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Cosmic Warfare: Changing Models of the Universe and C.S. Lewis's Defence of Truth and Meaning

Thesis submitted by Brenda Adam BA (Hons) in November 2016

for the degree of Doctor of Philosophy in the College of Arts, Society and Education James Cook University

Abstract

C.S. Lewis's interests and arguments range widely across the arts and the sciences. He noted the transience of models of the universe and described them as representations of current knowledge; composites of science, philosophy, theology and culture. He observed how they communicate meaning and influence popular thinking, and used them as a backdrop to his art. This thesis is an analytical and interpretive reading of his worldview expressed in various genres. His fantasy stories are evidence of his claim that the imaginative man within him was older and more basic than the religious writer or critic.

The research investigates his fusion of intellect and imagination for dialectic, aesthetic, ethical and spiritual ends, at a time of conflict and uncertainty. Against the tide of materialism and secularism, Lewis set out to explain and clarify Christian cosmology as a rational alternative to the seemingly purposeless and meaningless emptiness of Space. Models are big picture metaphors and the research explores Lewis's prolific use of metaphor, intrinsic to his method in elucidating the complexities of philosophy and theology to the wider public. The thesis does not attempt to fit him into a particular theoretical framework, in deference to his many-sided approach to various subjects, and his dislike of restrictive labels. The 'warfare' theme in the thesis title relates to Lewis's engagement with progressive philosophies and man-centred epistemologies. The aggressive tactics of 'New Atheism' in the twenty-first century have given his apologetic texts even greater relevance. His books and essays challenge the assumed 'conflict narrative' regarding science and religion, encouraging dialogue rather than inflammatory rhetoric. His arguments speak for themselves, not as relics of a past age but as valuable insights into the issues of the here and now.

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Abbreviations

AGO	A Grief Observed
AO	Allegory of Love
AOM	The Abolition of Man
AS	The Amber Spy Glass by Philip Pullman
CC	The Cambridge Companion to C.S. Lewis
CL	C.S. Lewis Collected Letters
СР	The Collected Poems of C.S. Lewis
CR	Christian Reflections
DC	The Devil's Chaplain by Richard Dawkins
DFT	Dreams of a Final Theory by Steven Weinberg
DG	Dawkins' God by Alister McGrath
DI	The Discarded Image
EC	An Experiment in Criticism
ES	Edge of the Sacred by David Tacey
FF	C.S. Lewis on the Final Frontier by Sanford Schwartz
FSE	Fern-seed and Elephants
FTM	The First Three Minutes by Steven Weinberg
GD	The God Delusion by Richard Dawkins
GID	God in the Dock
HDM	His Dark Materials by Philip Pullman
HHB	The Horse and His Boy
IA	Imaginative Apologetics, ed. Andrew Davison
IW	The Intellectual World of C.S. Lewis by Alister McGrath
LB	The Last Battle
LWL	C.S. Lewis. Life Works and Legacy 4vols.
М	Miracles
MC	Mere Christianity

MN	The Magician's Nephew
NL	Northern Lights by Philip Pullman
OHEL	English Literature in the Sixteenth Century
OSP	Out of the Silent Planet
OTOW	Of This and Other Worlds
PER	Perelandra
PF	Physics of the Future by Michio Kaku
PL	Paradise Lost by John Milton
PP	The Problem of Pain
PPL	A Preface to 'Paradise Lost'
PR	The Pilgrim's Regress
PRCON	Present Concerns
PW	Parallel Worlds by Michio Kaku
ROM	The Rediscovery of Meaning by Owen Barfield
ROP	Reflections on the Psalms
RWD	Religion without Dogma
SBJ	Surprised by Joy
SK	The Subtle Knife by Philip Pullman
SL	The Screwtape Letters
SLE	Selected Literary Essays
SO	Sanderson of Oundle
TGD	The Great Divorce
THS	That Hideous Strength
TRH	"The Republic of Heaven" by Philip Pullman
TWHF	Till We Have Faces
VDT	The Voyage of the Dawn Treader
WG	The Weight of Glory

Introduction

Origins, Existence and Meaning

What weary orbits we must keep Around our dying sun Falling towards the verge of sleep When all our wars are done Falling towards the verge of sleep Where, lying side by side The angels of our planets weep To see two worlds collide

From "The Daily Planet" by Malcolm Guite

The interests and arguments of C.S. Lewis range widely across the arts and the sciences. In various genres he engaged with issues such as language, ethics, authority, autonomy, ecology and cosmology. My interest in how cosmology influences our worldview, and how our worldview influences the way we interpret models of the universe was first ignited by several fantasy texts from children's literature. Michael Ward's ground-breaking *Planet Narnia* was also a stimulus in the ideating stages of the thesis. His in-depth study of the influence of the Ptolemaic model on Lewis's imagination (conscious or unconscious) helped to encourage and inform my ideas. Lewis's writings are distinguished by erudition, intellectual force, and profound insights. Against the tide of secularism he defended the rationality of his Christian faith. His addresses and texts were a source of strength and encouragement to a nation embroiled in the physical and ideological conflicts of the twentieth century. Many of the tensions and questions about life, truth and meaning that exercised his mind and energies now appear in contemporary dress.

As the thesis title suggests, there are two branches of research: Lewis's engagement in philosophical and spiritual warfare, and his use of cosmic models for his literary art. He observed the power of models to communicate meaning and influence popular thinking, and the poet within him responded to their imaginative potential. He viewed models of the universe as provisional representations of the current body of knowledge, a synergy of science, philosophy, history and theology which is reflected in his writings generally. Like Newton, Lewis valued the sciences to learn about the natural world, and the Bible to learn about the Creator. He believed in a divine first cause of life; an eternal 'someone' rather than an impersonal force. He acknowledged that all models of the universe are transient constructs and encouraged an attitude of "respecting each but idolising none" (*The Discarded Image* 222). His research into the long-term literary influence of the Ptolemaic

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Model led him to claim that: "In every period the Model of the Universe which is accepted by the great thinkers helps to provide what we may call a backcloth for the arts" (DI 14). This statement informs my hypothesis that, in diverse genres, Lewis's own literary art provides evidence in support of this premise. The thesis sets out to research and analyse Lewis's response to models of the universe, his prolific use of metaphor, and his engagement with the spirit of his own time; to investigate his use of critical essays and fiction for dialectic, aesthetic, moral and spiritual ends.

The thesis aims to show that, like the ancient poets, Lewis was inspired more by the imaginative possibilities of models than by their "modest epistemological status" (17). His stated aim as an author relates to the tension between doing "full justice to the Natural while also paying unconditional and humble obedience to the Supernatural" (Collected Letters III 111). The fact that he describes this as "an absolute key position" (111) gives focus and direction to my research into his body of work. His approach undermines the 'conflict narrative' regarding science and religion, while establishing a principle of order. His commitment to respect and care for the natural world was subsumed within his devotion to his Creator. In principle, the thesis is an exposition of his Christian cosmology and his defence against secular ideologies and anti-theism. The methodology is qualitative, and involves an analytical and interpretive reading of Lewis's worldview. The underlying rationale is that there are different ways of appropriating knowledge; intellect, intuition and faith are involved in all academic disciplines. Theories are not statements of fact. Science has not disproved the tenets of theism, and Naturalism cannot answer all the ultimate questions. Lewis's ideas relate to current discourses and challenge the assumed dichotomy between the sciences and religious faith. His statements on various issues are critiqued in the context of writings on the same topic by other scholars. His early and mid-twentieth century dialectics are compared and contrasted with later and current viewpoints. The analysis is often tailored to the particular discourse in question, and some chapters employ a deconstructive strategy where appropriate. The polarity between Lewis's worldview and anti-theism is primarily discussed with reference to the polemics of Richard Dawkins and the fantasy novels of Philip Pullman. Both these high-profile authors have sought to undermine Lewis's credibility and posthumous influence.

The thesis argument does not conform to a strictly linear progression, but chapter topics are connected, reflecting the composition of cosmic models as described by Lewis. His key arguments are threaded through every thesis chapter but his ideas are communicated in

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different genres, necessitating a more centrifugal pattern with each component part relating to the central hypothesis. My reading of Lewis is selective in its focus, utilising material that relates to cosmology, his interrogation of prevailing theories and the philosophical speculations based upon them. The scope of the research is necessarily broad to reflect his areas of interest, but has no claims to be comprehensive. The thesis includes many Lewis quotations because, as Stephen Schuler so accurately puts it, it is extremely difficult to express Lewis's ideas "more clearly or succinctly" than he does himself, and his works are "immeasurably more interesting than anything that could be written about them" (Schuler 1). In deference to Lewis's reluctance to 'pigeonhole' other authors, there is no intention to psychoanalyse or define him in terms of a particular period or critical theory. My decision to focus my doctoral studies on Lewis was, in part, a response to the aggression of the 'New Atheists' and their influence on the social climate of today. Their strategy and tactics are a more extreme version of the opposition Lewis experienced, but in the essay "The Decline of Religion" he predicts the rise of anti-theism: "We have not yet had, (at least in junior Oxford) any real bitter opposition. But if we have any more successes, this will certainly appear" (222). He relished the exchange of ideas in the pursuit of truth but encouraged dialogue rather than inflammatory rhetoric. He coined the term "Bulverism" to draw attention to an increasing tendency to belittle opponents by defaming their person and motivation rather than addressing their arguments. This ad hominem methodology is described in Lewis's essay "Bulverism" as "The Foundation of 20th Century Thought," and personified in the fictional "Mr. E. Bulver" who believes that "refutation is no part of argument" (273). Lewis preferred to engage in rational debate and employ imaginative imagery to clarify his points.

Although an acclaimed scholar Lewis saw a need to translate abstract concepts into the language of laypeople. He stressed the need to read the past to inform the present, and his non-fictional prose style is developed to enable a diverse range of readers to appreciate complex ideas. Doris T. Myers, in her book *C.S. Lewis in Context (1994)*, notes how Lewis made works from previous eras more accessible to contemporary readers: "by reconstructing the scientific knowledge, the word meanings, and the unspoken assumptions" (ix). Lewis used language to create pictures and his style, wit and clarity make compelling reading. As David C. Downing notes in *Planets in Peril* (1992), "Lewis recognised the need for abstract language in analytical discourse" (88), but used definitive language and concrete images, "as a safeguard against replacing actualities with fanciful cognitive constructs"(88). Lewis's method provokes profound thoughts about the ultimate

questions of life while grounding them in material reality. His insights continue to inform the search for meaning in the twenty-first century, and the 50th anniversary of his death in 2013 generated a daunting supply of scholarly books and articles. Moving on from the Freudian and rational-empirical attacks of earlier decades, there is a tendency now to recognize Lewis's anticipation of contemporary ideas and his more pluralistic approach to ways of knowing. His perspective allows for revelation, reason and imagination. Lewis's creative thinking and fusion of reason and imagination have proved to be a far-sighted engagement with modern and post-modern ideas. New Testament scholar N.T. Wright, in his book The Challenge of Jesus (1999), speaks of living "at the overlap of several huge cultural waves" (151). Wright notes the growth of individualism, the drive for autonomy during the eighteenth to twentieth centuries, and the transition to the "shifting sands" of post-modern Western thought (153). His observations recall Lewis's concerns in The Abolition of Man (1943), a book that alerts readers to the encroaching dehumanization and our alienation from the natural environment. The future prospect envisaged by Lewis, of life without moral absolutes or objective truth, is partially borne out by Wright's experience of life "in a cultural, economic, moral and even religious hypermarket" (152). He claims that 'modernity' thought it could observe the world objectively, but subsequent trends have undermined the concept of "neutral knowledge" (151). Lewis, too, comments on the limitations of human knowledge and his approach to the pursuit of truth combines fixedness and flexibility. His ideas express the certainty of absolutes as a basis for values but his nuanced way of thinking allows for the elements of uncertainty associated with postmodernity.

Lewis's understanding of cosmic models appears to anticipate Michel Foucault's 'episteme' idea. A cosmic model and an episteme are both tools for organising knowledge, subject to dramatic changes at particular times in history. Both authors recognise how the accumulation and organization of knowledge wields power and influence. Lewis speaks in a literary context and Foucault from a political angle. Lewis understands each model of the universe to be "a serious attempt to get in all the phenomena known at a given period" (DI 222). He notes how deeply the prevailing model influences the mind, and claims that change is only brought about by new empirical data and the mindset of a future generation (222). Foucault introduced the term 'Episteme' in *The Order of Things* (1970), his initial study of the archaeology of human sciences. He employed the word in a specialised way, as a discursive term for the underlying epistemological assumptions which reflect, sometimes unconsciously, current beliefs about what is accepted to be true. Foucault

wrestled with the constrictive nature of his original definition and went on in *Power/Knowledge* (1980) to expand the concept to include 'non-discursive' elements and to acknowledge that other epistemes can exist concurrently with the prevailing one. Foucault's retrospective understanding of the 'episteme' defines it as "the strategic apparatus...which makes possible the separation, not of the true from the false, but of what may from what may not be characterised as scientific" (197). Lewis and Foucault note the provisional nature of representations. Both authors refute the suggestion that there is in fact a natural, linear progression to truth. Lewis did not view any model as an embodiment of truth: "We can no longer dismiss changing models as a simple progress from error to truth" (DI 222). Though holding conflicting worldviews, both men make similar observations about the combined influence of historical events, culture and the effect of *a priori* assumptions regarding what can be accepted as 'scientific' at a given time. Lewis notes a "two-way traffic", in that a model is shaped by society's "prevailing temper of mind", but at the same time it influences the way society views the world (222).

Lewis notes the increasing influence of the mass media in his day and its role in creating "popular scientism", which he describes as "a caricature of the true sciences" (17). He could hardly have imagined the phenomenon of social media in current culture and its infiltration of most areas of daily life. Radio, TV, magazines, newsprint and the internet combine to create and fulfil demand. They drive what is popular, dictating what is important, what is and what is not accepted as legitimate knowledge. Lewis suggests that the impetus for the formation of a new or updated image begins either when the experts in a particular field ask new questions or when they challenge old answers. In this context, he describes every model as "a construct of answered questions" (DI 18) and the following quotation expands and illustrates his point: "a good cross-examiner can do wonders...The structure of the examination is like a stencil. It determines how much of that total truth will appear and what pattern it will suggest" (DI 223). The comment encourages a more circumspect approach to the interpretation of evidence elicited from nature and experience; an awareness of the questions not asked, the limitations of reason, and the incommensurability of things unknown. In his analysis of the Ptolemaic or "medieval model" of the universe, Lewis speaks of the 'unconscious' elements that contribute to the overall picture. Speaking specifically in the context of Plato and Aristotle's contributions, he refers to their "indirect, unconscious and almost accidental" influence which, he claims, goes beyond their expertise as great thinkers (DI 19). Sometimes an imaginative image might only suggest rather than illustrate, and Lewis stresses that "No model is a catalogue

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of ultimate reality and none is a mere fantasy" (222). He appreciates models as informative human constructs, but as an author and storyteller it is the imaginative potential that interests him most. The following passage clarifies the literary use of models of the universe as a backdrop:

But this backcloth is highly selective. It takes over from the total Model only what is intelligible to a layman and only what makes some appeal to imagination and emotion. Thus our own backcloth contains plenty of Freud and little of Einstein. The medieval backcloth contains more of the order and influences of the planets, but not much about epicycles and eccentrics. (DI 14)

The magnitude and mystery of the cosmos impacts on human consciousness and inspires contemplation about origins, existence, and meaning. Lewis's perspective encompasses spiritual dimensions beyond the material universe, a view compatible, in a sense, with multiverse speculations. His preferred backcloth for artistic purposes is the medieval model, which envisioned a universe full of life, light and music; a realm inhabited by spirit beings rather than a cold vacuity. The geocentric perspective did not spoil Lewis's admiration of the model's beauty and order, and he marvels at its syncretistic harmonising of diverse philosophical and cultural threads. The design served as a vehicle for communicating what he believed to be self-evident and revealed truths. He anticipated the resistance of modern readers to an empathic appreciation of the 'discarded image' but made a case for claiming that "Other ages have not had a Model so universally accepted as theirs, so imaginable, and so satisfying to the imagination" (DI 203). In the article "C.S. Lewis' Short Course on the Middle Ages" (2005), Eric Mader notes that Lewis's term "medieval model" envisages the particular medieval synthesis "in which God, man, the angels, nature and the heavenly bodies all had their place" (1). For Lewis, the essential difference between the medieval model and the imaginative image of his own day centres around the question of 'meaning'. The medieval model had "built in significance" (DI 204) and the ancient authors were certain of the intrinsic value of their universe. Order and meaning were already there so the creative, artistic nature had only to wrestle with the task of making an adequate response. In Lewis's own era the cosmos was increasingly associated with emptiness and meaninglessness. The notion of 'the heavens' was superseded by terms characterised by 'indifference', such as 'space' and 'void'. Lewis's writings interrogate these assumptions and employ alternative imagery that reflects the beauty, integrity, and glory that he found revealed in creation. Against the tide of naturalism, he defends theological interpretations of existence.

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These introductory comments are intended to locate Lewis within the context of his own day and to relate his dialectics to later and current debates. He learned the necessity of combining inspiration with perspiration in the development of his craft: "in reality no story tells itself. Art is at work" (DI 205). We see in these thoughts why he was so industrious in imparting freshness to what he believed to be enduring principles. Lewis's intellectual arguments and stories are composites of philosophy, science, history, and theology, and the thesis chapters conform, in part, to this structure. Cosmic Models are big-picture metaphors and the creative use of metaphor is a feature of Lewis's writing. The first chapter begins with his participation in the twentieth-century language wars and the modernist agenda to undermine religious faith by creating an objective 'scientific' language purged of figurative terms. Lewis's contributions and those of his friend Owen Barfield are still pertinent in the context of twenty-first century exchanges about the role of metaphor. The dialogue leads into sections on scientism, reductionism, subjectivism relativism and neo-Gnosticism. Lewis challenged naturalism and his arguments show a prescient awareness of the social and ecological cost of progressive extremism. He followed and accepted current scientific theories but challenged scientism, which Raymond Williams defines in Keywords as "the (inappropriate) transfer of methods of inquiry from the 'physical' to the 'human' sciences" (280).

The cross-disciplinary role of metaphor is discussed in books by Mary Midgley and Janet Soskice. Midgley is well known for her opposition to sociobiologists who use metaphor in a constrictive way to popularise a reductionist view that goes beyond the boundaries of science. Soskice examines the role of models and metaphors in scientific and theological language. Lewis challenged the Nietzschean agenda to change language in the cause of revolutionizing traditional values. He also engaged with Bergson's *élan vital*, Jungian philosophy and 'emergent evolution'. Lewis interrogated the drive to supplant anthropomorphic and figurative theological terms with the impersonal language of a more amorphous spirituality. His engagement with these philosophies relates to the contemporary neo-Gnostic challenge, as promoted in David Tacey's book *Edge of the Sacred*. Tacey's vision exemplifies the nature of the contemporary philosophical challenge to the tenets and language of Judeo-Christian faith and culture. His doctrine regarding the 'sacred feminine' invites comparison with Lewis's reading of gender issues in the light of scriptural teaching. The chapter concludes with some examples of Lewis's own creative metaphors, his attempts to communicate complex theological concepts which he claims are

"at least as difficult as modern physics and for the same reason" (*Mere Christianity* 134). Both disciplines seek to understand and describe invisible realities.

Lewis's comparison of the language of physics with that of theology is explored in the second chapter, within the context of intellectual and emotional responses to the cosmos. The topic relates to Lewis's "key position" regarding the order of things-his commitment to give pre-eminence to the Creator while nurturing the creation. Physicist Michio Kaku's book Parallel Worlds is a primary source of scientific terminology but other eminent scientists are cited to illustrate the diversity of views. There is no intention to argue the science, only to discuss how certain theories and interpretations impact on the way we see ourselves as individuals and how we interact with society. Other sections focus on the quest for knowledge and how meaning is transmitted. The role of intellect and imagination is discussed, further linking the arts with the sciences. Consciousness enables us to respond to sensory experience and to speculate on the concepts of immanence and transcendence. Lewis's study findings are used to challenge the common assumption that theistic faith is a product of superstition and engenders inflated pride. The supposed theological ramifications of the Copernican Principle and assumed ignorance of the religious ancients are myths that Lewis rebutted in his day even before the abundant evidence of the Anthropic Principle was widely acknowledged. Divergent reactions to the details of 'fine tuning' are cited, together with futuristic visions seen through the naturalistic eyes of Kaku and the theistic gaze of Lewis. Kaku's book Physics of the Future (2011) explores some seemingly impossible projects, envisaged by theoretical physicists, which relate to Lewis's understanding of 'miracles'. In conclusion, John Polkinghorne's case for an affinity between theology and physics is cited. He views both as "forms of rational enquiry" but also speaks of that essential "creative leap" in all aspects of human endeavour.

The value of imagination in exploring the frontiers of science is acknowledged by Kaku, and the third chapter begins with some of his references to sci-fi novels based on multiverse theory. The general development of the genre is discussed informally by Lewis and two other published authors—Kingsley Amis and Brian Aldiss, in the transcript "Unreal Estates". Lewis further analyses the genre in the essay "On Science Fiction", which provides insights into his own trilogy: *Out of the Silent Planet, Perelandra* and *That Hideous Strength*. Lewis uses the science-fiction genre to enact supernatural themes. The trilogy is the most obvious example of his mythopoeic use of a cosmic backdrop for his literary art. The layered mix of reality, myth, magic, and theology, also reflects the

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evolution of Lewis's worldview. All three novels are an exposé of twentieth century progressive trends, with plots involving ethical, social and environmental issues; the human propensity for excessive pride, abuse of power and exploitation of nature. Each story stands alone but there is a chronological progression. The first two feature interplanetary exploration and interaction with aliens but the second reshapes themes from Milton's *Paradise Lost*, and the Garden of Eden, raising the controversial subject of gender roles. The third novel is an earth-bound story that features political, domestic, and apocalyptic events. The 'marriage' of domestic and spiritual elements is consummated in the novel's conclusion.

A more personal perspective of Lewis is given in Chapter 4 to give background to his philosophical and spiritual pathway; a journey that involved the reconciliation of the warring forces of reason and imagination active in his psyche. The research also serves to illuminate the balance in which Lewis weighs divine revelation and knowledge revealed by the study of Nature. His stated motivation and aims as a writer are discussed, and a brief overview of some key texts further illustrates his rationale and purpose. His post-conversion experience compelled his engagement in the battle for the mind, and called upon his adversarial talents in defence against anti-Christian rhetoric. His willingness to explain the Christian faith in the public domain made enemies in academia and impacted on his career. The worldview he expresses in intellectual argument is imaginatively enacted in story form. The combination provides a better understanding of his experience of spiritual warfare as both pilgrim and crusader. He determined to pursue truth wherever it led him, and insists that he did not turn to Christianity as a soft option.

Lewis's role as an apologist is the focus of Chapter 5, which begins with John Milbank's definition of the Greek term 'apologia' in the context of historic trials. The discourse moves into Lewis's defence strategy in the context of Modernity. His method of interrogating the assumptions of liberal theology, literary criticism and the apparent randomness and futility of life evince his anticipation of the de-centering tenets of Post-Modernity. His approach to thinking generally encourages looking from different perspectives, and his insights illustrate a more nuanced approach to paradoxes and apparent contradictions. His essays and stories counter the intellectual influence and wider social impact of various philosophical 'isms', and his challenge to relativism and subjectivism finds some unlikely allies among contemporary scientists. Lewis's '*apologia*' in defence of truth and meaning was a response to secularism and the cynicism which put

'God in the Dock' and passed the death sentence upon Him. Lewis's lucid and grounded arguments are valued by twenty-first century apologists in their response to current angry anti-theists. Lewis vigorously rebutted debating points but respected opponents with "honestly held" views different to his own. He did not claim positive proof for his Christian faith but offered a cogent defence of its rationality.

The research into Lewis's apologetics directs the focus of Chapter 6 onto the particular nature and source of what Lewis identified as the nineteenth century offensive against the Christian faith. The intellectual climate of that period propagated the factoid that religion and science are at war, a belief that persists today. Contributions from various scholars and writers (historians, scientists, philosophers and theologians) are cited to inform debate and to give evidence that religious faith has historically been an inspiration rather than a hindrance to progress and the pursuit of knowledge. Lewis challenges both the popular assumptions about ancient ignorance and the twentieth century confidence that Science had somehow disproved the supernatural. He also comments on the relationship between cosmological models and popular culture, the Galileo case and the issue of empirical evidence. Lewis's dialectic points are combined with those of contemporary historians, philosophers and apologists who have published books to counter the bias of anti-theism. New Atheists promote the dichotomy myth and have 'upped the ante' against any serious dialogue by mocking theists and repeating misinformation to label religion in general as an evil influence. The nature of this particular attack is evident in Richard Dawkins' approach and this is analysed in the context of his essay "A Devil's Chaplain". Various scholars are cited in answer to this challenge and there is evidence of movement toward a mutually beneficial relationship between religion and the sciences.

The philosophical and ideological issues discussed up to this point are the substance of Chapter 7, in which the theme of cosmic warfare is telescoped into a type of single combat in the theatre of children's fantasy literature. Lewis's Narnia chronicles are juxtaposed with Philip Pullman's *His Dark Materials*. Against a backdrop of parallel worlds, the authors enact conflicting interpretations of origins and the nature of good and evil. A careful reading of their contrasting depictions draws attention to many links and parallels which are usually dealt with only summarily in critical literature. Pullman is an obvious choice as a literary adversary to Lewis. Not only does his trilogy dramatize a naturalistic cosmology, effectively euthanizing the concept of God, but he has publicly sought to personally denigrate Lewis, his sci-fi and his children's fantasy texts. Lewis's

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representations of a divine monarchy are anathema to Pullman, but in crafting a secular republican alternative, his themes and imagery mirror those of Lewis, indirectly acknowledging a worthy opponent. The warfare theme overarches the analysis of Lewis's ideas and imagery. Each thesis chapter deals with a specific aspect of the spectrum, but inevitably some of the themes discussed find their way into other chapters because they are part of the fabric and pattern of the whole.

CHAPTER 1

The Power of Words and the Role of Metaphor

For chosen words can change the things they mean And set the once-familiar world aflame With pictures copied from a world unseen.

From The Singing Bowl by Malcolm Guite

Metaphors are not intended to have direct ever constant referents, but can convey information...about things as diverse as parallel universes and God. Rosemary Dunn.

Although ostensibly about the use of figurative language, this chapter is foundational to the wider theme of Lewis's defence of truth and meaning. The twentieth century witnessed a war of words between philologists, and Doris T. Myers begins her book, *C.S. Lewis in Context* (1994), with the premise that all Lewis's fiction "is influenced by, and responds to, twentieth century issues, especially language issues" (1). She notes the low evaluation of language, the post-war feeling that people had been "duped by language", and cites the philosopher Wilber M. Urban's identification of these times as the "beginning of scepticism" (3).

In *The Meaning of Meaning* (1923) C.K. Ogden and I. A. Richards claimed that previous attempts by philologists and philosophers to study how language influenced thought had failed because the theories were not subjected to "scientific methods of verification" (6). Ogden devised a Basic English system which simplified grammar by restricting it to 850 basic essentials. His agenda to cull appears to be driven by an ideological belief that "primitive" symbolic language is a prop to mystical metaphysical responses to nature, protecting "naïve theories" and keeping them alive (14). Naturalistic philosophy aimed to supersede religious responses to the cosmos and was dismissive of Christian orthodoxy. Progressive theologians wanted to change traditional terminology in order to modernize the image of God, and life-force philosophies favoured a depersonalised language to describe or relate to the mysterious source of life and energy. Lewis's position is clarified by his response to several assaults on metaphorical and anthropomorphic language. In *The Allegory of Love*, he states that, "It is the very nature of

thought and language to represent what is immaterial in picturable terms" (44). This thought is re-iterated by his friend Owen Barfield in *The Rediscovery of Meaning and Other Essays* (1977): "The natural world can only be understood in depth as a series of images symbolizing concepts" (16). Barfield's book was published after Lewis's death but reflects Lewis's contribution to their discussions about twentieth-century cultural trends. Lewis and Barfield were on the same side in the language debate. Myers notes that Lewis did not accept Barfield's basis of anthroposophy, but did agree with most of his theory of language (7).

Barfield acknowledges the many practical benefits that have come from man's ability to explore and manipulate nature, but draws attention to a corresponding change in how humans think about and relate to their environment. He links this to the philosophical belief of Positivism which "has been so thoroughly absorbed into the thought stream of Western humanity that it has come to be regarded, not as a dogma, but as a scientifically established fact" (ROM 12). He claims that over time words have become distanced from the fullness of their original meaning, and that the first metaphors, rather than artificial, were closely related to the natural world: "All words used to describe the "inside" of ourselves, whether it be a thought or feeling, can be clearly seen to have come down to us from an earlier period when they also had reference to the outside world" (15). Barfield describes language as "the primary vehicle" through which we express and communicate meaning and argues against "positivist assumptions" that dismiss the reality of meaning expressed in signs and symbol. He questions the view of some "pioneers of etymology" that mythology and religion had evolved from a mistaken tendency to take metaphorical language literally, and claims that further study has shown that "symbolic significance is not the exclusive attribute of religion and art, but is an intrinsic element in language itself" (15). In the chapter "Dreams, Myths and Philosophical Double Vision", Barfield makes a statement that echoes Lewis's experience of different ways of knowing:

Accordingly, a good, a true metaphor is not just a device for lobbying us abruptly out of ordinary consciousness into a-consciousness, out of time into eternity, out of the communicable into the ineffable, but one for affording us vision of some particular intermediate stage between two extremes of the continuum. (30)

Lewis expresses the complexity of communicating anything not perceived through our senses in the following passage:

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To think, then, is one thing, and to imagine is another. What we think or say can be, and usually is, quite different from what we imagine or picture; and what we mean may be true when the mental images that accompany it are entirely false...it is a serious mistake to think that metaphor is an optional thing which poets and orators may put into their work as a decoration which plain speakers can do without. (*Miracles* 75-76)

His response to those who wanted a purely scientific language for speech and writing, involves two steps. Firstly, the need to cultivate an awareness of the 'fossilized' metaphors we are using, and secondly, to freely create new metaphors. The second step, though part of an intellectual argument, is an instinctive feature of his writing. He claims to use metaphors in the same sense as parables, and borrows the term 'models' from scientists whose theoretical images are analogous to some aspect of reality. Lewis is careful to differentiate between his use of the term 'model' and the meaning implied by the term 'model ships' which are "small scale replicas" of an actual reality (DI 218). He regards models of the universe, not as replicas of reality, but as big picture representations of the body of knowledge and culture of a certain period.

Lewis's essay, "Bluspels and Flalansferes: A Semantic Nightmare" relates to the language debate. "Bluspels" is a derivative of "blue spectacles", a phrase used in relation to Kantian philosophy. "Flalansferes" is a derivative of "Flatlander spheres" (Selected Literary Essays 257). Both terms are coined by Lewis to illustrate the corruption of figurative language used to explain the existence of a fourth dimension to people living in a two-dimensional world. The essay sets out to refute the claim that it is possible to think without metaphors (262), and the discourse provides a key to the rationale behind his prolific use of them. Lewis cites Barfield's claim that Ogden and Richards "had forgotten that all language is figurative in origin" (251). He stresses the need to keep in mind that a metaphor is not a statement of fact (254) and concedes that a badly chosen metaphor, one that fails to capture the original idea, will result in nonsense (255). Lewis does not exclude himself from the possibility of making wrong choices, advising readers to ignore any metaphor he uses if it is not helpful. He argues that a claim to be independent of metaphorical language is "a claim to know the object otherwise than through the metaphor" (260), to have a "genuinely literal apprehension" (262). He concedes that dealing with sensible objects is relatively straightforward, but "the difficulty begins with objects of thought". They become meaningful only through metaphors, and Lewis asserts that "literalness we cannot have" (262). This reasoning is applied from a different

perspective in his "Footnote to All prayers". The poem is a profound expression of the inadequacy of his efforts to commune with the "ineffable" Creator God. Lewis describes his prayers as "arrows, aimed unskilfully, beyond desert" and ends with the plea: "Take not, oh Lord, our literal sense. / Lord, in Thy great Unbroken speech our limping metaphor translate" (*Collected Poems* 143).

Lewis's essay, "Behind the Scenes" illustrates his belief in the existence of an invisible reality beyond the physical world. He uses an image drawn from his childhood impressions of a visit to the theatre-"a ready-made symbol of something universal" (247) and reminiscent of Shakespeare's famous words, "All the world's a stage." Lewis recalls being caught up in the make-believe performance on a stage, with its backdrops, props and actors, all contributing to the appearance of everyday life. He was fascinated by the fact that two worlds could co-exist—the onstage drama coming through like "photons" to the audience, full of events, emotions and meaning, and the subordinated reality of the drab boards, fake sets and people in costume. He envied those who sat in stage boxes where it was possible, by craning one's neck, to see along to the point at which the drama stopped and "the joint between the real and the apparent" became visible (246). Even as a boy, Lewis pondered the visual impact as he constructed his own cardboard theatre, and considered how the players could move through the wings and traverse two worlds so easily: "The charm lay in the idea of being able thus to pass in and out of a world by taking three strides" (246). The close proximity of the spiritual dimension is a feature of Lewis's space trilogy and the Narnia chronicles. The childhood experience provided an effective image for communicating his adult conviction that it is just as possible to enter into a supernatural reality beyond the appearance of our material existence.

1.1 Philosophers and Scientism

The contemplations about life that occupied the young Lewis's mind matured and materialised in his adult writings, and are still subjects of enquiry today: "How does language hold meaning?"; "How is technology changing the way we understand life"; "What does evolution mean today?"; "Is science the new philosophy?"; "Do we have free will?"; or "Where is God?" These are all questions listed by editors Baggini and Stangroom on the inside cover of *What Philosophers Think* (2003), a twenty-first century book comprised of interviews with a diverse range of contributors. One of the issues raised

concerns analytical philosophers who see metaphors as vehicles of "ambiguity and ambivalence", believing their own explanations to be "clear and unambiguous" while metaphors are "a threat to objective truth" (131). In the chapter "Murdoch and Morality", the editor notes that both Mary Midgley and Iris Murdoch acknowledged the importance of being aware of how much we rely upon myth and metaphor in our discourse (128). Midgley notes how mental images re-inforce the perception that people are **just** machines and their minds **only** computers made of meat: "What people take to be proper official thinking is often a pared down version of a myth or metaphor that they have been using ...it's not just that people are using metaphors of which they are not totally aware but they use metaphors explicitly as facts" (Baggini 130-1). In *The Ethical Primate* (1994), Midgley argues that 'sociobiological rhetoric' is just as metaphorical as theology:

Metaphors are not just cosmetic paint on communication. They are part of its bones, crucial members in the structure of thought. Science itself is packed with examples...it is clear how much influence the metaphor of 'selection' had on Darwin's thought, and what a deep effect the imaging of particles, first as billiard-ball-like parts striking each other in a 'mechanism', and then as waves or solid items, has had on physical theory...All metaphors have their misleading features. In order to guard against them, it is essential not to rely blindly on a single image. (87)

Both Murdoch and Midgley were part of a group of outstanding female philosophers who studied at Oxford during the nineteen forties. They seized the opportunity afforded them by the depredations of WW II to distinguish themselves in a male-dominated society. But when asked if their holistic approach to philosophy was a feminine trait, Midgley denies any gender-specific divide, but speaks more of a shift of emphasis: "I do think very profoundly that we are all male and all female, that these are elements in all of us, that there should not be and isn't warfare" (Baggini 129). Midgley does, however, concede that men generally are more likely to play games in philosophy, and though women are well able to engage in complex philosophical argument they are more likely to ground ideas in the practical issues of real life: "it's a largely male peculiarity to wish to go right up in the air and round in circles without relating them to anything else" (128). However, Lewis studiously avoids this "male peculiarity" with his habit of grounding philosophical and theological ideas in concrete, everyday examples. Midgley's friend and fellow philosopher Iris Murdoch welcomed the "element of metaphor" in female arguments, and claimed that "art is important because it increases our sense of reality" (130), enabling them "to see the broader picture and the truth of what you are saying more clearly" (131). In "Sorting out the Zeitgeist" (1998), Midgley begins with the statement: "Theorists have invented a special kind of metaphysical freedom, sending us up like autonomous hot-air balloons, to a stratosphere beyond the reach of nature and science" (1).Midgley's article commends Murdoch's book, *The Sovereignty of Good*, for its moral philosophy, and likens the book's impact to that of Lewis's *The Abolition of Man*, "which shoots with equally deadly aim at the same target" (2).Midgley, like Lewis, interrogates the spirit of the age and sees the need to distinguish between 'Evolution' in the strict sense from what Lewis terms the "universal evolutionism of modern thought" ("Is Theology Poetry?" (137).

Midgley has been dubbed the 'foremost scourge of scientific pretension', and is renowned for her fierce confrontations with Richard Dawkins. In a series of books, including The Selfish Gene, Dawkins has popularized the view that, "We are survival machines—robot vehicles blindly programmed to preserve the selfish molecules known as genes. This is a truth, a truth that still fills me with astonishment" (The Selfish Gene xxi). In a letter to The Guardian (6 Sept. 2005), Midgley claims that there is "widespread discontent with the neo-Darwinian or Dawkinsian orthodoxy," which depicts the world solely in terms of randomness, something which Darwin himself denied. She describes the transition as "a strange faith which ought not to be taken for granted as part of science" ("Designs on Darwinism"). However, Dawkins' book The God Delusion is currently still available in book shops under the label of 'Science'. Dawkins ridicules opponents and repeats metaphors that instil certainty that we are nothing more than blindly programmed robots (language bound to evoke the charge of determinism). In interview he has answered this charge by saying that: "A robot to me...is potentially an exceedingly complicated and indeed intelligent being. I was using the word robot as almost a sort of poetic evocation of the idea that here is this fantastically complicated machine which has been programmed to do something" (Baggini 44-45). Of course, his use of the word "programmed" instantly raises the question about the programmer, but Dawkins solves this to his own satisfaction with a Zeno-type paradoxical claim that the 'programming' is done in advance by DNA for the '**purpose**' of propagating "the DNA that did the programming" (44-5). He is happy to attribute the term "purpose" to an inanimate DNA but disallows the possibility that a creative intelligence devised such an intricate information system.

Lewis is not around to debate Dawkins, but his essay "Religion without Dogma" notes how the image of humanity as a "purely biological entity" can become fixed in the popular consciousness (136). This thought relates to a point made by Lewis in "*De Descriptione*

Temporum" concerning how metaphors from the world of technology have imprinted themselves on our perceptions of human life: "I submit that what has imposed this climate of opinion so firmly on the human mind is a new archetypal image. It is the image of old machines being superseded by new and better ones. For in the world of machines the new most often really is better and the primitive is the clumsy" (11). Lewis predicted that it would be "the unnoticed mechanical and mineral metaphors, which in this age, will dominate our whole minds (without being recognised as metaphors at all) the moment we relax our vigilance against them" (Miracles 133). Lewis viewed strict materialism as selfrefuting, and in Miracles cited these words from Professor Haldane's book Possible Worlds to support his case: "If my mental processes are determined wholly by the motion of atoms in my brain, I have no reason for supposing my brain to be composed of atoms" (Haldane 209). Lewis claims in AOM that it was "little scientists and little unscientific followers" who reduced an object to an "artificial abstraction," (43) whereas the great scientific minds realized that in doing this, something of its reality was lost. He does not specify who he has in mind for the great scientists but surely Isaac Newton and Einstein are universally recognized, and both had a more holistic approach. Newton in his *Principia* saw the beauty of the universe as evidence of "the counsel and dominion of an intelligent and powerful Being" (Parallel Worlds 344). In The World As I See It, Einstein claims that: "The fairest thing we can experience is the mysterious. It is the fundamental emotion which stands at the cradle of true art and true science. He who knows it not and can no longer wonder, no longer feel amazement, is as good as dead, a snuffed out candle" (242).

In *Beast and Man: The Roots of Human Nature* (1978), Midgley targets "the bizarre cult of the future itself as a kind of mythical subsistent realm enshrining value" (159). And in *Evolution as a Religion* (1985), she cites the following passage from Lewis's satirical *Screwtape Letters* to underline her argument. Lewis's diabolical protagonist Screwtape voices this futuristic agenda:

We want a man hag-ridden by the Future...dependant for his faith on the success or failure of schemes whose end he will not live to see. We want a whole race in pursuit of the rainbow's end, never honest, nor kind nor happy now, but always using as mere fuel wherewith to heap the altar of the Future every real gift which is offered them in the Present...We have trained them to think of the Future as a promised land which only heroes attain—not as something which everyone reaches at the rate of sixty minutes an hour, whatever he does, whoever he is. (SL 78-130)

Lewis published this in 1942 but one can see why Midgley cited it in conjunction with E.O. Wilson's confident assertion in *Sociobiology: The New Synthesis* (1975) that "The time has come for ethics to be removed temporarily from the hands of the philosophers and biologicized" (562). However, the philosophers are not yet ready to leave the 'great questions of existence to the scientists' and Midgley challenges the integrity of some in the scientific community:

Scrupulous moderation in making factual claims is commonly seen as a central part of the scientific attitude...when I have complained of this sort of thing to scientists, I have sometimes met a surprising defence, namely, that these remarks appear in the opening and closing chapters of books, and that everybody knows that what is found there is not to be taken literally; it is just flannel for the general public...It cannot be more excusable to peddle groundless predictions to the defenceless general public, who will take them to have the full authority of science...The bold prophecies of an escalating future are often combined as they are here with the vision of one's own Science in a gold helmet, finally crushing its academic rivals: again scarcely a monument to scientific balance and caution. (*Evolution as a Religion* 66-67)

Midgley was not convinced by Lewis's Christian theology but found him both relevant and useful in confronting Scientism. In correspondence she suggested that "Unlike most prophets C.S. Lewis doesn't get out of date. Like a good wine, he improves with time" (Letters to Dutch scholar Arend Smilde (1996) 1-2).Now in her tenth decade, Midgley is the subject of a Guardian article by Andrew Anthony: "Mary Midgley: a late stand for the philosopher with soul" (2014). She is not a religious person but values Lewis's contribution to debate, and acknowledges the evidence of order and meaning in the universe. Her latest book, *Are You an Illusion?* (2014), challenges the materialist tenet that everything can be reduced and understood in terms of physical properties. The following passage on genetic engineering expresses Wilson's future vision:

When mankind has achieved an ecological steady state, probably by the end of the twenty-first century, the internalization of social evolution will be nearly complete. About this time biology should be at its peak with the social sciences maturing rapidly...the cognition will be translated into circuitry. Learning and creativeness will be defined as the alteration of specific portions of the cognitive machinery regulated by input from the emotive centres. (*Sociobiology* 574-5)

Wilson does acknowledge in his book *Consilience* (1998) that it is "unfashionable in academic circles nowadays to speak of evolutionary progress" but expresses his defiance by asserting: "*All the more reason to do so*" (98). His italicised wording indicates Wilson's

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sentiments but, more importantly, shows how attitudes have changed somewhat since Lewis first forewarned against the direction of prevailing trends. Lewis took a keen interest in all scientific developments as well as matters of conservation and animal welfare but warned against the uncritical pursuit of increasing human power and control over nature:

Man's conquest of Nature, if the dreams of some scientific planners are realized, means the rule of a few hundred of men over billions upon billions of men. There neither is nor can be any simple increase of power on Man's side. Each new power won by man is a power over man as well. Each advance leaves him weaker as well as stronger. In every victory, besides being the general who triumphs, he is also the prisoner who follows the triumphal car. (*The Abolition of Man* 36)

It is typical of Lewis to underline his point with a metaphor, and from a twenty-first century vantage point we can see the wisdom of his words. They are a reminder of the history of our species, and the social cost of progress—ecological problems and social disconnection. Lewis would surely have also challenged Wilson claims that philosophers have not kept pace with the advances of science. However, in a later book, *On Human Nature* (1978), Wilson does concede that the "deterioration of the myths of traditional religion" together with the failure of secular ideologies, such as those based on Marxian interpretations of history, have resulted in a "loss of moral consensus, a greater sense of helplessness about the human condition and a shrinking concern back toward self and the immediate future" (195).

In *The Mind of God* (1992), physicist Paul Davies notes that among the world's finest thinkers, "scientists Einstein, Pauli, Schrodinger, Heisenberg, Eddington and Jeans have espoused mysticism" (226). Davies recognises mystical thought as a binary to rational thought and acknowledges the possibility that science and logic cannot address the "how" and "why" questions of life (226). In "Religion without Dogma", Lewis suggests that science, by its nature, has not and cannot disprove the religious element in religion (135), but notes that, as new details of the workings of the human body are discovered or better understood, it is often assumed that this is proof against a creator. In the context of conflicting worldviews, it is clear that metaphorical language is not the exclusive domain of religious ideas; it is an effective tool across the arts and the sciences. Carefully chosen words and syntax can manipulate and communicate meaning. In an *Observer* interview entitled "We are controlled by electrical impulses" (2012), Frances Ashcroft (a professor of physiology at Oxford University) admits to being uncomfortable with the interview title because she resists the idea of being "controlled" by anything. She talks about her book,

The Spark of Life, and as a fitting conclusion to the article (about ion channels and how they regulate the currents to our various senses) she quotes the poet Percy B. Shelley: "man is no more than electrified clay" (2). Shelley was inspired by Italian scientist Luigi Galvani's discovery of the presence of electrical currents in the bodies of animals and humans, and took this as evidence against theism. Ashcroft seems to approve the atheistic timbre of Shelley's remark because it excludes any hint of meaningful design. Any inferred 'controlling' source outside of nature is eliminated by statements asserting that people are "no more than electrified clay". The terms 'no more than', 'just' and 'only' are trademarks of reductionist language and its denial of meaning. Lewis acknowledged and valued scientific endeavour: "I do not wish to disparage all that is really beneficial in the process described as 'Man's conquest', much less all the real devotion and self-sacrifice that has gone to make it possible" (AOM 34). But he did confront the supposition that life could be adequately described by statements about neurons and chemicals, and the theories of Naturalism (*Miracles* 16-27). The potential effect of this doctrine on the wider community is well illustrated by the experience of Lewis's wife. Joy Davidman's biographical essay "The Longest Way Round" (cited in C.S. Lewis: Collected Letters Vol. III) documents her experience:

In a few years I had rejected all morality as a pipe dream...In 1929 I believed in nothing but American prosperity; in 1930 I believed in nothing. Men, I said are only apes. Virtue is only custom. Life is only an electro chemical reaction. Mind is only a set of conditional reflexes...Love, art and altruism are only sex. The universe is only matter. (1690)

In "Is Theology Poetry?" Lewis writes specifically on the subject of theological metaphors:

We are invited to restate our beliefs in a form free of metaphor and symbol. The reason we don't is that we can't. We can if you like, say "God entered history" instead of saying "God came down to earth". But, of course, "entered" is just as metaphorical as "came down". You have substituted horizontal or undefined movement for vertical movement. We can make language duller; we cannot make it less metaphorical. (WG 133)

Janet Soskice argues a similar case in her book *Metaphor and Religious Language* in which she discusses the use of metaphors and models both in theology and in the language of the natural sciences. She points out that many of us recognise that phrases such as 'time

warp', 'particle charm' or 'black hole' are figurative terms for something 'scientific', even though we do not know exactly what (99). She suggests that "religious apologists have conceded a sharper demarcation than actually exists" (108), and observes that metaphors in scientific language are given a legitimacy denied to religious metaphors. Those who are dismissive of any reality beyond the natural world argue that scientific metaphors are only a kind of technical code which can be dispensed with, and not essential to the overall 'scientific quest' (100); the inference here being that religious metaphors are in a different category, and that Christendom would collapse without them. She challenges both the claim that "the models of science are explanatory and those of religion merely affective" (108), and the argument "that the models of science are dispensable whereas those of religion are not" (112). Consistent with Lewis's discourse on figurative language, Soskice asserts that "in practice Christians tend to regard their models as both explanatory and reality depicting" (112), an approach re-iterated in her conclusion: "The theist can reasonably take his talk of God, bound as it is within a wheel of images, as being reality depicting, while at the same time acknowledging its inadequacy as description" (141). Soskice defends theological realism and the theist's right to make metaphysical claims, but stresses that it is not her object to prove the existence of God, only to show the "conceptual possibility rather than the proof"(148). Her statement parallels Lewis's approach to defending the basics of Christian orthodoxy in the face of challenges from within Christendom and without.

1.2. Progressive Philosophy and Theology

The ideas of Friedrich Nietzsche are foundational to the debate about language because revolutionary ideas demand new modes of expression. Some of his comments in "On Truth and Lies in a Nonmoral Sense" have much in common with those of Lewis and Barfield cited earlier, although Nietzsche regards the concept of 'truth' as merely a human construct: What then is truth? A movable host of metaphors, metonymies, and, anthropomorphisms: in short, a sum of human relations which have been poetically and rhetorically intensified, transferred, and embellished, and which, after long usage, seems to a people fixed, canonical, and binding. Truths are illusions which we have forgotten are illusions; they are metaphors that have become worn out and have been drained of sensuous force, coins which have lost their embossing and are now considered as metal and no longer as coins. (Nietzsche 84)

Ironically the 'worn coin' metaphor, 'coined' by Nietzsche to represent the illusory nature of truth, also serves to support the notion of an absolute source. The concept of 'Truth' is better defined by the gold from which the coins are made. Precious metals exist independently and are enduring, while images imprinted on coins shaped by human hands erode. Lewis and Barfield acknowledge the limitations of metaphor to represent ultimate reality, but Nietzsche asserts that there is no ultimate reality or moral code; language is illusory and we are totally free to imprint our own meaning on life. His worldview is reflected in subsequent attempts to change language in order to update traditional attitudes and redress the wrongs of history. The pressure to replace traditional anthropomorphic or masculine terminology for God seems to come from an aversion to paternalistic language. Extreme cynics see anthropomorphic language not only as a relic of past generations but a tool to perpetuate institutional control through religious myths which have no referent behind them to inspire devotion or trust. Demythologizers deny that theological imagery could be part of any divine communication of truth and mystery, and assert that the figurative language reflects the ignorance of pre-scientific cultures.

Lewis was addressing these issues in the nineteen sixties. The Bishop of Woolwich, John Robinson's controversial book *Honest to God* created huge interest in the media and inflamed religious debate, selling nearly a million copies. Adrian Hastings, in his book *A History of English Christianity1920-2000*, observes that the Bishop had correctly gauged that the religious revival of the 1950s "had not got through to the ordinary modern pagan at all" (Hastings 536-37). He notes the Bishop's drastic proposal to change all fundamentals regarding God, the supernatural and religion, but Hastings sees Robinson's book not as anti-Christian but as evangelical in its attempt to create a modern theological language. Prior to the book's release in America, a letter was sent to Lewis by the editor of the *Episcopalian* (16 April 1963), requesting a critique of Robinson's book. Edward Dell notes that "its subject is really the semantics, images and the mythology of the language of Christians", and Lewis was well equipped to undertake the task (CLIII 1417). Lewis's

review, "Must Our Image of God Go?" undermines the book's pretension to be revolutionary. He claims that "the Bishop of Woolwich will disturb most of us Christian laymen less than he anticipates" (184), saying in effect, that Robinson's depiction of what Christians believe is a misleading caricature, and in reality no-one visualises "a God who sits in a localized heaven" (184). New Testament scholar N.T. Wright has written a contemporary critique of *Honest to God* entitled "Doubts about Doubt: Honest to God Forty Years On" (2005). He identifies seven problems regarding the book's lack of scholarly substance. Like Lewis, he challenges the Bishop's assumptions about the various opinions of modern man, noting the absence of a "sociological survey, or an index of changes in belief over time" (185). Wright concludes by suggesting that:

The tragedy of *Honest to God*, as I perceive it, is that Robinson did not see that what he was rejecting was a form of supernaturalism pressed upon Christianity by the Enlightenment; that he did not go looking for help in finding other ways of holding together what the classic Christian tradition has claimed about God, the world, and Jesus. (196)

Lewis challenges the originality of the Bishop's suggested image of Jesus as a 'window' through which we view the divine. He claims it is not revolutionary but "wholly orthodox", and in harmony with Jesus' claim recorded in the gospels: "he who hath seen me hath seen the Father" (John 14.9). The Bishop approves Paul Tillich's phrase "ground of our being" as an improvement to anthropomorphic terminology, stripped as it is of any notion of personality. Something 'below' rather than someone 'above' removes any hierarchical and paternalistic notions of 'God' or 'Father', but Lewis questions whether changing the language does anything to help our concept of God. He argues that the flexibility of Christian anthropomorphic imagery is such that deity is never confined in metaphors that reflect human experience: "we can imaginatively speak of the Father 'in heaven' yet also of the everlasting arms that are beneath", and Lewis insists that "we have always thought of God as being not only 'in' or 'above', but also below us" (GID 184). This claim is well supported simply by reading the lyrics of old, even ancient hymns. The breadth of Christian vision is obvious in eighteenth and nineteenth century hymns such as Walter Chalmers Smith's scripturally based "Immortal, invisible God only wise. In light inaccessible hid from our eyes". Dorothy F. Gurney addresses God as "perfect love, all earthly love transcending" and Matthew Bridges names God as "the potentate of time, creator of the rolling spheres, ineffably sublime". The fifth century Gaelic prayer known as St. Patrick's Breastplate translates as an invocation to God who is the 'strength of heaven'.

The prayer expresses the assurance that Christ is not only 'with' him but 'before', 'behind', 'in', beneath', 'above', 'on my right', 'on my left', 'when I lie down', 'when I sit down' and in 'the heart of everyone who thinks or speaks of me'. These lyrical expressions are hardly the localised language of primitive or ignorant people. Rosemary Dunn, in her thesis "The Word in Words", also asserts that "Medievals wrote within a tradition which believed that words could communicate, but had no illusions that metaphors were directly descriptive." (Dunn 40).

When defending traditional theological metaphors and their role in communicating the personal attributes of God, Lewis emphasises that the imagery is to help our apprehension of the incomprehensible. In *Letters to Malcolm* he writes: "But never...let us think that while anthropomorphic images are a concession to our weakness, the abstractions [metaphysical and theological] are the literal truth. Both are equally concessions; each singly misleading, and the two together mutually corrective" (21). In "Horrid Red Things," Lewis challenges the agenda to de-personalize God by dispensing with Biblical imagery:

All language, except about objects of sense, is metaphorical through and through. To call God a "Force" (that is something like a wind or a dynamo) is as metaphorical as to call Him a Father or a King. On such matters we can make our language more polysyllabic and duller: we cannot make it more literal. The difficulty is not peculiar to theologians. Scientists, poets, psychoanalysts, and metaphysicians are all in the same boat. (71)

Physicist and priest John Polkinghorne makes a similar point, saying that to use the term 'force' in relation to the concept of God is more misleading than employing "the finite resources of human language" such as the personal 'Father' (34). Jesus himself encouraged his disciples to pray to "our Father in heaven" (Matt.6.9). In "The Seeing Eye" Lewis compares the futility of searching for God, as if he were some kind of "ether", to reading or viewing all of Shakespeare's plays in the expectation of finding the author in one of the characters: "Shakespeare is in one sense present at every moment in every play. But he is never present in the same way as Falstaff or Lady Macbeth. Nor is he diffused through the play like a gas" (CR 210).

The progressive terms '*élan vital*' or 'life force' express the vision expounded by the French philosopher Henri Bergson in his book *Creative Evolution* (1928). In *Miracles* Lewis writes that: "In life-force worship, which is the modern and western type of Nature-religion, we take over the existing trends toward "development" or increasing complexity

in organic, social and industrial life, and make it a god" (123). In "The Grand Miracle", he notes that the 'vital impulse' theory involves embracing the concept of an evolutionary energy rather than a real, personal creator, and he cites G.B. Shaw as a popularizer of "the more modern forms of nature religion (86). Lewis makes only brief mention of Bergson's later return to a more orthodox faith, but this fact is referred to in more detail by T.A. Goudge who describes Bergson's later move away from an impersonal "supraconsciousness" in these words: "God is now affirmed to be love and the object of love. A divine purpose in evolution is also affirmed" (Goudge 3). The following statement is an extract from Bergson's will (Feb 8 1937): "My thinking has always brought me closer to Catholicism in which I saw the perfect complement to Judaism (qtd. in Zolli 89). Lewis had originally read Bergson's innovative theories while convalescing from a war wound and discovered a new dynamic to his thinking, but he sums up the popular appeal of the impersonal in this way:

An "impersonal God"—well and good. A subjective God of beauty, truth and goodness, inside our own heads—better still. A formless life-force surging through us, a vast power which we can tap—best of all. But God Himself, alive, pulling at the other end of the cord, perhaps approaching at an infinite speed, the hunter, king, and husband—is quite another matter. (*Miracles* 98)

In *Mere Christianity*, Lewis similarly probes the appeal of a de-personalised 'Life-Force': "what is the sense in saying that something without a mind 'strives' or has 'purposes'?"(34). He could empathize with the preference for nebulous terminology in religion because if the language is abstract or distanced from practicalities, it is therefore less demanding about how we live or relate to our environment: "The Life-Force is a sort of tame God...All the thrills of religion and none of the cost" (34).

Lewis observed how the essential tenets of the Christian faith are always grounded in real people, real places and material events. This is evident in the Apostle John's account of the Incarnation as an historical fact, attested by eyewitnesses: "And the Word was made flesh, and dwelt among us, (and we beheld his glory, the glory as of the only begotten of the Father,) full of grace and truth" (John 1.14). In his first epistle, the apostle again emphasises the importance of sensory experience: "That which was from the beginning, which we have heard, which we have seen with our eyes, which we have looked upon and our hands have handled" (1 John 1.1). John's explicit testimony was recorded to address the influence of Greek philosophy and early Gnostic variations which came into the early

church as it spread among gentile communities. The very foundation of the Christian gospel was undermined by those who denied that the Christ could be fully divine and fully human. Some said Jesus only *appeared* as a human being. Bible scholar David Pawson explains the philosophical implications: "Greek philosophers divided life into two spheres. Various terms are used interchangeably for this: above and below, the physical and the spiritual, the temporal and eternal, the sacred and secular. Not only did they divide these two, they exalted one above the other" (Pawson 899). Pawson notes that the Gnostic separating of the spiritual from the physical not only affected their belief about Jesus, but also impacted on their behaviour, causing confusion and encouraging extremes of either "asceticism or licentiousness": "Some were living quite immoral lives but claiming to be spiritual, because they believed that their body had nothing to do with their soul. It is a small step from thinking like this to saying that sin doesn't matter in Christians" (Pawson 1222).

Lewis engaged with Gnosticism by contrasting progressive ideas about spirituality with the Biblical emphasis on the whole person—mind, body, and spirit: "It is no good trying to be more spiritual than God. God never meant man to be a purely spiritual creature. That is why he uses material things like bread and wine to put new life in us. We may think this is rather crude and unspiritual. God does not: He invented eating. He likes matter. He invented it" (MC 62). This bold assertion demonstrates that Lewis's own belief in a supernatural realm is not a rejection of the material world. That he saw body and spirit, intellect and emotions as integral parts of a whole is evident in this vibrant figurative description of his conversion experience: "A philosophical theorem, cerebrally entertained, began to stir and heave and throw off its grave cloths, and stood upright and became a living presence. I was to be allowed to play at philosophy no longer" (SBJ 181). Lewis's contemporary language and personal application bring an added immediacy to an ancient event. The image relates to the prophet Ezekiel's vision of a valley filled with dry bones which are clothed in flesh and restored to life by the breath of God.

1.3. Contemporary Gnosticism

David Tacey's book, *Edge of the Sacred* (1995) provides material for comparing how twenty-first century neo-Gnosticism relates to Lewis's earlier response to life-force theories. Tacey undermines any concept of a supernatural Creator, advocating the creation

of a new image to replace the one "attacked by Nietzsche and debunked by Freud"(x). His vision is an interesting comment upon Australian culture, but he also assumes a global scope for his agenda to supplant Christian orthodoxy and resurrect a pre-Christian spirituality: "What excites me is the role that Australia can play in this archetypal drama of the death and rebirth of the sacred" (x). The terminology here recalls observations made by Lewis in correspondence with Don Giovanni Calabria, claiming that 'Post-Christian man' has lost both "the supernatural and natural light which pagans possessed" (CLIII 365). But Lewis argues that the primitive innocence of 'pre-Christian man' cannot simply be regained, because figuratively he is "as far removed as virgin is from widow" (307). Lewis writes before the constraints of political correctness so the female terms representing two stages of 'society' may appear 'sexist'. But these terms are not used in the context of gender roles and are not demeaning. Rather they relate to social status. He relates 'Virgin' to youthful inexperience and 'widow' speaks of bereavement and separation. Lewis's metaphor appears to be an apt representation of the state of a society that having experienced widowhood through the death of God and traditional values, expects to return to an earlier stage of pagan innocence and naivety. He argues that after the loss of a longterm mature relationship, life cannot return to its earlier innocent state.

