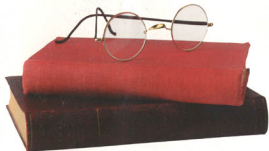# THE Great Courses on Tape™

Teaching that engages the mind™

**Science Fiction:
The Literature of the
Technological Imagination**

Eric S. Rabkin, Ph.D.

1-800-TEACH-12
1-800-832-2412

The Teaching Company®
7405 Alban Station Court, A-106
Springfield, VA 22150-2318

COURSE GUIDE

THE TEACHING COMPANY®

Eric S. Rabkin, Ph.D.

Professor of English Language and Literature
University of Michigan

Eric Rabkin is Professor of English and Literature at the University of Michigan in Ann Arbor. Born and raised in New York City and educated at Stuyvesant High School, Cornell University, and the University of Iowa, he joined the University of Michigan faculty as an assistant professor in 1970, became associate professor in 1974 and full professor in 1977.

As a teacher, Rabkin is known for his large, popular lecture courses on science fiction and fantasy, and for his many teaching innovations, including development of the highly successful Practical English writing program for those who will use writing in their work. He received the University Teaching Award in 1990 and, for his teaching contributions, was named Arthur F. Thurnau Professor (1990–93).

Rabkin has written, cowritten, edited, or coedited over one hundred publications, including twenty-two books. His published works include *Narrative Suspense* (1973); *The Fantastic in Literature* (1976); *Science Fiction: History, Science, Vision* (with Robert Scholes, 1977); *Teaching Writing That Works: A Group Approach to Practical English* (with Macklin Smith, 1990); and *It's A Gas: A Study of Flatulance* (with Eugene M. Silverman, 1991).

Rabkin's awards include a fellowship from the American Council for Learned Societies (1973) and research funding from the American Philosophical Society (1991).

He lives in Ann Arbor with his wife, Elizabeth, an elementary-school teacher. They have two children, David Ivan and Rachel Ann.

.

Table of Contents

Science Fiction: The Literature of the Technological Imagination

Scope:
Dr. Eric Rabkin traces the history of science fiction. Though he explains how the genre developed as a response to the newfound pressures of science and technol-ogy in the Industrial Revolution, he also refers throughout the course to the roots of science fiction, including the legends of Faust and the Golem, the Greek myth of Prometheus, and Sophocles' *Oedipus Rex*. Mary Shelley's *Frankenstein* introduced the world to science fiction, at the time an outgrowth of romantic and Gothic literary traditions.

Professor Rabkin introduces the writers and editors who helped to shape science fiction. The love of science associated with science fiction is evident in the works of Edgar Alan Poe, Jules Verne, and especially Isaac Asimov. Many people consider H.G. Wells the single greatest influence on the formation of science fiction.

As he outlines the history of the genre, Professor Rabkin shows that the early evolution of science fiction was predominantly European but that, thanks to pulp culture and the dime novel, modern science fiction is a largely American phe-nomenon. After the Civil War, the dime novel, produced at low cost for the masses, became immensely popular. The literary values were poor, but pulp novels sold like crazy and established an enormous cultural presence.

Science fiction had no separate name or identity until Hugo Gernsback declared "scientifiction" the subject of his magazine *Amazing Stories* in April 1926. Gernsback promoted what came to be known as Hard SF, as did John W. Campbell, Jr. Campbell's favorite writer was Robert A. Heinlein, who created a shareable "future history" that would be used and built upon by numerous science fiction authors.

Fan culture, initiated by Gernsback and science fiction magazines of the early twentieth century, dramatically influenced the direction of this relatively new field. Ray Bradbury received wide popular acceptance and, with Samuel Delany and Ursula K. LeGuin, began to introduce new perspectives into science fiction.

Professor Rabkin shows how science fiction and film have been linked since the inception of film. German expressionist films provided background for the American science fiction films that became important in the 1930s. By the 1950s, science fiction B-movies had become the medium for popular political warning. Stanley Kubrick became a science fiction pioneer in the 1960s, and Ridley Scott's *Blade Runner* would became the first postmodern film.

While science fiction has adopted characteristics of modernism and moved into postmodernism, its geographic center has moved west and is now centered in Tokyo, the opening setting of William Gibson's cyberpunk *Neuromancer*. Professor Rabkin wraps up the course by explaining how science fiction has reached around the world and permeated our entire culture.

Lecture One
Mary Shelley's *Frankenstein* and the Emergence of Science Fiction

Scope: The antecedents of science fiction can be traced through literary history. From its mythic roots, science fiction evolved from a sense of ambivalence created in the early nineteenth century by science and technology. Suddenly at one with the limitless universe as a result of new developments in science, many felt small and weak. By 1818, the Industrial Revolution and its technological advances had led to conflicts between the haves and have-nots, the white majority and the exploited peoples. Science fiction arose to deal with these fundamental problems.

Outline

I. What is science fiction?
  A. Modern science fiction is a universal literature that emerged in response to the pressures of the early nineteenth century.
    1. By demonstrating that the same law of motion applied in the celestial world and on earth, Newton created the first universal law and challenged radically the notion of a God present in human affairs; science in this way created a great deal of ambivalence.
    2. The Industrial Revolution created enormous wealth *and* enormous social pressure, leading to conflict among economic classes, nations, and ethnic groups and, ultimately, to ambivalence about technology.
  B. Science fiction had no separate name or identity until editor Hugo Gernsback declared "scientifiction" the subject of his magazine, *Amazing Stories*, in the first issue of April 1926.
  C. Purists consider the works of H.G. Wells to be the ideal and define science fiction as that based on extrapolation from a single change; however, no science fiction novel appears ever to have fulfilled this definition, because the changes seldom stop at just one.
  D. Science fiction is defined by three related characteristics.
    1. The fantastic is made plausible through attention to the rhetoric of science, whether or not legitimate science is used.
    2. Science fiction includes high adventure.
    3. Defined by intellectual excitement, science fiction asks the reader to think.
    4. Mary Shelley's *Frankenstein* clearly fulfills these three criteria.
      a. In the preface to the first edition, Shelley writes that physiologists have declared the reanimation of body parts "not of impossible occurrence," or not implausible.
      b. A monster gets loose and wreaks havoc, producing high adventure.
      c. Intellectual excitement is stimulated by the question: what would it be like to conquer death?

