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The Anti-Modern Imagination

C.S. Lewis and The Cosmic Trilogy

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Abstract

This thesis examines how in his essays and fiction C.S. Lewis voiced opposition to a tendency to idolatry of science and scientific method in the modern world. Accused of being against science and scientists, Lewis was actually opposed to misguided thinking in any realm, most especially “thought about nothing,” as he muses in “Meditation in a Toolshed”. This thesis attempts a reading of the three science fiction texts of *The Cosmic Trilogy*, focusing on Lewis’s arguments against a variety of fashionable “isms”, including scientism, developed discursively in his popular and academic essays. Choosing to write in the science fiction genre, enriching the genre with the addition of a spiritual quest, Lewis highlights weaknesses in earlier examples of the genre, and points to the danger to human dignity that arises from unbalanced thinking that reduces human beings to mechanistic ghosts in machines.
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"You can’t get second things by putting them first; you can get second things only by putting first things first.” (Lewis, “First and Second Things” 22)

“Lewis would have us all remember that the more we identify with the modern age and the spirit of the times, the less likely we are to be clear about ourselves.” (Holmer 79)

Clive Staples Lewis (1898-1963) lectured and published as a professor of Medieval and Renaissance literature, wrote popular theology and children’s literature, and produced a science-fiction trilogy. All of his writings voice opposition to certain cultural tendencies prevalent in the modern world. Although Lewis was accused of being against science, his writings indicate that he was not a Luddite, but rather a man concerned with the preservation of reason and human dignity. In 1942’s “Meditation in a Toolshed” Lewis finds “the whole basis of the specifically ‘modern’ type of thought” (52) to emerge from a mistaken vantage point: privileging looking at instead of looking along experiences (such as “religion, love, morality, honour and the like” [53]) has allowed modern thinkers to see only half the picture. That modern scientists, anthropologists, physiologists and others who study nature and man often describe activities with which they have no personal experience suggests to Lewis that “a great deal of contemporary thought is, strictly speaking, thought about nothing” (53). Out of the Silent Planet, Perelandra and That Hideous Strength, Lewis’s Cosmic Trilogy (published 1938-1945), do not attack science or scientists, but do argue against some specifically modern scientific thinking.
Born in Ireland in 1898, C. S. Lewis inherited from his mother's family the rational, "the critical and ironic" (*Surprised By Joy*) and a distrust of emotion; to his father's Welsh blood, Lewis might attribute the skill for oratory evident in his series of radio talks on the BBC that were eventually published as *Mere Christianity*. *Surprised by Joy*, Lewis's autobiography of his life to age thirty-one (to "the Trinity Term of 1929" [182]), describes his life as an atheist and the process of his conversion to Christianity. His turn to Christianity was part of a philosophical journey: before becoming a Christian, Lewis was a theist; before a theist, an atheist. Modernism in philosophical thought did not interest him beyond its use as a teaching tool: he finally found his own philosophical stance in a tradition antithetical to the modern "new look" (159-69). Modern literature, especially modern poetry, contained little to impress Lewis. He tried to resist the flow of modern poetry, himself publishing a book of poems under a pseudonym,¹ and writing narrative poems in no way fashionable in the age of imagism and free verse. His convictions, his religious affiliation and his temperament combined to leave Lewis 'outside' his time: the practiced medievalist used his vantage point as outsider to survey the modern age from a certain critical distance.

Although many who simply misread Lewis's intentions charged him with being against science, Lewis found in some popular scientific writing arguments to which he objected. John B.S. Haldane’s *Possible Worlds*, a book of essays originally published in 1928, is one such example. Haldane provides an account of the "scientific point of view [...] applied [...] to politics and religion" (v) which Lewis found distressing. Haldane makes predictions in essays such as "Man's Destiny" about the future of civilization and humanity based on his conception of man as a purely scientific creature. He assumes that "if [civilization] is to be improved there is no hope save in science" (302) and that, barring natural disaster and religious persecution,

¹ *Spirits in Bondage: A Cycle of Lyrics* published under the pseudonym Clive Hamilton in 1919.
“evolution will take its course” (303). Human desire and willingness to “pay the cost” and the what we need to know to stop “the less intelligent of our species” (303) from breeding (which “if research continues […] we shall” have within a couple of centuries) may then allow man to take “his own evolution in hand” (304). The eugenic future Haldane envisions sees “no theoretical limit to man’s material progress […] and] perhaps, no limit at all to his intellectual and spiritual progress” (305).

Haldane the scientist attempts literary criticism in “Auld Hornie,” a piece which reviews Lewis’s *Cosmic Trilogy*. “Auld Hornie,” not surprisingly, not only misreads Lewis, but also finds evidence for his misreading not readily apparent in the texts themselves. Haldane compliments Lewis on his fictional talent – “The tale is told with great skill, and the descriptions of human and non-human behaviour are often brilliant. I cannot pay Mr. Lewis a higher compliment than to compare him with Dante and Milton” (33) – even while slighting the novels as an attack on science and scientists.

Lewis responds to the charges in “A Reply to Professor Haldane,” insisting that “Auld Hornie” misreads *The Cosmic Trilogy*; Haldane “keeps on missing the point” (75). In Lewis’s words, the attack from Haldane

resolves itself into three main charges. (1) That my science is usually wrong; (2) That I traduce scientists; (3) That on my view scientific planning ‘can only lead to Hell’ (and that therefore I am ‘a most useful prop to the existing social order’, dear to those who ‘stand to lose by social changes’ and reluctant, for bad motives, to speak out about usury). (75)

Lewis responds to each charge. The first he accepts as correct: yes, some of the science in his novels is wrong. “No one hopes, in such fantasies, to satisfy a real scientist, any more than the
writer of a historical romance hopes to satisfy a real archaeologist” (76). Had Lewis intended to
write a scientific treatise he would have done so. He faults Haldane for writing false history in
articles such as “Some Dates” (in Possible Worlds), a work “intended to be true” (76).

On the second charge (that Lewis traduces scientists) Lewis suggests that not only does
Haldane charge the wrong book – That Hideous Strength – but also that his criticism focuses not
on scientists “yet on something which might be called ‘scientism’ – 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” (76). Lewis defines ‘scientism’ as “the
belief that the supreme moral end is the perpetuation of our own species, and that this is to be
pursued even if, in the process of being fitted for survival, our species has to be stripped of all
those things for which we value it – of pity, of happiness, and of freedom” (77). He notes that
Shaw’s Back to Methuselah, works of Olaf Stapleton and Haldane’s own “Last Judgement”
include “as assumed, and unstated, major premises” (77) forms of scientism: the erroneous myth
is not perpetuated by scientists alone.

Although much of Lewis’s thinking contrasts with contemporary intellectual fashion, his
choice of fictional genre in which to explore his ideas was very modern. He acknowledges his
debt to H.G. Wells, in particular, in the Note included with Out of the Silent Planet. Lewis
proclaims he “would be sorry if any reader supposed he was too stupid to have enjoyed Mr. H.G.
Wells’s fantasies or too ungrateful to acknowledge his debt to them” (2).

Lewis’s early reading included what was then known as “scientifiction”. Voyages to
distant planets provided the setting for adventures for which the earth had become too small.
Frequently in his early biography Lewis offers suggestions about the effect his reading had on
him:
The idea of other planets exercised upon me then a peculiar, heady attraction, which was quite different from any other of my literary interests. Most emphatically it was not the romantic spell of Das Ferne. ‘Joy’ (in my technical sense) never darted from Mars or the Moon. This was something courser and stronger. The interest, when the fit was upon me, was ravenous, like a lust.[...] I may perhaps add that my own planetary romances have been not so much the gratification of that fierce curiosity as its exorcism. The exorcism worked by reconciling it with, or subjecting it to, the other, the more elusive, and genuinely imaginative, impulse. (Surprised By Joy 34)

Evidently, the “genuine imaginative impulse” that Lewis describes elsewhere as a longing for ‘Joy’ could not be found in reading or writing a straightforward voyage story.

David Lindsay’s Voyage to Arcturus provided the conceptual framework that enabled Lewis to write science fiction without a standard adventure story plot. The point of the trilogy is not just to show men-in-the-moon. To Professor Charles A. Brady, who had written two articles about Lewis,² Lewis wrote:

The real father of my planet book is David Lindsay’s Voyage to Arcturus, which you also will revel in if you don’t yet know it. I had grown up on Wells’ stories of that kind: it was Lindsay who first gave me the idea that the ‘scientifiction’ appeal could be combined with the supernatural appeal – suggested the ‘cross’ (in biological sense). His own spiritual outlook is detestable, almost diabolist I think, and his style is crude: but he showed me what a bang you cd [sic] get from mixing these two elements. (Hooper, Letters 375)

The idea that science fiction writing can, and perhaps should, include a supernatural, or religious element can be found more widely than in the work of Lewis.
Before taking up each of the books in Lewis’s trilogy in turn, I want to examine briefly Lewis’s considerations of the effects of modern ways of thinking about science in “De Descriptione Temporum” and other essays. In his 1955 address as the newly founded Chair of Medieval and Renaissance studies at Cambridge, Lewis expressed his apprehension concerning the general social application of modern scientific principles. Lewis saw in modern thought a tendency to extend the application of scientific hypotheses to realms outside their intended application, and believed the tendency to be dangerous. The domination of scientific modes of thought in the modern age included two distinct areas of danger: the myth of progress (“evolutionism” as a general measure of value as well as growth), and the discounting of alternate modes of thought to the scientific. For Lewis, the modernist mistake revolved around misinterpretation and closed-mindedness. In “De Descriptione Temporum” Lewis describes the early nineteenth century shift that introduced the post-Christian era: one visible area of change was “the birth of the machines” (10). The domination of the machine alters man’s thinking, and leads to the error of evolutionism. Clyde Kilby explains that the error is born out of “not the machine as such but a new archetypal image it has created that because old machines are inevitably superseded by new and better ones a parallel is to be expected with ideas and beliefs” (174). Denying the value of modes of thought other than the scientific has led modern thinkers to the error of scientism – in effect, a kind of blind faith in the idea that technical progress will always lead to a higher human good.

Lewis closes “De Descriptione Temporum” with a reassurance and a claim: he reassures his audience that the study of the past, of a “dead period” can only liberate, not enslave. “I do not think you need fear that the study of a dead period, however prolonged and however sympathetic, need prove an indulgence in nostalgia or an enslavement to the past” (12). Rather,
correct contemporary knowledge and interpretations of the past are "surely a proper task for a university" (13). His claim is that he, belonging far more to the age of Old Western Culture than to the age in which he finds himself, can stand as a native of an age most have forgotten; he can "read as a native texts that [his audience] must read as foreigners" (13).

Lewis warned现代s not to reject the past simply because it has passed. Rather, every age should recognize that each period in human history holds certain ideas that are not easily identifiable to people living within them. Lewis identified, and coined the term "bulverism" to explain, what he believed to be the characteristic modern blindness: analogous to the process he described in "Meditation in a Tool-Shed" whereby individuals stop seeing when they begin to concentrate on their sense of sight, in "Bulverism" the modern debater "assumes without discussion that [a man] is wrong" (15) and proceeds to "distract his attention from this (the only real issue) by busily explaining how he became so silly" (15).

Lewis explained in a letter to Sister Penelope, C.S.M.V. (who had written to him about Out of the Silent Planet) his impetus to writing the first book in the trilogy:

What set me about writing the book was the discovery that a pupil of mine took all that dream of interplanetary colonisation quite seriously, and the realisation that thousands of people, in one form or another depend on some hope of perpetuating and improving the human species for the whole meaning of the universe – that a ‘scientific’ hope of defeating death is a real rival to Christianity. (Hooper, Letters 321)

In chapter two I will illustrate how Out of the Silent Planet portrays Lewis’s fears concerning the social cost of this fantasy. The ways in which Out of the Silent Planet differs from its scientifiction precursors, including Wells’s First Men in the Moon and Lindsay’s Voyage to Arcturus, indicate Lewis’s concerns. The first difference is that Lewis did not need to wrest
meaning out of the alien context of the stars, but rather takes his characters to a place where the meaning of earthly existence can be seen better, as it were, from a distance. Lewis "takes an already coherent philosophy with him as he begins his journey" (Murphy 26). In his philosophy the modern world has lost its way; the treatment of nature by characters both good and bad in *Out of the Silent Planet*, and the affirmation of a hierarchical order in the cosmos, introduce alternatives to scientism and evolutionist conceptions of human progress.

Progressively less science and more fiction, the second book in the trilogy sees the main character leaving Earth again, but not in a space-ship. Lewis later explained about *Perelandra*: "I took a hero once to Mars in a space-ship, but when I knew better I had angels convey him to Venus" ("On Science Fiction" 69). Because the novel was written for his "co-religionists" ("A Reply" 78), the real themes "would not interest Professor Haldane" (78). My third chapter will focus on *Perelandra* as it continues to showcase Lewis’s concerns about scientism, and the ways he believes modern thinking endangers human dignity. The characters’ reactions to their expanded cosmology suggest ways of viewing the evolution of modernism itself, in particular, the mythologizing of science in general into "scientism" as pseudo-religion. Lewis suggests that there is an objective reality distinct from any human perceptions despite the diversity of our changing vantage points. The two human characters of *Perelandra*, Ransom and Weston, develop Lewis’s argument in its positive and negative dimensions. Ransom’s growth illustrates Lewis’s theoretical and practical ideal, while Weston’s degeneration exemplifies the abolition of personal dignity that the final book in the trilogy explores in detail. But it is the same ‘objective’ reality in terms of which both characters are measured by the reader.

In *That Hideous Strength*, the final text of *The Cosmic Trilogy*, all the primary characters stay on Earth. Visits from interplanetary creatures do occur, but no space-ship breaks through
the atmosphere. In my fourth chapter I will analyze *That Hideous Strength* and make some concluding observations on Lewis's interpretation of modern applied science and the lost relationship between knowledge and wisdom. It will be evident that *That Hideous Strength* is less science fiction than *Out of the Silent Planet* or *Perelandra*. As a fictionalization of the ideas expressed in Lewis's *The Abolition of Man*, Lewis takes the tenets of Natural Law and illustrates the breakdown of dignity and freedom when knowledge and practice are alienated from each other. *That Hideous Strength* reveals that the ramifications of this estrangement for nature (animals) and humanity effect both personal and institutional life. Lewis as narrator of *That Hideous Strength* sees nothing wrong with science, but objects to the ends to which scientific pursuits seemed already to be leading scientific culture:

> The physical sciences, good and innocent in themselves, had already [...] begun to be warped, had been subtly manoeuvred in a certain direction. Despair of objective truth had been increasingly insinuated into the scientists; indifference to it, and a concentration upon mere power, had been the result. (560)

The idea that science is wrong, or that scientists are evil, appears nowhere in Lewis's writing. That human dignity is related to creature-hood, that this time is in ethical and personal respects no better than any other, and that the reasonable does not disallow the imagination, or faith, are among the beliefs that Lewis asserts. He offers this key to his books: "Donne's maxim, 'The heresies that men leave are hated most'" (*Surprised By Joy* 170). As a former atheist, and philosophical subjectivist, Lewis speaks out most pointedly against what he takes to be attacks on reason and denials of common sense.
Chapter One

Lewis on Scientism

Scientism is "the belief that the supreme moral end is the perpetuation of our own species, and that this is to be pursued even if, in the process of being fitted for survival, our species has to be stripped of all those things for which we value it – of pity, of happiness, and of freedom" (Lewis, "A Reply" 77). Scientism was only one heading under which Lewis identified a tendency among modern thinkers to lend authority to arguments with inherently anti-human implications. In essays and addresses throughout his career, Lewis considered the effects of modern ways of thinking, often about science, on the dignity and freedom of the individual, and of culture. The Cosmic Trilogy offers not only a fictionalized version of some of Lewis’s own positive convictions, but also an uncompromising examination of the false reasoning characteristic of several of the “-isms,” including “scientism,” that Lewis noted in the university, the particular culture in which he found himself living and writing.

