

TEACHER'S GUIDE TO BEYOND THIS HORIZON: A POST-UTOPIA NOVEL BY ROBERT A. HEINLEIN

Contents:

- recommended reading levels
- Heinlein biographical material and links
- background of the book and plot summary
- character sketches
- chapter guides include a more detailed plot summary and may also include some of the following:
 - prepare to read...
 - vocabulary
 - focus questions or initiating activity
 - plot summary
 - quiz/reading comprehension questions—multiple choice/short answer questions to testing reading comprehension
 - reflection and discussion questions—may be used to initiate classroom discussion, as short writing assignments, or as test questions
 - suggested activities/inquiry-based exploration—suggestions for activities and projects

Recommended reading levels: For use in the classroom, *Beyond This Horizon* is probably most appropriate for readers in grades 9-12.

Biographical information on Robert Heinlein:

Robert Anson Heinlein is considered to be one of the best, if not *the* best, writers of science fiction of all time. He was a prolific, commercially and critically successful, and, at times, controversial contributor to the genre. He was born in Butler, Missouri on July 7, 1907, and graduated from the United States Naval Academy in 1929. Heinlein served in the Navy until 1934, but was forced to retire because of tuberculosis. After a few

failed business and political ventures, he decided to try writing and sold "Lifeline," a short story, in 1939 to Astounding Science Fiction, which was a pulp magazine. These were periodicals published on cheap (pulp) paper that catered to popular tastes for genre fiction (mystery, romance, detective, adventure, horror, and science fiction). He was a regular contributor to science fiction pulp magazines for the first several years of his career. He hit his stride as a novelist after World War II, publishing fourteen "juvenile" novels aimed at the young adult market as well as many novels for adults. Some of his popular works are Double Star (1956), The Door into Summer (1957), Have Spacesuit, Will Travel, Stranger in a Strange Land (1961), The Moon is a Harsh Mistress (1966), and Time Enough for Love (1973), and four of his novels won the Hugo Award, which is presented at the annual World Science Fiction Convention. Heinlein wrote the screenplays for two movies: Destination Moon (1950) and Project Moonbase (1953), and two of his novels have been adapted into films: The Puppet Masters (book, 1951; film, 1994) and Starship Troopers (book, 1959; film, 1997). His novel Space Cadet (1948) also inspired the television show Tom Corbett, Space Cadet (1950-1955). Heinlein died in Carmel, California on May 8, 1988. For more biographical details, see the following articles:

- The Robert Heinlein Society offers a biographical essay by William H. Patterson, Jr. (*The Heinlein Society*, http://www.heinleinsociety.org/rah/biographies.html) and further information about Heinlein's life and work (*The Heinlein Society*, http://www.heinleinsociety.org/rah/FAQrah.html).
- The definitive biography of Heinlein is Paterson's two-volume *Robert A*. *Heinlein: In Dialog with His Century*.

Suggested class activity: Have your students read the information on Heinlein above before they begin the book.

For further information on Heinlein and his work:

- The most current and extensive website dedicated to Heinlein is that of The Robert Heinlein Society (http://www.heinleinsociety.org/). In addition to the biographical information linked above, the Society website includes news, essays, forums and many other interesting areas to explore.
- Another useful website is *RAH: The Robert A. Heinlein homepage* by James Gifford (http://www.nitrosyncretic.com/rah/). Although this web site is not currently being updated, it contains useful FAQs, essays and links on Heinlein's life and work.
- The most recent Baen edition of the book includes the essay "Revising the Map to Utopia" by Tony Daniel that focuses on *Beyond This Horizon*.

• There are several critical studies of Heinlein's work available in book form, such as *Heinlein in Dimension* by Alexei Panshin (Chicago: Advent: Publishers, Inc., 1968). Panshin considers *Beyond This Horizon* one of his two favorite Heinlein works, so he discusses it extensively. A study that focuses exclusively on Heinlein's young adult fiction is *Heinlein's Children: The Juveniles* by Joseph T. Major (Chicago: Advent: Publishers, Inc., 2006). There are several references to *Beyond This Horizon* in Major's book, comparing it to a few of Heinlein's young adult novels. Another critical study is *Robert Heinlein* by Leon Stover (Boston: Twayne Publishers, 1987), but it only refers to *Beyond This Horizon* twice in passing.