II. The literary evolution that led to the production of *Frankenstein* and the rise of science fiction includes romanticism and Gothicism.
  A. Mary Shelley (1797–1851) was at the center of the romantic mainstream.
    1. Her mother, who died in childbirth, was perhaps the most important feminist writer of her time.
    2. Her father, William Godwin, was an influential liberal philosopher.
    3. She was the mistress and later the wife of Percy Bysshe Shelley, one of the great romantic poets, and spent time with other important figures of the romantic movement, including Byron.
  B. Gothicism, a form of romanticism, arose in the 1740s in part from the Protestant English rejection of what was believed to be a plot for world domination by the papacy.
  C. Gothic literature went through its own evolution in producing science fiction.
    1. At the core of Gothicism is a notion of ancient evil, religious institutions, divine retribution, perverse sexuality, family tensions, power, the idea of haunting by something from the past, and the need for an appropriate marriage to reestablish order.
    2. Horace Walpole's *The Castle of Otranto* (1764), subtitled "A Gothic Story," was set in an Italian town and tells of a family curse and a marriage between two ruling families.
    3. In *The Mysteries of Udolpho* (1794), Ann Radcliffe told a similar story but at the end provided a gothic explique, an explanation of how everything that seemed supernatural really had justification.
    4. Jane Austen's *Northanger Abbey* (1818) satirizes Gothic literature.
    5. Mary Shelley's *Frankenstein* (1818) moves the gothic explique to the front of the book, stating at the outset that this is all understandable and that we need to use our minds; in this way, Shelley creates the general form for science fiction.

III. Science fiction's mythic roots are evident in early literature.
  A. The legend of the Golem was quite well known in German texts.
    1. Rabbi Judah of Prague (d. 1609) supposedly created and mystically animated a clay giant to guard the ghetto.
    2. The guardian later gets into the hands of the wrong people.
    3. Unlike Victor Frankenstein, Rabbi Judah uses God's power for creation.
  B. The legend of scientist Johann Faust (1488-1541), said to have made a deal with the devil, is also in the background.
    1. At the end of Goethe's version, Faust is able to repent with the love of a good woman.

2. In Christopher Marlowe's *Dr. Faustus* (1588), the deal with Mephistopheles fails.

C. Sophocles' classic drama of conflict, *Oedipus*, which is now often thought of in exclusively sexual terms, tells of the problematic nature of knowledge and the intergenerational passage of power; such passage of power is an archetypal story of science fiction.

D. Shakespeare's *The Tempest* echoes the Oedipus story in the relationships of Prospero, Miranda, and Ferdinand.

E. The Greek myth of Prometheus also bears on this story: Prometheus stole fire from the gods and gave it to humanity; like Prometheus, Frankenstein is punished.

IV. Mary Shelley's *Frankenstein, or The Modern Prometheus*

A. The book is *not* like the movies.
   1. There is no Doctor or Baron Frankenstein; Victor is a crazed undergrad.
   2. The "monster" itself is never named.
      a. A *monster* is an omen of what will happen if someone with the goal of learning or power isolates himself from the community.
      b. The monster is a "miserable (worthy of pity) creature (created one)," a "demon (spirit of the individual mind)," a "wretch (Old English word for exile)," a "fiend (enemy; the opposite of friend)."
      c. Still, he is the most articulate character in the book.
      d. On the basis of family and wider community, the monster is shunned and cast out.
      e. Only when he is rejected does the monster become an evil force; he is attacked for being superficially ugly.

B. The book, an epistolary novel, has a nested structure: inside Victor's story is the monster's story, and inside that is the monster's experience as the modern man—with the message that power and isolation lead us to evil.

C. Initially, Victor is guilty, both for breaking his word to his creature and for letting Justine die; the monster has only been *made* into a killer

D. At the end, the monster goes off alive; such an indeterminate ending is characteristic of the best science fiction.

V. Frederic Brown posed the science fiction teaser: "After the last atomic war, Earth was dead; nothing grew, nothing lived. The last man sat alone in a room. There was a knock on the door . . . ." Science fiction opens that door.

Questions to Consider

By challenging the notion of a God present in human affairs, Newton showed that science provided no special dispensation for what was transpiring on earth. God was not involved in our affairs, man alone could decide and manipulate.

How do you believe man has regained the control and security lost to early science?

Discuss how Victor Frankenstein's story is really the monster's story, and how the monster's experience reflects that of the modern man on the receiving end of the consequences of the Industrial Revolution. Do power and isolation lead man to evil.?

Lecture Two
Jules Verne and the Popular Passion for Science

Scope: Science fiction is usually associated with a love of science. In fact, the first great science fiction editors felt science fiction had a mission to create a love for science and to inspire people to become scientists. In this way, the popular passion for science had a role in the evolution of science fiction. Jules Verne's desire to travel, to see things, to learn them and get their names right is part of the passion for science.

Outline

I. Edgar Allan Poe (1809–49), in addition to horror, wrote "tales of ratiocination."
  A. Poe's *The Narrative of Arthur Gordon Pym* was either an attempt to write a novel or a rhetorical artifice.
  B. Poe gave definitive shape to Tales of the Great Detective in works like "The Purloined Letter" (1845), which was politically engaged.
  C. The narrator must set matters to rest by giving the facts; Latinate rhetoric sounds like science and makes the fantastic plausible.
  D. Science fictions like "The Facts in the Case of M. Valdemar" (1845) include, like *Frankenstein*, implicit social criticism and sexuality.

II. Jules Verne (1828–1905)
  A. Like many French writers, Verne greatly admired Poe, and even wrote a sequel to Poe's *The Narrative of Arthur Gordon Pym*.
  B. Verne's numerous "voyages extraordinaires" made him the first person ever to make his full-time living as a science fiction writer.
  C. He was a failed sailor who wrote on the "floating studies" *St. Michel* and *St. Michel II*.
  D. All of these extraordinary voyages were what are called Robinsonades.
    1. Daniel Defoe's *Robinson Crusoe* (1719) is the fictionalized account of Alexander Selkirk's adventures while marooned on an island west of Chile; he managed to survive using what he could salvage from the wrecked ship.
    2. Robinson Crusoe wants to travel through what is ostensibly an alien environment, only to catalog it, tame it, and make it an extension of the world from which the traveler came; this is the general type of all Verne's stories.
    3. Crusoe's is not really a voyage of exploration but a voyage of conquest of the alien with tools of the mind (with a name); Verne's stories also depend upon the naming of the Other.

III. Jules Verne's *20,000 Leagues Under the Sea* (1870) was enormously popular; in fact it was the first Western novel translated into Japanese.

A. The novel is well known for its marvelous invention, the submarine, which had actually been around for almost a century when Verne published *20,000 Leagues*.
B. Verne was actually writing satire; he expected his readers to understand that it only sounded plausible but was actually a satire of American ingenuity.
C. Verne uses stereotypes for comic, satiric purposes.
  1. The arrogant Professor Aronnax, a French know-it-all philosopher, consistently gets things wrong.
  2. Conseil is Aronnax's mindlessly devoted servant.
  3. Also on the vessel is Ned Land, a Canadian harpooner.
  4. The vessel is the USS *Abraham Lincoln*, a nationalist stereotype.
  5. Nemo is a misanthrope who lives alone, outside of community; he has control of his destiny (unlike the Frankenstein monster), because, like Crusoe, he has created his own world.
D. Verne also has his own political agenda: Nemo supports the Greek revolution, as did the romantics Byron and Shelley.
E. Verne's desire to travel, to see things, to learn them, and to get their names right is part of the passion for science.
  1. Verne places this passion for discovery via travel safely aboard the *Nautilus*.
  2. Verne shows a great love for empirical details, like the kinds of mollusks Nemo has collected.
  3. Recognizing that a fact is simply what we construct as one, Verne calls into question the way we construct facts, an act of the appropriating mind; this is a new kind of tale of ratiocination.
E. Verne was a more sophisticated writer than is usually acknowledged today.