Though they are a generation apart, Tacey's words sometimes appear to be a reiteration of Lewis's valuing of mythopoeia and ancient texts. Tacey recalls the anti-Christian climate of his formative years and, in the preface, discloses that "anti-Christianism has been a potent force in my development". Family and educational influences, right through to his post-doctoral fellowship taught him that "God was an infinite illusion" (ix). He speaks of the irony of living in a so-called "Christian country", where "the Christian viewpoint is consistently under attack and often undermined altogether" (ix). In this he is confirming what Lewis experienced in his day and spent his post-conversion life redressing. The 'chronological snobbery' confronted by Lewis and Barfield is addressed by Tacey but from a different angle: "the sacred is not a stage of human development that we have outgrown, but a crucial part of human experience that we have misunderstood by attempting to interpret it literally" (3). The first part of this statement advocates a reverence and respect for sacred myth but goes on to assume that the ancients were not discerning in their response to figurative language. The question of 'literal interpretation' is dealt with more fully by Lewis who makes a distinction between 'myth' meaning 'false'-a "symbolical non-historical truth", and mythical accounts of "what may have been the historical fact"(The Problem of Pain 59 n1). The former meaning is often applied

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indiscriminately to Biblical texts to counter any possibility of supernatural intervention and the revelation of profound and historical truths. The Judeo-Christian testaments are a library of texts which together tell a cohesive and transcendent story of life—past, present and future, from the perspective of the Creator. The texts contain accounts of the origins of life, family, morality, culture and society. They record history, wisdom, poetry, letters and prophecy. Some of them are both figurative and literal and it would be a mistake to assume everything is fictional. Lewis's understanding of how these foundational Old and New Testament accounts evolved is expressed in a letter to a Mrs Johnson 14 May 1955:

If you take the Bible as a whole, you see a process in which something which, in its earliest levels...was hardly moral at all and was in some way not unlike Pagan religions, is gradually purged and enlightened till it becomes the religion of the great prophets and Our Lord himself. The whole process is the greatest revelation of God's true nature. (CLIII 608)

Lewis's understands the Word (the *logos*) to be, like the incarnate Christ, fully human and fully divine. This does not mean that the diverse texts were directly dictated by God or that He steered the pen, but that oral and written texts were recorded by a variety of authors whose human personalities, thoughts and experiences were taken up, inspired and published by the author of life.

Tacey claims to be "outgrowing the anti-Christianism of my earlier years" (ix), but this is not evident in his new broom approach to spirituality. However, in his book Jung and the New Age (2001), he says: "The notion that Christianity could be swept aside saddens and alarms me" (5). But this emotion appears to relate only to the ethical and moral dimensions of the faith, not to the central message of God's reaching out to save a lost humanity from itself. Tacey sees declining church attendance in twentieth-century England as a death knell but Lewis saw it as a type of 'cleansing of the temple'. Tacey actually cites Lewis's essay "Revival or Decay?" which refers to historical patterns of growth and faithfulness, interspersed with periods of unbelief, persecution and spiritual warfare. Lewis seems unconcerned with statistics, and sees the drift away from nominal adherence as a prerequisite to the growth of genuine faith. Lewis believes that the sins of humanity and the abuses of technical progress are born out of humanity's desire to dominate nature and rule independently of God. Tacey sees the future of mankind as "Gnostic, not theological" (Edge of the Sacred 126) and advocates a regression to an ancient concept of "the sacred", divorced from Biblical roots. Both authors interrogate the same situation but have different answers. Taken together, Tacey's following four statements display some ambivalence. In

a rather arrogant introductory statement, he claims that, "the vast majority of educated, contemporary people, have like myself, experienced Nietzsche's death of God and are unable to pretend that the intellectual enlightenment, modernism and now postmodernism have not taken place" (3). The language infers that anyone who does not bow to Nietzschean and Freudian theories must be delusional. However, the following comment seems to agree with Lewisian sentiments that spiritual pride and chronological snobbery need to be challenged: "Instead of feeling superior to those in the past who possessed faith and belief in the supra-human, we will need to follow their example...because we have lost the art of intuitive perception, we no longer know or remember how to experience, feel or recognise that which is other than human" (3). Like Lewis, Tacey later observes the negative effects of radical atheism: "The so-called death of God and the loss of religious sensibility has taken its toll on all of us: we have shrunk to the size of the mere human ego" (19). The language here mirrors Lewis's arguments in both The Abolition of man and his depiction of the "un-man" in his sci-fi trilogy. Having earlier identified with the 'death of God', Tacey now speaks disparagingly of Nietzsche's impact and regrets the collateral damage to ancient mysticism and spirituality: "Only Nietzsche, the foolhardy, and some Australians would be perverse enough to find relief and delight in what is the great metaphysical catastrophe of the modern era" (189). Tacey cites Mircea Eliade's The Sacred and the Profane (1959) in which Eliade observes the effects of desacralization: "Modern non-religious man forms himself by a series of denials and refusals, but continues to be haunted by the realities that he has refused and denied" (Eliade 204). The situation he describes is reminiscent of Lewis's accounts of his spiritual journey, and, I think, Lewis would agree with Tacey's reference to Eliade and Jung's view that, "no high culture has ever attempted to live without a meaningful relation to the sacred, no-one has considered that the material level was an adequate basis for sustaining a healthy and coherent society" (4). However, Lewis's experience suggests that, even in his day, the secularisation of society was already advanced. Today, there are many people who are attempting to live "without meaningful relation to the sacred" and would consider a society without religion a healthy alternative. Tacey, too, comments upon the negatives of materialism and consumerism in contemporary society but in spite of the "great metaphysical catastrophe" welcomes the "death of the old spirit" as a "psychological necessity" (ES199). He hopes to fill the anticipated vacuum left by the demise of traditional religion with his own dynamic alternative mysticism grounded in the 'sacred feminine'. Judging by the following cryptic outburst, Tacey has had to face adverse reactions to his remedies for a lost spirituality:

"some may laugh at or dismiss these phenomena now, but they will not be laughing for long" (203).

Although dismissive of 'outdated' Biblical imagery, Tacey employs it to promote his agenda: "the new wine of the spirit will demand new bottles, new labels, and different tastes" (206). This is a direct purloining of the metaphor Jesus used to introduce the new covenant of grace which his life and death would initiate: "Neither do men put new wine into old bottles else the bottles break, and the new wine runneth out and the bottles perish" (Matt. 9.17). The same metaphor has long been circulating in various Christian churches to describe the phenomena of the charismatic renewal of the 1970s. In fact, the rise of interest in charismatic gifts of the spirit and the extremes of 'charismatic renewal' can be seen as a reaction to the formal rationalism demanded by modernity which discouraged experiential and emotional expressions of faith. Tacey grounds his postmodern system in "Jung, gnosticism and mythopoeic tradition" (199), acknowledging that Judeo-Christian high culture was initially made possible by the "lynchpin" of the "spirit", but now believes this spirit has died, and expects that the "vast structures would tumble and fall" (198). Hence his enthusiasm to bury the 'dead' God image with Jung's vision: "A new image of God would be born in our midst, an image that would fulfil contemporary human needs and at the same time reveal a new and previously undisclosed or 'unconscious' side of the Godhead" (x). Presumably, this introduces Tacey's incarnation of the 'sacred feminine'. Lewis's own spiritual journey shows he has some empathy with Jung and in his essay "Psycho-analysis and Literary Criticism", says that "Jung is quite right in claiming that certain images, in whatever material they are embodied, have a strange power to excite the human mind...at the same time we may be cautious about accepting his explanation" (299-300). Lewis suggests that Jung does not provide a cogent argument as to why this actually happens; and asks the question: "Has Jung in fact worked us into a state of mind in which almost anything, provided it was dim, remote, long-buried, and mysterious, would seem (for the moment) an adequate explanation for the "leap in our blood" which responds to great myth?" (299-300).

Lewis has always acknowledged the power of myth and imagination; indeed it was a potent influence on his personal journey of faith which is fully described in *Surprised by Joy*. Kevin J. Vanhoozer, in his essay "On Scripture", makes the point that "Lewis himself clearly values the primary language of faith—sacred myth made fact—more than second-order theological articulations" (CC 80). He bases this on Lewis's acceptance of the way

God reveals himself in "stories about mighty acts, shed blood, death and rebirth (80). The incarnation of Jesus is described by Lewis as the ultimate fulfilment of all myths. He articulates exactly what he means in this passage from "Myth Became Fact":

Now as myth transcends thought, Incarnation transcends myth. The heart of Christianity is a myth which is also a fact. The old myth of the Dying God, without ceasing to be myth, comes down from the heaven of legend and imagination to the earth of history. It happens—at a particular date, in a particular place, followed by definable historical consequences ...If God chooses to be mythopoeic—and is not the sky itself a myth—shall we refuse to be *mythopathic*? This is the marriage of heaven and earth: It is an event that demands our love and obedience, but also our wonder and delight and it is addressed to the savage, the child, and the poet in each of us no less than the moralist, the scholar and the philosopher.(66-67)

It was the march of secularism and contempt for the ancient legends and stories that led Lewis to expand concepts about thinking and seeing. Tacey, likewise, counters these trends but his vision of postmodern spirituality is designed to meet "all the demands of the present in ways that are entirely in accordance with our advanced technical, scientific and intellectual development" (3). His euphoric prophecy of a cultural evolution involves the 'sacred feminine', and is combined with the understanding that we must first take a step backwards from "the rational intellect toward our culturally abandoned intuitive and wisdom faculty" (3). This particular phrase echoes Lewis's sentiments but the harmony ends there because Tacey wants to replace Biblical revelations and eyewitness accounts of historical events, with a vision that appeals to contemporary tastes and values. The tenor of Lewis's writing suggests that these ideas are not 'new' and are an updated version of the drive to create a deity in our own image.

1.4. The Sacred Feminine

The book of Genesis establishes an innate equality between the sexes by stating that God formed men and women in the image of God. Female and male are distinctive and individual, designed to function best as a cohesive unit. Biblical patterns regarding gender roles are often much misunderstood and misrepresented, but Lewis bases his understanding of social order and harmonious relationships on nature and scripture. The Gnostic Gospel of Thomas (written later than the New Testament Gospels) seems to indicate something strangely inferior to the Christian canon in the following interaction between Jesus and Mary Magdalene (found in the secret saying 114, translated by Thomas O. Lambdin): "I myself shall lead her in order to make her male, so that she too may become a living spirit resembling you males. For every woman who will make herself male will enter the kingdom of heaven" (qtd. in *Apologetics for the 21st Century* 193). The passage is cited by Louis Markos in "Beyond the Da Vinci Code", a response to Dan Brown's popular fiction regarding the 'sacred feminine'. Markos refutes Brown's "grossly distorted" claims against Christianity (185), and points out that the origins of the anti-feminine perspective were secular rather than ecclesiastical:

The real suppression of feminine virtues did not occur during the early church or the Catholic Middle Ages—both of which held masculinity and femininity in a tense but creative balance—but during the secular Enlightenment. It was the architects of the eighteenth-century Age of Reason who privileged reason and logic over emotion, intuition, and revelation—that is to say, masculinity over femininity…in fact the real impetus behind Gnosticism is not the preservation and exultation of the feminine, but the collapsing of masculinity and femininity into a bland sexless androgyny. (192-3)

Gender difference is a feature of the natural world and the culture of diverse societies reflects biological differences. It is fair comment to observe that in Western civilisations with a heritage of Judeo-Christian roots, women have achieved greater autonomy than their sisters in other cultures. Tacey adapts Biblical concepts to accommodate his Gnostic agenda of elitist, special knowledge: "The archetypal feminine wells up from the collective unconscious and feminism is born. But unless the Goddess herself is allowed to be born out of the sea spray and foam created by the severed genitals of the old patriarch, we have missed the mythic opportunity of the time" (Edge of the Sacred 189). This sexist/ageist language deliberately evokes a negative image of the Biblical deity, presumably in order to promote new revelations which are, "grounded in the feminine, but may not necessarily be feminine" (200). Tacey's wording echoes Lewis's, spoken in the role of narrator in his scifi novel, Perelandra: "he of Malacandra was masculine (not male) and she of Perelandra was feminine (not female)" (230). The statement comes in a fictional context but Lewis's further clarifies his thought: "Masculine and Feminine meet us on planes of reality where male and female would be simply meaningless" (230). This understanding of the divine origin of gender is foundational to Lewis's worldview.

The Christian concept of the Incarnation and its significance as a singular historic event becomes vague and insubstantial in Tacey's mind: "the natural world is mysteriously

animated by the **incarnational spirit** which brings a new ecological cosmology into being" (203). What this means in concrete terms is not entirely clear. The Biblical Incarnation bridges the gulf between the immortal and the material world. The singular event of Virgin birth as recorded in scripture is a type of parthenogenesis (asexual reproduction). In Miracles, Lewis views this unique intervention as central to the Christian faith (112). The concept of the triune God is figuratively depicted in terms of human relationships, a plurality of roles operating in accord. Father, Son and Holy Spirit are masculine in their creative roles and feminine in nurturing roles. Jesus the Son is male in his human gender but feminine in his submission to the will of the Father. Apocalyptic imagery portrays the faithful Church universal as a bride and followers of Jesus are her children. The New Testament blueprint for social cohesion is the ritual marriage ceremony. The "one flesh" unity of couples shadows the mystical union between Christ and the Church. Lewis takes this symbolism seriously and once wrote to Sister Penelope (25 March 1943) that, "Symbolism exists precisely for the purpose of conveying to the imagination what the intellect is not ready for" (CLII 565). He views human relationships as a metaphor for supernatural realities. Tacey claims that "In the first Incarnation, God became man, but did not wed the feminine" (200). The implications of this statement are unclear, however it is certain that Tacey regards theological interpretations of history as "mistaken" and his new vision is grounded in the rediscovery of "nature and the archetypal feminine" (203). This idea directs the discussion of language into the arena of gender wars and Lewis's reading of the controversial aspects of male headship.

By the spirit of the age, Lewis is judged as old-fashioned in his high view of the sanctity of marriage and ideals of domestic harmony, but his comments about gender issues often appear ahead of his time. Accounts of his domestic life and behaviour generally give no evidence of any tendency to legalism or chauvinism. In fact he takes seriously the Pauline exhortation for men to love their wives 'sacrificially' (Eph.5.25), and admits in "Priestesses in the Church?" to being "crushingly aware how inadequate most of us are...to fill the place prepared for us" (238-9). He celebrates gender difference as a higher and more natural alternative to sexless role playing. The literal and metaphorical implications of this view are expressed in both his fiction and non-fiction. In his sci-fi version of a prelapsarian Eden, gender is described as a "fundamental polarity that divides all created beings," not merely an imaginative extension of biological difference, but "a reality, and a more fundamental reality than sex" (*Perelandra* 230). In the essay "Priestesses in the Church?" the discourse approaches the subject from another angle. The

issue here relates specifically to the Anglican Communion because many Christian denominations have no 'priests' of any gender, believing in the 'spiritual' priesthood of all believers. Lewis's position is based on a principle of order, and his main concern is about potential disunity among communicants if the issues become politicised. This is a valid point because polarisation on controversial issues is often aggravated by inflammatory rhetoric which does nothing to educate or clarify points of view. Lewis expresses "every respect" for his opponents (male and female); noting that they are "sincere, pious and sensible" and their case is full of common sense (235). He is careful to stress that his views are not based on any perception of women as inferior beings, and emphasises that female intellect, holiness, and charity are not in question (236). The topic also involves the issue of gender language for God, and Lewis observes that although "God is not in fact a biological being and has no sex," gender distinctions are significant and meaningful: "One of the ends for which sex [meaning biological difference] was created was to symbolise to us the hidden things of God. One of the functions of human marriage is to express the nature of the union between Christ and the Church" (237-238). He maintains that the masculine imagery traditionally attributed to God is not merely a relic of patriarchy, but revelatory and representative of the "different and complementary organs of a mystical body" (238). Lewis thinks the terms 'He' and 'She' are both purposeful and good, but become meaningless when indiscriminately substituted for each other. In answer to the question as to why we should not simply get rid of the gender divide. Lewis states that if we start referring to God as 'She', even though 'masculine' and 'feminine' are equal entities, it would infer that they are also interchangeable, which they are not (237).

In her essay "On Gender", Ann Loades cites Lewis's essay and comments on his association of "femininity with creatureliness"; the idea that both men and women play a feminine role in their response to God (169). Loades has difficulty reconciling this with Lewis's statement about male priests being "insufficiently masculine" (GID 239). It is true that Lewis does not enlarge on what he means by 'not being masculine enough', but it becomes clear when read in the context of his belief that priests have a dual role of "representing God to us" and us to God (236). His term 'insufficiently masculine' surely cannot be rationally interpreted as 'be more macho' because good leaders do not bully, dominate or abuse people. Lewis expects priests to be strong and exemplary, dedicated, courageous, nurturing and even sacrificial leaders. The dual role requires both creatureliness (which is feminine) and leadership (which is masculine). There is no ambiguity in Lewis wanting male priests to be both good leaders of their congregations and

'feminine' in response to God. The idea of 'creatureliness' or dependence was once abhorrent to Lewis and as an atheist he resented any notion of accountability to authority or divine rule, but came to see the relationship in a totally different light.

In Lewis's view, our human experience of difference between 'the sexes' is only a shadow of a more fundamental reality: "Masculine is not attenuated male, nor feminine attenuated female. On the contrary the male and female of organic creatures are rather faint and blurred reflections of masculine and feminine" (*Perelandra* 230). A practical outworking of this view in the context of marriage relationships is touchingly expressed in *A Grief Observed*, Lewis's exploration of the experience of grief as a 'process' rather than a 'state', after the loss of his wife Joy to cancer:

For we did learn and achieve something. There is, hidden or flaunted, a sword between the sexes till an entire marriage reconciles them. It is arrogance in us to call frankness, fairness and chivalry 'masculine' when we see them in women; it is arrogance in them, to describe a man's sensitiveness, or tact or tenderness as 'feminine'... Marriage heals this. Jointly the two become fully human. 'In the image of God created He *them*'. Thus, by a paradox, this carnival of sexuality leads us out beyond our sexes. (42-43)

Loades sees this passage as "something of a late revolution" (171), but Lewis's sentiments appear to be in harmony with his earlier statements about the practical and symbolic aspects of gender roles. Perhaps his comments as a widower appear less academic because the voice of experience does give greater weight and resonance to the thoughts articulated in his other texts. A newly published anthology, Women and C.S. Lewis (2015) provides a fascinating range of perspectives on Lewis's approach to gender issues. Jeanette Sears 'respectfully' disagrees with Lewis on women in the priesthood, but also claims that he played "an extremely important role" in her self-understanding as a woman and in her realisation of "the potential of the feminine" (205). Randy Alcorn draws attention to Lewis's choice of a highly intelligent and articulate wife: "Any man who was insecure around capable women would surely stay away from Joy who was so brilliant and prone toward debate" (248). Monika Hilder notes that the "sexist" charge, often levelled by detractors of Lewis, is a hot topic (173). Along with many others, she finds "ample evidence" that his life and writings affirm 'females' and testify to his affinity with the 'feminine'. One of the editors, Carolyn Curtis speaks of Lewis's "high view of women", his original wit and enduring relevance (16-17). The book is scholarly but aims to reach a wider audience.

1.5. Lewis's Creative Use of Metaphor

Not only did Lewis defend anthropomorphic language and masculine imagery of God, but constantly created his own metaphors to elucidate difficult theological concepts. Many of the people with whom he interacted, through broadcasts, lectures and correspondence, were ignorant of their scriptural heritage and antipathetic to the technical language of theology. He observed that 'theory' and 'practice' need each other and stressed that the intellectual aspects of the faith must be accompanied with charitable attitudes and behaviour. When he clarifies a point with his own homespun illustrations he always directs readers back to scripture for optimum understanding: "Naturally God knows how to describe Himself much better than we know how to describe Him" (MC 148). Lewis describes theology as "the science of God"—not God, but a guide to our thoughts about Him and knowledge of Him. Aware of the limitations of the medium and of his own imaginings, Lewis is careful to alert readers to, "remember this is only one more picture. Do not mistake it for the thing itself: and if it does not help you drop it" (MC 58). In his book The Allegory of Love (1936), Lewis claims that our inner conflicts cannot be expressed without a metaphor and says "every metaphor is an allegory in little" (60). In Mere Christianity, this point is illustrated by an account of a conversation with an old RAF officer who voices a common attitude to religion and spirituality: "I've no use for all that stuff. But mind you, I'm a religious man too. I know there's a God. I've felt Him: out alone in the desert at night, the tremendous mystery. And that's why I don't believe all your neat little dogmas and formulas about Him. To anyone who's met the real thing they all seem so petty and pedantic and unreal" (MC 131). The comment exemplifies the tension between theory and fact, the abstract and the experiential. "In a sense", writes Lewis, "I quite agreed with that man" (131) and he concedes that the man's mystic experience was more real than any religious creed. But Lewis proceeds to consider the matter from another perspective and pictures the impressions of a man who consults the map of an area after enjoying the reality of the Atlantic coastline: "turning from real waves to a bit of coloured paper" (132). The image evokes the undeniable superiority of a real ocean experience, but Lewis balances this with two salient points about the intrinsic value of a map: "In the first place, it is based on what hundreds of thousands of people have found out by sailing the real Atlantic" (132), and secondly that the map itself actually leads somewhere and is a tool for the journey. Lewis values the map as an aid to a good outcome but emphasises that theory must result in practice: "Neither will you get anywhere by looking at maps without

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going to sea. Nor will you be very safe if you go to sea without a map" (132). The illustration primarily illustrates the complementary nature of doctrine and praxis, but has a wider application regarding the wisdom of consulting and valuing our oral and literary heritage when negotiating life in general.

Before attempting to answer complex questions regarding the binary nature of 'faith and good works' or the doctrines of 'freewill and predestination' Lewis acknowledges that he is not professionally qualified as a theologian. But his ability to relate such matters to the familiar aspects of life is invaluable: "it does seem to me like asking which blade in a pair of scissors is most necessary" (MC 127). The mental image shows that superficially conflicting concepts do not have to be oppositional, but are descriptive of a larger symmetry. He does not play down the challenge of holding both aspects in balance, conceding that the production of "good actions" demands a strong faith and "serious moral effort" (127-8). The source for this wisdom comes from Paul's letter to the Philippians: "Continue to work out your own salvation ... for it is God who works in you to will and to act according to his good purpose" (Phil. 2.12). The scriptural position is one of both/and rather than either/or. Lewis employs a metaphor from physics to the same question in a letter to Mrs. Emily McLay (3 August 1953):

I think we must take a leaf out of the scientists' book. They are quite familiar with the fact that, for example Light has to be regarded both as a wave in the ether and as a stream of particles. No-one can make these two views consistent; but till (if ever) we can *see* the consistency it is better to hold two inconsistent views than to ignore one side of the evidence. (*Letters of C.S. Lewis* 252)

Problems associated with our concept of God in relation to time are elucidated in the following way:

God is not hurried along in the Time-stream of this universe any more than an author is hurried along in the imaginary time of his own novel... All the days are 'Now' for Him. He does not remember you doing things yesterday; He simply sees you doing them, because, though you have lost yesterday, He has not. He does not 'foresee' you doing things tomorrow; He simply sees you doing them, though to-morrow is not yet there for you, it is for Him. You never supposed that your actions at this moment were any less free because God knows what you are doing. (MC 143-145) Lewis points out that this idea is not a point of doctrine in the Bible or the creeds so there is no need to accept it or even think about it. He finds the idea helpful but it should be "left alone" by the readers who do not (MC 146).

Figurative language enables the intellect to apprehend the realities that theology attempts to express. Lewis had a natural inclination to translate the technical language used to explain the basics of the Christian Gospel into everyday terms:

It is just this; the business of becoming a son of God, of being turned from a created thing into a begotten thing, of passing over from the temporary biological life into timeless Spiritual life', has been done for us. Humanity is already saved in principle. We individuals have to appropriate that salvation. But the really tough work—the bit we could not have done for ourselves—has been done for us. (MC 153-154)

He deprecates his own efforts to explain the sovereignty of God, and admits that his own "conjectures as to why God does what He does are of no more value than my dog's ideas about what I am up to when I sit and read" (*Reflections on the Psalms* 115). This domestic image of Lewis and his dog somehow imparts fresh insight into the nature of trust, and the unequal relationship between a man and His maker. It is also a witty reminder of the limits of our capacity to understanding life and the universe. In the address "*De Futilitate*", Lewis discusses the phenomenon of human thought, and in principle defends the validity of reasoning against those who believed it to be subjective or illusory. The idea that the mind is only a chance result of 'mindless events', is nonsensical to Lewis. He argues that if we assent to the idea that no thought is 'true', we contradict ourselves, because, if this premise is true then it too must be false (84). He believes that the laws of logic operate in accordance with all the laws of the cosmos, and employs the following two pictures to illustrate the improbability of the assumption that mindless 'Nature' has accidentally produced a rational mind:

It is as if cabbages, in addition to resulting from the laws of botany also gave lectures in the subject: or as if, when I knocked out my pipe, the ashes arranged themselves into letters which read: 'We are the ashes of a knocked out pipe'. But if the validity of knowledge cannot be explained in that way...then surely we must seek the real explanation elsewhere...Where thought is strictly rational it must be, in some odd sense, not ours, but cosmic or super-cosmic...not shut up inside our heads but already out there—in the universe or behind the universe. (CR 89) There is not space here to look at every creative metaphor that Lewis employs but the diversity is evident in some brief examples from Mere Christianity. God is variously described as the inventor and we the innovation. He is the painter and we are the picture, He is the fuel that runs our motor, or the dentist who has to inflict pain to treat his ailing patients (169-170). God is also described as "a living, dynamic, activity of love" (148) and Lewis offers these images as an aid to readers who perceive theology as difficult and want only the simplicity of the obvious or the easy. He does, however, point out that we must expect complexity: "If Christianity was something we were making up, of course we could make it easier. But it is not" (141). In studying difficult passages in the Psalms, Lewis discovers that when the problems are honestly faced there is always the anticipation of a new discovery (ROP 28). This is a principle that relates to the following passage from Mere Christianity: "Christianity claims to be telling us about another world, about something behind the world we can touch and hear and see. You may think the claim fake; but if it were true, what it tells us would be bound to be difficult-at least as difficult as modern physics and for the same reason" (134). His statements can be applied to all aspects of human endeavour, but serve here to introduce the subject of the next chapter.

CHAPTER 2

The Language of Theology and Physics

There was a young fellow from Trinity Who took the square root of infinity But the number of digits, gave him the fidgets He dropped Math and took up Divinity.

George Gamow

The poet only asks to get his head into the heavens. It is the logician who seeks to get the heavens into his head. And it is his head that splits.

G.K. Chesterton

Lewis's comparison of the complexity of theology and physics serves as a platform from which to explore the shared quest to find answers to the big questions posed by our existence. Both disciplines explore the incommensurability and inscrutability of the cosmos. This chapter seeks to discuss this relationship in the context of Lewis's position regarding Nature and Supernature, and to explore contrasting philosophical responses to the universe. In Miracles (1947), Lewis likens the mental images associated with 'old atomic theory' to the pantheistic "instinctive guesses" of religious thought. He argues that as quantum theory has changed our simplistic perceptions of 'atoms', Christian theology has defined and organised our knowledge of God. He concedes that, "Christian theology, and quantum physics, are both by comparison with the first guess, hard, complex, dry and repellent" (88). This thesis has no intention to argue the science, only to analyse Lewis's engagement with philosophical interpretations of data and to explore the imaginative potential of cosmic models. In that context, the book Parallel Worlds (2005), by theoretical physicist Michio Kaku, is used as a primary source, not because his theories are held to be more authoritative than those of any other scientist but because his text speaks about contemporary models and is written for the lay person. As Kaku explains in his preface:

...instead of focussing on space-time, I concentrate on the revolutionary developments in cosmology unfolding within the last several years, based on new evidence from the world's laboratories and the outer reaches of space, and new breakthroughs in theoretical physics. It is my intention that it can be read and grasped without previous introduction to physics and cosmology. (xvi)

Like Lewis, Kaku has a talent for communicating a complex and specialist subject with a minimum of technical detail. He is a populariser of his subject and a best-selling author as well as achieving fame as one of the co-founders of String Theory. His book includes a variety of comments from other distinguished scientists who have differing views of cosmogony and cosmology. Although his philosophical interpretations are often in conflict with those of Lewis, his mix of science, philosophy and art fit the backdrop theme of the thesis.

In Miracles, Lewis claims that: "Men became scientific because they expected Law in Nature, and they expected Law in Nature because they believed in a Legislator" (110). Physicist Chris Jeynes echoes this in his paper "On a Christian Cosmogony": "There is an objective physical world out there, and physicists correctly regard it as their job to find out its nature and to understand its behaviour" (17). Lewis cites Professor Whitehead's claim that scientific curiosity was nurtured by "centuries of belief in a God who combined 'the personal energy of Jehovah' with 'the rationality of a Greek philosopher'" (110). The language presents an image of God who combines energy and reason, terms which have contemporary appeal. Although Lewis was neither a scientist nor formally trained as a theologian, like Newton, he studied Nature and the books of the Bible which give a theological perspective on the story of Earth's history from the very beginning to the end. In a metaphor reflecting his principle of "first and second things", he describes science in terms of humanity's explanatory "notes" on Nature, but views Christianity as the "poem" (Miracles 134-5). He followed the scientific discourses of the day and was interested to observe how current science relates to theology. In "Secular Philosophy and the Religious Temperament", philosopher Thomas Nagel acknowledges that humanity's yearning for "cosmic reconciliation...has been part of the philosophic impulse from the beginning" (1). Professor of Science and Religion, Peter Harrison claims in The Territories of Science and *Religion* (2015) that the premise for reading nature as a metaphor for spiritual realities is found "in scripture itself" (57). Genesis 1.14 states that the sun and moon were created for symbolic and practical purposes. Einstein famously claimed that "The eternal mystery of the universe is its comprehensibility" and he described the human ability to think of concepts which bring order into our whole sense experience as "a miracle" (Out of My Later Years 61).

History shows that great strides in science have been made by men living within a Christian worldview, and by those who believed that the Creator had revealed himself in the workings of nature and were therefore driven to study them diligently. Johannes Kepler wrote in this vein in a letter to Hewart Von Hohenburg ((March 26, 1598): "we astronomers are priests of the highest God in regard to the book of nature, we are bound to think of the praise of God and not the glory of our own capacities" (qtd. in Baumgardt 44). In his essay "Religion without Dogma", Lewis challenges the popular assumption that science has already disproved the supernatural:

If we define nature as the system of events in space-time governed by interlocking laws, then the new physics has really admitted that something other than nature exists...we have not in fact proved that science excludes miracles: we have only proved that the question of miracles, like innumerable other questions, excludes laboratory treatment." (133-4)

Physicist and priest John Polkinghorne notes that science can only comment on what usually happens and has "no a priori power to rule out the possibility of unprecedented events in unprecedented circumstances" (35). He acknowledges that the resurrection of Jesus lies at the heart of Christian belief (35) but believes that "theology can rightly lay claim to the pursuit of truth under the rubric of critical realism" (14-15). He compares miracles recorded in scripture to "phase transitions" in physics, and argues that rare or unique events should not be arbitrarily dismissed. "Divine consistency" does not rule out the occurrence of unprecedented events or the possibility of divine intervention (35-37). Thomas Nagel admits to being "constitutionally incapable of religious belief" but concedes that the hypothesis of a Creator who intervenes in the physical order on specific occasions is "just as likely as the hypothesis of blind forces" working through mutation and natural selection (24). Lewis notes that the continued application of the scientific method tends to foster a mind-set that excludes the supernatural, and observes that scientists tend to have varying degrees of flexibility depending on their particular discipline: "Mathematicians, astronomers and physicists are often religious, even mystical; biologists much less often; economists and psychologists very seldom indeed. It is as their subject comes nearer to man himself that their anti-religious bias hardens" ("Religion without Dogma" 135). This seems fair comment in light of the anti-theistic pronouncements made by socio-biologists such as Richard Dawkins and E.O. Wilson. Lewis's view that physicists seem more circumspect in their interpretations of data is evident in the thinking of physicist Paul Davies who has written many books engaging with the questions raised by the new physics, including The Cosmic Blueprint (1988), The Goldilocks Enigma (2006) and

Quantum Aspects of Life (2008). Davies denies any theological interpretations but in *The Mind of God* (1992) he concedes that: "I cannot believe that our existence in this universe is a mere quirk of fate, an accident of history, an incidental blip in the great cosmic drama" (Davies 232). Kaku says: "Indeed physicists stand alone among scientists in tackling one of humanity's greatest questions: is there a grand design? And if so, is there a designer? Which is the true path to truth, reason or revelation?" (PW 356). His comment is made in reference to philosopher/theologian Paul Tillich's remark that physicists are the only scientists who can say the word 'God' without blushing.

Lewis respects the work of scientists but does not uncritically accept the philosophical ideas built upon the theoretical projections. In Mere Christianity he says: "Do not think I am saying anything against science: I am only saying what its job is" (30). His caution that our knowledge and insights are limited is shared by physicist Roger Penrose who discusses the transition from classical physics in his book The Emperor's New Mind (1989). He tackles the gaps in knowledge on the subject of computers, minds, and the laws of physics: "Perhaps we shall need to understand whatever profound quality it is that underlies the very nature of matter, and decrees the way in which all matter must behave" (149). Like Penrose, Lewis acknowledges that the quest for truth is insatiable, and that theories can only give approximations. In the essay "Dogma and the Universe", Lewis observes that, "In one respect...contemporary science has recently come into line with Christian doctrine" and suggests that, "the burden of proof rests not on us but on those who deny that nature has some cause beyond herself" (38-44). He does, however, caution against relying too heavily on this because models change. In classical physics the universe was believed to be infinite, a view held by some very eminent scientists for many years (Jeynes 8). However, the universe is now said to have had a cataclysmic beginning in the Big Bang and will have a fiery end. In the words of Kaku: "The laws of physics and thermodynamics are quite clear: if the expansion of the universe continues to accelerate in a runaway mode, intelligence as we know it cannot ultimately survive" (PW 306). Another possible scenario is that the continuous expansion for our universe could lead to an eventual, catastrophic 'big freeze'. If the process is halted and reversed, "temperatures would become so hot that all life would be extinguished" (Kaku 42). In the words of the astronomer Ken Croswell, it will go "from Creation to Cremation" (43).

Lewis took great interest in the pronouncements of eminent scientists and in "Dogma and the Universe" notes that, "If anything emerges clearly from modern physics, it is that nature is not everlasting" (38-39). These scientific pronouncements accord with both the Genesis account, in which the "*ex nihilo*" creation of the universe has a dramatic beginning, and the New Testament prophecy of Earth's apocalyptic end. The prospect is also affirmed in the psalmist's ancient lyric: "Of old hast thou laid the foundation of the earth and the heavens are the work of thy hands. They shall perish, but thou shalt remain" (Ps.102. 25-6). As Chris Jeynes notes, there is no clear consensus among the scientists:

One might think that the acceptance by modern physicists of the Big Bang, which also affirms a clear temporal start to our universe, makes this aspect of it also a cosmogenical statement, but this is not the case since most of the exponents of the Big Bang theory also believe some sort of oscillating universe or multiverse conception which avoids this Biblical singularity. (Jeynes 4)

This point is also made by theoretical physicist Steven Weinberg in *The First Three Minutes*, when he says that although the oscillating theory is problematic: "Some cosmologists are philosophically attracted to the oscillating model, especially because, like the steady-state model, it nicely avoids the problem of Genesis" (154). The comment admits a bias against the possibility of a supernatural mind. Like Lewis, Jeynes stresses that speculations about the 'how 'and 'why' of the Cosmos "will always reflect the worldview of the thinker". He defines them as philosophical or religious, rather than scientific questions, because the events occurred "*prior* to any scientific treatment" (4).

2.1. Knowledge, Imagination and Meaning

The fixed laws of nature have been identified by physicists but the bewildering regions of quantum theory still defy comprehension. Nobel laureates Richard Feynman and Steven Weinberg both admit to this. Feynman claimed it was safe to say that "nobody understands quantum mechanics" (*Parallel Worlds* 146), and Weinberg admits to feeling discomforted by "working all my life in a theoretical framework that no one fully understands" (*Dreams of a Final Theory* 85). However, this does not make him sympathetic to theologians who seek to describe the nature and attributes of God. Weinberg is contemptuous of any kind of religious faith, dismissing theists as those who are "content to comfort themselves with tales of gods and giants," and contrasting them with the men and women who strive to cross the frontiers of science and technology (*The First Three Minutes* 155). In *Against the Flow* (2015), Professor John C. Lennox writes of

being challenged by a physicist as to how a twenty-first century mathematical scientist could possibly believe in the theology of the Incarnation. Lennox responds with two questions of his own regarding the nature of consciousness and the less complex concept of energy. Even though energy can be measured and its conservation expressed in equations, the challenger has to concede: "I don't know". The exchange demonstrates that it is not just theists "who believe in concepts that they do not fully understand" (19-20).

Lewis describes theology as the 'science of God' and compares the language of theologians to the formulas of scientists that can only be "expressed mathematically" (MC 54). The issue of specialized language is addressed by Weinberg in his chapter "Beautiful Theories": "Our theories are very esoteric-necessarily so, because we are forced to develop these theories using a language... of mathematics, that has not become part of the general equipment of the educated public" (DFT 119). Weinberg goes on to remark that physicists generally do not like using technical terms which are only meaningful to "initiates", but does note that some deliberately make their work "accessible only to a band of cognoscenti". He sees esotericism for its own sake as "just silly" (119). Lewis concurs on the subject of technical jargon in "God in the Dock": "By trying to translate doctrines into vulgar speech we discover how much we understand them ourselves. Our failure to translate may sometimes be due to our ignorance of the vernacular; much more often it exposes the fact that we do not exactly know what we mean" (243). He shares the theologian's difficulty in expressing the ineffable qualities of deity, and likens this to the physicist's wrestling with the inadequacy of language to describe the invisible world of particles:

We have recently been told by the scientists that we have no right to expect that the real universe should be picturable, and that if we make mental pictures to illustrate quantum physics we are moving further away from reality, not nearer to it. We have clearly even less right to demand that the highest spiritual realities should be picturable, or even explicable in terms of our abstract thought. (*The Problem of Pain* 67-8)

Lewis notes that pictures only help us to understand the formula and relates this to the Incarnation and Atonement which are based on actual events and eyewitness testimony:

"We believe that the death of Christ is just that point in history at which something absolutely unimaginable from outside shows through into our own world. And if we cannot picture even the atoms of which our own world is built, of course we are not going to be able to picture this" (MC 54-5). Professor Alister McGrath, (renowned theologian,

scientist, intellectual historian and Christian apologist) further clarifies this approach: "Lewis is emphatic that we are not asked to accept Christian *theories* about—for example—the atonement; we are asked to embrace the atonement itself as a greater reality" (*The Intellectual World of C.S. Lewis* 68). Lewis anticipates a reader's questioning the benefit of talking about something we do not fully understand, such as the Trinitarian doctrine, and agrees that talking about it achieves little: "The thing that matters is being actually drawn into that three-personal life, and that may begin any time—to-night, if you like" (MC 139). In "On Theology", Professor Paul Fiddes notes that, "it is the *experimental* aspect of talking to God that interests Lewis" (92). Lewis always grounds abstract thought in temporal experience and believes that communicating with God is of more value than talking about God. He stresses that the academic study of scripture does not necessarily equate with 'knowing' the author of life in a Biblical sense and is sterile if it does not bear fruit in moral praxis.

Theologians wrestle with the problem of human sin, the mystery of deity, transcendence and immanence. Physicists also grapple with realities beyond observation. Weinberg speaks of the twentieth century's "dazzling expansion of the frontiers of scientific knowledge." He notes how the central role of matter has been changed by the "fusion of relativity with quantum mechanics" and has been "usurped by principles of symmetry, some of which are hidden from view in the present state of the universe" (DFT 1). The study of the unseen world of particle physics is now central in scientific enterprise but, as Weinberg laments, progress has been frustrated by the enormous cost and logistics of building new experimental facilities such as the CERN Hadron Collider (1-2). The impact on society in general of this huge expansion of scientific knowledge and its elevation to the exclusion of other ways of knowing was discussed by Lewis and Barfield. Barfield laments the growing sense of meaninglessness that has come from the habit of systematically and meticulously observing data and interpreting it "in terms of physical cause and effect" (ROM 11). In "Religion without Dogma" Lewis agrees that the concept of 'meaning' cannot be understood by scientific methods: "For meaning is a relation of a wholly new kind, as remote, as mysterious, as opaque to empirical study as the soul itself" (137). He rejects the naturalistic view that human thought, is a product of random, irrational causes.

The apparent emptiness of Space can be read as evidence of the absence of meaning. In *The First Three Minutes* (1977), Weinberg gives a poetic description of a view from an aeroplane, a benign scene of fluffy clouds and "snow turning pink as the sun sets" but

admits that, "It is hard to realize that this all is a tiny part of an overwhelmingly hostile universe" (154). He admits to pessimism about the significance of life: "whichever cosmological model proves correct, there is not much comfort in any of this" (154), and comes to the sad conclusion that "The more the universe seems comprehensible, the more it seems pointless" (154). In Dreams of a Final Theory, Weinberg qualifies this statement, saying only that "the universe itself suggests no point" (204), but dismisses the possibility of "any sign of the workings of an interested God" (196). He goes on to cite the mixed results of interviews with cosmologists and physicists, and quotes the words of Harvard astronomer Margaret Geller, "Why should it have a point? What point? It's just a physical system, what point is there?" (204). This reaction parallels Lewis's period of atheism as expressed in his early apologetic work The Problem of Pain (1940). After confronting the bleak realities of life in a broken world, the profligacy and indifference, Lewis contemplated the evidence of design, beauty, fecundity and abundant provision. The existence of consciousness, reason, personality, individuality and virtue led Lewis to consider the fact of moral law and a communicative 'author of life'. The sublime majesty of mountain ranges, rugged canyons and ocean depths also have a profound effect on the human spirit. The pre-Copernican views of the cosmos, the Newtonian mechanistic imagery or the current multiverse model all have the potential to inspire curiosity and awe. The apostle Paul writes: "O the depth of the riches both of the wisdom and knowledge of God. How unsearchable are his judgements and his ways past finding out. For who hath known the mind of the Lord? or who hath been his counsellor?" (Rom. 11. 33-34). The psalmist sings, "The heavens declare the glory of God; and the firmament sheweth His handiwork" (Psalm 19.1); a response that reflects the wonder of generations who have explored and appreciated planet Earth and pondered the visible universe.

The quotation comes from Lewis's favourite psalm, and for him, star gazing was a serious hobby. In scripture, people are so much more than 'just atoms', because God breathes into them the breath of life. Humans are body and spirit, with an awareness of their seeming insignificance and a desire for relationship. Arguably, this might in modern language equate to consciousness, reason and language. Mathematical physicist Roger Penrose discusses this subject in depth, challenging the supporters of AI (artificial intelligence), and claiming that physicists do not yet know enough about the physical laws that govern the workings of the brain (149). Penrose's following passage is particularly significant here because he is an atheist but his argument supports Lewis's case (put decades earlier) in defence of reason:

In this book I have presented many arguments intending to show the untenability of the viewpoint—apparently rather prevalent in current philosophizing—that our thinking is basically the same as the action of some very complicated computer...Consciousness seems to me to be such an important phenomenon that I simply cannot believe that it is something just "accidently" conjured up by a complicated computation. It is the phenomenon whereby the universe's very existence is made known. (447-8)

Lewis notes that: "what is behind the universe is more like a mind than it is like anything else we know" (MC 30). The comment reflects the thoughts of his contemporary, the astronomer James Jeans (cited by Kaku), who spoke of the inadequacy of mechanical interpretations of nature: "We come to entities and phenomena which are in no sense mechanical. To me they seem less suggestive of mechanical than of mental processes; the universe seems to be nearer to a great thought than to a great machine" (PW 350). Kaku has an atheistic worldview but leaves the question of what or who drives events unanswered, because it is outside the scope of science. Lewis too knows that 'supposals' are not proofs but are a legitimate part of questions about truth and meaning. Kaku's book *Physics of the Future* (2011) expresses the hope that future probes will "do the impossible" by revealing the origins of the universe prior to the Big Bang. If these questions are not answered by LISA (Laser Interferometer Space Antenna), whose tentative launch date is 2018-2020, Kaku hopes that the next generation of detectors "may be up to the task" (259-261). The following passage is Kaku's summary of cosmic origins: "Scientists believe the universe started out in a state of perfect symmetry, with all the forces unified into a single force. The universe was beautiful, symmetrical, but rather useless...In order for the possibility of life to exist, the symmetry of the universe had to break as it cooled" (PW 98).

Kaku's understanding of cosmic causes is consistent with the Biblical account of order and broken perfection in Eden. The apparent "randomness" is countered in *Genesis* by the account of the purposeful creation of all life. As Jeynes describes it, the fact of entropy (Second Law of Thermodynamics) is essential to creativity because it breaks the symmetry of all the other laws of physics, promoting "differentiation and the development of complex systems" (12). Kaku acknowledges that the origin of this small break in the symmetry of matter and anti-matter which sparked creation and life in the world as we know it, is still a mystery (PW 96). Weinberg notes that our view of things changes but the laws of Nature do not change; the symmetry of the laws of nature overrides any apparent symmetry of 'things': "A symmetry of the laws of nature is a statement that when we make certain changes in the point of view from which we observe natural phenomena, the laws of nature we discover do not change" (DFT 109). It seems that the fixed laws of nature operate in conjunction with the apparent randomness of quantum physics. Likewise in Judeo-Christian theology, humans are subject to a protective framework of natural and moral law, but have the freedom and responsibility to make life choices. Creaturely obedience to these Biblical precepts must be a willing rather than a forced response. This is the basis of Lewis's 'key position'. He once wrestled with the paradoxical concepts of predestination and free will but came to a position of trust: "If God thinks this state of war in the universe a price worth paying for free will...then we may take it is worth paying"(MC 49). His contemplations offer deeper insights and a different perspective, as does his following thought:

The inexorable 'laws of Nature' which operate in defiance of human suffering or desert, which are not turned aside by prayer, seem, at first sight, to furnish a strong argument against the goodness and power of God. I am going to submit that not even Omnipotence could create a society of free souls without at the same time creating a relatively independent and 'inexorable' Nature. (PP 15)

This is an example of Lewis's flexibility in handling complex issues and going beyond theological tenets.

The descriptive language of science often lends itself to metaphysical and theological contemplations, creating mental images that resonate with meaning— the cold void of space full of dangerous radiation, gravity and anti-gravity, the high energy heat of a sun, a light source that burns but does not consume (like the burning bush of Moses). The subatomic particles of science relate to the "dust" of Genesis as a basic element of nature. It is also interesting to note that, as I understand it, anti-matter is just like normal matter; only the sign of certain properties is different. This is analogous to the fact that though people consist of the same basic materials, individually they behave positively or negatively, making rational or irrational choices driven by individual impulses and other unseen influences. Particles and anti-particles that annihilate each other, colliding planets, dying stars, gamma rays, quasars and 'Dark Matter'-these are the cosmic ingredients that inspire science-fiction and the pens of poets. Our awareness of potentially destructive comets and super-massive black holes brings to mind the abyss of apocalyptic literature. The visibility of stars and planets impact on human consciousness and the powerful forces and immeasurable distances speak of transcendence. But historically, humanity's relationship with nature evokes a sense of immanence. Immanence is expressed in both

Old and New Testaments by anthropomorphic metaphors for God such as 'Father', 'shepherd', 'potter' and 'bridegroom'. The diverse writers give evidence of communion between Creator and creature: "Thou will show me the path of life: in thy presence is fullness of joy" (Ps.16.11). The apostle Paul expresses the transcendent nature of deity by emphasising that God is separate to his material creation—holy and utterly 'other'. He is immortal, dwelling in "light that no man hath seen, nor can see" (1Tim.6.16). The prophet Isaiah also records God's separation from the natural world: "For my thoughts are not your thoughts, neither are your ways my ways, saith the Lord. For as the heavens are higher than the earth, so are my ways higher than your ways" (Isa. 55. 8-9). These verses inform Lewis's stance on Nature and the Supernatural. These dual facets of the divine nature are eloquently described by philosopher Charles Taylor in this passage from *Sources of the Self* (1989): "God is not just the transcendent object or just the principle of order of the nearer objects, which we strain to see...so the light of God is not just 'out there', illuminating the order of being...It is also an 'inner light'" (129).

Lewis's book *Miracles* explores at length the complexity of holding these two aspects in balance, and again reiterates that, "all speech about supersensibles is, and must be, metaphorical in the highest degree" (77). He is also aware that the Old Testament writers avoid any direct representation of God in terms of natural phenomena. For instance, God is communicated as light but not as the actual 'sun'. Even when God's presence is with the Israelites in the wilderness as 'a pillar of cloud by day' or 'a pillar of fire by night,' the wording suggests God is **in** the cloud or the fire, not **of** it. The language seems to deliberately avoid any tendency to encourage the idolatry so widespread in surrounding cultures at the time. It is clear in Lewis's theological writings that he is always conscious of looking beyond the figurative representations because they can only ever be imperfect vehicles to carry aspects of a larger truth:

Space is like Him in its hugeness: not that the greatness of space is the same kind of greatness as God, but it is a sort of symbol of it, or a translation into non-spiritual terms. Matter is like God in having energy: though, again, of course, physical energy is a different kind of thing from the power of God...But life, in this biological sense, is not the same as the life there is in God: it is only a kind of symbol or shadow of it. (MC 135)

This passage relates to Lewis's principle of "first and second things"; his claim that if we confuse the Creator with his creation or deny His authorship and authority, we will distort or miss the greater good. Lewis addressed the need to strip away the "puny human

characteristics" of our mental images of deity, but counselled against the opposite error of picturing God as "an endless, silent sea, an empty sky beyond all stars, a dome of white radiance" (*Miracles* 94). This practice he believed led to "mere zero" and the worship of "a nonentity" (94). In a letter to Paul Elmer More (1934), Lewis finds the concepts of transcendence and immanence most perfectly embodied and reconciled in the person of Jesus, and the singular events of his life on earth: "Is the traditional Christian belief not precisely this; that the same being which is eternally perfect...in some incomprehensible way, is a purposing, feeling, and finally crucified Man in a particular place and time? So that somehow or other, we have it both ways?" (CLII 146). The statement unites the two elements of his "key position", but also demonstrates that his faith involves a personal, spiritual relationship rather than an adherence to religious ritual.

2.2. Insignificance and the Image of God

The vastness of space and the insignificance of planet Earth have been used to undermine religious responses to the universe. The Copernican and Cosmological Principles have been used against belief in a personal creator, and to infer that before heliocentrism became fact, ancient people had an inflated idea of their own importance due to ignorance of their place in the cosmos. Lewis countered this idea in the twentieth century in the following passage from *Miracles*:

The immensity of the universe is not a recent discovery. More than seventeen hundred years ago Ptolemy taught that in relation to the distance of the fixed stars the whole Earth must be regarded as a point with no magnitude. His astronomical system was universally accepted in the Dark and Middle Ages. The insignificance of Earth was as much a commonplace to Boethius, King Alfred, Dante, and Chaucer as it is to Mr. H.G. Wells or Professor Haldane. Statements to the contrary in modern books are due to ignorance. (53)

He argues that "There is no question of religious people fancying that all exists for man and scientific people discovering that it does not" (55). Kaku perpetuates the myth somewhat by claiming that Victorian England's national pride grew from the Biblical status of humans as created in God's image and the erroneous view that Earth was the centre of the universe (PW 344). He credits Newton, Einstein and Darwin with dethroning humanity from its exalted place (344) and claims that "our place in the universe has shifted dramatically with each scientific generation" (347). Kaku sees Thomas Huxley's defence of Darwinian theories as instrumental in giving a more scientific understanding of human nature, and in conclusion claims that: "The generation now alive is perhaps the most important generation of humans ever to walk the earth" (361). The comment retains something of the pride and dominion that Kaku associates with Victorian attitudes. In fact he gives the current 'now' generation a more exalted status than any claimed by previous eras.

Lewis shows that ancient scholars were aware of the cosmic insignificance of both planet Earth and the human species, and had a greater understanding of some of the concepts since revealed by modern physics than they are given credit for. His detailed study of medieval scholarship *The Discarded Image* aims to educate and enable the reader to appreciate the ancients' perception of the universe (74). In his essay "C.S. Lewis as Medievalist", Stephen Yandell notes that "In modern evolutionary thought, Man stands at the top of the stairs whose foot is lost in obscurity", but in the medieval mind, "he stands at the bottom of a stair whose top is invisible with light" (Yandell 216). As Lewis has stressed often, the Bible always counsels against unhealthy pride. It is Kaku who exalts humanity, asserting that we are the creators of meaning in the universe: "It is our destiny to carve out our own future, rather than have it handed down from some higher authority" (PW 358). This is also the mantra of the new atheists who cynically misrepresent theistic faith in the cause of autonomy. Lewis points out that **all** knowledge is linked to authority:

The ordinary man believes in the Solar System, atoms, evolution and the circulation of the blood on authority—because the scientists say so. Every historical statement in the world is believed on authority. None of us has seen the Norman Conquest or the defeat of the Armada. None of us could prove them by pure logic as you prove a thing in mathematics. (MC 60)

The Hebrew Scriptures do not support the case for unhealthy human pride and selfimportance. The prophet Isaiah describes the earth as a sphere, and speaks of the Creator as the one who "stretches out the heavens like a curtain." This imagery does not fit the image some man-made tribal deity. God's cosmic operations are described in expansive terms; He sits "upon the circle of the earth and its inhabitants are like grasshoppers" (Isa. 40.22). The psalmist, looking at the starry skies without any telescopic aids, exclaims in awe: "When I consider thy heavens, the work of thy fingers, the moon and the stars which thou hast ordained; what is man, that thou art mindful of him, and the son of man that thou visitest him?" (Ps.8. 3-4). Augustine of Hippo (354-430), who wrote many theological

works and anticipated some of the findings of modern physicists, had no illusions about his own status. In his devotions he asks, "What is a human being, but a tiny particle of your creation" (The Confessions of St. Augustine 15). In its Biblical context, the phrase 'in the image of God' is a detail of origins and differentiation; a fact concerning identity and relationship, not a coronation. Genesis does not record the phrase as an elevation to the central place in the universe or a licence for self-glorification. Rather, it is a reminder of the standard below which humanity has fallen and implies a duty of responsibility. Both 'male and female' are said to be made in God's image, but even in the close fellowship enjoyed with their maker from the beginning, they are always subordinate creations, naturally dependant and responsible as stewards of the earth. More is demanded of humans because whether or not they are a product of special creation, or gradually evolved from some ancestral primate, they have been endowed with reason, moral conscience and spiritual consciousness. In "Dogma and the Universe", Lewis sums this up in a simple but memorable one liner: "Men look at the starry heavens with reverence: monkeys do not" (41). Kaku, too, observes that human consciousness at the highest level involves a sophisticated understanding of common sense and the rules of nature, planning strategies and predicting the future. He notes in *Physics of the Future* that: "on the whole, animals do not have a well-developed sense of the distant past or future. Apparently, there is no tomorrow in the animal kingdom. We have no evidence that they think days into the future" (98).

In Lewis's estimation, St. Augustine surpassed other classical philosophers, and Lewis's concept of eternity was influenced by Augustine's advanced understanding of the finite concept of 'time':

For us, all time past is driven on by time to come, and all to come follows upon the past. But in God's timetable of creation, all past and future are one design, flowing out of one now...What then is time?...if nothing ever passed away then it would be wrong to speak of time past. If nothing were coming in the following pieces of existence there would be no future...If the present remained one present always and never passed into time past, truly it should not be time. It would be eternity. (*The Confessions* 214-217)

St. Augustine's view changes any notion of 'eternity' as a ceaseless perpetuation of 'time', to a perpetual present. As Jeynes notes, it is a view that "sits comfortably with modern physics" (5). Author Harry Lee Poe notes in "The Problem of Time in Biblical Perspective", that "No consensus exists today in the scientific world about the meaning and

nature of time" (Lee Poe 25). And in "History, Hope and Christianity", Dr. Timothy George notes that Augustine's teaching about the mysteries of time and eternity is very like that of Lewis, apart from "certain twists and contortions" (George 30-31). Lewis explores the concept in the Appendix B of *Miracles* where he reflects in some detail on the false picture that God and nature inhabit a common Time, positing the idea that to God "all the physical events and all the human acts are present in an eternal Now" (180-81).

This perspective on 'time' relates to metaphors cited earlier by Lewis to help correspondents with the concept of "predestination", and informs his thinking about the operations and purpose of prayer and intercession. This leads him to contemplate that a prayer offered at midday could possibly influence an event that has already occurred earlier in our time, and he notes that this thought would be easier for some scientists to accept than it would for the populace in general (183). The theme is expressed in even simpler terms in Mere Christianity: "We tend to assume that the whole universe and God himself are always moving on from past to future just as we do...It was the theologians who first started the idea that some things are not in Time at all: later the philosophers took it over: and now some of the scientists are doing the same" (143). In recent television programmes featuring the cosmos, physicists have spoken of 'time' as an illusion. Discoveries regarding the structure and fabric of the universe do not help with the really interesting questions about meaning, or provide answers on moral or religious matters. Lewis accepted the nuclear origins of the chemical elements of our universe, and that our bodies consist of star dust, but it was not the physical details of the material world that fired his enthusiasm, as this letter to Arthur Greeves shows:

It seems like having new bits of curtain described to one, when one is agog for hints of what lies behind the curtain...it is not quite true to say that I don't feel any interest in these things now: rather they rouse a very intense, impatient interest for a short time, which quite suddenly leaves one at once sated & dissatisfied. (CLI 952)

The truth of this statement is evident in Kaku's citing of how Einstein, following the success of his ground-breaking theory of relativity, was bombarded with letters asking him to explain the meaning of life. He, too, could not see beyond the curtain and admitted that he was "powerless to give comfort" (PW 358-9). Others have been less reticent about venturing outside the discipline of science, and interpret each new discovery about our universe as justification for discrediting any concept of a Creator.

2.3. The Anthropic Principle

The insignificance of Earth in the structure of the cosmos is well established, but so too are the 'special' conditions that enable this planet to sustain life in a hostile environment. Kaku states that "the constants of nature seem to be finely tuned to allow for life and even consciousness" (381). He does not believe these facts necessarily signify God's 'special blessing' but neither does he avoid asking the question, "Was Earth placed in the middle of all the Goldilocks zones because God loved it? Perhaps" (244). It seems apt that scientists should have chosen a term from a fairy tale to describe such phenomena. The evidence of 'fine tuning' suggests we earthlings live within a whole series of 'Goldilocks zones' which protect us from the lethal properties of space. The term "the Anthropic Principle of Cosmology" was not introduced into scientific language until the nineteen seventies so Lewis would have been unaware of this compelling evidence of purposeful design. Kaku lists an impressive array of 'coincidences': "For example, our moon is just the right size to stabilize Earth's orbit" (PW 242). Over time, any variation would cause destructive climate change, due to a resulting wobble and a shift of axis which would make the creation of DNA impossible (243). The importance of the moon to Earth's survival is stunningly expressed in the sobering words of astronomer Donald Brownlee and geologist Peter Ward, cited by Kaku: "Without the Moon there would be no moon beams, no month, no lunacy, no Apollo programme, less poetry, and a world where every night was dark and gloomy. Without the Moon it is also likely that no birds, redwoods, whales, trilobites, or other advanced life would ever grace the earth" (PW 243). It is a passage that justifies the special, mystic place that the moon holds in our emotions, in the history of astrology and astronomy, as well as in the world of literature, romance and fantasy. Philosopher and historian of religion, Mircea Eliade writes of the metaphysics of the moon, their value in communicating meaning, giving form and structure to the cosmos:

It was lunar symbolism that enabled man to relate and connect such heterogeneous things as: birth, becoming, death, and resurrection; waters, plants, woman, fecundity, and immortality...For we must not forget that what the moon reveals to religious man is not only that death is indissolubly linked with life but also, above all, that death is not final, that it is always followed by new birth. (Eliade 156-57)

Kaku records that the planet Jupiter has an important role in our world's survival; it is the perfect size to have a beneficial effect on planet Earth, "its immense gravity helps to fling asteroids into outer space", and as computer models indicate, "if Jupiter were much Cosmic Warfare Chapter 2: The Language of Theology and Physics

smaller and its gravity much weaker, then our solar system would still be full of asteroids", plunging into Earth's oceans and destroying life (PW 243).Furthermore, the dimensions and weight of Earth are tailor-made for our survival. The weight is perfect for keeping "an atmospheric composition beneficial to life" (243). If it were any smaller our oxygen would be diminished by weak gravity, and if earth were too big, "it would retain many of its primordial, poisonous gases, making life impossible" (243). If this were not enough to inspire awe, Kaku goes on to say that Earth is in the 'Goldilocks zones' of both 'planetary masses' and 'permissible planetary orbits':

Remarkably, the orbits of the other planets, except for Pluto, are all nearly circular, meaning that planetary impacts are quite rare in the solar system. This means that Earth won't come close to any gas giants whose gravity could easily disrupt Earth's orbit...Earth also exists within the Goldilocks zone of the Milky Way...if the solar system were too close to the galactic center, where a black hole lurks, the radiation field would be so intense that life would be impossible. And if the solar system were too far away, there would not be enough higher elements to create the necessary elements of life. (243-244)

While noting the relative stability of planet Earth through its history, and the many "happy cosmic accidents" that have placed it in such a favourable, narrow band, Kaku cites how astronomer Hugh Ross compares the chances of this happening accidentally, "to a Boeing 747 aircraft being completely assembled as a result of a tornado striking a junk yard" (PW 247). The amazing statistics confirm that people throughout history were not foolish to gaze on the mysterious planetary system surrounding them with a sense of reverence and awe. Ancient generations could not access the detail and drama of telescopic images but were able to observe the 'cathedral of stars' without a haze of urban sprawl or competing neon flashes.