Background: *Beyond This Horizon* was written in 1941 and originally serialized in the April and May 1942 issues of *Astounding Science Fiction* under his frequent pseudonym Anson MacDonald. Fantasy Press published the first hardcover edition in 1948 under Heinlein's own name.

Plot Summary: Heinlein set his story several centuries from now, and the world is run by one world government. Felix Hamilton visits his friend Monroe-Alpha Clifford at Clifford's office, where Hamilton shows Clifford his new side arm, a reproduction of a twentieth century pistol. They engage in a shooting contest to demonstrate Hamilton's new weapon, and Hamilton wins. They then go out to eat in a restaurant where they are seated in a balcony booth. Clifford spills a crab leg unto a table below where it lands on the dress of a female patron. Hamilton's apologizes, but a male patron at another table challenges him. The challenger shoots high, but Hamilton wounds him.

After Hamilton and Clifford finish their meal, Hamilton has a few drinks in a bar while Clifford has a date with Larsen Hazel, his ortho-wife. The next morning Hamilton calls a casino manager to check on the latest game Hamilton designed and has a meeting with Claude Mordan, the District Moderator for Genetics, who just happens to be one of the men he had met the previous night, but the meeting has nothing to do with the incident. The purpose is for Mordan to persuade Hamilton to father some children by a particular woman, but Hamilton refuses.

That night Clifford escorts Hazel to a party, but before they arrive, Hazel asks for a divorce to which Clifford agrees. At the party, they both meet Thorgsen, a scientist visiting from Pluto. After Larsen goes for a swim, Clifford meets Frisby Gerald, who has some interesting opinions. Hamilton also attends the party and meets McFee Norbert, a friend of the man he shot the previous night, but Norbert is friendly and invites him to a meeting of the Survivors Club later that night. Meanwhile, Clifford sees an attractive woman and asks her to dance. Unfortunately, he falls down and becomes separated from the woman. Then Thorgsen approaches him to ask for advice on a project of his. After the party, Hamilton attends that meeting, which turns out to be a group plotting the overthrow of the government.

The next day, Longcourt Phyllis, the woman Mordan picked out for him, shows up at his apartment wearing a sidearm, which is very unusual for a woman. Hamilton disarms her, and they end up kissing. Then they make a date for dinner that night.

Later that day, Hamilton visits Clifford at Clifford's office where they discuss the man discovered in the Adirondack Stasis, who has effectively traveled in time from 1926

to their time, and Hamilton asks Clifford to set up a secret meeting with Mordan at Clifford's apartment at noon. Hamilton tells Mordan about the revolutionary group. In return for Mordan allowing Hamilton to infiltrate the group, Hamilton deposits sperm with Mordan's office. In the event of Hamilton's death, Mordan can use the sperm to artificially inseminate one or more women of Mordan's choosing.

Over the next few weeks, Hamilton works up the ranks of the Survivor Club and dates Longcourt. He also meets J. Darlington Smith, the man from 1926, who seeks Hamilton out for some career advice, because Smith wants to start a football league. At an important meeting of the Survivors Club, he sees Clifford who has also joined the revolutionary group.

On the day of the revolution, Hamilton learns that his assignment is to assassinate Mordan. First Hamilton kidnaps Clifford, knocks him out, and puts him in a sky car. Using the autopilot, Hamilton sends the car out of the city, which lands in a redwood forest. Clifford wanders around the forest until he meets Marion, the woman with whom he tried to dance. They walk around the forest and talk before finding a cabin to sleep. The next morning they argue and Marion runs off.

