THE THEME OF THE HARMFUL EFFECTS OF SCIENCE IN THE WORKS OF C.S. LEWIS

A Thesis

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ABSTRACT

The Theme of the Harmful Effects of Science in the Works of C.S. Lewis (August 1971)

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One of the finest of literary historians and critics of the twentieth century, C.S. Lewis, devoted much of his time to writing. Christian apologetics and both fiction and non-fiction works which show his concern for moral values. Lewis feared that the modern rejection of absolute standards and traditional, objective values would leave mankind with no defense against what some men might do with the powers of science. His love of individual freedom and his appreciation for men as creatures of worth in God's sight caused him to fear what might be done to men if science, without the old values to restrain it, were to be given the power of government to enforce what a few men might plan for all the rest.

Lewis expressed these fears in expository prose, particularly The Abolition of Man, and in imaginative literature—his trilogy which includes Out of the Silent Planet, Perelandra, and That Hideous Strength. In The Abolition of Man Lewis described the process of debunking of traditional values which he saw going on in education, in sociology, psychology, biology, and philosophy as students were taught that values are nothing but subjective reactions de-

pending on body chemistry and environment. Then he traced the process of the "Conquest of Nature" by which one phenomenon after another is reduced to a quantitative object: a tree no longer is the
home of a nymph or a spirit to the one who uses it for lumber or
who analyzes it in the laboratory; the mind, reason, and all human
characteristics become "merely" objects in Nature when men study
them as such, forgetting that there is mystery and reality which
cannot by studied empirically.

In the novels Lewis created characters and situations which embody the concepts and actions which he feared and those which he approved. A main character of all the novels, Elwin Ransom, is a Christian who embraces the old values of pity, kindness, honesty, respect for individuals, etc. Professor Weston, in the first two novels, is a scientist who believes there is no absolute truth or value or a God. Weston is willing to sacrifice anyone or anything to his goal of perpetuating human life in the universe. In the third novel the leaders of the National Institute for Coordinated Experiments exhibit the ruthless disregard for people that Lewis feared would begin to appear in those who rejected traditional values; they would regard men as animals for experimentation, as some Nazis had so regarded the Jews. That his fears were not farfetched is seen by a brief glance at some developments in science since Lewis wrote these books.

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TABLE OF CONTENTS

Chapter		Page
ı.	INTRODUCTION	1
II.	MORAL, RELIGIOUS, AND PHILOSOPHICAL BASES FOR LEWIS'S	
	FEARS	12
III.	OUT OF THE SILENT PLANET AND PERELANDRA	30
IV.	THAT HIDEOUS STRENGTH	48
٧.	CONCLUSION	72
LIST O	F WORKS CONSULTED	83
VITA		87

CHAPTER I

INTRODUCTION

Few literary figures in the twentieth century have achieved recognition in two or more fields of endeavor, but Clive Staples Lewis excelled in many areas. He was a critic and historian of literature, one of Oxford's most popular lecturers, a scholar of medieval and Renaissance literatures, a philologist, a Christian apologist, and an author of imaginative literature—children's stories and science fiction and fantasies for adults.

As a youth and into his twenties, Lewis thought that his calling was to write poetry, but when his Spirits in Bondage: A Cycle of Lyrics (London: William Heinemann, 1919) and a long narrative poem, Dymer (London: J.M. Dent, 1926), received little recognition, he concentrated on studying and teaching literature, though he continued to write poems all his life. Many of these poems, having appeared in journals and magazines under a pseudonym, were collected by Lewis's secretary, Walter Hooper, and published, together with previously unpublished ones, after Lewis's death in Poems (New York: Harcourt, Brace & World, 1964).

Better known to students and teachers of literature are Lewis's books of literary criticism and history. He first gained recognition as a scholar of medieval literature with *The Allegory*

Citations conform to the format and style of PMLA, as presented in The MLA Style Sheet, 2nd. edition (New York, 1970).

of Love (Oxford: Clarendon Press, 1936), a study of the tradition of courtly love and its influence on life and literature. Commenting on the book, Professor M.C. Bradbrook said that Lewis's study has "permanently altered the general way of reading medieval poetry." A Preface to Paradise Lost (London: Oxford University Press. 1942) is an effort to explain to modern readers what an epic is and what ideas about the nature of God and man and angels, about hierarchy, and about Christian doctrine appear in the poem and would have been familiar to its first readers. The next important work is English Literature in the Sixteenth Century, Excluding Drama, 2 which was nine years in the writing. Of it one critic wrote, "Everyone who has to use his mind for a living" should study certain passages, especially the sketch of Renaissance politics at the beginning of the chapter on Spenser and Sidney. 3 Studies in Words (Cambridge: University Press, 1960) shows some of Lewis's talent as a philologist, and Experiment in Criticism (Cambridge: University Press, 1961) presents a part of his literary theory, including his definition of myth and fantasy, a love and understanding of which inform all his fiction. The last book on literature which Lewis was able to prepare for publishing before his death is

¹ Quoted by William Luther White, The Image of Man in C.S. Lewis (Nashville: Abingdon Press, 1969), p. 25.

²This is Volume III of The Oxford History of English Literature (New York: Oxford University Press, 1954).

³John Wain, "C.S. Lewis," Encounter, 22 (May 1964), p. 56.

The Discarded Image, An Introduction to Medieval and Renaissance Literature (Cambridge: University Press, 1964). Based on lectures given at Oxford, this book presents the model, or concept, of the universe prevalent in the Middle Agcs and its influence on literature. Five other books containing essays on literature have been published posthumously. Four were edited by Walter Hooper: Studies in Medieval and Renaissance Literature (New York: Cambridge University Press, 1966), Of Other Worlds: Essays and Stories (New York: Harcourt, Brace & World, 1966), Christian Reflections (Grand Rapids: Eerdmans, 1967), and Selected Literary Essays (Cambridge: University Press, 1969). The fifth, Spenser's Images of Life (New York: Cambridge University Press, 1967), was edited by Alastair Fowler.

It is not at all certain that this fine contribution to scholarship would exist if Lewis and his father had not sacrificed to keep the young man at Oxford, hoping he could lecture there even after repeated disappointments as other men were chosen for fellowships. He was finally elected to a fellowship in Magdalen College in 1925, thus not beginning to earn his own living until he was twenty-six years old. His father's willingness to support him so long may have been partly due to the advice of Lewis's tutor, W.T. Kirkpatrick, who said of his pupil: "He was born with the literary

In this collection are two essays particularly helpful in studying Lewis's imaginative works, "On Science Fiction" and "On Children's Stories."

temperament. . . . Outside a life of literary study, life has no meaning or attraction for him . . . he is adapted for nothing else." Since early childhood Lewis had been an avid reader in a house filled with books; he had written many animal stories before he was seven and a complete novel by 1912, before he was thirteen years of age. 6

After lecturing at Oxford for thirty years and becoming one of the few dons whose lectures were always filled to overflowing, Lewis accepted a fellowship at Cambridge in 1954, which he held until the year of his death, 1963. There he continued to write and published one or two books a year, though not all were on literary subjects. Concerning Lewis's literary criticism. Neville Coghill wrote that it

has the unusual qualities of his mind at large, of which I think the chief to be his power to read and enjoy fluently in five or six languages: the power to think; the power to make judgements and generalizations that lead the reader into new territory: the power to write quickly. clearly, and with color and force. His sentences are in homely English, and yet there is something Roman in the easy handling of clauses, and something Greek in their ascent from analogy to idea. The subjects he has chosen to write on have generally been of intrinsic greatness and difficulty; in the field of literature he has illuminated a whole way of sexual feeling in The Allegory of Love, a whole age of poetry and prose in The Sixteenth Century, a major poet in Preface to Paradise Lost and a forgotten universe in The Discarded Image: these are magistral books and I do not know of any critic of our times who can

⁵ Letters of C.S. Lewis, ed. W.H. Lewis (New York: Harcourt, Brace & World, 1966), p. 5.

⁶ Ibid., p. 6.

equal this achievement.7

The majority of his readers, however, know him not for his literary scholarship but for his theological and apologetical works, beginning with The Screwtape Letters (London: Geoffrey Bles), which appeared in 1942, and for his imaginative fiction, the "interplanetary novels" -- Out of the Silent Planet (London: John Lane, 1938), Perelandra (London: John Lane, 1943), and That Hideous Strength (London: John Lane, 1945) -- and seven children's books known as The Chronicles of Narnia. 8 Lewis's love of mythology, fantasy, and nature as well as his moral and ethical values are evident in the novels and stories. His theological and ethical convictions, to be discussed in Chapter II, have been presented in essays, articles, interviews, sermons, radio broadcasts, and in almost twenty full-length books, beginning with Pilgrim's Regress, An Allegorical Apology for Christianity, Reason and Romance (London: J.M. Dent, 1933) and ending with the posthumously published God in the Dock (Grand Rapids: Berdman's, 1970), which the editor Walter

⁷ Light on C.S. Lewis, ed. Jocelyn Gibb (New York: Harcourt, Brace & World, 1965), p. 65.

⁸The first five children's books were published in London by Geoffrey Bles: The Lion, the Witch and the Wardrobe (1950), Prinae Caspian (1951), The Voyage of the Dawn Treader (1952), The Silver Chair (1953), and The Horse and His Boy (1954). The last two, The Magician's Nephew (1955) and The Last Battle (1956), were published in London by The Bodley Head.

 $^{^{9}}$ It is difficult to give a specific number because some of the smaller books were later published together as one.

Hooper says is the last of Lewis's unpublished work. ¹⁰ Having moved from atheism through theism to full commitment to Christianity, Lewis felt that he could speak to others who had intellectual doubts concerning the orthodox faith. Soon after his conversion to Christianity in 1931 he began to speak and write, at first to people in his own academic world and then to "industrial workers, members of the Royal Air Force, and students. It was partly due to this varied experience that he came to see why the professional theologians could not express Christianity in language understandable to most people. As a result he set himself the task of 'translating' the Gospel into language which men use and understand. ¹¹ Lewis traced his rejection of Christianity (or at least what little he knew of the Church) and his return to it through literature, philosophy, and certain friendships in Surprised by Joy, the Shape of My Early Life (New York: Harcourt, Brace & World, 1955). ¹²

Scholarship on Lewis includes articles on his medieval and

¹⁰ Those books by Lewis mentioned in this thesis are listed as primary sources in the List of Works Consulted. The best bibliography for all Lewis's published works up to 1965, compiled by his secretary, Walter Hooper, is included in Gibb's Light on C.S. Lewis.

¹¹ God in the Dock, p. 8.

¹² There is no full biography of Lewis but his brother included a very helpful "Memoir" in Letters of C.S. Lewis and there is biographical information in Chad Walsh's C.S. Lewis: Apostle to the Skeptics (New York: Macmillan, 1949), Clyde Kilby's The Christian World of C.S. Lewis (Grand Rapids: Berdman's, 1964), Richard Cunningham's C.S. Lewis: Defender of the Faith (Philadelphia: Westminster Press, 1967), and William White's The Image of Man in C.S. Lewis (Newlyille: Abingdon Press, 1967)

Renaissance studies: more than a dozen theses and dissertations on his theology, his fiction, and his literary theories; four books on his theological and ethical ideas (see note 12 for these books by Walsh, Kilby, Cunningham, and White); and a number of studies which compare Lewis with Charles Williams, J.R.R. Tolkien, T.S. Eliot, or other Christian writers. The earliest of these comparative studies, Charles Moorman's Arthurian Triptych: Mythic Materials in Charles Williams, C.S. Lewis, and T.S. Eliot (Berkeley: University of California, 1960), examines the ways in which these authors used the Matter of Britain in fiction and poetry. In a later study, Precincts of Felicity: The Augustinian City of the Oxford Christians (Gainesville: University of Florida Press, 1966), Moorman shows how Williams, Lewis, Tolkien, Eliot, and Dorothy Sayers make use of Augustine's images of the City of God and the Earthly City. Mark Hillegas in The Future as Nightmare (New York: Oxford University Press, 1967) places Lewis's space novels with Zamyatin's We, Huxley's Brave New World, and Orwell's 1984 as antiutopian works written in reaction to Wellsian utopias of scientifically planned societies. 13 But Hillegas points to a basic dif-

¹³ Chapter II of The Future as Nightmare shows that the reaction in the 1930's to Wells's utopias was based on a misunderstanding of his work. Popularly regarded as a scientific optimist who advocated the union of science and political power, Wells in fact had serious misgivings. His Invisible Man is one of many stories which show "the need for ethical control over the use of science which Wells deemed necessary. . . And how perfect a symbol of science without humanity is an invisible man without scruples" (Hillegas, p. 39). Wells's words about controlling science and his fear of intelligence without human sympathy sound like Lewis in The Abolition of Man.

ference in Lewis's novels; "instead of being a reaction to utopia from a 'disillusioned left', the trilogy is an attack from a conservative Christian right and . . . is a kind of Paradise Lost employed to teach Christian doctrine to a sophisticated but unsuspecting twentieth century, and thus, more than any other anti-utopia, it generates an enveloping myth." Katheryn Nott wrote The Emperor's Clothes (Bloomington: Indiana University Press, 1958) to discredit what she called a new scholasticism in Lewis, Sayers, Eliot, Basil Willey, T.E. Hulme, and Graham Greene, all of whom she thought were trying to turn the western world back to an age of dogmatism. She embraces empirical methods of science as the only way of knowing truth and resents what she feels are attacks on the scientific method by these Christian writers.