The evidence of 'fine tuning' is increasingly apparent in other branches of science, as Alister McGrath points out in "The Natural Sciences and Apologetics" (2011): "In recent years, it has become clear that 'fine-tuning' can also be observed at the chemical and biological levels. The debate in the literature mainly concerns the interpretation of these phenomena, whose existence is generally conceded" (155). Robin Collins, a researcher and writer in the disciplines of physics, mathematics and philosophy notes in interview with author Lee Strobel that most of the research and writing about fine-tuning has been published since the nineteen eighties and during the last thirty years scientists have discovered how "everything about the basic structure of the universe is balanced on a razor's edge. The coincidences are far too fantastic to attribute this to mere chance or to claim that it needs no explanation. The dials are set too precisely to have been a random accident" (Strobel 160). Ironically, it was the evidence of the anthropic principle and the integrated complexity of DNA that led renowned proponent of atheism, Antony Flew, to gradually reject his former philosophical conclusions late in life: "So multiverse or not, we still have to come to terms with the origins of the laws of nature. And the only viable explanation here is the divine mind" (Flew 119-21). Dawkins has dismissed Flew's change of mind, not by rational argument, but by referring to his advanced age and "overpublicised tergiversations" (The God Delusion 82). In River out of Eden (1992), Dawkins rejects any possibility of a first cause and claims that, "DNA just is. And we dance to its music" (133). Flew was once a participant in the meetings of Lewis's Socratic Club where he imbibed the Socratic principle, "to follow the argument wherever it leads" (23). He describes his philosophical turnaround in There is a God (2007). The book presents as a rational response to the evidence of both physics and theology rather than a dramatic conversion to Christianity. He became unconvinced by the new atheist theories of abiogenesis (123-4), and his dialogue with contemporary Bible scholar N.T. Wright gave him a new perspective on the singular Incarnation of Jesus. Flew was impressed with Wright's fresh approach to the Christian story: "It is absolutely wonderful, absolutely radical, and very powerful" (Flew 213). Wright has been dubbed by some as the most important apologist of the Christian faith since Lewis.

Even when facts are indisputable, individual interpretations are diverse. Kaku airs differing views from scientists to illustrate the lack of consensus among theologians, philosophers and physicists regarding the origins and destiny of the universe. Kaku cites Isaac Newton's view that stars and planets move without divine intervention because they are controlled by immutable laws of nature (248). But Newton also believed that the elegance of these laws pointed to the existence of a supernatural God. Citing from Lightman and Brawer's *Origins: The Lives and Worlds of Modern Cosmologists*, Kaku quotes the response of Don Page, a student of Stephen Hawking. Speaking of the abstract rules of quantum physics, Page says that "In some sense, the physical laws seem to be analogous to the grammar and the language that God chose to use" (356), and in answer to question of purpose says, "Yes, I would say there's definitely a purpose. I don't know what all the purposes are, but I think one of them was for God to create man to have fellowship with God. A bigger purpose maybe that God's creation would glorify God" (PW 356). The same data inspired Charles Misner, an early pioneer in the analysis of Einstein's general

theory of relativity, to say: "My feeling is that in religion there are very serious things, like the existence of God and the brotherhood of man...So I think there are real truths there... the majesty of the universe is meaningful, and we do owe honour and awe to its Creator" (356). Kaku also cites Stephen Hawking on the subject of origins and chance:

If the rate of expansion one second after the big bang had been smaller by even one part in a hundred thousand million, [the universe] would have recollapsed before it reached its present size...The odds against a universe like ours emerging out of something like the big bang are enormous. I think there are clearly religious implications. (PW 348)

However, in the book The Grand Design (2010), Hawking and Leonard Mlodinow promote a purely naturalistic answer to the enigma of creation ex-nihilo, based on the predictions of M-theory: "The discovery relatively recently of the extreme fine-tuning of so many of the laws of nature could lead...us back to the old idea that this grand design is the work of some grand designer...That is not the answer of modern science... our universe seems to be one of many, each with different laws" (164). Hawking and Mlodinow claim that mathematical models could allow for the spontaneous creation of unlimited multiple universes, and suggest that this possibility somehow erases God from the equation. John Lennox rebuts these speculations in his book Gunning for God (2011): "We note in passing that Hawking has once again fallen into the trap of offering false alternatives: God, or the Multiverse. From a theoretical point of view...God could create as many universes as he pleases. Of itself, the multiverse concept does not rule God out" (36). Lennox challenges Hawking's claim to be "the voice of modern science", citing other 'weighty voices' including Oxford physicist Frank Close's claim that the M-theory, "is not even defined...I don't see it adds one iota to the God debate, either pro or con" (36). Lennox also cites Lewis's argument about the inability of the laws of Nature to cause anything (Miracles 34).

Professor of English David C. Downing, too, finds Lewis's arguments relevant to current debate and cites them in a blog entitled, "How C.S. Lewis "prefutes" Stephen Hawking" (2010). "Prefute" is Downing's creative adaptation of "refudiate", a Sarah Palin slip of the tongue, confusing the words 'refute' and 'repudiate'. While acknowledging that Hawking and Mlodinow "write on abstruse issues with admirable clarity," Downing views their explanation for the laws of physics and the creation of universes *ex nihilo* as a "breath-taking logical leap"; a "leap of faith" from "theoretical possibility" to "unarguable reality" (1-2). Downing proceeds to suggest that Lewis "almost seemed to have them in

mind when he wrote half a century ago that our external observations should always be supplemented by some alert inward gazing" (2). He cites Lewis's paper, "The Laws of Nature," which discusses the predictable movements of billiard balls to illustrate what we understand about 'the laws of physics'. Lewis argues that though the laws of nature explain the movements, "it is usually a man with a cue" who sets them in motion. He comes to the conclusion that: "however far you traced the story back you would never find the laws of Nature causing anything...the *laws* are the pattern to which events conform: the source of events must be sought elsewhere" (77-78). The Genesis account of creation begins with an act of 'spontaneous creation', and introduces the timeless existence of an omnipotent and omniscient creator, unlike any local, tribal deity. For Lewis, the existence of the Bible's powerful 'logos' and the evidence of nature speak of a conscious mind, and he rejects the hypothesis that the production of chemicals and conditions necessary to life and thought is the result of "some kind of fluke" (MC 30). But Sir Martin Rees, the Astronomer Royal of England, prefers to replace the 'hand of God' with the law of averages and explains the numerous beneficial 'cosmic accidents' and the tiny band of hundreds of 'coincidences' by postulating "the existence of millions of parallel universes" (Rees 249). Responses to evidence are usually driven by a particular worldview and Kaku notes in his glossary that Multiverse theory was introduced on "philosophical grounds" to explain the implications of the Anthropic Principle (PW 394).

2.4. Science and the Arts

The pursuit of truth in the sciences and the arts involves the imagination. Kaku's books demonstrate his interest in the cross-disciplinary contributions of scientists, philosophers, theologians and writers of science-fiction. His *Physics of the Impossible* (2008) makes reference to *Star Trek, Star Wars* and *Back to the Future*, but is a serious exploration of phasers, force fields, teleportation and time travel. In *The Discarded Image*, Lewis too noted how science-fiction often anticipates later realities. The astronomical changes in his day reduced scepticism about life on other planets, fuelling expectancy and optimism about its probability: "We are now told that in so vast a universe stars that have no planets and planets that have inhabitants must occur times without number. Yet no compulsive evidence is to hand. But is it relevant that in between the old opinion and the new we have had the vast proliferation of 'science fiction' and the beginnings of space travel in real life?" (222). Weinberg acknowledges the role of imagination in the exploration of the

universe: "It is as if Neil Armstrong in 1969 when he first set foot on the surface of the moon had found in the lunar dust the footsteps of Jules Verne" (DFT 125). Ironically, it was a poet who first intuitively and accurately presupposed the solution to Olbers' Paradox. Kaku draws attention to this, citing cosmologist Edward Harrison's acknowledgement that Edgar Allan Poe's Eureka: A Prose Poem (1848) anticipates the answer: "When I first read Poe's words I was astounded: How could a poet, at best an amateur scientist, have perceived the right explanation 140 years ago when in our colleges the wrong explanation ... is still taught?" (PW 29). Kaku explains that the solution lay in the supposition that the universe is finite. Modern science has since revealed that the universe had a beginning and is expanding. The light from the fringes of the universe takes a long time to reach earth and we are unable to see microwave radiation. Figuratively speaking, the language resembles the language of theology which speaks of our metaphysical and spiritual blindness. Scripture speaks of the darkness of human sin which separates humanity from communion with God and that from the perspective of Earth the Creator is concealed or cloaked in darkness (Ps. 97.2). Poe introduces Eureka as "An Essay on the Material and Spiritual Universe" and his preface has a passage (reminiscent of Keats) that captures the complexity of ways of knowing: "To those of us who feel rather than think—to the dreamers and those who put faith in dreams as in the only realities—I offer this Book. Truths, not in the character of Truth teller, but for Beauty that abounds in its truth, constituting it true" (7). Edward H. Davidson's critique of Poe's work views Eureka as both poetry and "science", in the sense of "designating the whole body of discreet knowledge which man may know" (223). However, Davidson notes that the poem was "for more than a century...denounced as a farrago of nonsense" (223). The prevailing philosophy of empiricism was not receptive to Poe's interest in man's total intuitive perception, his "sense of poetic and imaginative beauty" (224), but he would have found a friend in Lewis.

Kaku waxes lyrical when describing the beauty and power of a theory that attempts to reconcile gravity with quantum theory:

String theory allows us to view subatomic particles as notes on a vibrating string: the laws of chemistry correspond to the melodies one can play on these strings; the laws of physics correspond to the laws of harmony that govern these strings; the universe is a symphony of strings; and the mind of God can be viewed as cosmic music vibrating through hyperspace. (PW 356)

The imagery echoes the medieval concept of the music of the spheres, which was a mathematical, harmonic or metaphysical idea, a philosophical concept rather than literal sound. In Dr. Tony Phillips's article "NASA Spacecraft Records 'Earthsong,'" he writes that NASA has confirmed that the sun, moon and planets emit sounds in their orbits, and recently space recordings of "eerie-sounding radio emissions" from planet Earth have been available on a new Science Cast Video on-line. The non-acoustic 'chorus' is beamed from NASA's twin Radiation Belt Storm Probes. The relationship between beauty and truth relates to Kaku's comments regarding the current standard model of physics which he says is so "remarkably ugly" that "theoretical physicists feel it cannot be the final theory" (PW 82-3). The theory is remarkably successful in accommodating all the experimental data of particle physics, but is still unable to account for gravity: "all attempts for the last fifty years to create a truly unified description of the universe have ended in ignominious failure" (185).

The subject of elegant mathematical truths, the world of physical reality and a Biblical world view is comprehensively explored by John Nickel in Mathematics: Is God Silent? (2001). One of the most eloquent citations comes from mathematician Herbert Westren Turnbull: "The greatest mathematics has the simplicity and inevitableness of supreme Poetry and music, standing on the borderland of all that is wonderful in Science, and all that is beautiful in Art. Mathematics transfigures the fortuitous course of atoms into the tracery of the finger of God" (Turnbull 141). Nobel laureate in atomic theory Paul Dirac wrote of the "beauty and power" of mathematical theory in describing physical laws (Dirac 53). He had no religious belief but sometimes used the term 'God' metaphorically. Mathematical patterns underlying the Hebrew and Greek scriptures have been revealed by Russian mathematician Ivan Panin. Remarkably, the original Hebrew language of the very first verse of Genesis 1.1: "In the beginning God created the heavens and the earth" exhibits mathematical perfection, using multiples of seven in the letters, words and grammatical forms. Weinberg is averse to any theological interpretations of life, but in DFT, acknowledges some mystery in the transference of knowledge, when he notes that, "physicists generally find the ability of mathematicians to anticipate the mathematics needed in the theories of physicists quite uncanny" (125). He cites the mathematician G.H. Hardy who, like Turnbull, harmonizes science with the arts: "mathematical patterns like those of painters and poets must be beautiful. The ideas, like the colours or the words, must fit together in a harmonious way" (121). Weinberg has reservations about "our sense of beauty", valuing it only as "a sign of our progress toward a final theory" rather than as useful guide in the pursuit of knowledge (105): "Weirdly, although the beauty of physical theories is embodied in rigid mathematical structures based on simple underlying principles, the structures that have this sort of beauty tend to survive when the underlying principles are found to be wrong" (120). Weinberg's point is reminiscent of Lewis's comments concerning the "discarded image" of the Ptolemaic universe, which Lewis admired for its pattern of elegance and order in spite of its flaws. Weinberg draws attention to the fact that even elegant theories such as those of Einstein or Dirac were later shown to contain flaws, and he notes, too, that interpretations of natural phenomena are influenced by our perspectives. He concedes that current observations and theories may later be shown to conflict with a natural law: "Symmetries like these have amused and intrigued artists and scientists for millennia but did not play a central role in science" (DFT109). In *Theology, Hermeneutics and Imagination*, Garrett Green also notes the long-term influence of cosmic imagery:

From Galileo and Newton to Einstein and Stephen Hawking, the reigning scientific models of the cosmos have provided the larger culture with powerful analogies and metaphors that shape its epistemology, its poetry, its politics, and its religion...many of the leading postmodern ideas borrow much of their imagery and not a little of their social prestige from scientific notions of relativity, uncertainty, and incommensurability. (15)

Both quotations relate to Lewis's premise that models are more useful to the poets than to the theorists.

Kaku believes there is indirect evidence of a theory of everything, but as yet "there is no universal consensus on what the theory is" (PW 187). He admits that rather than the usual painstaking process of detailed observation, partial hypothesis and testing of data, String Theory came as a result of "simply guessing the answer" (PW 188-89). Polkinghorne observes that to accept the in-vogue ideas of superstring theory requires the belief that by using only mathematical considerations, theoretical physicists can " second-guess the character of nature at a level of detail more than ten thousand million million times smaller than anything of which we have empirical evidence" (99). Kaku's book *Physics of the Future* (2011) reiterates his passion to find a "single coherent theory" (3), and he concedes that, "if the ultimate laws of reality will be described by a formula perhaps no more than one inch long, then the question remains, where did this equation come from?" (358). Lewis comes to the same conclusion: "Supposing science ever became complete so that it knew every single thing in the whole universe. Is it not plain that the questions, "Why is

there a universe?' 'Why does it go on as it does?' 'Has it any meaning?' would remain just as they were?" (MC 31). The question of meaning behind the universe will not go away, and Kaku admits that if this "single equation that can describe the entire universe in an orderly, harmonious fashion is found, it implies design of some sort" (PW 358). But this has no personal implications for him and he believes that we "create our own meaning" (358). Kaku reduces the issue to a simple choice: "physicists have been forced to entertain two outrageous solutions: either there is a cosmic consciousness that watches over all, or else there are infinite universes" (145).

2.5. Future Visions

Many of the futuristic projections of scientists are just as marvellous or seemingly incredible as Biblical imagery of apocalyptic endings and promised "new creation". Kaku speaks of the future threat of meteor and comet impacts, the possibility of the Sun swallowing the Earth (PW 295) and, the likelihood "that our Earth will die in fire, rather than ice, leaving a burnt-out cinder orbiting the Sun" (296). He even states that: "Some physicists have argued that before this occurs, we should be able to use advanced technology to move Earth to a larger orbit around the Sun, if we haven't already migrated from Earth to other planets in gigantic space arks" (296). In discussing the possibility that worm holes (inter-universe tunnels) may someday be the means of inter-dimensional travel, Kaku's speculations seem even more fantastic. If a civilization is threatened and needs to escape to a new universe through a portal that proves too small, his hypothetical solution is: "To reduce the total information content of an advanced intelligent civilization to the molecular level and inject it through the gateway, where it will assemble on the other side. In this way an entire civilization may inject its seed through a dimensional gateway and re-establish itself in full glory" (21). Surely this language has the ring of science fiction about it but as noted earlier, many of the ideas of science fiction have since been realized. Kaku suggests that "Hyperspace, instead of being a play thing for theoretical physicists, could potentially become the ultimate salvation for intelligent life in a dying universe (21).

Lewis vision of 'ultimate salvation' interprets science in the light of scriptural principles and prophecy. His youthful rebellion turned into a willingness to 'lay down his arms' (MC 56). He takes seriously the Bible's records and accounts, told over thousands of

years and written down by diverse authors. In *Mere Christianity*, he explains the Christian vision of hope but ends with a self-deprecating reference to his own shortcomings:

Though Christianity seems at first sight to be all about morality, all about duties and rules and guilt and virtue, yet it leads you on, out of all that, into something beyond. One has a glimpse of a country where they do not talk of those things except perhaps as a joke. Everyone there is filled full with what we should call goodness as a mirror is filled with light. But they do not call it goodness. They do not call it anything. They are not thinking of it. They are too busy looking at the source from which it comes. But this is at the stage where the road passes over the rim of the world. No-one's eyes can see very far beyond that: lots of people's eyes can see further than mine. (MC 129)

According to Lewisian theology, this eschatological consummation, the harmonious relationship which humanity was created to enjoy, is likened to a dance. He anticipates that when self-interest, competition and resentment are no more: "It is like turning from a march to a dance" (*Fern-seed and Elephants* 21). He finds a similar theme in the Psalms: "the most valuable thing the Psalms did for me is to express that same delight in God which made David dance" (ROP 45). Other scholars have noted the same—Michael Ward writes that for Lewis, "this ceaseless dance of singing spheres around the home of God represented the revelry of insatiable love" (*Planet Narnia* 24). Evan K. Gibson finds it in Lewis's science-fiction trilogy:

Lewis did not claim to be able to explain the nature of the universe...But one of his most poetic pieces of prose gives us a series of principles of God's creation. I am referring, of course, to what might be called the hymn of the Great Dance, which appears at the close of the story...By dance, Lewis seems to mean the interlocking and constantly shifting relationship of all created things. Nothing moves at random. All are part of a pattern and contribute in perfect harmony to the beauty of the whole (Gibson136-37).

Kaku, too, uses the imagery of a dance to describe his appreciation of the cosmos. But his enthusiasm and expectations for the future, in contrast to those of Lewis, are soundly mancentred:

We are now at the most exciting time in human history, the cusp of some of the greatest cosmic discoveries and technological advances of all time. We are making the historic transition from being passive observers to the dance of nature, to becoming choreographers of the dance of nature, with the ability to manipulate life, matter, and intelligence. (PW 360-361) If Lewis's Bible-based future vision seems surreal or delusional, Kaku's prognostications for billions or trillions of years ahead seem impossible to digest, even for twenty-first century minds. From his 'stage zero', where we are now, he envisages three stages of development for civilized advancement. Type 1 people will succeed in harnessing planetary energy and master how to access solar power, using it to "control or modify the weather, change the course of hurricanes, or build cities on the ocean" (307). The people of Type 2 civilisation, having exhausted the power of a single planet, will harness the power of an entire star, "They are able to consume the entire energy output of their star and might conceivably control solar flares and ignite other stars" (307). When Type 3 civilization consumes the energy of one solar system, it will colonize "large portions of its home galaxy", utilizing the energy of "ten billion stars" (308). This would have sounded anathema to Lewis who deplored the drive to subdue nature and the assumption that mankind was on an ascent to domination.

Lewis's quest was about the pursuit of 'goodness' rather than power. Kaku's vision seems to involve an insatiable pursuit of energy. The billions to trillions of years' time scale allows plenty of time for the realization of these dramatic changes to our current primitive condition, and gives free reign to hypothetical blue prints. Kaku would think this a fair comment because he cites this quip from astronomer Ken Croswell: " Other universes can get intoxicating: you can say anything you want about them and never be proven wrong, as long as astronomers never see them"(PW 256). Although the Christian faith is based on actual events in history, and fulfilment of prophecy, the end times visions involves things as yet unseen. It is Lewis's contention in the essay "Miracles" that our experience of death and entropy; the laws of degradation and disorganisation, cannot be "the ultimate and eternal nature of things" (34). Like the physicists who search for a 'theory of everything', Lewis's vision stretches the boundaries of existing knowledge, as this passage from his address "De Futilitate" illustrates: "Where thought is strictly rational it must be, in some odd sense, not ours, but cosmic or super-cosmic. It must be something not shut up in our heads but already 'out there'—in the universe or behind the universe: either as objective as material Nature or more objective still" (CR 89). In "Miracles," Lewis challenges the assumptions of liberal theologians who reject the possibility of supernatural intervention in the history of the universe. He cautions against the hasty dismissal of miraculous events as primitive fakes or mere allegories that emanate from a localised view of earth and heaven. Lewis seeks to expand our perception of concepts and events that go beyond our five senses: "To explain even an atom Schrodinger wants seven dimensions" (34-5). According to Kaku, "String and M-theory need eleven dimensions to describe the universe, only four of which can be observed in the laboratory" (PW 386). The statement makes Lewis's speculations about multiple supernatural realms: "a world or worlds of super-sense and super-space" (GID 35), sound entirely plausible.

In *Physics of the Future*, Kaku notes that quantum forces are at work everywhere in everyday life, even though generally not visible. The solid appearance of objects is in reality an illusion because "matter is basically empty" (175-6). The language recalls Lewis's view that the material world is less real than invisible realms. But Kaku's more startling ideas mirror New Testament miracles and bring to mind the singular Biblical accounts of a virgin birth, and the resurrection of Jesus with a transformed body that could walk through walls. Kaku records a meeting with Dawkins who postulates that:

"the genome of the missing link has been mathematically re-created by a computer programme...it might be possible to actually create the DNA of this organism, implant it into the human egg, and then insert the egg into a woman, who will then give birth to our ancestor"(PF 158). Kaku claims that, "Scientists are not just interested in extending human life span and cheating death, they are interested in bringing back creatures from the dead" (156). He goes on to say that "since atoms are largely empty, we should be able to walk through walls" and the reason we don't is due to a "curious quantum phenomenon." (175). This is explained by Pauli's exclusion principle which states that, "no two electrons can exist in the same quantum state. Hence when two nearly identical electrons get too close, they repel each other" (176). Kaku's futuristic 'miracles' require the intervention of human intelligence but those recorded in scripture required the intervention of a divine intelligence. In the essay "The Grand Miracle," Lewis views these miraculous events as "the first fruits" of the approaching "cosmic summer" (GID 87).

In the first chapter, we saw how Lewis used Shakespeare's metaphor of a stage to depict the proximity of the spiritual realms to mundane realities. In *Parallel Worlds*, Kaku also draws on this image to clarify his ideas:

Imagine the stage of life consisting of multi-storey stages, one on top of the next. On each stage the actors read their lines and wander around the set, thinking that their stage is the only one, oblivious of the possibilities of alternate realities. However, if one day they accidentally fall into a trapdoor, they find themselves thrust into an entirely new stage, with new laws, new rules and a new script. (112) Kaku is not concerned here with the identity of the play's author, but unlike Weinberg, he does at least allow the existence of a script. Kaku's vision takes account of the social implications of scientific progress and he is encouraged by the current rate of advances in infrastructure and technology such as the internet, freedom of information, large trading blocks, democracy, and a global and bilingual society. He is optimistic about overcoming national divisions, and anticipates a reduction and change in the nature of warfare due to expansion of trade and tourism. He hopes that the pressure to survive will bring about a greater control of pollution and management of resources (309). However, like the doctrine of sanctification in theology, Kaku warns that the transition from the 'zero' of our present civilization to stage one will not be without pain: "Our painful transition...will surely be a trial by fire, with a number of close calls" (311). He is not specific about what this entails but does make a proviso in this later comment: "Our grand-children, however, will live at the dawning of Earth's first planetary civilization. If we don't allow our brutal instinct for self-destruction to consume us...we possess both the means for destroying all life on Earth or realizing a paradise on the planet" (360). Like Lewis, Kaku sees the importance of moral values and discipline in our attitude to life and work. His focus is on the quest for one single coherent theory that can unify gravity with quantum physics and comprehend the ultimate laws of reality. But his futuristic vision for humanity's wellbeing includes the quality of love: "And love is an essential ingredient that puts us within the fabric of society. Without love, we are lost, empty, without roots. We become drifters in our own land, unattached to the concerns of others" (PW 359).

Of course, 'love' has no place in the technical language of science and we would not expect an in-depth analysis of the term in a book essentially about physics, but it is central to theology. Lewis's analysis of the term is found in his book *The Four Loves*. He admits his inadequacy for the task of examining such a topic but discusses the differing aspects of love: Affection, Friendship, Eros and Agape (charity in a Christian sense). For him, love is much more than a naturalistic development from the sexual instinct, and is divine in origin. In an earlier introductory passage, Kaku indicates that the source of his ethics was established in his early upbringing under the influences of Bible stories and Buddhism:

"It seemed to me that the parables about great floods, burning bushes, and the parting of waters were so much more exciting than Buddhist chanting and meditation. In fact these ancient tales of heroism and tragedy vividly illustrated deep moral and ethical lessons which have stayed with me all my life" (3). The parallels evident in the visions of Kaku and

Lewis inform discussion on the affinities between theology and physics. In Quantum Physics and Theology, Polkinghorne illustrates an 'unexpected kinship' between the two disciplines, and argues that both use intellectual and experiential techniques of discovery. He identifies their "cousinly relationship" in five points: "Moments of enforced radical revision", "A period of unresolved confusion", "New synthesis and understanding", "Continual wrestling with unsolved problems" and "Deeper implications" (17-21). He describes both as "forms of rational enquiry" with differing subject material (24) and claims that theology, like science, progresses through the "dialectical engagement between experimental challenge and theoretical conceptual exploration" (27). Theology was formulated by a careful evaluation of records regarding the historical Jesus, his life and teaching and that of the early church (27-8). Like Lewis, Polkinghorne observes that physics uses mathematical equations and theology uses the tools of philosophy to assess "the conceptual coherence of ideas" (28). He fuses his science with Christian faith and suggests that the GUT (Great Unified Theory) has its counterpart in the Father, Son and Holy Spirit (99). Both concepts seek to express a harmonious relationship between differing elements, and Polkinghorne suggests that: "the true Theory of Everything is not superstrings...but is actually trinitarian theology" (104). The concept of "three Persons eternally united in the mutual exchange of love" is meaningful to him as "a profound insight into the meaning of the foundational Christian conviction that 'God is Love' (1 John 4.8)" (104). Theoretical physics speaks the language of mathematics, and cannot relate to humanity's intuitive need for love or the desire to relate to the creative mind; but Polkinghorne observes that the physical universe appears increasingly to be "the fitting creation of the Trinitarian God, the One whose deepest reality is relational" (104). Like Kaku and Lewis, Polkinghorne embraces Einstein's inspirational approach to understanding the cosmos, the method of "freely inventing", which he interprets as a "creative leap of the theoretical imagination that is involved in grasping the character and implications of some great insight" (25). The idea of 'freely inventing' is welcomed by Lewis in his use of the science-fiction genre at a time when the prospect of conquering Space created an appetite for stories about inter-planetary travel and contact with aliens. The following chapter analyses how he tapped into this imaginative energy to challenge 'progressive evolutionism' and the drive to dominate the universe.

CHAPTER 3

'Of This and Other Worlds'

Why should I leave this green-floored cell, Roofed with blue air, in which we dwell, Unless, outside its guarded gates, Long, long desired, the Unearthly waits, Strangeness that moves us more than fear, Beauty that stabs with tingling spear, Or Wonder, laying on one's heart That finger-tip at which we start As if some thought too swift and shy For reason's grasp had just gone by?

"An Expostulation": Against Too Many Writers of Science Fiction by C.S. Lewis

Citations from Michio Kaku in the last chapter show that, while working on the frontiers of theoretical physics, he enjoys reading science fiction and watching the fantasy worlds of *Star Trek, Star Wars* and *Back to the Future*. He freely quotes from novels based upon speculative quantum mechanics, and makes the point that many ideas once ridiculed in the world of science have proved to be achievable. Lewis, too, makes this link in *The Discarded Image* when commenting upon the 'astronomic' changes in the cosmic model of his day. He observes how agnosticism towards the prospect of life on other planets had been supplanted by optimism about its probability, even without "compulsive evidence". He asks the question: "But is it irrelevant that in between the old opinion and the new we have had the vast proliferation of 'science fiction' and the beginnings of space-travel in real life?"(221-2)

This chapter is not a comprehensive study of Lewis's sci-fi trilogy but focusses on selective themes that relate to thesis topics: ideological warfare and how models of the universe communicate meaning. The trilogy is the most obvious example of his use of a cosmic backdrop. The narratives encapsulate the interplay between reason and imagination, and his materials include aspects of twentieth century experience, science, philosophy, politics and cultural influences. These are mixed with ancient mystical beliefs and Biblical themes to create an "unearthly" environment. The genre is ideal for enacting a drama about ideological and spiritual warfare, a natural medium for probing the possibilities of cosmic dimensions. Lewis's boyhood response to the idea of interplanetary travel (as dramatized in the "scientification" of H.G.Wells) is described in *Surprised by*

Joy as a "peculiar, heady attraction, which was quite different from any other of my literary interests" (34). Lewis describes his once ravenous appetite for the novels as psychological rather than spiritual and goes on to say that his own adult sci-fi romances were "not so much a gratification of that fierce curiosity as its exorcism" (34). He had a telescope set up to view 'the heavens' and once on a clear evening he observed a quarter moon in close alignment with Jupiter and Venus. The elation he felt is related to his brother in a letter which expresses his difficulty in believing that, "anything so splendid could be without significance" (CLII 348). This sense of beauty and awe is transmitted into his account of a first journey into space in Out of the Silent Planet (1938): "the stars, thick as daisies on an uncut lawn, reigned perpetually, with no cloud, no moon, and no sunrise to dispute their sway. There were planets of unbelievable majesty, and constellations undreamed of" (34-5). The narrative features a journey to the planet Malacandra, and discussion with an alien 'sorn' about the wonders of particle physics and the speed of light. The presiding 'Oyarsa' is warned of the predatory ambitions of the human physicist Weston in a passage which seems to anticipate multiverse theories: "He wants our race to last for always...and he hopes they will leap from world to world...always going to a new sun when an old one dies..." (139).

Michio Kaku's speculations about the cosmos are fuelled by the behaviour of electrons which stabilise molecules and prevent the universe from disintegrating: "if electrons can exist in parallel states hovering between existence and non-existence, then why can't the universe? He cites the plot of Philip K. Dick's novel *The Man in the High Castle*, which is based on this exact possibility (PW 147-8). Greg Bear's novel *Eon* builds on the theme that earth is threatened by a massive asteroid and the inhabitants have to flee to a parallel universe. Kaku cites this in his chapter "Escaping the Universe", and speculates that, "although the dimensional gateway discussed in *Eon* is purely fictional, it raises an interesting question that relates to us: could one find haven in a parallel universe if conditions in our universe became intolerable?" (305). Larry Niven's book *All the Myriad Ways* features the moral implications of parallel quantum universes and Kaku comments that:

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When we imagine the quantum multiverse, we are faced, as Trimble is in the story, with the possibility that, although our parallel selves living in different quantum universes may have precisely the same genetic code, at crucial junctures of life, our opportunities, our mentors, and our dreams may lead us down different paths, leading to different life histories and different destinies. (353)

Kaku's *Physics of the Impossible* (2008) is a journey into the future, explaining ideas which are already in the laboratory pipe line: invisibility, force fields, time machines, teleportation, telepathy, robots and energy weapons. The futuristic visions of some theoretical physicists make ancient ideas regarding planetary influences and stories of the miraculous, sound much more plausible. Kaku embraces the challenge of 'impossibilities' on the basis of experience, reason and faith in human ingenuity. Lewis embraces 'impossibilities' on the basis of experience, reason, revelation and faith in a moral Creator. Lewis enjoyed reading and writing science fiction at a time when it was a developing genre, and his participation in an informal discussion with Kingsley Amis and Brian Aldiss provides insights into his trilogy.

3.1. The Science-Fiction Genre

The transcript of their conversation was later published as "Unreal Estates", a reference to the general agreement between them that science fiction gives access to strange and unknown places. Most of Earth by that time had been explored or swallowed up by real estate, and Amis quips that "Swift, if he were writing today, would have to take us out to the planets" (OTOW 180). Aldiss adds that in the eighteenth century, much of the then equivalent to science fiction was "placed in Australia or similar un-real estates" (180). For Lewis, the creation of a totally original environment is vital to the genre: "It's only the first journey to a new planet that is of any interest to imaginative people" (183). Their comments address the academic prejudice against science fiction and indicate how deeply entrenched was the modern preference for the rational over the imagined. All concur on the problematic snobbery in academia which refused to take the genre seriously. However, Amis's pet theory is that "serious writers as yet unborn or still at school will soon regard science fiction as a natural way of writing" (189). All three enjoy the mental stimulation of exploring unknown territory and find the whole experience liberating.

They discuss in what sense authors are influenced by current models of the universe and the degree of poetic licence. Lewis admits that his own interest is not in the technical side; and although in *Out of the Silent Planet* his space travel is powered by solar radiation, he was deliberately vague about the technology, "because I'm no scientist" (181). This is consistent with Lewis's view that the creative arts are more inspired by the imaginative appeal of models of the universe than by the mechanics. It is Amis who suggests to Lewis that science fiction is a "natural outlet" for writing about religious themes and Lewis agrees, because theology is about supernatural events, so "If you have a religion it must be cosmic"(184). The discussion moves into popular ideology concerning the ascent of man, and the authors cite evidence of an increased sensitivity to the ethics of exploration. Aldiss cites a Sheckley novel which subverts the desire for conquest and features the survivors of a radioactive attack on Earth, who migrate to another planet. After a millennium, they return to find the planet overtaken by strange flora and fauna, and fully intend to drive out the invaders. However, in a reversal of the habitual way of thinking, the protagonists adopt a more moral alternative: "Well, we made a mess of the place when it was ours, let's get out and leave it to them" (185). Lewis agrees that most of the novels before this one had assumed the superiority of the human race.

Lewis's thoughts are further clarified in his essay "On Science Fiction": "I had read fantastic fiction of all sorts ever since I could read, including of course the particular kind which Wells practiced in his Time Machine, First Men in the Moon and others" (80). Referring to the genre as a "species of narrative", he divides it into six "sub-species," beginning with the only one he considers "radically bad" (82). In this category the author imagines a futuristic cosmic setting but then proceeds to tell a mundane story of love, crime or adventure (83) without employing the planetary or galactic possibilities. The second sub-species is the "fiction of engineers" written by authors whose primary interest is in exploring as yet "undiscovered techniques" which are genuine future possibilities (84). Here again, Lewis admits to being "too uneducated scientifically to criticize the stories on the mechanical side; and I am so completely out of sympathy with the projects they anticipate that I am incapable of criticizing them as stories" (84). Sub-species three though scientific in one way is more speculative and Lewis places Wells' First Men in the Moon in this category. What impresses him most about Wells is his "ingenuity" in imagining something which no-one on earth had ever actually experienced: "The first glimpse of the unveiled airless sky, the lunar landscape, the lunar levity, the incomparable solitude, then the growing terror, finally the overwhelming approach of the lunar night-it is for these things that the story...exists" (86).What Lewis seeks to emulate is Wells' ability to evoke the sensations that must be felt on encountering an utterly alien environment. In contrast to Wells, Lewis portrays humans as a threat to the aliens rather than the reverse. In fact, the common tendency to depict aliens as malevolent was a spur for him to present a different perspective in his trilogy. The future technologies involved were of little interest to him compared with the imaginative power to evoke the appropriate images and emotions in the reader. He again refers to the negative critical responses to sci-fi literature at the time: "How anyone can think this form illegitimate or contemptible passes my understanding" (86). Some critics had panned sci-fi books for their lack of "sensitive characterization", but Lewis points out that: "Every good writer knows that the more unusual the scenes and events of his story are, the slighter, the more ordinary, the more typical his persons should be. Hence Gulliver is a commonplace little man and Alice is a commonplace little girl" (86).This passage, too, is worth bearing in mind when studying both the sci-fi trilogy and the Narnia Chronicles because Lewis combines the supernatural themes and action with very ordinary characters in domestic settings.

Sub-species four is called "Eschatological" and parallels Kaku's speculations about the long-distance future of advanced civilizations in the multiverse. The focus is on "the ultimate destiny of our species" (87-88) and, as examples, Lewis cites Well's Time Machine, Olaf Stapleton's Last and First Men, and Arthur Clarke's Childhood's End. David C. Downing reads the beginning of Lewis's trilogy as a direct critique of the Wellsian idea of evolutionism which he defines, in "Rehabilitating H.G.Wells", as "a philosophy that projects Darwinism into the metaphysical sphere, speculating that humankind may eventually evolve its own species of divinity, jumping from planet to planet and star to star (LWL2 14). Lewis fits himself most comfortably into sub-species five which features stories about space travel but can include "gods, ghosts, ghouls, demons, fairies, monsters etc." ("On Science Fiction" 89-90). This mix appeals to Lewis as a representation of, "an imaginative impulse as old as the human race working under the special conditions of our own time" (90). This type of story works within a framework of impossibility, but "Within that frame we inhabit the known world and are as realistic as anyone else" (93). He observes that our increasing familiarity with the geography of Earth has fuelled an appetite for crossing the frontiers of space. Earth can no longer satisfy the universal fascination with "beauty, awe, or terror" (90). Sub-species six covers stories in which nothing conforms to life as we know it: "the marvellous is in the grain of the whole work. We are throughout in another world" (93). This concentration on 'the marvellous' is

regarded by Lewis as problematic in literature because no critical discussion of it is possible with people who refuse to contemplate anything that does not conform to "real life" (93). Lewis interprets the term "real life" to mean the confinement of thoughts to sense experience, "our biological, social and economic interests" (93). The 'problem' he speaks of here also relates to his engagement with higher criticism, an approach to theology that summarily rejects the supernatural and re-interprets the Bible accordingly. Like Kaku, Lewis embraced the 'impossible' in literature and life because things once thought to be ridiculous are commonplace today.

The experience of incorporating 'realistic' technology in the writing of OSP taught Lewis to move the plot of *Perelandra* (equivalent to Venus) by more supernatural methods: "I took a hero to Mars in a space-ship, but when I knew better I had angels convey him to Venus" (91). This disclosure relates to Lewis's comments in *The Discarded Image* in which he explains his preference for the traditional imagery of the medieval model which allowed for supernatural possibilities. He wanted to rescue the term 'the heavens' as an alternative to the naturalistic assumptions attached to the preferred term "space" and the "vacuous libel" of meaninglessness. Lewis once liked to think of the starry skies as a metaphor for a benign realm full of infinite mercy, and in a letter to Mrs. Stuart More, he admits that when he wrote OSP he was not fully aware of the hostility of space:

I am glad you mentioned the substitution of heaven for space as that is my favourite idea in the book. Unhappily I have since learned that it is also the idea which most betrays my scientific ignorance: I have since learned that the rays in interplanetary space, so far from being beneficial, would be mortal to us. However, that, no doubt, is true of heaven in other senses as well. (CLII 235)

His last thought is a profound theological insight into the paradoxical aspects of the universe. The warring and destructive forces of the cosmos forced Lewis to face the fact that the life we enjoy on earth is something of a 'miracle', a comment that anticipates the Anthropic Principle. When taken for granted, the comforts of civilised life on planet Earth give a false sense of security. It is easy to forget that to leave its sanctuary without protective gear would mean instant annihilation. Lewis finds this fact a useful metaphor for understanding the dual aspects of the divine character. Scriptural images of God communicate this unapproachable aspect and the human need for an intercessor. In essence, the God of the Bible is revealed as the source of life, goodness and love, but in respect to holiness and justice He manifests as a "consuming fire" (Deut. 4.24). The

apostle Paul writes: "Behold therefore the goodness and severity of God" (Rom. 11.22). Lewis came to appreciate the fact that, like the sun, God is both a life giving radiant light and a destructive power. He considered these attributes to be important even to our childlike concepts of God, and in *The Narnia Chronicles*, they are present in the character of Aslan. The Lion is good, affectionate and playful, but he is also wild and powerful, with sharp claws.

3.2. Exploring Space

The multi-layered aspects and intertextuality of Lewis's narratives explain much of the sometimes bewildering array of imagery employed in his fantasies. He never discards the archaic or pagan imagery in literature simply because they belong to the past. For him, they are a legitimate part of divine revelation through human history. In "On Science Fiction", he speaks of fantastic and mythopoeic literature in a similar way: "If good novels are comments on life, good stories of this sort... are actual additions to life; they give like certain rare dreams, sensations we never had before, enlarge our conception of the range of possible experience" (93). This statement is consistent with Lewis's expressed motivations in writing-to open minds to the possibility of greater realities beyond our dreams and imaginings. Lewis did not live to see the first moon landing in 1969, but Kaku's 2011 perspective on that momentous event is as follows: "it seemed as if our astronauts were poised to explore the solar system...and already people were dreaming about going to Mars and beyond. It seemed as if we were on the threshold of the stars. A new age was dawning for humanity. Then the dream collapsed" (Physics of the Future 261). The reason Kaku gives for the unsustainability of the moon programme is the prohibitive cost. Lewis's trilogy was written at a time of unbridled optimism regarding the conquest of space and fascination with aliens. In a letter to Sister Penelope in 1939, Lewis shared the fact that one of his pupils "took the dream of interplanetary colonization guite seriously" and he became aware that, for many people, this was the "whole meaning of the universe" (CLII 262). However Lewis was also concerned about the ecological threat posed by inter-planetary colonisation. In the past, the introduction of common diseases has decimated remote societies, but Lewis's following comment indicates that he was also thinking of moral pollution:

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I look forward with horror to contact with the other inhabited planets, if there are such. We would only transport to them all of our sin and our acquisitiveness, and establish a new colonialism...But if we on earth were to get right with God, of course, all would be changed...we can go to outer space and take the good things with us. That is quite a different matter. ("Cross-Examination" 267)

Lewis's abhorrence of the predatory potential of space exploration is most graphically expressed in a poem depicting the penetration of the pristine, unknown regions as "rape". The poem reflects the influence of author Arthur C. Clarke, and was published (posthumously) under the title "Prelude to Space":

So Man, grown vigorous now/Holds himself ripe to breed, Daily devises how/ To ejaculate his seed/ And boldly fertilize The black womb of the unconsenting skies...Steel member grow erect, Turgid with the fierce charge /Of our planet's skill/ Courage, wealth, knowledge, concentrated will/Straining with lust to stamp/Our likeness on the abyss... (CP 70)

Lewis's trilogy addresses an ugly extreme which he feared could easily materialise from the acquisitive spirit that seemed to accompany futuristic ideas of inter-galactic travel in his day. It was not yet a reality, but neither was it a figment of Lewis's imagination. Human history did not encourage optimism, but perhaps it is important to note here Lewis's comments in a letter to Arthur C. Clarke:

I don't of course think that at the moment many scientists are budding Westons: but I do think (hang it all, I live with scientists) that a point of view not unlike Weston's is on the way...I agree that Technology is per se neutral but a race devoted to the increase of its own power by technology with complete indifference to ethics does seem to me a cancer in the universe. Certainly if he goes on his present course much further man cannot be trusted with knowledge. (CLII 594)

The trilogy's inter-planetary and terrestrial settings are in keeping with Lewis's stated "key" objective—to reverence both Nature and Supernature. The first two books have a cosmic backdrop and the plots involve spacecraft and inter-planetary travel, but the final novel is an earthbound adventure involving both negative and positive spiritual influences. All three stories critique progressive evolutionism and twentieth-century cultural issues. They feature ideological conflict, the inner tension of warring impulses, and the importance of individual life choices. Across three distinct settings, Lewis comments on the ethics of colonization, ecology, pacifism, feminism, eugenics and animal rights. Each

novel stands on its own but there is a definite progression in the course of events and an intensification of drama and violence. OSP features many firsts: the earthling's first venture into space, the first encounter with an unspoiled planet, alien species and Ransom's first engagement with spirit beings. In a letter to Helmut Kuhn (16 August 1960), Lewis refers to the book as "a critique of our own age as any Christian work is implicitly a critique of any age" (CLIII 1178). *Perelandra* (Venus) marks a transition from twentieth-century preoccupations with the search for alien life, and Lewis reshapes the Edenic story of origins—the beginnings of life, good and evil, society, law, death and sacrifice. The final novel, like the first two, depicts the ease with which small moral lapses can degenerate into advanced corruption. *That Hideous Strength* is a departure from interplanetary travel but the same themes are explored in the environs of planet Earth, where conflicting spiritual influences are more visible in the power struggles enacted in society, the work place and the home.

The first novel introduces the main characters and themes, preparing the way for subsequent, more complex plots. The silent planet is Earth, known to the alien races as Thulcandra. It represents a place already fallen prey to the influence of a "bent" spiritbeing, the Oyarsa, (a Lewisian equivalent for a type of Satan). To represent Satan as the "Bent One" is to portray evil, not as a self-existent entity, but as the corruption of something originally made 'straight'; the opposite to goodness and truth. In "The Ransom Trilogy", T.A. Shippey describes this as Lewis's "most original speculation" (CC 241). But the idea reflects Lewis's Biblical knowledge because it is scripturally based. The sources are found in passages from Isaiah 14 and Ezekiel 28 which have a local context but also indicate a cosmic meaning. Lucifer is described as "the morning star", a supremely created archangel, who became conscious of his own magnificence, and used his freedom in an attempt to usurp his Creator: "You were the seal of perfection, full of wisdom and perfect in beauty. You were in Eden, the garden of God...You were the anointed cherub who covers; I established you; you were on the holy mountain of God;...you were perfect in your ways from the day you were created, till iniquity was found in you" (NKJV Ezek. 28. 12-15).

All the elements of Lewis's premise about models of the universe are present in OSP. The cosmic backdrop is made up of current science, philosophic trends and theology. Earth (or Thulcandra) is now as an enemy-occupied territory, ruled by a corrupt spirit and isolated from other planets. But Malacandra (Mars) is Lewis's model for a divine

monarchy ruled by an 'angelocracy'. The good 'Oyarsa', and lesser spirits called 'eldila' all owe their existence and allegiance to Maleldil (God). Malacandra's friendly communication to planet Earth is misinterpreted by scientists Devine and Weston as a ploy to lure a human victim. They abduct the philologist Dr. Ransom and force him to journey with them as a sacrificial specimen in the cause of progress. Ransom's mind, influenced by the sci-fi literature of the day, is filled with terrifying images of "superhuman intelligence and insatiable cruelty" (40). But the three diverse indigenous species are discovered to be peaceful and civilised; they share one language and exist together in a harmony of difference. The possibility of an 'unfallen' race is one of Lewis's speculations in The Problem of Pain (1940) when he discusses the possible impact of space travel and the issue of universal free will. He comes to the opinion that: "I think the most significant way of stating the real freedom of man is to say that if there are other rational species than man, existing in some other part of the actual universe, then it is not necessary to suppose that they also have fallen" (66). This thought materialises in the uncorrupted environments of Malacandra and Perelandra. Like Jonathan Swift's rational horses, the indigenes have no word for evil and the best translation Ransom can come up with is to describe it as a 'bent' version of what was originally good. Ransom's role in the trilogy involves a personal journey of discovery about himself, as well as an education in cultural relativism and supernatural 'higher authority'. When he eludes his captors, he assumes the role of translator and ethnographer rather than an endangered astronaut. He explores the strange environment as a participant observer, sensitively interacting with the aliens, learning their language and describing both the social structures and the weird flora and fauna of an unspoiled planet. Like Swift's Gulliver, Ransom comes to see himself as others see him and begins to question his own estimate of himself.

Ransom's philosophical journey parallels in some way Lewis's own spiritual path. Initially a materialist, Ransom is reluctant to engage with a spirit being such as the Oyarsa but gradually changes and matures into a force capable of taking on the enemy of the planet Perelandra (Venus). It is the earthlings who compare badly. The Oyarsa is unimpressed with people who use space technology to traverse the universe but "in all other things have the mind of an animal" (OSP 151). His people are intellectually and technically advanced but have learned not to focus on measuring and accumulating; a practice that leads to reverencing "nothings" and missing "what is really great" (140). But Weston has only contempt for the non-materialist Malacandrian culture, and his following statement sounds like a manifesto for ethnocentrism:

I am prepared without flinching to plant the flag of man...to march step by step, superseding, where necessary, the lower forms of life...claiming planet after planet, system after system till our posterity—whatever strange form and yet unguessed mentality they have assumed—dwell in the universe wherever the universe is habitable. (155)

Devine and Weston personify the extremes of materialism and scientism, voicing the attitudes that Lewis encountered in academia. Devine is ambitious and acquisitive, hungry for wealth and advancement and features again in the final novel. Weston is a more complex character with spiritual dimensions, a fact that reflects Lewis's observation that physicists are the scientists most open to a religious perspective. Devine introduces Weston to Ransom as a "great physicist" who drinks Schrodinger's blood for breakfast and "has Einstein on toast" (OSP 14). The name 'Devine' is significant. There is only one letter difference in the spelling of 'divine' and 'Devine', which relates to Lewis's theme of evil beginning as a small detour from the good. The name 'Weston' might relate to Jessie Weston, whose book *From Ritual to Romance* (1920) explored the origins of Arthurian legend and the mythology of the Holy Grail which feature in the final novel. Alternatively, Weston sounds the same as 'Western', so could be Lewis's way of parodying western materialism and the popular idea of 'emergent evolution'.

3.3. Life-Force Theory, Eden and Theology

Of the three novels, *Perelandra* is the one most theologically-charged and influenced by Milton's epic poem, *Paradise Lost*. Lewis's imagination was stimulated by his enjoyment of Milton's cosmic epic and its Biblical themes. He sums up Milton's momentous account of the Edenic drama in these words: "The cosmic story—the ultimate plot in which all other stories are episodes—is set before us. We are invited for the time being to look at it from the outside. And that is not, in itself, a religious exercise" (PPL 132). The comment relates to the importance of perspective (discussed in Chapter 5). Lewis's draws on Milton's themes of a 'paradise lost' and a 'paradise regained' to create a 'paradise preserved'. Weston becomes "a convinced believer in emergent evolution" (PER 102) and thinks the only difference between his own spirituality and that of Ransom is the unhappy result of "a few outworn theological technicalities" (103). Weston cannot grasp the concept of God: "Don't you worship Him because He is pure spirit?" Ransom replies: "Good heavens, no! We worship Him because He is wise and good. There's nothing especially

fine about simply being a spirit. The Devil is a spirit" (105). Weston actually concedes that "There's more sense in parts of the Bible than you religious people know" (192), but his imaginative response to the cosmos is largely nihilistic:

Picture the universe as an infinite globe with this very thin crust on the outside. But remember its thickness is a thickness of *time*...We are born on the surface of it and all our lives we are sinking through it... If your God exists, He's not in time—which you think is comforting! That is all there is to us, all there ever was. He may be in what you call 'Life', or He may not. What difference does it make? (193)

Weston gradually develops a very cynical approach to progress and his once utilitarian ambitions take a sinister direction. Like the tempter in Eden, Weston mixes truth with error in the cause of seduction. What he said was "always very nearly true" (152), but he is prepared to sacrifice animals and people in the quest to conquer the universe. Weston becomes a mouthpiece to articulate Enlightenment ideas and trends against Christian orthodoxy. In his dialogues with Tinidril, the green lady (a type of Eve), he portrays morality as life-quenching, whereas unbridled energy is exciting. Weston's claim that "Anthropomorphism is one of the childish diseases of popular religion" (104) predates the Bishop of Woolwich's book, Honest to God (1963). Weston also states that popular religion breeds "pairs of opposites: heaven and hell, God and Devil" (PER105), but his aim is to merge them: "The doublets are really portraits of Spirit, of cosmic energy-selfportraits, indeed for it is the Life-Force itself which has deposited them in our brains" (105-6). This attempt to negate the tension of opposing concepts, presenting them as interchangeable is also explored by Lewis in his book *The Great Divorce*. Though Lewis agrees with the need for a 'marriage' of concepts such as predestination and free will, he believes the ultimate binaries of heaven and hell are irreconcilable as far as humanity is concerned and cannot operate together to produce something 'better' than the 'perfect goodness' represented by heaven. But in Weston's mind "diabolism...becomes the morality of the next stage" (108). He is totally committed to a philosophy which "utterly overrides all our petty ethical pigeon-holes" (108). It is a view that brings to mind the reaction of the Romantic poets to Milton's devil. They embraced him as a dynamic freedom fighter.

Sanford Schwartz provides an innovative analysis of the trilogy's themes and structure in *C.S. Lewis on the Final Frontier* (2009), an engaging study on "Science and the supernatural in the Space Trilogy". He asserts that: "Behind the various Promethean visions from Blake and Shelley to Nietzsche to Bergson resides the temptation to deny our

dependent condition and assume the sovereignty traditionally reserved for the gods" (FF 73-74). Schwartz notes that the trilogy has usually been read as a clear conflict between theistic and naturalistic philosophies, but challenges these traditional "terms of engagement" by drawing attention to Lewis's "Augustinian" strategy of "taking up' the very thing he is putting down" (FF 16-17). Schwartz notes how Lewis presents the negative aspects of 'emergent evolution' while also exploring and employing its attractions. The positive elements of the philosophy are depicted by Lewis as mere derivatives of God's creative power and purpose, as revealed in Genesis and expounded in the orthodox doctrines of Christianity. Schwartz traces a pattern throughout and sees in each story a pivotal situation which features a particular deficiency in the 'emergent' evolutionary model, resulting in a costly distortion of an original principle. Each situation illustrates the battle of wills between divine authority and human autonomy, pitting integrity against self-interest and demanding courage and resilience: "In each volume of the Trilogy there are moments when the protagonist shifts from a relatively passive state to one that requires personal decision, commitment to violent action or painful scrutiny, and confrontation with death" (141). He re-iterates that each of us is "a rational animal endowed with the capacity for discriminating right from wrong" (142), and notes that the freedom to choose the right involves sacrifice. Schwartz underlines the trilogy's engagement with modern ideas by building into the structure of his own book a juxtaposition of parallel epigraphs to introduce key sections. Quotations from Psalms, Milton and Lewis are paired with equivalent ones from Darwin, F.H. Bradley, Rousseau and Derrida. For Schwartz, the overview of the whole trilogy is a dramatization of the tension that exists in the nature of humanity.

Perelandra enacts the more practical aspects of the Christian walk: the 'obstinacy of faith', the trials, tribulations, and the demands of human responsibility. The mettle of the Ransom and the green lady must be tested: "If the lady were to be kept in obedience only by the forcible removal of the Tempter, what was the use of that? What would it prove?" (PER 164). The fictional encounters illustrate the importance of training in any type of combat. Lewis emphasizes that not only is the battle intense but it is fought in a variety of arenas and settings—spiritual, physical, personal, local and universal. The fictional events reiterate Lewis's argument in AOM that education should instil moral fibre, discernment and emotional fortitude in the formative years. He could also be preparing readers for the real physical, psychological and philosophical battles they may have to face in days ahead. T.A. Shippey writes this of Lewis's agenda in his chapter "The Ransom Trilogy":

Satan or no Satan, he thought that 'bending' was exactly what was going on in his own world and time. The real danger was not mere cynical gold-seekers like Devine, but idealists like Weston or Wells and Haldane and a whole gallery of clever fools, with their support for Stalin and their conviction that ends justify the means, even if the ends include genocide. Weston certainly intends to inflict genocide on Mars, but in the late 1930s, as Lewis was writing, genocide on Earth was not far off. (CC 241)

For Lewis, Milton's epic poem raises all the "what if" questions about life's possibilities. Kaku uses the same phrase in his analysis of human consciousness and our ability to understand and form strategies for the future: "it means that you ask yourself "what if" repeatedly" (PF 98). Perelandra explores one of Lewis's "what if" questions by showing how different things might have been if temptation had been resisted. In Genesis, the serpent's seduction tactics pre-figure the temptation of Jesus in the gospels; the Tempter makes a direct appeal to self-interest and plants a seed of doubt about the authority and integrity of the Creator. Unlike Eve, Lewis's innocent green lady is targeted when alone and at her most vulnerable, but Ransom empowers her against Weston's false rhetoric about liberty. Ransom does this by explaining God's optimum plan for her true maturity into "a creature of free choice". Within the bounds of divine authority she would "in a sense be more distinct from God and from her husband" but also united with them "in a richer fashion" (PER 152). Lewis's high view of the sacrament of marriage offers fresh insights into dialogue about gender roles, challenging both modern cynicism and misunderstandings about the Biblical pattern of social order. His concept that true individuality can exist within a binding relationship is also voiced in The Screwtape Letters. The senior devil explains to his pupil that 'the enemy' (God), "wants a world full of beings united to Him but still distinct" (47).

In *Perelandra*, the pristine young parent figures became separated during the characteristic turbulence of the planet's environment, "we were leaping from island to island, and when he was on one and I was on another the waves rose and we were driven apart" (PER 73).There are various readings of the significance of the pristine planet's environment—the fixed land, floating islands and restless unpredictable waters. David Downing's *Planets in Peril* (1992), is a major study of the trilogy in which he suggests that, "the emphasis is not upon stability vs. instability but upon relinquishing control and accepting what is given" (91). This is consistent with Lewis's emphasis on creaturely obedience. Downing interprets the restless physical movement as analogous to riding the tumultuous waves of life, an image that reflects Biblical symbolism and fits well with

Ransom's discovery that trust and compliance with the sovereign will of God can be an exhilarating adventure. Downing and Schwartz do justice to different facets of the Divine character with insights that penetrate Lewis's employment of the symbolic pattern of the cosmos with its immutable laws and unpredictable subatomic particles. Schwartz reads the shifting environment and exuberant 'leaping' of the newly created couple as a deliberate strategy by Lewis to both exploit and counter Bergson's 'élan vital', a theory that depersonalizes God in favour of "an immanent creative impetus". Schwartz suggests that, "Lewis constructs his own version of evolution by endowing his imaginary world with a principle of dynamic change in which even the evolutionary lapses, including the spiritual catastrophe that has overtaken our own fallen planet are transfigured into something new and more marvellous by the redeeming act of God" (FF 63-64). This too, is a persuasive reading of Lewis's shifting landscape and energetic inhabitants. The environment does indeed reflect the spirit and flux of Bergson's theory which had inspired Lewis: "From him I learned to relish energy, fertility, and urgency; the resource, the triumphs, and even the insolence, of things that grow" (SBJ 160). But in "Modern Man and his Categories of Thought", Lewis defines "Developmentalism" as "the extension of the evolutionary idea beyond the biological realm" (63). In "The Weight of Glory," he explains how he could not identify with the unbridled confidence in human supremacy that went with the theory, and ran contrary to the pattern of nature (32).

Schwartz's reading fits well with Lewis's motivation to re-claim energetic activity as the prerogative of a dynamic, creative God. This, together with the novel's prohibition against dwelling on the fixed land, does, as Schwartz says, transform the terms of the creative evolution theory into "a Christian vision of perpetual development"(55). Lewis's essay "Miracles" draws attention to the 'life-force' already manifest in Biblical revelations about the Creator: "All his acts are different, but they all rhyme or echo to one another...Our featureless pantheistic unities and glib rationalist distinctions are all alike defeated by the seamless, yet ever varying texture of reality, the liveliness, the elusiveness, the intertwined harmonies of the multi-dimensional fertility of God" (37). Ransom, too, remarks on God's creativity: "Never did he make two things the same...After earths, not better earths, but beasts; after beasts, not better beasts but spirits...After falling, not a recovery but a new creation" (PER 246-47). This passage reflects Old and New Testament language regarding the Creator who: puts a 'new song' in the mouth, makes 'a new covenant', 'a new commandment', creates 'new birth', 'new heart', 'new life', 'a new and

living way', and ultimately 'new heavens and a new earth'. Perelandra' s environment is an imaginative reprise of this principle.