Meanwhile, Hamilton has gone to Mordan's office, where he finds Mordan, Brainbridge Martha, the chief of technical staff, and Longcourt, and informs them of the revolutionaries' plans, which is to kill Mordan and his staff and take over the sperm and eggs banks there. The four of them decide to hold off the revolutionaries until help arrives. They succeed, although Martha is wounded. Otherwise, the revolution fails. Hamilton takes up the project of finding scientific evidence that there is life after death, invests in Smith's football business, and marries Phyllis. They have two children. Clifford finds Marion and marries her and then he goes to work on Thorgsen's scientific project.

Characters:

- Felix Hamilton is a game designer.
- Monroe-Alpha Clifford is a mathematician and financial analyst.
- **Herbert** is a bartender.
- Larsen Hazel is a retired dancer and Clifford's "ortho-wife."
- Claude Mordan is the District Moderator for Genetics.
- **Dr. Thorgsen** is a scientist who has lived on Pluto for the last ten years.
- Frisby Gerald is a member of the Survivors Club.
- **McFee Norbert** is the leader of the Survivors Club.
- **Longcourt Phyllis** is a psycho-pediatrician and Mordan's first choice to be the mother of Hamilton's children.
- **J. Darlington Smith** is a man from the twentieth century.
- **Marion** is a woman Clifford met at a party.
- **Bainbridge Martha** is the technical chief for the genetics office and the wife of Claude Mordan.
- **Espartero Carvala** is a member of the Policy Board, this world's rulers, representing Patagonia.

CHAPTER SUMMARIES

Chapter I—"All of them should have been very happy—"

- Chapter Title: This establishes one theme of this novel, which is that human beings are never satisfied with what they have, even those who live in a utopia.
- prepare to read:
 - vocabulary
 - bureau
 - economic
 - statistics
 - pontificate
 - accumulator
 - integrating
 - inclusive
 - aspirant
 - concatenations
 - entrepreneurs
 - actuarial
 - bouillabaisse
 - ostentatious
 - brassard
 - Focus question/initiating activity: The male citizens in this society all carry side arms in public. Discuss gun ownership with the class.
- Chapter summary: Hamilton Felix visits Monroe-Alpha Clifford in the latter's office at the Bureau of Economic Statistics where Felix demonstrates his new side arm, a replica of a twentieth century pistol. Then they go out to eat in a payrestaurant, where they are seated in a semi-private balcony booth. Clifford drops a crab leg, and it lands on a table below, where it stains a woman's dress. Felix apologizes and avoids a duel with one of the men at the table. A man at another table insults Felix, who insults him back. They draw their weapons. The other man misses, but Felix hits the other man, wounding him in the shoulder. When it becomes clear that the duel is over, everyone in the restaurant goes back to their business. After Clifford and Felix separate, Felix visits a bar, where he has several drinks and talks to Herbert, the bartender. Felix learns that Herbert is a "control natural." Unlike Felix and Clifford, he is not the product of several generations of selective breeding.
- quiz/reading comprehension questions:
 - 1. What is Clifford's position?
 - (a) Chief Economist, State of California

- (b) Professor of Mathematics, University of California
- (c) DNA analyst, Genetics Department
- (d) Director, Office of Analysis and Prediction
- 2. Felix has a new sidearm. What is it?
- (a) A replica of .357 Magnum
- (b) An antique Desert Eagle
- (c) A replica of a .45 caliber Colt automatic pistol
- (d) An antique dueling pistol
- 3. What do Clifford and Felix compare?
- (a) Their fingernail polish
- (b) Their shoes
- (c) Their haircuts
- (d) Their cell phones
- 4. What is bouillabaisse?
- (a) Fish stew
- (b) Steak
- (c) Chicken
- (d) Fruit
- 5. What is Herbert drinking?
- (a) Orange juice
- (b) Flavored water
- (c) Coca-Cola
- (d) Ice Tea

Answers: 1-d, 2-c, 3-a, 4-a, 5-b

- Suggestion for reflection and discussion: In Felix's and Clifford's world, food is free, although they do have to pay when they visit an upscale restaurant. Ask the students how this development would change their lives.
- Suggested activities/inquiry-based exploration: Felix and Clifford are both the products of selective breeding, although Herbert is not. Have the students research the life and work of Charles Darwin.