To narrow this discussion to the existing criticism of Lewis's space fiction, the most helpful articles in journals are these:

"The Myth-maker's Dilemma: Three Novels by C.S. Lewis" (Discourse, 2, October 1959, pp. 234-243) by Patricia Spacks; "Mr. Lewis in Perelandra" (Thought, 20, June 1945, pp. 271-287) by Victor Hamm; "Lewis Trilogy: A Scholar's Holiday" (Catholic World, 168, July 1948, pp. 337-344) by Margaret Grennan; "There and Back Again:

The Romances of Williams, Lewis, and Tolkien" (Sewance Review, 69, Autumn 1961, pp. 566-578) by W.R. Irwin; and especially these two, "Unifying Themes in C.S. Lewis's Trilogy" (Critique, 9, November

¹⁴Hillegas, pp. 133-134.

1965, pp. 67-80) by W.D. Norwood and "The Cosmic Trilogy of C.S. Lewis" (Hudson Heview, 8, Summer 1955, pp. 240-254) by Wayne Shumaker.

The reception of the space novels has been generally favorable, with the most vocal criticism coming from those who disagree with Lewis's religious and political beliefs, like Professor J.B.S.

Haldane, some of whose objections are presented in Chapter IV.

Most of the critics and reviewers appear willing, however, to let

Lewis believe what he likes. As Leonard Bacon, while not agreeing with Lewis's beliefs, has put it: "He has perfectly clearly gotten himself born for the second time. And no one in his senses will ever directly or indirectly belittle such a piece of luck." 15

Many of these writers have referred to elements in the trilogy which they think show that Lewis was completely opposed to science, but those who knew him personally and/or who have made the most detailed studies of his works—Chad Walsh, Clyde Kilby, Richard Cunningham, and William Luther White—have insisted that it was not science which Lewis was attacking but certain ideas held by people usually not scientists. In a conversation with Lewis, Chad Walsh asked him directly if "he was against science. He answered—with unusual warmth—that he was not." Lewis was concerned because people were attributing to science power which he felt it did not

^{15&}quot;The Imaginative Power of C.S. Lewis," Saturday Review, 27, (April 8, 1944), p. 9.

¹⁶Walsh, p. 129.

have: the unique ability to discover truth. Cunningham discusses such "epistemological arrogance" and "pretensions of unlimited applicability" in C.S. Lewis: Defender of the Faith (pp. 45-53). He duotes Julian Huxley's words, ". . . any set of phenomena can be treated by the method of science,"17 to illustrate Lewis's contention that modern science worship has as its result "the elimination of non-empirical realities, among them objective value, God, and soul."18 Naturalistic empiricism, instead of being a philosophy drawn from verifiable facts, actually "brings its philosophy to the facts." The presupposition that empiricism is the only route to knowledge causes men to "reduce nature to analyzable and manipulative quantities, suspend value judgments about it, and ignore its final cause."²⁰ Lewis agreed with Alfred North Whitehead that "the scientist should exercise 'humility before the fact'" and that "the real scientist will often bow before the mystery of matter and think of realities which he cannot touch or see. But . . . false science . . . explains away instead of explaining and forgets that . . . the abstracted facts of science are not identical with reality."21 But neither admiring writers nor critical ones have

¹⁷ Cunningham, p. 48.

¹⁸Ibid., p. 47.

¹⁹*Ibid.*, p. 47.

²⁰*Ibid.*, p. 47.

²¹Ibid., p. 47.

published a sustained analysis showing how Lewis presents in his novels a theme occurring in his non-fiction also--the theme of the misuse of science.

Lewis lamented another aspect of modern thinking also, the substitution of relativism and subjectivism for the older concept of absolute and objective values. By saying that moral values and views of nature and society were "merely" subjective feelings resulting from environment and from chemical reactions, men were cutting themselves off from safeguards which they would desperately need as their powers grew to affect their own natures and the world around them. Lewis feared that the power of science, unchecked by traditional values of humanity and united with political power, would be the undoing of the race. In Chapter II these fears are presented, as found in Lewis's non-fiction and in his poetry. Chapter III traces this theme through the first two novels of the trilogy, Out of the Silent Planet and Perelandra. Chapter IV shows the working out of these ideas in That Hideous Strength. In Chapter V there is both a summary of Lewis's fears of science without values or restraints and a justification for his foreboding. For within thirty years of the publication of his third space novel, much knowledge has been gained in the area of controlling and changing the nature of man, and applications of this knowledge are already in progress.

CHAPTER II

MORAL, RELIGIOUS, AND PHILOSOPHICAL BASES FOR LEWIS'S FEARS

C.S. Lewis expressed his fears of what man might do to mankind. and even to creatures of other possible worlds, in lectures, poems, letters, essays, magazine articles, sermons, and fiction. Because he felt responsible for other men's welfare, he continued to confront audiences and readers with the logical and, he believed, doombringing conclusions to be reached if we follow two particular trends of modern thought. The first of these is the doctrine of subjectivism which has pervaded twentieth century thought, the theory that morality is relative and that moral standards have grown from mere impulses, from chemical reactions and responses which are in turn simply part of the irrational, blind development of organic life from the inorganic. The second, even more widely held, is the idea that man will and should completely conquer nature, even human nature. The combined effect of these two ideas. Lewis feared, will spell the end of mankind as we know it, for men who have left the standard of traditional, objective morality will have no guide but their own feelings and desires when they begin to control human nature "by eugenics, by pre-natal conditioning, and by an education and propaganda based on a perfect applied psychology."1

¹The Abolition of Man (New York: Macmillan, 1965, Paperbacks Edition), p. 72.

But before we examine Lewis's presentation of this problem, we should establish the reasons for his deep and urgent sense of responsibility for warning men, because his fear of the misuse of scientific knowledge was just one aspect of his sense of mission. What would cause a literary scholar of his ability to take the time to write, in addition to his critical works, dozens of books and essavs on Christian doctrine and practice? From his long study of literature, first, came Lewis's sense of the dignity and worth of man. He was a Christian humanist, in the sense used by some writers on Renaissance tragedy. Lewis believed that man has a definite place in an orderly universe, that he has been made "a little lower than the angels" and above all other created things on earth, over which he must exercise his dominion, while maintaining his obedient service to God. If he seeks to be a god, as Faustus did, or if he fails to exercise his authority as King Lear did when he gave his land to his daughters, he has no place in God's ordered universe. 2

The second and weightier reason for his concern grew out of his Christian beliefs. He saw each man as a creature of infinite worth, because God thought him worth creating, because Christ died for him, and because he is an immortal being. As Lewis' literary executor, Walter Hooper, has written in his preface to a collection of Lewis's essays, "He never forgot that every human being would

Lewis's fullest treatment of the hierarchical view is found in The Discarded Image (Cambridge: Cambridge University Press, 1964). There is also a chapter on this subject in his Preface to Paradise Lost (New York: 1942), pp. 73-81.

enjoy ultimately a vision either Beatific or Miserific." Barlier in the same preface Hooper states that Lewis's conviction of the immortality of men is the central premise of all his works. And Lewis himself said in a sermon, "You have never talked to a mere mortal... it is immortals whom we joke with, work with, marry, snub, and exploit—immortal horrors or everlasting splendours." This appreciation for the worth of each man was tempered by his knowledge of man's capacity for sin, a knowledge drawn from studying the Bible, from classical and later literature, and from his observation and experience. He was quick to admit he was not a trained theologian, but still could understand the capacity for evil in man. In addition to studying theology, he wrote, "... there is an equally reliable, though less creditable, way of learning how temptation works. 'My heart'—I need no other's—'showeth me the wickedness of the ungodly.'"

Thus his vision of the human condition and the solution to its problems led him to spend much of his life, after his conversion to Christianity, speaking and writing about what he called "mere" Christianity. In the preface to his book of that title

³Christian Reflections (Grand Rapids, Michigan: Eerdman's, 1967), p. x.

⁴Ibid., p. vii

^{5&}quot;Weight of Glory," Weight of Glory and Other Addresses (New York: Macmillan, 1949), p. 15.

⁶The Screwtape Letters and Screwtape Proposes a Toast (New York: Macmillan, 1961, Paperbacks Edition), p. xiii.

Lewis explained, "Ever since I became a Christian I have thought that the best, perhaps the only service I could do for my unbelieving neighbors was to explain and defend the belief that has been common to nearly all Christians at all times."

Having considered how Lewis's view of man influenced his purposes in writing, we can turn to the major concern of this study, his feeling that men, because of their fallen nature and their rejection of absolute, objective moral values, would misuse the powers given them by science. The earliest published evidence of this foreboding appeared in his first space novel, Out of the Silent Planet, published in 1938. This novel also shows that Lewis's dread of the uses men might make of science and technology was not confined to their danger to mankind. He believed that men's mistreatment of other creatures that they might find in the universe was not only possible but probable. A comparison of this novel with two essays published over twenty years later reveals no abatement of this fear. In the first essay he reminds us of our history on earth: "We know what our race does to strangers. Man destroys or enslaves every species he can. Civilized man murders, enslaves. cheats, and corrupts savage man. . . . [Men going to exploit other planets] will do as their kind has always done. What that will be if they meet things weaker than themselves, the black man and the

Mere Christianity (New York: Macmillan, 1952, Paperbacks Edition), p. 6.

red man can tell." In the second essay, written less than a year before his death, Lewis expresses the same misgivings: "If we encounter in the depths of space a race, however innocent and amiable, which is technologically weaker than ourselves . . . we shall enslave, deceive, exploit, or exterminate; at the very least we shall corrupt it with our vices and infect it with our diseases. We are not fit yet to visit other worlds. . . . Must we go to infect other realms?" In the first-quoted essay, Lewis, touching again on the subject of the spreading of man's corruption, wonders if "the vast astronomical distances may not be God's quarantine precautions." The most forceful expression of his fear of the spread of infection is found in the third stanza of an undated poem, "Prelude to Space, an Epithalamium."

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 member grow erect, Turgid with the fierce charge Of our whole planet's skill,

^{8&}quot;Religion and Rocketry," The World's Last Night and Other Essays (New York: Harcourt, Brace and Company, 1960), p. 89.

^{9&}quot;The Seeing Eye," Christian Reflections, p. 173.

^{10 &}quot;Religion and Rocketry," ibid., p. 91.

¹¹ Poems, ed. Walter Hooper (New York: Harcourt, Brace & World, Inc., 1965), p. 56.

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 sires).

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. 12

Far more important to Lewis than the possibility of man's cruelty to creatures of other worlds was his fear of what men might do to each other and to unborn generations through the combination of subjectivism and the powers of science. In "The Poison of Subjectivism," an essay published in 1943, Lewis laments the "ruinous effects" of this doctrine on men's moral judgments. Here, as in many other books and essays, Lewis attacks the modern idea that "To say that a thing is good is merely to express our feeling about it, . . . the feeling we have been socially conditioned to have." 13 He

¹² The extended metaphor of the poem may have its source in a book whose outlook on space travel and man Lewis believed to be immoral. In Last and First Men (originally published in 1931, but reprinted by Dover Publications in 1968) Olaf Stapledon writes of a great "dissemination" program; the "last men," two billion years from now, realizing that their sun and their planet will soon be destroyed, prepare minute particles of life-bearing matter to be projected by solar radiation which they hope will land on distant planets and evalve into humans. At an earlier stage in their history, Stapledon's men had destroyed inhabitants of Venus and Neptune so that men could live on those planets after the earth became uninhabitable.

¹³ Christian Reflections, p. -73.

names Plato, Aristotle, Hooker, Butler, and Doctor Johnson as a few of the men who never "doubted that our judgements of value were rational judgements or that what they discovered was objective."14 He feels the modern attitude has grown mainly from man's attempt to study his reason, but this very attempt is like taking "out our eyes to look at them. Thus studied, his own reason appears to him as the epiphenomenon which accompanies chemical or electrical events in a cortex which is itself the by-product of a blind evolutionary process. His own logic . . . becomes merely subjective."15 Lewis moves quickly to attack the conclusion that, if we have simply been conditioned to have certain values, we should "improve our morality" with further conditioning by education or by scientific means. "But of this apparently innocent idea comes the disease that will certainly end our species (and, in my view, damn our souls) if it is not crushed: the fatal superstition that men can create values. that a community can choose its 'ideology' as men choose their clothes."16 In arguing for the necessity of a philosophy which accepts values as absolute and objective, Lewis reminds us that "Many a popular planner on a democratic platform, many a mild-eyed scientist in a democratic laboratory means, in the last resort. just what the Fascist means. He believes that 'good' means what-

¹⁴*Ibid.*, p. 73.

