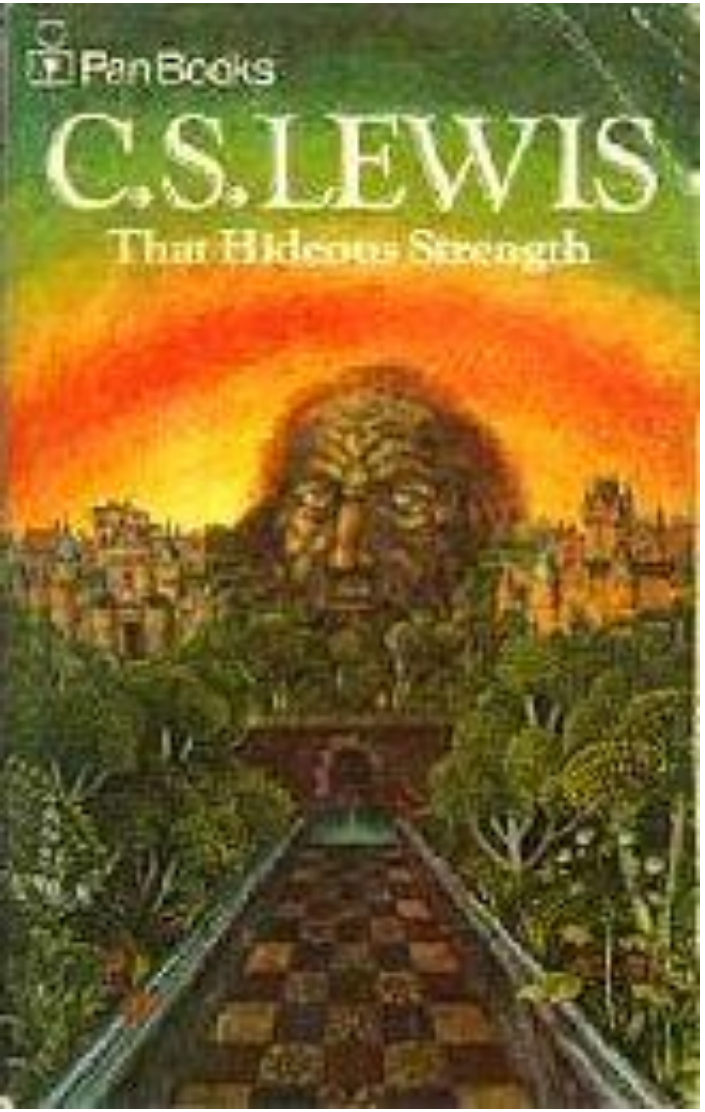
Session 9: "That Hideous Strength": *C. S. Lewis on Scientism*



"The shadow of that hideous strength
Six mile and more it is of length."

--Epigraph on cover page of *That Hideous Strength*
quoting from poem *Ane Dialog*
written by Sir David Lyndsay in 1554,
describing the Tower of Babel