- Chapter Title: This is a direct quote from the poem "Tinker, Tailor". The author is unknown, and it was first printed by William Wells Newell in *Games and Songs of American Children* in 1883.
- prepare to read:
 - vocabulary
 thiamin
 chromosome
 emulsion
 dactyl
 anthropomorphic
 zygote
 endocrine
- Focus questions or initiating activity: Felix has designed a game for a theme park on the Moon. Ask the students if they would like to go to the Moon for a vacation
- Chapter summary: Felix returns home and is dreaming the following morning when his phone wakes him up. Felix ignores the call but takes a shower, eats breakfast, and checks the news. Among the stories is the opening of a new theme park on the Moon for which Felix has designed several games. Felix calls the manager to see how his games are doing, and the manager was quite positive. Then Felix checks his phone for messages and discovers a fax, called a "stat" from the District Moderator for Genetics requesting a meeting for later that morning. Felix goes to the Moderator's office and discovers that this was the man to whom he had apologized the previous night. However, this meeting had nothing to do with the incident. The Moderator introduces himself as Claude Mordan, and his greeting is cordial. The purpose of the meeting is for Mordan to persuade Felix to father children, because his gene line is the best one in the district. Felix has no plans to have children and refuses. While Mordan continues his attempt, he summarizes the history of the world from 1941, the year Heinlein is writing, to the time in which the story takes place. Felix replies that he feels no obligation to preserve his genes and that he sometimes wonders if life is worth living in the first place. Mordan does not give up, but instead shows him a video of the woman they have picked out for him. Felix is still unpersuaded, and the meeting ends.
- Quiz/reading comprehension questions:
 - 1. What kind of bed does Felix sleep in?
 - (a) A king-size bed

- (b) A water bed
- (c) An air mattress
- (d) A hammock
- 2. In the future history described in this chapter, when does the Atomic War take place?
 - (a) 1962
 - (b) 1970
 - (c) 1984
 - (d) 2001
- 3. What did young Felix want to be when he grew up?
 - (a) An encyclopedic synthesist.
 - (b) A geneticist.
 - (c) A physicist.
 - (d) A movie star.

Answers: 1-b, 2-b, 3-a

- Suggestion for reflection and discussion: Felix does not want to have children. Ask the students if they want to have children. If yes, why? If not, why not?
- Suggested activities/inquiry-based exploration: Have the students research the life and work of Gregor Mendel.

Chapter III—"This we covenant in the Name of Life Immortal"

- Chapter Title: For this novel, Heinlein created the Mendelian Oath, which ends with this line.
- Prepare to read:
 - vocabulary
 - covenant
 - drosophila
 - nucleus
 - gonad
 - gamete
 - fission
 - spermatozoa
 - Focus question/initiating activity: Ask the students if any of them have been involved in any kind of animal breeding program.

- Chapter summary: This chapter is devoted completely to exposition and background information. Heinlein summarizes that the state of the art of genetics as it was in 1941 and how it is applied at the time of the story.
- quiz/reading comprehension questions:
 - 1. The gene for blue eyes is what kind?
 - (a) Recessive
 - (b) Dominant
 - (c) Mutation
 - (d) Random
 - 2. Which chromosome makes a human a female?
 - (a) None. Gender is determined by the environment.
 - (b) The ABBA-Chromosome
 - (c) The Y-Chromosome
 - (d) The X-Chromosome

Answers: 1-b; 2-a

- Suggestion for reflection and discussion: Ask the students whether they would like to live in a world in which people are the product of a breeding program.
- Suggested activities/inquiry-based exploration: Have the students research the life and work of Thomas Hunt Morgan.