^{15&}lt;sub>Ibid., p. 72.</sub>

¹⁶ Ibid., p. 73.

ever men are conditioned to approve."¹⁷ In opposition to the modern view that men should reject old moralities and develop new ones, Lewis puts forth two propositions:

- (1) The human mind has no more power of inventing a new morality than of planting a new sun in the sky or a new primary color in the spectrum. [For example, no people existing now or in the past has ever praised cowardice or the murder of one's parents. These are ancient ideas common to every culture.]
- (2) Every attempt to do so consists in arbitrarily selecting some one maxim of traditional morality, isolating it from the rest, and erecting it into an unum neaessarium. 18 [If a man chooses love of one's neighbor as the highest or only good, he may ignore other points of traditional morality.]

The fullest expression of these ideas on subjectivism, the denial of objective values, and dangers resulting from these two positions Lewis made in the Riddell Memorial Lectures, delivered in 1943, and later published under the title The Abolition of Man. In its three chapters he develops much more fully the ideas in "The Poison of Subjectivism." In the appendix he lists examples drawn from Egyptian, Babylonian, Hindu, Chinese, Jewish, and Christian writings to illustrate his argument that there is, despite differences in unimportant details, a standard of morality common to all civilizations. This standard of traditional moral values Lewis calls the Tao, a Chinese term meaning "the reality beyond all predicates. . . . the Way in which the universe goes on, the Way in

¹⁷*Ibid.*, p. 81.

¹⁸Ibid., p. 75.

which things everlastingly emerge. . . . the Way which every man should tread in imitation of that cosmic and supercosmic progression, conforming all activities to that great exemplar. "19 Others have called it the Natural Law.

In The Abolition of Man Lewis insists that we must not overlook the thing that is common to all these statements of morality: "It is the doctrine of objective value, the belief that certain attitudes are really true, and others equally false, to the kind of thing the universe is and the kind of things we are" (Abol., 29). Any reformer who desires to better the condition of mankind must work within the Tao, for if he rejects its claims of absolute, objective values, he will move outside Reason. "Outside the Tao there is no ground for criticizing either the Tao or anything else" (Abol., 60). To say that moral codes are simply subjective values . evolved as people have developed through an evolutionary process from mindless matter is to say that we have no basis for choosing to call any idea good or bad or even to trust our own reasoning. The reformer who would throw away traditional morality and establish a new morality can only choose some points already recognized as morally good. Even his criticisms of those who hold to traditional moral standards are based on those very standards. Where does the critic get his ideas of justice, of compassion for the poor, of

 $^{^{19}}$ Abolition, p. 28. Subsequent references to this book will be noted by the abbreviation Abol, and the page number in parentheses in the text.

sharing material wealth, of respecting another's dignity as a human being? These values come not from subjectivism but from the very tradition under attack.

But many moderns are convinced that the Tao simply developed from the way in which earlier people looked at the universe, especially in an agricultural economy and a patriarchal society; they accepted ideas of objective and absolute values outside themselves because they did not know how the mind works. Today the mind is being conquered just as many other things in nature have been. Lewis imagines the subjectivist reformer arguing thus: "You say we shall have no values at all if we step outside the Tao. Very well: we shall probably find that we can get on comfortably without them. Let us regard all ideas of what we ought to do as an interesting psychological survival. . . . Let us decide for ourselves what man is to be and make him into that. . . . Having mastered our environment, let us now master ourselves and choose our own destiny" (Abol., 62-63). Then Lewis reminds us that the mastering of the environment, the power of man over nature is in reality "a power possessed by some men which they may, or may not, allow other men to profit by" (Abol., 68), "a power exercised by some men over other men with Nature as its instrument" (Abol., 69). He uses the airplane, the radio, and contraceptives to show that man can enjoy these things only if he can afford them and if those who sell or tax or produce these goods will allow it. But he may also be a victim if the airplanes drop bombs or the radios broadcast propaganda. The use of contraceptives today means that some men of future generations will never exist or that they, through selective breeding, may become what earlier men decide they should be. "Each new power won by man is a power over man as well" (Abol., 71). "The man-moulders of the new age will be armed with the powers of an omni-competent state and an irresistible scientific technique" (Abol., 73).

This power is also greatly increased by another factor. Earlier systems recognized the Tao as their guide for the values and attitudes to be taught to children, and teachers felt obligated to work within the traditional morality. They were not affected by what Lewis calls "chronological snobbery" -- the idea that old ways give way to new because the new are superior. But the "Conditioners" of the future will "produce conscience [and all judgments of value] and decide what kind of conscience they will produce" (Abol., 74) by pre-natal and psychological conditioning. What will guide their choice of the values they condition into others? Duty was part of the Tao which they reject. Lewis fears that those in control will impose only what they like or desire or need. "Nor are their subjects necessarily unhappy men. They are not men at all: they are artefacts. Man's final conquest has proved to be the abolition of Man" (Abol., 77). But the Conditioners, those "who stand outside all judgements of value, cannot have any ground for preferring one of their own impulses to another except the emotional strength of that impulse" (Abol., 78). And so we cannot be

sure that benevolent impulses will rule as these men condition others. Lewis could not recall from history even one man who had used benevolently power which he had gained by ignoring the Tao. What those in control of science and government do to and with the rest of mankind is then left up to the chance that kindly impulses will predominate in them. "And Chance here means Nature. It is from heredity, digestion, the weather, and the association of ideas that the motives of the Conditioners will spring. Their extreme rationalism, by seeing through all 'rational' motives, leaves them creatures of wholly irrational behaviour. . . At the moment, then, of Man's victory over Nature, we find. . . [that] Nature, untrammelled by values, rules the Conditioners and, through them, all humanity. Man's conquest of nature turns out . . . to be Nature's conquest of Man" (Abol., 79-80).

At this point Lewis explains at some length the abstract term "Nature," first by listing some contrasts, such as the Human, the Supernatural, the Civil, or the Spiritual. Nature "seems to be the world of quantity, as against the world of quality: of objects as against consciousness . . . of that which knows no values as against that which both has and perceives value" (Abol., 81). Then he explains that "when we understand a thing analytically and then dominate and use it for our own convenience we reduce it to the level of 'Nature' in the sense that we suspend our judgements of value about it . . and treat it in terms of quantity" (Abol., 81). For example, astronomy has made us see the stars in a far

different way from the ancients who thought that stars and planets were divinities. Nor do we think of a tree as a Dryad or a beautiful object in creation when we cut it up for lumber. Animals and cadavers become objects for vivisection. In other words, "we reduce things to mere Nature in order that we may 'conquer' them. . . . The price of conquest is to treat a thing as mere Nature. Every conquest over Nature increases her domain. The stars do not become Nature [mere objects] till we can weigh and measure them: the soul does not become Nature till we can psycho-analyze her. The wresting of powers from Nature is also the surrendering of things to Nature" (Abol., 83).

Lewis was not arguing against the advances in medicine, agriculture, or other fields but rather pleading for men to stop short of the logical conclusion of the process of conquering Nature—the conquest of man himself. "It is in Man's power to treat himself as a mere 'natural object' and his own judgements of value as raw material for scientific manipulation to alter at will" (Abol., 84). But like King Lear we cannot "have it both ways: to lay down our human prerogative and yet at the same time to retain it." If we reject the Tao we have no standard outside ourselves by which to judge ourselves and others; "dogmatic belief in objective value is necessary to the very idea of a rule which is not tyranny or an obedience which is not slavery" (Abol., 85). As Lewis later illustrated in his third novel, That Hideous Strength, "many a mildeyed scientist in pince-nez, many a popular dramatist, many an

amateur philosopher in our midst, means in the long run just the same as the Nazi rulers of Germany. Traditional values are to be 'debunked' and mankind to be cut into some fresh shape at the will of some few lucky people in one lucky generation which has learned how to do it" (Abol., 85). We are reminded of George Orwell's Newspeak by Lewis's next point, that our language already reflects the idea that men are specimens to be manipulated: "Once we killed bad men: now we liquidate unsocial elements. . . . boys likely to be worthy of a commission are potential officer material. . . . the virtues of thrift and temperance, and even of ordinary intelligence, are sales-resistance" (Abol., 85).

Lewis realized that some would say he was attacking science, but he denied such an aim and went on to say, "I even suggest that from Science herself the cure might come" (Abol., 86-87). The argument on which he bases this hope may in itself raise controversy, but Lewis reminds us that he had "described as a 'magician's bargain' that process whereby man surrenders object after object, and finally himself, to Nature in return for power" (Abol., 87). He purposely chose the word magician because science and magic had risen as twins in the sixteenth and seventeenth centuries, largely motivated by the same desire: "how to subdue reality to the wishes of men," and this desire separated both science and magic "from the 'wisdom' of earlier ages" when "the cardinal problem had been how to conform the soul to reality" (Abol., 88). The solution for scientists and magicians alike lay in technique, but for earlier

men "the solution had been knowledge, self-discipline, and virtue" (Abol., 88). He compares Francis Bacon with Marlowe's Faustus, who sought not knowledge but power, believing that "a sound magician is a mighty god." Lewis refers to Bacon's Advancement of Learning where that author "condemns those who value knowledge as an end in itself: this, for him, is to use as a mistress for pleasure what ought to be a spouse for fruit. The true object is to extend Man's power to the performance of all things possible. He [Bacon] rejects magic because it does not work, but his goal is that of the 'magician' (Abol., 88-89). Science must admit this idea and perhaps repent in some way for transgressing its bounds.

Lewis then imagines a "regenerate" science which would analyze and explain things without explaining them away. "While studying the It it would not lose what Martin Buber calls the Thousituation. . . Its followers would not be free with the words only and merely" (Abol., 90). This science would not try to reduce the Tao to simply another phenomenon of nature, but would stop short of "explaining away" this reality which gives us meaning and protects us from ourselves, a framework which preserves our humanity. But the science which rejects or destroys traditional morality Lewis saw chiefly in those disciplines which he once called "pseudo-sciences," for example, sociology, and behaviorist and Preudian psychology (especially where scholars in these areas of study try to enter philosophy and religion without the necessary training and study). He makes a clear distinction between these

groups and the pure sciences like chemistry and mathematics in the novel already mentioned, That Bideous Strength, as we will see in Chapter IV, and also in one of his most widely read books, The Screwtape Letters, published a year before The Abolition of Man. Screwtape, an experienced demon, advises his nephew at work on a "patient" in England not to "attempt to use science (I mean, the real sciences) as a defence against Christianity. They will positively encourage him to think about realities he can't touch and see. There have been sad cases among the modern physicists. If he must dabble in science, keep him on economics and sociology. . . . But the best of all is to let him read no science but to give him a grand general idea that he knows it all and that everything he happens to have picked up in casual talk and reading is 'the results of modern investigation." ²⁰

Lewis's criticism then is not of science in general, as many have said, but of science without values, of science which makes itself God. To one of England's great modern scientists, J.B.S. Haldane, who had charged that Lewis traduced scientists in *That Hideous Strength*, the latter replied:

If any of my romances could be plausibly accused of being a libel on scientists it would be *Out of the Silent Planet*. It certainly is an attack, if not on scientists, yet on something which might be called 'scientism'——a certain outlook on the world which is usually connected with the popularization of the sciences, though it is much less common among real scientists than among their readers. It is, in

²⁰The Sarewtape Letters and Screwtape Proposes a Toast (New York: Macmillan, 1962, Paperbacks Edition), p. 10.

a word, 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.²¹

Lewis had perceived such an attitude in some of Professor Haldane's writing, in Shaw's Back to Methuselah, and in Olaf Stapledon's books, and it was against this attitude that his main character spoke, in the novel attacked by Haldane, when he said that sciences were in themselves good but that an evil scientism was invading them. Both in this essay addressed to Professor Haldane and in the preface to That Hideous Strength Lewis states that the view of values he was attacking in this third novel is to be found undisguised in The Abolition of Man. In The Discarded Image Lewis again made clear his distinction between real scientists and the popularizers of science: "In our age . . . the ease with which a scientific theory assumes the dignity and rigidity of fact varies inversely with the individual's scientific education. . . . The mass media which have in our time created a popular scientism, a caricature of the true sciences" did not exist in the Middle Ages. "The ignorant were more aware of their ignorance then than now."22

The statements about the thematic relationship between the non-fiction work, *The Abolition of Man*, and the novel *That Hideous Strength* were both written in 1943. However, we know that Lewis

^{21.} A Reply to Professor Haldane," Of Other Worlds, ed. Walter Hooper (New York: Harcourt, Brace & World, Inc., 1966), pp. 76-77.

²²The Discarded Image, p. 17.

was thinking along these lines at least five years before that, from his own words quoted above concerning what he was attacking in the novel which he published in 1938. It is with this novel, Out of the Silent Flanet, and its sequel, Ferelandra, that the next chapter deals, tracing in them Lewis's concern for what men may do with the power of science. That this was a lifelong concern we have already noted in references to essays written in 1958 and in 1963, the year of his death.