IV. Long before founding *Amazing Stories*, Hugo Gernsback reprinted Verne's stories in *Modern Electrics* (1911).

V. Science fiction's greatest exponent of passion for science is Isaac Asimov (1920–88).
  A. Asimov made history into a science, *psychohistory*, in The Foundation Trilogy, a series of stories that argues that you can predict the outcome of history by knowing what great social forces are at work and by making the appropriate adjustments based upon a knowledge of history.
  B. Asimov's passion is most evident in *I, Robot* (1950), a series of stories that sound scientific ("positronic brains") but that, in fact, use the Three Laws of Robotics as perfect fairy tale tools.
    1. A robot may not injure a human being or, through inaction, allow a human being to come to harm.
    2. A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.

3. A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws.

VI. Contemporary passion for science goes well beyond science fiction.

A. World's Fairs exemplify this critical yet joyful embrace of the future.
  1. Paxton's Crystal Palace at London's Great Exhibition (1851), the first huge building constructed of glass and steel
  2. Gustave Eiffel's Tower at the Paris Exposition of 1889
  3. White City at Chicago's Columbian Exposition (1893) included the spherical building, Democracity, where one could view the ideal small town of the future.
  4. At New York's World's Fair (1939), General Motors automated an exhibit that took one riding in cars through the World of Tomorrow.

B. The theme park industry, particularly EPCOT Center, embodies the desire for a passion for science.

C. This is the fiction of world creation.

Questions to Consider

Verne loved science enough to play with it. He created scientific enterprises that he expected his readers to understand only sounded plausible but were actually satires of American ingenuity. Is Verne's satire completely lost on the modern reader? Have we simply grown to accept stories that challenge the imagination, or has science moved too fast for the modern reader to stay abreast of what is and is not plausible?

Is there, in your opinion, such thing as a fact? Consider Verne's questioning of our construction of facts: What makes something something? Is this one thing or another? What determines that, how we use it or how we name it?

Lecture Three
H.G. Wells and Science Fiction
Parables of Social Criticism

Scope: Many people consider H.G. Wells the single greatest influence on the formation of science fiction. His works are grounded conceptually in a metaphor system that depends upon the notion of evolution but are aimed at giving profound analysis to what is going on in the world. Wells' prolific work can be divided roughly into four stages, throughout which Wells acts as a teacher of tolerance and asks the reader to look for a sense of community.

Outline

I. H.G. Wells
A. Between 1895 and 1901, Wells published what he called "scientific romances" that had an enormous impact on the world.
B. In his time, Wells was thought of as one of the two greatest writers in the English language, along with Henry James.
C. James and Wells reflected an older kind of writing that would be supplanted by the modernism of Joyce, Lawrence, etc.
D. Nowadays, Wells is often thought of as a writer for children, something he never intended to be.

II. H.G. (Herbert George) Wells (1866–1946) became one of the key figures in British intellectual life.
A. The son of a draper who could not afford to send him to school, Wells was a self-taught polymath.
  1. His intellect was discovered by a teacher who supplied him with books and, in exchange for a portion of the bounty, signed him up for university admittance exams.
  2. Wells began his formal education when he became a laboratory assistant for T.H. Huxley (1884-87), the great disciple of Darwin; consequently, evolution is a continuing theme of Wells'.
B. Wells left school in 1887 to be a journalist and began writing fanciful stories.
  1. In 1888, he published serially a bad novel called *The Chronic Argonauts*, the third draft of which was published to little note.
  2. Rewritten three more times, the seventh edition of *The Chronic Argonauts* came out in 1895 as *The Time Machine* and became an instant smash hit.
C. Often considered the great intellectual force behind the rise of socialism in England, Wells was active in the Fabian Society.

1. The three major public figures in the society were E. Nesbitt, George Bernard Shaw, and Wells.
2. Shaw and Wells engaged in a great debate.
   a. Shaw wanted to focus on the politics of England and its problematic class structure.
   b. Wells agreed that the class structure was a terrible thing, but he believed that England's domination of other lands must stop.
   c. Wells lost out politically and left the society in 1908.
D. In the early twentieth century, the Wells-James debate was probably the single most significant debate about how literature should be written.
   1. Henry James argued that literature should be true to the psychology of the individual person.
   2. Wells said readers need to see the forces that make the world as it is.
   3. Wells appears to have been correct both in terms of the political utility of the work and the artistic satisfaction gained from them.
E. Wells' prolific work can be divided roughly into four stages.
   1. The works of the first six years, the great, ambivalent "scientific romances," leave us wondering what we are supposed to do next.
      a. *The Time Machine*, 1888 and 1895
      b. *The Island of Dr. Moreau*, 1896
      c. *The Invisible Man*, 1897
      d. *The War of the Worlds*, 1898
      e. *When the Sleeper Wakes*, 1899
      f. *The First Men in the Moon*, 1901
   2. The second stage yields Wells' positively utopian works, written while he worked hard with the Fabian Society toward a world state.
      a. *The Food of the Gods*, 1904
      b. *A Modern Utopia*, 1905
      c. *In the Days of the Comet*, 1906
      d. *The War That Will End War*, 1914
      e. *Men Like Gods*, 1923
   3. The third stage includes the nonfiction works with which Wells tried to show a new way to look at one aspect or another of the world.
      a. *The Outline of History* (1920) was the first history to follow the evolution of what Wells considered all the cultures of the world.
      b. Wells wanted to explore the possibility that history was an evolutionary idea.
      c. He wrote a new kind of history; the four volumes were enormously successful and changed the way we look at history.
   4. The fourth division consists of reflective works, like his own *Experiment in Autobiography* (1934).

III. The positively utopian works bravely reflect the passing of life with humility and the supplanting of the ego for something greater.

A. The word was coined by Thomas More as the title for *Utopia* (1516).
B. Though More's work was written in Latin, *utopia* is actually a pun in Greek.
   1. A distinction is made in Greek between two sounds, *ou*-topia (no) versus *eu*-topia (sweet, as in euphemism or euphony).
   2. Because we do not distinguish, in English, between these two sounds, the title means both no place and sweet place.
   3. The opposite, in Greek, of *eu*- is *dys*-; a *dystopia* is a negative utopia or an anti-utopia.
   4. *Utopia* has in it both *eu*-topias and *dys*-topias.
C. The history of utopian literature is usually thought to have begun with Plato's *Republic*.
   1. The ancient world is run by philosopher kings with an economy based on slave labor.
   2. During the Christian Renaissance, slavery was forbidden, therefore the economy had to be based on regularized work by all.
   3. During the Industrial Revolution, the economy is based on machines.
   4. In our post-Industrial world, the distinction between machines and humans is not so great; we have wound wind up with humans as machines or made slaves to the machines.
   5. In the creation of new worlds, high adventure, intellectual puzzles, and so on, utopian literature gives us prototypical science fiction.