Michael D. Aeschliman’s The Restitution of Man: Lewis’s Case Against Scientism establishes in five chapters Lewis’s logical case against scientism in writings besides the fiction. The first chapter, “Common Sense and the Common Man” offers a coherent account of the steps by which Lewis came to be labelled an enemy of science, the anti-modern position familiar to critics of Lewis’s theology and popular writings.³ Aeschliman notes that Lewis knew “that nothing he could say would keep some people from saying that he was anti-science” (“On Mere Science” 16). The “common man” of Aeschliman’s first chapter is, above all, the man of

³ Aeschliman’s second chapter, “Scienticism and Sapientia,” defines the metaphysical category of ‘wisdom’ and traces the ‘scientism’ debate from about the seventeenth century to the ‘radical subjectivism’ of the immediate precursors to Lewis. Aeschliman’s chapter three, “Scientism: the Current Debate,” follows the debate from before
common sense; Lewis’s writings are shown to respect the normative logic available to all reasoning beings. Aeschliman suggests that “we could with some accuracy say of Lewis what Joseph Sobran has said of Samuel Johnson, that he ‘may fairly be called the great champion of the obvious’” (13).

He was convinced that the experience of the intelligible Good is not only available but obligatory to every person at some level and in some sphere, and that it has never been the possession merely of mystics or adepts or specialists. It is part of the common wealth of humanity, this invitation and this command to ascend and transcend the self, and to the extent that we accept the invitation and respond to the command, we are truly human, truly *homo sapiens*, and not merely *homo scient.* (11)

Lewis believed in *rational man*, the creature that modern philosophy rejects as it embraces radical subjectivism. Aeschliman’s introductory remarks include the observation that Lewis felt that the amorality, agnosticism, and atheism of much of twentieth-century culture, and especially of the culture of modernism, amounted to an aberration within the historical tradition of common sense, and that its adherents were, in the terms of Augustine whom he quotes, ‘divorced by some madness from the *communis sensus* of man’ [*Studies in Words*, 150]. (3)

Aeschliman’s review of Lewis’s ideas admirably restricts itself to Lewis’s own terms.

Underlying the pronouncements Lewis makes against the modern world is his belief in the doctrines of Christianity. Some modern readers, educated in secular science, have difficulty properly hearing his critique. The publicly confessed Christianity that Lewis proclaimed can make readers in “what may reasonably be called the post-Christian world” uneasy ("De
Descriptione Temporum” 4). Lewis’s pronouncements against the myths emerging from scientific thought can be likewise unsettling to modern thinkers: “Some are convinced that Lewis is subconsciously afraid of science because it tends to destroy what they call his theological dogmatism” (Kilby 113). Lewis was not unconscious of this resistance: “Christians and their opponents again and again expect that some new discovery will either turn matters of faith into matters of knowledge or else reduce them to patent absurdities. But it has never happened” (“Religion and Rocketry” 94). Lewis’s relation to the modern world is critical, but his messages could apply in any century. Peter Kreeft’s C.S. Lewis: A Critical Essay, in the series “Contemporary Writers in Christian Perspective,” includes the observation:

Lewis’s historical significance, then, is belied by the unpopularity of his cause. To embrace ‘mere Christianity’ is not to abandon the twentieth century any more than to embrace an equally unpopular and an equally mere Christianity in the second or third centuries was to abandon that similarly critical and similarly dying age. (44)

Whether Lewis was attacking universal inaccuracy in interpretation or failure in understanding, his stated intention in “The Funeral of a Great Myth” has applicability: “It is our painful duty to wake the world from an enchantment” (93). Waking the world, one might be expected to disturb some of its residents.

Lewis’s pronouncements in “De Descriptione Temporum,” “The Funeral of a Great Myth,” The Abolition of Man and numerous short essays explaining his views might well frighten a world more interested in worshipping science than God. Lewis’s questions about what we can know of history and of chronological time explain his vantage point. Scientism, evolutionism, developmentalism and historicism were in his view but aspects of each other; Lewis decried them individually as failing in logic. Lewis announced as if it were his duty the
disastrous consequences in all of these spheres of positivism and the loss of a doctrine of objectivity.

"De Descriptione Temporum" was Lewis’s inaugural lecture as the newly founded Medieval and Renaissance chair at Cambridge, in 1955. Lewis was concerned that his job as the first person in a new post, if a failure, might result in not only his own failure, but also might cause the University to regret founding the chair in the first place. Accordingly, he announces that he will “devote this lecture to explaining as clearly as [he] can the way in which [he] approach[es his] work” (1). Lewis establishes in “De Descriptione Temporum” a view of the past strikingly unusual for an academic: Chad Walsh recalled that “Instead of talking in the usual professorial way about the continuity of culture, the value of traditions, etc., he announced that ‘Old Western Culture’, as he called it, was practically dead” (Hooper, Companion 73). Lewis did, of course, value tradition, but knew that the modern age did not.

The establishment of a ‘Medieval and Renaissance’ chair seemed to Lewis to indicate the university’s recognition of a change “coming over historical opinion” (1). Before the 1950s, the medieval period was likely to be considered the dark ages, and the Renaissance a completely new and extremely different era. Scholars in the 1950s were far less likely than scholars in the 1920s and earlier to consider the Middle Ages an age “of unrelieved gloom about grossness, superstition, and cruelty to children” (1) relieved only by the Copernican revolution in astronomy. Lewis announces his own belief “that the barrier between those two ages has been greatly exaggerated, if indeed it was not largely a figment of Humanist propaganda” (2).

Lewis was concerned with how scholars knew history. An important digression in “De Descriptione Temporum” has Lewis arguing that “All lines of demarcation between the Middle Ages and the Renaissance, where should we put it?” (3). He is fully aware that “there is no
Great Divide” (3), but this discussion, though not meant to propose an historical dividing line any more powerful or permanent than any other proposal, will provide in “as good a way as any other” (3) a chance for Lewis to explain his view of his new position.

Lewis attempts to divide the past into periods, or “aetates” as he calls them, according to Isidore’s usage. A note of wariness introduces a theme recurrent in Lewis’s writings:

About everything that could be called ‘the philosophy of history’ I am a desperate sceptic. I know nothing of the future, not even whether there will be any future. I don’t know whether the human tragi-comedy is now in Act I or Act V; whether our present disorders are those of infancy or of old age. I am merely considering how we should arrange or schematise those facts – ludicrously few in comparison with the totality – which survive to us (often by accident) from the past. (3)

Where in time (between creation and apocalypse) he might be is a question Lewis explores elsewhere. He explains his scepticism about attempts to ‘place’ ourselves in history in “The World’s Last Night,” an essay title taken from Donne’s question “What if this present were the world’s last night?” “The doctrine of the second coming teaches us that we do not and cannot know when the world drama will end” (76), Lewis states. Though Christians are obliged to adopt this doctrine, they inherently question it: “Not now, of all moments!” (77), we might insist, ‘if it might happen at any time, please do not let it happen yet!’ Lewis understands that:

we think this because we keep on assuming that we know the play. We do not know the play. We do not even know whether we are in Act I or Act V. We do not know who are the major and who are the minor characters. The author knows. The audience, if there is

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4 Hooper notes that the chapter heading “aetates” occurs in Isidore’s Etymologiarum, ed. W.M. Lindsay (2 vols. Oxford, 1911), v. xxxix. (3)
an audience (if angels and archangels and all the companies of heaven fill the pit and the
stalls), may have an inkling [.....] The playing it well is what matters infinitely. (77)

He identifies serviceable historical divisions between Antiquity and the Dark Ages (around the
fifth century) and between the Dark and the Middle Ages (“about the early twelfth century” [5]).
Between these periods changes in attitudes and activities that were significant enough to
distinguish the periods as unique periods occurred. He considers that the time “towards the end
of the seventeenth century, with the general acceptance of Copericanism, the dominance of
Descartes, and (in England) the foundation of the Royal Society” (6-7) might be another division
if the lines were drawn along considerations of the history of thought and not of culture.

Through “De Descriptione Temporum,” Lewis is explaining how he has come to his belief that
the greatest change in cultural history was not found in the division between Antiquity and the
Dark Ages or the Middle Ages and the Renaissance. In the modern period, Lewis insists, “we
have since witnessed a change even more profound” (5).

Lewis “came to regard as the greatest of all divisions in the history of the West that
which divides the present from, say, the age of Jane Austen [1775-1817] and Scott [1771-1832]”
(7). Marked changes in religious culture, in literary practice, in technological progress and the
advance of scientific discovery were becoming important factors in everyday life. This suggests
to Lewis that the recent period which he identifies represents a wholly different order of cultural
self-understanding.

The steps by which Lewis came to believe in his dividing line, in order of strength of
qualification, are: change in the political order, change in the arts, change in religion and the
new “birth of the machines” (10). In the political order, the change is not abrupt, nor is it
definitively as extreme a change as that which occurred between Antiquity and the Dark Ages.
The shift pertains to what people expect of their political leaders (not "rulers"), and what the leaders expect of them. "In all previous ages [...] the principal aim of rulers, except at rare and short intervals, was to keep their subjects quiet, to forestall or extinguish widespread excitement and persuade people to attend quietly to their several occupations" (8). In disarmingly prophetic statements, Lewis identifies the modern age as one of "appeals", 'drives', and 'campaigns'" (8) in which people expect "dash, initiative, and [...] 'magnetism' or 'personality'" (8) from their leaders. In other essays Lewis explores why people expect such changes:

Unless we return to the crude and nursery-like belief in objective values, we perish. If we do, we may live, and such a return might have one minor advantage. If we believed in the absolute reality of elementary moral platitudes, we should value those who solicit our votes by other standards than have recently been in fashion. While we believe that good is something to be invented, we demand of our rulers such qualities as 'vision,' 'dynamism,' 'creativity,' and the like. If we returned to the objective view we should demand qualities much rarer, and much more beneficial – virtue, knowledge, diligence and skill. 'Vision' is for sale, or claims to be for sale, everywhere. ("The Poison of Subjectivism" 81)

The change in political order is primarily apparent in the changing use of the words; Lewis states his preference for the seemingly rare breed of modern politician, "who will do a day's work for a day's pay, who will refuse bribes, who will not make up his facts, and who has learned his job" ("The Poison of Subjectivism" 81).

In the arts the changes within Lewis's lifetime seemed to him, and to subsequent generations, "shatteringly and bewilderingly new" ("De Descriptione Temporum" 8). In painting, and in poetry, novelty became the object of the game. Not only were artists engaging
in new practices, but their work was “new in a new way” (9). The difficulty, the lack of consistent interpretation (no one knows for certain what the poem means), and the confusion Lewis sees (not only do readers not know what the poem is about, no one can figure out what the author was trying to do) contribute to the greatest change ever seen in the history of the arts.

Lewis identifies one of the greatest changes occurring within the purview of the modern age. The change in religion’s role in culture is astounding:

The christening of Europe seemed to all our ancestors, whether they welcomed it themselves as Christians, or, like Gibbon, deplored it as humanistic unbelievers, a unique, irreversible event. But we have seen the opposite process. Of course the un-christening of Europe in our time is not quite complete; neither was her christening in the Dark Ages. But roughly speaking we may say that whereas all history was for our ancestors divided into two periods, the pre-Christian and the Christian, and two only, for us it falls into three – the pre-Christian, the Christian, and what may reasonably be called the post-Christian. This surely must make a momentous difference. (“De Descriptione Temporum” 4-5)

Lewis’s awareness of the past – of arts and politics and religion in ages before his own – allow him to state confidently that the continuity of Old Western Culture has been interrupted, and that this has repercussions in every branch of scholarship, whether scholars recognize it or not.

The final and greatest change Lewis sees between the ages before Austen and Scott and the age he finds himself in is the “birth of the machines”. Lewis considers the psychological effects of this change as represented in semantic shifts. “How has it come about that we use the highly emotive word ‘stagnation’, with all its malodorous and malarial overtones, for what other ages would have called ‘permanence’?” he asks (10). “Why does the ‘latest’ in advertisements
mean ‘best’?” (10). In machinery, perhaps, “the new most often really is better and the primitive really is the clumsy” (11). Lewis is concerned that the science of evolution (“Darwin’s theorum of biological evolution” [10]) is being popularized into a “myth of universal evolutionism” (10).

Lewis’s suggestion that the Great Divide comes just before the period in which he finds himself clouds his entire outlook; he admits that his conviction “determines [his] whole approach” (11) to the chair. ‘Medieval and Renaissance’ as an umbrella term covers much more and much less with which he will be able to work. More, because the time span to him “must primarily appear as a specimen of something far larger” (11) and less, because although “within that immense period there are all sorts of differences” (11), “the whole thing, from its Greek or pre-Greek beginnings down to the day before yesterday, seen from the vast difference at which we stand today, reveals a homogeneity that is certainly important and perhaps more important than its interior diversities.” (12) His outlook allows him to become “the spokesman of Old Western Culture” (12). His final thoughts in “De Descriptione Temporum” include a statement of belief:

It is my settled conviction that in order to read Old Western literature aright you must suspend most of the responses and unlearn most of the habits you have acquired in reading modern literature. And because this is the judgement of a native, I claim that, even if the defence of my conviction is weak, the fact of my conviction is a historical datum to which you should give full weight. That way, where I fail as a critic, I may yet be useful as a specimen [.....] Use your specimens while you can. (13-14)

When Dabney Adams Hart considers the significance of Lewis’s imagery he observes: “The dinosaur was not the supreme achievement of the Creator. Old forms may be superseded, for better or worse. The most carefully calculated conclusions or deeply entrenched convictions
may be invalidated by new revelation” (11). Yet Lewis continually insisted he could only argue from what he knew.

Lewis further reflects upon these arguments in “The Funeral of A Great Myth.” “De Descriptione Temporum” is about ways the past is read; “The Funeral of a Great Myth” is more specifically about the modern “picture of reality” (82) inherited from an earlier age, and which Lewis wishes to “bury […] but also to praise” (82). The “Great Myth” Lewis defines as “That picture of reality which resulted […] not logically but imaginatively, from some of the more striking and (so to speak) marketable theories of the real scientists” (82). This myth, he goes on to say, “is implicit in nearly every modern article on politics, sociology, and ethics” (82).

Although the myth emerges in a sense from actual scientific theories, it is rather a myth and not the logical result of the science being practiced by real scientists. Lewis recognizes that although people refer to ‘modern science’ there are actually “only particular sciences, all in a stage of rapid change, and sometimes inconsistent with one another” (82-83). The myth chooses from among the theories data “in obedience to imaginative and emotional needs” (83).