CHAPTER III

OUT OF THE SILENT PLANET AND PERELANDRA

While some who have written on Lewis's fiction insist there are basic differences between Out of the Silent Planet and Perelandra. 1 these novels are placed together in this chapter because, in the first place, they do not contain as much evidence of the theme we are following--that of Lewis's fears for the misuse of science. Secondly, they are closer to each other than to the third novel of the trilogy, That Hideous Strength, in several ways, such as the number of characters and their complexity, the simplicity of plot, the realistic device of naming C.S. Lewis as narrator, and especially their imaginative settings. Because they are other worlds, these settings require description at great length of very strange and different places, while in That Hideous Strength the setting is an ordinary small university in an ordinary English market town. Both novels are necessary to this study because of what they show dramatically of Lewis's attitude toward science and because they establish the space mythology and the character of Ransom, both of which will be important in the third novel, the major vehicle for

The best argued case for this distinction is that of Mark Hillegas in "Out of the Silent Planet as Cosmic Voyage," Shadows of Imagination, ed. Mark Hillegas (Carbondale, Illinois: Southern Illinois University Press, 1969), where he shows how Lewis met and excelled every convention established for the cosmic voyage genre begun by Kepler and continued through Verne and Wells, while in Perelandra, a theological fantasy, the voyage itself is accomplished quickly and with frankly supernatural means.

the expression of the theme of the misuse of science.

Several reviewers of both Out of the Silent Planet and Perelandra have supposed that Lewis deliberately set out to clothe his theological ideas in a form which would reach people who perhaps would not read his apologetical works. Besides his "Reply to Professor Haldane" already referred to for its clear statement of what Lewis was attacking in Out of the Silent Planet, we have his direct denial that he had ever started a story "from a message or a moral. . . . The story itself should force its moral on you. You find out what the moral is by writing the story."2 But we must balance this denial with another statement from Lewis in a letter written about 1938 quoted by Roger Lancelyn Green: "What immediately spurred me to write was Olaf Stapledon's Last and First Men and an essay in J.B.S. Haldane's Possible Worlds, both of which seemed to take the idea of such travel seriously and to have the desperately immoral outlook which I try to pillory in Weston. I like the whole interplanetary 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." And to this we must add Lewis's words in a letter written in 1955: "The imaginative man in me is older, more continuously operative, and in that sense more basic than either the religious writer or the critic. . . . It was

 $^{^2\}mbox{"Unreal Estates,"}$ a conversation recorded on tape in 1962 and published in <code>Encounter</code>, 24 (March 1965), p. 62.

³C.S. Lewis (New York: Henry Z. Walck, Inc., 1963), p. 26.

he who after my conversion led me to embody my religious belief in symbolical or mythopeic forms, ranging from Screwtape to a kind of theologised science-fiction."

Out of the Silent Planet

Some of the mythopeic forms mentioned by Lewis in his letter were first created for the novel, Out of the Silent Planet. In it and in the subsequent novels of the trilogy, elements of Christian and Hebrew teachings and of Greek mythology and medieval legends are blended to complete Lewis's own mythology. He depicts a universe created and ruled by Maleldil the Young, a spirit being who is omnipresent, omnipotent, omniscient, holy, loving, and just. Each planet is ruled for Maleldil by an Oyarsa, a being of superior intelligence and supernatural power. These rulers and the rational creatures of other planets share the same values Lewis has for convenience referred to as the Tao (in The Abolition of Man). They live in joyful obedience to Maleldil. In Out of the Silent Planet, Earth is called "Thulcandra," or the Silent Planet, because it has had no communication with the other parts of the universe since the Oyarsa of Earth rebelled against Maleldil, smiting the moon with barren cold and establishing his own rule on Earth. This Oyarsa, now called the Bent One, was defeated, but not destroyed, and was confined to the space enclosed by the moon's orbit.

⁴Letters of C.S. Lewis, ed. W.H. Lewis (New York: Harcourt, Brace & World, Inc., 1966), p. 260.

Soon after the novel begins, the main character, Dr. Elwin Ransom is kidnapped by two men who are about to go to Mars in the world's first spaceship on the second of their secret voyages. Ransom's abductors are Weston, a physics professor, and Devine, an opportunist who is financing Weston's trips to Mars, which is called Malacandra by its inhabitants. Weston and Devine had made an earlier trip to Mars, which they found was habitable, had rich gold deposits, and was peopled by strange creatures whom they thought wanted a human sacrifice. It turns out that the Malacandrians wanted only to take Devine and Weston for an interview with their ruler, the Oyarsa, but the two men had assumed the worst from this summons, and on their second trip they take not only weapons for subduing the Malacandrians and equipment for mining gold, but also the hapless Ransom to serve as the "sacrifice."

Of course, the very idea of sacrificing a human being, for whatever gain, is counter to the Tao discussed in The Abolition of Man; thus we have in the first chapter of the novel one of the attitudes Lewis was fighting. The physicist Weston had planned to take the retarded boy who worked for him as he prepared his spaceship, but, when challenged by Ransom to leave the retarded boy alone, Weston is secretly persuaded by Devine to take Ransom to Malacandra instead of the boy. In the second chapter the partially drugged Ransom hears a conversation which reflects both Devine's selfishness and lack of concern for another's life and Weston's lack of compassion as well as his zeal for wrong goals. Weston is

perfectly willing to sacrifice the boy because he was "incapable of serving humanity and only too likely to propagate idiocy. He was the sort of boy who in a civilized community would be automatically handed over to a state laboratory for experimental purposes." The physicist does not like the idea of taking Ransom because he is "human." But Weston argues with himself that Ransom is "only an individual, and probably a quite useless one" (S.P., 19). He had in Chapter I dismissed Ransom's work in philology as "unscientific tomfoolery" which was "wasting money that ought to go to research" (S.P., 13). Lewis reveals Weston from the beginning as one who has stepped outside the Tao and in so doing has made himself a slave to subjective values instead of the objective ones of traditional morality. Thus Weston is unable to use his scientific genius in a moral way and is a danger to mankind as well as to creatures of other worlds.

When Ransom wakens aboard the spaceship and demands an explanation for his abduction, Weston makes quite clear his willingness to sacrifice any individual for the "great cause" he is devoted to, which Ransom guesses is "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" (S.P., 27). Weston argues, "You cannot be so small-minded as to think that the rights

Out of the Silent Planet (New York: Macmillan, 1965, Paper-backs Edition), p. 19. Subsequent references to this novel will be noted by the abbreviation S.P. and the page number in parentheses.

or the life of an individual or of a million individuals are of the slightest importance in comparison with this" (S.P., 27). Lewis uses irony heavily throughout this speech of Weston's: "It would be easier if your philosophy of life were not so insufferably narrow and individualistic. . . . even a worm, if it could understand, would rise to the sacrifice. . . . all educated opinion—for I do not call classics and history and such trash education—is entirely on my side" (S.P., 27).

One of the ways in which Lewis works "to conquer for his own (Christian) point of view" a field dominated by other views is to suggest that space is quite different from the way other writers had pictured it. Lewis uses the voyage through space to combat the influence which scientific discoveries, and especially popularizers of science, have had on our minds—our belief that space is barren, dark, and empty. He does this by describing Ransom's impressions and his change in thinking. At first Ransom is able to learn nothing specific from either Weston or Devine about his part in their plans. The only hint he gains from Devine comes when the latter, having had too much to drink, says they are "handing him the baby. But I'm sure you'll live up to the old school tie" (S.P., 30). By this time Ransom has realized that Devine, an old school mate, has always hated him as much as he had hated Devine. But none of these very real reasons for being uneasy and unhappy are able to shake

⁶Green, p. 26.

Ransom's feeling of supreme well being, which he attributes to the healing rays of the sun, unfiltered by earth's atmosphere, and to the aesthetic satisfaction he finds in contemplating the night sky, its brilliance unabated by that atmosphere he had always known. He glories in being able to move from endless night to endless day simply by going to a room on the other side of the spaceship. In this passage particularly we see Lewis actively conquering the realm of space fiction for the Christian point of view. His descriptions of space approach poetry as he writes of "celestial sapphires, rubies, emeralds, and pin-pricks of burning gold," and "stars, thick as daisies on an uncut lawn" (S.P., 31). Looking at the sky, Ransom found it hard "to disbelieve in old astrology: almost he felt, wholly he imagined, 'sweet influence' pouring or even stabbing into his surrendered body" (S.P., 31).

Not even the knowledge that a meteor might shatter the spaceship at any moment could make Ransom fearful. After some hours of
contemplating the night skies, "He now felt that Weston had justly
called him little-minded in the moment of his first panic. The adventure was too high, its circumstance too solemn for any emotion
save a severe delight. But the days . . . were best of all" (S.P.,
31). In the sunlit room of the ship, "totally immersed in a bath
of pure, ethereal color and of unrelenting though unwounding brightness, stretched his full length and with eyes half closed . . . he
felt his body and mind daily rubbed and scoured and filled with new
vitality" (S.P., 31-32). Then Ransom discovers another reason for

the continually growing sense of well being. "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 until now--now that the very name 'Space' seemed a blasphemous libel for this empyrean ocean of radiance in which they swam. . . . Older thinkers had been wiser when they named it simply the heavens --the heavens which declare the glory--" (S.P., 32).

Just how far Ransom moved in his thinking from the typical ideas about space held by modern men can be seen as he returns toward Earth, after learning from the ruler of Malacandra that myriads of angel-like beings people space. It is quite unlikely that the three men will ever reach their own planet, but Ransom feels that not death but life is waiting outside the ship. He experiences ten times the lift of heart he felt on the voyage toward Mars, because now he is sure "that the abyss was full of life in the most literal sense, full of living creatures" (S.P., 146). His last thoughts along this line come near the end of the book, where Lewis, in his own person, quotes Ransom as writing thus in a letter: "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" (S.P., 154).

Still another conception put forth in earlier science fiction

was the notion that inhabitants of other planets would be cruel monsters, or at any rate, monsters who might, like Wells's creatures in the moon, destroy men who really meant them no harm. Lewis's secretary, Walter Hooper, thought that Lewis was the first to take fallen men to planets where they found unfallen rational creatures. The inhabitants of Malacandra do not even have words for sin or evil; they can say only that a person is bent. Their name for the created being counted most evil because of his rebellion and disobedience is simply, "The Bent One." Ransom finally realizes that this one is Earth's Satan, who, according to Malacandrian mythology, had tried to tempt their people to fear and rebellion, after he had brought death and cold to the moon, but before the creation and fall of man. Ransom experiences shame before the frank and open huzu (rational beings) of Malacandra when their questions draw out men's weaknesses and cruelties. And he is discomfited when, as he wonders whether he should try to evangelize them, they patiently explain that the one they worship has no body. is not the sort to dwell in one place, and created all worlds and creatures. They are naturally monogamous, kindly, unselfish, obedient to their ruler, unattached to material things, and unafraid of death, which they look forward to as union with God, no longer hindered by the body.

It is in contrast to these wholesome, balanced, lovable crea-

⁷ In a footnote in Christian Reflections, p. 174.

tures that Weston and Devine stand, both ready to kill for what they count most important. Devine wants only the gold so abundant on Malacandra, and Weston seeks to preserve humanity by transplanting men from planet to planet as suns die or other needs push men on. Their attitudes and actions illustrate Lewis's generalizations concerning the rejection of the Tao. Near the end of the novel Lewis makes the strongest indictment of this attitude in the interview between Weston and the ruler of the planet, as Weston speaks grandly of his hopes. It is as Ransom translates Weston's words into Malacandrian that we see most clearly the vain emptiness of this man whose only hope for immortality is in preserving his kind. at whatever cost to the original inhabitants of planets men might invade. Oyarsa, the ruler, tells Weston that the Bent One has taught the physicist to disregard all values except one, the love of kindred; "this one he has bent till it becomes folly and has set it up, thus bent, to be a little, blind Oyarsa in your brain" (S.P., 138). Here we can see Lewis's belief that subjective values, or divorcing oneself from the Tao and setting up new values, would result in perversion and destruction. Weston was willing to sacrifice Ransom's life, to kill all the inhabitants of Mars, and to give his own life if necessary, to see that mankind continued to exist somewhere in the universe.

To foil his attempt, Oyarsa sends Weston and the other two
men back to Earth with the warning that the spaceship will "unbody"
--be destroyed--in ninety days; and soon after they have landed.

the ship is totally destroyed. But we understand that Weston will not give up his efforts to conquer other planets. Before sending the men away, Oyarsa tells Ransom privately that he must watch Weston and Devine back in Thulcandra, for they may still do great evil. Oyarsa also hints that there will now be some communication between the heavens and the silent planet and that great things long prophesied may be about to take place. He may even meet Ransom again while the latter is still in the body.

Perelandra

Lewis's second novel, *Perelandra*, begins with the fulfilling of Oyarsa's prophetic words. The Oyarsa has been making visits to Ransom on Earth. To counteract Weston's influence on another planet, this time Venus (called *Perelandra* in Old Solar speech), the Oyarsa prepares to take Ransom there also, at Maleldil's bidding. While Weston travels in a new spaceship, Ransom is transported to Perelandra in a strange, coffin-like box. Lewis later wrote that when he "knew better," he used angels, not technology, to carry his protagonist through the heavens. In this novel, too, there is

⁸In Out of the Silent Planet Ransom learned that Maleldil was Christ, God the Son, who had created the worlds and guided all events. The Malacandrians worshipped Him joyfully and obeyed Him and His representative, the Oyarsa, without question. But the Malacandrians made almost no distinction between the Persons of the Trinity because they knew nothing of the Incarnation. They communed with Maleldil directly, being unfallen creatures.