Lewis's own personal testimony is clearly mirrored in Ransom's pathway from atheistic materialism to faith and obedience. The talks he has with the green lady to shore up her defences are reminiscent of the rigorous exchange of ideas which Lewis had with friends and peers. After the fictional dialogues, Ransom's first impulse is to reach for a cigarette (Lewis too was a heavy smoker) but there are none to hand on the pristine planet. It was during these intense times that Ransom came to sense the overpowering presence of Maleldil:

...when a man asserts his independence and feels that now at last he's on his own. When you felt like that, then the very air seemed too crowded to breathe...But when you gave in to the thing; gave yourself up to it, there was no burden to be borne. It became not a load but a medium, a sort of splendour as of eatable, drinkable, breathable gold, which fed and carried you and not only poured into but out from you as well. (80)

The passage reverberates with Lewis's principle of true liberty in "obeisance," and has the same mystical quality of his own experience of entry into the "region of awe":

...in deepest solitude there is a road right out of the self, a commerce with something which, by refusing to identify itself with any object of the senses or anything whereof we might have biological or social need, or anything imagined, or any state of our own minds, proclaims itself sheerly objective...the naked Other, imageless (though our imagination salutes it with a hundred images), unknown, undefined, desired. (SBJ 176-77)

Lewis's personal account is both spiritual and sensory, and like that of Ransom, it is lifechanging. The imagery suggests that Lewis's own conversion was not primarily an intellectual event as some critics have suggested.

In a letter responding to Dom Bede Griffith's comments on *Perelandra*, Lewis suggests that the novel is primarily a "yarn", not to be taken too seriously (CLIII 576); but he had genuine concerns for the direction society was taking. The trilogy is a response to twentieth century ideological warfare, and subsequent events show that there was good reason to be concerned about national and international trends. Lewis was mindful of the human cost of Hitler's aggressive policies and predatory ambitions. It is on the planet Perelandra that Weston's position hardens and his speech assumes a demonic tone: "In so far as I am the conductor of the central forward pressure of the universe, I am it. Do you

see, you timid, scruple-mongering fool? I *am* the universe. I, Weston, am your God and your Devil. I call the Force into me completely...." (PER 109). Lewis avoids any glamourizing of the "Un-man", depicting Weston as deluded, fearful and enslaved. But, against Weston's demonic power, Ransom believes himself to be only a straw man. Yet, by explaining theology to the green lady and sharing with her the wonder and ways of Maleldil, he mentally arms her and enables her personal moral victory. This success strengthens and prepares him for the ultimate battle when he faces up to the fact that Weston's seditious assaults on the innocent green lady will increase unless someone physically confronts him.

The process of enlightenment in Ransom's mind is described by Lewis as a divine intervention: "The Presence in the darkness, never before so formidable, was putting these truths into his hands, like terrible jewels" (164). It is a gem of a sentence that encapsulates the essence of Lewis's own encounter with the sublime. In his religious and military experience, there is no sentimental or cheap joy to be won and sometimes the price involves 'terrible' human pain. The narrative shadows the Gospel narratives of Christ's victory over sin and death. Lewis's fictional version is a fusion of the Gardens of Eden and Gethsemane. Ransom's long-drawn-out physical battle involves a bloody, unarmed wrestling match and a hellish encounter with fear, doubt and impending death. The necessity of depicting a brutal encounter reflects Lewis's belief that pacifism is sometimes not an option under the onslaught of an implacable aggressor. Ransom is conscious both of Nature's indifference to his plight and the fact that the future of the young planet and its inhabitants depends on his action. Chapter eleven of *Perelandra* is a penetrating study of the nature of spiritual warfare and its relation to the problems of the material world. Ransom's first reaction to the suggestion that he must physically engage with Weston is to reject the idea: "It stood to reason that a struggle with the Devil meant a spiritual struggle...the notion of a physical combat was only fit for a savage. If only it were as simple as that" (163). Lewis was writing the story during the Second World War but his own first-hand experience and wounding in WW I (he carried shrapnel in his chest for the rest of his life) is evidence of the cost of human conflict to body and soul. Scenes from the Great War are vivid in Ransom's thoughts: "At that moment, far away on Earth...men were at war, and white-faced subalterns and freckled corporals who had but lately begun to shave, stood in horrible gaps or crawled forward in deadly darkness, awaking, like him, to the preposterous truth that all really depended on their actions" (161-2). Ransom's thoughts are a profound expression of Lewis's own emotional and mental attempts to come to terms with the very real threat of ideological battles and physical invasion. Schwartz notes the importance of Lewis's dramatizations:

These issues were increasingly acute in the early twentieth century, when projects for the 'transformation of humanity' turned from speculative fictions into real-life legislative agendas...at their most extreme, into lethal crusades to secure the future of the evolutionary process itself. Seen from this vantage point the war against Nazi aggression was not simply a conflict between rival nations ...but a struggle over the very way in which we conceive of human nature and its relations to the rest of the natural order. (FF 6)

3.4. Good, Evil and the Politics of Power

The mortal combat with the dehumanised Weston parallels Lewis's resolve in confronting what he viewed as potentially destructive philosophies. The following passage directly relates to Lewis's personal engagement in military and spiritual warfare:

How *could* he fight the immortal enemy? Even if he were a fighting man—instead of a sedentary scholar with weak eyes and a baddish wound from the last war—what use was there in fighting it? ... But the answer was almost immediately plain. Weston's body could be destroyed; and presumably that body was the Enemy's only foothold in Perelandra. By that body, when the body still obeyed a human will, had entered the new world: expelled from it, it would doubtless have no other habitation. It had entered that body at Weston's own invitation, and without such invitation could enter no other. (166)

This passage deals with the combined operations of body, mind, and spirit upon the will. The language is particularly helpful when trying to analyse a subsequent, rather puzzling part of the story. After defeating Weston, Ransom carves out a memorial plaque on the cliffs of Perelandra to commemorate the life of "EDWARD ROLLES WESTON". The inscription respectfully acknowledges only the good things of Weston's life and avoids recording his descent into the 'Un-man'. The fact that this inscription takes up most of one printed page in the novel indicates its importance to narrative and author. The wording honours Weston's achievements, his brave undertaking of interplanetary travel and his reputation as a great physicist. Perhaps Lewis emphasises that Weston started 'good' because he does not want to be accused of traducing the noble profession of science or scientists generally. Some readers have also noted an anomaly concerning dates. Weston's birth year is recorded as1896 and the year 1942 is identified as the period when, "HE

GAVE UP HIS WILL AND REASON" (216). If this phrase is a euphemism for physical death, then the dates become problematic. In 1942 Weston would be aged forty-six yet earlier in the narrative he speaks of personal developments in his life during his fifties (100). The date issue could be a simple oversight or arithmetical error, but the wording appears to indicate something more profound. The phrase to give up 'will and reason' could equally be a euphemism for ceasing to be human. 'What if' the date 1942 marks Weston's spiritual death rather than his mortal destruction at the hands of Ransom? This interpretation accords with Lewis's belief that spiritual death is more tragic than physical death in the context of eternity. This reading also absolves Ransom of murder because the 'thing' he killed was no longer a person: "What was before him appeared no longer a creature of corrupted will. It was corruption itself" (177).

The very name 'Ransom' destines the protagonist, at some point in the trilogy, to pay a price to redeem humanity. As Weston develops into a type of anti-Christ, Ransom matures into the role of a type of Christ figure. After the physical battle with Weston, the victorious Ransom carries an enduring wound in his heel which lingers on into the final novel. The wound in the heel is very significant although Lewis does not directly draw attention to its Biblical source in Genesis 3.15: "And I will put enmity between you and the woman, and between your seed and her Seed; He shall bruise your head and you shall bruise His heel'. This unique ancient verse pronounces a judicial death sentence on the Tempter who spoiled God's material creation. It is foundational to the progression of events in *Perelandra* and *That Hideous Strength*. Ransom deals Weston a mortal blow but his wounded heel does not heal until his earthly task is completed in the final novel. Schwartz points out that the war changed the world map, and deduces that: "in setting Ransom's final battle in postwar (sic) England, Lewis makes it clear that the ideological issues at stake in the conflict would not disappear with the demise of fascism. Indeed, they are very much with us today" (FF 6).

THS is a long and involved mix of domestic, environmental and political issues, myth, magic and realism. The diverse characters and themes in alternating settings seem analogous to a journey through the landscape of Lewis's emotions, intellect and imagination. The drama is played out in the rural community of Edgestow, the academic workplace at Belbury, and the haven at St. Anne's. These locations represent philosophical, social and spiritual conflicts, both in the community and on a personal level through the introduction of a young married couple (Jane and Mark Studdock). The

polarities are further enhanced by the fact that although Mark and Jane share a secular worldview, Jane is a 'seer' with a gift for prophetic dreams. The earthbound environment facilitates engagement with contemporary controversies about ecology, animal rights, gender issues and the politics of power. The supernatural pervades the narrative in dreams, time travel and in the Pentecostal-type empowering of the group at St. Anne's by planetary spirits in the chapter "Descent of the Gods." Schwartz sees a specific purpose in the use of Gothic imagery: "Lewis appropriates the dark tradition of the Gothic to depict horrors...of the new totalitarian order, which threatens to transform the basic terms of existence in the modern world" (FF 93). The intensification of spiritual warfare manifests in the demonic presence behind the idolatrous worship of the severed head by the members of N.I.C.E., an acronym for the National Institute of Co-ordinated Experiments. Like the Biblical Satan who masquerades as "an angel of light" (2 Cor. 11. 13), members of the institute start honourably but becomes corrupted.

The story marks a transition in status for the surviving adversaries; Devine has moved higher up the social ladder and is now given the title 'Lord Feverstone'. Ransom carries his battle scars into the final novel (like those of Jesus in his resurrection appearances), but has moved into a higher, spiritual state (surely analogous to the Ascension). In an outline to *The Life and Writings of C.S. Lewis* (2000), Louis Markos also notes Lewis's mix of scripture and myth to underline the significance of the wounded heel which not only marks Ransom as a type of Christ in PER but in THS it also identifies him with the Fisher-King of Arthurian legend:

Lewis pulls together the full mythic weight of the Scapegoat King and invests it with a historical reality...he [Ransom] is Arthur the Pendragon, the great Christian King whose court of Camelot (or Logres) is the one shining light in a dark world...This redemption is heralded in the novel by the physical awakening and return of Merlin, whose dark, earthy magic is channelled for good by Ransom. (Markos 35)

The institute has an agenda not only to fracture the local society and displace the populace, but to destroy both the natural environment and heritage sites. Mark and Jane Studdock are the main protagonists. But like others before him, Mark is lured into the institute with good intentions, but is manipulated and coerced by degrees to succumb to the system. The N.I.C.E. programmes are brutally advanced without compassion for residents, flora or fauna. The destruction of the natural environment is a sub-theme in Lewis's *Narnia Chronicles* but, in THS, he depicts the type of degradation visible in his own country,

describing the felling of trees, destruction of woods, and the diversion and pollution of a once clear and playful river (100): "The river...now flowed opaque, thick with mud, sailed on by endless fleet of empty tins, sheets of paper, cigarette ends and fragments of wood, sometimes varied by rainbow patches of oil" (146). These changes are not just accidental to the inevitable march of technological progress. The N.I.C.E. members plan to sterilize the earth, replacing the mud and mess of the organic with the artificial. Nature has served her purpose in producing humanity but now is the time for man-made ingenuity to rule: "Nature is the ladder we have climbed up by, now we kick her away" (215). Filostrato's vision represents one of Lewis's fears for future generations explained in The Abolition of Man. The emerging ideology is centred upon the pre-eminence of the human mind, and how we must learn "to make our brains live with less and less body" (THS 211); hence the veneration of the severed head. The extreme language of Filostrato and Straik sounds incredible, but their faith is centred upon, "a man-or a being made by man-who will finally ascend the throne of the universe. And rule forever" (218). Devine (Lord Feverstone) believes that: "If science is really given a free hand it can now take over the human race and re-condition it; make man a really efficient animal" (45); a conviction that resembles language used in the futuristic aims of Transhumanism.

The controlling strategy of N.I.C.E is evident in the treatment of Mark. The institute's political agenda requires a massive bureaucracy with fifteen, highly paid departmental directors, its own legal staff and police. Even before his experience in Belbury, Mark was programmed by de-humanising terminology: "his education had the curious effect of making things that he read and wrote more real to him than things he saw" (104). Statistics and bureaucratic language were supplanting reality; people became 'vocational groups', 'elements', 'populations' or 'classes'. The tactics and developments caricatured by Lewis are recognizable in today's world. They include false propaganda and the deliberate stirring up of social unrest; lies, violence, intimidation, murder, incarceration, torture. Selective breeding, sterilization of the unfit, liquidation of 'backward' races and pre-natal education are approved by Feverstone (THS 47). Filostrato's statement that, "Man's power over Nature means the power of some men over other men" (217), is a fictional reiteration of Lewis's argument in AOM. Eugenic procedures were actually being considered by some progressives in Lewis's day for the perfecting of the human race. Aldous Huxley's dystopian novel Brave New World (1932) anticipated future progress in eugenics but the ambitious possibilities of social engineering were not confined to the imaginings of sci-fi authors. In "The Humanitarian Theory of Punishment" Lewis speaks of the "slide down

into the sub-humanity imagined by Mr. Aldous Huxley and George Orwell and partially realised in Hitler's Germany" (GID 300). He was well aware that the negative portrayal of any scientists would leave him open to charges of obscurantism but has made his position very clear. In a letter to Roger Lancelyn Green (28 December 1938), Lewis reveals that his pillorying of Weston in the trilogy was driven by "the desperately immoral outlook" of authors Stapleton and Haldane (CLII 236-7). In "Rehabilitating H.G.Wells", David Downing refers to Haldane's "vigorous, if chilling defence of chemical warfare" in *Callinicus* (1925), and he cites from Haldane's chapter "Man's Destiny" (in *Possible Worlds*) which so disturbed Lewis: "There is no theoretical limit to man's material progress but the subjection to complete conscious control of every atom and every quantum of radiation in the universe" (qtd. in *Life, Works and Legacy* Vol.2 16). Haldane enthuses about mankind's unlimited evolutionary potential which seems to imply the future ability to conquer death and the cosmos.

Lewis's "A Reply to Professor Haldane" refers specifically to the books of Stapleton, Shaw's Back to Methuselah, and Haldane's "Last Judgement" in Possible Worlds (100). Lewis's paper is primarily a response to Haldane's denunciation of his sci-fi trilogy. Lewis freely admits to some artistic license in his stories, the depiction of canals on Mars and use of the astrological character of the planets: "not because I believe in them but because they are part of the popular tradition" (99). Once speculative ideas about the Martian environment (now known to be falsehoods), and popular perceptions about planetary influence still had imaginative appeal. Lewis suggests that, "If anyone ought to feel himself libelled by this book it is not the scientist but the civil servant: and next to civil servant, certain philosophers" (OTOW 102). He claims that Professor Haldane has misunderstood the trilogy because, in fact, it is in *Out of the Silent Planet* (the first novel) that there is an attack, not on scientists, but on 'scientism'. Lewis defines 'scientism' as "a certain outlook on the world which is causally connected with the popularization of the sciences, though it is much less common among real scientists than among their readers" (100). He concedes that although the extremes he writes of are not yet "formally asserted" they can, "creep in as assumed, and unstated, major premises" (100). Lewis's reply to Haldane includes insights into the rationale behind THS and information about its themes and characters: "The 'good' scientist is put in precisely to show that 'scientists' as such are not the target" (101). This is a reference to Hingest, the internationally renowned scientist, who is regarded as an enemy by the "progressive element" because he refuses to capitulate to the authoritarian regime. Hingest is 'liquidated' after resigning from N.I.C.E. Lewis claims that his authorial intention is made even clearer by Hingest's incisive clarification of the reason for his resignation: "I came here because I thought it had something to do with science. Now I find it's something more like a political conspiracy" (THS 83). The fictional comment relates to the apologetic critique of scientism and relativism in Lewis's *The Abolition of Man*.

Lewis's commitment to "do full justice to Nature" is shown to include inanimate, animate and human nature. One of his specific targets in THS, less generally commented upon, is his critique of the 'inner ring' syndrome—the common human need to be 'in the know' or part of an exclusive group, which makes us vulnerable to manipulation or oppression. This relates to his unhappy exposure to a school fagging system, in which the strong and athletically gifted 'Bloods' were allowed to use the younger boys as virtual slaves. Lewis describes this culture of control and bullying as, "the cruelty and arrogance of the strong, the toadyism and mutual treachery of the weak, and the unqualified snobbery of both" (OTOW 102). He came to realise that the system was more about power than wealth: "The pleasure of being 'high up' and 'far within' may be worth the sacrifice of some income" (103). He claims never to have forgotten the lesson and adds that this is "a passion insufficiently studied and the chief theme of my story" (103). This disclosure explains the significance of Mark's acquiescence to the unethical activities at Belbury; his strange tolerance of the official's refusal to give any details or certainty concerning his salary, terms and conditions. The need to be 'in' with the power group is the crux of N.I.C.E.'s hold over Mark. The theme relates to Lewis's assessment of the "adored Bloods" and their "unbreakable constitution" described in Surprised by Joy. The primary qualification for attaining Blood status in the school was not necessarily wealth or class, but brilliant "athletic prowess," followed by personality and good looks (71). When Lewis witnessed the rise of authoritarian regimes in the twentieth-century, it brought to his mind the seminal version of the art of intimidation as practiced in the classroom. In the twentyfirst century the power of social media is evident in the medium of text messaging and cyber sites such as Facebook, Twitter, Instagram or LinkedIn. A non-fictional version of this theme is found in "The Inner Ring", Lewis's address to a group of young people on the verge of completing education. He encourages their participation in post-war reconstruction and speaks about the phenomena of "what Tolstoy calls the second or unwritten systems" (WOG 146). Lewis notes that these systems manifest in all walks of life and are not necessarily, in essence, a bad thing. He concedes that confidential discussions and work-related personal friendships can be both good and necessary, but

observes that 'unwritten systems' inevitably emerge when the demands of self-interest and lust for "secret intimacy" become stronger than any ethical considerations. It is then that the corruption of character follows (149). Lewis aims to make his youthful audience aware of the fact that an inner ring is capable of making someone who is not yet bad do very bad things (154). This is imaginatively demonstrated in the environment at Belbury, characterised by a sinister and ill-defined leadership, lurking fear, treachery, shifting loyalties and in-fighting. Lewis contrasts this with the health and sanctuary of St. Anne's. The former symbolizes the love of power, the latter the power of love.

With the benefit of hindsight, Shippey claims that many of Lewis's concerns have now "passed beyond recall" and thinks Lewis's concerns about 'Creative Evolution', "have proved unnecessary: not even Richard Dawkins believes in that any more" (CC 247). Even if this is so, it does not prove that the earlier concerns were unjustified. It is more likely that subsequent global events have vindicated the warnings of Lewis and other critics of progressive extremism, tempering popular enthusiasm for unprincipled, social engineering. Lessons from the past have been costly and instructive, but a cursory look at current literature on 'Transhumanism' indicates the wisdom of vigilance. Shippey does concede that "some of Lewis's targets remain utterly familiar, including the growth of bureaucracy and the corruption of language" (CC 245). In fact, the role and significance of language permeates the whole trilogy. In the first book Ransom is a philologist who studies the language of aliens. In the second, Weston's voice and language take on a demonic tone during his dialogues, and the apocalyptic finale of the third story features the Babel-like confusion of tongues. In the preface to THS, Lewis explains his decision to make the university at Edgestow the main setting. It is one with which he as an academic is most familiar, "not because I think fellows of colleges more likely to be thus corrupted than anyone else, but because my own profession is naturally that which I know best" (7). Shippey describes Lewis's early account of the college meeting "with its cunningly rigged agenda" as a "gem", born of Lewis's "twenty years' experience of office politics" (CC 244). Lewis may absolve academics in general from any particular proneness to corruption, but the dons in THS are condemned for their failure to discern or take seriously the potential harm in ideas that they helped to disseminate in the halls of learning. This is a reiteration of Lewis's concern over the trends in education expressed in AOM-the failure of some educationalists to diligently look into the practical implications and outworkings of theories and abstractions. Shippey says this of Lewis's fictional dons: "They preached the doctrines of power and amorality which N.I.C.E. put into practice, and the fact they never meant them just shows once again the fatal separation of words and meaning" (246). The comment relates to points made in Chapter 1 of this thesis and underlines Lewis's views on the manipulation of language.

Another important element of Lewisian ethics is his outrage over animal cruelty in a supposedly civilised and technically advanced nation. He campaigned against vivisection, and his passion for animal rights and justice is expressed in the retributive role of animals in the last novel's denouement. The term 'vivisection' has come to include any experiment that causes pain and suffering to animals, but originally it referred to experimental cutting up of live animals. The "Brown Dog Riots" broke out during Lewis's childhood when a statue was erected in London's Battersea Park in memory of an anonymous dog. The animal died in the medical school of University College London after being used in more than one experiment, without anaesthetic, and in contravention of existing law. Public opinion was fiercely divided over the issue, but the case was used as evidence in the book The Shambles of Science: Extracts from the Diary of Two Students of Physiology (1903). The National Anti-Vivisection Society (NAVS) has described the distressing details (recorded by eye witnesses) in Lorraine Murray's article "The Brown Dog Affair" (2010). The practice was never denied but the statue was attacked with sledge hammers by provivisection protesters who saw live experiments as a legitimate part of scientific research, and resented the accusative tone of the statue's inscription. Lewis engaged in literary debates on the subject and his essay "Vivisection" was published by the New England Anti-Vivisection Society in 1947 and by the NAVS in the UK the following year. His essay examines some of the arguments for and against, and it is clear Lewis thought he was fighting a losing battle:

The victory of vivisection marks a great advance in the triumph of ruthless, non-moral utilitarianism over the old world of ethical law; a triumph in which we, as well as animals, are already victims, and of which Dachau and Hiroshima mark the more recent achievements. In justifying cruelty to animals we put ourselves at the animal level. We choose the jungle and must abide by our choice. (GID 228)

The last sentence quoted could almost be a sub-title for THS. The image evoked by the 'law of the jungle' provides a frame of reference for the climactic scenes of carnage in the command centre at Belbury. Even though Lewis intended this story as an adult fairy tale, the banquet at Belbury disturbs some critics who see it as what Schwartz describes as "a sadistic bloodbath" (FF135). This reaction seems strange considering the levels of

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gratuitous violence in contemporary books, movies, TV dramas and computer games. The actual cause of offence may lie in the sense that the violence at Belbury is retributive rather than simple 'poetic justice'. Society now may be inured to viewing increasing levels of violence and sadism, but capital punishment jars on modern sensibilities. But in a story about authoritarian rule and brutal excesses in experimentation, it seems fitting that the animal victims should turn executioners. Lewis administers justice by enacting the law of the jungle and making the punishment fit the crime. It is significant that the only manmade weapons used in the carnage are the guns which the members of N.I.C.E. turn upon each other. The resistance group at St. Anne's are not involved in killing at all. The banquet scene is also the occasion for the confusion of language, an analogy of the fall of the Tower of Babel. In the Genesis 11 account, the tower falls by divine judgement. The inhabitants are not destroyed, only scattered throughout the earth, but the unity of language is lost. The tower has come to symbolize the arrogant ambition to be supreme in the universe, a fact that Lewis incorporates into his story, giving the local events a cosmic dimension.

3.5. The Sacrament of Marriage and the 'Sacred Feminine'

The ideological issues which drive events in the surrounding countryside of Edgestow are paralleled by the individual inner conflicts reflected in the relationship problems of Jane and Mark. The final chapter of THS illuminates Lewis's high view of the marriage sacrament and its shadowing of a transcendent reality. The growing estrangement between the young couple is impacted by the demands of N.I.C.E. upon Mark and the challenge to Jane's worldview by the alternative, unworldly lifestyle fostered at St. Anne's. Jane had entered marriage with confused emotions; culturally conditioned to think that the submission of any part of herself to the partnership denied women any life of their own, and was "a relic of animal life or patriarchal barbarism" (THS 390). This intractable position not only required her to be stubbornly independent of her husband but made her averse to the prospect of motherhood. Mark is selfish and neglectful of Jane and is stupidly and increasingly drawn into the authoritarian regime. The couple's individual decisions increasingly keep them emotionally and physically apart-Mark effectively enslaved in Belbury and Jane sheltered in the celestial but cosy confines of St. Anne's. Radical feminism demands total rebellion against traditional roles regardless of how natural, practical or admirable they may be, so Lewis's cosy domestic scenes centred on a mother

figure are bound to provoke ire. However, it is Jane's internalised ethics and intuitive perception that enable her to see through the members of N.I.C.E. The title "That Hideous Strength" proclaims the book's intention to attack tyranny in any form: political, professional or domestic. It is obvious from Lewis's other writings and conduct that he eschewed oppressive control, neglect and arrogance in any situation. His depiction of traditional values appears to be a guard against trends that undermine fundamental gender difference and view people basically as amoral cosmic accidents. It is part of his defence of truth and meaning. Lewis esteems the universal basic family unit as a derivative of divine origin; a pale reflection of the order of the Trinity with its equality in essence but difference in roles. The concept of headship or leadership in any context is about order, responsibility and teamwork. It does not confer innate superiority. Lewis does not interpret deference or subordination on a human level as inferiority or weakness. In the context of Christian marriage, male headship means the opposite to a licence to dominate or abuse. It intends to protect harmony and security. Lewis's orthodox view of the marriage institution is more than a social ritual. It is a sacrament, symbolic of the mystic union between Christ and his church (Eph. 5.32-33). The pattern is designed to operate by mutual commitment, nurture and 'sacrificial love' (on the part of the husband). One of the clearest statements of Lewis's position comes in his book *The Four Loves*:

Christian writers (notably Milton) have sometimes spoken of the husband's headship with a complacency to make the blood run cold. We must go back to our Bibles. The husband is the head of his wife just in so far as he is to her what Christ is to the Church. He is to love her as Christ loved the Church—read on—*and to give his life for her* (Eph.V, 25). (97)

The story of Jane's journey can be read as both a critique of extreme feminism and an affirmation of the feminine. It is Jane who stands against Mark's weak capitulation to the authoritarian demands of Belbury. Her early aversion to motherhood appears to come more from doctrinaire pressure than natural instinct. Jane's ultimate act of spiritual submission to the presence and authority of Ransom appears to have nothing to do with gender issues; and seems directly related to Lewis's point that we are all feminine in our response to God. The event is a recapitulation of Lewis's own account of submission to the transcendent God he could no longer deny. To Jane it felt as if "a boundary had been crossed. She had come into a word, or into a Person, or into the presence of a Person" (THS 394). Schwartz acknowledges that this event will offend some feminist sensibilities: "it is easy to bristle at this passage, even if we acknowledge that the main emphasis is on obedience that all

human beings (men and women alike) owe to their creator" (FF 129). In "The Ransom Trilogy," Shippey assumes that, "Lewis's views on Christian marriage are probably unacceptable to almost everyone" (CC 247-48). But if this is the case, it may be because Lewis's views, or indeed those of the apostle Paul are not read in context and not well understood. Shippey notes that cries of 'misogyny' against Lewis "have been subtly countered by Monika Hilder, who points to Lewis's deliberate presentation of a 'feminine heroic' in contrast to the traditional masculine one" (247-8).

The 'misogyny' label has become something of a political cliché, and through frequent misapplication can stifle serious debate. In *Women and C.S. Lewis* (2015), there is comprehensive discussion from male and female perspectives. Brett McCracken observes that Lewis was "egalitarian in his views of women", valued "their unique perspectives," and encouraged their ambitions to have a public voice (189). Mary Poplin claims that "Lewis was a highly educated man who took women scholars seriously" (191). David Downing claims that Lewis "defies gender stereotypes" and points to *The Pilgrim's Regress* wherein 'Reason' is personified "as a young woman, a maiden knight". Lewis's choice of a "virgin–warrior" to symbolise Reason is related by Downing to the fact that "she is not 'wed' to any particular worldview, but strikes down errors of logic wherever they are found"(130). Monika Hilder argues that Lewis "challenges classical convention with a biblical vision" (177). She cites his dislike of the terms "man's man" and "woman's woman" expressed in correspondence with Sister Penelope: "there ought to be a man in every woman and a woman in every man" (CLIII 158). To Mary Willis Sherbourne he writes: "I suspect we—and especially, my sex—don't cry enough nowadays" (CLIII 432).

That Hideous Strength airs Jane's just grievances and shows Lewis's willingness to draw attention to Mark's common masculine shortcomings and faults in attitude. This indicates a sympathetic awareness of the female perspective. Mark, too, wrestles with internal conflicts: "the different men in him appeared with startling rapidity and each seemed very complete while it lasted" (THS 266). His traumatic experiences help him to assess his relationship with Jane more honestly: "He must give her freedom...When she had first crossed the dry and dusty world which his mind inhabited she had been like a spring shower; in opening himself to it he had been mistaken. He had gone wrong only in assuming that marriage, by itself, gave him either power or title to appropriate that freshness" (THS 448). In coming to the end of a complex plot, it is easy to forget the significance of the beginning. The story of THS begins and ends with a focus on human

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marriage as a symbol and reflection of cosmic unity. The novel's opening words come directly from the traditional marriage service: "Matrimony was ordained for the mutual society, help, and comfort that one ought to have for the other" (THS 9). The statement comes into the narrative as a vague memory wafting into Jane's mind, tinged with bitterness—an unhappy reminder of broken promises and disappointed dreams. The scene is thus set for a venture into a potentially dystopian view of a marriage relationship and the parallel discord in the wider community. However, the author has a 'fairy tale' ending in mind, with hopeful indications of movement towards resolution and consummation between Jane and Mark—a microcosm of Lewis's own cosmic vision of a restored universe. The story illustrates Kingsley Amis' observation in "Unreal Estates" that science fiction is "a natural outlet" for writing a religious novel that isn't concerned with details of ecclesiastical practice and "the numbing minutiae of history"(OTOW 184). The trilogy has all the elements of Lewis's favoured sub-species—the "pseudo-scientific apparatus". The plots create a framework of impossibility and allow protagonists to interact with supernatural forces while engaging with real-life issues.

CHAPTER 4

A Personal Perspective: Lewis's Spiritual Journey

In reading great literature I become a thousand men and yet remain myself. C.S. Lewis You should never read a book before you review it. It will only prejudice you. Sidney Smith

Lewis describes the strong impulse to write as a "lust" or an "itch" that demands to be scratched ("Cross-Examination" 258), and in correspondence with Arthur Greeves (30 May 1916), he writes: "whenever you are fed up with life, start writing: ink is the sure cure for all human ills" (CLI 187). In Letters to Children, he confides: "I enjoy writing fiction more than writing anything else. Wouldn't anyone?" (94-95). In fact, his children's fantasy stories were written while he was engaged in the much heavier task of composing 'the O Hell' (Lewis's abbreviation for his Oxford History of English Literature). Helen Gardner reviewed the finished work and one comment reveals a side of his work sometimes missed: "who else could have written a literary history that continually arouses delighted laughter" (qtd. Hooper 480). Lewis's literary flair was nourished by his enjoyment and early exposure to books about myth and legend. He claims to write the kind of books he enjoyed reading, and his liking for the kappa or cryptic elements is manifest in his penchant for building layers of meaning into his stories. The structure of his fantasies could be said to follow the components of his worldview in which the events and issues of the material world are on the surface. Beneath that is a supernatural substratum, and foundational to both are the tenets of Christian theology. No deliberate strategy for a career path is apparent in Lewis's comments on his writing. He does, however, reveal in the essay "Christianity and Culture": "My own professional work though conditioned by taste and talent, is immediately motivated by the need for earning my living" (CR 36).

This chapter is intended to give a more personal view of Lewis and to provide some background to his philosophical and spiritual journey. His worldview is shaped by an interdisciplinary blend of history, science, philosophy and theology, and he wrote in different roles: poet, scholar, philosopher, fantasy writer, literary critic and apologist. In various genres he reveals his motivation as an author, his approach to writing and critical reading, and his reconciliation of the tension between intellect and imagination: In "Reason" he writes: "O who will reconcile in me both maid and mother/ Who make in me a concord of

the depth and height? /Who make imagination's dim exploring touch/Ever report the same as intellectual sight? (CP 95). Lewis's path to becoming "perhaps the most dejected and reluctant convert in all England" (SBJ 182) had been a meandering search through various philosophies, including 'popular realism', Idealism, Pantheism and Deism. When he began reading philosophy at Oxford University, 'idealism' was the dominant philosophy, but 'realism' appealed to his need for nature to be a self-existing 'other'. Unwilling at that stage to consider a theistic response to life, he was forced to admit that, "the whole universe was, in the last resort, mental; that our logic was participation in a cosmic logos" (SBJ 168). The 'Christian myth' was explained away as the product of simpler, "unphilosophic minds", only capable of absorbing a certain amount of truth (172). The arrogance of this view eventually came home to him as he thought how absurd it was to assume that the minds of such men as "Plato, Dante, Hooker and Pascal" were incapable of grasping concepts which came easily to modern under-graduates (172). His philosophical progression involved overcoming blind spots and some deep-rooted prejudices. Materialism and Atheism had suited the young Lewis's resentment of any outside intervention from a "transcendental interferer", and this rebellious stage is expressed in The Pilgrim's Regress, through the protagonist John, who feels a sense of freedom when convinced that the universe has "no landlord" (51). In Surprised by Joy, Lewis speaks of his early "deep-seated hatred of authority, my monstrous individualism, my lawlessness" (139). This is an unfamiliar aspect of Lewis at a time when he was embracing the very ideologies which he later set out to refute

In *The Problem of Pain*, he considers the case for divine goodness and human responsibility, but first tackles the nature and implications of "divine omnipotence" by presenting a devastatingly cynical interpretation of life on earth:

It is so arranged that all the forms of it can live by preying upon one another. In the lower forms this process entails only death, but in the higher there appears a new quality called consciousness which enables it to be attended with pain. The creatures cause pain by being born, and live by inflicting pain, and in pain they mostly die. In the most complex of all the creatures, Man, yet another quality appears, which we call reason, whereby he is enabled to foresee his own pain which henceforth is preceded with acute mental suffering, and to foresee his own death while keenly desiring permanence. It also enables men by a hundred ingenious contrivances to inflict a great deal more pain than they otherwise could have done on one another and on the irrational creatures. This power they have exploited to the full. Their history is largely a record of crime, war, disease, and terror, with just sufficient happiness interposed to give them,

while it lasts, an agonised apprehension of losing it, and, when it is lost, the poignant misery of remembering. (PP 1-2)

The passage radiates a type of pessimism reminiscent of A.E. Houseman's line: "Whatever brute and blackguard made the world", cited by Lewis in "De Futilitate" (90). The following passage from *Surprised by Joy* is Lewis's assessment of the warring aspects of his personality:

Such then was the state of my imaginative life, over against it stood the life of the intellect. The two hemispheres of my mind were in the sharpest contrast. On the one side a many-islanded sea of poetry and myth; on the other a glib rationalism. Nearly all that I loved I believed to be imaginary; nearly all that I believed to be real I thought grim and meaningless. (SBJ 138)

The current model of the universe as "a meaningless dance of atoms" communicated a callous disregard which both disillusioned and confused Lewis, as he sought to make sense of the "apparent beauty" (139). The cynical mind-set that saw only cruelty and injustice was challenged and eventually overcome by Lewis's sense of something 'Other', and the evidence of meaning and hope. He recalls the inescapable sense of holiness and immanence as God closed in on him (179), and in hindsight, concedes that he was being played like a fish by "the great Angler" and "never dreamed that the hook was in my tongue" (169). The metaphor is reminiscent of the poet Francis Thompson's language in "The Hound of Heaven": "I fled Him, down the nights and down the days / I fled Him, down the arches of the years / I fled Him, down the labyrinthine ways /Of my own mind (1184). In "Cross-Examination", Lewis's answer to an interviewer's question as to whether his conversion experience was by compulsion or a decision of free choice, his language is plain and direct: "I was the object rather than the subject in this affair. I was decided upon. I was glad afterwards at the way it came out, but at the moment what I heard was God saying 'Put down your gun and we'll talk'" (261). To Dom Bede Griffiths (23 April 51), Lewis describes his conversion experience as being "in process of being created" (CLIII 111). He had struggled to harmonise his naturalistic belief with his own brief flashes of 'joy' or 'senhnsucht'. The intellectual and intuitive aspects of his conversion are succinctly described in the following passage from "Religion without Dogma": "My conversion, very largely, depended on recognising Christianity as the completion, the actualization, the entelechy, of something that had never been wholly absent from the mind of man" (GID 132).

After years of reading ancient texts, the rational Lewis came to the conclusion that he could no longer regard the Gospels as myths because "They had not the mythical taste" (SBJ 188); a view that inevitably pitted him against the devotees of liberal theology. He was not averse to the critical method as such, but disagreed with speculative deliberations constructed to fit a debunking or de-mythologizing agenda. As a literary historian and 'professional literary critic', Lewis was well trained to comment on the authenticity of the Gospels; to distinguish between historical writing and legend. In "Christian Apologetics" he claims that the gospel accounts, "if they are not history then they are realistic prose fiction of a kind which actually never existed before the eighteenth century" (101). In "What are we to Make of Jesus" he says: "I am perfectly convinced that whatever else the Gospels are they are not legends" (158). In Reflection on the Psalms, he likens the holistic experience to "steeping ourselves in a Personality, acquiring a new outlook and temper, breathing a new atmosphere" (113-114); going beyond the activity of our "systematising intellect" which approaches the teachings of Jesus as a purely academic subject. In an address entitled "The Grand Miracle", Lewis recalls how he once imbibed the poetic, mysterious and quickening ideas of the anthropologist James George Frazer, "all that stuff about the dying God, The Golden Bough and so on" (83); but his close reading of the Gospel accounts of Christ's crucifixion changed his perspective. Ironically, according to Lewis, it was a "hard boiled Atheist" who in an informal conversation in Lewis's room acknowledged that the evidence for the historicity of the Gospels was "really surprisingly good. 'Rum thing, all that stuff of Frazer's about the Dying God. Rum thing. It almost looks as if it had really happened once" (SBJ 178-79). Lewis scholar Colin Duriez suggests that speaker was probably Thomas Dewar Weldon, a philosophy don at Magdalen College (Duriez 41).

Lewis appreciated pagan myths as a foreshadowing of God's dynamic interventions into human history:

When He created the vegetable world He knew already what dreams the annual death and resurrection of the corn would cause to stir in pious Pagan minds, He knew already that He Himself must so die and live again and in what sense, including and far transcending the old religion of the corn King. He would say 'This is my Body'. *Common* bread, miraculous bread, sacramental bread—these three are distinct, but not to be separated. Divine reality is like a fugue. (*Miracles* 37)

He reconciled the historical accounts and revelations of Scripture with humanity's mythopoeic attempts to relate to the numinous. The following comment expresses the breadth of his vision:

For if we take the imagery of Scripture seriously, if we believe that God will one day *give* us the Morning Star and cause us to put on the splendour of the sun, then we may surmise that both the ancient myths and the modern poetry, so false as history, may be very near the truth as prophecy. At the present we are on the outside of the world, the wrong side of the door. ("The Weight of Glory" 43)

He came to accept the Incarnation, Resurrection and Ascension of Jesus as unique historical events, a consummation of all the earlier mythical foreshadowings imprinted on the human consciousness: "If ever a myth had become fact, had been incarnated, it would be just like this. And nothing else in literature was just like this" (SBJ 188). The simplest expression of his new understanding comes in *Mere Christianity* in which he deliberately avoids theological terminology: "God became man to turn creatures into sons: not simply to produce better men of the old kind but to produce a new kind of man" (MC 180). The Biblical cosmology fitted both his intellectual and emotional experiences of life: "I believe in Christianity as I believe that the Sun has risen, not only because I see it, but by it I see everything else" ("Is Theology Poetry" 140). This widely cited figurative illustration of Lewis's worldview is explored in greater depth by Alister McGrath in The Intellectual World of C.S. Lewis. He notes that Lewis's preference for visual over auditory metaphors is both "rooted in the Christian Bible" and characteristic of the philosophical traditions of western thought (84). McGrath sees this aspect as a neglected area of Lewisian scholarship, and in this passage from his beautifully written and insightful book, he draws attention to Lewis's 'ocular' emphasis in appealing to the imagination:

Lewis's commendation of the Christian faith rests partly in his belief that it offers a capacious and deeply satisfying vision of reality—a way of looking at things that simultaneously allows both discernment of its complexity and affirmation of its interconnectedness. The human imagination plays a leading role in grasping this "big picture", in that it is more perceived than understood. (91)

It was in prose works that Lewis gained recognition and fame but others have commented that his poetry is now being given more serious attention. Poetry was his early passion because, like "music or gesture", it was able to transcend the limitations of language (*Studies in Words* 313). In *Faith, Hope and Poetry* (2012), Malcolm Guite

describes language as a system of symbols, and sets out to demonstrate how poetry is "peculiarly fitted" to answer questions about the relationship between "language, symbol and truth" (2). In Lewisian fashion, he relates this poetic power to Christian theology, noting how the Incarnation is communicated to human minds as both a spiritual phenomenon and a historic physical event. Something incomprehensible is made meaningful in terms that we know and understand: "that theology depends both on written scriptures and also on the radical idea that the Word behind all words and scriptures has been made, not more words, but flesh. Poetry may be especially fitted as a medium for helping us apprehend something of the mystery embodied in that phrase 'the Word was made flesh""(2). Against the trend toward 'realism' in literature, Lewis valued the 'mythopoeic'. This is clearly defined in his preface to George MacDonald: An Anthology, in which he remarks upon the man's genius for communicating the power of myth and his ability to imprint a story on the imagination. According to Lewis, MacDonald's gift owes nothing to any literary talent, and he differentiates between the "art of mythmaking" and the art of writing poetry. The deep personal impact that MacDonald's stories had upon him is explained in this way: "In poetry the words are the body and the "theme" or "content" is the soul. But in myth the imagined events are the body and something inexpressible is the soul" (xxvii). In analysing this statement it appears that Lewis awoke to the possibility of the agency of some supernatural element. He admits: "It begins to look as if there were an art, or gift, which criticism has largely ignored" (xxviii). The flaws in MacDonald's literary language did not, for Lewis, detract from his ability to weave a myth: "It gets under our skin, hits us at a level deeper than our thoughts or even our passions, troubles oldest certainties till all questions are reopened, and in general shocks us more fully awake than we are for most of our lives" (xxviii). In Surprised by Joy, he describes the effect that George MacDonald's *Phantastes* had upon him in this way: "That night my imagination was, in a certain sense, baptised; the rest of me, not unnaturally, took longer" (146).

Though initially captivated by the power of poetry, Lewis came to value all imaginative writing as an indirect path to the emotions and sought by his stories to weave a myth. His fantasy novels demonstrate the same serious treatment regarding social, ethical and religious themes, but are equally an indulgence of his imaginative appetite. Lewis clarifies his understanding of the nature of imagination in "Bluspels and Flalansferes" when he says "it must not be supposed that I am in any sense putting forward the imagination as an organ of truth" (265). In SBJ, he stresses that: "I never mistook imagination for reality" (69), and later refers to "the lower life of the imagination" (136), stressing that imagination

is merely imagery, not necessarily the beginning of a path towards the higher life of the spirit: "In me, at any rate, it contained no element either of belief or of ethics; however far pursued, it would never have made me either wiser or better" (136). Lewis notes the limitations of the faculties of both reason and imagination but relishes the power when they work in harmony. In the following passage from "Rehabilitating H.G. Wells", Downing captures the essence of Lewis's synthesis of the intellectual, the imaginative and the spiritual:

Critics often assume that Lewis deliberately chose fantasy literature as an imaginative instrument to express his vision of the cosmos. But the truth is just the reverse: Lewis did not simply adopt fantasy as a didactic vehicle after his conversion to Christianity; rather it was his love of fantasy, myth, and romance that led him to faith in the first place. (LWL2 13)

This claim is supported by Lewis's own comments. Some critics have suggested that Lewis's children's fantasies were a new direction away from apologetics, but his letter to the Milton Society of America undermines this idea: "The imaginative man in me is older, more continuously operative, and in that sense more basic than either the religious writer or the critic" (CLIII 516-17).

4.1. Lewisian Theology

Lewis's writings show how diligently he learned ancient languages and studied ancient texts, but his lack of formal theological training could be a contributing factor to his fresh style and nuanced approach to translating doctrinal passages. His erudition and wit combine in stimulating ways to come to grips with Old and New Testament narratives, relating the events and teachings to common experience. Lewis's reading of scripture is informed by the natural sciences and his observation of an innate universal moral law. He finds positive meaning in the complexities and paradoxes of life including those which are taken by some to be evidence against a moral universe. He does not deny the challenges and, in fact, he acknowledges in "The Grand Miracle" that our universe appears to be "shockingly selective," "undemocratic" and relatively unoccupied by any type of matter: "Of the stars perhaps only one has planets: of the planets only one is at all likely to sustain organic life. Of the animals only one species is rational. Selection as seen in nature, and the appalling waste which it involves, appears a horrible unjust thing by human standards"

(84-85). As Lewis notes, these observations are contrary to human expectations that a moral creator should conform to our ideas of justice and perfection, to exhibit only perfect order, sameness and equality (84). These superficial expectations take no account of creativity, inter-dependence and free will. He concludes that selectiveness is "not unfair in the way...we first suspect" (85). He understands hierarchies and inequalities to be amoral, but in practice they may manifest in the extremes of "tyranny and servility" or as acts of "kindness and humility" (85). Those selected for special honour and specific responsibility are usually destined to bear heavy burdens, and often endure suffering and loss for the benefit of others. He contemplates the centrality of inter-dependence and vicariousness in life: "It is a law of the natural universe that no being can exist on its own resources" (85). He finds that the same patterns of inter-dependence, service and sacrifice are found in the Christian gospel. Lewis also notes that the natural scheme of things does not evince sameness or equality and argues that perfect 'sameness' would be a recipe for boredom and sterility. Applying his 'what if' principle, Lewis imagines what life would be like in a world of perfect equality; a place where we would never meet anyone cleverer, more beautiful or stronger, and we would thus be denied the pleasure of admiring something or someone better than ourselves. It is instinctive to give adulation to someone who demonstrates the skills and qualities we most admire or who epitomises the values we most wish to emulate. The point is made more mundane by his remark that the crowds who follow footballers and movie stars, "know better than to desire that kind of equality" (85). These points help to clarify his position regarding authority, egalitarianism and order as expressed in his fiction.

Lewis suggests that it is our "modern democratic and arithmetical presuppositions" that condition us to expect that everyone should "start equal in their search for God" (84). He proceeds to give examples from Biblical narratives of a selectiveness which is different to natural selection, because it allows for specific supernatural interventions. The following passage is a poetic telescoping of events, from Israel's birth as a nation through to the annunciation that the Virgin Mary would be the human mother of the promised Messiah:

One people picked out of the whole earth; that people purged and proved again and again. Some are lost in the desert before they reach Palestine; some stay in Babylon; some become indifferent. The whole thing narrows and narrows, until at last it comes down to a little point, small as a point of a spear—a Jewish girl at her prayers. (84)

Twenty-first century society is increasing unfamiliar with Biblical narratives, and people are even more conditioned to dismiss the authenticity of supernatural interventions and facts surrounding events like the Incarnation, followed by crucifixion, burial and resurrection. But as Louis Markos argues in *Lewis Agonistes* (2003), these events, too, fit the rhythm of life:

Yet is not this same cycle replayed in every corner of the created world? Every year, the seasons spin round us in an endless parade of life, death, and rebirth. The seed must fall into the ground and be buried before it can sprout into a tree and bear fruit. The DNA from the parents descends into a sperm and an egg, is buried for nine months in a dark womb, and then resurrects into the light of a new life. (57)

In the essay "Miracles" Lewis views the Biblical accounts of miracles as signs; "focal points at which more reality becomes visible than we ordinarily see at once" (36). Like Athanasius before him, he sees "an essential likeness between the miracles of Jesus and the general order of Nature" (36). The changing of water into wine or the abundant provision of loaves and fish, he sees as accelerated versions of what is already being acted out in the material world in the common processes of life. But they become sacred and mystical symbols of the soul's union with Deity (37). An updated version of Lewis's argument is given by Markos in *Lewis Agonistes*: "Believing in miracles does *not* mean believing that 2+2 = 5. It means believing that there is a supernatural being (or at least a force) in the universe that is capable of intervening in human events, suspending the laws of nature, and consequently altering the natural flow of cause and effect" (56).

Philosopher David Hume claimed that miracles are "a violation of the laws of nature" and 'new atheists' likewise assert that miracles "violate the principle of science" (Lennox 165). However, renowned atheist philosopher Antony Flew came to reject this view on the basis of new evidence: "Generations of Humeans have in consequence been misled into offering analyses of causation and of natural law that have been far too weak because they have no basis for accepting the existence of either cause and effect or natural laws" (Flew 57-8). Professor of Mathematics John Lennox welcomes "healthy scepticism" when examining or interpreting claims of the miraculous, but has no difficulty allowing that the Creator of the universe could "do special things" (Lennox 166). The physicists tell us that the act of creation demands the breaking of symmetry and Lewis suggests that the existence of the universe is one "great miracle". He asserts that the gospel writers, including Luke who was trained as a physician, always knew that seemingly miraculous

happenings were "contrary to the natural course of events", but until we can disprove that anything exists "beyond Nature," we can allow that miracles are possible (Miracles 52). Lewis discounts claims that Biblical accounts and events surrounding the Resurrection are a fabrication to prove conformity to the cycle of survival. He asserts that the New Testament writers record it as a one-off intervention in the affairs of men, rather than an imaginative reprise of the normal cycle of life. The phenomenon is plainly recorded as if it were the "first event of its kind in the history of the universe" (Miracles 149). It involves the breaking of the physical laws of entropy and death which Lewis reads as a singularity that opens "a new chapter in cosmic history" (149). The Biblical Creator's resolution to the brokenness and strife of an estranged humanity is expressed in theological terms such as Incarnation, Atonement, Justification, Sanctification and Regeneration. Lewis's awareness that the operations and concepts represented by these terms may be impossible for us to fully comprehend, is demonstrated in this quotation from Mere Christianity: "A man can eat his dinner without understanding exactly how the food nourishes him. A man can accept what Christ has done without knowing how it works: indeed, he certainly would not know how it works until he has accepted it" (MC 55).

Lewis's penchant for profound thought appears to have a natural channel into the region of plain-speaking. His precis of the Gospel narrative reads like this: "It costs God nothing, so far as we know, to create nice things: but to convert rebellious wills cost Him crucifixion" (177). Lewis's reading of divine intervention into human history takes account of God's initial act of creation and his sacrificial plan of salvation and restoration. The plan fulfils the divine demands of justice and mercy, opening the way to restored relationship and the beginnings of a new creation:

The story is strangely like many myths that have haunted religion from the first, and yet it is not like them. It is not transparent to the reason: we could not have invented it ourselves. It has not the suspicious *a priori* lucidity of Pantheism or of Newtonian physics. It has the seemingly arbitrary and idiosyncratic character which modern science is slowly teaching us to put up with in this wilful universe, where energy is made up in little parcels of a quantity no-one could predict, where speed is not unlimited, where irreversible entropy gives time a real direction and the cosmos, no longer static or cyclic, moves like a drama from a real beginning to a real end. (PP 12)

The passage illustrates how Lewis mixes theological narratives with current physics to underline a Christian perspective on the current model.

In *Mere Christianity*, Lewis propounds the idea that: "If I find in myself a desire which no experience in this world can satisfy, the most probable explanation is that I was made for another world" (MC 118). This 'argument by desire' suffuses the body of his work, and in the preface to *The Pilgrim's Regress*, Lewis expresses the concept this way: "The human soul was made to enjoy some object that is never fully given—nay, cannot even be imagined as given—in our present mode of subjective and spatio-temporal experience" (15). In the "The Weight of Glory" he suggests that the philosophies of "Progress or Creative Evolution" are in fact a response to this sense of *senhnsucht*, because in trying to convince us that earth is our only home, they try to make it a type of heaven: "thus giving a sop to your sense of exile" (31). In SBJ, he argues that this strange, spiritual desire is distinct from sexual appetites: "Joy is not a substitute for sex; sex is often a substitute for Joy" (138). He proceeds to suggest that:

...by refusing to identify itself with any object of the senses or anything whereof we have biological or social need, or anything imagined, or any state of our own minds, proclaims itself sheerly objective. Far more objective than bodies, for it is not, like them, clothed in our senses: the naked Other, imageless (though our imagination salutes it with a hundred images), unknown, undefined, desired. (177)

Alister McGrath has written an in-depth analysis of Lewis's argument in *The Intellectual World of C.S. Lewis* (2014). He draws attention to the subtlety of Lewis's argument, stressing that it was never intended to be 'deductive', not about 'proving' anything. For Lewis, the moments of joy that stimulated spiritual awareness were hints of something above and beyond the secondary or subordinate aesthetic joys of earth; they were an immortal reality. As McGrath so eloquently puts it, this was a huge factor in Lewis's growing awareness of the paucity of "shallow rationalism":

For Lewis there is a fundamental resonance between the beauty of the created order and human aesthetic sensitivities, which transcends the limits of reason. This is one of the reasons why Lewis appealed to the imagination—not to retreat into irrationality, but to escape the austerity of a purely rational view of reality, which could only offer a partial and inadequate account of things. (IW 138)

Lewis's theme of 'first and second things' derives from this consciousness that the ephemeral joy found in beauty, literature or music speaks of a yet inaccessible ultimate reality; all other sensory and aesthetic joys are secondary. In the essay "First and Second Things", he suggests that, "until the time of the Romantics—nobody ever suggested that

literature and the arts were an end in themselves" (GID 279), and he notes the trend now is to elevate them to the status of a "universal law" (280). Lewis does not perceive his own stories as 'ends in themselves' but mere vehicles to express his delight in the sublime Personhood and creative artistry of God. In "The Weight of Glory", he notes how the various arts can become our primary obsession. They do transmit glimpses of something ethereal but are not the ultimate spiritual reality: "The books or the music in which we thought the beauty was located will betray us if we trust to them; ...For they are not the thing itself; they are only the scent of a flower we have not found, the echo of a tune we have not heard, news from a country we have never yet visited" (WG 30-31). The guiding principle behind these thoughts relates to the counsel of Jesus (Matt.6.33) in which he tells his disciples to seek first the kingdom of heaven, and everything else will be added.

4.2. Motivation and Aims

In order to critique and appreciate texts it is valuable to read them in context; to note the motivation and aim of the author and identify the intended readership. Much of Lewis's writing is a response to requests and questions about faith and life matters. The huge quantity of his personal correspondence (published posthumously) demonstrates how seriously he took the charge of communicating with those who sought to engage with him. Greg M. Anderson suggests that Lewis accepted invitations to explain the beliefs and practices of Christianity as part of "war work" (LWL3 77). Anderson cites J.R.R. Tolkien's comment that Lewis did this in a "Pauline spirit", a reference to the Apostle Paul's post-conversion self-evaluation of himself as the "least of the apostles" (I Corinthians 15: 9); unworthy of the calling because he had once brutally persecuted the early church. Lewis's diligence could well involve a need to make reparation for his own earlier apostasy. In the original preface to a selection of addresses published later as The Weight of Glory (1949), Lewis writes that: "All were composed in response to personal requests and for particular audiences without thought of subsequent publication (23). His war-time radio broadcasts were first published as Broadcast Talks, Christian Behaviour and Beyond Personality in 1942. The preface has this clear statement of his motivation and aims:

I gave these talks, not because I am anyone in particular, but because I was asked to do so. I think they asked me chiefly for two reasons: firstly because I am a layman, not a clergyman; and secondly, because I had been a non-Christian for many years. It was thought that both these facts might enable me to understand the difficulties that ordinary people feel about the subject. (5)

The substance of the talks was later compiled and published as Mere Christianity in 1952. Lewis is careful to emphasise that the book is not intended to expound his own theological interpretations, or to offer an alternative creed to the various existing Christian communions. His purpose is to translate, to cut through to the basic elements foundational to them all. He avoids going into historically disputed points about 'high theology' because this would offer no help to people enquiring about the essentials of the faith. This point is further clarified in the preface: "But in this book I am not trying to convert anyone to my position. Ever since I became a Christian I have thought that the best, perhaps the only service I could do for my unbelieving neighbours was to explain and defend the belief that has been common to nearly all Christians at all times" (MC 6). Using an architectural metaphor, Lewis describes his task as one of introducing readers into the entrance hall of a great edifice. He sees the hallway as a place of waiting or transit rather than a place of residence—a place for prayer in preparation for choosing a door. The hallway has many doors leading into diverse rooms representing various styles of worship, differing doctrinal emphases and social mores. His liberal attitude toward drinking and smoking has troubled some readers, and his avoidance of pressing ambiguous or obscure passages into too narrow an interpretation has alienated others. Lewis is very careful to say, right from the beginning, that readers will not learn from him whether to become Anglican, Methodist, Presbyterian, or Roman Catholic (MC 5). His refusal to venture any advice on such matters is reinforced at the end of the preface with some wise counsel that typifies his responsible attitude to his readers: "When you have reached your own room, be kind to those who have chosen different doors and to those who are still waiting in the hall. If they are wrong they need your prayers all the more, and if they are your enemies, then you are under orders to pray for them. That is one of the rules common to the house" (12). His book The Problem of Pain (1940) is an intellectual argument written in response to a request from Ashley Simpson, the editor of the Christian College Series. The text addresses the difficult subject of suffering. In the preface Lewis admits that he would have preferred to write it anonymously (a request subsequently denied), because he was sensitive to the problem of approaching the subject academically (ix). Even though he had experienced emotional and

physical pain through the loss of his mother in childhood, and personal wounding and the loss of comrades during WW I, he feared sounding callous:

...the only purpose of the book is to solve the intellectual problem raised by suffering; for the far higher task of teaching fortitude and patience I was never fool enough to suppose myself qualified, nor have I anything to offer my readers except my conviction that when pain is to be borne, a little courage helps more than much knowledge, a little human sympathy more than much courage, and the least tincture of the love of God more than all. (ix-x)

Years later in 1961, following the death of his wife, Lewis published *A Grief Observed* under the pseudonym of N.W.Clerk to distance himself from the assumption that the narrative was strictly autobiographical. He described the book as "a safety valve" and "a defence against total collapse" (AGO 50). In contrast to the apologetic book PP, it is a heartfelt and intimate expression about the 'process' of grief.

The Abolition of Man (1943) is a concise but potent book written in response to a new elementary school text book, intended for the upper forms. In Lewis's opinion, the content inadvertently encouraged subjectivism in children ill-equipped to yet discern what is sophistry or propaganda (1). The discourse alerts readers to the dangers inherent in the trend in education away from objective values and training in ethics and thinking. He contends that the relativist and subjectivist assumptions fed into young minds will predispose them to take a side without being conscious that there is another way of looking at the situation (9). He does not name names because, as he notes, his purpose is not to "pillory two modest practising schoolmasters" (1), but he felt compelled to point out the outcome of what they proposed as an education tool-students would be neither trained to read and compose literature with discernment, nor generally equipped to face life: "without the aid of trained emotions the intellect is powerless against the animal organism...In battle it is not syllogisms that will keep the reluctant nerves and muscles to their post in the third hour of the bombardment" (AOM 19). Michael Travers' chapter "The Abolition of Man: C. S. Lewis's Philosophy of History" reveals that the unnamed books challenged by Lewis were The Control of Language (1940) by Alex King and Martin Ketley and The Reading and Writing of English (1936) by E.G. Baggini. In the essay "Fern-seed and Elephants" (1959) Lewis challenges what he saw as the needless capitulation to a theory which denies "the historicity of nearly everything in the gospels to which Christian life and affections and thought have been fastened for nearly two millennia" (105). The original address was delivered to theological students at the request of Kenneth Carey, then

principle of Westcott House, Cambridge. Lewis was invited to speak to students after an informal conversation in which he expressed some thoughts on "The Sign at Cana" in Alec Vidler's *Windsor Sermons*. As the title indicates, Lewis was questioning the literary judgement of scholars who miss the obvious essential points while scrutinizing the minutiae of New Testament texts. The 'fern-seed and elephant' metaphor relates to Jesus' admonition to Pharisees. He charged them with leading people astray with legalistic quibbles: calling them blind guides, "who strain at a gnat and swallow a camel" (Matt. 23:23-24). Carey expressed the wish that Lewis would come and "say all this to my young men" (FSE 104). The address was first published as "Modern Theology and Biblical Criticism" and later included in other essay collections.