In anticipation of the critics who will attack him for attacking science, Lewis claims: “we must sharply distinguish between Evolution as a biological theorem and popular Evolutionism or Developmentalism which is certainly a Myth” (83). If the myth were a logical result of the scientific theory, it would not have been apparent first. The “evidence of chronology” (83) is the first proof Lewis offers that the myth is a myth, and not a fact or even a theorem. Internal evidence offers further proof: “Popular Evolutionism or Developmentalism differs in content from the Evolution of the real biologists” (85) and “In the science, Evolution is a theory about changes: in the Myth it is a fact about improvements” (85). Lewis knew that scientists such as J.B.S. Haldane knew this; but the Myth is not the science.
Having proven that such Evolutionism is a myth, and not the biological theorem of evolution, Lewis proceeds to explain "[w]hat makes it impossible that it should be true" (88). The logical difficulty he describes is difficult for those formed by a scientific education to accept. The myth borrows from true science the necessary validity of rational inferences while rejecting the validity of absolute reason:

To reach the positions held by the real scientists – which are then taken over by the Myth – you must – in fact, treat reason as an absolute. But at the same time, the myth asks me to believe that reason is simply the unforeseen and unintended by-product of a mindless process at one stage of its endless and aimless becoming. (89)

The conclusion of the syllogism of the myth defeats the premises: the myth asks us to believe that there can be no ground for belief.

“Evolutionism, when it ceases to be simply a theorem in biology and becomes a principle for interpreting the total historical process, is a form of Historicism” ("Historicism" 45-46). In "Historicism," his essay on finding meaning in history beyond historical premises, Lewis defines an "Historicist" as "a man who asks me to accept his account of the inner meaning of history on the grounds of his learning and genius" (44). "The Historicist differs from the historian: "to find causal connections between historical events, is in my terminology the work of an historian not of a Historicist" (44) "The mark of the Historicist […] is that he tries to get from historical premises conclusions which are more than historical; conclusions metaphysical or theological or (to coin a word) atheo-logica" (45).

Lewis more whimsically investigates the idea of the myth of evolution in "Evolutionary Hymn," one of several poems he wrote exploring ideas he also wrote about in prose.

Lead us, Evolution, lead us
Up the future's endless stair.
Chop us, change us, prod us, weed us,
For stagnation is despair:
Groping, guessing, yet progressing,
Lead us nobody knows where.

'To whatever variation
Our posterity many turn,
Hairy, squashy, or crustacean,
Bulbous-eyed or square of stern,
Tusked or toothless, mild or ruthless,
Towards that unknown god we yearn.

'Ask not if it's god or devil,
Brethren, lest your words imply
Static norms of good and evil
(As in Plato) throned on high;
Such scholastic, inelastic,
Abstract yardsticks we deny.

'Far too long have sages vainly
Glossed great Nature's simple text;
He who runs can read it plainly:
"Goodness equals what comes next"

By evolving, Life is solving

All the questions we perplexed.'

(Hooper, Poems 55-56)

In “The Funeral of a Great Myth,” “Historicism,” and “De Descriptione Temporum”

Lewis argues that it is perfectly reasonable to move from historical premises to historical conclusions, but it is not justifiable to move from historical premises to meta-historical conclusions. This would be historicism. Similarly, it is reasonable to move from scientific premises to scientific conclusions; the mistake of scientism, as seen in Lewis’s “Reply to Professor Haldane,” is moving from scientific premises to meta-scientific conclusions. In chapter two, I want to show how Out of the Silent Planet includes a fictionalization of the mistaken fantasy of ‘scientism.’ In his essay “Historicism” Lewis also makes it clear that within the sphere of scientific inquiry itself the typical procedure of the scientist is fruitful. But Lewis asks: “Does my canon that historical premises should yield only historical conclusions entail the corollary that scientific premises should yield only scientific conclusions?” (62). He suggests this answer:

If we call the speculations of Whitehead or Jeans or Eddington ‘scienticism’ (as distinct from ‘science’) do I condemn the scientistic as much as the Historician? I am inclined, so far as I can see my way at present, to answer No. The scientist and the historian seem to me like the palaeographer and the literary critic in my parable. The scientist studies those elements in reality which repeat themselves. The historian studies the unique. Both have a defective manuscript but its defects are by no means equally damaging to both. One specimen of gravitation, or one specimen of handwriting, for all we can see to the
contrary, is as good as another. But one historical event, or one line of a poem, is
different from another and different in its actual context from what it would be in any
other context, and out of all these differences the unique character of the whole is built
up. That is why, in my opinion, the scientist who becomes a scientician is in a stronger
position than the historian who becomes a Historician. It may not be very wise to
conclude from what we know of the physical universe that 'God is a mathematician': it
seems to me, however, much wiser than to conclude anything about his 'judgements'
from mere history. (62-63)

The parable of the palaeographer and the literary critic sees the two professionals reading
a fragment of a manuscript. "[T]he palaeographer deals with what is cyclic and recurrent, and
the literary critic with something unique, and unique, and uniquely developing throughout" (61).
The paleographer may reasonably come to conclusions about the scribe that would be ludicrous
for the literary critic to guess at: the former might, on the evidence of spelling or penmanship
suggest a nationality, the latter can know nothing beyond what appears on the surviving
fragment.

*Out of the Silent Planet, Perelandra and That Hideous Strength*, the three texts of
Lewis's science-fiction trilogy, are unusual in many ways when compared to standard science
fiction, despite that the trilogy shares with other books of the genre a commentary on the age in
which it was written. As a result of Lewis's philosophical education and Christian orthodoxy, he
views the modern world as having lost its way. Lewis's critique of the modern tendency to
scientism takes the form of a dramatization of individual choices, including the failure to choose,
showing that for each there are dangerous consequences. His novels question typical modern
treatments of nature by postulating an ordered and purposeful cosmos.
Chapter Two

The Anti-Science Fiction of Out of the Silent Planet

Critics approaching the novels of The Cosmic Trilogy without an awareness of what genre they are often regard them as simply flawed. Jim Herrick offers a brief survey of critical response to The Cosmic Trilogy, and concludes with the observation that: “[a] survey of critical reaction to Lewis’ space trilogy, and especially to its first installment, may leave a reader wondering what exactly Lewis was up to in these books. Was he writing as poet, myth-maker, philosopher, satirist, novelist, romantic, propagandist, visionary, or all of the above?” (15).  

Unavoidably, perhaps, critics who do not ‘treat the work for what it is’, a rule for criticism Lewis himself insisted upon, do not do justice to the work. But the demands can seem more imperious: Lewis has written, “The first demand any work of art makes upon us is surrender. Look. Listen. Receive. Get yourself out of the way. (There is no good asking first whether the work before you deserves such a surrender, for until you have surrendered you cannot possibly find out)” (An Experiment in Criticism 19). It is nevertheless important to consider Lewis’s own critical ideas. Herrick’s conclusion, that Out of the Silent Planet has been difficult for critics to read because they do not know what to do with the style, the plot or the purpose, reconciles here with my argument that Out of the Silent Planet is essentially an anti-scientism argument, even a

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5 Among the critics Herrick considers are Joe Christopher, Donald Glover, Thomas Howard, Kathryn Lindskoog, Gilbert Meilander, George Sayer, Peter Schakel, Robert Houston Smith, Chad Walsh and A. N. Wilson. See “Works Cited and Bibliography” for titles and publishing information.

6 Another critical tendency Lewis decreed was ‘chronological snobbery’. He describes in his autobiography the educational tendency prevalent during his own school days that seems only to have increased as the century has progressed: “the uncritical acceptance of the intellectual climate common to our own age and the assumption that whatever has gone out of date is on that account discredited” (Surprised by Joy 167). Lewis also expressed this sentiment in a poem entitled “A Vulgar Error” (Hooper, Poems 60).
kind of “anti-science fiction”. Taken as any other thing, the novel will seem to have less power and more flaws.

Lewis’s contemporaries often misinterpreted his use of Christian thought in his critique of modernism. Much of this stemmed from a failure to see elements of Christian allegory in Lewis’s fiction. For example, several initial reviews of Out of the Silent Planet did not recognize that The Bent One was the Devil. In a letter from Magdelen College written in the summer of 1939 Lewis wrote to his interlocutor: “You will be grieved and amused to learn that out of about sixty reviews, only two showed any knowledge that the idea of the fall of the Bent One was anything but a private invention of my own!” (Hooper, Letters 322). Later reviews question Lewis’s use of the popular form: why present his anti-science rhetoric in the popular genre of science fiction? Why did he choose to fictionalize his arguments for Christianity at all? Many of the most frequently asked questions about the trilogy, and especially Out of the Silent Planet, can be answered, or made meaningless, by noting three points: first, Lewis maintained certain theses in all his writing; second, the trilogy is an argument for points best made in the fictional form; and finally, the arguments against science, are, as previously explained, not anti-science, but anti-scientism and directed against other myths that grow out of misunderstandings of popularized scientific theories.

Lewis’s letter to Sister Penelope in August 1939 describes the fantasy against which he wrote the first book of his trilogy:

What set me about writing the book was the discovery that a pupil of mine took all that dream of interplanetary colonisation quite seriously, and the realisation that thousands of people, in one form or another depend on some hope of perpetuating and improving the
human species for the whole meaning of the universe – that a ‘scientific’ hope of defeating death is a real rival to Christianity. (Hooper, *Letters* 321)

Lewis’s fears concerning the social cost of this fantasy are illustrated in *Out of the Silent Planet* in the novel’s use of the very modern genre of science fiction, and in the novel’s representation of the modern world.

A card written to Roger Green in 1938 offers a further explanation for Lewis’s coming to write *Out of the Silent Planet*: “I like the whole inter-planetary idea as a mythology and simply wished to conquer for my own (Christian) point of view what has always hitherto been used by the opposite side” (Green and Hooper 163). The impetus to writing as Lewis explained it reveals thus a thoroughly modern antagonism: a rival to Christianity in the hope of defeating death that denies the eschatological meaning of life found in the Bible. Lewis meant his description of “the danger of ‘Westonism’ [...] to be real” (Hooper, *Letters* 321). His poem “Prelude to Space: An Epithalamium” makes clear his opinion:

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.

Some now alive expect
(I am told) to see the large,
Steel number grow erect,
Turgid with the fierce charge
Of our whole planet’s skill,
Courage, wealth, knowledge, concentrated will;

Straining with lust to stamp
Our likeness on the abyss---
Bombs, gallows, Belsen camp,
Pox, polio, Thais’ kiss
Or Judas’, Moloch’s fires
And Torquemada’s (sons resemble sirens).

Shall we, when the grim shape
Roars upward, dance and sing?
Yes: if we honour rape,
If we take pride to fling
So bountifully on space
The sperm of our long woes, our large disgrace.

(Hooper, Poems 56-57.)

Lewis announced his views on modern literature in “De Descriptione Temporum”: he noted that the changes that had come over the arts in his lifetime alone were more drastic than any changes in any previous age. Modern poetry appalled him; modern fiction bored him; and modern art in general bemused and baffled him. A debate in print with T. S. Eliot, a giant of the modern age of poetry, included Lewis’s admission that he disliked Eliot’s work, and feared its
effects on modern poetry (Hooper, Companion 653). Writing science fiction was perhaps the most modern thing Lewis might have done. Chad Walsh suggests that Lewis’s use of the genre may be seen as appropriate to a man with the ability to write in a variety of literary forms. In science fiction Lewis “at last found a literary genre ample enough to accommodate his profligate imagination when he chose a form that has been brought to its mature development in the last two centuries” (Walsh 83). Lewis could employ a thoroughly modern genre in order to draw attention to the disparity between his own ideas and the common tendencies of the age.

Readers who approach Out of the Silent Planet expecting to find a typical science fiction novel are likely to be surprised. Brian Murphy warns: “A reader of science fiction who delights in technical detail and scientific speculation had better pass on at once” (25). A typical science fiction novel contains more extrapolated technical information than found in Lewis’s book (or actual scientific expertise: Isaac Asimov, Arthur C. Clarke and Robert Heinlein, later practitioners of the genre, had scientific training which added a measure of scientific accuracy to their writing). Although the plot is set at least partially in outer space, the technological method by which the men leave earth, travel and arrive in Malacandra are granted no importance: “Problems of propulsion and atmosphere and so forth are subsumed under larger concerns” (Howard 70). John Peters reports that The Encyclopedia of Science Fiction7 says that the “scientific content [of the first two books of The Cosmic Trilogy] is intermittently absurd” (99). Yet Lewis’s response to Professor Haldane’s review of this work in “Auld Horney” makes clear he was not attempting to attain any standard of scientific integrity: “No one hopes, in such fantasies, to satisfy a real scientist, any more than the writer of a historical romance hopes to satisfy a real archaeologist” (“A Reply” 76).

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7 Edited by Peter Nicholls, and published by Granada in 1981.
To one Herr Kunz (in Germany), Lewis indicated his goal in writing *Out of the Silent Planet*: “I was trying to redeem for genuinely imaginative purposes the form popularly known in this country as ‘science fiction’ – I think you call it ‘future-romanz’ – just as *(si parva licet componere magnis)* [to compare small things with great] *Hamlet* redeemed the popular revenge play” (Hooper, *Letters* 492). Science fiction had, in the hands of such writers as H.G. Wells and David Lindsay, been used as a vehicle for notions abhorrent to Lewis.

*Out of the Silent Planet*’s evident relationship to *Gulliver’s Travels* reveals something of the purpose in Lewis’s transformation of science fiction: by using events that had been used before in a text concerned with identifying political foolishness, Lewis surreptitiously comments on contemporary culture. Ransom’s experiences on the planet, up to the time he meets the hrossa, and his later encounter with the Oyarsa, have intertextual echoes with Gulliver’s adventures in part 4 of *Gulliver’s Travels*, ‘A Voyage to the Country of the Houyhnhnms.’ The hrossa do not physically resemble the horses that Gulliver meets, but the word “hross” is Old Norse for “horse,” a linguistic connection appropriately made by Ransom, a philologist. A summary of the structural similarities between the two stories reveals a conscious sharing of plot elements:

Both [protagonists] find themselves in fantastic surroundings as the result of treachery and violence at the hands of their fellow men. Both, wandering friendless and unprovisioned in a totally unknown environment, encounter rational beings whom they initially take to be beasts. Both recognize the rationality of these creatures by hearing them talk. Both go home with the creatures they have met, live for a considerable time among them, learn their language, communicate something of the cultures they represent to their hosts […] and learn something of the host culture, grow to love and admire their
hosts but eventually find themselves under the necessity of leaving them, and after further adventures, return to their own lands with changed outlook and a kind of permanent homesickness for the culture that once seemed so alien. (Jeannette Hume Lutton, quoted in Downing 126-27)

Lewis could not have Ransom travel on the seas to an unexplored part of the world; he had to get as far away as Mars to find “fantastic surroundings.” Yet by these similar means, Lewis, like Swift, could show a society some unattractive things about itself. Aeschliman notes that Lewis also shared with Swift a love for the individual and a hatred for the crowd: “he disliked and dreaded mankind in the mass and ‘mass man,’ and could only conceive of the willed loving of individuals which is Christian loving-kindness” (Restitution 14).