^{9&}quot;On Science Fiction," Of Other Worlds (New York: Harcourt, Brace & World, 1966), p. 69.

a first person narrator, again Lewis himself. But Perelandra opens with Lewis's first person narration, while Out of the Silent Planet apparently is told from the third person point of view until the last chapter, when Lewis speaks as Ransom's friend and amanuensis. Once again Lewis gives a realistic beginning to his novel, this time by having himself, a real Oxford philologist, to be a character in the story. He has been called to meet Ransom at his country cottage, where Lewis is needed to fasten Ransom into the box in which he will be taken to Venus.

But Lewis almost fails his friend. Foreshadowing the epic spiritual and physical battles of Ransom on Perelandra, Lewis himself has to struggle against hysterical fears about his own sanity and against the idea that Ransom has been duped by evil spirits. In addition to the mental turmoil Lewis experiences as he walks from the train station to the cottage, he also feels as if he is walking against a headwind, though the evening is very still. When Ransom arrives at the cottage a few minutes later than Lewis, the former apologizes for not meeting his friend at the station. After explaining why he was detained, Ransom asks, "You got through the barrage without any damage?" Lewis had thought it was just his nerves but Ransom assures him it was the very real opposition of the eldila (spirit beings) of the Bent One (Satan) who had tried

¹⁰Perelandra (New York: Macmillan, 1965, Paperbacks Edition),
p. 21. Subsequent references to this novel will be noted by the
abbreviation Pere. and the page number in parentheses in the text.

to dissuade Lewis from helping his friend to fulfill Maleldil's commands. As Ransom tells Lewis what he knows about the mission he is to undertake, his words are a second foreshadowing of the battles to come: "You are feeling the absurdity of it. Dr. Elwin Ransom setting out single-handed to combat powers and principalities" (Pere., p. 23). Both Lewis's fearful experience on the road and Ransom's allusion to the New Testament remind us of St. Paul's assertion that "we wrestle not against flesh and blood, but against principalities, against powers, against the rulers of the darkness of this world, against spiritual wickedness in high places" (Ephesians 6:12). Referring directly to this verse, Ransom informs Lewis that the wording of the King James Version is misleading; he gives the last phrase as "depraved hypersomatic beings at great heights" (Pere., p. 24), a translation which closely fits the events to follow in the novel. This first conversation introduces the central theme and action of the novel: the struggle of Ransom, as Maleldil's representative, to keep the Bent One in the body of Professor Weston from corrupting Tinidril, the Eve of Perelandra. Random's success in this struggle helps to prepare him for the role of leadership he will play in the third novel, for he learns to trust in Maleldil's strength and to be patient and obedient.

The subject of this thesis, the threat of the misuse of science, is present though not emphasized in *Perelandra*. The idea is expressed plainly at the first appearance of Weston on Perelandra. At this point, the narrator explains, for the benefit of readers

unfamiliar with Out of the Silent Planet, how Weston had kidnapped
Ransom so as to make a sacrifice of him to the Oyarsa of Mars, who,
of course, had wanted no such thing. Weston, we are told,

. . . was a man obsessed with the idea which is at this moment 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 intellectuals, but ready, if the power is ever put into its hands, to open a new chapter of misery for the universe. 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: that the vast astronomical distances which are God's quarantine regulations, must somehow be overcome. This for a start. But beyond this lies the sweet poison of the false infinite -- the wild dream that planet after planet, system after system, in the end galaxy after galaxy, can be forced to sustain, everywhere and forever, the sort of life which is contained in the loins of our own species--a dream begotten by the hatred of death upon the fear of true immortality. . . . The destruction or enslavement of other species in the universe, if such there are, is to these minds a welcome corollary. In Professor Weston the power had at last met the dream (Pere., pp. 81-82).

In his first conversation with Weston, Ransom realizes that the professor is now different from the man who had abducted him a few years before. Weston admits he was wrong in planning to exterminate the inhabitants of Malacandra so that his own species could dwell there and spread to other planets. He says, "It was a mere prejudice that made me prefer our own race to theirs: To spread spirituality, not to spread the human race, is henceforth my mission" (*Pere.*, p. 91). Weston explains that he now believes in "emergent evolution"; he asserts, "The majestic spectacle of this blind, inarticulate purposiveness thrusting its way upward and

ever upward in an endless unity of differentiated achievements towards an ever-increasing complexity of organization, towards spontaneity and spirituality, swept away all my old conception of a duty to Man as such" (Pere., p. 91). In an effort to communicate with Ransom, whom Weston knows to be a Christian, the professor tries to show that his beliefs are simply clearer views of traditional religious ideas and that the spirit he now serves is the Holy Spirit. He believes that he is being guided by this "Force." even to the point of being taught the Old Solar language used on the inhabited planets. Ransom cautions the older man that there are good and bad spirits, but Weston sees God and His angels as symbolic of the goal toward which evolution is striving and the Devil and his angels as the driving force behind the upward struggle; "Your Devil and your God are both pictures of the same Force" . (Pere., p. 93). Lewis's ideas about the Tao, the system of morality with major points common to all people in all periods, are evident in this conversation when Ransom finds that Weston would murder him if told to do so by the Life-Force; likewise, he would "sell England to the Germans" (this was published during World War II. in 1943) or "print lies as serious research in a scientific periodical" (Pere., p. 95) if this would further the cause of "spirituality." Weston has clearly abandoned objective standards of morality.

Ransom is troubled and confused by the perversion and force-fulness of Weston's new attitudes and not sure how these will af-

fect the paradise of Venus. Finally Weston shouts at him. "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. . . . " (Pere., p. 96). At this moment the physicist is seized with convulsions and then lies still. Ransom tries to revive him with brandy, but Weston bites off the neck of the bottle, spitting nothing out, so that Ransom fears he has killed him. Leaving the body, Ransom climbs a hill for a view of the sea and the floating islands where Tinidril lives but he is overtaken by darkness. Unable to find Weston's body or inflatable boat the next day, Ransom returns to the floating islands. He is awakened the following night by Weston's voice as the professor tries to convince Tinidril that she has misunderstood Maleldil's one prohibition in Perelandra--never to sleep on the Fixed Land nor to be there when darkness falls. As Ransom listens, the realization that "something which was and was not Weston was talking . . . had sent thrills of exquisite horror tingling along his spine, and raised questions in his mind which he tried to dismiss as fantastic" (Pere., p. 107). After many conversations in which Weston (whom Ransom begins to call the Unman when he understands that a demon is using Weston's body) tries in various ways to corrupt the mother of the race that will people Venus, Ransom realizes with re- . luctance and even horror that he has been brought to Perelandra to fight the Unman hand-to-hand, before the demon can cause Tinidril

to sin by disobeying.

After a long argument with himself and the voice of Maleldil, Ransom accepts the task of fighting the Unman, but he is sure he will be ripped apart by the long talons of the demon-possessed body. However, Ransom destroys the Unman and receives praise and homage from the King and Queen of Perelandra, but not even the healing waters of this planet are able to cure one of the wounds from the long battle -- a wound in the heel, which, of course, suggests the promise in Genesis 3:15 that the seed of the serpent would bruise the heel of the one who defeated him. The wound continues to bleed slightly, though without pain, as Ransom spends a year, not conscious of the passage of time, in joyful praise and a kind of joint revelation with the King, the Queen, and the Oyarsas of Malacandra and Perelandra. They all speak, as in a great anthem, of Maleldil's grand design, or the Great Dance, as Lewis calls it here (Pere., pp. 214-219) and in non-fiction work also. 11 The wound does not hurt Ransom until he returns to Earth, again in the special box where he lies in suspended animation as the Oyarsa of Mars speeds him to his own cottage. His friend Lewis, summoned by the Oyarsa, is on hand to open the box, and he has brought a medical doctor just in case there is need. However, the doctor is unable to stop the hemorrhage. It is the wounded heel which helps to identify Ransom in the third novel, for in That Hideous Strength,

¹¹Letters to Malcolm, Chiefly on Prayer (New York: Harcourt, Brace & World, 1964), p. 93.

he is not called Ransom at first. We are told in that novel that he has taken the name Fisher-King upon the death of his sister of that name, who has also left him a considerable fortune and has asked him to assume leadership of a small company which would gather around him in England, where a Christian mystic from India had prophesied that great danger to the human race would soon break out. This danger comes primarily from men and spirits who have rejected God's rule and the objective values of the Tao, and who plan to use scientific knowledge to dominate the world for their evil purposes. The form which this danger takes and the role of Ransom and his company are the subject of Chapter IV. The name Fisher-King and the wounded leader of a land needing to be healed helps to unite the images of the Grail legend with the Arthurian myth used in That Hideous Strength.

CHAPTER IV

THAT HIDEOUS STRENGTH

The fullest dramatic expression of Lewis's fears of misused science is found in the third of Lewis's novels, That Hideous Strength, the longest and most complex novel in the trilogy. Its setting is simpler -- a small English university and the surrounding countryside -- but the interweaving of elements from the Matter of Britain, Christian doctrine, and a blend of classical mythology with Lewis's own mythology of the silent planet and Deep Heaven, plus much greater development of character, make this novel more difficult to analyze. Ransom is no longer the central character. though he plays an essential role in the victory of good forces over evil, in saving the life of one main character, Mark Studdock, and in guiding the other main character, Mark's wife, Jane, into belief in God and maturity in her marriage. Mark's problems and harrowing experiences embody what Lewis said was the central theme of this novel, that "All men . . . desire power and all men desire the mere sense of being 'in the know' or the 'inner ring', of not being 'outsiders.'" Little will be said of this theme except as it bears upon the subject of this study, the dangers C.S. Lewis saw in the misuse of scientific knowledge and power by men who have rejected objective standards of value.

^{1&}quot;A Reply to Professor Haldane," Of Other Worlds, ed. Walter Hooper (New York: Harcourt, Brace & World, 1966), p. 79.

Because the evil forces of the novel are centered in an organization supposedly scientific -- the National Institute for Coordinated Experiments (N.I.C.E.) -- with a biologist and a psychologist as important but evil characters, some readers have regarded the book as an attack on science. In his reply to Professor J.B.S. Haldane's highly critical article, 2 Lewis answered this criticism by explaining just what he was attacking: "Firstly, a certain view about values: the attack will be found, undisguised, in The Abolition of Man."3 The dangers Lewis saw in the twentieth century abandonment of traditional, objective values have been discussed in Chapter II. His second aim in That Hideous Strength was to illustrate the folly of devoting one's life to gaining the power and prestige of belonging to the ruling clique; and third, Lewis continued, he was attacking not scientific planning, as Professor Haldane had thought, but the kind of planned society which first Hitler and then European communists had instituted: "the disciplined cruelty of some ideological oligarchy."4 Lewis had observed that "Every tyrant must begin by claiming to have what his victims respect and to give what they want. The majority in most modern countries respect science and want to be planned. . . . therefore . . . if any man or group wishes to enslave us it will of course

²Haldane, "Auld Hornie, F.R.S.," *Modern Quarterly*, N.S. 1 (Autumn 1946), pp. 32-40.

^{3&}quot;A Reply," p. 78.

⁴*Ibid.*, p. 80.

describe itself as 'scientific planned democracy.'"⁵ Six years later Lewis explained in a letter that "Where benevolent planning, armed with political or economic power, becomes wicked is when it tramples on people's rights for the sake of their good."⁶

To understand better how Lewis's fears concerning values and scientific power are integrated into the novel, a plot summary will be helpful. It will also show how the two intertwining story threads, Jane's experiences with a Christian group at St. Anne's. a village near the university town, and Mark's affairs at the N.I.C.E., and the many characters function to express the themes already alluded to. The novel opens with the revelation that Jane Studdock, after only six months of marriage, is bored and dissatisfied with her husband, convinced that Mark is interested only inher body and not in her mind and companionship as he had seemed to be during their courtship. Unaware of Jane's feelings, Mark is thoroughly enjoying his new status as a part of the "Progressive Element" among the fellows of Bracton College. This element, led by Curry, Busby, and Lord Feverstone, persuades Bracton to sell a part of its land, Bragdon Wood. Older fellows of the college are aghast when they realize what has been done, for the Wood, probably the reason for the existence of the college, is important in history and legend because of its association with Merlin, King

⁵*Ibid.*, p. 80.

⁶Letters of C.S. Lewis, ed. W.H. Lewis (New York: Harcourt, Brace & World, 1966), p. 227.

Arthur's counselor. In the center of the Wood, providing water for the ceremonial cup drunk by each new Warden of Bracton College, is Merlin's Well, surrounded by British-Roman pavement. Lord Feverstone, the Dick Devine who had helped Professor Weston to kidnap Ransom in Out of the Silent Planet and still a base opportunist, has pushed the sale of the Wood because he wants to have influence with the N.I.C.E., the organization which wanted the land. Feverstone does not know why the Institute's permanent headquarters will be built where marshes make the land unsuitable, but the reader learns through the disturbing dreams of Jane Studdock that Merlin is actually buried in the Wood and will soon awaken from his long sleep of enchantment.