IV. Wells was working within the utopian tradition when he wrote *The Time Machine*.
   A. *The Time Machine* addresses the persistent themes of utopian literature.
      1. Should the work be considered utopian, eutopian, or dystopian?
      2. Should the created world be authoritarian or anti-authoritarian; what is the relationship between the individual and society?
      3. Will the world created be technological or anti-technological?
      4. Will this be an extrapolation from what we know, or will it be the opposite of what we know?
   B. The Time Traveler's description of the world he viewed in 802,701 serves as a warning about class conflict and the need for community.
   C. The Time Traveler also takes a voyage to the year 30,000,000, when the world is no longer rotating.
      1. At a far enough perspective, even the question of what is good and bad for human life is trivial.
      2. We will be only parts of forces far bigger than anything we can control.
   D. In the short run, we have a moral obligation to take over our lives and use the power of science and technology to make our world better.

V. The history of utopian (or dystopian) literature since Wells suggests that most people believe we cannot make our world better.
   A. Karel Capek, *R.U.R.* (1920)

B. Eugene Zamiatin, *We* (1920)

C. Aldous Huxley, *Brave New World* (1932)

D. George Orwell, *Nineteen Eighty-Four* (1949)

Questions to Consider

Wells' works are science fiction parables of social criticism. In *The Invisible Man*, Griffin is rejected from society on account of his albinism, and he turns to science. Compare this to Shelley's Frankenstein, in which the monster becomes an evil force only when he is rejected. Are the forces that drive us out of society inherent in how society looks at people?

Where do you stand in the Wells-James debate? Do you believe, like James, that literature should be true to the psychology of the individual person in order to convey an accurate picture of what the world really was? Or do you feel that readers need a picture of the forces that make the world as it is and the social movements that shape our lives?

Lecture Four
Pulp Culture, World War II, and the Ascendancy of American Science Fiction

Scope: The early evolution of science fiction was predominantly European, but, thanks to pulp culture, modern science fiction is a largely American phenomenon. In contrast to highbrow writers like Verne, Shelley, and Wells, pulp writers were paid by the word and therefore had no incentive to be brilliant or concise. The literary values were poor, but pulp novels sold like crazy and established an enormous cultural presence.

Outline

I. Pulp culture, which characterized publishing for the masses as it began around the time of the Civil War, ultimately had a tremendous impact on the development of science fiction.

 A. Pulp culture is so called because it revolves around material printed on wood pulp, the content of cheap paper not expected to last long.

 B. The consumers were ordinary working people, comparatively lower in age, income, and level of formal education.

 C. Low costs and formulaic writing led to serial production.

 D. Because pulp writers were paid by the word, there was no incentive to be brilliant or concise; pulp fiction provides what the audience wants and tends to be intellectually conservative.

II. Dime novels, with an average of twenty-four three-column pages (or 60,000 words), sold for ten cents after the Civil War.

 A. The first dime novels, around the time of the Civil War, were Westerns.
 1. The typical Western story has the "in" group being more civilized, the "out" group better equipped with survival skills.
 2. A lone hero with the values of the in group and the skills of the out group protects the in group from the out group, thereby becoming the greatest potential threat to the in group.

 B. The conquest of new territory and naming of places as civilization marches westward is akin to, and soon leads to, science fiction
 1. The first pulp science fiction is Edward S. Ellis' (1840–1916) *The Huge Hunter: or, The Steam Man of the Prairies* (1868).
 2. *Frank Reade and the Steam Man of the Plains* (1878) by "Noname" (mostly Lou Senarens [1835–1939]) was an important dime novel; by the time he was done, Senarens had written 400 novels, leading to a whole industry of science fiction dime novels.

3. *The Huge Hunter* and *Frank Reade* were both Westerns and science fictions, sharing all the characteristics of pulp culture, as well as the American spirit of individualism.
4. These early works depict a characteristic belief of science fiction in meritocracy.
5. Use of technology and the taming of the world, two science fiction motifs, are melded into the standard Western story; as pulp fiction began to spread with its large audience and low cost, these aspects began to dominate the tone of science fiction

C. Among the most famous science fiction dime novels are the Tom Swift novels by "Victor Appleton" (a house name trademarked by Stratemeyer Syndicate).

III. Hugo Gernsback (1884–1967), an immigrant from Luxembourg, came to America in 1904.

A. Gernsback founded the magazine, *Modern Electrics* in 1911.
B. He also published serially a novel called *Ralph 124C41+* (1911–12).
1. Ralph. one of only ten men on the planet allowed to use the plus sign after their names, goes through one adventure after another.
2. Ralph has a mind so powerful he can will himself to consciousness even when seriously wounded.
3. Ultimately, a twenty-one-year-old saves the universe, a pulp fiction characteristic.
4. Though not an actual dime novel, it is the perfect exemplar of the field.

C. Gernsback wants to make the reader love science; he includes diagrams of the different inventions he has in mind, including one of working radar almost thirty years before it existed.
D. In 1926, Gernsback founded *Amazing Stories* with the aim of publishing "scientifiction."
E. To increase sales, he began picking up writers who had already started publishing in other magazines.

IV. The most important of the writers picked up by Hugo Gernsback was Edgar Rice Burroughs (1875–1950).

A. Though he is a Virginian who has just lost the Civil War, John Carter forges a truce between the green Martians and the red Martians in *A Princess of Mars* (1912); the eleven novels in this series mix aspects of the Western with pulp science fiction.
B. Much of Burroughs' work could be called science fiction, if anthropology is viewed as science; *Tarzan of the Apes* (1912) is a good fictionalization of the notions of anthropology understood at the time (as are the 23 additional books in the series).
C. *At the Earth's Core*, 1914 (plus five more)

D. *The Land That Time Forgot*, 1918 (plus two more), gives the reader the chance to watch the evolution of human culture and human language.
E. Altogether Burroughs wrote more than sixty books.

V. John W. Campbell, Jr., (1910–71) wrote science fiction under the pen name, Don A. Stuart.

A. Two of Campbell's influential stories as Don A. Stuart are "Twilight" (1934) and "Who Goes There?" (1938), which he wrote in the tradition of philosophic science fiction.
B. Campbell took over editorship of *Astounding* (now *Analog*) in 1937 with a backlog of accepted stories awaiting publication, but by 1939 the magazine had taken on Campbell's own stamp.
1. Campbell wanted some concern for characterization and incorporation of ideas and feelings.
2. He insisted upon stylistic polish in the works published.
3. Philosophically, Campbell wanted to promote a kind of inclusiveness; rather than tolerance, he advocated the liberal notion of America as melting pot.
4. He found and supported writers who would become greats in the field, including Isaac Asimov, Lester Del Rey, A.E. van Vogt, Robert Heinlein, and Theodore Sturgeon.
5. Campbell fostered what has been called the golden age of science fiction; from 1939 to 1960, he defined the field with his inclusive, aggressive, protechnology, pro-American approach.