H. G. Wells, one science fiction author to whom Lewis acknowledges his debt, had distinctly antithetical views about human nature and destiny. Similarities between Well’s First Men in the Moon and Lewis’s Out of the Silent Planet have frequently been noticed. David Downing summarizes the relationship:

Both stories portray a single-minded physicist who builds a spherical spaceship in his backyard, accompanied by a younger man seeking interplanetary gold; both ships make use of an arcane antigravity device; both mention the tinkling sound of meteorites on the ship’s hull and the steel shutters used to shut out the intense sunlight; both show earthlings full of fears about alien worlds who, in an audience before the ruling spirit, discover that they themselves are the ones who pose a danger to other species. (124)

The similarities in plot and character belie the fact the Lewis was essentially against the underlying philosophy for which Wells’s writings argue. Wells believed, like Haldane, that evolution and progress would see the eternal expansion of human life: his science fiction
contained much science and scientism, but little of the supernatural appeal Lewis found in Lindsay.

Because Lewis named it as a precursor to his own work David Lindsay’s *Voyage to Arcturus* has received more attention than it deserves on its own merits as a piece of fiction. The style is crude, the plot confused, and the messages about civilization maniacal. In a 1947 letter to Ruth Pitter (a contemporary poet whose work Lewis actually liked), Lewis noted that “From Lindsay [he] first learned what other planets in fiction were really good for: for *spiritual* adventures” (Hooper, *Companion* 206). An earlier letter, to Charles A. Brady, names Lindsay’s *Voyage to Arcturus* “the real father” of the Trilogy (Hooper, *Letters* 375). Lindsay had done something that Lewis had never seen in a work of science fiction: merged the adventure story with technical appeal and the suggestion of supernatural adventures.

Imaginative exploration of journeys in space, the only exploration available to writers in the 1940s and 50s, allowed authors to take contemporary issues out of their contemporary context and examine potential consequences, much like writers of eighteenth-century travel narratives imagining voyages to remote nations could surreptitiously offer court counsel. Travel fiction in the seventeenth century and science fiction in the twentieth thus share a concern with cultural criticism. As Swift wrote in his “Letter to his Cousin Sympon,” appended to *Gulliver’s Travels*, “the Truth immediately strikes every Reader with Conviction” (vii). Lewis borrowed from modern science fiction conventions and old travel narrative conventions elements he found useful to develop his arguments against modern ways of thinking and, contrarily, arguments for reasoned opposition.

The two main human characters in *Out of the Silent Planet* function as representative modern thinkers: Weston is the selfish worshipper of science, interested in self-advancement,
while Ransom is the open-minded, willing to learn, Christian man. Edward Rolles Weston and Elwin Ransom in their respective views and actions come to represent the negative and the positive, the evil and the good, the wrong and the right, throughout the trilogy. Devine introduces them:

'The Weston,' he added. 'You know. The great physicist. Has Einstein on toast and drinks a pint of Schrödinger's blood for breakfast. Weston, allow me to introduce my old schoolfellow, Ransom. Dr Elwin Ransom. The Ransom, you know. The great philologist. Has Jespersen on toast and drinks a pint --' (9)

Yet the physicist, Weston, will represent the extremes of twentieth-century scientific thought that Lewis found so disheartening and emerge in the first book as more foolish than dangerous. Ransom undergoes a transformation in understanding that will prepare him for the voyages in the second and third books.

Ransom begins his journey as a Christian. A Christian science fiction novel might have an atheist taken to a place where everyone knew Christianity was true; Lewis instead takes a Christian to a place where Earth's story can be revealed in a larger context. Ransom's adventures, from the time it occurs to him "that he might call on the mysterious professor and ask for the boy to be sent home" (Out of the Silent Planet 5), to the time he finds himself travelling out of the Earth's atmosphere are described with images of birth and growth. The re-education of Ransom, as he learns what it means to be Christian, is a principle of development throughout the trilogy, that begins with Ransom's rebirth as a Christian in Out of the Silent Planet.

Before leaving Earth, the unlikely hero is not looking for an adventure; in fact "[t]he last thing Ransom wanted was an adventure" (Out of the Silent Planet 7). A scholar on leave,
Ransom is an ordinary man on a walking tour. His second thought, after feeling the obligation to help the poor old woman he meets on the road get her Harry home, is that “once he were inside the house [where he will presumably find Harry] – among men of his own profession – he might very reasonably accept the offer of a night’s hospitality” (5). He is without a bed for the night, and the thought of walking much further is not attractive. His commitment to the old woman forces him forward: up the dark road, through the deep hedge and into the scuffle between Devine, Weston and Harry. He saves the young man, and in return for his trouble is eventually taken in his place. Before the first evening ends, Ransom finds himself trapped. After “he realised that he had been drugged or hypnotised, or both” (14), he makes a futile attempt to escape. When he resuscitates, he seems to be “in a bed in a dark room” (16); he does not know that he is in a place that will see his rebirth.

When Ransom discovers outer space, he rediscovers wonder: the ability to experience the world and to know it from within as something not only larger and more important than the self, but also as existing as another, with no essential need for ourselves. Although a practicing Christian, Ransom is a modern academic. Having himself been conditioned by scientism, Ransom’s vision must change. Lewis wrote in his biography a detail that Ransom probably could have spoken: “my early reading – not only Wells but Sir Robert Ball – had lodged very firmly in my imagination the vastness and cold of space, the littleness of Man. It is not strange that I should feel the universe to be a menacing and unfriendly place” (Surprised by Joy 57). Michael Edwards relates Ransom’s fear to Pascal’s famous saying:

Lewis was protesting in part against the so-called scientific view of space as cold and arithmetical regressions of nothingness, a view summed up in the famous sentence of the
Pensées which Pascal [...] puts into the mouth of his hypothetical atheist: ‘The eternal silence of those infinite spaces fills me with dread’. (109)

The fear of alien space affects Ransom in more than one way; upon finding himself in an unknown vehicle, against his will, with two very unfriendly men, his first reaction is, understandably, terror.

Ransom’s time in the space ship begins in horror: “He was separated by an astronomical distance from every member of the human race except two whom he had excellent reasons for distrusting” (24). The journey to the unknown destination, being taken against his will, the loquaciousness of Devine and the brooding of Weston naturally function to disturb Ransom. But the unexpected beauty and slendour of space, the feeling of comfort he feels and the quality of the sunshine override Ransom’s fear: “It is hard for a man to brood on the future when he is feeling so extremely well as Ransom now felt” (25). Bright daylight endlessly brightens one side of the ship, while night darkens the other; Ransom can move as he wishes between day and night. He sees stars more vividly than any view from out of the earth’s atmosphere has allowed him. Planets and constellations, “celestial sapphires, rubies, emeralds and pin-pricks of burning gold” shine for him against “the undimensioned, enigmatic blackness”. He “found it night by night more difficult to disbelieve in old astrology: almost he felt, wholly he imagined, ‘sweet influence’ pouring or even stabbing into his surrendered body” (25).

The visions he sees and the influence he feels bring Ransom to a state of joy: “The adventure was too high, its circumstance too solemn, for any emotion save a severe delight” (Out of the Silent Planet 26). Waking every few hours, Ransom explores the daylight side of the ship: he could never cease to wonder at the noon which always awaited you however early you were to seek it. There, totally immersed in a bath of pure ethereal colour and of
unrelenting though unwinding brightness, he stretched his full length and with eyes half closed in the strange chariot that bore them, faintly quivering, through depth after depth of tranquillity far above the reach of night, he felt his body and mind daily rubbed and scoured and filled with new vitality. (26)

Weston suggests, in response to Ransom's questioning, that the unusual sensations result from the reception of "many rays that never penetrated the terrestrial atmosphere" (26); Ransom knows the result is more than physical.

The explanation discovered for the imagined and finally felt rejuvenating, numinous influence of the rays of sun, and the lightening of spirit and mind Ransom experiences upon spending time in the glorious light of the day side of the ship corresponds to Weston's scientific idealism and the tendency of the modern world to extend the hypothesis of science into the realm of practical reason. The lover of language discovers that the name "space" does not do justice to the reality he has accidentally discovered:

Ransom, as time wore on, became aware of another and more spiritual cause for his progressive lightening and exultation of heart. A nightmare, long engendered in the modern mind by the mythology that follows in the wake of science, was falling off him. He had read of 'Space': at the back of his thinking for years had lurked the dismal fancy of the black, cold vacuity, the utter deadness, which was supposed to separate the worlds. He had not known how much it affected him till now — now that the very name 'Space' seemed a blasphemous libel for this empyrean ocean of radiance in which they swam.

(26)

"Heavens" proves a better word for the reality Ransom discovers. He recalls the 19th Psalm, in which "the heavens declare the glory of God," and Milton's "Comus," from which he quotes
"'happy climes that ly/ Where day never shuts his eye/ Up in the broad fields of the sky'" (27). By applying the 19th Psalm, Lewis is not only suggesting Ransom's rebirth of spiritual awareness, but also positioning *Out of the Silent Planet* in an older understanding of the motives of learning. Ransom's journey becomes a voyage of discovery for the glory of God; he becomes open to discipleship in his extraterrestrial enquiry.

Weston's reaction to travelling in space reveals his limited interest in anything besides himself. He first voices an explanation for the absence of scientific detail in the science fiction novel. He gives Ransom some answers before he starts asking questions, supposing "it will save trouble" if he deals with them immediately, "instead of leaving [Ransom] to pester [them ...] every hour for the next month" (*Out of the Silent Planet* 20). Weston answers by telling Ransom not to ask:

'As to how we do it – I suppose you mean how the space-ship works – there's no good your asking that. Unless you were one of the four or five real physicists now living you couldn't understand: and if there were any chance of your understanding you certainly wouldn't be told. If it makes you happy to repeat words that don't mean anything – which is, in fact, what unscientific people want when they ask for an explanation – you may say we work by exploiting the less observed properties of solar radiation.' (20)

He explains the workings of the ship in plain language, with little emotional reaction to the amazing feat that has been accomplished:

'The ship is roughly spherical, and now that we are outside the gravitational field of the Earth, 'down' means – and feels – towards the centre of our own little metal world. This, of course, was foreseen and we built her accordingly. The core of the ship is a hollow globe – we keep our stores inside it – and the surface of that globe is the floor we are
walking on. The cabins are arranged all round this, their walls supporting an outer globe which from our point of view is the roof. As the centre is always ‘down’, the piece of floor you are standing on always feels flat or horizontal and the wall you are standing against always seems vertical. On the other hand, the globe of floor is so small that you can always see over the edge of it – over what would be the horizon if you were a flea – and then you see the floor and walls of the next cabin in a different plane. It is just the same on Earth, of course, only we are not big enough to see it.’ (23)

Although they have loosed the bonds of gravity that have held generations to the Earth, Weston can only consider his cleverness in building the spherical ship to create centrifugal force. He also manifests the arrogance that blinds him throughout his journeys, in suggesting that the space-ship design corresponds somehow to the design of the planet Earth.

Westonism, a modern tendency Lewis feared as a danger not only to Christianity, but also to humanity as Christianly defined, is evident in the contrast he draws between Ransom’s growth and Weston’s static obstinacy. Ransom’s re-education stands in contrast to Weston’s increasing inability to see reasonably that that his intentions represent evil impulses. The critique of modern thought that emerges in the character of Weston is essentially a critique of evolutionism. “The Funeral of a Great Myth” explains that the critique of the myth of evolutionism is not a critique of “the doctrine of Evolution as held by practicing biologists” (83), but rather the extrapolated belief that “first turned what was a theory of change into a theory of improvement” (86). Weston’s behaviour in Out of the Silent Planet reveals that he believes that:

everything is moving ‘upwards and onwards’. Reason has ‘evolved’ out of instinct, virtue out of complexes, poetry out of erotic howls and grunts, civilization out of savagery, the organic out of the inorganic, the solar system out of some sidereal soup or
traffic block. And conversely, reason, virtue, art and civilization as we now know them are only the crude or embryonic beginnings of far better things – perhaps Deity itself – in the remote future. ("The Funeral of a Great Myth" 86)

Ransom correctly observes that his philosophy of life means that Weston thinks he is "justified in doing anything – absolutely anything – here and now, on the off chance that some creatures or other descended from man as we know him may crawl about a few centuries longer in some part of the universe" (Out of the Silent Planet 22).

Ransom’s experiences in space and his on-going reactions to the species of creatures he meets on Malacandra illustrate his maturation as a Christian. The contrast between his continuing education and Weston’s obstinacy further illustrates Lewis’s apprehension concerning the social dangers of modern closed-mindedness. Ransom will find new meaning for his life and the life of human beings in his experiences off the planet; he will find in discovering the three species of created Malacandrans new ways of relating to his fellow man. Meanwhile, Weston’s preconceived notions about dealing with natives prevent his communication with the natives of Malacandra.

Ransom, a philologist and a Christian, practices socially constructive, self-effacing kinds of love; Weston, a physicist and agnostic, practices self-centering love. Ransom uses the science of philology as a means to learn the new language he joyfully discovers on Mars. Meeting “a big, black animal” (Out of the Silent Planet 47) that emerges from out of the water out of which he had been drinking, Ransom’s love helps him to resist fear:

Then something happened which completely altered his state of mind. The creature [...] opened its mouth and began to make noises. This in itself was not remarkable; but a lifetime of linguistic study assured Ransom almost at once that these were articulate
noises. The creature was talking. It had language. If you are not a philologist, I am afraid you must take on trust the prodigious emotional consequences of this realisation in Ransom's mind [...] The love of knowledge is a kind of madness. (47)

Weston uses the technology only few physicists can understand to get to another planet to provide a new stomping ground for the future of humanity. Later, he will explain:

'I should make it clear that the false humanist ideal of knowledge as an end in itself never appealed to me. I always wanted to know in order to achieve utility. At first, that utility naturally appeared to me in a personal form – I wanted scholarships, an income, and that generally recognised position in the world without which a man has no leverage. When these were attained, I began to look farther: to the utility of the human race!'

(Perelandra 223)

Lewis agreed that 'knowledge as an end in itself' is a misguided ideal; but so is utility: Lewis recognized that "a thing can be revered not for what it can do to us but for what it is in itself" (Surprised by Joy 185).

As Ransom discovers the rationality of all three species of Martians, he expresses surprise that they have survived together on the same planet, and notes his inability to imagine right relationships between animals. Lewis was "protesting against the habit in H.G. Wells and others – and more particularly against the sources of that habit – of assuming that extra-terrestrial creatures would necessarily be monstrous" (Michael Edwards 109). "On Malacandra, apparently, three distinct species had reached rationality, and none of them had yet exterminated the other two. It concerned [Ransom] intensely to find out which was the real master" (Out of the Silent Planet 60). His notion, that distinct species must be warring, is soon proved wrong. The three species of Martians are beset by neither violence nor a population problem: "It is a
thoroughly hierarchical world with the chain of command starting at the top and descending rank by rank. Any human quibbling is simply silly; those of high rank know best” (Walsh 89). The creatures recognize that ‘equality’ is not a matter for concern among creatures evidently created unequal.