Merlin is important to N.I.C.E. in its plans for taking control of mankind. While it has human leaders who dream of personal power and of making the world and men what they think will be better, the real directors of N.I.C.E.'s activities are the dark spiritual beings of the Bent One (Satan in Lewis's space mythology). Only N.I.C.E.'s two men at the top know about these beings. They call them "Forces" and "macrobes," never suspecting that they are demonic forces. To make sure of his victory over mankind, the Bent One desires the added power of Merlin, who had lived at a time when some supernatural beings were uncommitted to the good or

⁷ That Hideous Strength (New York: Macmillan, 1965, Paperbacks Edition), p. 22. Subsequent references to this book will be noted by the abbreviation T.H.S. and the page in parenthesis in the text.

evil forces. He had used their power, at great personal danger, and at his awakening from the long spell of enchantment, might be persuaded to join either N.I.C.E. or Ransom's company. Not even the wise Oyéresu are sure of what the sorcerer will do. But the good Oyéresu and the evil Oyarsa of Earth know that Jane Studdock is the seer whose dreams will reveal Merlin's whereabouts and the time of his awakening.

Jame herself does not understand her frightening dreams until they are explained to her by the "company" which has gathered at Ransom's house in the village of St. Anne's. She was directed there by her former professor, Dr. Dimble, after she had told the Dimbles about her nightmares.

Ransom, called the Director by those who have become a part of his household, ⁸ has learned through the Oyéresu ⁹ that Satan's forces are about to make a tremendous attack on humanity. They have commanded him to wait until a company has gathered about him, including a seer whose dreams will provide information they need, as the Oyéresu are not omniscient. Even though the group needs Jane's

⁸Ransom's company of believers is composed of the Dimbles, the Denistons, and Ivy Maggs, who have all been evicted from their homes by the N.I.C.E.; Grace Ironwood, a medical doctor, who has come because of some unrevealed but embarrassing reason; and McPhee, the only unbeliever in the group, who is a very old friend of Ransom's.

⁹Plural for Oyarsa, which is the word for ruler in Old Solar speech. Each Oyarsa rules a planet and is called by that planet's name. They are not organic beings; they travel with phenomenal speed; except for the Bent Oyarsa of Earth, they are joyfully obedient to Maleldii.

gift, Ransom respects her reluctance to join a group of strangers in a purpose which he is not free to reveal until she willingly joins and puts herself under his authority. Jane is skeptical at first, very modern in her rejection of the supernatural, besides having a life-long aversion to entanglements or having her inner self invaded by others, even her husband. Several frightening incidents and Mark's prolonged absence from home finally cause Jane to join herself to the little group at St. Anne's.

At Belbury, temporary headquarters of the N.I.C.E., Mark is trying to establish himself with the leaders, Deputy Director Wither, the police chief "Fairy" Hardcastle, the psychologist Frost, and the biologist Filostrato. He swallows every scruple (never having had many) and begins to aid in duping the town of Edgestow and the whole nation through "managed" news releases and editorials which ignore the cruelties and injustices of the N.I.C.E. in taking over the town. He writes up beforehand the desired view of the riot engineered by N.I.C.E. workers for the purpose of gaining police powers in the town.

His and Jane's stories are parallel in many ways and in sharp contrast in several aspects. Most of the contrasts are Lewis's dramatic representation of the differences between those who believe in God and hold to the Tao and those who reject traditional values. There is a contrast in leadership. Both Mark and Jane have directors whom they are expected to obey, but Mark does so out of fear, never knowing really where he stands or what his job is and

gradually coming to despise all at Belbury. Jane, however, obeys Ransom out of her love and respect for a man whose holiness is evident to all who meet him. Under his leadership there is order and peace, no jealousy or contention; everyone has certain duties and knows he is accepted and loved by the rest. But at the N.I.C.E. there is jealousy and fear and confusion. The two groups are similar in that they are both under the direction of spiritual beings. At Belbury less than a dozen people know that Deputy Director Wither's orders come from the head of a guillotined French scientist which has been kept alive by the biologist Filostrato. Only Dr. Frost and Wither know that it is not the brain of the scientist which gives directions for the N.I.C.E., but spiritual forces, the macrobes (actually the same old enemy of the two earlier novels. Earth's Bent One and his demons), which speak through the Head. At St. Anne's the orders and standards of attitude and action come from the Oyéresu and ultimately from Maleldil, the being who is God in Lewis's mythology. Another contrast lies in methods. The macrobes had ordered Wither to bring Mark into the Institute so as to get Jane to Belbury, where her dreams can tell them where to find Merlin and when he will awaken. After various methods have failed in getting Mark to bring Jane, the Institute leaders let him know that he must bring her or be killed, though he is never told why they want her. However, at St. Anne's Jane is invited to join voluntarily. Members of the company tell her there may be danger and that they need her for a great and good cause, but they do not

pressure her. Mark is bullied and threatened and, after running away from Belbury, is caught and locked in a cell there, but Jane is allowed to leave St. Anne's when she at first rejects anything having to do with the supernatural. While the Director at St. Anne's counsels with Jane to help her to believe in God and to submit herself to Him and to her own husband in loving obedience, for her own happiness and fulfillment, Mark is being "conditioned" by the psychologist Frost into rejecting every kind of traditional moral value or decent feeling. He is being swallowed up by the Institute, while Jane is being made whole and free for the first time.

Knowing that his life depends on the whim of his captors, Mark finally loses his desire to be a part of the ruling clique, but he pretends to go along with the conditioning so as to live as long as possible. He finds the courage to reject the lure of the inner ring even though Frost is training him to be a member of it. Mark clings to a growing ideal of the "Straight and True" of which his memories of Jane are a part. As he resists the power of Belbury, he finds himself unaccountably strengthened, and his conversion begins in that cell. Jane's occurs in quite a different way. After less than a month among the people at St. Anne's who never talk about religion (which Jane had rejected when a young girl) but talk a great deal about God, she comes "into a world, or into a Person, or into the presence of a Person" (T.H.S., p. 318). Her defensive attitudes and resentments fade, and she gradually begins to love her husband unselfishly. She is no longer governed by a fear of

being treated as a "thing," but finds joy in the realization that she is, besides being quite a different person from what she had thought, "a thing . . . made to please Another and in Him to please all others, a thing being made at this very moment" (T.H.S., p. 319).

The next significant action of the plot is the entrance of Merlin. When the druid had emerged from his deep tomb, his robe had disintegrated, but he solved the problem of nakedness in winter by taking the clothes of a tramp who was camping near Bragdon . Wood. The N.I.C.E. people scouring the area found the naked tramp, inarticulate with fear, and assumed that the bearded old man was Merlin, who had in the meantime gone to Ransom's home. Wither and Frost try to speak with the tramp in Latin and Welsh, but the old man, fearful and yet crafty, keeps silent. Ransom is delighted when N.I.C.E. advertises for someone who can speak Celtic, for by this time the Oyéresu have said their action must begin. They fill Merlin with their power, and he goes to Belbury disguised as a Basque priest. After gaining access to the tramp, Merlin hypnotizes him and pretends to interpret his speech. The druid pretends great perturbation upon hearing the tramp claim to be Merlin and tries to run away, but of course allows himself to be detained at Belbury as the supposed Merlin's interpreter. That night at a banquet Merlin uses the power of Mercury to confuse the speech of all the Institute's members and guests. While they mill about, Merlin releases among them the animals kept for experiments but now maddened by him to kill and destroy. Then Merlin sends Mark away to St. Anne's before the whole Institute is destroyed by fire.

As Mark walks the several miles to St. Anne's, he begins to think how completely unworthy he is of the "company." He is ashamed to face them, feeling they must despise him for having chosen the wrong goals and values. Worse still, he dreads meeting Jane, because he feels ashamed for not having valued her fresh beauty and person. He had been a "coarse, male boor with horny hands and hobnailed shoes and beefsteak jaw . . . blundering. sauntering, stomping in where great lovers, knights and poets would have feared to tread" (T.H.S., p. 381). Only now does he feel the "humility of a lover," and now he is sure it is too late. He resolves to release her; he feels she must scorn him and now believes that what he had thought was coldness in her was really patience. But at this moment the Oyarsa of Perelandra, the original Venus, bids him enter the gate lodge at St. Anne's, already prepared by Jane and Mrs. Dimble as a nuptial chamber. The novel ends with Jane on her way from the manor house down to the lodge, "descending the ladder of humility. First she thought of the Director [who has taught her loving obedience], then she thought of Maleldil [who had made her see all things new]. Then she thought of her obedience and the setting of each foot before the other became a kind of sacrificial ceremony" (T.H.S., p. 382).

It is Mark's experiences with the N.I.C.E. that afford most opportunity for the three "attacks" Lewis admitted he was making

in That Hideous Strenath. His horror of the forcibly planned society appears first, as the Institute is introduced. The N.I.C.E. is said to be "the first fruits of that constructive fusion between the state and the laboratory on which so many people base their hopes of a better world" (T.H.S., p. 23). The bursar Busby, a member of the Progressive Element which controls Bracton College. expresses the popular notion of the purpose of the N.I.C.E.: "It's the first attempt to take applied science seriously from the national point of view" (T.H.S., p. 37). But he has gathered this from newspapers; although Busby works very hard to bring the Institute to Edgestow, he does not know its real nature or purposes. Young Mark Studdock, in trying to ingratiate himself with Feverstone so as to gain through him a position with the N.I.C.E., says that having "its own legal staff and its own police" is the important thing. 10 He continues, "The real thing is that this time we're going to get science applied to social problems and backed by the whole force of the state" (T.H.S., p. 38). To draw Mark in (for Feverstone has orders from Wither and ultimately from the Head to bring Mark into the N.I.C.E. so as to obtain from his wife Merlin's whereabouts), Feverstone presents some of the N.I.C.E.'s aims not revealed in newspapers. His language is conversational.

¹⁰This is particularly ironic because a few weeks later Mark's wife is caught by Institute police, and when she refuses to tell where she has been staying, is burned repeatedly with a cheroot by Miss Hardcastle, the sadistic (and probably homosexual) woman who heads the N.I.C.E. police force.

but the thoughts are the same, though from the opposite viewpoint. as those expressed more formally in The Abolition of Man concerning the control of a few men over all the rest: "It does really look as if we now had the power to dig ourselves in as a species for a pretty staggering period, to take control of our own destiny. If Science is really given a free hand it can now take over the human race and re-condition it: make man a really efficient animal. . . . Man has got to take charge of Man. That means, remember, that some men have got to take charge of the rest" (T.H.S., pp. 41-42). When Mark questions Feverstone further, the latter makes even more frightening statements concerning the Institute's aims, which include "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 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 . . . " (T.H.S., p. 42).

Attitudes like Feverstone's aggressive one and Mark's acquiescent one show the loss of the values of the Tao which Lewis felt have left modern men at the mercy of those in power. These attitudes also reveal a lack of concern for individuals and their freedom, another concept Lewis fought for in his writings. With naturalism and empiricism controlling men's views of the universe and each other, Lewis felt sure that a union of applied science and social planning with the power of government would result in the loss of freedom and individuality. Consequently, he felt that democracy was necessary to protect men from each other. To help Professor Haldane understand why he was wrong in saying that Lewis thought that "the application of science to human affairs can only lead to Hell," Lewis explained that it was not the application of science which he feared, but application with the force of government, no matter what a man's choice might be. Lewis went further in making this idea clear to the communist Haldane:

I am a democrat because I believe that no man or group of men is good enough to be trusted with uncontrolled power over others. And the higher the pretensions of such power, the more dangerous I think it both to the rulers and to the subjects. . . A metaphysic, held by the rulers with the force of a religion, is a bad sign. It forbids them, like the inquisitor [and later Nazis and Communists] to admit any grain of truth in their opponents, it abrogates the rules of ordinary morality, and it gives a seemingly high, super-personal sanction to all the very human passions by which, like other men, the rulers will frequently be actuated. 12

One specific example of the denial of human rights under politically powerful social planning is the policy of the N.I.C.E. to "rehabilitate" criminals. The first suggestion of this policy comes from Feverstone as he offers the bait to Mark, playing upon the younger man's desire to be a part of the inner circle. He tells

^{11&}quot;A Reply to Professor Haldane," p. 80.

¹² Ibid., p. 81.

Mark that he is just what the N.I.C.E. needs:

a trained sociologist with a radically realistic outlook a sociologist who can write . . . write it [the program of N.I.C.E.] down-to camouflage it. . . . For instance, if it were even whispered that the N.I.C.E. wanted powers to experiment on criminals, you'd have all the old women of both sexes up in arms and yapping about humanity. Call it re-education of the mal-adjusted, and you have them all slobbering with delight that the brutal era of retributive punishment is at an end (T.H.S., p. 43).