VI. During the Civil War, America simultaneously developed an appetite for national news and a mechanism to get national news.

A. American News Company allowed national distribution of newspapers and periodicals.
B. With the end of the Second World War, American pulp literature finally entered Europe, where the field was still dominated by more highbrow authors, and American science fiction took over everywhere.
C. In 1954, Wall Street bought out and liquidated the American News Company to get its prime downtown office space throughout the country.
D. There has been no national distribution system for periodical literature since the demise of American News Company; increased distribution costs put many magazines out of business and decreased the number of science fiction monthlies from 38 to 4 between 1954 and 1960.

VII. Pulp culture began to break down.

  A. The liquidation of American News Company began the downturn.

  B. In about 1952, Ian Ballantine came up with the idea of publishing novels in paperback versions, rather than in serial form.

  C. Advertising funds shifted from periodical literature to television.

  D. With the launch of Sputnik in 1957, science fiction editors shifted emphasis from bug-eyed monsters to more scientific-sounding material that could compete with contemporary newspapers.

  E. Low-budget movies came along in the 1950s and took over much of the popular science fiction market.

  F. Ray Bradbury's *Martian Chronicles* redefined the broader public's notion of science fiction.

Questions to Consider

Describe the role of the lone hero as the character first presented in early Western novels. How does this character reappear in science fiction? What are the parallels and commonalities between Western and science fiction motifs, particularly in terms of conquest and naming?

John W. Campbell, Jr., wrote in the tradition of philosophic science fiction pioneered by H.G. Wells. Compare the inclusiveness Campbell promotes with that championed by Wells in his earlier science fiction-based social parables.

Lecture Five
And the Winner Is . . . Robert A. Heinlein

Scope: John W. Campbell, Jr., continued Gernsback's tradition by pushing what came to be known as Hard SF, but fan culture soon took off in a different direction. Of all the popular genres, science fiction has the strongest interconnection among writers, editors, and readers. Though Hard SF has had a tremendous defining influence on the field, there is very little *true* Hard SF; most science fiction is fiction first and science second.

Outline

I. Believing, like Hugo Gernsback. that science fiction should entice people into a life of science, John W. Campbell, Jr., encouraged what came to be known as Hard SF.

  A. To increase the likelihood of a community of scientists and to increase sales, Gernsback founded what came to be known as fan culture: letters columns allowed fans to write in and comment on their likes and dislikes, as well as their suggestions for improvement in stories.

  B. Hard science fiction is a minor tradition in terms of production but major in its ideological impact on the field.
    1. Verne wrote hard science, but in a satirical way, in *From the Earth to the Moon* (1865).
    2. Wells often deliberately ignored hard science, as in *The First Men in the Moon* (1901).
    3. Nonetheless, people still talk about Gernsback's diagram of radar in *Ralph 124C 421+*; in 1942 Lester Del Rey published the novella, *Nerves*, about a nuclear power plant meltdown; and in 1944, in "Deadline," Cleve Cartmill described how to make an A-bomb.

  C. The only true invention by a science fiction writer is the "extraterrestrial relay," Arthur C. Clarke's 1945 proposal for the geostationary communication satellite; Clarke is often thought of as the greatest writer of Hard SF.

II. Hard SF includes the joy of figuring out whether the author did things right or wrong and the joy of the "what if?" question.

  A. To produce *A Mission of Gravity* (1954), about an Earth crew on a discus-shaped planet, Hal Clement figured out the effects of gravity on flow and physiology.

  B. Perhaps the most skillful work of Hard SF is Clarke's *A Fall of Moondust* (1961), in which tourists travel to the moon and take sightseeing trips around the seas of the moon in pressurizable vessels.

C. A modern example of Hard SF is Robert Forward's *Dragon's Egg* (1980), about contact with and the evolution of inhabitants of a neutron star.

III. More Hugo Awards, which are decided upon by fans, have been awarded to Robert Heinlein (1907–88) than to any other writer; Heinlein was also John W. Campbell, Jr.'s favorite author.

    A. He was an Annapolis graduate who retired from the Navy in 1934 due to disability; he served during WWII writing aviation reports and helping the war effort by communicating scientific progress.

    B. Heinlein was very interested in many things other than hard science, particularly politics.

    C. Heinlein used the idea of scientific extrapolation to create a shareable "future history" (a diagram of which Campbell first published in 1941).

        1. There is a natural evolution in the genre; once something becomes a well-established motif, other writers need to adopt it for their own work, as they did with Heinlein's future history.

        2. Heinlein established future history and the idea that conditions in the future can be projected from current social forces.

        3. He is the framework author for what became the golden age of science fiction.

IV. The first of Heinlein's four career stages, exemplified by *The Puppet Masters* (1951), had the greatest influence on other writers.

    A. *The Puppet Masters*, a science fiction story of possession, reflects the fear of alienation and subversiveness in the McCarthy era.

    B. Sam is the typical Heinlein hero.

        1. His influential father figure is split in two.

            a. One part is the author's mouthpiece, in this case the old man who is both the head of the Agency and Sam's father.

            b. The other part is the legitimate enemy, here the Puppet Master.

        2. Although he can do without the heroine, the main character always gets the girl.

        3. The Heinlein hero is always brave under fire, but only under fire.

        4. With Mary and his father, Sam is involved in an oedipal triangle, standard for Heinlein's protagonists.

    C. Heinlein works out the life of his typical hero in many works.

        1. The simple but effective plot of *Starship Troopers* (1959), a Hugo winner, led to almost inadvertent sequels by other writers.

        2. Joe Haldeman's Hugo and Nebula Award-winner, *The Forever War* (1974), tells almost the same story but with an antiwar slant.

        3. Orson Scott Card's *Ender's Game* (1985) again follows the pattern of *Starship Troopers*; it too won both a Hugo and a Nebula.

V. In *Stranger In a Strange Land* (1961) Heinlein mixes his standard fare with the hippie mysticism common at the time.

VI. Heinlein's third career stage includes his attempts to reconstruct America, as in *The Moon Is a Harsh Mistress* (1966).

    A. Heinlein is a good coiner of phrases; *The Moon Is a Harsh Mistress* introduces such phrases as "TANSTAAFL" ("there ain't no such thing as a free lunch").

    B. He understands American politics and the psychology of the adolescent male reader.

VII. At the end of his career, Heinlein wrote very long and preachy books appreciated only by his diehard fans.

Questions to Consider

How and in what subject areas is fan culture evident today? Is it beneficial or dangerous to the genres or art forms it develops around? How do you suppose science fiction might have evolved had fan culture not so strongly influenced its growth?

Heinlein took the idea of scientific extrapolation and created his grand vision, a shareable "future history." How have later authors taken advantage of his future history? Does such a well-established motif lend continuity to a genre? Or does it quash innovation?