Ransom’s maturation in relating to the initially most frightening of the Martians teaches him the right relation with other rational creatures. Knowing they will land soon, Ransom explores the possible creatures he might meet:

His mind, like so many minds of his generation, was richly furnished with bogies. He had read his H.G. Wells and others. His universe was peopled with horrors such as ancient and medieval mythology could hardly rival. No insect-like, vermiculate or crustacean Abominable, no twitching feelers, rasping wings, slimy coils, curling tentacles, no monstrous union of super-human intelligence and insatiable cruelty seemed to him anything but likely on an alien world. The sorns would be ... would be ... he dared not think what the sorns would be. (Out of the Silent Planet 29)

Weston’s reaction to meeting the seroni never advances beyond the horrific: the reason Weston and Devine bring Ransom to the planet is in the mistaken belief that they must offer a human sacrifice to the new species they have met (Weston tells Ransom while they are on their way to Malacandra that he is “only obeying orders” [21]).

Upon first seeing a sorn across the water, the shock of actually meeting an alien creature “chase[s] the blood from [Ransom’s] cheeks” (Out of the Silent Planet 38). He runs as soon as he can and having discovered that “[t]hey were quite unlike the horrors his imagination had conjured up” (40) attempts to classify them: “They appealed away from the Wellsian fantasies to an earlier, almost an infantile, complex of fears. Giants – ogres – ghosts – skeletons: those
were its key words. Spooks on stilts, he said to himself; surrealistic bogey-men with their long faces” (40). Finally meeting a sorn, after having lived among the hrossa, Ransom’s exhaustion is the first thing that distracts him from absolute terror: “Now that he stood face to face with the spectre that had haunted him ever since he set foot on Malacandra, Ransom felt a surprising indifference” (79). He has a mission to complete, “determined to carry out his programme” (79) the sight of a sorn does not, this time, send him running. Actually, “[t]he whole animal, seen at close quarters, was less terrifying than he had expected, and even a little smaller” (81). He renames the horror and “the ideas of ‘giant’ and ‘ghost’ receded behind those of ‘goblin’ and ‘gawk’” (81). Once the fear is replaced with indifference, the opportunity for enjoyment arises. While riding atop Augray’s shoulder, Ransom learns the right way to see the sorns; ironically, the criterion is scientifically “objective”, it is right because it is based on empirical observation, not on prejudicial preconceptions. The scene of three seroni ahead of Ransom is one of exotic beauty:

They seemed to Ransom to be rather skating than walking. The lightness of their world and the perfect poise of their bodies allowed them to lean forward at right angles to the slope, and they came swiftly down like full-rigged ships before a fair wind. The grace of their movement, their lofty stature, and the softened glancing of the sunlight on their feathery sides, effected a final transformation in Ransom’s feelings toward their race. ‘Ogres’ he had called them when they first met his eyes as he struggled in the grip of Weston and Devine; ‘Titans’ or ‘Angels’ he now thought would have been a better word. (89)

The re-education Ransom experiences concerning the seroni is possible because he moved beyond his preconceptions and started to believe the experience of his senses and his intuition.
Weston’s notion of anthropological theory reveals his misguided reliance on preconceived notions, and mythologies. Upon first hearing the voice of Oyarsa, neither Weston nor Devine can identify it; Devine thinks it might be “a loudspeaker” and Weston is sure the voice is being thrown.

‘Ventriloquism [...] Quite common among savages. The witch-doctor or medicine-man pretends to go into a trance and he does it. The thing to do is to identify the medicine-man and address your remarks to him wherever the voice seems to come from. It shatters his nerve and shows you’ve seen though him. Do you see any of the brutes in a trance?

By Jove – I’ve spotted him.’ (Out of the Silent Planet 112-13)

Other theories Weston has brought with him to deal with the natives include intimidating them, threatening them and bribing them to “do all we say” by giving them cheap costume jewelry. When the assembled hrossa, pfiftriggi and seroni thunder with the various noises that express humour, an indignant Weston first believes the natives are attempting to frighten him, and finally fears that he must be failing, for he knows his actions are “following the most orthodox rules for frightening and then conciliating primitive races” (114). Oyarsa’s patience runs out, and Weston is taken away to have his head soaked; an efficient method of cleansing clogged brains. When he returns, he tries to explain his meaning to the unidentifiable voice speaking in a foreign tongue, Oyarsa.

Ransom translates as far as he is able Weston’s ideas from English to Oyarsa’s Old Solar. Weston’s arguments turn out to correspond with the ideas put forward by Lewis in “The Funeral of a Great Myth.” Weston believes that evolution proves the superiority of “Life” over “any system of morality”; that civilized man is the highest form of life (and that he himself represents civilized man); “the might of Life herself” gives him the right to kill lower life-forms and to
claim planets and systems as possible homes for man (Out of the Silent Planet 122). That he
does not necessarily fight only for himself suggests to Oyarsa his “will is less bent than [he]
thought” (123). Weston’s attitudes “reveal him to be so obsessed with a hope of the continuance
of human-kind in the future that he is willing to sacrifice any number of individuals in the
present” (Gibson 44). A few questions from Oyarsa bring him to the truth. He tells Weston:

“You do not love any one of your race – you would have let me kill Ransom. You do not
love the mind of your race, nor the body. Any kind of creature will please you if only it
is begotten by your kind as they now are. It seems to me, Thick One, that what you really
love is no completed creature but the very seed itself: for that is all that is left.’ (124)

Further, Oyarsa recognizes how Weston is mistaken. The man breaks all natural laws, known by
all living creatures, except “the love of kindred”. The bent one that rules the earth has left this
law “which is not one of the greatest laws [...] bent till it becomes folly [...] to be a little blind
Oyarsa in your brain”. Weston follows this law. “[he] can do nothing but obey it, though if
[asked] why it is a law [...] can give no other reason for it than for all the other and greater laws
which it drives [him] to disobey” (124).

Weston’s inability to communicate with the Malacandrans results in a speech that reveals
his misguided intentions and the futility of his program. Ransom’s inability to translate the
philosophical ideas as anything other than concrete nouns reveals the brunt of Lewis’s satire:
“The speech also represents those whose desperate hope is that man will somehow through
science be able to defeat the inevitable, the end of the human race in this physical universe”
(Gibson 45). Lewis presents in Weston the worst side of scientism, its obdurate materialism.

Lewis uses Oyarsa to voice his beliefs concerning the true nature of humanity. Oyarsa
defines all creatures who have knowledge of the laws of the universe as hnau. Neither the bent
Weston, the broken Devine, or the potentially straight Ransom yet have the necessary knowledge. Devine, left with only greed, is no longer hnau. Within his body, "the hnau [...] is already dead" (*Out of the Silent Planet* 124) because he is unable to follow any laws or recognize any divinity. He cannot acknowledge meaning beyond his own fleeting satisfactions. Oyarsa knows that being hnau means accepting yourself as a creature.

The twenty-second chapter of *Out of the Silent Planet* opens with an explanation for the unusual science fiction novel reminiscent of Dean Swift's "Letter to Captain Symson": "if I were guided by purely literary considerations, my story would end, but it is time to remove the mask and acquaint the reader with the real and practical purpose for which this book has been written" (136). Lewis presents himself as a character within the novel to whom the original of Dr. Ransom has told his story. The point of writing, he explains, is made clear by that Ransom: "'If we could even effect in one per cent of our readers a change-over from the conception of Space to the conception of Heaven, we should have made a beginning.'" (138). In short, Lewis would like to reintroduce into modern scientism a necessary human supplement to its physics – metaphysics.

Lewis creates an anti-modern piece of fiction by using science fiction, the most modern fictional genre. Against the tendency to scientism in the modern drive toward progress, Lewis shows not the danger, but the foolishness, of purely selfish motives. Ransom awakens to the possibilities of beauty and self-transcending love in his undesired journey; Weston becomes a beastly creature even Ransom has trouble identifying. The characters and events of *Out of the Silent Planet* prepare readers going on to *Perelandra* for unscientific science fiction with the ability to comment on anti-scientism. Ransom has matured and *Perelandra* is in many ways the realization of his growth. No longer insulated from knowledge of the "heavens" and the
Malacandrians, he has knowledge that he is not alone, and that the ‘silent planet’ is not so silent as he once believed. Finding Perelandra, Ransom will find a place without the protection of Malacandra’s Oyarsa; his next destination is thus to be a more vulnerable paradise.
Chapter Three

Shifts in Objectivity in *Perelandra*

The second installment in *The Cosmic Trilogy, Perelandra*, continues to showcase Lewis’s concerns with modern ways of thinking. Ransom and Weston both have new ways of reacting to their adventures. The cosmos has expanded. The suggestion of an ‘objective reality’ becomes for Ransom initially disconcerting, but finally has liberating implications for his life and actions. Ransom grows in *Perelandra* to exemplify the ideal that the objective reality demands of a man: how he relates to creatures is one indication of his maturity. Weston degenerates toward total loss of personal dignity and meaning. The middle text in the tri-part anti-scientism exploration fictionally illustrates for Lewis’s “co-religious” audience the anti-Wellsian possibility that scientific advancement need not destroy faith. For a readership interested in science fiction, Lewis asks for another suspension of disbelief.

The expanded cosmos known to Ransom and Weston in *Perelandra* prepares the setting for a mythologically-proportioned adventure. Ransom is prepared; no longer the frightened scholar, he knows he has a role, and that whether he lives or dies, he must do what is demanded of him. The Oyarsa of Malacandra had informed him that they might meet again while Ransom was still alive. The Oyarsa suggested that “this is the beginning of more comings and goings between the heavens and the worlds and between one world and another […] the siege of Thulcandra may be near its end” (*Out of the Silent Planet* 128). Ransom has further learned that “The black archon – our own bent Oyarsa – is meditating some sort of attack on Perelandra” (*Perelandra* 162), and that that fallen angel, who cannot by his own power leave the sphere of Earth, will somehow arrange to get to Perelandra. Ransom takes comfort in knowing that “he is
part of a plan” (*Perelandra* 188). Ransom’s having learned the language, not just of Mars, but Old Solar, “originally a common speech for all rational creatures inhabiting the planets of our system” (*Perelandra* 162), may be the only reason, as far as he can know, that he has been chosen to take the second journey.

Ransom’s second extra-terrestrial journey has a new purpose, and his adventures both getting to, and living on Malacandra have made him a new man. To get to Perelandra, Ransom has to trust. His obedience helps him. The new man knows that he has been sent; he has a purpose, for Maleldil has sent him. He explains to the character Lewis: “I’ve been ordered there” (*Perelandra* 162). Accepting his role does not assuage all his fears. When asked if he feels quite happy about travelling by angel-power to another planet in a box much like a coffin, he responds with a nod to reason:

‘If you mean, Does my reason accept the view that he will (accidents apart) deliver me safe on the surface of Perelandra? – the answer is Yes [...] If you mean, do my nerves and my imagination respond to this view? – I’m afraid the answer is No. One can believe in anaesthetics and yet feel in a panic when they actually put the mask over your face. I think I feel as a man who believes in the future life feels when he is taken out to face a firing party. Perhaps it’s good practice.’ (166)

Ransom arrives in Perelandra, but “[w]hat it is like to travel in a celestial coffin was a thing that [he] never described,” except for a few hints about the different quality of the experience and the fantastic ultraspectacular colours (170-71). Arriving in Perelandra, Ransom undergoes a kinesthetic shift similar to the shift in vision he experienced upon his arrival in Malacandra. There, he had to wait for the colours to form; on Venus he feels as if he is floating, but is not frightened. His immediate impression of Perelandra does not last long: “nothing more definite
than of something slanted – as though he were looking at a photograph which had been taken when the camera was not held level” (173). He finds himself swimming in high seas.

The difficulty the eyes have shifting into focus when presented a novel object, and the moment after the shift to focus occurs when one cannot tell how the object could have been missed, corresponds to the mental shift made by the new convert to Christianity. The fictional Lewis appearing in *Perelandra* meets his first eldil, or angel. The meeting recalls the real Lewis’s conversion, as outlined in his *Surprised by Joy*. Meeting the eldil, the character “felt sure that the creature was what we call ‘good,’ but [he] wasn’t sure whether [he] liked ‘goodness’ as much as [he] had supposed” (*Perelandra* 159). As in *Surprised by Joy*, the character questions neither the existence of the supernatural, nor its beneficence, but rather, his own willingness to submit to the higher and better being:

>You must picture me alone in that room at Magdalen, night after night, feeling, whenever my mind lifted even for a second from my work, the steady, unrelenting approach of Him whom I so earnestly desired not to meet. That which I greatly feared had at last come upon me. In the Trinity Term of 1929 I gave in, and admitted that God was God, and knelt and prayed: perhaps, that night, the most dejected and reluctant convert in all England. (182)

As Ransom finds that everything changes when the picture comes clearly into view – when he knows he is swimming, he can move beyond fear, and begin to feel pleasure – so Lewis sees the person he was before his turn to Christianity in a whole new light, after his turn to Christianity.

The suggestion that there is an objective reality, distinct from human thought and despite our diverse vantage points, arises in the first scenes in *Perelandra*. Lewis, the fictional character in the novel, upon encountering the eldil in Ransom’s lobby, recognizes a seeming standard
where “up,” for example, is not subjective. Lewis sees the eldil as a vague shaft of light at an angle not quite perpendicular: “The impression, however produced, was that this creature had reference to some horizontal, to some whole system of directions, based outside the Earth, and that its mere presence imposed that alien system on me and abolished the terrestrial horizontal” (158). Later, on Perelandra, Ransom experiences the same mistrust of visible points of reference. He views the archons of Malacandra and Perelandra:

Whenever he looked straight at them they appeared to be rushing towards him with enormous speed: whenever his eyes took in their surroundings he realised that they were stationary. This may have been due in part to the fact that their long and sparkling hair stood out straight behind them as if in a great wind. But if there was a wind it was not made of air, for no petal of the flowers was shaken. They were not standing quite vertically in relation to the floor of the valley: but to Ransom it appeared [...] that the eldils were vertical. It was the valley – it was the whole world of Perelandra – which was aslant. (325)

Neither Lewis nor Ransom can discern what causes the impression that it is not the eldils that are off, but rather the rest of the visible world that is crooked. Both know simply that his experience demands of him certain reactions.

Ransom indicates in his relation to creatures that his lessons about the hierarchy that accompanies the unseen reality have taught him what it means to be a creature. His education is a slow process. The Green Lady, the Queen of her world, and Mother of Venus, gives Ransom his first lessons in relating in a hierarchical universe. He watches how she relates to creatures:

The beasts raced forward to greet her [...]. She turned as they approached her and welcomed them, and once again the picture was half like many earthly scenes but in its
total effect unlike them all. It was not really like a woman making much of a horse, nor yet a child playing with a puppy. There was in her face an authority, in her caresses a condescension, which by taking seriously the inferiority of her adorers made them somehow less inferior — raised them from the status of pets to that of slaves. (201)

Choosing fish to ride to the fixed island, the Green Lady tries “not to choose the same fish too often” (212). When they meeting the Piebalds on the Fixed Land “In a moment they were bounding all about the Lady and welcoming her” and Ransom and the Lady cannot continue their journey until completing “a proper interchange of courtesy” (213-14) with them. The beasts on the islands and in the air are her inferiors, and the lady defines “what it means to be a beast,” when she tells him that the King and herself “make them older everyday” (201). The Lady’s reaction to Ransom changes when she realizes she is not speaking to an equal.

‘Greet your Lady and Mother well from me when you return to your own world,’ said the Green Woman. And now for the first time there was a note of deliberate courtesy, even of ceremony, in her speech. Ransom understood. She knew now at last that she was not addressing an equal. She was a queen sending a message to a queen through a commoner, and her manner to him henceforth more gracious. (203)

Not all creatures are equal; for some are closer to the angels and the gods in likeness. She is Maleldil’s “beast”: as the created creatures on Venus are to her, she is to Him (211), for He created them all.