The next hint of the "rehabilitation" policy comes from Miss Hardcastle, the coarse and offensive chief of the Institute's police. When Mark tries to learn exactly what his work will be, she tells him that the Sociology Department will soon be done away with because "The kind of sociology we're interested in will be done by my people-the police" (T.H.S., p. 98). Miss Hardcastle's Department has obtained permission to take convicted criminals from jails in England in order to experiment on them at Belbury. This power touches the group at St. Anne's because the husband of Ivy Maggs, one of the company, was sent to Belbury just before he was due to be released from prison. He had been serving a six months' sentence for stealing a small amount of money from his employer before he had met Ivy, reformed, and married. He had sincerely repented of his one criminal action and had settled down as a good husband when a jealous fellow worker had reported him for the theft. Lewis's comment on Mr. Maggs's situation summarizes the author's opinion of the modern idea that punishment should not be retributive. As poor Mr. Maggs sits in dejection, thinking of what his homecoming would have been like that day, he does not question the

philosophy behind his treatment, but Lewis writes, "An educated man in his circumstances would have found misery streaked with reflection; 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" (T.H.S., p. 350).

Not just this aspect of sociology but the whole field is scored by Lewis in That Hideous Strength. When Mark uses the phrase, "sciences like Sociology" in a conversation with Bracton's most outstanding scientist, William Hingest, the chemist interrupts him with, "There are no sciences like Sociology" (T.H.S., p. 70). Mark goes on to speak of studying "the reality" of the common man. and Hingest interrupts even more abruptly, commenting on what happens when men study men: "[Then] I should want to pull [them] to bits and put something else in [their] place. . . . That's what happens when you study men: you find mare's nests. I happen to believe you can't study men; you can only get to know them, which is quite a different thing" (T.H.S., p. 71). Lewis still held this view of sociology five years after the publication of his novel. In a conversation with Chad Walsh, author of the first book-length study of Lewis's works and ideas, Lewis said he "had noticed that the 'pure sciences' seem to have no dehumanizing effect on those who study them, but that the closer a science approaches to human affairs the more it tends to strip its specialists of their humanity; sociologists and psychologists are in greater peril than chemists and mathematicians."13

Lewis makes clear in his characterization of Mark Studdock that his education as a sociologist had left him "hardly one rag of noble thought." It was "neither scientific nor classical--merely Modern. The severities both of abstraction and of high human tradition had passed him by. . . . He was a man of straw, a glib examinee in subjects that require no exact knowledge" (T.H.S., p. 185). Nor did he have any real feeling for individual men and women. This can be seen in the only work with sociology that he does at Belbury. While Mark is trying to become a part of the N.I.C.E., Cosser, a member of the Sociology Department there asks Mark to help him investigate the nearby village of Cure Hardy and to write a report on their findings. Or rather, on what the Institute wants them to find, for it has already been decided that the . people in the village will be moved to a new model village. Cure Hardy, with its sixteenth-century almshouses and Norman church, was to be inundated by a lake when a nearby river should be diverted to provide water resources for the N.I.C.E. Before they have even looked at the village, Cosser says they can write up most of the report. "It ought to be pretty easy. If it's a beauty spot, you can bet it's unsanitary. That's the first point to stress [modern sanitation was one of N.I.C.E.'s aims]. Then we've got to get out some facts about the population. I think you'll find it consists

¹³Walsh, C.S. Lewis: Apostle to the Skeptics (New York: Macmillan, 1949), p. 129.

almost entirely of the two most undesirable elements—small rentiers and agricultural laborers" (T.H.S., p. 85). Mark and Cosser spend two hours walking through the village, seeing "all the abuses and anachronisms they came to destroy," including "the recalcitrant and backward labourer" and "the wastefully supported pauper" and the old rentier who reminds Mark of his aunt. Having thoroughly enjoyed seeing the village and talking with its inhabitants, Mark feels a twinge of regret in thinking of the destruction to come, but

this did not in the least influence his sociological convictions. Even if he had been free of Belbury and wholly unambitious, it could not have done so, for his education had had the curious effect of making things that he read and wrote more real to him than things he saw. Statistics about agricultural labourers were the substance; any real ditcher, ploughman, or farmer's boy was the shadow. Though he never noticed it himself, he had a great reluctance, in his work, ever to use such words as 'man' or 'woman.' He preferred to write about 'wocational groups,' 'elements,' 'classes' and 'populations': for, in his own way, he believed as firmly as any mystic in the superior reality of the things that are not seen (T.M.S., p. 87).

But other areas than sociology are under attack; certain ideas in psychology and philosophy and Creative Evolution (as in Weston's devotion to the movement toward "spirit" in Perelandra) are shown in their absurd and sometimes cruel extremes in That Hideous Strength. The psychologist Frost has become mechanical in his actions after years of training to divorce himself from what he calls subjective values. Because he thinks emotions and value judgments are "merely" chemical reactions or opinions conditioned by environment, he has become almost inhuman. Concerning this

character, in "A Reply to Professor Haldane" Lewis wrote frankly, "If anyone ought to feel libelled by this book it is . . . certain philosophers. Frost is the mouthpiece of Professor Waddington's ethical theories."14 Dr. C.E. Waddington's book, Science and Ethics, which is the subject of a lengthy footnote in The Abolition of Man (p. 49), is quoted by Frost when he is trying to retrain Mark's mind to prepare him for a close relationship with the macrobes, the spirits who give their orders through the head of Alcasan. Mark questions Frost as to what criteria will be used to justify or condemn actions if human motives are rejected as being merely chemical phenomena conditioned by community mores. Frost answers, "I think Waddington has given the best answer. Existence is its own justification. The tendency to developmental change which we call Evolution is justified by the fact that it is a general characteristic of biological entities" (T.H.S., p. 295). Belbury's continuing contact with the macrobes "is justified by the fact that it is occurring, and it ought to be increased because an increase is taking place" (T.H.S., p. 295). Of course, the logical extension of this idea means the loss of all traditional values: murder, cruelty, theft, violation of rights are "justified" because they are happening.

The type of philosophy most castigated by Lewis was Logical Positivism, a school developed mainly by scientists and mathema-

¹⁴p. 78.

ticians who insisted that empiricism was the only way to know truth -- that only what can be verified by the senses has meaning. From several of Lewis's works, both nonfiction and imaginative writing, Richard Cunningham has made this generalization of Lewis's criticism: "Naturalistic empirical science must not be allowed to arrogate the right from limited empirical facts to project a whole philosophy about the nature of man and reality."15 According to Cunningham, Lewis saw Logical Positivism as "the jumping-off place for naturalistic rationalism. The misuse of reason and the truncation of thought can be carried no further."16 The character in That Hideous Strength which exemplifies this progression into meaninglessness is John Wither, the Deputy Director of the N.I.C.E. Not even the knowledge that Belbury was being destroyed by the powers of Deep Heaven working through Merlin could move Wither, "because he had long ceased to believe in knowledge itself. . . . He had passed from Hegel into Hume, thence through Pragmatism, and thence through Logical Positivism, and out at last into the complete void. . . . He had willed with his whole heart that there should be no reality and no truth, and now even the eminence of his own ruin could not wake him" (T.H.S., p. 353).17

¹⁵C.S. Lewis: Defender of the Faith (Philadelphia: Westminster Press, 1967), p. 52.

¹⁶*Ibid.*, p. 53.

^{17.} In his "A Reply to Professor Haldane" Lewis called this passage "the rake's progress of Wither's mind" (p. 78) and pointed out that it was philosophical, not scientific.

The fearful union of metaphysical ideas with political and scientific power is illustrated best in two of the leaders at Belbury, the clergyman Straik and the biologist Filostrato. in whose plans and words are found the extreme evils set forth in The Abolition of Man, when man thinks that he has become god-like in his control of Nature but is in reality controlled by Nature, that is, by his own subjective emotions or physical states, having rejected the external, objective system of values of the Tao. Straik's zealous espousal of Creative Evolution illustrates the perversion Lewis had in mind when he wrote to Haldane of the danger of placing political power and scientific planning in the hands of those who felt that they had a mission to carry out, that God or the Life Force or history was on their side. The horrors of the Inquisition, the Salem witch trials, the crushing of Hus's life and work in Bohemia and of Wycliffe's in England, as well as communism's ruthless destruction of opponents in this century--all these are examples of this union of power and passionate belief which Lewis feared, but they lacked the power now known to science.

On Mark's second day at Belbury he finds himself alone with the "Mad Parson" Straik and endures with embarrassment the intense, fanatical pronouncements of the older man. Straik is convinced that the N.I.C.E. is empowered by Jesus, whose coming is at hand. Straik had left the organized church because none there would listen to his views and had joined the group at Belbury because, he says, "The feeblest of these people here has the tragic sense of life, the ruthlessness, the total commitment, the readiness to sacrifice all merely human values, which I could not find amid all the nauscating cant of the organized religions" (T.H.S., p. 79).

Straik insists to Mark that "The Kingdom is going to arrive: in this world: in this country. The powers of science are the instrument. An irresistible instrument, as all of us in the N.I.C.E. know. . . . because they are an instrument in His hand" (T.H.S., p. 79).

A few days later, just before Mark is to be presented to the Head, Straik joins with Filostrato in persuading Mark that he must want to be a part of the group which is bringing about a new order. Because they think that Alcasan is still alive and consciouly directing the N.I.C.E. through his disembodied head, Straik and Filostrato think they have discovered how to make men live forever. After more experimentation they foresee making the dead live whether or not they want to, for a few men or one who is king will be all-powerful. Straik asks, "Don't you see that we are offering you the unspeakable glory of being present at the creation of God? Here, in this house, you will meet the first sketch of the real God. It is a man--or a being made by a man--who will finally ascend the throne of the universe. And rule forever" (T.H.S., p. 179).

To exemplify the other type of danger, the "conquering" of Nature, Lewis uses Filostrato, who wanted eventually to "clean" the earth of all organic matter. Much more space is given to Filostrato's ideas. He looks forward to the day when men would be able

to "make our brains live with less and less body: learn to build our bodies directly with chemicals, no longer [with] dead brutes and weeds. Learn how to reproduce ourselves without copulation" (T.H.S., p. 173). Filostrato would prefer art trees made of aluminum with art birds which would sing at the touch of a switch, thus eliminating feathers, eggs, dirt, decay. Against the questions of Mark and a few other dinner companions, the biologist argues that they themselves consider minerals "clean" dirt and organic matter real filth. He wants an earth purified by eliminating "the things that most offend the dignity of man. Birth and breeding and death" (T.H.S., p. 174). Later, in private, Filostrato tells Mark what he sees as the true purpose of the N.I.C.E. "It is for the conquest of death: or for the conquest of organic life if you prefer. They are the same thing. It is to bring out of that cocoon of organic life which sheltered the babyhood of mind the New Man, the man who will not die, the aritificial man, free from Nature. Nature is the ladder we have climbed up by, now we kick her away" (T.H.S., p. 177). Filostrato confides that these developments and the power for conquering time and space will be controlled by a small number of men (cf. Feverstone's words "that some men have got to take charge of the rest" and Lewis's warning of this same situation in Abolition of Man) at first but will then be given to one man.

Neither Filostrato nor Straik nor Wither nor Frost feel compunction about destroying anyone who does not fit in with their purposes. They are completely outside the Tao and have no standards for judgment, no pity or compassion, no knowledge of truth. And their "conquest" over Nature has made them like the Conditioners Lewis envisions in Abolition of Man. "It is the function of the Conditioners to control, not to obey [the ultimate springs of human action]. They know how to produce conscience and decide what kind of conscience they will produce. . . . Human nature has been conquered—and, of course, has conquered" (Abol., p. 74). Without the external standards of the Tao, the Conditioners will be moved by their momentary impulses, by the weather, by chemicals, or by whatever they think is good or desirable. To recall Lewis's words quoted in Chapter II, "It is not that they are bad men. They are not men at all. Stepping outside the Tao, they have stepped into the void. Nor are their subjects necessarily unhappy men. They are not men at all: they are artefacts [sic]. Man's final conquest has proved to be the abolition of Man" (Abol., p. 77).

It is unfortunate that Lewis's reply to Professor Haldane was not published twenty years earlier, ¹⁸ for it answers most of the criticism directed against the book by reviewers and critics who see it as an attack on all science. For example, Philip Deasy in 1958 wrote that the "total and unrelenting attack on science" was for many readers . . . an insuperable stumbling block. "¹⁹ He also

 $^{^{18}{\}rm The}$ manuscript was found among Lewis's paper after his death and not published until 1966. Haldane's article appeared in 1946.

¹⁹ Deasy, "God, Space, and C.S. Lewis," *Commonweal*, 68 (July 25, 1958), p. 422.

made the mistake of saying that there was no "other kind of scientist than those of the N.I.C.E.'s Power Elite."20 However, in the "Reply" Lewis points out that "The 'good' scientist is put in precisely to show that 'scientists' as such are not the target. To make the point clearer, he leaves my N.I.C.E. because he finds he Was wrong in his original belief that 'it had something to do with science." Lewis is referring to the chemist from Bracton College, William Hingest, who is murdered on his way home from Belbury after rejecting the Institute's offer of a job. Had Hingest known about the Head and the macrobes, he would have agreed with Chad Walsh that "The routine activities [at N.I.C.E.] are more those of a convention of witches"22 than of a scientific organization. Walsh had once asked Lewis directly if he was against science. With a great deal of warmth Lewis said, "Science is neither an enemy nor a friend. Science is not a person."23 Lewis went on to say "that the point had been missed by many readers. The moral is not that science or scientists are launching an attack on humanity, but simply that anyone who is an enemy of humanity would claim the prestige of science."24

²⁰Ibid., p. 422.