Lecture Six
Ray Bradbury, Ursula K. LeGuin, and the Expansion of Science Fiction

Scope: Ray Bradbury received wide popular acceptance and accolades as a science fiction writer despite the objections of many writers and fans who feel he is not a science fiction writer at all. *The Martian Chronicles*, a prototypically American tale, was honored by a medal from the National Institute of Arts and Letters. Along with Bradbury, Samuel Delany and Ursula K. LeGuin introduced new perspectives and furthered the spread of science fiction.

Outline

I. An anti-science fiction writer from the standpoint of Hard SF writers, Ray Bradbury (1920–) became a wildly popular author and moved on to write science fiction movies.

  A. Bradbury's family moved from the Midwest to Los Angeles in 1934.

  B. Though he received no formal education beyond high school, Bradbury loved to read science fiction.

  C. Bradbury still has no driver's license and first flew in an airplane in 1982.

  D. Bradbury's first great work is *The Martian Chronicles* (1946–50), a novel composed of pieces, which, when put together, form a connected narrative of the first landing on, conquest of, and colonization of Mars.

    1. The only weapons the Martians—represented by crystal, glass, gold, and magic—have to defend against the Earthmen's technology are telepathy, poetry, and their ability to change shape; humans embody science, technology, metal, dirt, and fire.

    2. Bradbury loved the pulp tradition; he provides in Mars a specifically American fairyland and replays the conquest of the American West in a way that exonerates European Americans from guilt.

      a. Eventually the Martians are conveniently killed off by disease.

      b. The connection between Martians and Native Americans is fairly explicit.

    3. The book proceeds coherently to its last story, "Million Year Picnic."

      a. The family of the governor of Wisconsin escapes to Mars after an atomic war, suggesting that science is something that we cannot handle.

      b. The idea that Mars has canals is an old mistake caused by a mistranslation of Schiaparelli's Italian "channels."

      c. Both are indications of Bradbury's lack of concern for hard science and his interest in indulging our fantasies.

    4. Bradbury became an instant literary success when *The Martian Chron-icles* received a medal from the National Institute of Arts and Letters.

  E. Bradbury's *Fahrenheit 451* (1953) was honored by the Commonwealth Club and made into a movie by François Truffaut in 1967.

    1. *Fahrenheit 451* shows Bradbury's mystic, spiritual attachment to the power of books.

    2. It is a parable of social criticism against the anti-intellectualism of the McCarthy era.

  F. Bradbury eventually became a screenwriter.

    1. *It Came From Outer Space* (1953) is a perfect story of Communist takeover from without.

    2. In *The Beast From 20,000 Fathoms* (1953), America's militarism has released a monster.

    3. Bradbury's screenwriting for John Huston's *Moby Dick* (1956) reveals the deep connection of Bradbury's work to the fundamental stories of American literature.

II. Samuel R. Delany (1942–) is the first important black science fiction writer and a powerful personality who brought new perspectives to science fiction.

  A. *Babel-17* (1966), a Nebula Award winner about communication and the ways in which people can come to re-understand one another, puts language at the heart of science fiction.

  B. *The Einstein Intersection* (1967), another Nebula Award winner, interweaves entries in the diary of a character named Samuel Delany with the story of a post-nuclear apocalypse world.

III. Ursula K. LeGuin (1929–) played an important part in the spread of science fiction.

  A. LeGuin is the daughter of renowned anthropologists.

    1. Her father, A.L. Kroeber, was one of America's most famous anthropologists.

      a. His most important publication in terms of LeGuin's work is "The Oecumenae" (1944), an essay about cultural diffusion.

      b. LeGuin's series of Hainish novels depend upon cultural relativity and notions of diffusion, which she gets in part from her father

    2. Her mother, Theodora Kroeber, is best known for *Ishi in Two Worlds: A Biography of the Last Wild Indian in North America* (1961).

      a. Ishi, a Yana, died 1916.

      b. LeGuin clearly supports the preservation of native cultures.

  B. LeGuin's *The Left Hand of Darkness* (1966), one of the Hainish series, was the second book to win both the Hugo and the Nebula Awards.

1. *The Left Hand of Darkness* is a stylistic and structural tour de force with five types of narrative.
   a. Gethenians are androgynous; their roles cannot be dependent on being male or female, because no one can be permanently one or the other.
   b. The novel was originally read as strongly feminist.
   c. *The Left Hand of Darkness* can be read as a political document but is also a meditative story of unexpressed love.
2. *The Dispossessed* (1969) also won both a Hugo and a Nebula.
3. *The Word For World Is Forest* (1972) is a very subtle anti-Vietnam War book.

C. LeGuin's Earthsea books for children, starting with *The Wizard of Earthsea* (1968), are award-winning novels about a protagonist who learns that in order to control things you need to know their true names, which brings us back to the importance of language as suggested by Delany and Bradbury.

Questions to Consider

Many science fiction writers resent Bradbury as a usurper of their fame and fortune. Is this just sour grapes? Consider the ways in which Bradbury has disregarded traditional science fiction tenets. How has he nonetheless expanded the scope of science fiction to incorporate historical reality and contemporary concerns and to reach out to a wider audience?

Discuss science fiction's gradual adoption of new perspectives with writers like Samuel Delany and Ursula K. LeGuin. Consider how these voices might attract new audiences to science fiction.

Lecture Seven
Stanley Kubrick, Arthur C. Clarke, and the Modern Science Fiction Film

Scope: German expressionist films provided background for the American science fiction films that became important in the 1930s. By the 1950s, science fiction B-movies had become the medium for popular political warning. Stanley Kubrick, considered a mainstream director and honored as one of the best in the history of the field, became a science fiction pioneer in the 1960s. With the stage set for science fiction film as high art, Ridley Scott's *Blade Runner* became the first postmodern film.

Outline

I. Science fiction and film have been linked since the inception of film, because film, as the embodiment of an ancient fantasy, *is* science fiction.
   A. Louis and Auguste Lumière's *Arrival of a Train in the Station* (1895) panicked people.
   B. Perhaps the greatest early narrative filmmaker was Georges Méliès, whose *A Trip to the Moon* (1902) playfully pirated Verne.
   C. In 1910, the Edison Company produced its first filming of *Frankenstein*.
   D. German expressionism, a strange, fevered artistic movement, became important between the wars in the filming of science fiction.
      1. Fritz Lang's *Metropolis* (1927), a dark, lurid, oedipal story of a typical technical dystopia, warns about the future.
      2. Lang's *Die Frau im Mond* (1929) first presented a rocket ship countdown.
   E. In 1931, James Whale directed a *Frankenstein* that portrayed Depression-era class structures and made the monster an emblem for the victimized masses.
   F. Monster horror stories, like *Dracula*, are anti-scientific; the rules depend upon superstitions.
   G. Almost all of the Academy Awards for special effects go to science fiction or fantasy films

II. In the 1950s, low-budget science fiction films continued to be the medium for popular political warning.
   A. Bradbury's *It Came From Outer Space* and *The Beast From 20,000 Fathoms* represent, respectively, the Communist menace and dangerous militarism.
   B. *Them!* (1954), a complicated parable, tells the story of six-foot ants created by nuclear testing.
   C. *The Fly* (1958) explores the premise of science itself going awry; the 1986 David Cronenberg remake reflects contemporary uncertainty.