Ransom’s final re-education on Perelandra in what it means to be a creature comes when the Un-man takes under his power an underground bug. Ransom sees a horrifying thing:

long wiry feelers [...] a shell-helmeted head [...] a large roughly cylindrical body.

Horrible things followed — angular, many-jointed legs, and presently, when he thought
the whole body was in sight, a second body came following it and after that a third. The thing was in three parts, united only by a kind of wasp’s waist structure – three parts that did not seem to be truly aligned and made it look as if it had been trodden on – a huge, many-legged, quivering deformity. (310)

When he smashes Weston’s body, thereby releasing the devil within it and killing the Un-man, the horror that accompanied the sight of the creature evaporates, although the insect-like being still stands before him. “All [the loathing] that he had felt from childhood about insects and reptiles died that moment: died utterly, as hideous music dies when you switch off the wireless. Apparently it had all, even from the beginning, been a dark enchantment of the Enemy’s” (310). Lewis’s message about bugs is about all animals, and about preconceptions that one can allow to rule one’s mind. Relating to all creatures with a kind of disinterested charity will help to avoid prejudicial hatreds.

Ransom’s education in the ways of the hierarchical universe stands in contrast to Weston’s complete degeneration, as he sinks toward a total loss of personal dignity and meaning. Weston has changed between the journey from Malacandra and his appearance on Perelandra. The new Westonism was frighteningly common to Lewis and potentially disastrous for humanity and the natural order alike:

It is the idea that humanity, having now sufficiently corrupted the planet where it arose, must at all costs contrive to seed itself over a larger area [...]. This for a start. But beyond this lies the sweet poison of the vast infinite – the wild dream that planet after planet, system and system, in the end galaxy after galaxy, can be forced to sustain, everywhere and for ever, the sort of life which is contained in the loins of our species – a dream begotten by the hatred of death upon the fear of true immortality, fondled in secret
by thousands of ignorant men and hundreds who are not ignorant. The destruction or enslavement of other species in the universe, if such there are, is to these minds a welcome corollary. (*Perelandra* 216)

Weston recognizes that his conception of what he is now able to call the “interplanetary problem” (222) had been mistaken; he had erroneously believed in the difference between Man and Nature; he “‘had been making a wholly unscientific dichotomy or antithesis between Man and Nature – had conceived [himself] fighting for Man against his non-human environment.’” (224). Like Ransom, upon returning from Malacandra Weston had spent some time recuperating and thinking. He explains:

‘During my illness I plunged into Biology, and particularly into what may be called biological philosophy. Hitherto, as a physicist, I had been content to regard Life as a subject outside my scope. The conflicting views of those who drew a sharp line between the organic and the inorganic and those who held that what we call Life was inherent in matter from the very beginning had not interested me. Now it did. I saw almost at once that I could admit no break, no discontinuity, in the unfolding of the cosmic process. I became a convinced believer in emergent evolution. All is one. The stuff of mind, the unconsciously purposive dynamism, is present from the very beginning.’ (224)

Weston’s point of view, in the time between *Out of the Silent Planet* and *Perelandra*, evolves from a preoccupation with “physics to biology to the utility of all Nature to the conclusion that ‘All is One’” (Howard 108). At this point he sees himself as having a “new age” mission: “‘To spread spirituality, not to spread the human race.’” (*Perelandra* 224). He claims he worked first only for personal goals, then for the advancement of science, then for civilized man; he now
works ""for Spirit itself [...] the Holy Spirit"" (*Perelandra* 225). Evan Gibson summarizes Weston’s progress:

On Malacandra he appears as a complete materialist. He denies the existence of both Maleldil and the Bent One. The reality which he admits is that of matter. And the only matter which he values is that of some future race which has descended from man. But a transformation takes place before he arrives on Perelandra. The philosophy which he espouses now is pantheism, a belief in a single pervading spirit which inhabits all things.

(53)

Weston’s movement away from pure research to the philosophy of science, and especially toward the notion that he himself has been chosen as an important tool in a universal struggle evidences his diminishment as a thoughtful person. Without any belief to ground him in pure materialism or some other form of worship, he ends by inviting an evil spirit to take over his body. The black archon chooses a willing victim to carry him to Perelandra.

Although Ransom is initially bored by Weston’s message, he soon starts to take offence as Weston begins to insist that the “Meaning” which he has come to believe exists beneath all life is “exactly the same thing” as Ransom’s Christian God (*Perelandra* 225). Ransom’s reaction develops into concern for the soul of this misguided man. Weston tries to explain: ""Why, spirit – mind – freedom – spontaneity – that’s what I’m talking about. The goal towards which the whole cosmic process is working. The final disengagement of that freedom, that spirituality, is the work to which I dedicate my own life and the life of humanity’’’ (226). When asked if the spirituality to which he is referring is at all personal, Weston’s tone changes. His voice drops to a whisper as if to draw Ransom closer: ""That’s what none of them understand’’ (226), he contends. He continues lecturing: ""Not a person, of course [...]. Call it a Force’’"
(226), he says, and insists that his personal experiences have been guided. He believes that his reason for living has also been given a purpose.

The personality of Weston is effectively annihilated when he invites the devil, in whom he never "believed," to enter into his body. The first step in what will allow his possession is the collapse of polarities Weston has learned: ""Your Devil and your God [...] are both pictures of the same Force."" (Perelandra 227). He integrates Christian worship and Ransom's cosmology into a single picture: ""Your heaven is a picture of the perfect spirituality ahead; your hell a picture of the urge or nisus which is driving us on to it from behind. Hence the static peace of one and the fire and darkness of the other. The next stage of emergent evolution, beckoning us forward, is God; the transcended stage behind, ejecting us, is the Devil."" (227-28). As proof that he has been chosen Weston holds up his having learned the language ("an inexplicable and disquieting novelty" [220]).

In searching for a point of conversational contact, Ransom asks about the total submission of Weston to the devil that possesses his body: ""you say it's a total commitment. That is, you're giving up yourself. You're not out for your own advantage"" (Perelandra 229). As Weston answers, ""[h]is voice was almost a howl and he had risen to his feet"" (229). He yells that what Ransom insists upon is still the dualism he has already rejected: ""There is no possible distinction in concrete thought between me and the universe. 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 that Force into me completely""] (230). Weston willfully calls the devil into him. His face twists out of recognition for a moment, before Ransom hears him calling through terror, ""For Christ's sake don't let them - "" (230) and he falls into convulsions.
Weston’s taking certain ultimately Nietzschean ideas to their logical conclusion allow him to become the Un-man. Animating the body of Weston is the devil or one of his minions; he is not Weston while tempting the Green Lady, but only a vehicle for palpable evil: “Weston’s body, travelling in a space-ship, had been the bridge by which something else had invaded Perelandra – whether that supreme and original evil whom in Mars they call the Bent One, or one of his lesser followers, made no difference” (Perelandra 244). Weston can never emerge; once he has called “that Force” into his body, he is captive: “There was, no doubt, a confusion of persons in damnation: what Pantheists falsely hoped of Heaven bad men really received in Hell. They were melted down into their master, as a lead soldier slips down and loses his shape in the ladle held over the gas ring” (302). Ransom considers Weston, and others’ damnation: “The forces which had begun, perhaps years ago, to eat away his humanity had now completed their work. The intoxicated will which had been slowly poisoning the intelligence and the affections had now at last poisoned itself and the whole psychic organism had fallen to pieces. Only a ghost was left” (261).

Ransom notices that though the creature he sees before him resembles Weston, any actual humanity has fled out of his body. “He saw a man who was certainly Weston, to judge from his height and build and colouring and features. In that sense he was quite recognisable. But the terror was that he was also unrecognisable. He did not look like a sick man: but he looked very like a dead one” (Perelandra 242). Ransom is horrified as he comes to believe that he is facing a creature of evil, and not the disagreeable professor Weston: “forcing its way up into consciousness, thrusting aside every mental habit and every longing not to believe, came the conviction that this, in fact, was not a man: that Weston’s body was kept, walking and
undecaying, in Perelandra by some wholly different kind of life, and that Weston himself was
gone” (243). The creature necessarily using the body uses it in its own horrifying way:

It's eyes moved like the eyes of a living man but it was hard to be sure what it was looking
at, or whether it really used the eyes as organs of vision at all. One got the impression of
a force that cleverly kept the pupils of those eyes fixed in a suitable direction while the
mouth talked but which, for its own purpose, used wholly different modes of perception.
(254)

Even the faculty of reason is a tool for deception when used by the Un-man:

It showed plenty of subtlety and intelligence when talking to the Lady; but Ransom soon
perceived that it regarded intelligence simply and solely as a weapon, which it had no
more wish to employ in its off-duty hours than a soldier has to do bayonet practice when
he is on leave. Thought was for it a device necessary to certain ends, but thought in itself
did not interest it. It assumed reason as externally and inorganically as it had assumed
Weston's body. (260)

Throughout his time following and being followed by the Un-man, Ransom experiences
assaults on his own faith. One of the tools the Un-man uses is a form of Westonism Ransom
labels “The Empirical Bogey.” While drifting on the vast Perelandrian sea, Ransom tries to recall
the glory he felt at first discovering wonder, but to no avail. “In vain did Ransom try to
remember that he had been in ‘space’ and found it Heaven, tingling with a fullness of life for
which infinity itself was not one cubic inch too large. All that seemed like a dream” (293). The
conception of the area above and around earth as the lifeless area of space, inhabited perhaps by
ghosts, comes back to Ransom:
That opposite mode of thought which he had often mocked and called in mockery The Empirical Bogy came surging into his mind – the great myth of our century with its gases and galaxies, its light years and evolutions, its nightmare perspectives of simple arithmetic in which everything that can possibly hold significance for the mind becomes the mere by-product of essential disorder. Always till now he had belittled it, had treated with a certain disdain its flat superlatives, its clownish amazement that different things should be of different sizes, its glib munificence of ciphers. (293).

The “nightmare, long engendered in the modern mind by the mythology which follows in the wake of science” returns to him for a moment as his faith is assaulted (Out of the Silent Planet 26).

In his October 1944 letter to Professor Brady about the sources for his trilogy, Lewis suggested, “Milton I think you possibly over-rate: it is difficult to distinguish him from Dante & St Augustine” (Hooper, Letters 375). That is to say, although the agon between Ransom and Weston constitutes at one level an evident criticism of the imperial encroachments of western scientific culture, at another level it recapitulates an archetypal agon. There are, however, unmistakable references to Milton’s Paradise Lost in Perelandra. Besides including a few allusions and direct references, frequently Lewis attempts in Perelandra to make clear that this is a different story. Weston’s appearance on the beach includes an allusion to Milton’s devil in Paradise Lost – “squatting at the roots of his tree with his knees drawn up” – strengthens the illustration of Weston’s collusion with the black archon (228). The events on Perelandra are not like the events on earth related by Milton. As it becomes apparent to Ransom that his position on Perelandra is a miracle, it becomes clear that the mission he must perform has a status not

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8 Marsha Ann Daigle’s Dante’s ‘Divine Comedy’ and the Fiction of C.S. Lewis reviews The Cosmic Trilogy as Dantecan journey.
possible on Earth; he imagines "[w]hatever happened here would be of such a nature that Earthmen would call it mythological" (274). Further, the story will not repeat itself:

Every minute it became clear to him that the parallel he had tried to draw between Eden and Perelandra was crude and imperfect. What had happened on Earth, when Maleldil was born a man at Bethlehem, had altered the universe for ever. The new world of Perelandra was not a mere repetition of the old world of Tellus. Maleldil never repeated Himself. (274)

Although Ransom recognizes that the story he has been living, and the story he recalls from Milton and from Genesis differ, "In vain did his mind hark back, time after time, to the Book of Genesis, asking 'What would have happened?'" (275). The stories he knows can offer no clues because, as he learns, "Only the actual was real: and every actual situation was new" (275).

Neither is the Un-man, Lewis's version of the devil, anything like Milton's devil. Lewis's *A Preface to Paradise Lost*, written in 1942, is Lewis's response to critical response to *Paradise Lost*. Chapter thirteen considers the character of Milton's Satan, and the misguided admiration (because Milton could not have concurred) that certain Romantic thinkers displayed for him. "The proposition that Milton's Satan is a magnificent character" if taken to mean "that the real being (if any) whom Milton is depicting, or any real being like Satan if there were one, or a real human being in so far as he resembles Milton's Satan, is or ought to be an object of admiration and sympathy, conscious or unconscious, on the part of the poet or his readers or both" was "never affirmed before the times of Blake and Shelley" and is "wholly erroneous," in Lewis's opinion (95). Milton could not have agreed with those who admire Satan; "[w]e know from his prose works that he believed everything detestable to be, in the long run, also ridiculous; and mere Christianity commits every Christian to believing that 'the Devil is (in the
long run) an ass”’ (95). Just as Lewis wrote *Perelandra* for an audience of his co-religionists, so Milton expected of his sympathetic readers a certain response: when Milton wrote *Paradise Lost* “[m]en still believed that there really was such a person as Satan, and that he was a liar. The poet did not foresee that his work would one day meet the disarming simplicity of critics who take for gospel things said by the father of falsehood in public speeches to his troops” (100). Yet Lewis recognized that his work would also be read by non-Christians, and perhaps used this knowledge to create a wholly disdainful fictional portrait of Satan.

Lewis’s version of the devil, or one of the devils, presented in *Perelandra* gives the reader no opportunity for enjoyment. The Un-man is in no way attractive. At the beginning of the temptation, Ransom:

had the full opportunity to learn the falsity of the maxim that the Prince of Darkness is a gentleman. Again and again he felt that a suave and subtle Mephistopheles with red cloak and rapier and a feather in his cap, or even a sombre tragic Satan out of *Paradise Lost*, would have been a welcome release from the thing he was actually doomed to watch. (259-60)

The Un-man teases, and destroys, and bothers when it suits his purpose. He is nasty, puerile, ugly, petty, and evil. Not sure what he has encountered, though certainly “a creature of more fantastic shape than he had yet seen on Perelandra,” Ransom finds:

[a] damaged animal. It was, or had been, one of the brightly coloured frogs. But some accident had happened to it. The whole back had been ripped open in a sort of V-shaped gash, the point of the V being a little behind the head. Something had torn a widening wound backward – as we do in opening an envelope – along the trunk and pulled it out so far behind the animal that the hoppers or hind legs had been almost torn off with it. (241)
The frog he finds is not yet dead, and "proved remarkably hard to kill" (241). Ransom gets his first glimpse of the Un-man by following a row of mutilated frogs. He watches as "he was tearing a frog—quietly and almost surgically inserting his forefinger, with its long sharp nail, under the skin behind the creature's head and ripping it open" (242).

The Un-man speaks Ransom's name and waits for a reply. "'Well?' said Ransom" (Perelandra 254); "'What is it?' said Ransom sharply" (255); "'What the hell do you want?' he roared at last" (255). "'Nothing'" is the Un-man's only reply. Ransom feels sick that the attack is so puerile:

If the attack had been of some more violent kind it might have been easier to resist. What chilled and almost cowed him was the union of malice with something nearly childish. For temptation, for blasphemy, for a whole battery of horrors, he was in some sort prepared: but hardly for this petty, indefatigable nagging as of a nasty little boy at a preparatory school. (255)

Lewis's portrait of Satanic evil leaves no room for admiration.