The Great Divorce (1946) responds to William Blake's poem "The Marriage of Heaven and Hell". Lewis's visionary fantasy explores the incompatible characteristics of the concepts of heaven and hell, and the operations and implications of free will. George MacDonald appears as the Teacher, and articulates the logical outcome of free choice: "There are only two kinds of people in the end: those who say to God, 'Thy will be done,' and those to whom God says, in the end 'Thy will be done'" (66-67). The book Miracles (1947) was written in response to a request from Dorothy L. Sayers, and argues against the a priori assumption that the supernatural does not exist. Sayers was in desperation over angry letters she was receiving from a correspondent she described as a, "relic of the Darwinian age who is wasting my time and sapping my strength" (qtd. Hooper 343-344). She appealed to Lewis because she had been particularly impressed with *The Screwtape* Letters (1942), his satiric dialogue between a senior and junior devil. The book was written to address what Lewis describes as the two opposite errors concerning perceptions of the devil-one that refuses to allow his existence in any shape or form, and the other which fosters "an excessive and unhealthy interest" in things demonic (SL 9). In a letter to his brother in 1940, Lewis described the book as an attempt "to give all the psychology of temptation from the other point of view" (Letters of C.S. Lewis 188). In a later interview (published as "Cross Examinations"), Lewis admits that the experience of representing a reverse perspective, expressing good as bad and vice versa, was "dry and gritty going" (GID 263). Though a brilliant and popular satire, the book is the one Lewis least enjoyed writing.

He believed his last novel *Till We Have Faces* (1956) to be his finest, so it invites closer scrutiny. Walter Hooper's companion guide (246-9) tells of Lewis's youthful fascination

with the Cupid and Psyche myth, his early failed attempts to recast it in verse and later inability to do justice to the ideas and literary possibilities that the story inspired in him. The catalyst to releasing the intellectual and imaginative flow was Lewis's spiritual conversion. His new Christian perspective bathed the characters, settings, and events in a new light. The narrative is a recapitulation of topics and concepts discussed and depicted across the body of Lewis's work-good and evil, faith and unbelief, beauty and ugliness, truth and falsehood, justice and mercy, things temporal and eternal. The story is a synthesis of intertextuality, philosophy, culture, personal quest and ultimate discovery. Lewis probes the transition from blindness to sight, the experience of temptation, jealousy, bitterness and repentance. He explores the phenomenon of familial love expressed in selfless sacrifice, and revisits the subject of possessive love (also depicted in The Great Divorce). In "New Perspectives" Andrew Lazo notes the influence of Lewis's wife Joy on the text and describes the book as "psychological...and perhaps even a feminist novel" (137). He links the themes to Lewis's children's fantasy, The Voyage of the Dawn Treader: "In both novels, Lewis shows readers that only in seeing ourselves in all our ugly pride, and then allowing love to transform us, can we find our true selves" (139). Lewis's Argument by Desire and his principle of First and Second things are apparent in the story. His dislike of anything fake and cosmetic is expressed through Orual's horror at seeing Psyche appear like a painted doll. All these themes are explored against a backdrop of imagery that recalls Narnia's blighted landscape under the rule of tyranny and the majestic mountains that symbolise a divine destination, and the eventual 'cosmic summer'.

Orual's story is set in the kingdom of Glome, on the borders of the Hellenistic world, and features a barbaric culture and a cruel king's dysfunctional family. The fictional tensions parallel those of modernism and Christianity, and the book reflects Lewis's own pathway to faith. Further insights into this novel are disclosed by Lewis in correspondence. To Mary Shelbourne he claims to be the first male author to have spoken and "lived in the mind of an ugly woman for a whole book" (CL111 716). He also reveals a less obvious aspect of his initial motivation—the intention to communicate sympathy for bewildered relatives of new converts to Christianity, family members who respond with feelings of doubt, concern, and even bitterness. To Katherine Farrer (2 April 1955), Lewis writes: "it is the story of every nice, affectionate agnostic whose dearest one 'gets religion'" (CLIII 590). He expresses the same concern to Clyde S. Kilby (10 Feb. 1957) and explains that though Psyche's search for the true God drives the plot, his primary interest is the ugly sister Orual, and her possessive love which cannot bear to see her sister "passing into a sphere it cannot follow" (830-831). The book has two parts, the first of which involves Orual's interrogation of the gods which results in a scrutiny of her own motives and actions. The second part transforms all her confused questions into a singular revelation which reflects Lewis's own epiphany: "I know now, Lord, why you utter no answer. You are yourself the answer" (TWHF 319).

These summaries are a brief overview of some of Lewis's key theological and apologetic texts. Some are cited often in the thesis but, unlike the sci-fi and fantasy novels, they are not the subject of individual chapters. However, they do include statements in Lewis's words, as to why he wrote them and which themes he considered important.

4.3. The Elusive Lewis

In "An Examined Life", Bruce L. Edwards claims that, "Lewis's strategy was always to be 'in', but not 'of' the period in which he lived" (LWL1 13). The comment captures Lewis's embodiment of things both fixed and fluid. Former Archbishop Rowan Williams makes a similar observation about Lewis's theology:

...he constantly escapes categorization, largely because—unlike some contemporary polemists—he has a sense of the immensity and complexity of Christian history...everything about him bespeaks a vast intellectual hospitality—not the open mind that proverbially lets things fall out the other end, but a curiosity and mental energy that is on the lookout for new perspectives on the familiar. (Williams 408)

Lewis's theology was not confined to a particular school of thought, nor was he aligned to the dogma of a political party. His worldview encompasses both hierarchical and egalitarian principles. His essay "Membership" supports the case for democracy on the grounds of human fallibility—the fact no-one can be trusted with "irresponsible power over his fellows" (WG 168). The emphasis here is on "irresponsible" because he did advocate ethical leadership, law and order rather than anarchy. But he resisted any type of authoritarianism in church, state or home. In "Meditations on the Third Commandment", he advises against attempts by some to form a Christian Party: "Whatever it calls itself ...It will be a part of Christendom, but a part claiming to be the whole" (GID 198-99). He advocates only that a Christian voice should be heard across the political divide through individual voices on particular issues. He did encourage Christians to actively participate in articulating their viewpoint by "pestering" members of parliament with letters on specific issues (GID 199), a pestering that should combine the wisdom of serpents and the peacefulness of doves, in accordance with the Apostle Luke's counsel (Luke12.14).

Lewis's ideas could variously be termed as 'conservative', 'liberal', 'green', and 'socialist.' But his political views and his hope for the human species are inextricably linked to the teachings of Jesus. In fact, Lewis's thinking on how Christians should interact as both members of a church and members of society has much in common with the ideas expressed by the current Archbishop of Canterbury, Justin Welby in "The Good Economy" (4 Feb. 2015). Invited to speak at an event organised by The All Party Parliamentary Group on Inclusive Growth, Welby begins by commending their cause-their inclusive efforts to reconnect the creation of wealth with social justice and their aims to make best use of a wealth of cross-party experience. Like Lewis, Welby brings theology into the equation, citing "God, creation and Jesus" to exemplify a transcendent creativity and the "commitment to the inherent dignity of all" (1-3). He cites the principles of "solidarity" and "subsidiarity" in reiterating that "we all have a role to play" in the development of strong communities. He identifies the need to enable the creation of wealth without the focus on maximum profit (3). Like Lewis, he encourages "personal responsibility", "shared morality" and "a spirit of generosity", and is averse to giving the state too much power over the economy or society.

In the areas of literary and historical criticism, Lewis sought to move freely within the confines of "period criticism", cultural and literary theories. This approach is evident in his comments on the works of George MacDonald: "I will attempt no historical and theological classification of MacDonald's thought...still more so because I am no great friend to such pigeon holing" (*Anthology* xxx).. Lewis was wary of 'isms' which tend to restrict discussion and silence conscience. In "Period Criticism" he cautions about making periods and dates the focus of literary criticism (OTOW 149). His renowned passing comment (to Nevill Coghill on Addison's walk) that the Renaissance in England "never happened" was said with a smile on his face and with the proviso that if it did happen it was of "no great importance". Coghill recalls the incident in "The Approach to English", when speaking about Lewis's polemical prose and his "gift of pungent simplicity...this ability to make sudden, provocative generalizations" (Coghill 61). Lewis's conclusions regarding historical period divisions are clarified and expanded in his major work: *English Literature in the Sixteenth Century, Excluding Drama* (1954), volume 3 in the series: *The Oxford History of English Literature* (OHEL). He observes that the term *Renaissance* is no

longer a harmless "chronological label" with a "clear and useful sense," but has since widened to become "an imaginary entity" which "helps to impose a factitious unity on all the untidy and heterogeneous events which were going on in those [fifteenth and sixteenth] centuries as in any others" (55). He does concede that periods are "a methodological necessity" but observes how they can also become "a mischievous conception" (64). This comment seems to relate to his recalcitrance about the modern drive in the arts and sciences to divide and dissect to the point of destroying the life of a specimen: "Perhaps, in the nature of things, analytical understanding must always be a basilisk which kills what it sees and only sees by killing" (AOM 47).

Lewis's thoughts about the categorisation of writers and their works also relates to his views on what he described as the modernist susceptibility to 'chronological snobbery'; the contempt for earlier wisdom, ideas and values on the basis of date, and an uncritical embracing of everything contemporary. Lewis habitually re-read books in order to value and analyse the wisdom and knowledge of literature past and present. In 1916 he wrote to Arthur Greeves, "You really lose a lot by never reading books again" (CLI 161). Barbara Johnson suggests in her book, *The Critical Difference* (1980), that "Literary criticism as such can be called the art of re-reading" (3), and she cites the following passage from Roland Barthes:

Rereading, an operation contrary to the commercial and ideological habits of our society, which would have us "throw away" the story once it has been consumed ("devoured"), so that we can then move on to another story, buy another book, and which is tolerated only in certain marginal categories of readers (children, old people, and professors), rereading is here suggested at the outset, for it alone saves the text from repetition (those who fail to re-read are obliged to read the same story everywhere. (Barthes 15-16)

Barthes' thoughts bring to mind Lewis's own approach to reading and writing; and his aversion to the consumer-society's assumption that 'new' must infer 'better'. Lewis's once tongue-in-cheek description of himself as a 'dinosaur' is far from an admission to being extinct and the following passage elucidates his approach to evaluating authors and texts, past and present. It comes from an introduction by Lewis to a new translation of an ancient text by Sister Penelope Lawson:

Every age has its own outlook. It is especially good at seeing certain truths and specifically liable to make certain mistakes. We therefore need the books that will correct the characteristic mistakes of our own period. And that means the old books. All contemporary writers share to some extent the contemporary outlook—even those, like myself, who seem to oppose it. (*Athanasius* 2-3)

The comments are part of his response to a trend to ignore past wisdom by reading only contemporary books. He recognizes that every age and culture exhibits positive and negative traits, and advocates the need for a broader picture in order to interpret and benefit from the present age: "We may be sure the characteristic blindness of the twentieth century…lies where we have never suspected it…none of us can fully escape this blindness…the only palliative is for the clean sea breeze of centuries blowing through our minds" (3).

His argument suggests that we cannot assess and measure the ideas and behaviours of our own age accurately by reading only modern literature. We must step outside the boundaries of our own time and culture, but since the books of future generations are not yet written, we must access the literature of the past. T.S. Eliot makes a similar point in his essay "Tradition and the Individual Talent" (1921): "the conscious present is an awareness of the past in a way and to an extent which the past's awareness of itself cannot show" (Eliot 2). Lewis advocates a system of checks and balances which applies on all levels of life: "Two heads are better than one, not because either is infallible, but because they are unlikely to go wrong in the same direction" (Athanasius 3). Past knowledge and wisdom enriches the learning of present and future generations, and is a safeguard against ignorance and stimulus for informed debate on current issues. As a young child Lewis was allowed free access to his father's extensive library; nothing was out of bounds. Throughout his life he read avidly and widely. His pleasure in reading shaped and stretched him, and was transmitted to pupils and readers alike. Walter Hooper cites the following comments from a former pupil, Kenneth Tynan in In Search of C.S. Lewis (1983):

He had the most astonishing memory of any man I have ever known...the great thing about him as a teacher of literature was that he could take you into the medieval mind and the mind of a classical writer. He could make you understand that classicism and medievalism were really vivid and alive —that it was not the business of literature to be 'relevant' to us, but our business to be 'relevant' to it. (qtd. Hooper 42-43) Hooper also cites Inkling John Wain in *The Spectator* 193 (1 Oct.1954 p.405): "Mr. Lewis...writes as if inviting us to a feast" (Hooper 508). Lewis disapproved of the tendency to focus primarily on a subjective analysis of a text; a method he believed gave only a superficial understanding of "the things which separate one age from another" (62). His approach to critical reading is best summed up by this metaphorical suggestion to his pupils: "Instead of stripping the knight of his armour you can try to put his armour on yourself" (PPL 64). His lectures on Milton's *Paradise Lost* aimed to "hinder hindrances", bridging the gulf between the poet's world and the modern generation, leaving them better prepared to appreciate and comment on an epic poem: "The first qualification for judging any piece of workmanship from a corkscrew to a cathedral is to know *what* it is – what it was intended to do and how it was meant to be used" (1).

In "On Criticism", Lewis says: "It is the author who intends; the book means" (OTOW 176). He also notes that a reader may find an unintentional meaning, and concedes that the author "is not necessarily the best, and is never a perfect judge" of the book's meaning (178). In An Experiment in Criticism Lewis wants readers to enjoy a "primary literary experience" (129). This involves first being receptive to whatever the author sought to say. He claims that his experience as a reader convinced him that a critic who assists a reader to access whatever an author actually says, who explains the difficult words and identifies the allusions, has "done far more for me than a hundred new interpretations or assessments could ever do" (121). As an author, Lewis found literary criticism a useful tool for improving his writing skills but observes that it has now become more "valued for its supposed use to readers" (120). He did not support the approach of critics such as F.R. Leavis who founded the periodical Scrutiny (Hooper 74). Lewis understood the scrutiny group's "honest and earnest desire" to detect and weed out every perceived evil but advocated a more liberal approach: "The best safeguard against bad literature is a full experience of the good; just as a real and affectionate acquaintance with honest people gives a better protection against rogues than a habitual distrust of everyone" (94). He believed the critic's role as an adjudicator of merit was "overestimated" (124) and observed that young students were being "drenched, dizzied, and bedevilled by criticism to a point at which primary literary experience is no longer possible" (129). These comments have coloured my own approach to studying Lewis's approach to reading and writing.

4.4. Ideological and Spiritual Warfare

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Lewis believed that a supernatural reality existed beyond the appearance of the material world; a moral and spiritual conflict was being played out in both arenas. This idea reflects the Apostle Paul's teaching in his letter to the Ephesians: "For we wrestle not against flesh and blood, but against principalities, against powers, against the rulers of the darkness of this world, against spiritual wickedness in high places" (Eph. 6.12). This verse is analogous to Old Testament references to an angelic rebellion in the heavenly realms prior to humanity's fall in Genesis. The reality of supernatural cosmic warfare is the backcloth to Lewis's fantasy novels but also informs his rationale regarding the paradoxes of life on earth: the beauty and ugliness; poetry and pain; music and misery, abundance and waste, energy and entropy; despair and hope. When Lewis became a Christian he experienced the realty of spiritual warfare. If his conversion came as a shock in the halls of academia, his willingness to speak and write about his faith was even less well received. The fact that he became an advocate for Christian orthodoxy in the public domain, while an academic at Oxford University, made him something of an aberration. Some of his peers attest that his career prospects were harmed as a result. As J.R.R.Tolkien once confided to Walter Hooper: "No Oxford don was forgiven for writing books outside his field of study-except for detective stories which dons, like everyone else, read when they were down with flu. But it was considered unforgivable that Lewis wrote international best-sellers and worse still that many were of a religious nature" (Duriez 145-146). Helen Gardner, who knew Lewis well, also supported Tolkien's view that Lewis was passed over for the Merton Professorship Chair in English Literature in 1946, because many people in Oxford were opposed to any kind of Christian apologetics, especially by a popular academic. His name was not put forward in 1947 when a second chair in English was established, and again in 1951, "despite huge support from his faculty" (144), he was not given the Oxford Professorship of Poetry. Yet, Gardner described him as:

...by far the most impressive and exciting person in the Faculty of English. He had behind him a major work of literary history; he filled the largest lecture-room available for his lectures; and the Socratic Club, which he founded and over which he presided for the free discussion of religious and philosophic questions, was one of the most flourishing and influential of undergraduate societies. (Duriez 143)

In a letter to Dom Bede Griffiths (23 April 1951), Lewis confided that he had suffered more abuse from the enemy within the Anglican institution and other non-conformist groups than from his opponents outside: "I really think that in our day it is the

'undogmatic' 'liberal' people who call themselves Christians that are the most arrogant and intolerant. I expect justice and even courtesy from many Atheists and much more from your people: from Moderns I have to take bitterness and rancour as a matter of course" (CLIII 112). Other brief references are made to the taunts and vitriol sometimes directed at him. In "Revival or Decay?" he recalls an anonymous postcard that claimed he should be "flogged at the cart's tail for professing to believe in the Virgin Birth", and he describes how he was snubbed by a "distinguished literary atheist" who, on introduction, muttered, looked quickly away and rushed off to the other end of the room (252). In SBJ, he reveals that offensive anti-God magazines were sent to him regularly by an "anonymous donor", an underhand tactic that saddened Lewis because it marked a decline in levels of debate since the days of 'Kirk' and his fellow agnostics/atheists: "Atheism had come down in the world since those days, and mixed itself with politics and learned to dabble in dirt" (SBJ 113). Lewis's prediction of the emergence of New Atheism (cited earlier) is described in terms of spiritual warfare: "We have not yet had, (at least in junior Oxford) any real bitter opposition...The enemy has not yet thought it worthwhile to fling his whole weight against us. But he soon will" ("The Decline of Religion" 222).

Lewis's conversion permeated his whole person and joined him to a community of faith. Studying scripture was not primarily an intellectual exercise; it was devotional and edifying. He valued the Bible as a very human but sacred book, not just a piece of ancient literature to be cut up and sacrificed on the altar of modern tastes. When he translates its teaching into language that makes sense and connects to contemporary readers, the genuine conviction of his own faith comes through. It is a potent combination that inevitably results in wildly mixed responses. The love/hate reactions and academic prejudice are commented upon by current scholars. In the introduction to The Cambridge Companion to C.S. Lewis (2011), Robert MacSwain notes that Lewis was not considered seriously by mainstream, academic theologians "even among his fellow Anglicans", and claims that many had been "hoping for half a century that Lewis would quietly go away" (3). MacSwain warns that twenty-first century academic theology is in great danger of sealing itself within a very small self-enclosed chamber in which experts talk to other experts while losing all contact with the outside world (4). He ventures to say that they ignore Lewis "at their peril" (20). Michael Ward comments on Lewis's exclusion from contemporary discussions of theology, aesthetics and imagination, in his dissertation on Lewis: "The Son and Other Stars" (2005). Ward suggests that Lewis's popularity was the cause: "there is a widespread misconception in the academy that what is popular must therefore be superficial" (6). The

fact of academic prejudice against Lewis is borne out by other contemporary Lewis scholars. N.T. Wright in his featured article "Simply Lewis" in *Touchstone: A Journal of Mere Christianity* recalls that, "My Oxford tutors looked down their noses if you so much as mentioned him in a tutorial." Wright suggests that it may be "mere jealousy...the frustration of the professional who...sees the amateur effortlessly sailing past to the winning post" (1). Malcolm Guite points out that Lewis is omitted from a twentieth century dictionary of theology, even though he was the most popular and influential writer of apologetics in that century ("C.S. Lewis and the Cosmic Summer" (2011). Perhaps, this omission was due to the fact that Lewis's brought theology out of the elite regions and made it relevant and meaningful to any interested person. It seems significant that he does not even rate a mention in the index. This anti-Lewis attitude is also mentioned by Alister McGrath in *The Intellectual World of C.S. Lewis*:

I began to study theology in Lewis's Oxford in the mid-1970s...at the same time as completing my doctoral research in molecular biophysics. It soon became clear to me that one of the required initiation rites into the Oxford theological fraternity house was to rubbish Lewis as "outdated", "populist" and "theologically naïve"...As a young theologian, I was taught to despise Lewis; as a thinking person, I found him refreshing and energising. As I listened to then-fashionable but now-forgotten voices faulting and dismissing him, I heard a deeper dissenting voice within me. (164)

McGrath vindicates Lewis's unsought right as a layman to be recognised as a theologian. In a masterly discourse he draws attention to the fact that many "senior theological minds" have acknowledged Lewis as a "theologian of distinction" (164), and he cites the words of Professor Donald M. Baillie, the Dean of Divinity at St. Andrews, on the occasion of the university's conferring of an honorary degree upon Lewis. Even before the publication of Lewis's most widely valued work, Baillie recognised how he had "succeeded in capturing the attention of many who will not readily listen to professional theologians" (163). McGrath also notes that at an earlier stage than many, Baillie appreciated how Lewis had "arranged a new kind of marriage between theological reflection and poetic imagination" (164). McGrath's study is comprehensive and convincing as he considers the charges of "oversimplification" and "naivety" that have sometimes been used in an attempt to counteract Lewis's effectiveness without actually answering his challenge. One passage in particular shows McGrath's skill in stressing the points that should be borne in mind when reading Lewis's down-to-earth version of theology:

Yet we must try to understand what Lewis chose to do, not what others believe he ought to have done. What Lewis has offered is a transposition of the doctrine of the Trinity into the quotidian, anchoring a complex theological abstraction in the everyday life of the believer. His primary concern is not to explore the doctrine's theological profundities, but to reassure the believer of its intrinsic plausibility. (175)

That last sentence actually sums up the primary motivation behind Lewis's apologetic work; to translate complex theology, inform debate and defend the faith.

Lewis's conversion from atheism rates a brief salvo from Richard Dawkins. The God Delusion (2006) proved to be a very popular but spiteful piece of anti-religious propaganda. In the preface, Dawkins seeks to discredit 'the enemy' by warning readers not to be fooled by Christian testimonies of converted former atheists; cynically dismissing them as an attempt to build "some sort of street cred" and "One of the oldest tricks in the book" (13). Dawkins does not seem to hold the reverse testimonies of Christian apostates converted to atheism in the same contempt. He dismisses the renowned atheist Antony Flew's transition to deism in similar fashion but Flew retaliated in the journal "First Things" (2008) by describing Dawkins as a "secularist bigot" who had no genuine interest in the pursuit of truth because his primary concern was "to discredit an ideological opponent by any available means" (Flew 2). Flew, who argued an atheistic view for most of his life, has described Lewis as "the greatest Christian apologist of the last century" (Flew 4). Dawkins does not attempt to seriously engage with Lewis but is dismissive of his 'trilemma' argument. Rather than analysing what Lewis actually says, Dawkins repeats a simplistic contraction "Lord, Liar or Lunatic" and says "Lewis should know better" (GD 117). The context of Lewis's original statement indicates that he was not offering conclusive proof of the divinity of Jesus. Lewis was challenging the patronising attitude of those who describe Jesus as a great moral teacher but reject his claim to be God on the grounds that they do not believe in the supernatural. Lewis is actually addressing a point of logic, arguing that someone who is either delusional or at worst a liar cannot be esteemed as a great moral teacher: "He would either be a lunatic—on the level with the man who says he is a poached egg-or else he would be the Devil of Hell. You must make your choice. Either this man was and is the Son of God: or else a madman or something worse" (MC 52-53). The logic of the 'trilemma' re-appears in different guise in The Lion, the Witch and the Wardrobe, when Lucy's account of her wardrobe adventure is disbelieved

by her siblings. The professor's wise solution to the children's dispute is essentially the same as Lewis's:

Logic said the professor half to himself. Why don't they teach logic at these schools? There are only three possibilities. Either your sister is telling lies, or she is mad, or she is telling the truth. You know she doesn't tell lies and it is obvious that she is not mad. For the moment then and unless any further evidence turns up, we must assume that she is telling the truth. (*The Narnia Chronicles* 131)

In a style reminiscent of G.K. Chesterton, Lewis sometimes enjoys emphasizing a point by using a comic extreme, but his sometimes vernacular language avoids technical complexities because he was not primarily addressing academics. However, that does not render his arguments any less sound.

4.5. Crusader or Evangelist?

Lewis was cognizant of the stock arguments against Christianity; indeed he had once employed them all: "I thought I had the Christians "placed" and disposed of forever" (SBJ 141). He could identify with the climate of unbelief spread by secular propaganda but wanted to present a vibrant and relevant Christian alternative. Lewis was well qualified not only to empathize with doubters and adversaries, but to explain basic beliefs to those who wanted to understand better the theology and the implications of commitment. He demonstrated that the battle for the mind and the emotions demands both intellectual armoury and the appeal to the imagination. Austin Farrer experienced the impact of these attributes, noting Lewis's ability to make a compelling case, evoking an encounter with a living God: "Lewis makes us "think we are listening to an argument" when in reality "we are presented with a vision, and it is the vision that carries conviction" ("The Christian Apologist" 37). In "Learning in War-time" Lewis addressed university students on the importance of their education to all aspects of life: "Good philosophy must exist, if for no other reason, because bad philosophy needs to be answered" (WG 58). He concedes that most of his books are evangelical in the sense that they present an alternative to the prevailing secular and materialistic trends of his day. He chose to leave controversial points of theology to other "more talented authors" and concentrated on the basics: "That part of the line where I thought I could serve best was also the part that seemed to be thinnest. And to that I naturally went" (Mere Christianity 6). The reference to the 'thinnest'

part of line is further explained in "Rejoinder to Dr. Pittenger" in which Lewis claims to write "ad populum, and not ad clerum":

When I began, Christianity came before the great mass of my unbelieving fellow-countrymen either in the highly emotional form offered by revivalists or in the unintelligible language of highly cultured clergymen. Most men were reached by neither. My task was therefore simply that of a translator —one turning Christian doctrine, or what is believed to be such, into the vernacular, into language that unscholarly people would attend to and could understand. (GID 183)

The following passage is his parting comment to those who belittled attempts to make the gospel message more widely accessible: "If the real theologians had tackled this laborious work of translation about a hundred years ago, when they began to lose touch with the people (for whom Christ died), there would have been no place for me" (183). It is a rebuke reminiscent of Jesus' charge against the self-righteous Pharisees who failed to nurture their 'flock' and kept people outside the 'kingdom of heaven' with a souldestroying plethora of minor legalities. Lewis noted a similar sad neglect of the spiritual health of communicants by 'shepherds' for whom the Christian calling had become a career bereft of faith and love.

Lewis was rigorous in debate, but when communicating his ideas to a wider audience he used a more conversational tone and was often self-deprecating. In "God in the Dock", he shows how he felt ill-equipped to take a direct route to the emotions: "My own work has suffered very much from the incurable intellectualism of my approach. The simple, emotional appeal ('come to Jesus') is still often successful. But those who, like myself, lack the gift for making it, had better not attempt it" (GID 244). Although often asked to give addresses and sermons, Lewis did not see himself as a preacher, but apparently his sermons were as memorable as his lectures, and the halls filled to capacity. Greg Anderson writes of "The Oxford Don as Preacher" and cites the comments of a student, Eric Routley, who witnessed Lewis's "Weight of Glory" sermon, noting Lewis's use of words as "precision tools, the effortless rhythm of sentences, the scholarship made friendly, and the sternness made beautiful" (LWL3 85). In the "Cross-Examination" interview Lewis gives no indication that his sermons were, like his fiction, inspired by sparks of imagination or dreams. In fact, he down-plays any suggestion that theological texts have a greater claim to spiritual illumination than any others: "God is concerned with all kinds of writing. In the same way a sacred calling is not limited to ecclesiastical functions. The man who is weeding a field of turnips is also serving God" (264).

Lewis also relates how he came to appreciate some of the styles and methods of evangelism he had once dismissed. He observed the appeal of some popular evangelists and speaks of his meeting with Billy Graham in Cambridge in 1963, saying afterwards, "I thought he was a very modest and a very sensible man, and I liked him very much indeed" (GID 265). Lewis names two men as his greatest teachers-"Smewgy" at Wyvern who taught him Grammar and Rhetoric, and after that, W.T Kirkpatrick who taught him Dialectic. The following tribute is found in SBJ: "If ever a man came near to being a purely logical entity, that man was Kirk... The idea that human beings should exercise their vocal organs for any purpose except that of communicating or discovering truth was to him preposterous. The most casual remark was taken as a summons to disputation" (110-11). Ironically, Lewis had been privately trained in logic by Kirkpatrick who had an atheistic worldview but Lewis writes: "My debt to him is very great, my reverence to this day undiminished" (SBJ 120). In a letter to Eliza Marian Butler (Sept. 25 1940) Lewis says this of his teacher: "A pure agnostic is a fine thing, I have known only one and he was the man who taught me to think" (CLI 444). It is an incisive sketch of the impact 'the Knock' had upon him and the flow-on effect of the teacher's ruthless logic can be plainly seen in Lewis's approach to debate. Although Kirkpatrick personally found it impossible to prove or disprove the existence God, his search for truth and his exacting standards were the perfect preparation for Lewis's future career.

In "Christian Apologetics", Lewis records how difficult it was to get across to modern audiences that he was not arguing the case for Christianity simply because he liked it or because it was good for society; but because he believed it to be true—"a question of 'objective fact'—not simply chatter about ideals and points of view" (90-91). Interestingly, Lewis's words strike a chord with those of the scientist Stephen Weinberg (whose comments are cited earlier in the chapter on theology and physics). In *Dreams of a Final Theory*, Weinberg includes a chapter entitled "What About God?" in which he admits to being "atypical" among scientists in caring about truth. Although a vociferous atheist, he seems in the following passage to have more respect for fundamentalist Christians than he does for religious liberals:

At least conservatives like the scientists tell you that they believe in what they believe because it is true, rather than because it makes them good or happy...One often hears that theology is not the important thing about religion—the important thing is how it helps us to live. Very strange, that the existence of God and grace and sin and heaven and hell are not important! (DFT 206)

Surely Lewis would say 'Amen' to that sentiment because it echoes his own thoughts in "Christian Apologetics": "Christianity is a statement which, if false, is of no importance, and if true, of infinite importance. The one thing it cannot be is moderately important" (GID 101). However the agreement ends there. In The First Three Minutes Weinberg suggests that acceptance of the Christian Gospel is a soft option: "It is almost irresistible for humans to believe that we have some special relation to the universe, that human life is not just a more-or-less farcical outcome of a chain of accidents reaching back to the first three minutes, but that we were somehow built in from the beginning" (FTM 154). Lewis counters this argument in "Bulverism": "The modern man has every reason for trying to convince himself that there are no eternal sanctions behind the morality he is rejecting" (273). In Mere Christianity, Lewis's discussion on "The Rival Conceptions of God" shows that he once felt it "much simpler and easier to say that the world was not made by an intelligent power" (MC 41), to settle for meaninglessness and close his mind to complicated arguments suggesting otherwise. Another common reproach against Christianity that Lewis answered was the suggestion that it had been fashioned as a prop or a sop to the need for 'wish-fulfilment'; designed to appeal to a more enlightened age by ameliorating Old Testament images of an awesome, transcendent God. Lewis's answer in Miracles asserts that: "It is a profound mistake to imagine that Christianity ever intended to dissipate the bewilderment and even the terror, the sense of our own nothingness, which come upon us when we think about the nature of things. It [Christianity] comes to intensify them" (55).

Similar sentiments are expressed informally by Lewis in "Answers to Questions on Christianity": "I didn't go to religion to make me happy. I always knew a bottle of Port would do that. If you want a religion to make you feel really comfortable, I certainly don't recommend Christianity" (58). The comment is both effective in conveying the complexity and demands of his pursuit of truth and faith commitment, and memorable for its wit and honesty.

CHAPTER 5

Apologetics: In a Modern and Postmodern Climate.

What the world is going to come to without religious aspirations, and the old feelings of awe and mystery that Nature inspired in the best, is more than I can tell or care to guess.

James Ward

In the twentieth century, Lewis engaged with progressive philosophies that challenged the mental, moral and spiritual foundations of society. His rigorous logic and clarity of expression continue to inspire twenty-first century apologists. The term 'apologia' originally applied to a legal argument in a trial, a defence against the prosecution's charge. John Milbank discusses the derivation of the word in his article "The Heart of Christianity: A theological defence of apologetics" (2013), and notes that an 'apologia' contained all the elements of narrative, argument, personal testimony and confession (1-2). According to Milbank, 'apologetics' "fell out of favour" in the twentieth century due to the word's association with 'apology,' which implies a position of weakness from which a doubtful defence is mounted. The term is now most commonly associated with theology and has come to represent something secondary to theological exposition. Milbank challenges the view that a theological argument is compromised when a defender of faith ventures into the opponent's intellectual territory, and he cites the wide and popular appeal of Christian apologists, "most notably C.S. Lewis" (1). Milbank cites three historic trials: Socrates before civic authority, Jesus before Pilate and the Apostle Paul before Festus and Agrippa. In each case the accused is charged by the state with failing to respect everyday laws and customs, and faces the threat of "legal execution" (2). Their defence relies on the fact that they live under a 'higher authority' which the state does not recognize, but any such 'ultimate authority' cannot be produced in court. Milbank views the three trials cited as "secretly cosmic" (3) because the issues involved are ultimate questions about truth and meaning which live on; they are never really over. The Christian apologist relies on rational argument when dealing with issues of truth and meaning, but no supernatural authority can be summoned to attend a metaphorical or material human court. Lewis observed in his day that God (the intelligent Creator of the universe and author of life) was being arraigned 'in the dock' and unjustly accused, so he took on the role of defence

counsel. In "Christian Apologetics", Lewis emphasises that in the context of Faith, an apologist is not engaged in defending personal opinions, "We are defending Christianity; not 'my religion'" (90). He also points out the wisdom of not making some recent development in science the foundation of our apologetic because "just as we have put the finishing touches to our argument science has changed its mind..." (92). This relates to his observations concerning quantum theory and the evidence that the universe is finite.

Nietzsche's 'death of God' idea and the rejection of absolutes had captured the popular imagination. Author A. N. Wilson evokes the mood in journalistic style in his book Our *Times* (2009), which documents the lives of prominent people and events during the reign of Elizabeth II who was crowned in 1953. Wilson notes that: "The heirs of Bloomsbury had assumed that theology would vanish with the extension of education. Bertrand Russell's atheism had taught two generations to think as he did...British primary schools were no longer teaching the children Bible stories but were giving them hazy versions of comparative religion" (395-6). He goes on to claim that the well-intentioned educational theorists trusted that these "progressive tots" would mature with a vague sense that religions were mere social constructs to be outgrown when they came to learn about science: "What else was religion, but, in the words of one of the most eloquent poems of our times ["Aubade" by Philip Larkin]: "That vast moth-eaten musical brocade/ Created to pretend we never die?" (396). The poet's cynical depiction is typical of the contempt for church institutions and Christianity itself so prevalent among the intelligentsia of British society. Bertrand Russell was scathing and prolific in his arguments against religious conviction and in his contemptuous misreading of Biblical narratives. Yet, he owned the label of 'agnostic' rather than 'atheist', acknowledging the absence of a definitive proof either way.

In "An Examined Life", Bruce Edwards sets Lewis in context, sketching the spirit of the age and the intellectual climate in which he lived. Edwards observes similar patterns in the present age; vestiges of the Enlightenment's secular confidence in contemporary society; the belief that, "all kinds of knowledge are inevitably going to be accessible—and thus able to be catalogued incrementally and eventually exhaustively—to the glory of the human race" (LWL1 12). He notes Lewis's anticipation of the social outcomes of an internalised uncertainty which leaves individuals, communities and civilizations without "any compass with which to navigate the world at large" (12). Edwards captures the destabilising impact of Deconstruction and the "various relativisms" which exalt the

"single observer as an arbiter of truth while simultaneously undermining his or her qualifications for making such observations" (LWL1 12). Lewis's arguments encompass the social implications of a range of 'isms': Naturalism, Materialism, Reductionism, Relativism and Subjectivism. These philosophies seem to stem from the fundamental belief that humans are little more than biochemical accidents, and in the essay "Two Lectures", Lewis asks: "Is it not equally reasonable to look outside Nature for the real Originator of the natural order?" (211). The denial of a 'real originator' leads to the denial of moral absolutes, and although Lewis respected the current biological evolutionary model he rejected the atheistic assumptions constructed upon it. Contemporary scholar Thomas Nagel has come to question the assumptions attached to the Neo-Darwinist theory, not on religious, but on empirical grounds. His latest book, *Mind and Cosmos* (2012) argues against the conception of nature, which Dawkins has so successfully propagated:

Physico-chemical reductionism in biology is the orthodox view, and any resistance to it is regarded as not only scientifically but politically incorrect. But for a long time I have found the materialist account of how we and our fellow organisms came to exist hard to believe...The more details we learn about the chemical basis of life and the intricacy of the genetic code, the more unbelievable the standard historical account becomes...But it seems to me that, as it is usually presented, the current orthodoxy about the cosmic order is the product of governing assumptions that are unsupported, and that it flies in the face of common sense. (5)

Lewis's book *The Abolition of Man* is an apologia against the negative influences of subjectivism and relativism which he believed threatened to unravel the fabric of society. In the chapter "Men without Chests", he writes of the inevitable confrontation between a world of facts bereft of values, and a world of feelings reference to any absolute truth or justice: "no rapprochement is possible" (17). He addresses the potential impact on ethical standards generally and in the realm of education if these theories are widely disseminated. He argues the importance of objective standards in education and moral training of young people to the overall health of society. As Michael Travers points out in his chapter on Lewis's philosophy of history:

It does not take long for the reader...to understand that Lewis is not simply admonishing English school masters to correct a pedagogical error. He is, rather, writing to tackle nothing less than the hegemony of relativism in modern western culture...The Abolition of Man is a book about ethics, with roots in history and metaphysics. (LWL3 109) While allowing for the existence of some "contradictions and absurdities", Lewis believed that a universal moral code exists (AOM 30). He refers to it as 'The Tao' or "the doctrine of objective values" (16). The appendix of his book lists examples of moral laws from diverse cultures and religions, which he claims is by no means exhaustive. He interprets the consistency and universal aspect of these laws as grounds for claiming that they are derived from an external source, rather than the result of chance deliberations by disparate cultures. This view is supported by the scriptural claim that God has written his law on the hearts of humankind (Rom.2.15).

As Victor Reppert points out in "The Ecumenical Apologist" (24), Lewis was confronting the philosophical position, clearly set out by Bertrand Russell in the following statement:

The theory which I have been advocating is a form of the doctrine which is called the "subjectivity" of values. This doctrine consists in maintaining that if two men differ about values, there is not a disagreement as to any kind of truth, but a difference of taste. If one man says "oysters are good" and another says "I think they are bad", we recognize that there is nothing to argue about. The theory in question holds that all differences as to values are of this sort, although we do not naturally think them so when we are dealing with matters that seem to us more exalted than oysters. (*Science and Religion* 237-238)

Lewis argues that, "those who stand outside all judgements of value cannot have any ground for preferring one of their own impulses to another except the emotional strength of that impulse" (AOM 40). He cautions that, "I am doubtful whether history shows us one example of a man, who having stepped outside traditional moral values and attained power, has used that power benevolently" (40). Lewis saw the prevailing theory of Subjectivism as a threat to society more widespread than totalitarianism. In his essay "The Poison of Subjectivism" (1967) he writes: "Out of this apparently innocent idea comes the disease that will certainly end our species...the fatal superstition that men can create values, that the community can choose its 'ideology' as men choose their clothes" (CR 99). He links the toxic influence of Subjectivism to a change in focus from studying the environment to studying the human species, and observes that the faculty of reason, once seen as a conduit for knowledge, had been reduced to being a side effect of brain activity which in itself is only "a by-product of a blind evolutionary process" (98). Lewis argues that if the validity of logic and the rationality of value judgements come into doubt, then the relationship between scientific research and its basis in reason becomes uneasy. He

recalls hearing of some scientists who "dropped the words *truth* and *reality* from their vocabulary" because their aim was to "get practical results" rather than to pursue abstract knowledge (98-9).

The death of God and demise of moral absolutes evokes a sense of liberation, freeing individuals to do whatever seems good at the time, but the long term cost to the planet, the well-being of individuals, community and ecology is unknown. Lewis anticipated that this trend would develop into a habit of doing what one feels like rather than what one thinks is right (a popular approach to life later summed up in the Nike slogan 'Just Do It'). In "De Futilitate" Lewis claims that if we believe that nothing is certainly right then "it follows that nothing is certainly wrong" (90). In "The Poison of Subjectivism" he claims that without an independent standard or measure, terms such as 'progress' and 'decadence' become meaningless (100). He reasons that to dismiss traditional morality is absurd, on the grounds that any semblance of validity that a proposed 'new value' might possess is itself derived from traditional standards: "The trunk to whose root the reformer would lay an axe is the only support of the particular branch he wishes to retain" (101-2). One of the tools used in revolutionizing society involves language, and Lewis cites the "illegitimate emotional power" of the word "stagnation" which was used to denigrate long-established standards and justify change. He observes how positive words, such as 'improvement' and 'progress', are applied in the promotion of everything 'new'; whereas anything 'ancient ' or 'traditional' is obsolete or associated with inertia or decay: "To infer...that whatever stands long must be unwholesome is to be the victim of metaphor. Space does not stink because it has preserved its three dimensions from the beginning. The square on the hypotenuse has not gone mouldy by continuing to equal the sum of the squares on the other two sides" (102). He suggests the term "permanent" as a better descriptive substitute and asks the question, "Does a permanent moral standard preclude progress?" and answers "On the contrary, except on the supposition of a changeless standard, progress is impossible" (103).

5.1. Literary Criticism

Lewis's education, training in logic and literary profession equipped him to argue his case regarding the influence of modernist philosophies in the arena of critical theory. He noted the trend to focus on the author rather than the book, to judge authors and books

according to the dictates of relativism and subjectivism. In *J.R.R.Tolkien and C.S.Lewis*, Colin Duriez writes that Lewis: "in many ways represented the 'Oxford' tradition of literary criticism at its best: relaxed, knowledgeable, enthusiastic, conservative" (147). Lewis distrusted the modernist critics' judgement of ancient texts, because of their handling of contemporary literature. He could not respect the critics' habit of reading their own agenda into the current books they reviewed. In a letter to Francis Anderson in 1963, he wrote:

They are dealing with authors who have the same mother tongue, the same education, and inhabit the same social and political world as their own, and inherit the same literary traditions. In spite of this, when they tell us how the books were written they are wildly wrong! After that what chance can there be that any modern scholar can determine how Isaiah or the Fourth Gospel—and I'd insert Piers Ploughman—came into existence?...they don't know by the smell, as a real critic does, the difference in myth, in legend, and a bit of primitive reportage. (CLIII 1459)

One of Lewis's earliest engagements with trends in literary criticism was his response to E. M. W. Tillyard's reading of Milton. Lewis objected to Tillyard's approach to reading poetry, which implied "that all poetry is about the poet's state of mind" (CLII 157 n.14). A series of articles was published in "Essays and Studies by Members of the English Association" in 1934, and a later joint work containing three essays each from Tillyard and Lewis was published under the title The Personal Heresy (1939). Lewis's correspondence indicates that the two men had a congenial relationship and after the publication of the discourse in 1939 the 'heresy' ceased to be an issue. Lewis did, however, believe that his argument had been a necessary response to the modernist emphasis on analysing the poet at the expense of receiving the poem. One of Lewis's pupils, John Lawlor, has recorded his recollection of the last live debate, in C.S. Lewis: Memories and Reflections (1998). Lawlor depicts it as a 'no contest': "Lewis made rings around Tillyard, in and out, up, down, around, back again—like some piratical Plymouth bark against a high-built galleon of Spain" (CLII 248 n.25). Lewis's skills in debate were often sought after to support contentious issues, but in a letter to Joan Bennett (February 1937), he shows a much humbler, subdued view of his own adversarial efforts than that given by Lawlor. Not only does Lewis put the debate in perspective but expresses a reluctance to be lauded in his apologetic role: "C.S.L. as professional controversialist and itinerant prize-fighter is, I suspect, becoming rather a bore to our small public and might in that way infect you"

(210). In "The Apologist's Evening Prayer" he is equally self-deprecating: "From all my lame defeats and oh! much more/ From all the victories that I seemed to score;/From cleverness shot forth on Thy behalf/At which, while angels weep, the audience laugh" (CP 143). The prayer seeks divine deliverance from the incursions of pride that often came with success in his role as an apologist.

In An Experiment in Criticism (1961), Lewis proposes a reversal of the traditional premise that literary criticism is about judging books. He quotes Matthew Arnold's advice in "Pagan and Mediaeval Religious Sentiment" (1864): "The great art of criticism is to get oneself out of the way and to let humanity decide" (120). However, in the essay, "Christianity and Culture," Lewis names Arnold, together with the idealist philosopher Benedetto Croce as popularisers of a movement towards equating the "aesthetic and logical activities" of culture with a form of spirituality and ethics (27). Lewis denied that "good poetical taste" could be the means to improve or promote an "effective and satisfactory" way of life, or that "bad taste resulted in a corresponding loss" (28). He generally viewed culture as "a storehouse of the best (sub-Christian) values" (40), conceding that it might well contain "some reflection or antepast" of a real spiritual dimension, but denying that it could ever be a genuine substitute for religious experience. These points derive from his principle of first and second things. In "The Weight of Glory" he speaks of wanting so much more than an aesthetic experience: "We do not want to merely see beauty...We want something else which can hardly be put into words—to be united with the beauty we see, to pass into it, to receive it into ourselves, to bathe in it, to become part of it" (42). Arnold's prediction that "literature would increasingly replace religion" is referred to by Lewis in "Unreal Estates" during his discussion with fellow science-fiction writers (188). His quip on that occasion was to suggest that some literary critics were already absorbing some of the negative aspects of religiosity—"the features of bitter persecution, great intolerance, and traffic in relics" (188). While claiming to profoundly respect the work of the "great atheist critic" Dr. I.A. Richards, Lewis could not agree with his faith in literature as a moral compass. Richards was a mentor to F.R. Leavis, whose Scrutiny group at Cambridge sought to impose their evaluations of authors and works upon readers, judging rather than describing the books they critiqued. In An Experiment in Criticism, Lewis describes their method as "a form of social and ethical hygiene" (124). He also challenges the resulting "widespread neglect or disparagement of the romantic, the idyllic, and the fantastic" (60). In his view, the "momentary critical 'establishment" were guilty of treating the great names of English literature as, "so many lamp-posts for a dog" (112).

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Cosmic Warfare Chapter 5: Apologetics

Lewis's "experiment" suggests a different way of looking; an alternative method to that of the 'Vigilants' whose judgements were assumed to be authoritative. He observes how their condemnation of a book was falsely transferred to the reader and, conversely, the taste of a reader who liked the book was likewise condemned. Lewis's speculative method of assessing the merit of a book focuses on the reader's literary experience, and the manner in which the text is read—"perfunctorily, carelessly, reluctantly, avidly or repeatedly" (EC 1-4). By shifting the focus from the author's psyche to the reader's experience, Lewis reverses the current trend that made the reading of a book an ancillary to the critic's comments about it. Lewis vows to "stand together against all those who find the value of literary works in 'views' or 'philosophies of life, or even 'comments' on it" (135). His method is based on the premise that the critic's primary role is to "multiply, prolong and safeguard the experiences of good reading" (104), and on the assumption that literary scholarship and criticism are still regarded as subordinate to literature itself. Lewis might be surprised to see the popular twenty-first century entertainment of televised chat shows in which films or books are reviewed by celebrity critics, whose enlightening or diverting discussions can be a substitute for actually watching the movie or reading the book. Lewis was advocating a system "centred on literature in operation," one which would deflect from "abstraction" (105). But the following introductory comment from the editors of the Norton anthology of literary criticism suggests he might be disappointed: "In recent decades, theory and criticism have grown ever more prominent in literary and cultural studies, treated less as aids to the study of literature and culture than as ends in themselves" (Leitch 1).

Lewis's respectful attitude toward books in general is defined in the following passage:

...a work of literature can be considered in two lights. It both means and is. It is both Logos (something said) and Poiema (something made). As Logos it tells a story, or expresses an emotion, or exhorts or pleads or describes or rebukes or excites laughter. As Poiema, by its aural beauties and also the balance and contrast and the unified multiplicity of its successive parts, it is an objet d'art, a thing shaped so as to give satisfaction. (EC132)

His aim is to approach all texts objectively, even ones later judged as poorly written: "we must attend even to discover that something is not worth attention" (132). The stress on 'paying attention' seems to underline his insistence that the reader should concentrate primarily on the work itself, looking into and 'through' it rather than reading with a preoccupation about the psyche of the author. This theme is echoed in the epilogue of

Lewis's The Discarded Image (1964): "Even today, there are those (some of them critics) who believe every novel and even every lyric to be autobiographical" (DI 213). Contemporary author and critic J.M. Coetzee concedes that, "in a larger sense all writing is autobiographical; everything that you write including criticism and fiction, writes you as you write it" (Coetzee 17). But, like Lewis, Coetzee is sceptical about the ability of critics to accurately assess and interpret the relationship between the author and his text. In typically post-modern fashion, he claims that: "The author's position is weakest of all. Neither can he claim the critic's saving distance—that would be a simple lie—neither can he pretend to be what he was when he wrote—that is when he was not himself" (206). The sentiments are reminiscent of lines from Lewis's poem "Legion": "Lord hear my voice, my present voice I mean, / Not that which may be speaking an hour hence" (CP 133). Lewis, too, resisted the growing tendency to make assumptions and authoritative statements about authorial intention. In "On Criticism", Lewis also points out that publishing dates do not necessarily reflect the chronology of the writing, and he cites the reviews of his friend J. R. R. Tolkien's book *The Lord of the Rings* (1954-5), which critics assumed to be a political allegory, identifying the master Ring as the atom bomb: "Anyone who knew the real history of the composition knew that this was not only erroneous...but chronologically impossible" (168-9). Lewis also refers to diverse reviews of his own work, which ranged from depreciation to "fatuous praise" (163), and claims that, in some ways, the author is best positioned to judge his critics, "Ignorant as he may be of his book's value, he is at least an expert on its content" (165).

5.2. Higher Criticism

The secular philosophies of nineteenth century rationalism fostered a liberal approach to Biblical criticism. Lewis defended the Scriptures against the desacralizing and demythologizing agenda of higher criticism. In *The Literary Impact of the Authorised Version* (1950), he describes the Judeo-Christian Scriptures as "a collection of books so widely different in period, kind, language, and aesthetic value that no common criticism can be passed on them" (126). He claims that the Bible is not framed to appeal to our senses. It is "remorselessly and continuously sacred...It demands to be read on its own terms" (144). Lewis examines the history of translation, and questions the value of treating

the Bible as secular literature, stripping it of authority, allegorical and historical sense (144). He predicts that: "Unless the religious claims of the Bible are again acknowledged, its literary claims will, I think, be given only 'mouth honour' and that decreasingly" (144). He observed that although Scripture is frequently a 'source' in other literature, the populace was increasingly ignorant of Biblical narratives. Lewis's frequent allusions to Biblical themes in his fictional texts seem to be a partial attempt to redress the situation. However, the tenets of higher criticism, driven by German philosophers, encouraged scholars to read the scriptures with the *a priori* assumption that the supernatural does not exist. The sceptical lens saw Biblical records of history, teaching, wisdom and prophecy as the mythical constructs of primitive men; products of bias and self-interest. This belief informed their methodology and influenced interpretations regarding Biblical exegesis. Lewis defended the reliability of records and eyewitness accounts, as do contemporary scholars. N.T. Wright's *The Resurrection of the Son of God* (2003) is a masterly study that establishes the historicity of Christianity's central claim regarding the Resurrection.

In a letter to Lee Turner in 1958, Lewis explains his own understanding of the revelations of Scripture, and his belief that the Spirit of God operates through the personalities of diverse writers: "I myself think of it as analogous to the Incarnation—that, as in Christ a human soul and body are taken up and made the vehicle of Deity, so in Scripture a mass of human legend, history, moral teaching etc. are taken up and made the vehicle of God's word" (CLIII 81). In Reflection on the Psalms, he notes that divine power operates through real people: "The human qualities of raw materials... are not removed. The result is not 'the word of God' in the sense that every passage in itself gives impeccable science and history" (112). Lewis believed the human accounts to be inspired by God, for the primary purpose of revealing the spiritual and personal nature of the Creator; to communicate the thoughts and feelings of Deity. Lewis valued the Bible's mix of revelation, real-life situations, knowledge, wisdom and poetry; seeing it as God's Logos in literary form, providing a unique history in which the Creator gradually unveils himself by stages to his rebellious people. With a twentieth-century readership in mind, Lewis remarks that: "We might have expected, we may think we should have preferred an unrefracted light giving us ultimate truth in systematic form-something we could have tabulated and memorised and relied on like the multiplication table" (112). The metaphor draws upon Newton's discovery of the properties of white light. The individual colours that comprise pure light become visible when refracted through a prism. Lewis is suggesting that in our ignorance we think we are capable of handling the direct beam of the

divine, but God has given us his word in a refracted form through a prism of humanity. He reasons that if the scriptures were delivered to us in a form fitted only to our 'systematising intellect' it could have been 'fatal' to us, because the elusive quality of Jesus' teaching demands "a response from the whole man" (113).

Lewis found in the Gospels all the marks of authenticity. This automatically pitted him against those who rejected anything beyond the material in the life of Jesus and the words of Scripture. It was Lewis's practice to be respectful towards those he opposed and he conceded that people who habitually take the lower view, "will always be plausible" (ROP 116-7). In his essay "Transposition", he says the same about reductionist views of life and the cosmos, acknowledging that there will always be evidence to support the view that, "religion is only psychological, justice only self-protection, politics only economics, love only lust, and thought itself only cerebral biochemistry" (114-115). He concedes that the arguments sound both reasonable and convincing because they cannot be falsified, but counters this fact by saying that: "One who contended that a poem was nothing but black marks on white paper would be unanswerable if he addressed an audience who couldn't read (117). In correspondence with Mary Van Deusen, Lewis reveals how spiritually draining it was to be constantly required to focus on the intellectual aspects of theology:

"I envy you not having to think any more about Christian apologetics. My correspondents force the subject upon me again and again. It is very wearing, and not v. good for one's own faith. A Christian doctrine never seems less real to me than when I have just (even successfully) been defending it" (CLIII 762). The demand for his adversarial talents made him conscious of the need to balance the theoretical and practical commitments of the faith life with the edifying and nourishing devotional aspects. In ROP he writes: "A man can't always be defending the truth; there must be a time to feed on it" (7).

5.3. Twenty-first Century Apologetics

In the media today, misinformation and propaganda against the Christian faith seem relentless, and contemporary apologists still value Lewis's contribution to the pursuit of truth. His approach and arguments, though dated, are not outdated—they remain relevant and influential. Michael Ward claims that "C.S. Lewis is probably the most influential practitioner of Christian apologetics over the last 100 years" (*Imaginative Apologetics* 59). Louis Markos makes a similar comment in *Apologetics for the 21st Century* (2010): "the

last two generations of apologists owe a strong and enduring debt to Lewis" (23). He notes Lewis's courage in exposing and critiquing "the foundational assumptions of naturalism and secular humanism" (24). In a chapter entitled, "Answering the New Atheists", Markos takes issue with the term 'atheist philosophy', describing it as an "oxymoron" on the basis that 'philosophy' in its pre-modern sense sought to discern the true from the false, to pursue wisdom and the transcendent "divine blueprint" behind the physical world (215). He argues that if one allows no possibility of absolute truth or ultimate reality, there is nothing to direct or impel the search: "if there is no Unmoved Mover, No Absolute Consciousness, no First Principle, no Transcendent Source of Goodness, Truth and Beauty—the philosophy is left without a standard against which to measure the very thing it studies" (215).

In "The Natural Sciences and Apologetics" Alister McGrath ends his discussion with this challenge: "Christianity does not displace scientific accounts of the world; it lends them ontological depth and clarity, and in doing so, discloses a greater vision of reality—a vision that gives both intellectual resilience and existential motivation to the task of apologetics" (Imaginative Apologetics 157). The statement endorses Lewis's two-fold approach to Christian apologetics—the appeal to the mind and the imagination (143). McGrath points out that Lewis's apologetic method does not try to prove the existence of God on *a priori* grounds but rather shows how the Christian model involves the mind and the senses, making sense of the world and its paradoxes. It infuses the mind and the senses, incorporating the concepts of beauty, goodness and truth. In the broadcast talk, "Try seeing it this way: Imagination and reason in the apologetics of C.S. Lewis" (2013), McGrath notes that Lewis's ability to communicate with a compelling, intellectual approach, has been appropriated by many apologists as an effective tool to present the Gospel in terms that fit the intellectual emphasis of modernism. He draws attention to Lewis's visual approach, and his equal valuing of the more unsystematic and mythopoeic ways of communicating: "For Lewis, truth is about seeing things rightly, grasping their deep interconnection. Truth is something that we see rather than something we express in logical or conceptual terms" (2). The radio talk is a condensed version of some of the themes discussed in McGrath's book, The Intellectual World of C.S. Lewis (2013), in which he claims that apologetics has been part of the church's broader ministry throughout the history of Christianity. He cites the particularly brilliant contributions of Justin Martyr in the second century, Thomas Aquinas in the thirteenth century and Blaise Pascal in the seventeenth century, who all argued for the rationality of the Christian faith and defended

the reasonableness of belief in God (129). While commenting on the success of Lewis's apologetic method, McGrath also notes a development in his approach: "Lewis seems to have shifted his focus from the public defense of the Christian faith to exploration of its spiritual and imaginative dimensions" (IW 131). The perceived shift followed Lewis's move to Cambridge in 1954.

Malcolm Guite demonstrates Lewis's contemporary relevance in a series of podcasts on "The Inklings: Fantasists or Prophets?" (2011), in which he refutes any attempt to dismiss Barfield, Williams, Tolkien or Lewis as "backward-looking, reactionary or escapist". He argues the reverse, claiming they were "fully and prophetically engaged with the mainstreams of modernity" and "foresaw the coming crisis of violence and environmental degradation." Guite begins the talk "C.S. Lewis and the Cosmic Summer" with a humorous reference to the tweedy, beer swilling, pipe-smoking caricature of these 'archaic' academics and suggests that Lewis may even have played into this image as a kind of camouflage for his intellectual activism. Guite notes their engagement with modernism and recognizes their anticipation of postmodern trends. He draws attention to the Inklings joint contribution in putting forward an alternative vision which gave equal credence and importance to "Imagination and Reason as ways of knowing truth and relating to one another and the world". The Inklings foresaw many of the negatives associated with an unbalanced focus on reason and analysis, and Guite sees them in that sense as a kind of avant-garde. In his book Faith, Hope and Poetry, Guite speaks of this cultural shift, its benefits to poetry and widespread "ramifications": "Theology, likewise, has recovered from an atomising, reductive, demythologising period and is beginning to look at the importance of imaginative shaping and symbolic apprehension in the discovery of meaning and theological truth" (2). It is a view supported by Markos in Apologetics for the 21st *Century* (2010):

That cultural change goes by the name of postmodernism, a worldview that has consciously broken from modernism's focus on system, structure, science, and empiricism. Whereas modernism is very compartmental in its attempt to categorize all knowledge and phenomena in discrete boxes...Postmodernism, in contrast, yearns for an aesthetic and sacred language that is less fixed and systematic, that is more strange and startling and...seeks to restore meaning to the cosmos, to return to a sympathetic universe in which the turnings of the seasons and the orbits of the planets have something to do with us. For a postmodern, the universe is our home; for a modern it is only a house. (195-6)

The language here reflects much of the essential Lewis, indicating that rather than being stuck in the past, he jumped a generation. The current spirit of the age may not allow for certainties but does encourage a many-sided approach to knowledge.