Chapter IV ---- Boy Meets Girl

- Chapter Title: This is a reference to one of the most basic plots in storytelling and foreshadows that both Clifford and Felix will meet the loves of their lives in this chapter.
- prepare to read:
 - vocabulary
 - laudable
 - danseuse
 - warren
 - conspicuous
 - parallax
 - legerdemain
 - entropy

- acrimony
- mortician
- thalamic
- gauche
- coquette
- stasis
- Chapter summary: Clifford takes his "ortho-wife" Hazel to a party, but before they actually enter, they have a talk in which Hazel tells him she thinks they should get a divorce and Clifford reluctantly agrees. At the party, they meet Dr. Thorgsen, a scientist. Then Hazel goes off for a swim, and Clifford mingles with the other guests. He wanders into a conversation first about whether life in general is dominated too much by high tech gadgets and whether life was better in simpler times, like the twentieth century. He briefly meets Felix who in turn meets McFee Norbert, who was in the party that included the man Felix shot the other night. McFee is friendly and invites him to a meeting later that night. Meanwhile, Clifford has a conversation with Frisby Gerald and then notices a woman and dances with her. Unfortunately, he is clumsier than usual and stumbles, causing her to fall as well.
- They are all right, but they separate, and Clifford gets into a conversation with Thorgsen, who wants to discuss an idea of his. Clifford is encouraging, and they agree to discuss it in more detail on a future date. In the meantime, the woman has disappeared.
- The next morning, Felix is eating his breakfast when he has a female visitor, who turns out to be Longcourt Phyllis, the woman Mordan has selected to be the mother of Felix's children. She is wearing a side arm, which Felix finds offensive, so he forcibly disarms her. Then they kiss and have a drink. Before she leaves, they make a date to have dinner that night.
- quiz/reading comprehension questions:
 - 1. What is the Adirondack stasis field?
 - (a) A museum containing artifacts from the Dark Ages, i.e., the twentieth century.
 - (b) An impenetrable and reflective cube discovered in the Adirondack Mountains with a plaque saying it contained living specimens from the year 1926.
 - (c) A natural history museum.
 - (d) A park in the Adirondack Mountains.

- 2. What was Hazel's former occupation?
 - (a) She was a dancer.
 - (b) She was Clifford's secretary.
 - (c) She was a geneticist.
 - (d) She was a game tester.
- 3. Where has Dr. Thorgsen lived for the last ten years?
 - (a) Antarctica
 - (b) Titan
 - (c) Pluto
 - (d) Ganymede

Answers: 1-b, 2-a, 3-c

- Suggestion for reflection and discussion: Ask the students what kind of marriage Clifford and Hazel have.
- Suggested activities/inquiry-based exploration: Have the students research the planet Pluto, its discovery and recent demotion to "Dwarf Planet" status.

Chapter V—"I myself am but indifferent honest"

Prepare to read:

- Chapter Title: Heinlein misquotes Shakespeare's *Hamlet*, Act 3, Scene 1 in which the title character says "I am myself indifferent honest" to Ophelia. Most scholars believe he is feigning insanity in this scene.
- vocabulary
 - persona
 - enumerate
 - perturb
 - sic
 - superficial
 - Focus questions/initiating activity: Discuss current events regarding terrorist organizations.
- Chapter summary: After Phyllis leaves, Felix asks Clifford to set up a meeting with Mordan at Clifford's apartment, where Felix informs Mordan about his meeting with the Survivors Club after the party the previous night. They are a

revolutionary group that had plotted Mordan's assassination, but were foiled by Felix's interference. They have forgiven Felix and think they have recruited him. Their goal is to overthrow the government. Felix also learns that they have a spy in Mordan's office. He offers to spy on the Survivors Club for Mordan, who agrees with the condition that Felix deposit specimens of his sperm with Mordan's office. If Felix gets himself killed, then Mordan can use the sperm to impregnate a qualified female. When Mordan returns to his office, he meets with Martha, his chief assistant to inform her of the spy in their department.

- quiz/reading comprehension questions
 - 1. What is the agenda of the Survivors Club?
 - 2. The Adirondack stasis field has been opened. What did they find?
 - a. The contents of Al Capone's vault.
 - b. A living man from 1926.
 - c. Artifacts from 1926.
 - d. A passenger pigeon.

Answers: 1-After overthrowing the government, change the genetic policy to breed leaders and slaves. Eliminate or subjugate the control naturals. 2-b.