Lewis's Satan, his "ransom" and his portrayal of the twisted scientist in the central book of The Cosmic Trilogy are factors that make Perelandra more unlike science fiction than even Out of the Silent Planet. However, within the cosmology of Perelandra, Lewis respects scientific theories, as known in the mid-1940s: the planets in this solar system revolve around the sun, Mars is colder than Venus, and Venus has a thick atmosphere. The theories of the scientist Schiaparelli are disputed, but only for environmental purposes. Weston ceases to be Weston for religious, rather than scientific, mistakes. Perelandra expands Lewis's fictional universe to prepare for a final battle. The exploration of powers and principalities that Ransom does battle with, the state of lost dignity and humanity that killed Weston, and the truth about
hierarchy and objectivity continue to set the stage for an anti-scientism exploration in *That Hideous Strength.*
Chapter Four

Wisdom Abolished in That Hideous Strength

That Hideous Strength, the final text of The Cosmic Trilogy, has less in common with other science fiction books than either Out of the Silent Planet or Perelandra. A fictionalization of the ideas expressed in Lewis’s The Abolition of Man, That Hideous Strength nevertheless makes certain points about modern applied science and the lost relationship between knowledge and wisdom. Scientific endeavour, as practiced by the National Institute for Co-ordinated Experiments (N.I.C.E.) and the treatment of nature and animals take up much of Lewis’s concerns in That Hideous Strength.

Lewis connects the third book in The Cosmic Trilogy to his earlier work in the preface to That Hideous Strength: “This is a ‘tall story’ about devilry, though it has behind it a serious ‘point’ which I have tried to make in my Abolition of Man” (353). Lewis’s accomplishment in The Abolition of Man consists of drawing attention to the idea that modern educational methods and philosophies can negatively affect pupils’ assumptions about the nature of humanity. Lewis’s proclamation for Natural Law and Practical Reason rejects logical positivism, the philosophical stance that changes the function of language and denies the dignity of humanity. That Hideous Strength dramatizes the arguments of The Abolition of Man by presenting characters who carry the principles of logical positivism to their logical extremes.

The first of the three lectures which make up The Abolition of Man, “Men Without Chests” takes as its point of departure the evaluation of an unidentified elementary textbook of English. Lewis, not wishing to berate the authors who sent him a complimentary copy, does not offer their actual names, or the title of their text. He names them “Gaius” and “Titius” and calls
it *The Green Book*. Lewis suggests that the textbook teaches "precisely nothing" (5) about literature. What it does teach "is the belief that all emotions aroused by local association are in themselves contrary to reason and contemptible" (5). That a literary text should teach this philosophical position was probably not the intention of Gaius and Titius, but, as Lewis suggests, "literary criticism is difficult, and what they do is very much easier" (8). The philosophical position Lewis identifies is logical positivism; in identifying this position in a "little book of English" (1), he anticipates the definition of positivism given by Paul Ricoeur: "all language that is not descriptive, in the sense of giving information about facts, must be emotional. [...] what is 'emotional' is sensed purely 'within' the subject and is not related in any way whatsoever to anything outside the subject" (226).

Logical positivism shuns referentiality, correspondence, conformity and order. Representatively, Professor Augustus Frost eschews the "preposterous idea of an external standard of value which an emotion produced" (That Hideous Strength 659). Teaching that emotions are judgements and that emotional states are simply psychological facts The Green Book fails in its attempt "to admit that a good education should build some sentiments while destroying others" (The Abolition of Man 9). By contrast, what for brevity's sake Lewis calls the Tao is "the doctrine of objective value, the belief that certain attitudes are really true, and others really false, to the kind of thing the universe is and the kind of things we are" (The Abolition of Man 12). In That Hideous Strength, when Mark accepts "the Normal" in response to Professor Frost's Objectivity Training, he is, in effect, accepting the doctrine of objective value: "He was choosing a side: the Normal" (663).

*The Green Book's* teaching contradicts the Tao, a doctrine that, under various guises, until modern times was perhaps universally accepted. Lewis notes that Gaius and Titius present
a new educational message: "Until quite modern times all teachers and even all men believed the universe to be such that certain emotional reactions on our part could be either congruous or incongruous to it – believed, in fact, that objects did not merely receive, but could merit, our approval or disapproval, our reverence, or our contempt" (The Abolition of Man 9). Ransom lives out such congruity on Perelandra. When meeting the Un-man, he discovers the proper function of hatred and "rejoiced in the perfect congruity between his emotion and its object" (285). Mark Studduck, modern sociologist of Bracton College in That Hideous Strength, would, by contrast, be incapable of such exultation. He welcomes his ability to overcome his spontaneous revulsion for the people he meets as a sign of maturity. Positivism in the educational system, Lewis feared, conditioned the student against "emotion, beauty, transcendental reality, and objective value" (Cunningham 57); the narrator in That Hideous Strength outlines Mark’s position:

It must be remembered in Mark’s mind hardly one rag of noble thought, either Christian or Pagan, had a secure lodging. His education had been neither scientific nor classical – merely ‘Modern’. The severities both of abstraction and of high human tradition had passed him by: and he had neither peasant shrewdness nor aristocratic honour to help him. He was a man of straw, a glib examinee in subjects that require no exact knowledge (he had always done well on Essays and general papers). (540-41)

Mark’s education cannot prepare him to resist the attraction of getting to the most inner inner circle; even as he learns membership would eventually kill him: "The fact that it was almost completely horrible did not in the least diminish its attraction" (619).

Without the doctrine of objective value (the Tao) all teaching becomes either conditioning or propaganda. If no value can be ascribed, all values should equally be rejected.
Lewis uses a classic example: "[w]hen a Roman father told his son that it was a sweet and seemingly thing to die for his country, he believed what he said" (The Abolition of Man 14); when modern educators read dulce et decorum, they "must set themselves to work to produce, from outside, a sentiment which they believe to be of no value to the pupil and which may cost him his life, because it is useful to us (the survivors) that the young man should feel it" (14). The Roman father initiated his son into beliefs he knew were true. The new education system merely conditions students to live according to whatever convenient principles can be sufficiently commended by the educators.

The authors of The Green Book, being "better than their principles" (15), are not the perpetrators of cynical propaganda: "they leave the matter alone and get on with the business of debunking" (15). The second lecture in The Abolition of Man, called "The Way," explores the ramifications of the attempt to reject all values as 'sentimental' or 'emotional' and therefore undesirable. Extrapolating from Gaius and Titius' teaching, Lewis imagines a value-Innovator who "regards dulce et decorum [...] as mere irrational [sentiment...] to be stripped off in order that we may get down to the 'realistic' or 'basic' ground of this value" (19).

The educators' arguments against sentimental writing in their grammar book used reason; Gaius and Titius inferred connections between propositions ultimately derived from sense data. The Innovator, attempting to use reasonable arguments, with reason thus defined, will fail. According to this standard definition of rationality, "a refusal to sacrifice oneself is no more rational than a consent to do so. And no less irrational" (The Abolition of Man 20). Neither selfish nor altruistic acts can be concluded from reasoned premises because "[f]rom propositions about fact alone no practical conclusion can ever be drawn" (20). The fact that 'this will preserve society' is never reason enough for anyone to conclude 'I ought to risk death.' No one
can “get a conclusion in the imperative mood out of premises in the indicative” (20). The Innovator cannot find a ground for value in reason without changing the definition of reason itself.

Lewis reveals the difficulties with the Innovator’s presumed suggestion that Instinct is a more basic ground for behaviour than reason. Lewis grants that although the word ‘instinct’ means nothing, he can agree to use it in a mutually understood sense.⁹ The Innovator cannot insist that instinct makes people act a certain way, or that obeying instinct satisfies people. If the latter, no exhortations or praise would ever be necessary; if the former, satisfaction of “an instinctive desire for the good of posterity […] by the very nature of the case, can never be satisfied, since its aim is achieved, if at all, when we are dead” (22). The remaining option for the Innovator is the appeal to “oughtness.”

That one ought to obey instinct repeats the difficulty the value-Innovator had with reason: no psychological, or instinctual tendency inherently includes practical principles. “Even if it were true that men had a spontaneous, unreflective impulse to sacrifice their own lives for the preservation of their fellows, it remains a quite separate question whether this is an impulse they should control or one they should indulge” (The Abolition of Man 23). In denying rules of precedence (hierarchy receives support only from arguments within the Tao), the Innovator has no appeal to any authority. Neither is infinite regress possible. Lewis discovers: “[e]ither the premises already concealed an imperative or the conclusion remains merely in the indicative” (24).

The Innovator’s practical principles emerge from the Tao; without a doctrine of objectivity, any value system will fail: “[i]f nothing is self-evident, nothing can be proved.

⁹ “Instinct is a name for we know not what (to say that migratory birds find their way by instinct is only to say that we do not know how migratory birds find their way)” (The Abolition of Man 21).
Similarly if nothing is obligatory for its own sake, nothing is obligatory at all” (The Abolition of Man 27). Because all claims to innovation of value systems retain some measure of traditional value, and because “no kind of factual observation and no appeal to instinct” (28) can actually ground subjective opinion, Lewis concludes:

Natural Law or Traditional Morality or the First Principles of Practical Reason or the First Platitudes, is not one among a series of possible systems of value. It is the sole source of all value judgements. If it is rejected, all value is rejected. If any value is retained, it is retained. The effort to refute it and raise a new system of value in its place is self-contradictory. There never has been, and never will be, a radically new judgement of value in the history of the world. What purport to be new systems or (as they now call them) ‘ideologies,’ all consist of fragments from the Tao itself, arbitrarily wrenched from their context in the whole and then swollen to madness in their isolation, yet still owing to the Tao and to it alone such validity as they possess. (28-9)

The appendix printed with The Abolition of Man, “Illustrations of the Tao,” offers points of Natural Law. The Tao should not be mistaken for an unchanging code of morals, for development of certain points of value is illustrated even in the short list of examples Lewis gives. He argues only for the allowance of some first principles: “if we are to have values at all we must accept the ultimate platitudes of Practical Reason as having absolute validity” (32). ¹⁰

The third lecture in the series, from which The Abolition of Man takes its title, outlines the consequences of completely rejecting the doctrine. It is possible, Lewis suggests, and less hypocritical to suggest that value is completely unnecessary, than to attempt to discredit

¹⁰ Lewis includes this clarification: “In order to avoid misunderstanding, I may add that though I myself am a Theist, and indeed a Christian, I am not here attempting any indirect argument for Theism. [...] any attempt, having become sceptical about [the ultimate platitudes] to reintroduce value lower down on some supposedly more
traditional value systems while hoping to find "'real' values" (33). His considerations begin with attempting to delineate "what the thing called 'Man's power over Nature' must always and essentially be" (35). Lewis makes his point in *That Hideous Strength* through the great physiologist Filostrato, who, when speaking to Mark, uses the very words that Lewis speaks in *The Abolition of Man*: "'All that talk about the power of Man over Nature [...]. You know as well as I do that Man's power over Nature means the power of some men over other men with Nature as the instrument'" (532). What Filostrato fails to recognize is the one dimension that completely modifies the picture painted "of a progressive emancipation from tradition and a progressive control of natural processes resulting in a continual increase of human power" (*The Abolition of Man* 36): the great physiologist forgets about Time.

Dick Devine, Lord Feverstone, conceives of the National Institute of Coordinated Experiments' struggle as being about the conquest of nature: "[i]f science is really given a free hand it can now take over the human race and recondition it: make man a really efficient animal" (*That Hideous Strength* 385). Three categories of problem stand in his way: the interplanetary, the earthly and the Human. Lewis identifies "[t]he final stage [...] when Man by eugenics, by pre-natal conditioning, and by an education and propaganda based on a perfect applied psychology, has obtained full control over himself. *Human* nature will be the last part of Nature to surrender to Man" (*The Abolition of Man* 37). Feverstone's words echo *The Abolition* argument:

'At first – sterilization of the unfit, liquidation of backward races (we don't want any dead weights), selective breeding. Then real education, including pre-natal education.

By real education I mean one that has no 'take-it-or-leave-it' nonsense. A real education

'realistic' basis, is doomed. Whether this position implies a supernatural origin for the *Tao* is a question I am not here concerned with" (32).
makes the patient what it wants infallibly: whatever he or his parents try to do about it.

Of course, it’ll have to be mainly psychological at first. But we’ll get on to biochemical conditioning in the end and direct manipulation of the brain.’ (That Hideous Strength 387)

Feverstone cannot ask what winning the battle against human nature represents: “who, precisely, will have won it?” (The Abolition of Man 37).

Professor Frost, in both his life and his death represents the problem with decontextualizing values: as one who hopes to be among the “motivators, the creators of motives” (The Abolition of Man 39), Frost gradually loses his ability to justify his actions on any grounds. To engage with the macrobes, the intelligent species he believes are communicating with them, Frost insists it is necessary “to go outside the whole world of our subjective emotions” (617). In attempting to base his actions on “total objectivity of mind” (619), Frost succumbs to totally irrational behaviour; he notes to himself near the end that “[i]creasingly, his actions had been without motive” (726). Frost’s final action executes the option Lewis’s Conditioners are given: “If you will not obey the Tao, or else commit suicide, obedience to impulse [...] is the only course left open” (The Abolition of Man 42).

In becoming the molders of men, those who would reject the Tao cease to be men. Conditioners become “artefacts” (The Abolition of Man 41). Though the results are different, initiation to the society of the macrobes leaves both Frost and Wither “divided [...] from humanity” (That Hideous Strength 662). Frost finds, as he burns himself to death, that “his mind [is] a mere spectator” (726). John Wither, Deputy Director of the N.I.C.E, whose name in Old
English (wiper) comes from an Indo-European root denoting separation or division\(^{11}\) has
"something rather vague and chaotic about" (388) his face. Not only his physiognomy but also
his speech is ambiguous: "his very syntax is a vast and indeterminate mire quite devoid of
meaning" (Howard 149). Wither’s willed detachment from all knowledge eventually results in
Mark’s nightmare image: “a tall, slightly stooping figure, sauntering and humming a little dreary
tune” (545), the D.D. roaming the hallways and roadways of Belbury as “the real Wither, float[s]
far away on the indeterminate frontiers of ghosthood” (698).

Wither’s philosophical journey corresponds to the progression Lewis articulates in *The
Abolition of Man*:

He had passed from Hegel into Hume, thence through Pragmatism, and thence through
Logical Positivism, and out at last into the complete void. The indicative mood now
corresponded to no thought that his mind could entertain. He had willed with his whole
heart that there should be no reality and no truth, and now even the imminence of his own
ruin could not wake him. (721)

The Conditioner of men, maker of conscience, ceases to be a man. The innocuous point of
departure taken by the authors of *The Green Book*, “the belief that all emotions aroused by local
association are in themselves contrary to reason and contemptible” (*The Abolition of Man* 5),
when effected in literary, philosophical and ethical realms, results in the abolition of man.