Elevenses with C. S. Lewis

"That Hideous Strength": *C. S. Lewis on Scientism*

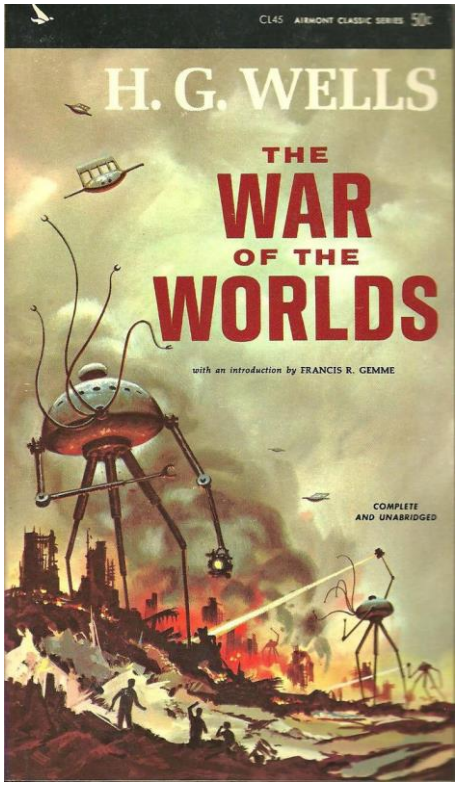
Session 9

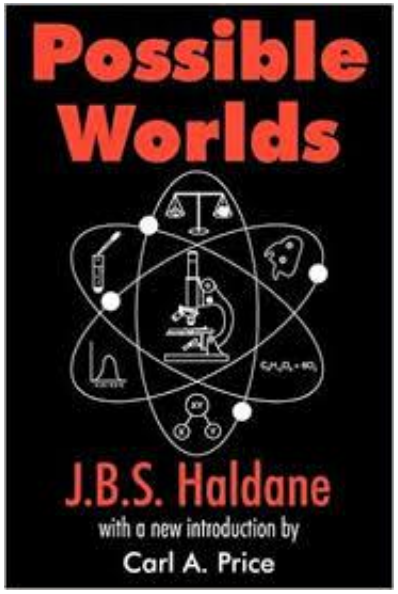
November 26, 2017

Plan for the day

- Introduction to Lewis' cosmic trilogy concluding with *That Hideous Strength*
- Science affirmed
- Scientism rejected
- Examples of contemporary developments in science and technology
- Contemporary science and scientism: A discussion with two commentators

Origin of Lewis' interest in science fiction and his motivation for writing his cosmic (or space) trilogy



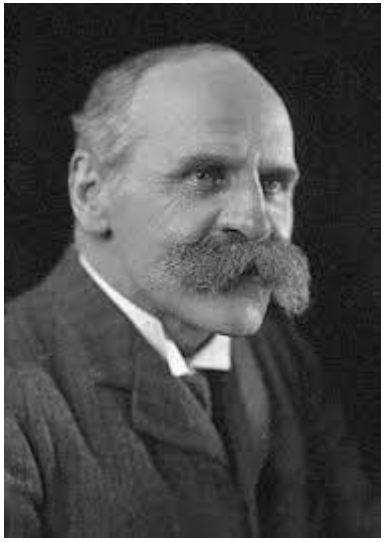


- When Lewis began reading before age 6, two of his favorite authors were H. G. Wells, and Jules Verne. Reading them inspired young Jack to write, at age 6, a story called "To Mars and Back"
- In *Surprised by Joy,* Lewis confesses "The idea of other planets exercised upon me a peculiar, heady attraction, which was quite different from any other of my literary interests. The interest, when the fit was on me, was ravenous, like a lust… My own planetary romances have been not so much the gratification of that fierce curiosity as its exorcism." (pp. 35-36)
- "What actually spurred me to write was… an essay in J. B. S. Haldane's *Possible Worlds…* which seemed to take the idea of such travel seriously and to have the desperately immoral outlook which I try to pillory in Weston." (Letter to Roger Green, 28 Dec. 1938, cited in Hooper, *Companion,* p. 206)

Out of the Silent Planet

- Weston, a physicist, kidnaps Ransom, a philologist, and takes him to Mars in hopes of finding a new planetary home for the human species.
- Ransom learns the Old Solar language spoken on Mars and discovers that earth is called the “silent planet” there because its fallen angel is prevented by God from communicating with other planets.

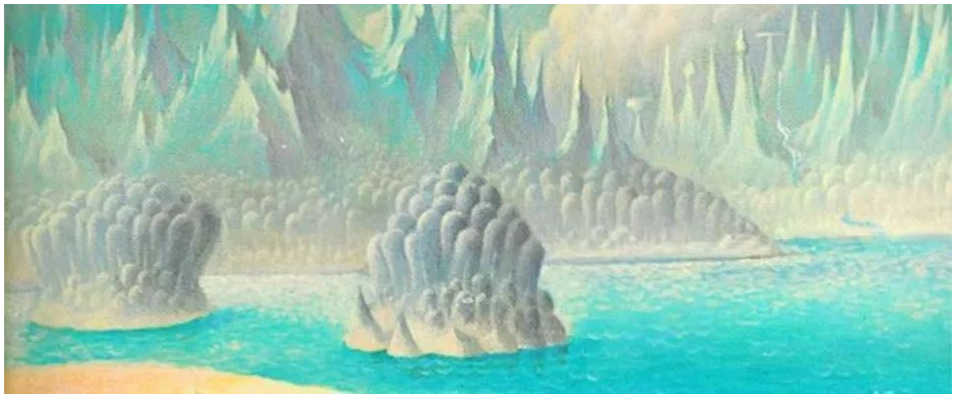
Weston, the villain, is based on J. B. S. Haldane