D. *Gojira* (1954; released in America as *Godzilla* in 1956) suggests a shift of science fiction to the west and captures an oedipal paradigm.

E. In *Invasion of the Body Snatchers* (1956), people are taken over by aliens.

III. Stanley Kubrick (1928–) is a mainstream director and has been honored as one of the best in the history of the field.

    A. *Dr. Strangelove, or How I Learned to Stop Worrying and Love the Bomb* (1964) is a funny Cold-War satire.

    B. *2001: A Space Odyssey* (1968) is *the* breakthrough science fiction film.
        1. Kubrick was motivated by three short stories by Arthur C. Clarke: "Transience" (1949), "The Sentinel" (1951), and "Expedition to Earth" (1953).
        2. Clarke cowrote the screenplay with Kubrick.
        3. Clarke's own 1968 novel has none of the movie's rich ambiguity.

    C. *A Clockwork Orange* (1971), based on Anthony Burgess' 1962 novel, continues Kubrick's exploration of the internal conflict between our mechanical and organic selves.

IV. Ridley Scott's *Blade Runner* (1982), based on the Philip K. Dick novel, *Do Androids Dream of Electric Sheep?* (1968), is the first postmodern film.

Questions to Consider

Many of us tend to think of low-budget "B-movies" as silly, inconsequential, cheap entertainment. Give examples of low-budget science fiction movies that have made political statements or incorporated much broader themes.

Discuss how Stanley Kubrick represents the internal conflict between our mechanical and organic selves in *Dr. Strangelove, 2001: A Space Odyssey*, and *A Clockwork Orange*. Explain how each of these movies does or does not meet the criteria defining science fiction.

Lecture Eight
New Wave, Cyberpunk, and Our
Science Fiction World

Scope: With science fiction's adoption of modernism and subsequent movement into postmodernism, there has been a geographic movement in science fiction to the West. There is a globalization of science fiction as its geographic center moves west, and there is a dispersion of it into our culture as a whole. We now live in a world constructed of science fiction images, where science fiction is no longer truly a separable genre. Just as Victor Frankenstein feared, the spawn of science has escaped, and it has conquered the world!

Outline

I. In the 1960s, a New Wave of less conservative science fiction voices began to be heard.

    A. The British science fiction journal *New Worlds*, edited by E.J. Carnell and later by Michael Moorcock, encouraged writers to experiment, particularly by importing into the field the stylistic devices of modernism.

    B. Carnell and Moorcock advocated the adaptation of science fiction to the techniques of Eliot, Joyce, and Lawrence.

    C. Of the writers they supported, the most central was J.G. Ballard, best known as the author of *Empire of the Sun* (1984).
        1. Ballard's most characteristic work is *The Atrocity Exhibition* (1970), a composite novel.
        2. Ballard uses the paratactic connection of one image with another to convey an overall sense of the violence, alienation, struggle, and pain of living in our postindustrial world.
        3. As Eliot and Joyce did, Ballard juxtaposes one allusion to another.

    D. Though New Wave writers were really just modernists who appeared on the scene two generations late, science fiction was finally trying to adapt and not be aesthetically conservative.

II. Without calling themselves part of a New Wave, American writers had already begun writing in similar ways.

    A. Philip K. Dick's *Do Androids Dream of Electric Sheep?* formed the basis for Ridley Scott's *Blade Runner*.
        1. Some of Dick's work is inspired modernism or postmodernism in that it questions and deconstructs even its own modernist techniques.
        2. *Ubik*, one of his most challenging works, is so complicated to read that it often goes unread.
        3. *The Man in the High Castle* (1962), which won a Hugo, was most accessible to science fiction fans.

a. The novel is based on the premise that the Allies lost World War II.

b. The novel within the novel represents a fictionalized America after the Allies win WWII, depicted as we had hoped America might be, not as it turned out to be.

4. Dick deals with the question of authenticity, with defining a phenomenon, and with showing how arbitrary some of those definitions are.

B. During the 60s, phenomenological writers like William Burroughs exhibited stylistic bravery in showing a manipulable image of the world, in which drug reality had become an important subject.

III. Science fiction was expanding itself out of all boundaries, and the New Wave led to cyberpunk.

A. William Gibson's *Neuromancer* (1984) brandished a new, postmodern style and a postindustrial theme.

1. The opening sentence of *Neuromancer* characterizes cyberpunk: "The sky above the port was the color of television tuned to a dead channel."

2. *Neuromancer* is a novel about personal isolation in the postindustrial world; it uses all the devices of postmodernism to tell a tragic story of alienation

3. *Neuromancer* made such an impact that less-committed writers tried to write within it.

4. Soon, in the mid-80s, a whole cyberpunk literature developed.

B. Works like Greg Bear's *Blood Music* (1985) softened cyberpunk conservatively to comfort traditional science fiction readers and thereby changed the essence of cyberpunk.

C. Works like Maureen F. McHugh's *China Mountain Zhang* (1992) moved cyberpunk forward philosophically.

1. McHugh's protagonist does not give up in the face of alienation or resign himself to domination by the system.

2. McHugh finally produced a cyberpunk character who is not ultimately isolated.

IV. The spread of science fiction is reflected by an increasing number of non-English-language writers.

A. The most widely published novelist behind the Iron Curtain was the Polish science fiction writer, Stanislaw Lem.

1. *Solaris* (1961) asks us to understand what it's like to meet the alien; it is, as science fiction has always been, about knowledge.

2. *His Master's Voice* (1968) shows the sociology of scientific inquiry.

3. In *The Futurological Congress* (1971), Lem provides a world of research gone berserk.

4. Lem was also writing philosophical fiction with much in common with the French new novel, French existentialism, Burroughs, etc.

B. The most widely published authors in Russia itself before the fall of the Iron Curtain were Arkady and Boris Strugatsky; *Roadside Picnic* (1972) is typical of their best work.

C. Kobo Abe, one of Japan's outstanding mainstream novelists, published the psychologically complicated *Inter Ice Age 4* in 1959 (translated into English in 1970) and *The Ark Sakura* in 1984.

D. Haruki Murakami's *Hard-Boiled Wonderland and the End of the World* (1985) asks do we know our minds?

V. Throughout time, science fiction has moved geographically to the west.

A. In the eighteenth century, the geographic center of science fiction was western Europe, specifically France.

B. By the nineteenth century, science fiction was centered in London.

C. After WWII, that center moved to New York and onward to Los Angeles.

D. Nowadays science fiction's geographic center is in Tokyo, the opening setting of *Neuromancer.*

E. Science fiction has moved west as the world moves west.

VI. Science fiction has also moved outside of its realm and is now often produced by authors not considered science fiction writers.