Lewis notes that not only current public enemies may practice the habits of mind that can
lead to the destruction of humanity; for although dissenting levels of brutality may emerge from
a variety of methods “many a mild-eyed scientist in a pince-nez, many a popular dramatist, many

\(^{11}\) In Old English wiper means hostile, adverse, contrary, opposite; or on the wrong side. In English, ‘wither’ can
connote making or becoming dry; ‘to wither’ means to lose vitality. All of these meanings can apply to the Deputy
Director of the N.I.C.E.
an amateur philosopher in our midst, means in the long run just the same as the Nazi rulers of Germany" (The Abolition of Man 46). The ideas that result in the N.I.C.E. emerged as much from Bracton College as from the macrobes. After both the N.I.C.E. and Edgestow have been abolished, Denniston asks:

‘Was there a single doctrine practised at Belbury which hadn’t been preached by some lecturer at Edgestow? Oh, of course, they never thought anyone would act on their theories! No one was more astonished than they when what they’d been talking of for years suddenly took on reality. But it was their own child coming back to them: grown up and unrecognisable, but their own.’ (741)

Lewis’s insistence that the practical applications of subjective theories without recourse to Natural Law result in death can be voiced in That Hideous Strength by both a member of the N.I.C.E. and one of the good characters: Feverstone says ‘‘If you try to be neutral you become simply a pawn’’ (386); Camilla Denniston insists to Jane Studdock ‘‘If you don’t give yourself to us, the enemy will use you’’ (467). William Hingest, the positive scientist figure in the novels, twice observes to Mark that ‘‘It all depends on what a man likes’’ (404 and 418). His observation highlights the fact that not making a choice represents a choice: individuals must choose right or wrong.

Some final points in The Abolition of Man that are worked out in That Hideous Strength reveal Lewis’s concerns with language. Language can be affected by ideologies: euphemisms arise to conceal the true significance of attempts to break Natural Law. And when logical positivism moves from philosophy to literary criticism, metaphors can lose all hope of referentiality.
That the ideas put forth by the N.I.C.E. affect language on a basic level can be seen in common euphemisms. *The Abolition of Man* offers some examples:

The belief that we can invent ‘ideologies’ at pleasure, and the consequent treatment of mankind as mere θάνατος specimens, preparations, begins to affect our very language. Once we killed bad men: now we liquidate unsocial elements [...]. Most wonderful of all, the virtues of thrift and temperance, and even of ordinary intelligence, are sales-resistance.

(46).

Fairy Hardcastle explains to Mark the importance of substituting, in the mind of the general public, the notion of remedial treatment “for the old notion of ‘retributive’ or ‘vindictive’ punishment” (417). Denniston shocks Mark when he reveals he knows that what Hardcastle and the N.I.C.E. call Remedial Treatment are actually various “tortures or assaults on personal identity” (579). The narrator makes a similarly explicit statement about words and things: “An educated man [captive at Belbury] would have been thinking how this new idea of cure instead of punishment, so humane in seeming, had in fact deprived the criminal of all rights and by taking away the name punishment made the thing infinite” (718).

Logical positivism, the philosophical tradition the authors of *The Green Book* found themselves espousing, finds a correspondence in later literary theory. Lyle Smith, in a 1991 article about Lewis on metaphor, notes Lewis’s ability to argue for the validity and referentiality of reason and language according to similar premises. When these philosophical ideas move into literary theory, language can lose its referential function. Smith explains:

The effect of this thinking made itself felt in the Formalist insistence that the literary work of art as a whole is self-contained, independent of any external structures, a ‘verbal icon.’ Deconstructionism has extended this notion to the level of words, so that the issue
of poetic or even verbal referentiality is, if anything, even more pointed than it was in Lewis’s time. (20)

Lewis argues in “Bluspels and Flalansferes” that metaphors have not always been dead, and “if there is not, in fact, a kind of psycho-physical parallelism (or more) in the universe, then all our thinking is nonsensical” (265). Without some actual validity and reference to language, imagination and reason, there can be no meaningful thought or communication. Language metaphorically comes to life when Dimble speaks in the Great Tongue:

The voice did not sound like Dimble’s own: it was as if the words spoke themselves through him from some strong place at a distance – or as if they were not words at all but the present operations of God, the planets, and the Pendragon. For this was the language spoken before the Fall and beyond the Moon and the meanings were not given to the syllables by chance, or skill, or long tradition, but truly inherent in them as the shape of the great Sun is inherent in the little waterdrop. (That Hideous Strength 587)

Jane, and all those present, hear the validity and referentiality that Lewis insists authoritative language must have.

The epigram and the title of That Hideous Strength come from Sir David Lindsay’s sixteenth century poem referring to the Tower of Babel story in Genesis 11. The Hebrew root of the word “Babel” is bll “to confuse”. The final scenes at Belbury re-dramatize the conclusion to the Babel story: those who have tried to deny death, to gain a collective identity, to usurp the power of the Creator find themselves first without words and then without life. Merlin surreptitiously leaves the dining room after implanting “the curse of Babel” (718) upon the
enemies. "Wither had once heard his voice calling loud and intolerably glad above the riot of nonsense, 'Qui Verbum Dei contemptserunt, eis auferetur etiam verbum hominis'" (718).12

Lewis's "tall story' about devilry" (353) makes points about the loss of a doctrine of objective value, about the state of modern education, and about how language means. To the fictionalization of The Abolition of Man lectures, Lewis adds other concerns. He makes explicit the fact that his concerns are purely modern, but uses classical examples to illustrate them.

Lewis makes explicit that the exercise of power practiced by the N.I.C.E., and the abolition of humanity that results, could only occur in the twentieth-century:

You could not have done it with nineteenth century scientists. Their firm objective materialism would have excluded it from their minds; and even if they could have been made to believe, their inherited morality would have kept them from touching dirt. [...] It was different now. Perhaps few or none of the people at Belbury know what was happening; but once it happened, they would be like straw in fire. What should they find incredible, since they believed no longer in a rational universe? What should they regard as too obscene, since they held that all morality was a mere subjective by-product of the physical and economic situations of men? (That Hideous Strength 560)

The N.I.C.E. views nature as raw material: "Nature, all over the globe of Tellus, would become their slave; and of that dominion no end, before the end of time itself, could be certainly foreseen" (561). Professor Filostrato, physiologist, explains his future plans for nature, saying "'we clean the planet [...] One day we shave the planet.'" (526). He has come to believe that "'The impure and the organic are interchangeable conceptions'" (527). The grounds for the N.I.C.E., less than aptly named the "Ornamental Pleasure Grounds," represent the intermediary look he would like to see all over the world:

12 They that have despised the word of God, from them shall the word of man also be taken away.
There were trees dotted about and winding paths covered so thickly with round white pebbles that you could hardly walk on them. There were immense flower beds, some oblong, some lozenge-shaped, and some crescents. There were plantations—slabs would be almost a better word—of that kind of laurel which looks as if it were made of cleverly painted and varnished metal. Massive summer seats of bright green stood at regular intervals along the paths. The whole effect was like that of a municipal cemetery. (452)

Nature is made to look un-natural; the garden looks artificial.

The garden setting of St. Anne’s becomes the setting for Jane’s conversion, joining a long line of gardens (from Eden to the garden of Augustine’s conversion) as a setting for life-changing and affirming moments. Jane’s first view of the garden reminds her of literary gardens:

It was like—like—yes, now she had it: it was like the garden in *Peter Rabbit*. Or was it like the garden in *Romance of the Rose*? No, not in the least like really. Or like Klingsor’s garden? Or the garden in *Alice*? Or like the garden on the top of some Mesopotamian ziggurat which had probably given rise to the whole legend of Paradise?

Or simply like all walled gardens? (408)

Unlike the setting at Belbury, the garden is allowed its organic growth; the gardener tends the grounds rather than sterilizes them.

The difference in the treatment of animals at Belbury and St. Anne’s shows the difference between the modern scientific way and the right way to treat creatures, as already understood by Ransom. The N.I.C.E. plans “an immense programme of vivisection, freed at last from Red Tape and from niggling economy” (452). In a 1947 essay entitled “Vivisection,” published in *First and Second Things*, Lewis explained his thinking behind vivisection: “Now vivisection can only be defended by showing it to be right that one species should suffer in order that another
species should be happier. And here we come to the parting of the ways. The Christian defender and the ordinary 'scientific' (i.e., naturalistic) defender of vivisection, have to take quite different lines" (79). At St. Anne's animals are treated not as pets, but as fellow creatures lower down on the hierarchical scale of being. Mr. Bultitude, Baron Carvo the Jack-daw, Pinch the cat and the menagerie of animals that descend onto the grounds when Venus arrives are part of the same nature that human beings are and are treated accordingly.

Merlinus Ambrosius appears as the character in That Hideous Strength who most immediately illustrates Lewis's conception of the lost connection between magic and science in the modern world. Both the novel and The Abolition of Man consider the negative repercussions of man's changed relationship to nature:

[Merlin] is the last vestige of an old order in which matter and spirit were, from our modern point of view, confused. For him every operation on Nature is a kind of personal contact, like coaxing a child or stroking one's horse. After him came the modern man to whom Nature is something dead – a machine to be worked, and taken to bits if it won't work the way he pleases. (That Hideous Strength 647-48)

There is something which unites magic and applied science while separating both from the 'wisdom' of earlier ages. For the wise men of old the cardinal problem had been how to conform the soul to reality, and the solution had been knowledge, self-discipline, and virtue. For magic and applied science alike the problem is how to subdue reality to the wishes of men: the solution is a technique; and both, in the practice of this technique, are ready to do things hitherto regarded as disgusting and impious – such as digging up and mutilating the dead. (The Abolition of Man 48)
Merlin is a figure from an age in which men could recognize nature as part of an ordered universe. Cecil Dimble wonders aloud to his wife: “I mean, we’ve all been imagining that because [Merlin] came back in the twentieth century he’d be a twentieth-century man” (643). However, as a character from before the Renaissance, Merlin has been affected by the possibilities available in a world without strict delineation between earth and animal: performing magic to heal and to hurt, he stands in contrast to the twentieth-century scientists and scholars who consider nature as distinct from themselves and having no inherent order or independent worth.
Epilogue

George Sayer reports in *Jack: C.S. Lewis and His Times* that the choice to write science fiction arose from Lewis’s observation that little of the science fiction available to readers until the 1940s combined spirituality and adventure, and none in a positive way. Although Lewis’s interest in space-travel and scientifiction began in boyhood, as an adult he found the available fare both intriguing and frightening. Lindsay’s *Voyage to Arcturus* seemed to him to combine the two kinds of fiction, the spiritual quest and the adventure story, that had to that point been kept apart, but not in the potentially positive manner Lewis foresaw. Sayer quotes from W.H. Lewis’s diary, of May 24th 1948, in recalling Lewis’s decision to rectify the situation:

he disagreed with Lindsay’s philosophy, which he described as being “on the borderline of the diabolical …[and] so manichaean as to be almost satanic.” This feeling no doubt aroused in him the desire to write a very different sort of space-travel novel, a Christian novel like the spiritual thrillers of Chesterton and Charles Williams. Concerned that such books were rare, he made a proposal to [J.R.R.] Tolkien: “We shall have to write books of the sort ourselves. Supposing you write a thriller that’s a time-journey, – you have such a strong sense of time – and I write one that’s a space-journey.” (153)

Tolkien’s time-journey thriller was never completed; Lewis’s *Out of the Silent Planet* fulfilled his part of the proposed bargain.

The space-journeys Lewis portrays in his trilogy prepare plots for spiritual adventures on earth and beyond. Moving outside the sphere of Earth was necessary to find an area untouched by human history from which Lewis could make comments on modern events. His science fiction comments, in effect, on the fictions of science, because Lewis was at all times interested
in misleading thinking. Lewis feared the tendency prevalent among modern thinking, as evidenced, for example, by Haldane, to elevate to the highest good not only the methods of science, but also the disciplinary status of the sciences, including social science. Consistently using reason to point out irrationality, Lewis never suggested that science in itself was a danger (even though, as he was aware, some scientists practiced dangerous experiments). Scientific endeavour in its own sphere could be fruitful; Lewis had no quarrel with the scientist or scientific method. That modern thinkers appeared to practice dangerous forms of idolatry was seen by Lewis as not only irreverent but also irrational. The myths that grow out of science, when scientific theories are treated as laws applicable to human behaviour, represent a danger not only to the misguided individual, but also to those they might try to condition.

The first two books of the trilogy present the dangers inherent in modern ways of thinking about science; Lewis illustrates that to define humanity according to its scientific achievements limits human potential. The seed of Westonism, the form of scientism that destroys Devine, and leads to the damnation of Weston, was apparent to Lewis “circulating all over our planet in obscure works of ‘scientifiction’, in little Interplanetary Societies and Rocketry Clubs, and between the covers of monstrous magazines, ignored or mocked by the intellectuals, but ready, if ever the power is put into its hands, to open a new chapter of misery for the universe” (Perelandra 216). Out of the Silent Planet and Perelandra fictionalize and illustrate the idea taken to its extreme.

The third installment of the trilogy, That Hideous Strength, is most strongly prophetic about environmental and educational concerns. Characters who treat nature as if it were an eternally renewable resource and ignore the connection between nature and humanity do so at their peril. Merlin knows nature; he offers to heal Ransom’s wound: “‘Give me but seven days
to go in and out and up and down and to and fro, to renew old acquaintance. These fields and I, this wood and I, have much to say to one another” (649-50). He is a part of nature, more than any of the moderns, not only because he has fewer instruments of technology between himself and the land. He also knows, as a child knows, that the mud created by dirt and rain, is only ‘dirty’ if you track it through a clean kitchen: leave it where it belongs and it is not unsanitary. Jane and Mark Studduck are the by-products of an educational system that fails to acknowledge either tradition or abstraction, objective value or reason. Her procrastination may result from her being “not perhaps a very original thinker” (356), but the schooling that cannot prepare students to learn must take some responsibility for her lack of enthusiasm for her thesis. “It must be remembered in Mark’s mind hardly one rag of noble thought […] had a secure lodging” (540); he is prepared to live as a decent human being only when faced with “a question of life or death” (540).

Lewis wrote science fiction because he feared for modern man: technology and science were making advances which made evolutionism an attractive and almost irresistible myth. Lewis’s anti-scientism is an anti-modernism because the modern age is an age in which scientific thought has been taken to dangerous extremes. Out of the Silent Planet, Perelandra and That Hideous Strength represent a consistent challenge to modern thoughtlessness. The Cosmic Trilogy fairly well summarizes Lewis’s thinking about the modern age. Ideas found in earlier poems, in essays and in records of conversation recur in these science fiction books. In them Lewis reveals himself as a man concerned with the preservation of human dignity in any age and specifically concerned that the cultural tendencies prevalent in the modern age might lead to the eventual abolition of human dignity.
Works Cited and Bibliography


Carter, Margaret L. “Sub-Creation and Lewis’s Theory of Literature.” Bruce Edwards. 129-137.

Christopher, Joe R. “Biographies and Bibliographies on C.S. Lewis.” Walker and Patrick. 216-222.


“Historicism.” Hooper, *Fern-seed and Elephants.* 44-64.

“Meditation in a Toolshed.” Hooper, *First and Second Things.* 50-54.


*Out of the Silent Planet.* *The Cosmic Trilogy.* 1-144.


“A Reply to Professor Haldane.” Hooper, *Of Other Worlds.* 74-85.


*That Hideous Strength.* *The Cosmic Trilogy.* 349-753.