The negative potential of philosophical trends anticipated by Lewis has become a reality observed by N.T. Wright. His book The Challenge of Jesus (1999) includes a brief overview (he calls it an 'oversimplification') of events that led to the philosophical and practical transitions of the twentieth century. His summary evokes the climate of unprincipled progress which impelled Lewis's apologetic and fictional response. Events depicted by Lewis in That Hideous Strength have been subsequently witnessed in the course of actual history. As Lewis does in his space trilogy, Wright links the corresponding exploitation of peoples and natural resources, to a lust for power and the corruption of healthy pride, claiming that "Modernity stands condemned of building a tower of Babel"(152). Wright also identifies with the yearning to be closer to nature and rooted in agriculture yet borne along by the current of the microchip economy, "which carries more muscle and generates more money than the factory chimney" (151). He speaks of the 'arrogance" of modernism, the ascendency of individuality, "the all-powerful 'I'", and the industrial economy which has changed landscape and culture. He observes that postmodernity has "reminded us that there is no such thing as neutral knowledge" (151). Objective truth and values have been deposed by 'preferences', and "We live in a cultural, economic, moral and even religious hypermarket" (152).

Lewis defended the reality of the supernatural, the authenticity of the Bible, and rationality of the Christian faith, at a time when all three were out of fashion and under attack. His brand of evangelism clothed Christian theology in contemporary metaphors and imagery. Rather than stripping the Scriptures of divine truth, he translated and shared their sacred message. He enabled his public to appreciate the second meanings and symbolism encased in Biblical characters and events, the stories that inspire integrity and virtue. Wright, likewise, encourages a type of "symbolic praxis"; an enactment of gospel truths which goes beyond words (168). He illustrates the point beautifully by recalling a ballerina's reply to someone who wanted her to articulate the meaning of her performance: "If I could have said it, I wouldn't have needed to dance it" (168). The 'story' aspect is a vital element in Lewis's writing. He understood the Christian worldview as essentially a story rather than a system; a story that combines an analytical approach to the study of

theology with historical narratives which bear witness to supernatural revelation and intervention.

5.4. Unlikely Allies

Lewis's defence of objective truth and his views on subjectivism and relativism have some unlikely allies. The renowned physicist Max Planck, whose work on heat and radiation led to the birth of quantum theory, speaks of the cloud of scepticism and confusion that characterized the spirit of the age. In his book *Where is Science Going?* (1932) Planck notes the unwarranted conclusions made about the paradoxical aspects of Quantum Theory—the philosophical assumptions made about the principles of causation and indeterminacy (or uncertainty). Like Lewis, Planck was disturbed by the social impact:

We are living in a very singular moment of history...This spirit shows itself not only in the actual state of public affairs but also in the general attitude towards fundamental values in personal and social life...Formerly it was only religion...that was the object of sceptical attack. Then the iconoclast began to shatter the ideals and principles...in the province of art. Now it has invaded the temple of science. (64)

The sociobiologist Edward O. Wilson inadvertently brings the sciences and religion closer by identifying relativism as a common enemy. In *Consilience* (1998), he comments on the rise of "philosophical postmodernism", noting how changing cultural trends impact on all areas of thought (40). His comments echo Lewis's observations about the social impact, but Wilson is concerned about the effect on scientific endeavour. He views the 'deconstructive' speculations as subversive to the mission of science to unify knowledge (40). He counts the cost of what he describes as "the post-modernist prohibition against universal truth" (41). His pithy assessment of changing attitudes is that "Enlightenment thinkers believe we can know everything, and radical post-modernists believe we can know nothing" (40). He regrets that rather than being a pillar of objectivity, "scientific culture is viewed as just another way of knowing" (42). He, like Lewis, notes the powerful appeal of "root metaphors", describing them as "those ruling images in the thinker's mind by which he designs theory and experiments" (42). As a case in point, Wilson names the representation of human beings as "machines", and cites American psychologist Kenneth Gergen's claim that this image "dominates modern psychology" (42). The comments mirror Lewis's identification of the mechanistic metaphor as "a new archetypal image" cited earlier. Lewis freely makes use of the figurative possibilities of the popular machine metaphor but not in a reductive sense. He follows the logic that all machines are made and understood by their designer, and a car cannot function on the wrong fuel: "Now God designed the human machine to run on Himself. He himself is the fuel our spirits were designed to burn, or the food our spirits were designed to feed on. There is no other...God cannot give us happiness and peace apart from Himself...That is the key to history" (MC 50). Lewis equates Biblical precepts with the maker's instructions: "Every moral rule is there to prevent a breakdown, or a strain, or a friction" (65). It is ironic that both Lewis and Wilson are defenders of absolute truth but Wilson's faith is firmly anchored in 'science' to ultimately sort out the true from the false (*Consilience* 43).

Wilson refers to philosophical postmodernists as "a rebel crew milling beneath the black flag of anarchy", charging them with undermining "the very foundations of science and traditional philosophy" (40). He challenges Derrida's "ornately obscurantist prose" (41), and suggests that Derrida himself is not certain about what he actually means: "Each author's meaning is unique to himself…nothing of his true intention or anything else connected to objective reality can be assigned to it" (41). Wilson once expected to see postmodern ideas relegated to "history's curiosity cabinet", but now laments that they have "seeped… into the mainstream of the social sciences and humanities" (42). In a passage reminiscent of Lewis's comments on literary criticism, Wilson claims that postmodern theory is viewed "as a technique of metatheory…by which scholars analyse not so much the subject matter of the scientific discipline as the cultural and psychological reasons particular scientists think the way they do" (42). In fact, Wilson, like Lewis, views the influence of subjectivism and relativism as a process of "infinite regress" in which a text is exposed to analysis and re-interpretation by reviewers whose commentaries are equally open to question (41).

Steven Weinberg, likewise, sees relativism as an attack on the objectivity of science, and some of his following comments relate to the second chapter discourse on physics and theology. Though he totally rejects a Christian worldview, Weinberg indicates some affinity with Lewis in the way he thinks. He claims that "Relativism is only one aspect of a wider, radical, attack on science itself. He defends against some of the more radical criticisms of science, citing the philosopher Sandra Harding who has accused modern science (physics in particular) of being: "not only sexist but also racist, classist and

culturally coercive" (DFT 150). Her reliance on pejorative labels is akin to the language of some extreme feminist and Freudian-based atheistic attacks on Lewis. Weinberg is aware that Harding's negative labels could result in a loss of funding, but is dismissive of the suggestion that the criticism would impact on "working scientists". However, he is concerned that the rising generation of potential scientists might take the criticisms more seriously. His response is like that of Lewis, who suggested that modernist attacks on orthodox Christianity would not trouble devout believers, but could fuel negative sentiment in the wider community and influence the education of the younger generation.

Weinberg concurs with Gerald Holton (a Research Professor in both Physics and the History of Science), in "seeing the radical attack on science as one symptom of a broader hostility to Western civilization" (151). He draws attention to the fact that though great art and literature have emerged from many of the world's cultures, scientific research has been "overwhelmingly dominated by the West" (151). The following passage is his response to the "tragically misdirected" hostility to science:

Even the most frightening Western applications of science like nuclear weapons represent just one more example of mankind's timeless efforts to destroy itself with whatever weapons it can devise. Balancing this against the benign applications of science and its role in liberating the human spirit, I think that modern science, along with democracy and contrapuntal music, is something the West has given the world in which we should take special pride. (151)

In this defence of the integrity of science, Weinberg acknowledges the problem of human nature—the propensity for exploitation, misuse of knowledge and self-destruction. But the degree of balance he expresses is conspicuously absent in his animosity toward Christianity. He ignores all the goodness spread through society by ordinary people who live out a gospel of love, and does not recognize the role of personal religious faith in the lives of so many social reformers and pioneers of science. Weinberg claims that epistemology is more troublesome to physics than metaphysics, because the epistemological doctrine of "positivism" demands that "every aspect of our theories must at every point refer to observable quantities" (DFT139). He concedes that some physical theories involve aspects that have not actually been observed, but makes a distinction between things "not yet" observed and things that could "never in principle be observed" (139). His solution to the problem of identifying those things which are only observable "in principle" is to use "thought experiments". As I understand him, he is saying that 'faith' is permissible when negotiating around the demands of 'positivism', and he trusts

that 'imaginative leaps' will one day enable scientists to find clues that lead to "the final theory" (139). Einstein realized the enormity of this task given that so little of nature was known or sufficiently understood. He concedes that there is a "theoretical" possibility (using purely abstract reasoning), but even if all the events of nature were ever fully known, he doubts humanity's ability to express them in an exact formula. In the prologue to Planck's book, Einstein writes: "in practice such a process of deduction is entirely beyond the capacity of human reason...the theoretical system of physics is dependent upon and controlled by the world of sense-perception, though there is no logical way whereby we can proceed from sensory perception to the principles that underlie the theoretical structure" (10-11).

Weinberg makes reference to the theoretical difficulties of various models of the universe, but concludes that, "whichever cosmological model proves correct, there is not much comfort in any of this" (DFT 154). He claims to be saved from total pessimism by the nature of his work: "the effort to understand the universe is one of the very few things that lift human life above the level of farce, and gives it the grace of tragedy" (155). In Lewis's view, the idea that the universe is amoral and without purpose stems from the popular assumption that science has somehow shown that nothing exists outside of Nature. In "The Seeing Eye," he argues that God cannot be found as an element within His material creation: "To look for Him as one item within the framework which He himself invented is nonsensical" (CR 210). His words echo those of Max Plank in the chapter "Nature's Image in Science". Planck acknowledges a boundary beyond which science "may not pass" (105), and in the epilogue claims that: "Science cannot solve the ultimate mystery of Nature. That is because, in the last analysis, we ourselves are part of nature and therefore part of the mystery we are trying to solve" (*Where is Science Going?* 217).

Lewis sought to show that though we are part of Nature, our beliefs about Nature and our attitudes towards it determine our behaviour as a species. In AOM he observes the enthusiasm for the use of eugenics and vivisection in the cause of progress and challenges the inordinate drive to physically dissect and analyse everything:

When we understand a thing analytically and then dominate and use it for our convenience, we reduce it to the level of 'Nature'...We do not look at trees either as Dryads or as beautiful objects as we cut them into beams...The stars do not become Nature till we can weigh and measure them: the soul does not become Nature till we can psychoanalyse her. (42-3)

Lewis believed that this mind-set led to the de-sensitization of part of our normal total reaction; a loss of our sense of wonder. He calls this a suspension of value judgements and warns that the final step in this self-destructive process involves the reduction of humanity to mere 'Nature' (43). His theme here recalls the words of Jesus, recorded in Matt. 16. 26, "What does it profit a man to gain the whole world and lose his own soul?" Lewis's pattern for the rejuvenation of Nature involves a "new Natural Philosophy" that would elevate natural objects from being used callously as scientific specimens. He refers to the "rumoured" approach to nature of Goethe and Dr. Steiner as worthy of "fuller consideration" and then makes the following bold statement about his own thinking on the subject: "The regenerative science which I have in mind would not do to minerals and vegetables what modern science threatens to do to man himself. When it explained it would not explain away. When it spoke of parts it would remember the whole" (AOM 47). The statement reflects his stance on environmental issues and his anticipation of the more developed ecological concerns in the twenty-first century. Lewis's deep appreciation and love for nature is palpable in both his intellectual discourses and fantasy narratives. The unusual degree of his respect for even the humblest creatures is disarmingly illustrated in the following letter replying to a young correspondent, Hila Newman, who enquired about the symbolism in The Lion, the Witch and the Wardrobe: "I love real mice. There are lots in my rooms in College but I never set a trap. When I sit up late working they poke their heads out from behind the curtains just as if they were saying, 'Hi! Time for you to go to bed. We want to come out and play" (CL111 335).

5.5. The 'Uncertainty Principle' and Demise of Metanarratives?

Lewis enjoyed the concept of 'play'. It is an aspect of his story writing and his approach to thinking. The word 'play' is polysemic, communicating the impression of fun and frivolity but also communicating a sense of freedom and movement. In "Meditation in a Toolshed" (1945), he explores the benefits of flexibility in our ways of looking, but (as the concluding line reveals) his meditations were penned in response to naturalistic "brow beating" (215). Lewis claims that the vacuity of "a great deal of contemporary thought" is due to restricted vision (214), and in the dim recesses of his toolshed he 'plays' with the concepts of truth and meaning The simple rustic scene offers spiritual insights as he ponders the effect of different perspectives. When looking **at** the single ray of sunlight as it pierces the gloom, he initially sees only a sunbeam illuminating some floating dust particles. From a scientific

point of view, the visual image may be explained as "an agitation of my own optic nerves" (214). But, when his gaze shifts to look **along** the sunbeam the experience is totally different; grass, trees, and sky come into view and ultimately the sun itself-ninety million miles away (212). The sun is a source of life and sustenance, an enduring symbol of the Divine absolute, and Lewis's musings invite circumspection about how we see things. His thoughts then transcend the shed environment and extend to considering the implications of 'inside' and 'outside' perspectives in the quest for knowledge. In this context, he equates the 'inside' experience with the subjective, experiential looking 'along', and the 'outside' experience with the more academic looking at something objectively. He interrogates the limitations of defining things only from the 'outside' and maintains that an 'inside' experience cannot be understood from the 'outside'. As examples, he names the feeling of being 'in love', religious ecstasy and the experience of physical pain. Pain has universal meaning because we all experience pain. But abstract things, like "moral ideals which look so transcendental and beautiful from inside", may be explained away without any experiential data, dismissed as "a mass of biological instincts and inherited taboos" (213-214). Lewis does however point out that 'inside' explanations alone can be equally deceptive: "if all inside experiences are misleading, we are always misled" (215). He concludes that we need both perspectives, and must look "along and at everything" (215), evaluating particular cases on their merits, "without prejudice for or against either kind of looking" (215). Addressing the question, "Which is the 'true' and 'valid' experience?" (213) he says this:

And you can hardly ask that question without noticing that for the last fifty years or so everyone has been taking the answer for granted. It has been assumed without discussion that if you want the true account of religion you may go, not to religious people, but to anthropologists; that if you want the true account of sexual love you must go, not to lovers, but to psychologists; that if you want to understand some 'ideology'...you must listen not to those who lived inside it, but to sociologists. (GID 213)

Lewis claims that in the current academic climate no-one is willing to "play the game" in reverse by stepping inside things to discover "their real and transcendental nature" (213). Perhaps the most striking example of Lewis's willingness to "play the game" is his satirical analysis of the psychology of temptation in *The Screwtape Letters*. This involved entering into the character of a senior devil, detailing the strategy for destroying the faith of a young

Christian convert, and viewing God as the enemy. Lewis found the experience extremely taxing.

I am indebted to David Downing for his article "C.S. Lewis: Among the Postmodernists", because his experience of reading Lewis affirms my own impression that notwithstanding Lewis's position on absolutes, his approach to thinking exhibits the flexibility and deconstructive techniques of postmodernity. Downing anticipates that, "In exploring the current critical landscape, students of Lewis might wonder where he might fit in. His simple answer is that Lewis is "off the map" (2). The expression agrees with Rowan Williams's comment cited earlier that Lewis "constantly escapes categorization". Downing begins by citing J. Hillis Miller's review of M.H. Abram's Natural Supernaturalism (1973), noting Miller's surprising inclusion of Lewis in his list of authors who characterised the "grand tradition of modern humanistic scholarship" (1). As Downing points out, 'modern' and 'humanist' are not terms with which Lewis aligned himself, and Miller's comment prompted Downing to recall his earlier exposure to Lewis's work, and to re-read the critical essays. This exercise explained the sense of "déjà vu" he had felt when studying the postmodernist denial of a 'center' (2). During his reading of Derrida, Foucault and Barthes, Downing found it strange that "the echoes I was hearing came not from Nietzsche or Wittgenstein, but from the pages of C.S. Lewis" (2). He found that Lewis's ideas displayed a type of analysis akin to the "strategies" of several postmodernist critics, and notes that Lewis understood "that we cannot grapple with the meaning of a particular text until we know what we mean by meaning" (1). Downing finds in Lewis's "perspectivist paradigm", a "similar critique" to that by Derrida on Claude Levi-Strauss's theory. Derrida claimed that the unconscious operations of myths on our minds cannot be studied scientifically because we are unable to step outside our own cultural structures to study them; there is "no fixed vantage point which is not itself implicated in the structure" (2). In his toolshed meditations, Lewis suggests; "you can stand outside one experience only by stepping inside another" (215), and argues the need for both perspectives. Downing notes how Lewis's musings anticipate the theory that "all analysis is situated, that there is no position of utter objectivity from which one may think about thinking itself" (4). Downing's perceptive analysis of Lewis's contribution in the context of literary theory is deftly underlined in his citation of Bruce Edwards' definition of 'deconstruction' in the essay "Re-habilitating Reading" (2007):

In its most innocent form, deconstruction is simply an attempt to deal with the finiteness of human knowledge, the subjective element of perception. It reminds us of the constitutive nature of what we call knowledge and challenges our easy equation of words with things-in-themselves. As such it serves **the discerning critic** as a fresh reading strategy with which to sift the text for internal incongruity, contradiction, and ambiguity. (Edwards 29)

Edwards' definition encompasses the elements of Lewis's approach to literary criticism, and Downing identifies Lewis as "just such a discerning critic" (7).

In re-reading Lewis, Downing was intrigued to find several instances of Lewis pointing out that 'meaning' is dependent on the "situatedness" of all analysis and the plurality of texts" (7). This is apparent in Lewis's ideas on literature, philosophy, science and history. In the essay "Christianity and Culture," Lewis concedes that "a cultured person...is almost compelled to be aware that reality is very odd and that ultimate truth, whatever it may be, must have the character of strangeness" (41). He found this "strangeness" in the Christian worldview, with its grounding in historical and geographical events, singular personalities, wisdom, prophecy and communication of eternal realities. The whole drama appeared consistent with the mysteries of quantum physics and the laws of nature; it made sense of life as he both observed and experienced it. His theistic belief did not reside in mere concepts of faith or spirituality, but was centred in a Divine absolute. Downing observes that Lewis does not presume that his Christian foundation gives him "some privileged vantage point from which to interrogate philosophy and history, or to find the hidden unity of a text" (6). Rather, Downing finds compelling evidence in the critical texts that Lewis "habitually resisted the totalizing impulse, the urge to reduce complexity and exclude contradiction, in order to achieve some spurious unity" (7).

Lewis noted the uncertainty and mutability in all disciplines of knowledge. In *The Discarded Image* he speaks of the inevitability of change in models of the universe: "No model is a catalogue of ultimate realities, and none is a mere fantasy. Each is a serious attempt to get all the phenomena known at a given period" (222). Though the book was published posthumously in 1964, the contents are based on a series of lectures given by Lewis in the 1950s. Downing claims that Lewis's understanding of the transient nature of models actually anticipates Thomas H. Kuhn's landmark study, *The Structure of Scientific Revolutions* (1962). He finds a similar trait in Lewis's inaugural lecture at Cambridge University in 1954 (published as "*De Descriptione Temporum*"), which interrogates the designated periods of history and suggests they should be subject to constant revision:

"The actual temporal process...has no divisions...Change is never complete, and change never ceases. Nothing is ever quite finished with; it may always begin over again... nothing is quite new; it was always somehow anticipated or prepared for. A seamless, formless continuity-in-mutability is the mode of our life" (SLE 2). In the essay "Historicism" (1950), Lewis reiterates the problems associated with our human inability to read events from the 'outside'. He notes the impossibility of interpreting accurately the whole span of history, even if, as Lewis believes, the story "is written by the finger of God" (CR 136). He differentiates between Historians and "Historicists"; the Historian finds "causal connections between historical events", whereas the Historicist goes beyond the scope of historical fact to reach conclusions about "inner meaning": "It is usually theologians, philosophers and politicians who become Historicists" (CR 131-132). Lewis allows that we can comment upon certain aspects of the drama, and concedes the possibility of finding some meaning, but insists that we must never assume to have sufficient data to comprehend the whole. He illustrates this point with a mixture of metaphors depicting our experience of the passage of time:

We ride with our backs to the engine. We have no notion what stage of the journey we have reached. Are we in Act I or Act V? Are our present diseases those of childhood or senility?...At every tick of the clock, in every inhabited part of the world, an unimaginable richness and variety of 'history' falls off the world into total oblivion. (CR 138-39)

Lewis stresses that, by critiquing Historicism, he is not denigrating 'primary history'. But as he does in the case of Scientism, he sees Historicism as a departure from the biological theorem of evolution, and claims that the theory has become "a principle for interpreting the total historical process" (132).

In "Is Theology Poetry?" he refers to the "universal evolutionism of modern thought", which he defines as:

the belief that the very formula of universal process is from imperfect to perfect, from small beginnings to great endings...the belief which makes people find it natural to think that morality springs from savage taboos, adult sentiment from infantile sexual maladjustments, thought from instinct, mind from matter, organic from inorganic, cosmos from chaos. (WG 137)

But Lewis is always conscious of an unseen originator of life and this gives his thoughts a cosmic perspective. In the essay "Historicism," he emphasizes the fragility and inadequacy

of our knowledge base, and defines 'primary history' as "the real revelation springing direct from God in every individual experience" (CR 146). He clarifies this view by stressing that: "I respect this real original history too much to see with unconcern the honours due to it lavished on those fragments, copies of fragments, copies of copies of fragments, or floating reminiscences of copies of copies, which are, unhappily, confounded with it under the general name of history" (146). If I understand this correctly, he is validating the essential truth of every individual event and experience that has ever happened, even though most of it has passed unnoticed and unrecorded as 'history'. This view attributes an intrinsic value to every life, giving meaning to the impact and input of countless anonymous individuals. A similar point is made in "New Learning and New Ignorance", the introduction to Lewis's English Literature in the Sixteenth Century *Excluding Drama* (1944): "The greater part of the life actually lived in any century, any week, or any day consists of minute particulars and uncommunicated, even incommunicable, experiences which escape all record" (64). Contemporary author Bill Bryson echoes this thought when he describes real history as "masses of people doing ordinary things" in his book Our Home (2010).

While recognising the limitations of intellect and knowledge, Lewis is not saying that reasoning is either invalid or illusory. In "*De Futilitate*", he claims that "if our minds are totally alien to reality then all our thoughts, including this thought are worthless" (CR 96). In his paper "Religion without Dogma?" he challenges the factoid that people are nothing more than "biological entities" and sets out his summary of the logical conclusion to a "fully naturalistic" reductionist view: "Our logical behaviour, in other words our thoughts, and our ethical behaviour, including our ideals as well as our acts of will, are governed by biochemical laws; these, in turn, by physical laws which are themselves actuarial statements about the lawless movements of matter" (GID 136). It is a perspective which can lead to nihilism and, according to Lewis's friend Owen Barfield, the "alienation of man from himself" (ROM 188). Barfield witnessed the progressive effects of this philosophy and published this observation a decade or so after Lewis's death:

Amid the menacing signs that surround us in the middle of the twentieth century, perhaps the one which fills thoughtful people with the greatest sense of foreboding is the growing sense of meaninglessness. It is this that underlies most of the other threats. How is it that the more able man becomes to manipulate the world to his advantage, the less he can perceive any meaning in it? (ROM 11)

In Miracles, Lewis questions whether terms like "random and lawless" in physics are intended to have literal meaning, and suggests the terms may only refer to things that "are permanently incalculable to us" (18). But Space was popularly visualised as amoral, silent and disinterested; nothing existed beyond matter. Lewis's paper "De Futilitate" was presented to a "scientifically trained audience" at Magdalen College during the Second World War, in response to a request for his thoughts on the growing sense of futility and angst in a universe that appeared empty and purposeless. Lewis was fully empathic with the common emotions of distress, anger and pessimism, and his address is a riveting consideration of various aspects of human thought, the faculty of reason and the existence of meaning. He approaches the interrogation of human existence by identifying three possible ways of coping with the sense of futility. The first is to pessimistically accept the fact that the universe is "shameless and idiotic" but to bravely determine not to imitate it (CR 82). The second option is to deny the 'pointless' image'; to claim (like the ancient Greeks) that the world is not quite real, or (like the Judeo-Christians) to assert that Nature does have some degree of reality, but other realities outside Nature change the overall picture of futility (83). The third way is to accept the scientific prognosis of futility and amorality but try to do something to change the sense of meaninglessness. This option is evident in Kaku's assertion (cited in Ch.2) that "we create our own meaning."

After considering the matter, Lewis comes to the conclusion that a universe without value or meaning is a self-contradiction: "In a word, unless we allow ultimate reality to be moral, we cannot morally condemn it. The more seriously we take our own charge of futility the more we are committed to the implication that reality in the last resort is not futile at all" (CR 95). He acknowledges the legitimacy of the sense of "cosmic futility", but also notes that it is somewhat concealed from the masses by the parallel enthusiasm for progress and the assumed ascent of Mankind (81). Citing J.S.B. Haldane, Lewis claims that in reality, "progress is the exception and degeneration is the rule" (81), and that "Popular Evolutionism" (taken to mean "improvement") ignores the scientific fact of entropy and assumes an inevitable general upward progression: "And it is not confined to organisms, but applied also to moral qualities, institutions, arts, intelligence and the like. There is lodged in popular thought the conception that improvement is, somehow, a cosmic law: a conception to which the sciences give no support at all" (81). Even before he embraced the tenets of theology, Lewis distrusted the confident expectation of the unilinear ascent of humanity. In his essay "Our English Syllabus" (1939), he describes the presumption that civilization is certain to rise and expand as: "one of the most dangerous errors instilled into

us by nineteenth century progressive optimism" (82-3). His grounds for believing this are based on his observations of history: "civilization is a rarity, attained with difficulty and easily lost. The normal state of humanity is barbarism, just as the normal surface of our planet is salt water" (83).

Lewis's essay "Bulverism" denounces the habit of assuming (without discussion) that someone is wrong, focussing on their 'silliness' for being wrong, and thus avoiding "the only real issue" (GID 273). He observed the common recourse to Bulverism by "Marxians" and "Freudians" who depicted Christianity as a buttress for "economic interests" or the product of "bundles of complexes" (271). Lewis asks the question, "Are all thoughts thus tainted at the source, or only some?"(GID 272) The logical answer is that if all thoughts are "ideologically tainted" then we must remember that: "Freudianism and Marxism are as much systems of thought as Christian theology or philosophical idealism...and cannot criticize us from outside. They have sawn off the branch they are sitting on" (272). This argument relates to that used by Paul C. Vitz in "The Psychology of Atheism" (also cited by Downing). Vitz confronts what he describes as the prevalent "Western intellectual" assumption that theistic belief is based on "irrational immature needs and wishes", whereas "atheism or scepticism is derived from a rational, no-nonsense appraisal of the way things really are" (2). Vitz sets out to show that "the psychological concepts used quite effectively to interpret religion, are two-edged swords that can also be used to interpret atheism" (1). He notes that the Oedipus complex can be applied to the troubled relationships that key atheists had with their fathers; among them he cites Freud, Voltaire, Diderot, Marx and Madalyn Murray O'Hair. Vitz links this with the drive to kill off the father figure of God. He concedes Freud's point that belief can be illusory, but notes the irony that Freud's argument provides a "powerful, new way to understand the neurotic basis for atheism" (5-9).

Lewis noted the increasing vitriol of some individuals toward him, but although he was rigorous in debate, he exhibits a tolerant attitude towards people who had "honestly held" beliefs different to his own. He argues against the philosophy of atheism but understands those who rail against a God they do not believe in (as he himself once did). In "De Futilitate", he sees this as a positive sign: "The defiance of the good atheist hurled at an apparently ruthless and idiotic cosmos is really an unconscious homage to something in or behind that cosmos which he recognizes as infinitely valuable and authoritative" (CR 95).

Lewis goes so far as to suggest that "there is something holier about the atheism of a Shelley than about the theism of a Paley" (95), and he believes that "defiance is not displeasing to the supreme mind" (95). This thought finds support in the Old Testament story of Job which has a cosmic setting. At the start, the narrator establishes the supernatural causes and rationale behind Job's afflictions but, during the narrative and the dialogue between the distraught Job and his judgemental 'comforters', no justification or explanation of his suffering is ever given to Job. Nevertheless, Job refuses to deny his Creator's existence (or like his wife say, "curse God and die"). He trusts God completely but still passionately states his case against Deity in defence of his own integrity. Lewis surmises that the story's real lesson is contained in the fact that Job had always lived by absolute standards of faithfulness and justice. So, when "hotly" criticizing Divine justice (95), Job is actually appealing to God on the grounds of His own absolute moral law, upholding Divine authority. This appeal is obviously met with approval because although the narrative shows Job being tried, tested and called to account by God, it is Job who ultimately receives Divine blessing and restoration. It is the so-called 'comforters', the "orthodox, pious people" who are rebuked for their presumption of Job's guilt and their arrogant attempts to speak for God and justify His actions (95). Lewis's reference to God's strong admonition of the self-righteous 'comforters' relates to other acknowledgements by Lewis that some 'religious' attitudes' are a corruption of 'true religion'. It could be argued that in some sense Lewis had more respect for the honest atheist than for apostate clergy who retained the trappings of position and authority, but denied the existence of a personal deity and belittled those who believed the authenticity of Scripture.

Lewis's rationale for defending Christianity is well expressed in this passage from his essay, "On Obstinacy in Belief":

It is not the purpose of this essay to weigh the evidence, of whatever kind, on which Christians base their belief. To do that would be to write a full dress *apologia*. All that I need to do here is to point out that, at the very worst, this evidence cannot be so weak as to warrant the view that all whom it convinces are indifferent to evidence. The history of thought seems to make this quite plain. We know in fact, that believers are not cut off from unbelievers by any portentous inferiority of intelligence or any perverse refusal to think. Many of them have been people of powerful minds. Many of them have been scientists. We may suppose them to have been mistaken, but we must suppose that their error was at least plausible. (17-18)

The passage re-iterates that Lewis is not claiming to prove conclusively the truth and claims of Christian orthodoxy; his task is to argue that it is rational and cogent, and to refute inaccurate presumptions about the nature of faith. His points are particularly timely as a rebuttal of the current false propaganda of New Atheism, and the relentless intimidation of believers by indiscriminate dismissal and ridicule. Lewis's case is apposite in the twenty-first century because negative misinformation is regular fare in fictional drama and mass media. Lewis opposes those who try to stifle debate on the enduringly important issues of life, and his statement that many scientists are among the powerful intellects that have embraced Christianity in the past is a challenge to those who deliberately disseminate the myth that science and religion are incompatible. The origins and persistence of this myth are examined in the following chapter.

CHAPTER 6

The Nature of Cosmic Warfare: Are Religion and the Sciences in Opposition?

If we are "only a chance ripple on dark, unfathomable cosmic waves, any reference to purpose will amount to mere equivocation and a rank abuse of meaningful discourse" Stanley Jaki

'Religion' and 'science' are amoral terms which can be associated with good or bad practice. In "The Value of Science" (1955), Nobel Laureate Richard Feynman says: "Scientific knowledge is an enabling power to do either good or bad—but it does not carry instructions on how to use it" (13). In *Genes, Genesis and God* (1999), philosopher Holmes Rolston says something similar: "Science has made us increasingly competent in knowledge and power, but...decreasingly confident about right and wrong...The genesis of ethics is problematic" (214-15). The 'father of rocket science', Wernher Von Braun publically combined his science with Christian faith and believed that the human responsibility to choose between good and evil should draw us closer to our Creator:

The two most powerful forces shaping our civilization today are science and religion... Far from being independent or opposing forces, science and religion are sisters. Both seek a better world. While science seeks control over forces of nature around us, religion controls the forces within us...The ethical guidelines of religion are the bonds that can hold civilization together. (Von Braun 1-2)

In *Keywords* (1983), novelist and critic Raymond Williams traces the emergence of science as the "theoretical and methodical study of nature". He notes the "increased specialization of ideas and method" (278); the gradual distinction between practical and theoretical knowledge, and how it came to be expressed as a division between 'art and science'. Lewis notes this trend to distinguish between the scientific and non-scientific in "De Futilitate", suggesting that the "proper distinction is between logical and non-logical thought" because the physical sciences, like metaphysics or mathematics, "depend upon logic and inference" (CR 86). Peter Harrison's comprehensive study, *The Territories of Science and Religion* (2015), shows how science and religion have come to be understood as distinct categories, separating "the domain of material facts from the realm of moral and religious values" (ix). Harrison notes Newton's belief that "discourse about God is a genuine part of natural philosophy" (148). The idea that metaphysical and theological

implications should be excluded from a study of nature only emerged in the mid-nineteenth century (148). Harrison challenges the oft repeated assertions that modern science evolved from classical Greek ideas about nature, and that progress was hindered by the influence of Christianity after the fall of Rome. He rebuts the assertion that "the scientific revolution was accomplished only by overcoming the religious preoccupation and prejudices of the previous age" (23).

'Religion' is such a loose term that it may refer to any number of systems including the corrupt or immoral. It may apply to devout experiential and rational faith or to merely nominal adherence or superstition. Harrison states that 'religion' cannot be explained because "it is not a single thing, but a cultural construct of the modern West" (196). In simple dictionary language 'religion' is generally understood to mean a set of beliefs and practices centred on the acknowledgement of a divine or transcendent power, but some do not recognise the supernatural at all. In "Religion without Dogma", Lewis defines the essence of religion as: "the thirst for an end higher than natural ends; the finite self's desire for, and acquiescence in, and self-rejection in favour of, an object wholly good and wholly good for it" (GID 131). The following extracts from "Christian Apologetics" illuminate Lewis's speculations about truth and meaning: "Now if there is a true religion it must be Thick and Clear: for the true God must have made both the child and the man, both the savage and the citizen, both the head and the belly" (102). This thought contradicts the Gnostic idea of esoteric knowledge and the preferencing of spirit over matter. Lewis appropriates the Apostle Paul's image of Christ's role in 'breaking down the middle wall of partition' (Eph. 2.14) and applies it to the fusion of the 'thick' and 'clear' aspects of the Christian liturgy; the intellectual and mythopoeic aspects of faith: "It [Christianity] takes a convert from central Africa and tells him to obey an enlightened universalist ethic: it takes a twentieth-century academic prig like me and tells me to go fasting to a Mystery, to drink the blood of the Lord" (103). This graphic illustration is a response to a Professor Price who believed that 'science' had undermined not only the mythologies engendered by religious impulses but the essential tenets of theism. In "Dogma and the Universe", Lewis reconciles his religion with the sciences, valuing the ritual aspects of faith-repentance, sacrament, prayer and worship, as pathways to reality: "Like mathematics, religion can grow from within, or decay...it remains simply itself, capable of being applied to any new theory of the material universe and out-moded by none" (GID 46-7).

In "Religion without Dogma", Lewis rejects the claim that science has disproved the possibility of miracles or the existence of the supernatural: "We have only proved that the question of miracles, like innumerable other questions, excludes laboratory treatment" (GID 134). In the essay, "Religion and Science," he argues that if anything (or nothing) exists outside of Nature, then it cannot be discovered by studying nature (73). He presents his case in the form of a dialogue with a fictional speaker who confidently proclaims that there is no longer any case for theological discussion: "OH, COME. SCIENCE HAS knocked the bottom out of all that...modern science has shown there's no such thing" (GID 72-73). This dismissive approach is echoed by New Atheist Sam Harris who asserts in his blog that there is an inherent conflict between religion and science which results in "zero-sum" ("Selling Out Science"). Von Braun supports Lewis's view, pointing out that the findings of 'science' are not antithetical to the concept of immortality: "Scientists now believe that in nature, matter is never destroyed. Not even the tiniest particle can disappear without a trace. Nature does not know extinction-only transformation" (2). Any discussion regarding the relationship between religion and science is still, as it was in Lewis's day, hampered by misinformation and generalisations. In "Medieval Science and Religion", David Lindberg suggests that we must "continually remind ourselves that 'science', 'Christianity', 'theology' and 'the church' are abstractions rather than really existing things" (295).

6.1. The History of the Myth

In *Religion and the Rise of Scepticism* (1960), Franklin Baumer recalls the enactment of an 'irreligious' ceremony in Paris during the French Revolution. The symbolic commitment to "Voltairean scepticism" occurred during the 1793 "Festival of Liberty and Reason". In the Cathedral of Notre Dame, the traditional religious insignia was replaced by a small Greek temple dedicated to the goddess Liberty and the cult of Reason. This act of iconoclasm symbolised that 'Christianity' was perceived by way of Voltaire's maxim "*Ecrasez l'infâme*" as something infamous that should be crushed (Baumer 35-36). In the early twentieth century, Bertrand Russell, in his book *Religion and Science* speaks of the "prolonged conflict" (7) and voices his concern that theology would harm intellectual freedom, cause the human race to stagnate and bring a new Dark Age (252). Lewis's formative years were coloured by this intellectual climate of scepticism and irreligion. He has referred to the particular nature of nineteenth-century polemics against Christianity, but illustrates it in allegorical form in his first post-conversion book, *The Pilgrim's Regress* (1933), an account of his own philosophical journey. In the chapter "*Dixit Insipiens*", the protagonist John is beginning to think for himself until he meets with "Mr. Enlightenment", a personification of Nineteenth Century Rationalism "who can explain away religion by any number of methods" (46). The chapter's Latin title appears to allude to Psalm 14.1 and 53.1, translating as "The fool has said in his heart, there is no God". Mr. Enlightenment dismisses the concept of God (the absent 'landlord') and is sure that the ignorant inhabitants of "Puritania" "had no knowledge of science and would believe anything they were told" (48). John ventures to ask how he knows that there is no landlord, and Mr Enlightenment's incoherent answer relies on the same stock examples of misinformation: "Christopher Columbus, Galileo, the earth is round, invention of printing, gunpowder!!" (48).

In Apologetics for the 21st Century (2010), Louis Markos notes the persistence of the dichotomy myth and claims it is largely based on Enlightenment propaganda rather than on historical fact. The 'canonical' status of the 'religion against science' myth is generally attributed to the influence of two nineteenth century men with an anti-Christian agenda. John W. Draper published History of the Conflict between Religion and Science (1884), and Andrew Dixon White's A History of the Warfare of Science with Theology and Christendom (1896) was an expansion of his earlier book The Warfare of Science (1876). In "Galileo, the Church and the Cosmos", David Lindberg condemns their simplistic and "overheated rhetoric" charging that it "is seriously deficient as history" (33). Many historians have exposed the widely promoted inaccuracies but the popular prejudice still lingers. Giorgio De Santillana speaks of the difficulty posed by the enduring "spell of misunderstanding" which influences both sides of the argument, and his book The Crime of Galileo (1955) seeks to dispel the image of the bold, free-thinking, progressive scientist coming up against the "static resistance of conservatism" (vii-viii). Maurice Finocchiaro's book Re-Trying Galileo 1633-1992 (2005) is a detailed investigation of the documentation and claims regarding the case. He notes that Galileo's original prison sentence was commuted to detention in the palace of the grand duke of Trinità, and later in the same year, to house arrest in his own villa (113) where Galileo was allowed to pursue his research (63). Galileo's book Discourse Concerning Two New Sciences (1638) was published during that time and he died aged seventy-eight in 1642. Historian Henry Kamen's book The Spanish Inquisition: A Historical Revision (1997) re-evaluates the exaggerated claims about the extent of the Inquisition's power and influence, and the

accuracy of statistics and information regarding its mandate and practices: "Its opponents through the ages contributed to building up a powerful legend about its intentions and malign achievements. Their propaganda was so successful that even today it is difficult to separate fact from fiction" (Kamen 305). History professor Thomas F. Mayer's research into the trial speaks of the poor standards of documentation at the time, and Galileo's mishandling of the legalities involved. Interviewed for *Live Science* (2010) by Jeremy Hsu, Mayer's findings are reported in "Sloppy Records Cast Galileo's Trial in a New Light", and he claims that "The notion that Galileo's trial was a conflict between science and religion should be dead".

In *Refuting Compromise* (2011), scientist Jonathan Sarfati claims that the Galileo case was "really a matter of *science v. science* not science v. religion" (52), and makes another pertinent point regarding the relationship between science and religion:

far from opposing astronomical research the church supported astronomers and even allowed the cathedrals themselves to be used as solar observatories...These observatories, called *meridiane*, were 'reverse sundials' or gigantic pinhole cameras where the sun's image was projected from a hole in a window in the cathedral's lantern on to a meridian line. Analyzing the sun's motion further weakened the Ptolemaic model, yet the research was well supported. (53)

Science historian John Heilbron's book Sun in the Church: Cathedrals as Solar Observatories (1999) provides other details regarding the Galileo case and undermines popular misconceptions about the Church's relationship with scientists: "Galileo's heresy, according to the standard distinction used by the Holy Office, was 'inquisitorial' rather than 'theological'. This distinction allowed it to proceed against people for disobeying orders or creating scandals, although neither offense violated an article of faith defined and promulgated by a pope and a general council" (202). In chapter two of this thesis, it is noted that Michio Kaku takes a more conciliatory approach but even he persists with the factoid that science has ultimately prevailed over the church's persecution of scientists. Weinberg also makes a passing reference to Galileo to endorse the idea that science and religion are at war. An example from contemporary fiction comes from popular author Dan Brown, who as well as perpetrating inaccuracies about Galileo, puts the following authoritative lines into the mouth of protagonist Robert Langdon, a Harvard professor in Angels and Demons: "Since the beginning of history...a deep rift has existed between science and religion...Religion has always persecuted science" (50). Author Dinesh D'Souza challenges this false propaganda in the chapter "Christianity and Science" (2007),

and notes the role played by other fictional representations in books, movies and plays. He cites Arthur Miller's *The Crucible*, Carl Sagan's *In The Demon Haunted World* and the 1975 film version of Bertolt Brecht's "brilliant play *Life of Galileo*...an account of priestly malevolence and scientific virtue" (D'Souza 103). This theme is prevalent in the Philip Pullman fantasy trilogy featured in the next thesis chapter.

The complexities of the Galileo case are discussed in depth by philosopher of science Richard J. Blackwell in Science, Religion and Authority (1998). He notes how the facts surrounding the events are still misrepresented. With regard to the relations between science and religion, he claims this to be "the central factor in shaping the attitude of the modern mind" (23). Lindberg claims that "Galileo had arguments, rather than proof" (43), and the main thrust of current research seems to be that Galileo sought to overturn the prevailing scientific theory of the day without supporting evidence. According to historian and science writer Margaret Wertheim, Galileo's ego was a factor in the case, because it "led him to reject by far the most convincing evidence for a heliocentric cosmos that existed at the time-Kepler's ellipses" (Pythagoras's Trousers 113). Wertheim claims that Kepler recognized the folly of Galileo's confrontational approach and understood the church authorities' position: "To demand concrete proof of a radical new theory is not an act of tyranny but good scientific practice. Scientists themselves demand no less" (113). Theories about the heliocentric nature of the universe had long been circulating and Copernicus' view was published (posthumously) seventy years before Galileo was involved. But, significantly, there was still as yet no definitive proof to refute the Aristotelian, geocentric view of the solar system. In The Discarded Image, Lewis makes only brief reference to the Galileo trial, and his interest, even then, focusses on the empirical aspects of the charge: "The real reason why Copernicus raised no ripple and Galileo raised a storm, may well be that whereas the one offered a new supposal about celestial motions, the other insisted on treating this supposal as fact" (16). The comment indicates that Lewis was well aware of the minutia of the case, and the critical absence of empirical evidence.

6.2. Science and Scientism

The term 'scientism' is defined by Raymond Williams as a subjective word which came in the nineteenth century to mean "the (inappropriate) transfer of methods of inquiry from the

'physical' to the 'human' sciences'" (280). Lewis, too, uses the term to describe a departure from the objective study of nature; the construction of philosophical ideas that become pseudo-science. His understanding of the scientific method is supported by Von Braun in his preface to Science but not Scientists: "the enthusiasm that encourages inference must be matched in degree with caution that clearly differentiates inference from what the public so readily accepts as 'scientific fact'. Failure to keep these two factors in balance can lead either to a sterile or a seduced science" (Grose xi). Lewis asserts that this standard of integrity was upheld in the Middle Ages, and translates the words of Thomas Aquinas on the movement of planets; his statement that suppositions based on apparent behaviours are "not strict proof...since for all we know...they could also be saved by some different assumption" (DI 16). Lewis notes, too, that Newton was careful to add an element of uncertainty into his ideas regarding the gravitational attraction force, preferring to say "all happens as if," before noting that, "the attraction varies inversely as the square of the distance" (DI 16). Newton's letter on "The New Theory of Light and Colours" concludes with the words, "And I shall not mingle conjectures with certainties" (Newton 2160). That Lewis considered this point important is evident in his various references to 'suppositions' in his critical essays and fantasy narratives.

The issue of 'reliable data' is the focus of philosopher Paul Feyerabend's discussion on the relationship of science and philosophy in his books: Farewell to Reason (1987), Against Method (1988), and The Tyranny of Science (1993). In Farewell to Reason, he recalls how as a student he "revered the sciences and mocked religion". He voices surprise at how easily Church dignitaries were prepared to retreat before "the superficial arguments" I and my friends once used" (264). In Against Method, he challenges the popular perceptions of the historic controversy, claiming that: "The Church at the time of Galileo not only kept closer to reason as defined then and, in part, even now; it also considered the ethical and social consequences of Galileo's views" (129). Feyerabend condemns the "small clique of intellectuals aided by scandal-hungry writers" who blew the case out of all proportion so that it came to appear, "almost like a battle between heaven and hell" (131). He supports the historians' view that Galileo's much vaunted trial was "basically an altercation between an expert and an institution defending a wider view of things" (131). While expounding his own "anarchic" or anything goes approach to the pursuit of knowledge, Feyerabend goes into the matter at length, and challenges the perception that 'Science' is supreme and above reproach. In Against Method, he uses the Galileo case to draw attention to current attitudes towards anyone who questions the prevailing orthodoxy.

He maintains that "there are many ways to silence people apart from forbidding them to speak and all of them are being used today" (131). Feyerabend points out "the contradiction in the actions of those who praise Galileo and condemn the Church, but become just as strict...when turning to the work of their contemporaries" (133). He suggests that by seventeenth-century standards of justice, Galileo was treated lightly. Feyerabend cites comments made by one of the Church's most outstanding spokesmen at the time to demonstrate that a hypothesis could not be taught as truth (136). There was a willingness to revise Biblical interpretations of the cosmos, providing there was sufficient scientific proof. Feyerabend likens this to the approach of today's scientific and educational institutions that "wait a long time before they incorporate new ideas into their curricula" (136). In Farewell to Reason, he notes that the ideas of modern scientists are likewise required to "fit the ideology of the institute that is supposed to absorb it and must agree with the ways in which the research is done" (254). A modern scientist who publishes his findings or gives public interviews before submitting to appropriate authority or peer scrutiny, "has committed a mortal sin which makes him an outcast for guite some time" (255). Feyerabend's contribution is valuable because although he has an atheistic worldview he does not resort to anti-Christian propaganda to justify his position. In fact he acknowledges that: "The Bible is vastly richer in lessons for humanity than anything that has come out of the sciences and might ever come out of them. Scientific results and the scientific ethos (if there is such a thing) are simply too thin a foundation for a life worth living. Many scientists agree with this judgement" (135).

In *Between Science and Religion* (1974), Frank Miller Turner sees the real polarity as between theology and philosophy; a conflict between theism and scientific imperialism. His solution is to propose "an intellectual alternative to both Christianity and naturalism" (247). He sees James Ward's contribution (among English philosophers) as coming closest to shaping a philosophy that "recognized the role and value of science while retaining a spiritual and non-mechanistic interpretation of man and nature" (209). Turner condemns the twentieth century barbarism that followed the nineteenth century passion for "the destructive potential of science and technology", and claims that secular humanists, such as Aldous Huxley (a grandson of T.H.), George Orwell, and C. P. Snow, only questioned the cultural and ethical adequacy of the 'New Nature' "after witnessing totalitarianism, and the image of nuclear holocaust" (246). Turner cites Marx's statement that his world view was grounded in Darwin's theory of natural history in *Origin of the Species*, and claims that scientific naturalism and Marxism are "cut from the same cloth" (247). Turner does not

refer to Lewis in this book but their views regarding the inadequacy of a "wholly secular culture" (9) are in harmony. Both have expressed abhorrence for both Technocracy and Theocracy. Turner sees a parallel between the most commonly hated aspects of ecclesiastical authoritarianism and the type that has "reappeared in secular guise within the context of scientific naturalism" (251). He notes that: "A culture dominated by scientific experts would not necessarily be more emancipated than one dominated by clergy. The discovery and dispersal of knowledge required a plurality of intellectuals co-operating with one another, tolerating one another, criticizing one another, and recognizing their own limitations" (251). Turner wants to replace both Christian theology and T.H. Huxley's "new Nature created by science" (8) with a new spirituality that reflects the spirit of the age (247). His vision predates that of David Tacey but both envisage a new Spirituality without Christianity and theology. Turner, like Lewis, insists that neither he nor the men who support his ideas have any intention to discredit the expertise of the scientific profession. They only attack a philosophy "which claimed that science was the only kind of knowledge that existed or ever could exist" (251-252). Both Lewis and Turner have noted the impact of quantum theory on our perceptions of the universe. Lewis's thoughts (cited in earlier chapters) are echoed in Turner's "Closing Considerations" concerning the changes that have occurred in philosophical and scientific categories of thought: "few scientific commentators still believe or wish to believe that physical science is so perfect a paradigm of knowledge or so near completion that all other human questions must be referred to it" (Turner 253).

Scientist Stephen J. Gould also addresses the dichotomy myth in *Dinosaur in a Haystack* (1996). He links it to an intellectual movement which deliberately set out to portray Western history as, "a perpetual struggle, if not an outright 'war', between science and religion, with progress linked to the victory of science and the consequent retreat of theology" (43). In his preface "Come Seven", Gould expresses his approach to writing using a sentence that echoes Lewis: "I intend to write my essays for professionals and lay readers alike—an old tradition, by the way, in scientific writing from Galileo to Darwin, though effectively lost today" (xiv). Gould's intention is to clarify language and remove jargon, but he also determines not to make scientific concepts "either more simple or more unambiguous than nature's own complexity dictates" (xiv). This resonates with Lewis's insistence on clarity of expression and transparency. Lewis too cautions against oversimplification by noting that we must expect theological concepts to be difficult, because like modern physics they are attempting to describe an invisible reality (MC 134).

Gould's stated purpose in writing the book is twofold: to teach "the dangers of false taxonomies" and to debunk the "supposed Dark and Medieval consensus for a flat earth" (40-41). Gould defines taxonomy as the tendency to divide things into fixed categories:

"The human mind seems to work as a categorizing device (perhaps even, as many French structuralists argue), as a dichotomizing machine constantly partitioning the world into dualities of raw and cooked [nature vs. culture], male and female, material and spiritual, and so forth" (39). His comments support Lewis's caution about humanity's inordinate drive to physically dissect and analyse things (AOM 42-43). Gould also asserts that: "There never was a period of "flat earth darkness" among scholars (regardless of how many uneducated people may have conceptualized our planet both then and now). Greek knowledge of sphericity never faded, and all major medieval scholars accepted the earth's roundness as an established fact of cosmology" (42). Lewis, too, put the record straight in *The Discarded Image*: "Physically considered, the Earth is a globe; all the authors of the high Middle Ages are agreed on this...The implications of a spherical Earth were fully grasped. What we call gravitation—for the medievals "kindly enclyning'—was a matter of common knowledge" (140-141).

Gould has defended both classical and medieval scholars against the misinformation perpetrated by Draper and White. He claims that even the purveyors of the myth could not deny the "plain testimony of Bede, Bacon, Aquinas and others", however, they attempted to portray the ancient scholars as rare and brave exceptions; a view considered by Gould to be "absurd, because these scholars were the establishment, and their convictions about the earth's roundness stood as canonical" (43). Like the historians cited earlier, Gould attributes the widespread influence of the "perpetual struggle" myth to Draper and White. One of their misrepresentations is the subject of Gould's chapter "The Late Birth of a Flat Earth" (1996) in which he claims that "Draper extolled the flat-earth myth as a primary example of religion's constraint and science's progressive power" (45). Though the perception of the conflict grew in the nineteenth century, Gould points out that the flat earth myth "did not enter the crucial domains of schoolboy pap or tour-guide lingo" (43) until the period 1860 to 1890. His source is the historian J.B. Russell who conducted a survey on history texts for secondary schools in the nineteenth century and found that nearly all texts after 1880 "featured the legend" (43). Gould cites from J.B. Russell's book, Inventing the Flat Earth (1991):

Cosmic Warfare Chapter 6: The Nature of Cosmic Warfare

The history of conflict is of immense importance, because it was the first instance that an influential figure had explicitly declared that science and religion were at war, and succeeded as few books ever do. It fixed in the educated mind the idea that "science" stood for freedom and progress against the superstition and repression of "religion". Its viewpoint became conventional wisdom". (qtd. Gould 45)

It seems that the anti-religious narrative suited the spirit of the time. The extent to which it became imprinted in both educated and popular consciousness is further illustrated by Gould's admission that the 1887 accounts researched by J.B. Russell are "little different from accounts that I read as a child in the 1950s" (41). Although Gould has done much to repudiate misinformation about the relationship between religion and science, McGrath regrets that Gould's "non-overlapping magisteria" resolution to the 'conflict narrative' tends to isolate the two disciplines into "hermetically sealed compartments"(Inaugural Lecture 3), thus, in a sense, undermining meaningful dialogue between them.

6.3. Changing Models of the Universe

Lewis viewed the nineteenth and twentieth century attempts to popularise the perception that the ancients were superstitious and ignorant as a ploy to undermine theism. In *Miracles,* he observes how those who deny the supernatural will manipulate anything and everything to undermine traditional faith and values:

The real question is why the spatial insignificance of Earth, after being asserted by Christian philosophers, sung by Christian poets ,and commented on by Christian moralists for some fifteen centuries, without the slightest suspicion that it conflicts with their theology, should suddenly in quite modern times have been set up as a stock argument against Christianity. (53)

Lewis's *The Discarded Image* is a study of medieval scholarship which analyses the origins and structure of the medieval model of the cosmos and its influence on literature and beliefs. He notes the close relationship between the ancient practices of astrology and alchemy and those of applied science, challenging the perception that ancient theologians were opposed to these early attempts to explore the cosmos: "Orthodox theologians could accept the theory that the planets had an effect on events and on psychology...plants and minerals" (103). What they did oppose were the negative "offshoots". Lewis names three areas of concern: "The lucrative and politically undesirable practice of astrologically

grounded predictions", the extremes of astrological determinism which excluded "freewill"; and practices that "might seem to imply or encourage the worship of planets" (103-4). Lewis's assessment of the mood and motivation of the age includes the observation that some scholars were motivated by a pure pursuit of knowledge, but the serious pursuit of both science and the magic arts was driven by the aim to subdue nature for selfish, material ends. These themes are enacted in his science-fiction trilogy in which the quest for power over nature drives the plots of all three novels. The unprincipled pursuit of knowledge and power is also enacted through the alchemy of Uncle Andrew in *The Magicians Nephew*, chronologically the first of the Narnia chronicles.

In *The Discarded Image*, Lewis traces the impact of the geocentric model on the poetic imagination. He selects and divides scholars into "the classical period" and "the seminal period". Cicero, Lucan, Statius and Apuleius come in the classical period, and Chalcidus, Macrobius, Pseudo-Dionysius and Boethius come from the seminal period. The latter marks a transition from the world of Pagan antiquity to the time from Plotinus (born 205), to pseudo-Dionysius, a philosopher of the late fifth and early sixth century. Material from these sources indicates to Lewis that the earth, though central in one sense from man's perspective, was not regarded as exalted in the universe. He finds no evidence that humans thought they were the nucleus of the universe. From their perspective, humans are "creatures on the Margin" (58) and, in Lewis's words, their perception of Planet Earth was "anthropo-peripheral." In the order of the "Medieval Model" they were on the outskirts looking in at the cosmic spectacle. Lewis credits Dante with expressing this perspective most clearly: "the spatial order is the opposite of the spiritual, and the material cosmos mirrors, hence reverses the reality, so that what is truly the rim seems to us the hub" (58). Lewis finds this perspective also reflected in the texts of Alanus and Chalcidus (58) and in the writings of the early fifth century Roman scholar Macrobius. Contrary to popular assumption, Lewis claims that in ancient scholarship the earth was relegated to the realm of least perfect matter and is in effect the "offscourings of creation; the comic dust-bin" (63). However, this did not detract from their industry in making sense of their universe. This information contradicts common assertions about the ancients' inflated ideas of their importance in the universe.

In the medieval drive for system and order, Lewis observes a blending of "what seems to us as their silliest pedantries" with a talent for bringing unity and beauty out of disparate parts. He cites their "sublime achievements" in literature, exemplified in the order and

unity of Dante's Divine Comedy, the Summa of Aquinas, and the crowded variety of Oedipus Rex (DI 10). In company with these, Lewis puts "the whole medieval synthesis itself, the whole organization of their theology, science, and history into a single, complex, harmonious mental Model of the Universe" (11). He views the finished article not merely as an object of artistic genius but the central component to understanding the works of art and literature of the age. The qualities he admires in ancient texts are manifestly the inspiration and motivation for his own literary art which is rooted in and enriched by a supernatural dimension that reflects divine order, beauty, conflict, and abundant life. In his tome on sixteenth-century English literature, Lewis extols the "unsurpassed grace and majesty" of the model formulated by theologian Richard Hooker. He marvels at Hooker's achievement in communicating the "unspeakable" transcendence and immanence of Deity, without overstating the place of reason or revelation. Hooker's model acknowledges the extent of God's creation: "all kinds of knowledge, all good arts, sciences, and disciplines" (OHEL 459-460). Lewis is particularly impressed because the model was initially formulated to refute other versions, but the polemic aspect becomes insignificant in comparison to the aesthetic and spiritual impact.

In Archives of the Universe (2006), Marcia Bartusiak recounts how Ptolemy (the Egyptian scholar/astrologer/astronomer and mathematician) refined previous findings and set the standard for the next fourteen centuries (32). His model was a departure from Aristotle's 'perfect universe' and Bartusiak describes his "insistence on matching theory with observation" as "a bold and modern move" (34). Although ultimately found to be inaccurate, the geocentric model proved to be "a valuable tool" for making the initial predictions about planetary movements (xii). The three successive models of Ptolemy, Copernicus and Brahe had only tiny variations and enabled future astronomers to make predictions based on past data. Brahe, who helped the breakaway from Aristotelian physics, is regarded as a "transitional figure". His model still maintained a static Earthcentred universe, but with some adjustments-the sun circled the earth but all the other planets circled the sun (63). Brahe's more precise information enabled Kepler's work on the motion of planets. Kepler is described by Bartusiak as "a precursor to the seismic Newtonian revolution to come" (67). She speaks of Kepler's obsession "with discovering the geometric rules of God's grand design" (67) and notes that Kepler's planetary laws were foundational to Newton's discoveries regarding gravitation (48). Not only did he show that planetary orbits were ellipses but established two more laws of planetary motion that enabled Newton to develop his theory of gravitation (67). Subsequent developments in Physics include Einstein's Theory of General Relativity, and the controversy between Steady State Theory and evidence of an expanding and accelerating universe. The Big Bang model prevails currently, and the quest is on to discover a Grand Unified Theory (GUT); to reconcile gravity and electromagnetism with the particles of quantum mechanics. A 'theory of everything' (TOE) could express "the ultimate mathematical description of reality" (Wertheim 213). In Lewis's day, it was the prospect of interplanetary travel and the search for alien life that fuelled popular imagination. However, recently (July 20, 2015) Stephen Hawking has reignited interest by making public his launch of a one hundred million dollar probe in search of alien life.

Margaret Wertheim's book, Pythagoras' Trousers (1997), is about "God, Physics and the Gender Wars". Her stated aim is to encourage a more balanced relationship between "Mathematical Man" and "Mathematical Woman" in the movement toward a "more socially responsible grounding" (251-2). Wertheim notes that the way people see the heavens "reflects how they see themselves" (67), a comment that augments Lewis's point about the influence of cosmic models. Wertheim points out that "Geocentrism was not an artefact of Christian imagination but a logical deduction from the evidence of the senses" (112). With reference to the ground breaking cosmology of the sixteenth and seventeenth centuries, she notes that "Copernicus, Kepler and Newton were profoundly religious men who forged their cosmic systems as offshoots of their theology" (61). The mutually beneficial aspects of this relationship between science and religion are evident in Wertheim's citation of Kepler. In a letter to his old teacher Michael Mastlin (3 Oct. 1595), he writes: "For a long time I wanted to become a theologian...Now however I behold how through my efforts God is being celebrated" (71). She also claims that Kepler and Newton's interest in alchemy and theology opened their minds to the possibility that some form of invisible force held the planets in orbit around the sun, and the moon around the earth (121). Like Kepler, Newton saw his scientific work as an expression of his faith in God: "He is eternal and infinite, omnipotent and omniscient, his presence from infinity to infinity; he governs all things, and knows all things that are or can be done" (123).