²¹Lewis, "A Reply," p. 78.

²²Walsh, p. 129.

²³Ibid., p. 129.

²⁴Ibid., p. 129.

CHAPTER V

CONCLUSION

In this study of Lewis's three space novels and some of his non-fiction, particularly The Abolition of Man, his attitudes toward science and toward the modern belief that values are relative and subjective have been explored. He feared what might be done to all nature and especially to mankind if scientific knowledge were to be applied by the power of government without the restraints of traditional values. These fears are stated openly in the non-fiction works examined in Chapter II and are presented dramatically in the space novels. To Lewis the possibility was great that men would not survive as men. His novels, especially That Hideous Strength, show a "dehumanization of man fully as deadly as those imagined by Huxley [in Brave New World] and Orwell [in 1984], with the added value that Lewis's vision of the actual nature of man which is being violated is much more profoundly grounded than that of the other two."

The grounds for this vision, presented in Chapter II, are
Lewis's humanistic education and his Christian beliefs which place
man in an orderly hierarchy of creation as a creature having infinite
worth and an eternal destiny that must be decided by each individual. Lewis's long and close acquaintance with Greek, Roman, medi-

¹Edmund Fuller, *Books with Men Behind Them* (New York: Random House, 1959), p. 158.

eval, and Renaissance literatures had instilled in him an appreciation for all that was noble in human traditions of art, government, and philosophy. He later accepted the biblical view of man as being created in the image of God and, though fallen from the original position of fellowship with God, still of value, indeed of such value that the Incarnation and the Crucifixion resulted. Lewis criticized the substitution of subjectivism for objective values and lamented the rejection of the absolute standards of morality which are common to the moral codes of peoples the world over---ancient . Chinese, Hebrew, Egyptian, Indian, Sumerian. He thought the loss of values to be especially serious in the light of the achievements of modern science and the drift toward government planning for society. Lewis feared a politically empowered scientific planning which would force itself upon mankind, or as he said, would be forced upon some men by other men, without regard for human rights or the traditional values of kindness and compassion.

Critics to the contrary, readers must listen to Lewis's repeated statements that he was not against science but rather against attitudes like Professor Weston's, whether they were held by the masses or by intellectuals. In *The Abolition of Man* Lewis anticipated the reaction which his book did cause in many of his readers: "Nothing I can say will prevent some people as describing this lecture as an attack on science. I deny the charge, of course: and real Natural Philosophers (there are some now alive) will perceive that in defending value I defend inter alia the value of knowledge,

which must die out like any other value when its roots in the Tao are cut" (pp. 86-87). Lewis reminded his readers that naturalism, determinism, and empiricism all view man as a biological accident with no meaning and no unmeasurable qualities like soul or spirit. They presuppose that there is no God nor absolute truth or values. The study of man by sociologists, psychologists, and anthropologists has reduced him to a thing having little dignity or worth, having little or no individual responsibility for his choices and actions. In explaining nature and man, scientists have "explained away" his value and meaning. This sort of explaining, or reductionism, is contemporary nihilism, according to Swiss psychiatrist Viktor Frankel, who blames the complaint of meaninglessness heard from his patients on those who say "time and again that something is nothing but something else."2. Lewis objected to the use of "merely" and "only" when used to describe certain phenomena, as, for example, the explaining away of emotions by saying they are "merely" chemical reactions. Along with reductionism, Lewis also deplored the arrogance of some scientists and philosophers who insist that only that which may be verified empirically is true and real.

In Chapter III the first two space novels, Out of the Silent Planet and Perelandra, were examined for evidence of these fears.

Professor Weston is used in both these novels to voice the attitudes which Lewis opposed. Weston had no scruples against taking a re-

²Frankel, "'Nothing But--' On Reductionism and Nihilism," Encounter, 33 (November 1969), p. 54.

Mars. The physicist did hesitate to use the philologist Ransom because the man was "human," but Weston considered Ransom narrowminded for not being a willing sacrifice in the high adventure of preserving the human species by colonizing other planets. In Perelandra Weston has come to believe in the Élan Vital or Creative Evolution similar to that propounded by Shaw and Bergson. The professor tries to persuade Ransom that they seek the same spiritual end, union with God, but Ransom makes him admit that to accomplish his goals, Weston would give over every traditional value, such as honesty, pity, or respect for individual life.

Was Lewis justified in his fears and his criticism? Today many scientists as well as laymen have begun to share his concern. Dr. Leon Kaas, executive secretary of the National Academy of Sciences Committee on the Life Sciences and Social Policy, has said, "One must question the wisdom of leaving the decision to go ahead [in research and experimentation] to the private judgment of a team of physicians and scientists or even to the collective judgment of the medical and scientific community." While laymen are not usually aware of developments in research, even a casual reading of newspapers and magazines in the last few years reveals how fast scientists are gaining power over nature (which Lewis insisted was the

³Lewis, Mere Christianity (New York: Macmillan, Paperbacks Edition, 1960), p. 35.

Quoted in "Media Mind," His, 31, no. 7 (April 1971), p. 9.

power of a few men over other men). Articles proliferate describing achievements like the use of transplanted or artificial organs, the identifying of genes for eventual control of characteristics, and manipulation of the brain by electronic and chemical means.

Scientists who are calling for consideration of ethics and for control in research include both Christians and unbelievers. Botanist Arthur Galston, whose research as a graduate student into a way to remove foliage for greater soybean production was later an element in the development of defoliating chemicals used to devastate large areas in Viet Nam, has recently expressed concern that basic and applied research may be misused by government. 5 Saturday Review's science editor, John Lear, began several years ago to urge stronger control over physicians who sometimes test drugs, therapies, or surgical techniques (or deny the possible benefits to a control group) on charity patients or others who may be too ill or too old to give the knowledgeable consent required by the Nuremberg Code, the Declaration of Geneva, and the American Medical Association's ethical code. The patients' rights were being denied by physicians who felt that the possible benefits to mankind would justify the harm which might be done to a few. 6 One book on this subject was published by a group of Christian physicians in England

⁵"Science in Review: On the Use and Misuse of Science," *The Yale Review*, 60, no. 3 (March 1971), p. 460.

^{6&}quot;Do We Need New Rules for Experiments on People?" Saturday Review, 49 (February 5, 1966), pp. 61-70.

concerning medical ethics in a number of areas, including population control, alcoholism, clinical research, delinquency, and responsibility in medicine. These doctors, having practiced almost a generation under England's system of socialized medicine, feel that the problem of the correct assessment of man's nature is urgent "because various palliatives for our social disorders, which are prescribed by politicians, sociologists, industrialists, and 'planning controls', are becoming increasingly based upon the trends in newer sciences of Psychology, Anthropology, and Behaviorial Studies. · · · Today, erroneous planning, when it is applied by a modern government on the grand scale, can swiftly alter the lives of millions for good or ill." This group of doctors feel that only the biblical view of man, created for fellowship with God but now at enmity with Him and thus unable to live at peace with himself or others, accounts for the course of history and for the mental and physical problems of men today. Or as Lewis stated, "God made us: invented us as a man invents an engine. . . . He Himself is the fuel our spirits were designed to burn, or the food our spirits were designed to feed on. . . . God cannot give us happiness and peace apart from Himself, because it is not there."8 Out of man's attempts to find happiness apart from God "has come nearly all that we call human history -- money, poverty, ambition, war, prostitution,

⁷Ethical Responsibility in Medicine, ed. Vincent Edmunds and C. Gordon Storer (Edinburgh: E. & S. Livingstone, 1967), pp. 181-82.

⁸ Mere Christianity, p. 54.

classes, empires, slavery."9

The tampering with man's nature which Lewis feared comes nearer with each discovery in the area of locating and identifying specific chromosomes and genes. Scientists hope to be able to test unborn babics for defective genes which could then be destroyed by laser beams. As yet the discovery of, for example, the chromosome which causes mongoloid idiocy, leads only to a difficult decision on abortion, because not enough is known to mutate or substitute genes.

Scientists are confident that the secrets will be unraveled. But who will then decide what kind of people will be born or which characteristics will be desirable? Lewis answered this in The Abolition of Man when he wrote of the "few lucky people in one lucky generation which has learned how" (Abol., p. 85), to change the nature of man.

Some of the statements of one outstanding scientist could come directly out of Lewis's space novels. Dr. E.S.E. Hafez, head of the Department of Animal Sciences at Washington State University, has led the research in the inoculation of animals with fertilized eggs from superior stock. Dr. Hafez foresees reproduction for man in a similar way, "completely separated from sexual intercourse, by-passing or seriously modifying the traditional monogamous couple marriage of humans. . . . A dozen or two vials containing frozen

^{9&}lt;sub>Thid.</sub>, p. 53.

¹⁰ Victor McKusick, "The Mapping of Human Chromosomes," Scientific American, 224, no. 4 (April 1971), pp. 112-13.

or fresh zygotes could supply the basic mammalian, including human, population for a new world. Shipped to another planet, they would require only insertion into the appropriate wombs to be born."

Though their motives seem different, the speeches of Lewis's Weston and Filostrato were similar to the ideas of Dr. Hafez. Weston desired to populate other planets, with as little regard as Hafez expresses for individual rights, for family love or other values (cf. pp. 33-34 of this paper). And Filostrato hoped to eliminate natural reproduction (cf. p. 69).

Another outstanding example of the kind of power and the lack of traditional values which Lewis feared is in the writings of Dr.

Joshua Lederberg, professor of genetics and biology at Stanford
University. Professor Lederberg has written of the possibilities of cloning and mixing human chromosome material with sub-human material. The "mishaps" which he admits may occur might be destroyed or preserved depending on whether they "look enough like men to grip their consciences, and [their] nurture does not cost too much."

A footnote in an article by Lederberg indicates his attitude toward the values Lewis thought necessary for preventing the reduction of men to artifacts: "Humanistic culture rests on a

¹¹Ibid., p. 97.

¹² Who Shall Live? (Houston Conference on Ethics in Medicine and Technology, 1963), ed. Kenneth Vaux (Philadelphia: Fortress Press, 1970), p. 95.

definition of man which we already know to be biologically vulnerable." This is also an example of the epistemological arrogance Lewis decried.

When Lewis's Professor Weston outlined his plans for preserving the human species, the Oyarsa of Mars replied that Weston had become "bent" because the Bent One had taken one value, the love of one's kind, and had set it up as a little blind idol in his mind. Lewis was highly critical of those who would pick and choose among the values of the Tao but refuse to accept the balanced, rational but humanitarian whole. This criticism as expressed in The Abolition of Man would include those who, a generation later, have propounded a "new" morality, or situational ethics, based on love for others and on self-fulfillment. Lewis had observed that acceptance of only one or two parts of the Tao brings corruption. In order to show love for a person convicted of a crime, a friend might hide the criminal or help him to escape, or even defend the fugitive with violence toward others who are obeying the law. Actions which the friend thinks noble would then deny other values, such as justice, truth, and responsibility to the society harmed by the criminal's actions. A speech illustrating both this rejection of traditional values in favor of self-chosen values and the desire to experiment with the nature of man was made in 1968 at the Houston Conference on Ethics in Medicine and Technology was given by Dr. Joseph Fletch-

^{13&}quot;Experimental Genetics and Human Evolution," American Naturalist, 100 (September-October 1966), p. 530, n. 2.

er. Professor of Social Ethics at the Episcopal Theological School of Cambridge, Massachusetts. In the speech Dr. Fletcher insisted that in science and medicine men should justify their choices only be situational ethics, rejecting any system of absolute values, for "a new morality of love" is superseding traditional ideas. 14 For example, he says that the Federal Drug Administration is oversimplifying by insisting "that the patient comes first"; this "traditional principle . . . is logically inconsistent with the social and undiscriminating purposes of medical investigation."15 Furthermore. Dr. Fletcher said. "The welfare of the many comes before the welfare of the few, or, if you prefer, the individual may be rightly sacrificed to the social good."16 Lewis's disapproval of experiments even on retarded people has already been mentioned in connection with Weston's plans for kidnapping a retarded boy in Out of the Silent Planet. The professor clearly regards the boy as less than human, for he speaks of him as "the sort of boy who in a civilized community would be automatically handed over to a state laboratory for experimental purposes" (S.P., p. 19). Thirty years later. Dr. Fletcher asked casually, in a parenthesis to a related subject, "Incidentally, why should we not "use" retarded babies for

¹⁴ Who Shall Live?, p. 124.

¹⁵ Ibid., p. 130.

¹⁶*Ibid.*, p. 130.

experiments we would not impose on other children?" Lewis, then, was not imagining impossible attitudes and situations but was warning his readers against ideas being seriously entertained a generation ago and even more so today, and also against practices now accepted which before World War II were simply the fantasies of science fiction writers. Developments in science, philosophy, ethics, and government policies have justified Lewis's fears of how the knowledge acquired by science might be applied to mankind when he is no longer protected by the traditional values of the Tao.

¹⁷*Ibid.*, p. 131.

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