A. Anthony Burgess' *Clockwork Orange*

B. Marge Piercy, a well-honored poet, wrote *Woman on the Edge of Time* (1976) and *He, She and It* (1991).

C. Margaret Atwood, the great Canadian novelist, stayed on the bestseller list for over a year with *The Handmaid's Tale* (1985).

D. William Golding, Nobel Prize winner in 1983, is never called a science fiction writer, but *Lord of the Flies* (1954) is a fine example of anthropological science fiction, as is *The Inheritors* (1955).

VII. *Star Trek* was on television from 1966 to 1969, but it has spawned a host of other science fiction television shows.

VIII. A look at the all-time biggest box-office draws reveals that, as of January 1993, six of the ten top movies are absolutely science fiction

A. *E.T.: The Extra-Terrestrial, Star Wars, Return of the Jedi, Batman, The Empire Strikes Back,* and *Ghostbusters* are clearly science fiction films.

B. *Raiders of the Lost Ark* and *Indiana Jones and the Temple of Doom* are arguably science fiction in the Edgar Rice Burroughs tradition.

C. Only two, *Home Alone* and *Jaws,* are not science fiction, although *Jaws* is much like *The Beast from 20,000 Fathoms.*

D. Since that listing was compiled, *Jurassic Park* took over first place.

Questions to Consider

How did science fiction finally begin to adapt from its initial aesthetic conservatism?

Is there a connection to be made between Philip K. Dick's concern with the definition of phenomena and Verne's concern with the construction of fact? Discuss the parallels and the arbitrary nature of our definitions.

Why did cyberpunk writers like Greg Bear revert to a more conservative story type? How did this softened form change the essence of cyberpunk as established in *Neuromancer*?

Glossary

Cyberpunk: a genre of science fiction writing that portrays worlds of the near future in which decentralized societies are saturated in complex technology and are dominated by large, multinational corporations

Dime novels: cheap books published around the time of the Civil War with an average of twenty-four three-column pages (or 60,000 words); they were sold for ten cents, cheap to produce and formulaic in content

Dystopia: a negative or anti-utopia; an imaginary place that is depressingly wretched and whose people lead a fearful existence

Epistolary novel: a novel written in the form of a series of letters

Existentialism: a philosophy that emphasizes the uniqueness and isolation of the individual in a hostile or indifferent universe

Fan culture: objects of creative expression, entertainment, and style that appeal to the fans of a particular genre or medium; the exchange or relationship between fans and creators of said objects

French new novel: writing style that rejects traditional forms and self-consciously manipulates narrative devices to explore the complexities of human existence

Future history: a shareable scheme created by Robert Heinlein with the idea of scientific extrapolation; a diagram was first published by John W. Campbell, Jr., in 1941; promotes the idea that conditions in the future can be projected from the current social forces of our world

German expressionism: a strange, fevered artistic movement that became important between World War I and World War II

Gothic explique: an explanation of how everything that seemed supernatural in a gothic novel has really had justificiation; Ann Radcliffe's 1794 *The Mysteries of Udolpho*

Gothicism: a form of romanticism that arose in the 1740s in part from the Protestant English rejection of what was believed to be a plot for world domination by the papacy

Hard SF, or **Hard science fiction:** in the tradition of Hugo Gernsback, science fiction that comes down hard on the side of scientific extrapolation

Hugo Award: annual honor voted on by science fiction fans

Meritocracy: a system whereby the talented are chosen and moved ahead on the basis of their achievement

Modernism: the use of innovative forms of expression that distinguish many styles in the arts and literature of the twentieth century, characterized by the techniques of Eliot, Joyce, Lawrence

Nebula Award: annual honor voted on by science fiction writers

New Wave: less conservative science fiction voices that began to be heard in the 1960s, shepherded by editors E.J. Carnell and Michael Moorcock of the British journal *New Worlds*

Parataxis: the placing of clauses or phrases one after another without coordinating or subordinating connectives

Postmodernism: a movement against the theory and practice of modern art or literature

Psychohistory: the science made of history by Asimov; argues that you can predict the outcome of history by knowing what great social forces are at work and by making the appropriate adjustments based upon a knowledge of history

Pulp culture: publishing for the masses as it began around the time of the Civil War, and which ultimately had a tremendous impact on the development of science fiction; so-called because it revolves around material printed on wood pulp, the content of cheap paper not expected to last long; low costs, formulaic writing

Ratiocination: use of the reader's rational facilities/stories that make us use our minds, Poe's term: "tales of ratiocination"

Robinsonade: describes what happens in a book like *Robinson Crusoe*.

Romanticism: an artistic and intellectual movement originating in Europe in the late eighteenth century and marked by emphasis on emotion and imagination, departure from classical forms, and rebellion against social conventions

Science fiction: a universal literature that emerged in response to the pressures of the early nineteenth century

Scientifiction: Hugo Gernsback declared this the subject of his magazine, *Amazing Stories*, in the first issue of April 1926; previously, science fiction had no separate name or identity

Utopia: an ideally perfect place, especially in its social, political, and moral aspects; an impractical, idealistic scheme; from Sir Thomas More's *Utopia* (1516)

Primary Works

Asimov, Isaac. *I, Robot* (1950). An integrated collection of stories, often presented as humorous puzzles, about the ultimately technological salvation of humanity.

Bradbury, Ray. *The Martian Chronicles* (1950). An award-winning, lyrical, nostalgic, fairy-tale look at the future; the first avowedly science fiction book to get a review in *The New York Times*.

Clarke, Arthur C. *2001: A Space Odyssey* (1968). One of the all-time best-selling science fiction novels and a byproduct of Stanley Kubrick's film of the same name, perhaps the most significant science fiction film of all time.

Gibson, William. *Neuromancer* (1984). The book that gave rise to the term *cyberpunk*.

Heinlein, Robert. *The Moon Is a Harsh Mistress* (1966). Probably the most mature novel by the world's most influential post-WWII science fiction writer.

LeGuin, Ursula K. *The Left Hand of Darkness* (1969). The much-honored, breakthrough novel that brought a whole new perspective to gender studies.

Shelley, Mary. *Frankenstein, or The Modern Prometheus* (1818). The first science fiction novel and ~~souRobinson Crusoe of~~ the one great modern addition to our culture's mythic images, the uncontrollable monster of science.

Verne, Jules. *20,000 Leagues Under the Sea* (1870). A classic travelogue advancing the tradition of *Robinson Crusoe* and recently recognized as a masterpiece of popular satire also.

Wells, H.G. *The Time Machine* (1895). The a~~Robinson Crusoe~~hetypal thought-experiment novel, a skillful parable of social commentary framed by a philosophic maturity lost in the film versions.

Secondary Works

Aldiss, Brian. *Trillion Year Spree* (1986). A readily accessible, voluminous history of science fiction.

Scholes, Robert, and Eric S. Rabkin. *Science Fiction: History, Science, Vision* (1976). An introduction to all aspects of the field.

Suvin, Darko. *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre* (1979). The most widely quoted theoretical discussion of the field.