Wertheim, too, refers at length to the late nineteenth century influence of Draper and White: "For the first time in history, champions of science began to construe religion not merely as irrelevant to, and separate from, science, but as its enemy" (162). This is still the mantra of militant atheism. But rather than being the enemy of science, the religion of many great scientists has been foundational to their work ethic. A partial list of famous

names of scientists who were Christians is given by Dinesh D'Souza in *What's So Great About Christianity*? (2007). The book includes names like: Gassendi, Mersenne, Harvey, Faraday, Herschel, Joule, Kelvin, Ohm, Ampere, Pasteur, Maxwell and Mendel (97). Other names are listed in Fred Heeren's book *Show Me God* (1995) which has a bonus section entitled "Fifty Believers Who Led the Way in Science". Heeren summarises their contributions to "the early growth of scientific disciplines" (268-297), and notes that the Belgian astronomer Georges Lemaitre was a theist and is known as the "father of the big bang theory" (125-6). Kaku's *Parallel Worlds* mentions the work of various distinguished scientists who are Christians. He also acknowledges that his hero Einstein, who had no faith in a personal deity, was interested in theology and had an unorthodox acknowledgement of the 'Old One'. According to Einstein: "Science can only be created by those who are thoroughly imbued with the aspiration towards truth and understanding. This source of feeling, however, springs from religion...Science without religion is lame. But religion without science is blind" (Jammer 94). This quotation is cited by Max Jammer in *Einstein and Religion: Physics and Theology* (1999).

Like Lewis, Wertheim notes that the language of physicists has moved closer to a religious response and finds this ironic after two centuries of denying a cosmic creator. She cites two Nobel-Prize winners-the cosmologist George Smoot and particle physicist Leon Lederman. Smoot, who on discovering the "much sought after ripples in the cosmic microwave background radiation", described the moment as "like seeing the face of God" (219). Lederman describes the Higgs boson particle as "the God Particle" (220), not from a position of belief but in recognition of the particle's elusiveness and its centrality to physics. The "unmistakeable implication" according to Wertheim, is that "particle physics is a direct path to deity" (220), but she also suggests that Lederman's label is also a good sales pitch: "the combination of God and physics is tremendously appealing to the public" (221). Like Lewis, Wertheim suggests that the drive to discover the secrets of the universe has been fostered by centuries of belief in a creative God: "longing for one allencompassing cosmic law is...the scientific legacy of more than three millennia of faith in one all-encompassing principle known as God. The fact that this idea was introduced into modern physics by a priest is not to be ignored" (209-10). She is referring to Roger Boscovitch (anglicised version Boscovich), whose book A Theory of Natural Philosophy (1758) has been very influential but rarely mentioned in histories of science. Wertheim notes his commitment to Newtonian physics, and his belief that "All the atomic forces, along with gravity, must be aspects of one all-encompassing universal force" (207). In the

context of the relationship between science and theology, she seeks to imprint on the reader's mind "that one doesn't have to make a choice between religion and science. Provided one understands the real role of each and does not let either side take over the other there is no reason one cannot have both forces in one's life" (251). Wertheim cites Michael Buckley (another Jesuit theologian) to emphasize that science cannot form the basis of belief in God and that religious faith "must find its justification within itself" (250). This is a valid point, and reflects Lewis's "absolute key position". The study of nature is not the first cause; it plays a supporting role to relationship with God. But the anti-theistic rhetoric of 'New Atheism' requires apologists to venture into scientific territory. As Lewis found, the believer is compelled to defend faith by engaging with naturalistic assumptions. Christianity is unequivocally dismissed or ridiculed by those who want to enthrone 'Science' as an alternative to the concept of God. Wertheim notes that Buckley's statement is not intended to imply that science is antithetical to religion, but to emphasize that while physics cannot prove the existence of God, it can enhance an already existing faith: "while not being able to serve as a foundation for faith...can still serve as a handmaiden" (251).

In The Four Loves, Lewis, too, recognises that the material world cannot teach us anything outside itself but can awaken awareness in us of something beyond: "Nature never taught me that there exists a God of glory and of infinite majesty. I had to learn that other ways. But nature gave the word glory a meaning for me...Nature will not verify any theological or metaphysical proposition...she will help to show what it means" (23-4). He stressed the imperfect and provisional nature of all models, noting they were neither accurate representations of ultimate truth nor "mere fantasy" (DI 222). As human constructs they are subject to bias: "what has been called a 'taste in universes' is not only pardonable but inevitable" (222). He was enamoured of the geocentric model, not because it described the material system accurately but because it illustrated invisible realities. Lewis admired the harmony of hierarchies—celestial, angelic and earthly; a pattern more pleasing to him than 'flat equalities' because, though shaped from a multiplicity of materials, the whole reflects beauty and order. His thematic and structural use of medieval imagery and astrological symbolism in his fantasy stories has been convincingly unveiled in Michael Ward's ground-breaking *Planet Narnia*. Ward expounds how Lewis tapped into the mythical power of these early attempts to organize and make sense of the universe, not because the science was accurate or because he believed in astrology, but because the symbolism was so deeply embedded in popular consciousness. Lewis is careful to say in the epilogue that he trusts no-one will think he is recommending a return to the medieval model. His point is that all models serve as metaphors and can be overturned; leaving us with the question: "Is it not possible that our own Model will die a violent death, ruthlessly smashed by an unprovoked assault of new facts…But I think it more likely to change because far reaching changes in the mental temper of our descendants demand that it should?" (222). Lewis's thought is echoed by Richard Dawkins in *A Devil's Chaplain*:

Darwin may be triumphant at the end of the twentieth century, but we must acknowledge the possibility that new facts may come to light which will force our successors of the twenty-first century to abandon Darwinism or modify it beyond recognition. (81)

It is a surprising statement in view of the fact that his intransigent naturalism and anti-theistic stance are firmly grounded in Darwinian Theory.

6.4. The Not so New Atheists

The following passage from *The Antichrist* (1923) is one example of Nietzsche's hyperbolic hatred of the Christian faith:

Christianity stands in opposition to all *intellectual* well-being,—sick reasoning is the only sort that it *can* use as Christian reasoning; it takes the side of everything that is idiotic...it follows that the typically Christian state of "faith" *must* be a form of sickness too, and that all straight, straightforward and scientific paths to knowledge *must* be banned by the church as *forbidden* ways. (147-8)

Equally vituperative sentiments have been expressed by celebrity 'new atheists'. Dawkins and Dennett refer to themselves, Christopher Hitchens, Sam Harris, and others of like mind, as "the Brights". For them there is no dialogue between atheism and theism and their agenda is one of ideological extermination. In "*Against Atheism*" (2010), Ian S. Markham asserts that Dawkins, Hitchens and Harris are "fundamentally wrong". His approach is more principled than theirs because he begins his argument by basing it on two premises: first, that there is a case for atheism which needs be answered, and secondly, that "science is now one of the best reasons for faith" (viii). Markham's method follows the example of Thomas Aquinas who began his *Summa Theologiae* by generously and carefully setting out "the strongest arguments he can find against the position he holds" (8). Markham is prepared to face up to the case made by his opponents, first setting out the evidence used by the three high-profile atheists to justify their hostility to religion. He concedes that they

appear to offer a compelling new vision (18), but makes some interesting points about their strategy of seizing the moral high ground. There is no intention here to repeat all of his points but rather to identify the nature of the polemic and show that the conflict is manifestly not between religion and science but between naturalist and theistic worldviews.

Markham describes Nietzsche as "the last real atheist" because although the new atheists begin with the same premise, Nietzsche followed it through more honestly and radically. The new atheists kill off the concept 'God' and eradicate religion while retaining the moral principles embodied in Judeo-Christian law for the health of humanity. Markham notes that Nietzsche required not only the demise of religion, but a radical challenge to traditional understandings of reality, truth and morality. His revolutionary ideas required a reinvention of word meanings, "even the language itself, from which moral discourse is made" (34), and the proposed new morality of the elite "Superman" would welcome the concept of "ultimate emancipation and irresponsibility" (35). The new regime would exercise "strength, power, and control of the herd", and the terms "ought" and "right" must go because their roots are in religious concepts (35). Markham does not directly refer to Lewis, but his arguments echo those of Lewis in *The Abolition of Man* and other apologetic texts. In "The Poison of Subjectivism" Lewis claims that adhering to the Nietzschean ethic puts us in a position "where we can find no ground for any value judgements at all" (CR 103). In Mere Christianity, he puts it this way: "If no set of moral ideas were truer or better than any other, there would be no sense in preferring civilised morality to savage morality, or Christian morality to Nazi morality...The moment you say that one set of moral ideas can be better than another, you are in fact, measuring them both by a standard..." (23). Markham suggests that Nietzsche would be unhappy with the "middle class university atheism" of a Dawkins, Hitchens and Harris because, while destroying the foundation, they retain the comforts of traditional Christian ethical and aesthetic values (27-28). Markham, like Nietzsche, insists that, "God affects everything. And if God goes (which Nietzsche thinks he should), then lots of other things go as well" (28). Markham argues that the "smug" new atheists have eliminated God without facing up to the implications, imagining that life can carry on as normal (33). They want the best of both worlds-to be free of transcendent authority, but still adjudicate on ethical matters using the internalised values of earlier God-centred eras.

Daniel Dennett finds unity, meaning and purpose in the Darwinian theorem but does acknowledge the social implications. He writes of the destructive power of Darwin's "universal acid" in his book Darwin's Dangerous Idea (1995). His latest book, Intuition Pumps and Other Tools for Thinking (2013) reiterates his earlier view and claims that the corrosive effects of Darwinian theories would destroy traditional "ethics, art, culture, religion, humour, and yes consciousness" (203). However, his potentially dystopian vision comes with the faith and assurance that, "what would be left behind would be just as wonderful, even more wonderful in many regards, but subtly transformed"(203). Dennett's use of the adjective 'subtly' sounds more palatable to contemporary tastes than Nietzsche's agenda but, in essence, is revolutionary. John Cottingham, a reviewer for the International Catholic Journal, The Tablet, sees Dennett's latest book as coming "perilously close to scientism —a term he defines as "a kind of intellectual imperialism—an insistence on forcing all truths into a scientific mould" (18). Dennett's vision is like that of other highprofile atheists but he does at least concede the factor of bias: "There is no such thing as philosophy-free science. There is only science whose philosophical baggage is taken on board without examination" (Darwin's Dangerous Idea 21). Atheistic scientists are just as likely as theistic scientists to approach research with a bias, as the following honest statement from Harvard biologist Richard Lewontin has indicated in "Billions and Billions of Demons":

We take the side of science in spite of the patent absurdity of some of its constructs, in spite of its failure to fulfil many of its extravagant promises of health and life, in spite of the tolerance of the scientific community for unsubstantiated just-so stories, because we have a prior commitment, a commitment to materialism. It is not that the methods and institutions of science somehow compel us to accept a material explanation of the phenomenal world, but, on the contrary, that we are forced by our *a priori* commitment to material causes to create an apparatus of investigation and a set of concepts that produce material explanations, no matter how counter-intuitive, no matter how mystifying to the uninitiated. Moreover, that materialism is absolute, for we cannot allow a Divine Foot in the door. (31)

Lewis encountered this type of "*a priori* commitment" in his day. In "Is Theology Poetry", he cites Professor D.M.S. Watson's admission that 'Evolution' was not accepted on the basis of empirical evidence but because "special creation" was dismissed as incredible. The statement provokes his following question: "Has it come to that? Does the whole vast structure of modern naturalism depend not on positive evidence but simply on

an *a priori* metaphysical prejudice? Was it devised not to get in facts but to keep out God?" (WOG 136).

Lennox's book, Gunning for God (2011), is a powerful response to the travesty of Christianity widely disseminated by extreme atheists. He has entered the public arena to "add my voice to those who are convinced that the New Atheism is not the automatic default position for thinking people who hold science in high regard" (15). Lennox has debated and written books to answer the scientific aspects of arguments put forward by Hawking and Mlodinow, and by Dawkins et al. He notes that "the Brights" are repeating Bertrand Russell's "slanderous assumptions" in Why I am not a Christian. They ignore the evidence of historical scholarship and also cast doubt on the historicity of Jesus. Among the examples cited by Lennox, is this brief extract from leading German New Testament historian Gerd Thiessen, who is "at the liberal/sceptical end of the theological spectrum" (189): "The mentions of Jesus in ancient historians allay doubt about his historicity. The notices about Jesus in Jewish and Pagan writers...indicate that in antiquity the historicity of Jesus was taken for granted, and rightly so" (Theissen 93-4). The tactic of propagating misinformation is condemned by Lennox as "characterized by sheer closed-mind prejudice: light years removed from the open-minded scientific attitude that they pretend to hold in high esteem" (187). Employing the term 'religion' in a general and pejorative sense avoids tackling genuine questions about origins, purpose and design-why the earth is so beautiful and why its human inhabitants are morally conscious yet so prone to spoil and self-destruct. The word 'inappropriate' has replaced more value-laden terms but evidence of human 'sinfulness' is universal; individual and corporate crime abounds in any context -secular, religious, political, social and domestic.

Biblical histories are extremely honest about the human predicament, including the faults and failings of prominent patriarchs, the unfaithfulness of the 'children of Israel', and shortcomings among members of the early church. But 'the Brights' pronounce judgement indiscriminately, deliberately ignoring the unsung evidence of personal goodness and humanitarian activity associated with those who are committed to living by the teachings of Jesus. Lennox notes that Sam Harris is more circumspect in his judgement, and is encouraged to see more recent signs that Dawkins and others are following Harris in realising the folly of failing to distinguish between belief systems and behaviours. But Harris still aims to "destroy the intellectual and moral pretensions of Christianity in its most committed form" (*Letter to a Christian Nation* ix). In a lecture at the Atheist Alliance

conference, Harris says he would like to drop the labels associated with atheism, and expresses the wish to "go under the radar", to "be decent and responsible", and "destroy bad ideas" (Lennox 62-3). But he appears to think that only those who hold his worldview can be the adjudicators of 'bad ideas'. Lennox asks if Harris, Hitchens and Dawkins have ever read The Black Book of Communism (1999) (first published in 1997), which documents the mass crimes of communist regimes and their death toll of "around 94 million" (Lennox 88). D'Souza documents in greater detail the statistics of "mass slavings, forced labour camps, show trials followed by firing squads, population relocation and starvation" (214). Based on the research of Jung Chang and Jon Halliday (2005), seventy million deaths are attributed to Mao Zedong. The crimes of Hitler and Stalin bring the number of mass killings up to one hundred million deaths. This is without the atrocities of "lesser" atheist tyrants, including Lenin, Khrushchev, Pol Pot, Castro and Kim Jong-il. McGrath is cautious about statistics in general, but finds it "one of the greatest ironies of the twentieth century" that these monstrous crimes were perpetrated and endorsed by those "who blamed religion for every evil and wanted to purge it from the face of the earth" (Dawkins' God 113-4). This fact is extremely important to any discussion about the perceived 'religious' crimes and the virtues of atheism.

6.5. In Defence of the Faith and Towards Convergence

In *Christianity and History* (1954), Herbert Butterfield claims that it is impossible to measure the vast difference that ordinary Christian piety has made to the last two thousand years of European history (131). The research of Psychology Professor Andrew Sims in *Is Faith Delusion? Why Religion is good for your Health* (2009) finds positive evidence:

The advantageous effect of religious belief and spirituality on mental and physical health is one of the best-kept secrets in psychiatry and medicine generally. If the findings of the huge volume of research on this topic had gone in the opposite direction and it had been found that religion damages your health, it would have been front-page news in every newspaper in the land. (Sims 221)

Sociologist and philosopher Jürgen Habermas gives the following perspective in a passage from his book *Time of Transitions* (2006):

Egalitarian universalism, from which sprang the ideas of freedom and social solidarity, of an autonomous conduct of life and emancipation, of the individual morality of conscience, human rights and democracy, is the direct heir to the Judaic ethic of justice and the Christian ethic of love. This legacy, substantially unchanged, has been the object of continual critical appropriation and reinterpretation. To this day, there is no alternative to it. And in the light of the current challenges of a post national constellation, we continue to draw on the substance of this heritage. Everything else is just idle postmodern talk. (150-51)

In The Guardian (2005), atheist politician and journalist Roy Hattersley writes this:

We atheists have to accept that most believers are better human beings ... The only possible conclusion is that faith comes with a packet of moral imperatives that, while they do not condition the attitude of all believers, influence enough of them to make them morally superior to atheists like me. The truth may make us free. But it has not made us as admirable as the average captain in the Salvation Army. (2)

These quotations support the view that societies generally have benefitted from the personal integrity, high standards and selfless giving of generations of genuine Christian believers. Notwithstanding, Dawkins has used his scientific credentials to portray religious faith as a virus of the mind, an evil to be eradicated. In The God Delusion (2006), he tries to bury the concept of 'God' altogether, indulging in a twenty-plus list of the most damning terms to describe the longsuffering Deity, including: "sadomasochistic", "vindictive", "unforgiving control-freak" and "capriciously malevolent bully" (51). The rant indicates complete ignorance of hermeneutics or Biblical exegesis. As semanticist S.I. Hayakawa asserts, 'snarl words' "unaccompanied by verifiable facts offer nothing further to discuss" and say more about the "emotional position of the speaker or writer" (29). Rather than encouraging rational debate, Dawkins demonstrates that he is engaging in warfare. Ironically, some of the characteristics he applies to the Judeo-Christian God fit those ascribed by Christopher Hitchens to 'Evolution': "We must confront the fact that evolution is, as well as smarter than we are, infinitely more callous and cruel and also capricious" (god is Not Great 88). Hitchens gives Evolution the status of an entity and bows to 'its' superior intelligence. The following words from Lewis might serve as a rejoinder to both: "In God you come up against something which is in every respect superior to yourself. Unless you know God as that-and therefore know yourself as nothing in comparison—you do not know God at all" (MC 108).

The God Delusion was rapturously received by prominent anti-Christians, described as "truly magisterial" by Ian McEwan and "a trumpet blast for truth" by Philip Pullman. But not all atheists or agnostics welcomed the ill-informed rhetoric. Atheist Professor of Cultural Theory, Terry Eagleton comments on the degree of ignorance displayed in Dawkins' book: "Imagine someone holding forth on biology whose only knowledge of the subject is a Book of British Birds, and you have a rough idea of what it feels like to read Richard Dawkins' theology" (1). Eagleton also claims that, "the existence or non-existence of God," is not, as Dawkins believes, "a scientific hypothesis which is open to rational demonstration" (2). He suggests that the "vulgar caricatures of the religious faith" employed by new atheists are a product of their blind belief that there is nothing there to be understood (2). Philosopher of Biological Science Michael Ruse regrets Dawkins' switch from writing science for a popular audience to launching an irrational attack on Christianity. In the article "Dawkins et al bring us into disrepute" (2009), he claims that they do not take scholarship seriously and their unsubstantiated claims for science and against theism are "political stupidity" (1). He defends the right of new atheists to propagate their views in rational debate but admits to having said, "The God Delusion made me embarrassed to be an atheist, and I meant it" (Ruse 1).

Dawkins' book title *The Devil's Chaplain* (2003) was inspired by Darwin's observation that the wastefulness and cruelty in life could be used as evidence against an omnipotent Creator (11). Nietzsche, too, referred to God's "blunders" in creation, and others have held God accountable for the hostility of nature, the history of sin and human suffering. Anti-theists blame God for allowing humanity's abuses of free-will but purport to celebrate autonomy and freedom from authority. In "De Futilitate", Lewis notes that the same Creator made both our minds and the very standard by which we judge: "Heroic anti-theism thus has a contradiction in its centre. You must trust the universe in one respect even in order to condemn it in every other" (CR 91). Someone once asked Lewis why God made humans of such "rotten stuff" that they went so wrong. His response suggests that the question hinges on a misunderstanding of the concept of free will: "The better stuff a creature is made of—the cleverer and stronger and freer it is—then the better it will be if it goes right, but also the worse it will be if it goes wrong" (MC 49). In *Miracles*, when Lewis observes the seemingly paradoxical aspects of the universe he resolves them in this way:

Cosmic Warfare Chapter 6: The Nature of Cosmic Warfare

We find ourselves in a world of transporting pleasures, ravishing beauties, and tantalising possibilities, but all constantly being destroyed, all coming to nothing. Nature has all the air of a good thing spoiled...rendered possible by the fact that God gave them free will...He saw that from a world of free-creatures, even though they fell, He could work out (and this is the re-ascent) a deeper happiness and a fuller splendour than any world of automata would admit. (M 125-26)

In "On Living in an Atomic Age", Lewis considers the reality of our material environment and reasons that if Naturalism is true and there is nothing beyond Nature, then all our thoughts and actions are generated by blind, amoral forces. Faced with this "preposterous conclusion", he finds himself prepared to listen to another voice that whispers: "But suppose we really are spirits? Suppose we are not the offspring of Nature...?"(78).

In The Discarded Image, Lewis contrast the then popular image of space as a "pitchblack and dead-cold vacuity" with the worldview of the ancients who looked "through darkness but not at darkness" (111-112), and he reminds readers of the vibrant medieval model, full of light and life. Dawkins denies any such possibility, and in River Out of Eden (1995) paints this bleak picture: "The universe we observe has precisely the properties we should expect if there is, at bottom, no design, no purpose, no evil and no good, nothing but blind pitiless indifference" (133). However, when promoting the wonders of "life's central theorem" his language undergoes a change, and he enthuses about the naturalistic marvels of the material universe. In Mere Christianity, Lewis describes the incomprehensible quality of space as symbolic of God's greatness, a translation of the divine into "non-spiritual terms" (135). In the George MacDonald anthology, Lewis speaks of the "divine, magical, terrifying, and ecstatic reality in which we all live" (xxxiv). His theological view is in harmony with current language regarding the cosmos. Tim Folger writes in *Discover Magasine* (August 18, 2008): "Empty space is not really empty because nothing contains something, seething with energy and particles that flit into and out of existence" (1). Science has no natural explanation for the patterns of order and incredibly precise conditions needed for the existence of life in the universe. In "A Survival Machine" (1996), Dawkins concedes that he embraces the Darwinian theorem because "the only alternatives are Lamarckism or God", but his euphoric appreciation of the evolutionary process resembles a religious paean of praise. He extols the wondrous aspects of the material universe as "genuinely mysterious, grand, beautiful, and awe-inspiring" (75-95). But when speaking of 'mystery' in a religious context in "Viruses of the Mind," he relates it to "a background infection" (DC 137), and dismisses the concept of 'mystery' as "plain insanity or surrealist nonsense" (139). In "The Great Convergence", Dawkins rejects any rapprochement between theism and science, but McGrath points to quantum mechanics as "an area of science where the category of 'mystery' seems entirely appropriate" (DG 155). McGrath speaks of the 'mysterious' as "something that is true and possesses its own rationality—yet which the human mind finds it impossible to grasp fully" (154).

In Our Times (2009), author and journalist A.N. Wilson notes Dawkins' determination to drive a wedge between science and religion, citing Dawkins' tribute to the innovative science teacher Frederick William Sanderson (1857-1922), a former headmaster of Oundle School, where Dawkins himself "picked up his infectious enthusiasm for science" (A.N. Wilson 398). The title of Dawkins' tribute is "The Joy of Living Dangerously", based on Nietzsche's famous maxim which inspired Sanderson's free-spirited approach to education. Dawkins' tribute promotes his own commitment to "true education" which revolves around Evolution as life's central theorem. As Wilson notes, Dawkins avoids acknowledging that the headmaster's "wonder at scientific discovery and all his faith in the curiosity, resourcefulness and healing creativity of human beings" were founded upon his Christian beliefs (Wilson 399). The official biography Sanderson of Oundle (1923) is a compilation of the headmaster's notes, drafts, addresses, sermons and lectures, supplemented by contributions from masters and pupils. Sanderson's own comments express his aim to inspire pupils to "feel the mysteries of Science and the mysticism of it" (Sanderson 257). 'Living dangerously' for Sanderson meant not fearing struggle and conflict (SO 349), and he relates it to Jesus' saying in Matt.10.34: "I came not to send peace on earth but the sword" (348). Sanderson's occasional bouts of anger against the school system were directed at education methods that stifle creativity and prevent boys reaching their individual potential. But Dawkins uses the occasion to rail at current Creationists who dare to challenge the centrality of his Evolution theorem, adding "Sanderson would hit the roof" (A Devil's Chaplain 59). This is misleading because it is clear from the official biography that Sanderson's frustrations were directed at "the bondage of elementary science" (242), "over-instructing" (257), "the devastating attack of the red ink and blue pencil" (307), and the preoccupation with exams. The headmaster was not doctrinaire or intolerant of free-thinking. He claimed that "Science is not about certainty and finality" (SO 240), and said, "In this school we do not believe in suppression, we believe in the creative urge" (215). Sanderson encouraged pupils to devise their own original experiments (348) and advocated a co-operative method that opposed competitiveness, claiming that it made half the boys "idle and useless" (359). H.G. Wells

was a friend and admirer of Sanderson's enthusiasm for scientific progress. He sent his sons to Oundle and published an unofficial biography, *The Story of a Great School Master* (1924). Although Wells did not share the Christian faith, he cites from Sanderson's sermons and scripture lessons, speaking of the headmaster's "very Nietzschean Christ" (Wells 29). Sanderson called Jesus "Master" and often quoted his words: "I am come that you might have life and have it more abundantly" (SO 238).

Sanderson's reforms included the building of labs, workshops, libraries, and rooms for art, music and drama. It is easy to see how Wells and Dawkins caught the fire of his passion to "overhaul" all departments of knowledge (354). But Sanderson's belief in humanity's innate "great stream of creativeness" (345) was modelled on the radical Jesus of Gospel records. The schoolmaster did not equate 'living dangerously' with the dethronement of God, faith and traditional values; he was passionate about improving "morally and intellectually" (191) as part of the "Divine purpose" (195). In literally his last lecture, Sanderson named the vital elements of science as: "discovery, uncertainty, doubt, service, mysticism" (349). He had a very idealistic vision of Science as a philanthropic servant, and a "truly modern version" (343) of the Biblical 'love your neighbour'. He called upon students to bring love, zeal, labour and sacrifice to their studies (347) because not only did he see God revealed in Nature, art, music and literature; but in the workshop, factory, mine and laboratory (SO 203-4). He believed that 'the biological purpose of man' was: "above all things to reveal the spirit of God in all the works of God ... the business of schools is through and by use of common service to get at the true spiritual nature of the ordinary things we have to deal with" (210-211). In light of such a statement, all Dawkins' attempts to portray Christianity as an enemy of science look untenable. It is remarkable that he could so praise the headmaster's radical ideas about education, and yet turn so implacably against the faith that inspired and shaped him. Sanderson's describes Jesus as a "Divine builder...who came to restore a kingdom, by whose life and death a new world was created" (335). He described the Bible as "the greatest creative book in the world" and read the narratives as expressions of "the ideals of science" (212). He claimed that: "Scientific men might well bring themselves to the discovery of the Christian ideals: "Back to Christ" may be their motto (347). This would be anathema to Dawkins and the "Brights". But more significantly, Sanderson's comments go against Dawkins' diagnosis that religious belief is a disease, and that people who teach theological precepts or stories to children are guilty of 'child abuse'. Sanderson died before Lewis's career took shape but their ideas and faith have much in common. Sanderson believed that people are much more than matter, and faith is much more than "blind subscription to a creed" (SO 185). Lewis, too, embraced the concept of God as "a dynamic, pulsating activity"; a life-changing drama (MC 148), and saw the purpose of theology as practical:

Faith is to the soul of man what reason is to the mind, and it requires cultivating and training as the reasoning faculty does. Faith is the belief in the ultimate triumph of right-doing; not a formal assent, but a living belief acquired by endurance, by "hardness" of life...Faith opens out a new world and a new world larger than that opened out to us by reason. Faith opens out a wider vista of life. (186-7)

In contrast, Dawkins defines religious faith as "blind trust in the absence of evidence, even in the teeth of evidence" (*The Selfish Gene* 212).

McGrath has authored several masterly books in response to Dawkins' tactic of conflating scientific observations with his anti-Christian worldview. In Dawkins' God (2007), McGrath makes clear that he is not critiquing Dawkins' specific views on the theory of evolution, and at the beginning of his academic career in the natural sciences he admired Dawkins' eloquence and skill in illustrating complex points of biology. But when turning to subsequent books expecting some "rigorous empirical evidence" for investigating the 'meme' hypothesis, McGrath found instead "savage anti-religious" polemics (8). Dawkins has posited the idea of a "meme of blind faith" as a cultural replicator for the contagion of religious belief. But this idea raises the possibility of a cultural replicator for atheism. Anti-theists pass on their faith and raise their children in a culture of unbelief which discourages theological curiosity and debate. McGrath claims that faith goes beyond the evidence and he endorses the words of Anglican theologian W.H. Griffiths: "[Faith] affects the whole of man's nature. It commences with the conviction of the mind based on adequate evidence; it continues in the confidence of the heart or emotions based on conviction, and it is crowned in the consent of the will...expressed in conduct" (DG 86).

In "The Natural Sciences and Apologetics", McGrath explains that over a period of twenty-five years, he had read and evaluated the substance and utility of the "meme" (introduced by Dawkins in 1976). Although some atheist writers have embraced the meme theory and used it as "an integral part of their critique of religion", McGrath claims that "the notion of the meme has failed to secure acceptance within the mainline scientific community" (147). McGrath re-iterates that the scientific method involves stepping outside the known and "finds itself committed to working beliefs that are not susceptible of

proof...which Thomas Huxley rightly terms 'acts of faith' " (146-7). Lewis, too, makes brief reference to this in a letter dated March, 1927 in which he asks his father which of the nineteenth century scientists (Huxley or Clifford) claims that science required more faith than theology (CL1 680). Huxley recognised the limitations of the human mind, and speaks of the "inaccessible" and "unfathomable" aspects of nature in the past, the present and the future: "Whatever lies beyond, above, or below this is outside science" (Huxley 3). Though Huxley did not believe in the existence of God or immortality of the soul, he described himself as an 'Agnostic' because he conceded that there was insufficient evidence to support his decision (133). In *Dawkins' God*, McGrath does "listen seriously" to the New Atheist criticisms and seeks to come to grips with the grounds of Dawkins' hostility. He identifies four "interconnected grounds", briefly summarised here as: the belief that a Darwinian worldview makes God redundant, that religious tenets are faithbased rather than empirically based, that the religious vision of the world is "impoverished and attenuated", and that "religion leads to evil" (11). McGrath believes that the issues involved are too important to be "evaded, or dealt with by the sound-bites or superficial pot shots that typify media-driven discussion" (11). It is his intention to "encourage exploration of the place of the natural sciences" in the shaping of minds and cultures (11), but his Christian faith has met with angry opposition. In the following passage from Why God Won't Go Away: Engaging With New Atheism (2011), he shares his adult experience of verbal assaults: "On several occasions I've been earnestly told by New Atheist foot soldiers that I have no business being a professor in a leading British university. After all, they inform me, I believe in God and am therefore stupid, evil and mentally unstable. I ought to be locked up for the public good" (26). His experience indicates a depth of prejudice and ignorance but it is encouraging to know that McGrath also notes: "When I am openly abused in this way, I find my most vociferous defenders are moderate atheists who are sickened by such mindless hostility and alarmed at the damage it's inflicting on the public image of atheism" (26).

In *Theology, Hermeneutics and Imagination* (2000), Garrett Green acknowledges the persistence of the popular assumption that science and religion are fundamentally opposed, but detects some movement. In "Medieval Science and Religion" (2000), Lindberg refutes the perception that the relationship between science and religion was historically one of polarity and suppression, and describes the interaction as one that exhibits the familiar "variety and complexity" found in other realms of human endeavour. He doubts that the debate over the "warfare thesis" will disappear entirely, but notes the scholarly movement

toward "a more dispassionate, balanced and nuanced understanding" (303). McGrath has observed a trend towards "a new convergence" between the disciplines (DG 139), but 'New atheism' is intent on fuelling animosity. In "The Great Convergence" Dawkins (claiming to be an "honest judge") dismisses any convergence as, "a shallow, empty, hollow, spin-doctored sham" (151). The biologist Jerry A Coyne is also intent on promoting the conflict narrative. His latest book Faith Versus Fact (2015) continues to advocate the perception that religious faith requires blind acceptance without evidence. Like Dawkins, Coyne cites the account of doubting Thomas (John 20.29) as evidence of Jesus encouraging 'blind faith'. Coyne makes a text a pretext, failing to notice the context. Thomas had recently witnessed the horrific details of the crucifixion, and was absent when the resurrected Jesus appeared to the group. Quite naturally Thomas doubted the testimony of his fellow disciples and wanted empirical proof. Jesus later offers this visual and tactile proof to Thomas (a necessary requirement for apostleship). Only then does Jesus announce a general blessing for future generations who believe the empirical accounts of the apostles when Jesus is no longer physically present. Lewis strove to show that the reality of the material world does not necessarily demand a rejection of anything supernatural. The real conflict comes when those who trust implicitly in scientific knowledge and human ingenuity are so committed to a totally naturalistic explanation of life that they refuse to allow 'a Divine foot in the door'.

Fred Heeran's book articulates a more harmonious dialogue, featuring exclusive interviews with leading scientists (atheist, agnostic and theist) who explore the wonders of space and discuss alternative cosmologies. John Mather, a principle investigator for NASA's research into the cosmic background radiation says this: "We have equations that describe the transformation of one thing into another, but have no equations whatever for creating space and time...I don't think we have words or concepts to even think about creating something out of nothing" (Heeran 93-94). Mather and Professor of Physics George F. Smoot were joint winners of the Nobel Prize for Physics in 2006. Smoot wrote the foreword for Heeran's book, describing it as a stimulating probe into "the frontiers of science and faith" (xv). Contrary to the negative invective of the Brights, Smoot views nature, faith and science as compatible: "Bible believers and scientists can have a healthy and—for both—uplifting dialog, a thing I have long felt crucial for humanity" (xiv). However, Sam Harris confidently declares in *The End of Faith* (2004) that: "theology is now little more than a branch of human ignorance. Indeed it is ignorance with wings" (173). An alternative view is wittily expressed by agnostic astronomer Robert Jastrow:

"For the scientist who has lived by faith in the power of reason, the story ends like a bad dream. He has scaled the mountains of ignorance; he is about to conquer the highest peak; as he pulls himself over the final rock, he is greeted by a band of theologians who have been sitting there for centuries" (God and the Astronomers 107). E.O.Wilson is an atheist who is confident that the secular worldview will ultimately defeat theism. His faith is grounded in the belief that scientific research into the material history of the universe will eventually provide evidence to supersede any religious cosmology. However, he does not denigrate the universal need for a "sacred narrative" and counsels that "However the process plays out it demands open discussion and unwavering intellectual rigour in an atmosphere of mutual respect" (Consilience 265). Particle physicist Brian Cox presents BBC TV programmes showing wondrous images of the cosmos which suggest evidence of creative intelligence and purpose behind the awesome complexity. Sharon Dirckx's article "Science Alone Does Not Have All the Answers" (2016) comments on a recent conference dialogue between Professor Cox and astrophysicist Professor David Wilkinson. Dirckx notes that Cox has "no personal faith" but does encourage a relationship of mutual enrichment between Science and Religion. He advocates the need for different viewpoints to be aired and opposes "polarisation" (1). Peter Harrison's historical research indicates that the perceived conflict is not between science and religion, but in the "underlying value systems" of naturalism and theism which are "irresolvable". He suggests that even "religiously motivated antievolutionists" are not anti-science, they only fear "the secularist package of values concealed in what they perceive to be the Trojan horse of evolutionary theory" (197). Like Harrison, McGrath sees "scientific imperialism" (the claim that science alone can provide answers to ultimate questions) as the instigator of conflict. On taking up the Andreas Idreos Professorship of Science and Religion at Oxford (October 2014), McGrath gave an Inaugural Lecture entitled "Conflict or Mutual Enrichment? Why Science and Theology Need to Talk to Each Other". He claims that the warfare myth is "sustained more by uncritical repetition than by historical evidence" (6), and in response to New Atheism, he says that "theology has nothing to fear from the empirical study of anything" (6). Like Lewis, McGrath notes "the provisionality of scientific theories" (6) and upholds the scientific method. He asserts that "Christian theology offers a conceptual framework...which both accommodates and encourages the scientific enterprise" (8). In Lewisian style he emphasises that "we need a rich palette of colours" to represent both our inner complexities and those of the world around us (7). In his Gresham College lecture (13 October 2015), McGrath repeats the thought that making sense of life involves maps,

pictures and stories. Taking a leaf out of Lewis's book, he notes that "We live in a storyshaped world. But which story makes most sense?" (6). The comment serves to move the thesis from the more austere regions of intellectual argument into the imaginative realm of fantasy literature. The collision between dogmatic anti-theism and Christian faith is presented in the next chapter by juxtaposing Lewis's theistic cosmology with Philip Pullman's sacrilegious alternative.

CHAPTER 7

Divine Monarchy and the Republic of Heaven

A man that looks on glass, on it may stay his eye, Or if it pleaseth through it pass and then the heavens espy.

George Herbert

The deepest and only theme of human history, according to a maxim of Goethe, is the conflict between scepticism and faith (Goethe 72). But healthy scepticism (unlike cynicism) is not an enemy of faith. In fact, it can be part of a search for truth and meaning that develops into a more robust faith. Based on the findings of the previous chapter, a more basic dichotomy exists between theism and anti-theism. In this chapter, the theme of warfare is explored through a fantasy lens, analysing Philip Pullman's response to Lewis's children's books.

Both authors use a cosmic backdrop and have enjoyed critical and popular acclaim. In the introduction to *The Definitive Guide to Philip Pullman's His Dark Materials* (2006), Laurie Frost notes the growth of fan sites, "republican communities," the role of media and internet access, and the impressive list of medals and awards conferred on Pullman, including the prestigious Astrid Lindgren Memorial Award. Pullman is a natural adversary to Lewis and has publicly denounced the person and fantasy texts of his literary "precursor". Pullman's anti-theistic worldview is expressed in plots which depict cosmic rebellion, the demise of the Church, and the celebration of human autonomy in a self-perpetuating universe. Many readers have enjoyed *His Dark Materials* for its excitement, suspense and imaginative scope without any curiosity about Pullman's parodying of scripture, or interest in the ideological issues. This is true too of the Narnia chronicles which were and are often enjoyed by children and adults with little awareness of allusions to theology. I aim to show that Pullman's borrowings from Lewis and Scripture undermine his own radical vision and are evidence of an internal contradiction in his text.

Pullman challenges both Theism and Lewis in "The Republic of Heaven" (2001). He has no qualms about 'abstract Man' running the universe: "we must find a way of believing that we are not subservient creatures dependant on the whim of some celestial monarch, but free citizens of the republic of Heaven" (2). These sentiments echo those of

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Kaku in *Parallel Worlds* (cited earlier): "It is our destiny to carve out our own future, rather than have it handed down from some higher authority" (358). In *Planet Narnia*, Michael Ward suggests a likely response from Lewis:

If he had lived to learn of Philip Pullman's 'republic of heaven' he would not have regarded it as a satisfactory alternative to the traditional monarchical conception of the divine-dwelling place; he would have thought it an imaginative solecism because it is anthropocentric. A 'republic of heaven', presumably with its own elected President, would be...the creation of God in the citizen's own image. (67-68)

Lewis sets out his Christian cosmology in this way: "on our view, Nature as a whole is herself one huge result of the Super-natural: God created her. God pierces her wherever there is a human mind" (*Miracles* 47). He contradicts the naturalistic view that rational thinking is "a comparatively recent development moulded by a process of selection, which can select only the biologically useful" (26). Lewis claims that the power to reason is older than nature, noting that "Nature, though not apparently intelligent, is intelligible—that events in the remotest parts of space appear to obey the laws of rational thought" (36). He defends the Theistic view as less problematic than every other hypothesis.

In *His Dark Materials*, Pullman depicts global and inter-stellar adventures in which the enemy is identified as a corrupt theocracy. In principle, Lewis too hated authoritarianism in any shape or form as we see from this comment in "Is Progress Possible" (1958): "I detest theocracy. For every Government consists of mere men and is, strictly viewed, a makeshift; if it adds to its commands 'Thus saith the Lord', it lies, and lies dangerously" (315). Lewis does not single out the Church universal for blanket condemnation but opposes any institution that allows the politics of power or a religious spirit to take over. Significantly, in The Magician's Nephew, after the creation of Narnia, Aslan chooses a 'cabby' to be king but first interrogates his ability to rule "kindly and fairly", conscious that all creatures are "free-subjects", not slaves (82). Both Lewis and Pullman claim to be democratic, but on different grounds. Lewis believes "humanity cannot be trusted with more than the minimum power over other men" (CLII 584). In The Problem of Pain, his theistic model has God at the centre of the universe and "man the subordinate centre of terrestrial nature" (117). Pullman trusts human ingenuity to subdue nature and denies any supreme moral entity. His rebellious attitude to the rule of a supernatural Deity apes that of the resentful "warie fiend" in Milton's Paradise Lost (1667). Milton's epic poem is inspirational for both authors, but the collision of their worldviews is apparent in their

response to Milton's devil. Lewis's *A Preface to Paradise Lost* (1942) is an in-depth critique of the poem and its Biblical themes. Pullman has not published a critique of Milton's text but imaginatively manipulates the themes for his atheistic alternative. Milton sets out to "justify the ways of God to men"; Pullman's trilogy justifies the ways of mortals in rejecting 'God'. Milton's energetic and resourceful rebel abuses his high status and freedom by exploiting the very elements used in the act of creation—"his dark materials". The phrase 'Dark Matter' as used in theoretical physics is imperfectly understood but seems perfect for Pullman's purposes. The title "His Dark Materials" has emotive power and announces the subversive nature of the author's creative genius.

Outside the veil of fiction, Pullman's comments are demonstrably antagonistic toward the Biblical Creator. Yet the Apostle James compares life in the light of God's precepts as looking into "the perfect law of liberty" (Jas 1.25). The Apostle Paul describes life under genuine divine rule as the "glorious liberty of the children of God" (Rom. 8. 21). He experiences no "spirit of bondage", only a loving Father who welcomes his estranged children in "the Spirit of Adoption" (8.15). In contrast, Pullman resents the Creator's single prohibition in Eden, and agrees with Milton's rebel that we are derived independently of God, random products of the natural environment:

self-begot, self-raised By our own quick'ning power, when fatal course Had circled his full orb, the birth mature Of this our native heav'n, ethereal sons. Our puissance is our own, our own right hand Shall teach us highest deeds, by proof to try Who is our equal. (VI 860-865)

HDM has the same premise that inanimate Dust is the sole progenitor of human life. Pullman's trilogy has been described as a celebration of atheism and (after his 2002 Whitbread award) he tells interviewer Helena de Bertodano that "If there is a God then he deserves to be put down and rebelled against" (3). More significantly, in reference to Blake's comment that Milton was of the Devil's party without knowing, Pullman claims, "I am of the Devil's party and know it" (Bertodano 3).

7.1. Milton, Eden and the Origins of Evil

Lewis admires Milton's depiction of the devil from a different angle. His praise is not for the character itself but for Milton's portrayal of the satanic personality. On the development of the devil's character, Lewis says: "He has become more a Lie than a liar, a personified self-contradiction" (97), and he translates the devil's insubordinate remark: "Better to reign in Hell, than serve in Heaven" (PL 1.263) as: "Evil be thou my good" (which includes 'Nonsense be thou my sense') and his prayer is granted" (PPL 99). Lewis admires the epic as a "magnificent poetical achievement". As a tutor Lewis wanted his students to first appreciate the whole majestic drama as an artistic creation, and counsels that, if they first scan for the faults, opinions and emotions of the writer, they will miss the specific "beauties and delights" of what Milton had in mind. Like the Biblical Lucifer, Milton's Satan is a supreme angelic being who becomes enamoured of his own beauty and resentful of his subservient status in the Divine hierarchy. Lewis suggests that Lucifer was originally created to operate in a realm of "light and love, of song and feast and dance" (96), so his vengeful ambitions do not fester as a result of repression, hunger or illtreatment. Milton's Satan, likewise, is too proud to admit derivation from a Creator (98), preferring to believe that he "just grew...like a turnip" (98). This is a comic allusion to the naturalistic theory of human origins-a debate still very much alive today. In Milton's poem, the result of cosmic rebellion is that "Chaos" reigns, and "next to him high arbiter/Chance governs all" (II 907-8). The language of chaos and chance predates that of quantum physics but has a very contemporary ring. Although widely assumed at a popular level, it seems that 'random chance' theory is no longer prevalent among scientists. In interview, philosopher of science Stephen C. Meyer claims that "Virtually all origin-of-life experts have utterly rejected that approach" (Strobel 283). Even Francis Crick (of DNA fame), a philosophical materialist, concedes in Life Itself that: "An honest man, armed with all the knowledge available to us now, could only state that in some sense, the origin of life appears at the moment to be almost a miracle, so many are the conditions which would have to have been satisfied to get it going" (Crick 88).

Pullman's views on origins and the Genesis Fall are as divergent from those of Lewis as their responses to Milton's tempter. Pullman has acknowledged Milton, Blake and von Kleist as the primary sources for his trilogy. At an English Society forum he cites from von Kleist's inspirational "The Marionette Theatre," an essay about self-consciousness, hope and the last chapter of human history when we will "eat again of the tree of knowledge in order to return to the state of innocence" (Frost 494). Von Kleist's thought is reminiscent of the 'tree of life' passage in Revelation 22 which envisions a denouement in the final

chapter of Earth's history. Eden's "tree of life" is seen growing in the newly-created city of God, bearing fruit and leaves for the healing of the nations. The Genesis and Revelation accounts are like bookends to the cosmic dilemma, resolved by grace and Deity's selfsacrifice. Pullman's humanist alternative does not accept the intervention of Divine grace but favours a Pelagian salvation by good works: "although the Eden of perfect innocence is currently lost to the human race, it is not lost forever-it can be regained, if the human race is willing to spend its life trying. But the innocence it will find is a more mature one...Working to that end should be a joyful action" (Frost 494). In "The Dark Materials debate" (2004) with Rowan Williams (the then Archbishop of Canterbury), Pullman enlarges on his treatment of the sin of Adam as portrayed in HDM: "I try to present the idea that the Fall, like any myth, is not something that has happened once in a historical sense ... For me it's all bound up with consciousness... with consciousness comes selfconsciousness, comes shame, comes embarrassment, comes all these things, which are very difficult to deal with" (4). Williams chose to 'praise' Pullman's trilogy (not to bury him) and claimed to be encouraged by the large school parties present in the audience at the National Theatre's adaptation of HDM. He did, however, add the proviso that he hoped the teachers were equipped to tease out the fantasy aspects of Pullman's world that did not reflect Christian teachings.

The Genesis Creation and Fall narrative is very profound though recorded in the style of a folk tale. The fall from grace is not simply a normal stage of growth and learning, it has the status of a cosmic event. A careful reading shows that the single prohibition is not a tyrannical restriction on adolescent learning, or a ban on tasting all the other Edenic delights. It is a safeguard to the couple's wellbeing and autonomy as potentially dual citizens of Earth and Heaven, but Genesis shows the Tempter sowing seeds of doubt in their minds about divine integrity: "Did God really say?" (NIV Gen.3.1). Pullman wants 'the Fall' to be all about adolescence and sexuality. But the Biblical Adam and Eve are pristine creations, **not** children; they are fully and consciously adult. With their freedom comes the opportunity for wrong choices. In The Problem of Pain Lewis analyses the nature of their act of disobedience as an impulse to have some corner of the universe outside the will of God: "They wanted to be nouns, but they were, and eternally must be, mere adjectives" (62). In Pullman's The Amber Spy Glass, temptation comes through Mary's encouragement of Will and Lyra to progress to a sexual relationship. In interview, Pullman explains: "when it happens they both understand what's going on and are tempted...but it's a fall into grace, towards wisdom, not something that leads to sin, death,

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misery, hell—and Christianity" (Spanner 8). This bitter précis is a travesty of the Gospels and the Biblical account of origins. Lewis saw the Genesis 'Fall' as a regression from humanity back to animalism, the "only satisfactory explanation" of the problem of evil in the universe: "Evil begins ...from free will, which was permitted because it makes possible the greatest good of all. The corruption of the first sinner consists not in choosing some evil thing (there are no evil things for him to choose) but in preferring a lesser good (himself) before a greater (God)" (CLII 585). This perspective is foundational to Lewis's principle of 'first and second things' and is consistent with his reading of history, and current evidence of corruption, abuses of power and degenerate behaviour in apparently civilised, progressive and technically advanced societies. Pullman's approach to the whole issue is found in interview with Parsons and Nicholson (1999) in which he sees the Fall as the best and most important thing that ever happened because disobedience is "essential" to maturity. Even more radically (in a tongue-in-cheek swipe at Roman Catholicism) he proclaims that "if we had our heads straight on the issue, we would have churches dedicated to Eve instead of the Virgin Mary" (119).

Biblical personifications variously identify Satan as a serpent, the father of lies, the tempter of Christ in the wilderness, the accuser of the brethren, a predatory lion, a beast and a dragon. The Apostle John calls him "the prince of this world" (John 16. 11). The Apostle Paul identifies him as "the prince of the power of the air", a ruler of darkness who appears as "an angel of light" (Eph. 2.2). These characteristic traits are present in various characters drawn by Pullman and Lewis, but neither author creates a single embodiment of evil. Pullman deconstructs the traditional Satan, perceiving the Tempter as a positive agent of progress rather than a spoiler. It is Pullman's religious 'Authority' figurehead who has pretensions to deity. Pullman believes no true deity exists and is angry that the concept continues to be propped up by self-interested clergy. In Northern Lights he features an unprincipled experiment station run by the General Oblation Board (the Gobblers) where the researchers are referred to as 'experimental theologians' rather than scientists. It is called Bolvangar, meaning "fields of evil" (NL186); the home of the silver guillotine. Bolvangar parallels Lewis's locus of evil at Belbury in That Hideous Strength, where members of the National Institute of Controlled Experiments imprison and sacrifice people and animals for experimental purposes. Its satirical acronym N.I.C.E. alludes to evil's ability to appear as an 'angel of light'. Pullman represents religion as evil. The corrupt 'Authority' and his treacherous regent, the Metatron resemble Lewis's false god Tash and his agent the ape (a type of anti-Christ figure) in The Last Battle. Narnia has no locus of

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evil, no religious institution, no priests, doctrine, or ecclesiastical imagery. But a spirit of evil is found in the predatory witch Jadis and in Caspian's murderous uncle Miraz. The Lady of the Green Kirtle in *The Silver Chair* actually transforms into a serpent.

Lewis sees the concepts of good and evil, heaven and hell as binaries, and in the preface to The Great Divorce, claims there can be no marriage between them: "Evil can be undone, but it cannot 'develop' into good" (viii). Some of his human characters in Narnia (such as Uncle Andrew, Edmund and Eustace) undergo a transformation of character. Eustace actually improves after turning into a dragon and experiences a dramatic peeling off of his scales. Pullman's treatment is more subversive, treating 'good' and 'bad' interchangeably. He blurs the boundaries, particularly in the case of Lyra's biological parents. Marissa Coulter and Lord Asriel have a fiery and erotic relationship, and the almost sadomasochistic wrestle between the two parents and their dæmons looked to Lyra, "more like cruelty than love" (NL393). Asriel is a brave commander, "haughty and imperious" (360), a ruthless political figure resembling Milton's devil in his energetic swoops through space. He flouts convention, and dares to "make war on the creator" (SK 286). His antipathy goes beyond confronting false religion; his hatred for Christian symbols is observed and made plain in The Subtle Knife: "I've seen a spasm of disgust cross his face when they talk of the sacraments, and atonement, and redemption" (SK 47). Asriel's character could serve as a type of alter-ego for Pullman whose own public renunciation of Christian roots is boldly re-iterated by Asriel: "We've gone beyond being *allowed*, as if we were children. I've made it possible for anyone to cross if they wish...This will mean the end of the Church" (NL 392). Mrs Coulter resembles Lewis's witch Jadis in beauty, seduction, and ambition for power. She is chillingly cruel and controlling, "charged with some kind of anbaric force. She even smelled different: a hot smell like heated metal came off her body" (NL 92). She is a neglectful mother, and her protestations of love and concern for her daughter sound hollow. Asriel's summation of her is that "she lied in the marrow of her bones" (AS 218). This dysfunctional family could be a parody of the holy family or even the trinity. But in the last book, Marissa confesses to being "corrupt and full of wickedness" (AS 426); a repentance shown to be genuine because she and Asriel sacrifice their lives to bring about Lyra's destiny, transforming them from sinners into saviours of the universe.

Pullman's fictional toying with good and evil is clarified in the public domain, but his responses to questions can be as enigmatic as the behaviour of his protagonists, varying in

response to particular interviewers. In the Spanner interview, he describes Mary Malone as his "Satan figure" (8). She is told by the shadow particles that she must "play the role of the serpent" to Lyra's Eve (SK 261). But as Pullman notes in a Scholastic Book Club Interview, his fantasy tempter "is not an evil being prompted by malice and envy, but a figure who might stand for Wisdom" (2). Mary demonstrates her 'wisdom' by renouncing her religious vows and flinging her crucifix into the sea. Her irreligious epiphany is summed up in this way: "I came to believe that good and evil are names for what people do, not for what they are" (AS 471). Ironically, this idea is consistent with Christian theology, as illustrated in Jesus' rebuke to Peter when the disciple tries to deflect him from his appointed sacrificial path: "get thee behind me Satan" (Mark 8.33). Peter was not 'evil'; only unknowingly playing into the hands of God's supernatural adversary. In conversation with Robert K. Elder, Pullman admits to having once undermined his atheistic premise by saying: "I can't get rid of God. I don't believe in him, but he won't leave me alone" (Elder 1-2). The words recall Mircea Eliade's claim (cited in Chapter 2) that contemporary non-religious man continues to be haunted by the realities he denies. On another occasion Pullman concedes that the Christian gospel is a very good story that gives an account of the world and is "intellectually coherent" (Spanner 3). He claims to have a very relativist view as to whether he is atheist or agnostic: "I am both...within this tiny circle of light I'm a convinced atheist; but when I step back I can see that the totality of what I know is very small compared to the totality of what I don't know" (6). The ambivalent nature of his comments is reflected in his fictional experimentation with uncertainties. The conspicuous behaviour swings in characters can strain credulity. Even the character Lee Scoresby is confused: "would someone mind telling me whose side I'm on in this invisible war" (NL 309). His plea regarding the "invisible" nature of the conflict suggests a spiritual dimension.

7.2. Many Worlds

Lewis's Narnia stories were penned before multiverse theory had entered popular consciousness, but he appropriates the imaginative power of cosmic models to depict the existence and exploration of unknown supernatural dimensions. Pullman refers to the theory directly, in *The Subtle Knife* (1998), through the voice of Carlo: "the many-worlds hypothesis—Everett, you remember, 1957 or thereabouts; I believe you're on the track of something that could take that theory a good deal further" (253). In *God and the New*

Physics, scientist Paul Davies writes: "one may find it easier to believe in an infinite array of universes than in an infinite Deity, but such a belief must rest on faith rather than observation" (174). Research into the enigma of particle physics and the possibility of multiple worlds poses no threat to a Christian worldview but, in the trilogy, Pullman suggests otherwise. His fictional church figures persecute a man for positing the idea of "seven or eight other dimensions" (AS 415). Scripture puts no restrictions on cosmic dimensions or the heavenly realms. In fact the apostle Paul tells of a unique experience: "whether it was in the body or out of the body I do not know, God knows...such a one was caught up to the third heaven" (2 Cor. 12.2). Theology allows for material and spiritual dimensions. Pullman has said in interview: "I have the greatest difficulty in understanding what is meant by the words 'spiritual' or 'spirituality'" (Miller 2). He clarifies his thinking in "The Republic of Heaven": "if the republic of heaven exists at all, it exists nowhere but on earth, in the physical universe we know, not in some gaseous realm far away" (3). Pullman parodies Biblical texts; his false 'Authority' hides within a cloud-covered mobile citadel, which glows and tremors, inspiring fear and awe (AS 416). The imagery alludes to the cloud on the peak of Mount Sinai in the Old Testament, the location for the giving of the Ten Commandments to Moses. In Judaism, the Creator is referred to only by the Tetragrammaton YHWH, his name is unspoken in deference to Deity's transcendent holiness. Similarly, Pullman's false 'God' figure is known only by the impersonal: 'the Authority'. This fictitious title is mixed with authentic Biblical terms: "God, the Creator, the Lord, Yahweh, El, Adonai, the King, the Father, the Almighty", which Pullman's angel Balthamos claims are "all names he gave himself" (AS 33); the inference being that the terms borrowed from scripture are equally bogus.

The Hebrew prophet Daniel refers to God as "the Ancient of Days" in acknowledgement of His immortal nature. Pullman lampoons this idea by referring to his 'Authority' as 'the ancient of days', but depicting him as decrepit and degenerate figure, carried around in a crystal litter. The image is a profane version of the transportable Ark of the Covenant, the symbolic vehicle for God's presence on earth under the old Covenant. Pullman's unholy monarch is a "rotten hulk", weeping and mumbling in "fear and pain and misery" (AS 431). Mrs. Coulter suggests that "the truest proof of our love for God, [is] to seek him out and give him the gift of death" (345). This is a sacrilegious reversal of God's gift of eternal life to humanity in the Gospels. Pullman's blasphemous death-scene is a mix of sugar-coated, self-justifying language and wishful thinking: "Oh, Will, he's still alive! But—the poor thing...to their dismay his form began to loosen and dissolve. Only a few

moments later he had vanished completely, and their last impression was of those eyes blinking in wonder, and a sigh of most profound and exhausted relief" (AS 431-2). In interview, Pullman justifies this fictional euthanasia by explaining that the 'God' he destroys is "an ancient IDEA of God, kept alive artificially by those who benefit from his continued existence" (Frost 11). But this is a moot point because Pullman allows no transcendent reality, and his sacrilegious fantasy is a precursor to Richard Dawkins' later book, *The God Delusion*, a book personally endorsed by Pullman as one he would like to see on the bookshelves of every school library.

Pullman promotes his 'republic of heaven' as a symbol of autonomy by portraying the "kingdom of heaven" as repressive and toxic. The Biblical term, used metaphorically and variously by Jesus, refers to the blessings associated with divine rule, and freedom from enslavement to selfishness. Jesus teaches that the "The kingdom of God is within you" (Luke 17.21), and in John's gospel (18.36) he is quoted as saying "My kingdom is not of this world". Pullman's heavenly republic owns no greater mind or consciousness. In the fantasy narratives, anti-religious propaganda is widely disseminated through dialogue and gossip among the witches. Will's father voices his hatred of all Church officials: "We've had nothing but lies and propaganda and cruelty and deceit for all the thousands of years of human history" (SK 334). Rebel angel Xaphania claims that human history is a struggle between "wisdom and stupidity" (AS 506), equating 'wisdom' with atheism and 'stupidity' with religious faith. Ruta Skadi, (former lover of Lord Asriel) spreads the same slander:

"I know whom we must fight...the church. For all its history...it's tried to suppress and control every natural impulse...There are churches...that cut their children too...they cut their sexual organs...with knives so that they shan't feel. That is what the church does, and every church is the same: control, destroy, obliterate every good feeling" (SK 52).

This authoritative statement is particularly libellous because the horrible ritual described has no parallel in Christianity. Neither do Ruta's words relate to the male circumcision practiced in Judaism, or in other cultures where it is done for health and hygiene reasons, never to "control" or destroy "good feeling". The language is more suggestive of genital mutilation of young girls; a type of circumcision practised by some Islamic peoples to deny sexual pleasure, but has no relevance to the plot of HDM, or to Pullman's fictional "intercision" (done in the cause of scientific progress by the silver guillotine). Ruta's allegation that "every church is the same" seems to have no purpose other than to insinuate a lie by planting a seed of presumed guilt. The narrative does nothing to dispel the

impression that the "cutting" is historical fact, and the veil of fiction lets it go unchallenged.

Pullman's trilogy demonises not only Roman Catholicism but Calvinism and everything in between. Both doctrinal extremes are combined in his reference to a "Pope John Calvin." Other name choices are meaningful and sometimes satirical. 'Asriel' is an anagram for Israel and the kindly Gyptians are one letter short of the Egyptians, traditional enemies of Israel. The apostate nun turned research scientist, 'Mary Malone', has a name that announces her Irish Catholic roots and links her to three prominent women in the New Testament: Mary the biological mother of Jesus, Mary of Bethany, a devotee of Jesus' teaching, and Mary Magdalene, a woman healed by Jesus. She later witnessed the crucifixion and was the first person to meet the resurrected Jesus. In some sense, the personality and role of Mary Malone reflects aspects of all three Marys. Shelley King sees Pullman's fictional names as a reflection of the "complex intertextuality of the novels" (King 106). She associates the name Asriel with Azrael, "the archangel of Islamic lore" (111) and notes that Marissa's surname 'Coulter' is also a medieval cutting instrument, "the vertical blade segment of a plow" (111). Pullman has personally associated the name of his heroine Lyra with the meaning 'liar', but it is also aptly the name of a constellation. King points out that 'Lyra' also relates to the late-medieval textual scholar Nicholas of Lyra, of whom Martin Luther said: "Without Lyra we would neither understand the New or the Old Testament" (106). The analogy may be unintentional but is ironic because, without the fictional Lyra's story, we would not understand the scope of Pullman's antitheistic agenda.