Ransom, the hero, is based on J. R. R. Tolkien

Perelandra (Venus)

- Supposal: what if the woman in another first couple did not succumb to temptation?
- Ransom is sent to Venus to counter the attempt of the demon-possessed Weston to cause the woman to fall.
- Ransom wonders why God did not intervene but is shocked to realize he is God's ambassador to that world.



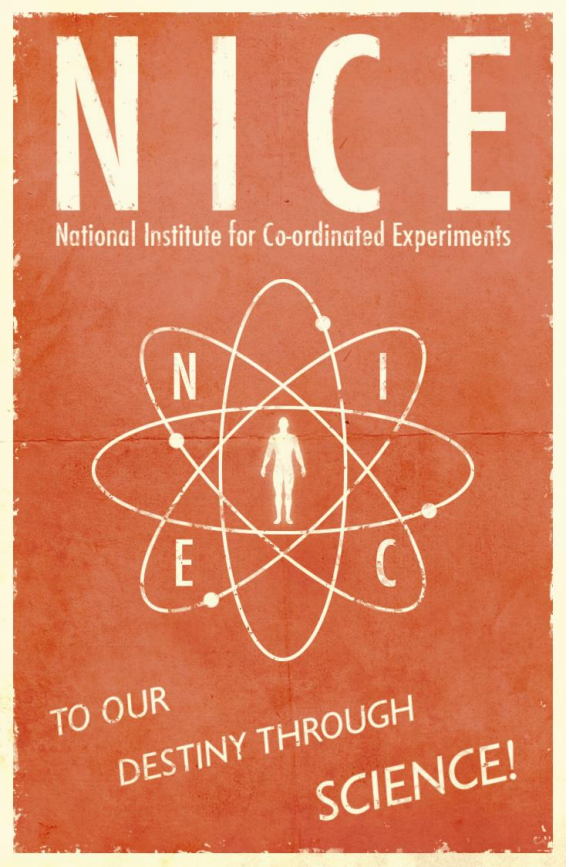
- The woman on Venus realizes that on Earth people long for the good they had expected instead of focusing of the good they had received.

Plot of *That Hideous Strength*

- Mark Studdock
  - Young Sociology Professor at University of Edgestow whose education had been purely modern and progressive.
  - Desires nothing more than to be in the "Inner Circle"
- Jane Studdock
  - Fiercely independent and slightly resents Mark
  - Has dreams of future events
- National Institute for Coordinated Experiments (N.I.C.E.)
  - Mark Studdock is offered a job at N.I.C.E. but ends up writing news releases blurring truth and falsehood that will cover up crimes of the secret police and garner public support for N.I.C.E.; Mark is told "Man has got to take charge on Man."
  - The brain of a brilliant scientist Alacasan, who had been guillotined in France for poisoning his wife. is kept alive by the scientists at N.I.C.E
- Elwin Ransom, now an old man and still suffering from a wound in the battle with Weston on Perelandra, leads a group with connections to supernatural forces that seeks to bring down N.I.C.E.
  - A friend who learns of Jane's dreams advises her to seek counsel from Ransom's group, and she becomes part of their group.

Goals of N.I.C.E

1. Solve the interplanetary problem
2. Wipe out rivals of Man on Earth
   1. Plants
   2. Animals
3. Take charge of man
   1. Sterilization of unfit
   2. Liquidation of backward races
   3. Selective breeding



In fact, N.I.C.E. is allied with demonic forces.

Fall of N.I.C.E.

- Merlin is brought back to life and joins forces with Ransom's group, and casts the Curse of Babel on N.I.C.E leadership.
- Caged animals being housed for scientific experiments are released and join in the battle with the forces of Merlin and Ransom.
- All N.I.C.E leadership, including Alcasan, are killed in the resulting chaos.