7.3. Parallels and Fantasy Literature

Pullman's animosity to the Narniad invites detailed examination because there are so many parallels in *His Dark Materials*. Both authors feature universal themes drawn from science, philosophy, and literature. Pullman's naturalistic alternative puts more emphasis on the science and offers a relativist agenda regarding absolutes. But both narratives feature moral, physical and emotional challenges: absent fathers, sick mothers, danger, violence, sacrifice and death. Both authors dramatize the consequences of life choices, the fight against enslavement, fear and superstition. Their protagonists are typically flawed beings who access other worlds and confront evil. They learn about integrity, concern for others

and the natural environment. Both authors feature rightful kings in exile and usurpers. Aslan's rule in Narnia is usurped during his absence by the white witch and Prince Caspian is exiled after his uncle Miraz kills the rightful king and usurps the throne. In Pullman's trilogy, the armoured bear lofur Raknison usurps the throne of lorek Byrnison, the exiled king of Svalbard. Iorek is endowed with some of the characteristics and experiences of Lewis's regal lion. Like Aslan, he is said to possess "brutal power...controlled by intelligence" (NL179). More significantly, like the Christological lion, Iorek is shamed and stripped at one point and the virtuous terms "pure and certain and absolute," are applied to him (NL 343). He regains his kingdom in an extremely gory contest, but Pullman subverts the 'good' image, revealing the likeable bear to be a "a dangerous rogue" (NL 189), guilty of murder in a brawl.

The bear's kingdom of Svalbard is located in the frozen North of Lyra's world, near the Arctic Ocean, but Lewis's frozen scenery in Narnia is used to represent the evil presence of the white witch Jadis, who usurps the title of Queen of Narnia. The imagery recalls the mythical cycle of seasons and the blighting of the goddess Demeter's everlasting summer by Hades, the god of the underworld who abducts her daughter Persephone. Perpetual winter reigns in Narnia until the return of Aslan initiates a gradual thaw and the promise of a cosmic summer. Pullman also features a big thaw when Asriel breaks through the skies above Svalbard. The blast melts the arctic ice and causes great floods and significant climate change: "It was as if the earth itself, the permafrost, were slowly awakening from a long dream of being frozen" (SK 45). Naomi Wood comments on the intertextuality and fascination with "'high' fantasies that draw on the Classical, Norse, and English myths and romances of the Western tradition" (238). But, in "Quest Fantasies", W.A. Senior notes that "Pullman avoids the staples of much of that genre... there are none of the conventional dragons, dwarves, elves or wizards" and no entry into "a magical land where time runs differently" (Senior 196).

Pullman's trilogy transcends the usual objectives of a children's fantasy and his exploration of speculative ideas about origins and future technology fit the science fiction genre. In "Modern Children's Fantasy", Catherine Butler claims that Pullman has "been engaged in a *literary* rebellion against fantasy fiction itself" (231), and notes that he "aspires to far more than entertainment" (232). In interview with Parsons and Nicholson (1999), Pullman eschews being cast as a fantasy writer (131), and in a Scholastic Book Club interview, describes his approach to dramatizing life's big themes as "stark realism"

rather than fantasy. His only interest in fantasy writing is "the freedom to invent imagery such as the daemon...to say something truthful and realistic about human nature" (2). Dæmons are Pullman's creative pièce de résistance. One obvious source is Socrates' idea of a daimon, meaning a conscience or inner voice, but another source mentioned by Pullman is the old idea of a "guardian angel" (Frost 266). Pullman's dæmons are external and mostly visible animal forms attached to all individuals, reversing the Christian concept of an individual's inner and invisible immortal spirit. Pullman's dæmons are essential to the development of character and maturity but are changeable only until puberty. Catherine Butler argues that while Pullman purports to bring freedom from "ideological repression", his version of puberty as a "life-defining event" fixes one's daemon irreversibly, so is a highly restricted vision of the human potential for growth and self-determination"(232). Butler also suggests that: "There are other indications, too, that Pullman's rebellion is not as wholesale as might first appear. In particular, the conclusion of his story is still in thrall to a moral and aesthetic vision that defines satisfying artistic closure in terms of selfsacrifice and self-denial..." (232). Carole Scott also notes that although HDM undergoes an "imaginative reconstruction", Pullman "continues to employ Christianity's humanistic ethics, traditions, and values" (Scott 96). He has admitted as much, but still does his utmost to undermine the Christian faith. In interview he says, "I'm an atheist who has a good deal of Christian in him" (Elder 1-2). Laura Miller's article "Far From Narnia" (2005) covers Pullman's Norwich lecture on the subject of religion and education, in which he states that "we can learn what's good and what's bad, what's generous and unselfish, what's cruel and mean, from fiction" (Miller 2). Pullman enlarges on this point with reference to the moral lessons enacted in Shakespeare's Macbeth and Jane Austen's Emma. However, he ignores the Christian roots and culture of these authors, their familiarity with Biblical stories, the internalised precepts and principles. Pullman does not discuss how these ethical standards might originate, how they are learned and imitated, or how one deals with the consequences when they are freely rejected.

Though Christian themes are one of Lewis's sources for the Narnia stories, he aims to show ethical values by avoiding dry theology, appealing instead to the senses and the imagination. He argues in AOM, that a basic moral code (the Tao) exists universally in every individual because it is written into the hearts and minds of the human race by a just and moral Creator. As Doris T. Myers notes, the Narnia Chronicles are more about "the modelling of moral and emotional attitudes" than explaining cognitive concepts (Myers xii-xiii). Lewis's worldview is about embracing the 'right' and the 'good', and his ultimate vision is a celebration of love and joy-the antithesis of the "life-hating" philosophy of which Pullman accuses him. Lewis claimed to write the kind of books he enjoyed reading and this is true also of Pullman: "it seems to me that the children's books I love are saying something important about the most important subject I know, which is the death of God and its consequences" (TRH 1). He believes that consciousness alone makes one responsible and brings meaning to our existence (Spanner 6). It seems Pullman wants the best of both worlds-a beautiful and moral universe without a designer or a law giver. When challenged by Spanner about the strong sense of 'ought' and sense of duty in HDM, Pullman claims that it evolves from "human decency" and "accumulated human wisdom". In that "accumulated wisdom", Pullman includes the "moral genius" of Jesus and goes so far as to say that if we all lived by his teaching, "we'd all do much better. What a pity the Church doesn't listen to him" (Spanner 7). The comment sounds disingenuous in the light of Pullman's later book, The Good Man Jesus and the Scoundrel Christ (2010). The book was conceived after his 2004 debate in which Rowan Williams queried why Pullman had not dealt with Jesus in His Dark Materials. The question is fair comment because the trilogy casts the Judeo-Christian faith, clerics and religious institutions in the worst possible light but ignores the founder. Any doubts about Pullman's attitude to the Incarnate Jesus are dispelled by his literary response; a frivolous and sacrilegious portrayal of the Jesus of the Gospels as a type of split personality with the human Jesus as 'good' and the divine Jesus as 'bad'. One is tempted to ask why anyone impressed by Pullman's fictional assassinations of both the Church and the New Testament Jesus would ever bother reading about his life and teachings, far less 'listening to him'.

In HDM, 'Dust' and consciousness are the source of life and moral wisdom. The leakage of dust from the world appears to be Pullman's equivalent to the theological problem of human sin. The leakage of dust into the abyss and the release of Spectres are alleviated by ethical behaviour. Xaphania credits humans and angels with the responsibility of dispensing wisdom—showing "how to be kind instead of cruel, patient instead of hasty, cheerful instead of surly, and above all how to keep their minds open and free and curious" (AS 520). Pullman's various characters demonstrate behaviour in accord with traditional Christian values. Lyra receives little filial affection or nurture from Lord Asriel or Mrs. Coulter , but finds care and security through her surrogate family in Jordan College: "who had been around her all her life, taught her, chastised her, consoled her, given her presents" (NL 19). The traditional approach to child rearing is also present in the Gyptian culture, where "children are precious and extravagantly loved" (NL 56). In the last novel, the

heroic couple Will and Lyra are depicted as role models, "the true image of what human beings always could be" (AS. 497). Pullman toys with the concepts of good and evil, but attempts to secure the moral high ground by employing the value-laden terms 'right' and 'good' for his republican model: "we are part of everything that's right and good. It's a sense that we're connected to the universe" (TRH 1). But as sociobiologist E.O. Wilson concedes in *On Human Nature*: "The spiritual weakness of scientific naturalism is due to the fact that it has no primal source of power" (192).

7.4. Once Upon a Time

David Gooderham has described children's fantasy as a "metaphorical mode" (Gooderman 173), and observes that the ideology of the author can be particularly influential in children's literature because the power relationship is already implicit in the form. Natasha Giardina examines the adult power relationship in her thesis, "To Steal Past Watchful Dragons: Cultural Hegemony and Ideological Transmission in Children's Fantasy Literature". Her selection of authors includes C. S. Lewis and Philip Pullman, and she claims that "Lewis is the first author in the study to admit using layered ideologies" (148). Lewis writes of the power relationship in children's fantasy in the essays: "On Three Ways of Writing for Children" and "Sometimes Fairy Stories May Say Best What's to be Said." Giardina's thesis title, "To Steal Past Watchful Dragons" is an expression borrowed from Lewis's latter essay which relates to his childhood experience when Bible stories were told in a manner which 'obliged' him to have a certain response to God but had the opposite effect of "freezing feeling" (73). Lewis's "dragons" represent these "inhibitions" and he realised that the "real potency" of the stories could be better transmitted through a fantasy genre. Pullman, too, echoes this truism in a press comment cited in "Far From Narnia" (2005): "Thou shalt not' might reach the head, but it takes 'once upon a time' to reach the heart" (Laura Miller 1). In the Spanner interview, Pullman stresses that 'the story' is central when writing for a largely child audience, and shares his experience of being able to "say things more wisely and profoundly" when he does not have to be "self-conscious ...postmodern... tricksy and self-referential" (Spanner 9). The fantasy genre allows authors to express feelings and beliefs more honestly. Pullman's protagonists reject subordination to authority and enact the type of moral freedom he so values. In the Narniad, Lewis's children wrestle with the trials and adventures of life which impact on their ethical and spiritual journey. In the "Three Ways of Writing" essay, Lewis claims that

his fantasies never began with a didactic aim; he puts in what he would like to have read as a child (OTOW 56). He considers it "impertinent" to spell out a moral, and prefers to "let the pictures tell you their own moral...For we have been told on high authority that in the moral sphere they [children] are probably at least as wise as we" (69).This "high authority" refers to the counsel of Jesus who welcomed the company and input of children: "for of such is the kingdom of heaven" (Matt.19.14).

Pullman and Lewis use settings related to specific periods in history. Radio Journalist Justin Phillips claims that Lewis's "most convincing books" about evil, pain and the devil are written at the time when Britain "was taking its biggest battering and was most at risk of enemy invasion" (Phillips 64). His stories reflect personal experience of two world wars, the horror of the London blitz and the evacuation of children to country areas. Lewis had young evacuees in his home at some stage, an event enacted by the Pevensie children in The Lion, the Witch and the Wardrobe. Lewis was also confronting the secular philosophies transforming British culture at the time. His mid-twentieth-century protagonists travel through time and become medieval-style crusaders, armed with oldworld weaponry, fighting for justice, liberty and the values of the chivalric code. But in Narnia the brutal tactics of the invading forces have much in common with the WWII reality of the Nazi-style secret police. Pullman was born after the defeat of Hitler and his generation experienced the Cold War, the increase of secularism, consumerism and materialism. But rather than relating to Communist atrocities or contemporary social problems, his protagonists use modern science and technology to defeat a fictitious, ancient religious tyranny. As W.A. Senior notes: "The church within Lyra's world has regressed to a medieval state, including a branch which recalls the Inquisition" (196). Pullman's settings do not reflect his personal experience because in the "Heat and Dust" interview, he concedes that the corrupt and oppressive Church of his fantasy is not the church in which he grew up. He speaks of his clergyman grandfather as a good and loving man who told Bible stories and spoke of a God who loves us but does not force us to come to him: "he waits until we're ready to come to him". Pullman even speaks fondly of youthful exposure to the Authorised Version of the Bible, the Book of Common Prayer and Hymns Ancient and Modern: "those old forms of worship that had given comfort and joy to generations" (Spanner 1-2). The comments indicate that his anti-theistic position does not emanate from a negative experience of exposure to Christian culture. Unlike Dawkins, he does not appear to equate a religious upbringing with "child abuse". His secular zeal seems to flow more from his conviction that Science is now absolute and must somehow supplant any concept of a sovereign and supernatural Creator.

Laurie Frost's wonderfully comprehensive guide to HDM is personally endorsed in the Foreword by Pullman: "I can't recommend it too highly." Professor of English Douglas Haneline describes it as "clearly a labour of love" (1). The study gives detailed information on all aspects of real and invented locations, multiple sources, characters, names, technical language, and allusions. But there is no mention of Lewis or the influence of the Narniad. HDM contains no overt reference to Narnia but, as Michael Ward so eloquently puts it in his article "C.S. Lewis and Philip Pullman", Lyra's hiding in a wardrobe, is an echo of Lewis's Lucy, "so loud you would think it an act of literary homage" (Ward 1). The anti-Judeo-Christian tenor of HDM is inescapable, and the trilogy appears to be an under-cover engagement with Lewis and his worldview. In the "Heat and Dust" interview with Pullman, Spanner raises the point that some media commentators have suggested that his trilogy is an antidote to C.S. Lewis, a claim Pullman dismisses as "largely nonsense" (3). But other critics have made similar observations. In Phillip Pullman, Master Storyteller (2006), Claire Squires claims that "the Chronicles are a clear source of intertextual material for His Dark Materials, and Pullman's commentary upon them in the media has only served to draw attention to this link" (Squires 131). In the article "Pullman does for atheism what C.S. Lewis did for God", Andrew Marr claims that Pullman has set Lewis up "as his enemy and opposite...creating a parallel world whose creation myth, neardestruction and eventual salvation echoes in almost every respect the Christian story" (Marr 1). Edward James suggests that Pullman's "distaste" for Lewis was inspirational to his whole sequence and particularly to the death of God in the third novel (James 72). Naomi Wood, in her "Paradise Lost and Found" article, remarks on the "deep connection" between the authors, citing Pullman's "seemingly deliberate rewriting of crucial moments and characters in Lewis's fiction" (250). Her most incisive and succinct observation is that Lewis upholds Christian themes and values by "creating a world in which Christianity does not exist" while Pullman "creates a Christianity without Christ" (Wood 239).

Pullman's republican cosmos has no divine presence but draws on Biblical themes and imagery. The multifaceted child Lyra has both origins and destiny identifying her as both messiah and earth mother. The following passage relies on witchcraft rather than a prophetic word of knowledge, but links Lyra to the infant Jesus: "The witches have talked about this child for centuries past...who has a great destiny that can only be fulfilled

elsewhere—not in this world, but far beyond. Without this child we shall all die" (NL 175). Lyra's birth, though not virgin, is shrouded in mystery. It is through the witch clan that Mrs Coulter learns that Lyra's true name is 'Eve' (Lewis's Lucy is addressed as 'Daughter of Eve' by Mr. Tumnus). Lyra is discussed by the witches as "that sleeping child: the final weapon in the war against the Authority" (SK 287). These rumours cause the Magisterium to fear another 'Fall' and they seek to kill her. The scenario recalls the New Testament account of King Herod's reaction to astrological predictions concerning the birth of a future king. Herod's vain attempt to exterminate the prophesied rival king leads to 'the slaughter of infants' (Matt. 2.16-18). Lyra is portrayed as a type of unholy messiah but she also serves as an antidote to Lewis's Lucy. Lyra is "a coarse, greedy little savage (NL 37), the opposite of the truthful and spiritually aware Lucy. Both are intuitive, curious, adventurous and courageous, but Lyra enjoys mischief, smokes and over-indulges in alcohol. Yet, in some ways Lyra is a fusion of several of Lewis's other girl characters. Jill, in The Silver Chair, feels the urge to "show off" when approaching the cliff edge. She recklessly spurns the warnings and help offered by Eustace, causing both to go into freefall until 'blown' to safety by the breath of Aslan (554-555). Pullman repeats this action in The Amber Spyglass. While rescuing Roger from the world of the dead, Lyra feels the urge to show off her climbing skills: "a little flicker of vanity blazed up in her heart" (378). She falls into the abyss but is rescued by a harpy. Lyra also exhibits behaviours remarkably like those of Lewis's Aravis in the third chronicle, The Horse and His Boy. In the exotic environment of Calormen, Aravis is feisty, independent and adept at lying. She steals her brother's armour as disguise to escape a forced marriage to an old man. Her elaborate plan of deception involves faking a letter, tricking her maid, drugging her and plying her with alcohol. Aravis's escapades involve only issues of personal freedom, but Lyra's actions are of cosmic importance, in line with Biblical eschatology.

Gossip among the witches identifies Lyra as a future saviour but the alethiometer predicts that "she will be the betrayer and the experience will be terrible" (NL 33). Pullman may be deliberately juggling the roles of Judas and Jesus here. Lyra does betray Roger unintentionally but the outcome adheres to the Biblical 'script' of death and sacrifice. Readers are later told that Lyra is "destined to bring about the end of destiny" (NL 308). The phrase embodies a contradiction but is consistent with Pullman's problem with the binaries of 'free will' and 'predestination'. In the trilogy, he allows his heroine to make mistakes, untrammelled by fears of a determinism which ends in "despair and death"(308); otherwise, "The universes will all become nothing more than interlocking machines, blind

and empty of thought, feeling and life" (308). Ironically, this depressing description actually conforms to Dawkins' naturalistic image of a universe of 'blind and pitiless indifference'. Though Lyra is a free spirit, she bravely faces up to the prospect of death: "if I have to die to do what's proper, then I will, and be happy while I do" (AS 281). The language echoes the Gethsemane prayer of Jesus: "My Father, if it be possible, let this cup pass from me: nevertheless, not as I will, but as thou wilt" (Matt. 26. 39). Sacrifice features strongly in HDM. Roger is killed along with other children in the cause of scientific research and Lee Scorseby dies trying to save the life of Will's father. The "sole purpose" of Asriel's republican agenda becomes the quest to save Will and Lyra: "the future of every conscious being" depends on them. In the final novel, Lyra's parents are sacrificed in dragging the evil Metatron into the abyss (The Amber Spyglass 397). In Lewis's first published chronicle, Aslan's sacrifice confirms him as a type of Christ-figure. This theme is also prominent in Lewis's sci-fi novel Perelandra, in which the scientist Dr. Ransom risks his life to save a pristine planet and carries a weeping wound as a result. The name Ransom relates to the Biblical Christ who dies "as a ransom for many" (Mark 10.45). These events are recycled by Pullman in HDM. The subtle knife is the 'ransom' demanded by Latrom for the return of the stolen alethiometer. More significantly, Will is permanently scarred by the loss of two fingers as he fights to keep possession of the subtle knife and, like Lewis's Ransom, carries a weeping wound: "I keep losing blood...And it's bleeding again, and it won't stop" (SK 278). Pullman has claimed to "loathe" both Lewis's "socalled space trilogy" and his Narnia stories (Spanner 5), but he purloins the name 'Ransom' as an alias for both Lyra and Will in their quest to communicate with dust (SK 70). These and other pointed references, along with his earlier placing of a wardrobe as a hiding place for Lyra in Northern Lights, indicate how much of HDM is written with Lewis's texts in mind.

7.5. Dark Side

Pullman's article, "The Dark Side of Narnia" (1998) reveals **his** dark side. He accuses Lewis of "cheating" and labels stories enjoyed by numerous distinguished and ordinary readers as "ugly and poisonous" or "nauseating drivel" (2). He begins by expressing outrage over the centenary celebrations of Lewis's birth and the enduring popularity of his work. Lewis's writings have not been universally acclaimed even in Christendom but Pullman's invective is directed at both the texts and the author. This appears to be a classic

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case of 'the anxiety of influence' as described by Harold Bloom in his work of the same name. Bloom speaks of a poet's drive to imitate, misread or even disparage his precursor in order to create "imaginative space" for himself (Bloom 5). Burton Hatlen proposes that: "rather than simply rejecting Lewis as a model, Pullman has...offered a kind of inverted homage to his predecessor, deliberately composing a kind of "anti-Narnia", a secular humanist alternative to Lewis's Christian fantasy" (Hatlen 82). Pullman's impulse to both imitate and denigrate Lewis reveals the complexity of his intellectual and emotional response to Lewis as a writer and a Christian. Pullman first read the Chronicles as an adult and repeats terms used by American critic John Goldthwaite (1996), in accusing Lewis of "misogyny, racism and sado-masochistic relish" ("Dark Side of Narnia"2). Pullman's 'snarl words' appear to be a smoke screen to deflect attention from his ideological bias. In "The Republic of Heaven" he refers to the author of Narnia as a "paranoid bigot," misreading the Chronicles as if they were allegories, and misunderstanding Lewis's concept of 'first and second things'. Lewis's children only fight against stock symbols of evil, tyranny, cruelty, slavery, greed, falsehood and self-interest. Like Pullman's protagonists they have typical squabbles, make unwise decisions and learn lessons, but the emphasis is upon reform, forgiveness and maturation. Yet Pullman denigrates the Narnia Chronicles as "an invaluable guide to what is wrong and cruel and selfish" (TRH 3).

Peter Hitchens (a sibling of Christopher) sees a political agenda in Pullman's aggression. In his 2003 article "A Labour of Loathing", Hitchens sees Narnia as a country under attack from the 'liberal intelligentsia,' and uses equally strong language to describe "the worship of Philip Pullman, who has set out to destroy Narnia" (1). Hitchens claims that the cultural elite see Lewis's work as "a pocket of resistance" to be put down: "They have successfully expelled God from the schools, from the broadcast media and, for the most part, from the Church itself. They would much rather He [God] was not sitting on the bookshelves of their offspring. Philip Pullman allows them to remove Him, and replace the Lion, the Witch and the Wardrobe with Pullman's very different country of the mind." (2) As various scholars have noted, Pullman's derogatory remarks appear unjust and irrational. In interview with Laura Miller, he claims that Lewis evinces "full-blooded hatred" toward the transition to adulthood (Miller 11). The charge appears ridiculous, especially in the light of Lewis's comments on the importance of children's games which are enactments and preparations for adult reality: "They are hardening their muscles and sharpening their wits, so the pretence of being grown-up helps them to grow up in earnest" (MC 158-90. Malcolm Guite's article "Growing up with C.S. Lewis (And Staying Young With Jack)"

addresses the issue of maturity, reminding readers of the "great paradox at the heart of Christianity...that Christians are called to be both child-like and mature"(1). He cites Mark 10.15 in which Jesus tells followers they must become "like little children" to enter the kingdom of God, and Ephesians 4.14-15, where church members are counselled by Paul that they must no longer be "tossed around like children". Guite situates this "double command" at the centre of Lewis's vision and suggests that a reading of Lewis's oeuvre helps to illuminate his understanding of the teaching. He rebuts Pullman's charge that Lewis is preaching an infantilising religion by refusing to allow his characters to grow up; "the Narnia stories are in fact a profound and subtle exploration of what it means to grow up, of how we find true maturity without abandoning or despising the gifts and insights of our childhood" (1).

In "On Power", Judith Wolfe suggests that Pullman is manipulating what he terms as Lewis's "life-hating ideology" into a foil for His Dark Materials (CC 175). She dismisses the racism charge, pointing out that the threat to Narnia from the dark race of Calormenes is only "literary Orientalism; suitable to the romance genre in which Lewis is writing rather than a political or anthropological view" (CC 179). Her common-sense reading seems much more in harmony with Lewis's own worldview as expressed in his non-fiction writings. Michael Ward refutes the 'racism' charge in his essay "C.S. Lewis and Philip Pullman" (2003): "Lewis is at pains to point out that dark-skinned characters are perfectly capable of goodness and conversely, that light-skinned characters are perfectly capable of evil. It is not the colour of your skin that determines our moral standing in Narnia, it is the content of your character" (3). Lewis's character Emeth, a Calormene, is introduced in The *Last Battle*, and plays a helpful role in exploring the inclusive nature of Lewisian theology. When Emeth comes face to face with the beauty and sublime power of Aslan, he becomes conscious of his own mistaken loyalty to Tash who falsely claimed to be the "Glorious One". Aslan discerns that Emeth is a genuine seeker after truth, and welcomes him like a prodigal son, totally absolving his guilt. In the words of Jesus, Aslan accredits the good things done during Emeth's life as "service done to me" (CN 757).

As Walter Hooper has noted, Lewis liked to experiment with space/time concepts and "loved the idea that different worlds might have different times...he also played with the idea that time might have 'thickness' as well as length" (Hooper 419). *The Last Battle* is apocalyptic and deals with the concepts of life after death and eternity. The protagonists mature in different time warps, and as pilgrims and crusaders they move on towards a

world beyond Aslan's country. Edward James reads Lewis's concluding novel in terms of "time, age and death, the attributes of Saturn" (James 72). This reading draws on Michael Ward's Planet Narnia which uncovers the 'Narnia code'-the medieval cosmology underlying Lewis's structure and themes. Lewis has emphasised that none of the Chronicles are intended to be strictly allegorical, but, despite the fact that life and goodness triumph over death and tyranny, Pullman considers it "grotesque" for Lewis to kill off his protagonists in a train crash in The Last Battle. His reaction seems excessive considering the torture and violence enacted in his own stories. One might have expected that Lewis's use of a realistic, mechanistic method of depicting human mortality (rather than a magical or supernatural event), would meet with Pullman's approval. Lewis takes the 'sting' out of physical death by depicting an apparently painless transition to immortality. The experience on the train is recalled as "a jerk and a noise" by Digory who notes that "we stopped feeling old" (LB 743). Edmund on the platform speaks of "a frightful roar, something hit me with a bang" and admits to feeling "not so much scared as-well, excited" (743). The fictional deaths have a positive role in the novel; combining a glimpse of 'stark realism' with spiritual solace for those facing real life tragedies at the time. As Myers says, "Lewis is showing that countries do not last forever. Neither do people" (174). The atom bomb, train and motor accidents were a factor in Lewis's Britain (see "On Living in an Atomic Age" 73). In the Spanner interview, Pullman claims to be "disgusted" that Lewis does not allow the children, after all the benefits of experience, to "stay in the world and make it better for other people" (Spanner 5). This sounds disingenuous bearing in mind the conclusion to HDM. Many readers were dissatisfied and upset by the traumatic breaking apart of Lyra and Will-their sending off into separate worlds. But Pullman's facetious response is to evade responsibility somewhat: "Do you think it wasn't traumatic for me? I tried all sorts of ways to prevent it, but the story made me do it" (Spanner 7).

Pullman is vague and defensive about the strongly 'inferred' sexual intimacy in Will and Lyra's relationship, and claims authorial distance: "I don't know what they did...Maybe they did, maybe they didn't. I think they were rather young to, but still..." (7). However, in *The Amber Spyglass*, Will and Lyra "lay together as the earth turned slowly and the moon and stars blazed above them." They wondered "whether any lovers before them made this blissful discovery" (528). The euphemistic language sounds more certain than the author admits. Pullman's trilogy promotes unrestricted freedom and idealizes the process of physical maturation. In targeting Lewis, he seems to ignore the fact that his own novels are aimed at young adults and cover rites of passage such as puberty and sexual intimacy. Lewis was writing for younger children and before the sexual revolution of the sixties. There was less market driven pressure to 'grow up,' and children generally were less exposed to the practical and emotional exigencies of sexuality. Lewis aimed primarily to spin a "good yarn" that opened minds to spiritual realities. In the article "What Christianity Feels Like: The Chronicles of Narnia and the Power of Myth," McGrath claims that the narratives "resonate strongly with the basic human intuition that our own story is part of something greater and grander" (1-2). Lewis intended his tales to be vehicles of enjoyment which enabled children to come to grips with complex concepts by means of a journey through an unreal yet still recognisable world. In "Christianity and Literature", he reiterates his premise that the arts are secondary to eternal realities: "an author should never conceive himself as bringing into existence beauty or wisdom which did not exist before, but simply...embody in terms of his own art some reflection of eternal beauty and wisdom" (22). The experiential aspect of Lewis's religious experience is mirrored in the fusion of ethics and aesthetics in Lewis's sci-fi and children's fantasies. The stories reflect the ambience of the Garden of Eden and in correspondence, he explains how the spiritual meaning in *Perelandra*, is present "in a general sense of suggesting perfect sensuous happiness" (CLII 576). In That Hideous Strength (1945), there is evidence that Lewis's wardrobe image was germinating in his mind long before Narnia. Toward the conclusion of this "adult fairy tale", a large, upstairs room is introduced, and named "the Wardrobe": "If you glanced in you would have thought for one moment that they were not in a room at all but in some kind of forest—a tropical forest glowing with bright colours...a kind of woven forest of their own" (THS 448). Pullman, likewise, embellishes his republican universe with evocative scenery and sensory stimulation. The vibrant vistas of natural beauty enhance the events of warfare, danger, stress and suffering. Scenes of shared friendship and home comfort punctuate the action. Pullman's homely cooking detail, "the sizzle of the frying butter" (NL 19), recalls Lewis's depiction of domestic harmony, boiling kettles, cups of tea and a "nicely-hissing" frying pan (LWW 143).

A careful reading of Pullman's trilogy uncovers significant instances of a shadowing of Lewis's key symbols and themes. This might have been less obvious had Pullman not made personal attacks on Lewis's work during his own rise to prominence. The Narniad features a supernatural golden lion, a stone knife and a silver chair. In HDM we find a golden compass, a subtle knife, and a silver guillotine. The golden compass ('alethiometer') is a man-made guidance tool with thirty-six ancient symbols, a mechanical

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alternative to the divine guidance embodied by Aslan. The compass has truth telling potential but is inexact, dependent upon the operator's state of mind. The dials are moved by elementary particles, but rather than being a 'prophetic' tool its purpose is to indicate the likely consequences "If certain things come about" (AS 71). This idea is reminiscent of Lewis's counsel to his child protagonists to consider the "what ifs" when faced with instructions, clues and choices. Lewis's silver chair is an instrument of restraint and captivity, "a vile engine of sorcery" that separates the young prince Rilian from his heritage. Likewise in HDM, the silver guillotine is an evil instrument that fatally severs children from their dæmons. Narnia's stone knife is used by Jadis to kill Aslan. Pullman's subtle knife is a weapon of mass destruction, an invincible cutting tool, known to the cliffghasts as "god-destroyer": "Nothing, no-one, matter, spirit, angel, air-nothing is invulnerable to the subtle knife" (SK 326). This unique tool has dual potential to be both "the death of Dust" and the "only way to keep it alive" (AS 193). Originally crafted by the Guild of Torre degli Angeli, the knife could probe the mysteries of matter by splitting the smallest particles. But, as Will's father claims, the inventors failed to realise its unique power: "they used it to steal candy. They had no idea that they'd made the one weapon in all the universes that could defeat the tyrant. The Authority. God" (SK 334). This language unequivocally identifies the knife as the key to destroying religious power. Metaphorically speaking, Pullman's trilogy as a whole is a type of not-so-subtle knife. HDM incisively carves out a future free from delusions about God; a literary 'silver guillotine' to sever society from its Christian roots. Pullman's amber spy glass has no direct equivalent in the Chronicles; it represents a technical breakthrough, promising unparalleled scientific advancement. But its amber colour recalls the gold and tawny glints of Lewis's lion and his divine status. Assembled by Mary, the spy glass can trace the movement of particles or 'straf' through distant realms. Frost notes in her analysis of the trilogy: "The mystery of Dust-its nature, cause, effects and origins is arguably the subject of His Dark Materials, determining the movements of its plots and defining its themes" (319).

7.6. Dust and Shadows

Physicist Richard Morris asks the question: "How is it that common elements such as carbon, nitrogen, and oxygen happened to have just the kind of atomic structure that they needed to combine to make the molecules upon which life depends? It is almost as though the universe had been consciously designed..." (Morris 155). Although the rationale

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behind HDM is ostensibly the battle to achieve self-government in a secular universe, the story is driven by the quest to present an irreligious answer to the enigma of origins. Pullman's plots are a fusion of particle physics and faith in naturalism. The rebel angel Xaphania claims that Dust is generated by conscious beings, who "renew it all the time, by thinking and feeling and reflecting, by gaining wisdom and passing it on" (AS 520). The very first words of Genesis: "In the beginning, God...." speak of supernatural intervention. Lewis believes God is the first cause and matter is His medium for creation: "He likes matter. He invented it" (MC 62). Pullman repeats this thought through the mouth of the angel Balthamos (but God is eliminated): "Matter loves matter" (AS 33), later repeated as: "Matter loved Dust" (476). Pullman's has nothing to replace "God so loved the world" (John 3.16), so he credits **matter** with the ability to create and love. In interview, he has admitted that the death of God might lead to nihilism, and in "The Republic of Heaven", concedes that, "one of the most deadly and oppressive consequences of the death of God is this sense of meaninglessness or alienation that so many of us have felt in the past century or so" (1). To Spanner, he recalls his own once post-apostate angst and admits that: "I still need these things that heaven promised, and I'm not willing to live without them" (Spanner 5). His personal apostasy is enacted in *The Amber Spyglass*, through Mary who re-lives the fear once felt when she rejected Christianity and faced the prospect of: "no meaning in life, no purpose" (476). Her post-traumatic stress is triggered by a dramatic flood of dust particles from the universe, but the potential catastrophe is averted (in the absence of God) by the operations of "matter" in harmony with human agency. Contrary to her fears, Mary experiences only an exhilarating baptism of Dust, "a sense that the whole universe was alive, and that everything was connected to everything else by threads of meaning...in a universe without purpose" (AS 473). Pullman's own words in the following passage, from a "Pullman in Readerville" interview, have the ring of religious conviction:

Dust permeates everything in the universe, and existed before we individuals did and will continue after us. Dust enriches us and is nurtured in turn by us; it brings wisdom and is kept alive by love and curiosity and diligent enquiry and patience and hope. The relationship we have with Dust is mutually beneficial. Instead of being the dependent children of an all-powerful king, we are partners and equals with Dust in the great project of keeping the universe alive. (Frost 320)

In Pullman's fantasy universe, Dust is endowed with all the creative, perfect and sustaining qualities of a transcendent Deity. At one point in *Northern Lights*, Lord Asriel assumes a Christ-like mantle when he opens the way to another world: "I've made it possible for

anyone to cross, if they wish" (NL 392). His Christological claim parallels Aslan's words in Lewis's *The Voyage of the Dawn Treader*: "I am the great Bridge Builder...I will open the door in the sky and send you to your own land" (NC 541). Asriel's aims to end "all those centuries of darkness" brought about by the theologians of the Magisterium (392), but he also vows to destroy: "all the dust, all the death, the sin, the misery, the destructiveness in the world...Death is going to die" (375). His language mimics New Testament prophecies about the resurrection power of Jesus: "O Death, where is thy sting? O grave, where is your victory? (1 Cor. 15.55), and "The last enemy that shall be destroyed is death" (1 Cor.15.26).

Lewis values the finite material world of particles as the work and reflection of infinite Deity. The radiant light and consuming fire of the sun speak to him of glory, holiness, justice and mercy. In Lewis's words, those who think that the gaze of absolute goodness would be fun are "still only playing with religion" (MC 36-37). These aspects of deity are evident in Aslan. In the Chronicles, gold signifies the divine presence, visible in some form whenever the presence of Aslan is manifest. His mane "scatters golden gleams of light" (The Magicians Nephew 99), and in The Horse and His Boy, golden light shrouds the travellers although the lion is not visible. When Aslan is shaved and sacrificed, "masses of curling gold fell to the ground" (LWW 180). Pullman, too, sprinkles gold liberally to signify kingship and power. Even the usurper king of the armoured bears displays gold jewellery and has his great claws tipped with gold leaf. The energy released at the moment of Roger's intercision and death, makes his head appear golden, and the cataclysmic blast reveals the glory of the northern lights. Pullman's description mirrors the apocalyptic vision of the Apostle John: "the street of the city was of pure gold like transparent glass" (Rev. 21). The 'deity' of dust particles is, likewise, proclaimed with images of gold. In The Amber Spyglass, the escaping particles resemble "a nimbus of gold mist" (AS 425), and through the spyglass, Mary observes the "straf" as a "swarm of golden sparkles" (242). Utopian statements are used to describe Will and Lyra emerging from the grove, seemingly "made of living gold...the true image of what human beings always could be" (497). Furthermore: "The Dust pouring down from the stars had found a living home again, and these children-no-longer-children, saturated with love, were the cause of it all" (497). The language links the theme of adolescent maturation to the primary role of dust particles in initiating human consciousness and perpetuating life. However, current science is unable to confirm this theory. Even Sam Harris admits in The End of Faith that: "the place of consciousness in the natural world is very much open to question...The idea that brains

produce consciousness is little more than an article of faith among scientists at present, and there are reasons to believe that the methods of science will be insufficient to either prove or disprove" (Harris 208-9).

Pullman's trilogy perpetuates the myth that religion is anti-science and breeds fear and ignorance. In Northern Lights, the religious Magisterium is cast as the villain whose aim is to destroy matter. Lyra's daemon comes up with the enlightened idea that, "if they all think Dust is bad, it must be good" (NL 395). In Svalbard, "the air of mystery and spiritual peril" surrounded anything to do with Dust (360), and Mrs Coulter, when allied with the church and the General Oblation Board, thinks Dust is evil and wicked (282). This idea has no Biblical basis. The idea that matter is evil and spirit is good comes from Greek Gnosticism. There is nothing sinister about dust in Genesis; it is simply a collective term for the particles of matter from which the universe and animate life are made. The "dust to dust" phrase reminds humanity of its status in the universe, and anticipates current physics as we see in a quotation from Ray Villard (Space Science Telescope Institute in Baltimore), "Dust to dust: an ongoing cycle on a galactic scale of growth, death, rebirth in the poetic sense" (Frost 402). In Lewis's Perelandra, Dust is identified as the basic element of God's original creation, before human minds understood it: "The Dust itself which is scattered so rare in Heaven, whereof all worlds, and the bodies that are not worlds, are made, is at the centre. It waits not till created eyes have seen it or hands handled it, to be in itself a strength and splendour of Maleldil" (249). Lewis links it to the Incarnation and the futuristic 'new creation': "In the fallen world He prepared himself a body and was united with the Dust and made it glorious forever" (PER 248). In the Narnia stories, The Magician's Nephew (though not the first written) features the creation of Narnia. The narrative gives a vibrant account of origins, featuring the imaginative potential of Dust and the multiverse long before Pullman's "Dark Materials".

Lewis depicts creation as a wonderful cosmic event, accompanied by the ethereal music of voices from the heavenly spheres: "cold, tingling, silvery voices...the blackness overhead, all at once, was blazing with stars. They didn't come out gently one by one, as they do on a summer evening. One moment there had been nothing but darkness; next moment a thousand, thousand points of light leapt out—single stars, constellations, planets, brighter and bigger than any in our world" (MN 61). The story highlights the distinction between earth magic and divine power, contrasting the power of Aslan which is supernatural with the alchemy of Uncle Andrew who seeks to manipulate nature for

personal gain. The magician recognises dust as a vital and mysterious substance. It comes to him in an ancient Atlantean box, concealed in a secret drawer and bequeathed by a type of fairy godmother. Uncle Andrew sensed from the pricking of his fingers as he picked up the box, that "I held some great secret in my hands" (MN 19). Although he had promised to burn the box unopened he kept it for experimental purposes, believing that it held something "highly dangerous". When he opened it he sensed its importance: "every grain had once been in another world-I don't mean another planet...but a really Other World -another Nature-another universe-somewhere you would never reach even if you travelled through the space of this universe for ever and ever" (21). This language is neither theistic nor atheistic, but captures the excitement of scientific discovery, and atomic power. Uncle Andrew tries to form the dust into rings which can propel people into other worlds but has not yet succeeded in perfecting or controlling the process. He is aware of the hazards of space travel: "the risk, the shock, the dangers of being flung suddenly into a different universe. Think what another world means-you might meet-anythinganything" (21). Lewis reminds young readers of the ethics of experimentation, showing the magician's callous indifference to his failed experiments with guinea pigs and his attempt to use his human visitors (without consent). When challenged as to why he didn't go himself, he replies: "Men like me, who possess hidden wisdom, are freed from common rules...Ours...is a high and lonely destiny" (19), echoing the mindset of Weston in Lewis's sci-fi trilogy.

In their divergent creeds, Pullman's 'shadow particles' and Lewis's 'shadowlands' are articles of faith. Pullman's amber spyglass represents the promise of future progress in cosmic communication by scientific research. Lewis's concluding chapter is entitled "Farewell to the Shadowlands", a term that relates to the leaving of the temporal world which he believes is a mere shadow of the unknown realms beyond time and space. Both perspectives relate to the Apostle Paul's vision: "For now we see through a glass darkly, but then face to face. Now I know in part but then shall I know even as I am known" (1 Cor.13.12). Both authors allude to the metaphoric Plato's cave, in which the shadows cast on the walls by a fire are the cave-dweller's only reality. To venture outside is to be blinded by sun. Any adaptation to this bright new light reduces normal vision, and on reentry the enlightened cave-dweller would have problems communicating his new knowledge to those still confined. In *The Last Battle*, Lewis re-visits this imagery when Tirian looks out through a crack in the stable door. At first, he sees only darkness but, "as his eyes grew used to it, he saw the dull red glow of a bonfire...then he could see dark

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figures moving about or standing between him and the fire" (LB 744). Tirian's vision is expanded to take in a whole new panorama. Lewis is encouraging readers to open minds to realms beyond the apparent material reality. Pullman, too, directly refers to Plato's cave to link the shadow imagery to the language of particle physics. The "supersymmetric" theory postulates that every particle has a shadow-particle. It is highly speculative but Pullman gives it substance through Mary's research. She refers to her computer as "the cave", and the "dancing lights" on the monitor make the shadows visible. The breakthrough occurs when she wires Lyra to the monitor, accessing her power to read the compass, while emptying her own mind to view the screen. Keats is cited to describe this optimum state of mind: "capable of being in uncertainties, mysteries, doubts, without any irritable reaching after fact and reason" (AS 92), a quotation that sounds more in accord with Lewis's pluralistic approach to ways of knowing. Human interaction with particles is achieved mechanically; using the alethiometer, a computer with specialised hardware, a detector, amplifier, encephalograph device and electrode sensors. The fusion of ancient and cuttingedge technologies enables Mary and Lyra to observe the shadow particles responding to human consciousness. A small concession to the supernatural comes when the shadows confirm to Mary that the fantasy angels are "creatures of shadow-matter", a complex union of "Matter and spirit" (260). The language calls to mind theological concepts regarding the operations of the mind, spirit and faith, although the general tone of HDM infers that Christian faith is blind, the enemy of enlightenment and progress.

Even though Pullman has publically owned Mary Malone's line that Christianity "is a powerful and convincing mistake" (AS 464), he has also conceded it to be a "powerful and convincing" story. His verbal assaults on the author suggest that Pullman views Lewis's theistic stories as adversaries to be taken seriously. This reading has support in *The Subtle Knife*, when Lord Asriel's manservant suggests that his master's apparent detour from attacking the church was "because it was too weak to be worth the fighting" (48). This is obviously not the case with Lewis and Narnia. Pullman has spoken disparagingly of other writers of children's fiction and admits to being irritated by the lack of ambition in his contemporaries: "They are not trying big things" (Parsons 117). In interview with Robert Butler, he dismisses Tolkien's fantasy as trivial, "not worth arguing with" (5). In interview with Parsons and Nicholson, Pullman acknowledges Lewis's skills as a great story teller and stylist and admits to feeling "as Bernard Shaw felt about Lewis" (130-31). The fact that author and fantasy texts have come directly into the line of fire is evidence that Lewis is

still relevant and effective as a presenter and defender of a theistic worldview. Pullman concedes that Lewis does engage seriously with the great questions of life. He just does not like his answers.

Conclusion

When we are frightened by the greatness of the universe, we are (almost literally) frightened by our own shadows: for these light years and billions of centuries are mere arithmetic until the shadow of man, the poet, the maker of myth, falls upon them...If it is large enough for us to stretch our spiritual limbs in, it must be large enough to baffle

C.S. Lewis

Man's perceptions are not bound by organs of perceptions; he perceives more than sense (tho'ever so acute) can discover.

William Blake

In the course of this dissertation on the writings of C.S. Lewis, the reality of cosmic warfare emerges naturally as an overarching theme. The term 'cosmic' recognises the hostilities inherent in Space, in Nature, in human nature, in ideologies, beliefs and behaviours. The pursuit of truth in every discipline involves dealing with problems and complexities but, as Lewis learned, there is always the anticipation of a new discovery when honestly facing up to the difficulties (ROP 28). He wrestled with the adversarial traits within his own personality-the habitual recourse to intellect and reason, and the insistent presence of intuition and imagination. His success in reconciling these forces is evident in his literary art. In books, essays and correspondence, we find variety in unity and harmony in difference. Lewis views the universe as sublime, moral and beautiful. His response to anti-theistic attempts to empty the cosmos of innate meaning is to observe that in doing so we "empty ourselves" ("The Empty Universe" 81). In "Dogma and the Universe", he asserts that the tenets of Christianity are not diminished by the vastness of space, the apparent indifference of the universe, or by increasing knowledge: "like mathematics, it remains simply itself, capable of being applied to any new theory of the material universe and out-moded by none" (GID 47).

Lewis has described cosmic models as imaginative representations of current knowledge, shaped by science, history, philosophy, theology and cultural factors. The chapter sequence of the thesis loosely follows these constituent parts. Each chapter relates to a particular aspect or genre of Lewis's writing and examines his more circumspect approach to thinking and debating. Lewis wrote at a time when theories about origins were expressed in terms of chance and chaos, words that raise the spectre of meaninglessness. The role of language in the communication of meaning is established in the first chapter but is a factor in subsequent discussions. Lewis argued against deliberate attempts to bring

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language into line with anti-theistic ideals, and challenged gnostic doctrines about esoteric knowledge and the separation of things spiritual and physical. These issues are addressed in his non-fictional texts but appear in dramatized form in the sci-fi trilogy through the dialogues between Ransom and Weston. In contrast to neo-gnostic doctrine about spirituality and the 'sacred feminine', passages from *Perelandra* and *That Hideous Strength* articulate a Biblical perspective on gender issues and the sacrament of marriage.

Lewis's dialectics on the use of metaphor and anthropomorphic language in Scripture are shown to be pertinent to debate about naturalism, spirituality and theology. His interrogation of scientism and nature religion relates to contemporary issues and challenges common assumptions about scientific knowledge. The thesis gives evidence of Lewis's clarity, logic, and talent for explaining abstract ideas. He expressed his ideas in lucid and transparent prose, a practice urged by philosopher Simon Blackburn in "Language Matters" (2003). Blackburn's interview comments stress the importance of writing clearly and concisely, and he suggests that the writing of obscure prose is sometimes the result of "a certain pride in difficulty" (211). In *Spreading the Word* (1984), he begins by noting that the claimed 'complexities' of philosophy are too often a cover for confusion. When these 'covers' are removed, he claims: "the real beauties can be revealed in clear and striking colours" (v). These words seem to articulate perfectly Lewis's style and approach to writing.

Lewis's creative and prolific use of metaphor appears to be a natural talent but could also be seen as part of his counter-offensive against philologists who sought to reduce the emotional and imaginative power of figurative language. After building a case with a sequence of logical points, he frequently concludes with a metaphorical punchline that grounds his argument, encapsulating its essence in a visual image that impacts the mind's eye and lingers in the memory. Mary Midgley has claimed to find Lewis's ideas "so helpful", perhaps because he breaks her mould of male philosophers. She observes that, in general, male philosophers become abstracted by academic argument, whereas women, who are just as capable of complex reasoning, are more likely to relate theory to practical issues. Lewis exhibits this 'female' tendency to harness airborne thoughts and bring them down to earth. Metaphorical language is shown to be indispensable in the arts and the sciences. The research into the language of physics and theology explores affinities between the disciplines, and compares naturalistic and theistic responses to the cosmos. The relationship between the two disciplines relates to Lewis's commitment to fully respect Nature while giving pre-eminence to the Supernatural. The nature of his obeisance is perhaps best expressed in his *Reflection on the Psalms*: "If Man is to know the bodiless, timeless, transcendent Ground of the whole universe not as a mere philosophical abstraction...but as an utterly concrete Being (far more concrete than we)...he must begin far more humbly and far nearer home, with the local altar, the traditional feast...For the entrance is low; we must stoop till we are no taller than children in order to get in" (75). This citation captures the tone and basic elements of his worldview, the essential threads that run throughout the thesis.

Lewis's comparison of the difficulty of theology with that of physics is a deft stroke, directing the mind toward unseen realities that can only be expressed in mathematical or technical language, and away from preoccupations with simplistic caricatures of God and Heaven. Some of the futuristic projections of theoretical physicists resemble the apocalyptic imagery of Biblical visionaries and, as Lewis noted in his day, the Big Bang theory and Quantum Mechanics have brought scientific theory closer to Biblical accounts of beginnings and endings. The miraculous events recorded in Scripture and the amazing fulfilments of prophecy cannot be laboratory tested, and are commonly declared to be false on that basis. But seeming impossibilities are also the stuff of scientific research. These topics are the substance of the second chapter, but are also linked to the penultimate Chapter 6, which explores the history and persistence of popular myths about religion and science. In this context, the focus is different, but the discussion includes reference to Christian pioneers of science, the transience of models, and polarities between theistic and atheistic responses to the universe.

The thesis research demonstrates the importance of imagination and faith in Lewis's life, and in the sciences and the arts. Imagination and scientific data are inextricably linked in the genre of science-fiction, and this topic is explored in Chapters 3 and 4. For Lewis, the writing of fantasy was a natural channel for reconciling the demands of intellect and imagination. He aimed to "spin a good yarn" that could also open minds to spiritual and supernatural realities, and this is reflected in his innovative style of communication—the combination of scholarship 'made friendly' and a love of the mythopoeic. His sci-fi trilogy exploited the then popular fascination with space travel and aliens in order to expose the predatory ambitions of some progressives toward the resources of other planets. All three novels manifest Lewis's passion for ethics and the environment but his defence of animal rights is most graphically expressed in *That Hideous Strength*, when animals prevail over

the perpetrators of evil. The moral and physical conflicts have their roots in Lewis's personal experience, and his plots and narratives draw upon Biblical accounts of temptation, sacrifice and redemption.

His erudition and nuanced approach to thinking is evident in the citations selected from his formative years, his profession as an educator, and his engagement in apologetics. His lectures and books encouraged students and readers alike to understand and appreciate the wisdom and lessons of history. His method of animating the lifestyle and ambience of earlier cultures succeeded in informing and stimulating the minds of successive generations. His body of literature serves as a bridge between past and present. The engagement with the zeitgeist of the early to mid-twentieth century contributes to addressing current issues and trends, and the preoccupation with being 'innovative'. In "Period Criticism", Lewis suggests that we are more likely to become 'dated' when specifically aiming to be 'contemporary': "to move with the times is, of course to go where all times go" (149).

Lewis and Barfield coined the term 'chronological snobbery' to sum up the uncritical presumption that everything 'new' or current is by definition superior, solely on the basis that it is more recent. The same channel of thought is apparent in his *An Experiment in Criticism* in which he defends some of the great names of English literature from the type of critic who treats them as "so many lampposts for a dog" (112). This comment is consistent with his objection to authors and people generally being regarded as specimens for scientific or psychological analysis. In the context of literary criticism, Lewis encouraged readers to enter into the environment of a book, an approach that enabled the reader to have a "primary literary experience" (129); to first listen for the music before dismantling the instrument. Lewis is similarly respectful in his approach to interpreting Scripture, making both the narratives and the tenets of theology accessible for the general public. In studying the books of the Old and New Testaments, he was aware that the historical records, wisdom, teaching and prophecy were intended to inform and edify ordinary people. In this he is a valuable bridge between an academic approach and the needs of laypeople.

As illustrated in Chapter 5, Lewis's engagement in apologetics was not limited to Christian orthodoxy. He defended traditional values to counteract what he observed to be the negative effects of subjectivism, relativism, and reductionism. His fusion of fixedness and flexibility anticipates future decentring methods and his ideas stimulate alternative ways of seeing and knowing. Lewis's caution about the increasingly clinical and desensitized approach to appropriating knowledge, contrasted with the modern drive to reduce and categorize everything. In *Dinosaur in a Haystack*, Scientist Stephen Gould also speaks of the danger of "false taxonomies", likening the human mind to a "dichotomizing machine" (39). Lewis uses the metaphor of a mythical lizard to consider this natural analytical tendency, describing it as a "basilisk" which can only observe by killing, and kills what it sees (AOM 47). The image captures his pensive mood regarding the exploitation of inanimate and animate life in the name of progress. Lewis wanted a "regenerate science" that "When it spoke of the parts it would remember the whole" (AOM 47). These themes are disseminated in various genres and fictionally portrayed on the planet Malacandra, where the alien race has learned not to develop an acquisitive or controlling spirit or to focus on reducing and measuring everything.

As anticipated by Lewis, New Atheism has declared war on Christian faith by portraying it as the enemy of Science. The source of the dichotomy narrative is explored in Chapter 6 together with contrary evidence. Richard Dawkins's 'divide and conquer tactics' are specifically challenged. This creates a natural lead-in to the theatre of fantasy in the last chapter. My initial hypothesis and Lewis's "key position" are synchronized in Chapter 7. The warfare theme dominates Pullman's Dark Materials trilogy but is also a factor in his animosity toward Lewis, his sci-fi novels and children's fantasies. The thesis deconstructs Pullman's literary response to the Narniad, and his charges against Lewis. The chapter examines his fictional caricature of religion against a cosmic backdrop. Pullman's 'heavenly' republic derives from random forces and the operations of Dust. He rejects any concept of a supernatural authority or moral absolute, asserting that "the death of God and its consequences" are his "most important subject" (TRH 1). His faith is in science and technology and he trusts human ingenuity and integrity to supply the blessings that heaven promises. Lewis believes that no individual or group can be trusted with absolute power. The two positions are not completely opposite because Christian orthodoxy involves freewill, human initiative, ingenuity and integrity, but these positives are held to emanate from a divine source.

This conviction underlines Lewis's belief that "the relation between Nature and Supernature, which is not a relation in space and time, becomes intelligible if the Supernatural made the Natural" ("Bulverism" 276). He believes that his own 'spiritual longings' were initially engendered by experiential glimpses of a transcendent reality, intimations of divine citizenship. His 'argument by desire' was developed from these brief moments of other-worldly consciousness. His principle of "first and second things" also relates to this acceptance of the primal order of creation. Secondary things (though inherently good) can have a negative effect if elevated to be of first consequence—liberty becomes licence, pleasure becomes hedonism. Lewis observed that the beauty and diversity of Nature (which includes humanity) is spoiled when the order is reversed. He also draws attention to the blend of individuality and connectedness, found first in the triune concept of God, and then reflected in nature and human relationships. His reiteration of these fundamentals in argument, satire and story form is demonstrated throughout the thesis, giving evidence that he fulfilled his commitment to do justice to both Nature and the Supernatural.

The thesis findings also support my hypothesis regarding the cosmic "backdrop" to Lewis's literary art. The modus-operandi of his post-conversion literary art is clarified in correspondence to Roger Lancelyn Green. Lewis speaks of his liking for "the whole planetary idea as a 'mythology'" (CLII 236-37). When witnessing cosmology being used as a weapon against faith, Lewis simply set out to appropriate its power from a Christian viewpoint. He does not claim to offer proof positive of his beliefs, only to explain them and demonstrate that Christianity is an intellectually sound and holistic alternative to Naturalism. This is evident in his defence of the authenticity of Scripture to theological students, when he appealed to their natural agnosticism: "I do not wish to reduce the sceptical element in your minds. I am only suggesting that it need not be reserved exclusively for the New Testament and the Creeds. Try doubting something else" (Fernseed and Elephants 122). This quotation exemplifies Lewis's style and approach to apologetics, but also sums up the methodology and aim of this thesis. Lewis is not outdated or one-dimensional; readers are encouraged to look 'along' as well as 'at'; to look from 'inside' and 'outside'. His rational and expansive approach assists in resolving tensions and finding a balance between the abstract and the concrete, the theoretical and the practical, the utilitarian and the ethical. My assessment is endorsed by Stephen J. Plant who claims that Lewis's "approach is perhaps even more relevant and cogent at the beginning of the twenty-first century than it was fifty years ago" (402). Plant's comment relates to articles by Alister McGrath and Malcolm Guite in Theology (2013). McGrath expands on Lewis's ability to communicate the reasonableness of faith "without confining it in "an impersonal austere rationalism" (410). Lewis's contribution as an "Intellectual historian" is assessed by Dennis Danielson in a 2010 essay of that name. He notes that: "In an age that increasingly values the kind of interdisciplinary work that he unostentatiously embodied, Lewis merits a more careful hearing than ever before" (Danielson 55).

In secular, materialistic Western cultures, there is increasing ignorance of our Classical and Judeo-Christian heritage. Lewis's combination of erudition, reason, clarity, wit and imagination renders his writings enduringly valuable from a literary and theological perspective. Whether intellectually argued or imaginatively presented as stories, the foundational principles of his worldview are consistently stated. His talent for creating pictures with words injects a current of fresh air into the pursuit of truth and the communication of meaning. This has been an important factor in his success as story teller and apologist. As Bruce Edwards so eloquently suggests in "An Examined Life": "Somehow what Lewis thought about everything was secretly present in what he said about anything" (10). The medieval model provided the scaffolding and cement for the Narnia fantasies and sci-fi trilogy. Both works respond to twentieth century events and Lewis's non-fictional texts critically engage with the same issues. My studies confirm that his essays and stories show a prescient awareness of the social and ecological cost of an unethical drive for power and control of Nature. The research into various rational and poetic responses to past and current representations of the universe supports Lewis's observation that the epistemological value of the Model in every age is outweighed by the imaginative impact (DI 17). The comment is consistent with his view that Science has not disproved the tenets of theism, and Naturalism cannot answer all the ultimate questions.

At the time of writing, the manipulation of word meanings to suit ideological agendas is attracting comment (a variation on the earlier language wars). Political correctness hopes to occupy and control the moral high ground, but debate on complex issues is stifled when abusive terms and hate labels are hastily misapplied to anyone with a different viewpoint. The thesis topics seem to be particularly important in this technically advanced age, marked as it is by global upheaval, social changes, greed, immorality, violence, substance abuse and lawlessness. Lewis's approach encourages circumspection and tolerance for multiple ways of seeing and knowing. His writings are enduringly helpful, and relevant to current debate regarding absolutes, values, aesthetics, theology, and faith. The strategy and tactics of New Atheists confirm Lewis's anticipation of increasingly bitter opposition and bring his plea for a fair-hearing into sharper focus. His belief in truth and meaning and his innovative defence of an orthodox Christian cosmology has proved effective in engaging with atheism and anti-theism.

Perhaps the cross-disciplinary approach, exemplified in Lewis's promotion of a mutually beneficial relationship between Science and religious faith is even more germane in the current climate. My research supports what other scholars have suggested, that the contemporary propaganda directed at driving a wedge between Science and Christianity is not grounded in fact. The thesis demonstrates that the real dichotomy is between ideological and philosophical interpretations of the cosmos. As cited in Chapter 6, the progressive headmaster Frederick Sanderson (celebrated by Richard Dawkins) was a devout Christian who named the vital elements of science as: "discovery, uncertainty, doubt, service, mysticism" (SO 349). It is important that the dissemination of anti-theistic misinformation (increasingly apparent in media, entertainment, education and politics) should be rationally countered in academic and public domains. The thesis findings generally, and Lewis's plea for an end to "the period of brow-beating" (GID 215) are echoed in the recent article, "Science Alone Does Not Have All the Answers" by Sharon Dirckx (cited in Chapter 6): "profound disagreement can co-exist with all 'voices' being given a fair hearing" (1). Her citing of Physicist Brian Cox and his acknowledgment that "novelists, artists, philosophers and theologians" (2) are all needed in the quest for answers is an important statement in today's world. It is hoped that the thesis will add depth to our understanding of the innate human desire for meaning, and inform our response to the complexity of life, the universe and beyond.

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