Science affirmed

- “When I accept Theology… I can get in, or allow for, science as a whole. Granted that Reason is prior to matter and that the Light of the primal Reason illuminates finite minds, I can understand how men should come, by observation and inference, to know a lot about the universe they live in.”
  - C. S. Lewis “Is Theology Poetry?” address to the Oxford Socratic Club, 1944

- “Unless all we take to be knowledge is illusion, we must hold that in thinking we are not reading rationality into an irrational universe but responding to a rationality with which the universe has always been saturated.”
  - --C. S. Lewis “*De Futilitate* [On Futility]” address given 1939 later published in *Selected Essays*

- “Men became scientific because they expected Law in Nature, and they expected Law in Nature because they believed in a Legislator.”
  - C. S. Lewis Ch. 15 “On probability” in *Miracles*

Science affirmed (cont.)

The lawfulness of nature a basic assumption or presupposition required by science

Science –a human activity with human understanding as its goal presupposes a universe that is (mysteriously) understandable

- *'The most incomprehensible thing about the universe is that it is comprehensible'* or "the eternal mystery of the world is its comprehensibility" or "The fact that it is comprehensible is a miracle." Albert Einstein (1936) "Physics and Reality"
- "To say that the discovery of objective truth in science consists in the apprehension of a rationality which commands our respect and arouses our contemplative admiration; that such discovery, while using the experience of our senses as clues, transcends this experience by embracing the vision of a reality beyond the impressions of the senses, a vision which speaks for itself in guiding us to an ever deeper understanding of reality—such an account of scientific procedure would be generally shrugged aside as out-dated Platonism; a piece of mystery-mongering unworthy of an enlightened age. Yet it is precisely on this conception of objectivity that I wish to insist."

Michael Polanyi from *Personal Knowledge,* Ch. 1: "Objectivity"

Science affirmed (cont.)

The beginning of modern science arose from a culture steeped in the Christian worldview

The Greek and Christian origins of modern science:

"faith in the possibility of science" arose from the European mind–

- Greek idea of inexorable law
- Medieval contribution–*"the inexpugnable belief that every detailed occurrence can be correlated with its antecedents in a perfectly definite manner, exemplifying general principles"* Alfred North Whitehead, *Science and the Modern World*.

Early scientists clearly affirmed a Christian worldview

Francis Bacon: It is impossible to be "too well studied in the book of God's word or the book of God's works."

Johannes Kepler: 'I am thinking God's thoughts after Him.'

Isaac Newton: "This most beautiful system of sun, planets, and comets could only proceed from the counsel and dominion of an intelligent and powerful Being."

Science affirmed (cont.)
Lewis often cited leading scientists of his day in his writing

Examples include:

- Arthur Eddington, the father of modern theoretical astrophysics, e.g. using the idea that scientific theories are pictures of reality, not the reality itself as an analogy to certain Christian doctrinal interpretations such as theories of the atonement (*Mere Christianity,* "What Christians Believe")

- Sir Fred Hoyle, Cambridge U. Professor of Astronomy, regarding prevalence of habitable planets in the universe (In Lewis' "Religion and Rocketry")

- Erwin Schrödinger, Lewis' colleague at Magdalen College, Oxford, who makes a brief appearance in Lewis' *Out of the Silent Planet.*

But Lewis nonetheless consistently rejected Scientism

Scientism, according to Lewis, is "a certain outlook on the world which is casually connected to the popularization of the sciences" (Lewis, "Reply to Professor Haldane")

What is that "certain outlook"?

"The belief that the supreme moral end is the perpetuation of our own species" (Lewis, "Reply to Professor Haldane")

Reducing man to merely a natural, determined object, e.g.:

"I take it 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 ignore its final cause (if any), and treat it in terms of quantity… We reduce things to mere Nature *in order that* we may 'conquer' them…." The final step in this process is that "of reducing our own species to the level of mere Nature." "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." (*Abolition of Man*, pp. 81-84)

Scientism rejected (cont.)

Lewis' approach is basically a common sense, common man's approach

- "The common sense of the human race finds it as obvious that everything is not matter as it is obvious that not everything is in the mind." Owen Chadwick
- "The don echoes and loves the tinker's certainties." Malcolm Muggeridge on Lewis

Scientism rejected (cont.)

The debate between scientia (knowledge) and sapientia (wisdom) has been going on since the beginning of modern science

- Mixed motives—perhaps seeking truth, but really wanting power—have been present in science from the start
  - Bacon, whom Lewis called "the chief trumpeter of the new era," wrote that "scientific knowledge is power" and the goal is "to extend Man's power to the performance of all things possible" (*Abolition*, p. 30).
- "Lewis' hero Samuel Johnson" warned in the 18th century against encroaching naturalism supplanting morality:
  - "The truth is that the knowledge of external nature, and the sciences which that knowledge requires or includes, are not the great or the frequent business of the human mind. Whether we provide for action or conversation, whether we wish to be useful or pleasing, the first requisite is religious and moral knowledge of right and wrong." Socrates' mission was "to turn philosophy from the study of nature to speculations upon life; but the innovators whom I oppose are turning attention from nature to life" (Johnson, "Milton", *Lives of English Poets,* 1779).
- The debate continued in succeeding eras with scientism…
  - Advocated by: Hume, La Mettrie, Diderot, Comte, Ayer
  - Condemned by: Coleridge, Kierkegaard, Dostoevsky

Lewis' contributions to the dialogue re religion and science

- Science studies Nature, and cannot show that something besides Nature does not exist.
  - People in previous eras were well aware of the fact that Nature generally follows laws and that the universe was immense, but nonetheless realized that it was plausible that something beyond nature could exist and on occasion interfere with Nature. (Lewis, "Religion and Science")
- Materialism though contrary to common sense can come to be accepted if it seems to be "practical," "contemporary," "strong, or stark, or courageous—that it is the philosophy of the future." (Lewis, *Screwtape Letters,* "Letter 1").
- People can be induced into taking part in unethical manipulation of others by the seduction of being part of the inner circle, "those in the know" or the intelligentsia (Lewis, *That Hideous Strength* and "The Inner Ring")

Examples of developments in contemporary science and technology

- Automation
- Artificial intelligence
- Transhumanism
- Genetic alteration: CRISPR

Automation: Technologies that reduce the need for human labor

- Examples on the horizon include:
  - Self-driving cars, trucks could put 1.5 million truckers, taxi drivers, delivery drivers out of work over night
  - Automated ordering machines and fast food cooks may sharply reduce the number of jobs in fast food industry
  - Some functions of paralegals and even of lawyers and doctors may be replaced by computer programs like Watson

Artificial intelligence

- Weak AI currently exists
  - Illustrated by Siri and other question-answering, command-following computer technologies
  - But sensitive to changes in environment, or other disruptions
  - Importantly, cannot substantially improve its own performance
- Strong AI is expected by many in the near future
  - Human-level cognition or better “in a box”
  - Could be used to iteratively improve itself, leading to a superintelligence that humans could not control
  - Dangers are predicted by, e.g. Stephen Hawking “AI could be the worst event in the history of our civilization. It brings dangers, like powerful autonomous weapons, or new ways for the few to oppress the many.”

Transhumanism: modifications of the human body or brain

- Builds on ideas first advanced by J. B. S. Haldane
- Includes: Artificial limbs, stronger than natural ones,
- Brain-computer interfaces to extend human cognitive abilities,
- Trans-cranial direct current stimulation (TDCS) to enhance cognitive functioning, e.g. heighten attention.
- The Transhumanism Declaration endorses efforts to “make available technologies to eliminate aging”

Genetic alteration: CRISPR Technology

- Stands for “Clustered Regularly Interspaced Short Palindromic Repeat,” which refers to the hallmarks of a bacterial defense system that forms the basis for a genome editing technology
- CRISPR allows biologists to wield “molecular scissors” to do gene editing, and hence it can be used to modify the activation or deactivation of genes in an organism’s genome.
- Ethics Risk
  - Has the potential to be used to create designer babies
  - Arguably could be construed as playing God with humanity

Contemporary science and scientism

- Our commentators:
  - Paul Gensheimer
  - Mike Edenburn