- Suggestion for reflection and discussion: Ask the students if they think it would be cool to be a spy and whether Felix is being smart or stupid.
- Suggested activities/inquiry-based exploration: Heinlein was writing in 1941, and this novel was first published in 1942, which is when Nazi Germany was at the height of its power. Have the students research Nazi policy toward Jews, Gypsies, the various Slavic peoples, and the mentally retarded.

Chapter VI—"We don't speak the same lingo"

- Chapter title: John Darlington Smith makes his first appearance in this chapter. Although both he and the people of this world speak variations of the English language, they have difficulty communicating.
- prepare to read:
 - vocabulary
 - pediatrician
 - duckbill platypus
 - urbane
 - interlocutor
 - fraternity
 - flapper
 - annunciate

- impertinent
- Initiating activity: Ask the students if they would like to travel in time to the future.
- Chapter summary: Felix works his way up the Survivors Club organization and also spends time with Longcourt Phyllis. J. Darlington Smith, the "Man from the Past" asks to meet with him at Felix's apartment. Smith tells Felix the story of how he came to enter the stasis field and then reveals the purpose of the visit. Since Felix is a game designer, Smith wants his advice on his plan to revive the twentieth century game of "football". Felix refers him to his agent. Then Clifford arrives, having been invited by Felix, and he and Smith have a conversation about rural life in 1926. McFee Norbert also shows up, but without an invitation, and joins the discussion. Norbert and Clifford leave together.
- quiz/reading comprehension questions:
 - 1. What happens to the man in the Survivors Club who disobeyed orders?
 - 2. What was J. Darlington Smith famous for in 1926?

Answers: 1— He is executed. 2—He was an All-American running back in college.

- Suggestion for reflection and discussion: Ask the students if they like McFee Norbert
- Suggested activities/inquiry-based exploration: Have the students research the United States as it was in 1926 and contrast and compare it with the world Heinlein is showing them.

Chapter VII—"Burn him down at once—"

- Chapter Title: This is almost a direct quote from McFee Norbert, the leading villain of this story, when he tells one of his subordinates to keep an eye on Clifford and, if necessary, murder him.
- prepare to read:
 - vocabulary
 - aseptic
 - hydrocephalic
 - recalcitrant

- hypothetical
- agent provocateur
- Focus question: Ask the students whether any of them know children with special health issues, such as hemophilia.
- Chapter summary: Felix continues his infiltration of the Survivors Club, is allowed to see some of their secret genetic experiments, and is promoted to section leader. One day, he meets Phyllis at her workplace, and they go to dinner at a pay-restaurant. Felix proposes marriage, but tells her he still does not want children, so she refuses. Afterward, he attends a meeting of the club, where he sees Clifford, who has just joined. Later in a private meeting of section leaders, he is informed that the day of revolution is close by. When all the meetings are finished, Felix and Clifford leave together and go to Clifford's apartment.
- quiz/reading comprehension questions:
 - 1. Where does Longcourt Phyllis work?
 - (a) In a hospital
 - (b) In a development center
 - (c) In a clinic
 - (d) In a school
 - 2. What will be Felix's job on the day of revolution?
 - (a) Secure a television station
 - (b) Secure a power plant
 - (c) Assassinate Mordan
 - (d) Secure a bridge

Answers: 1-b, 2-c

- Suggestion for reflection and discussion: Ask the students whether they have ever had contact with people with conditions like Down's Syndrome.
- Suggested activity/inquiry-based exploration: Have the students research the experiments of Josef Mengele on concentration camp prisoners.

Chapter VIII—"Thou, beside me, in the wilderness"

Prepare to read:

• Chapter Title: Heinlein quotes *The Rubaiyat of Omar Khayyam* in the chapter in

which Clifford meets Marion, the love of his life, for the second time.

- vocabulary
 - diaphragm
 - self-abnegation
 - emeritus
 - respiratory
 - klystron
 - solenoid
 - Focus question/initiating activity: Ask the students if any of them has ever seen a redwood tree.
- Chapter summary: After they arrive at Clifford's apartment, Felix reveals that he is a spy for the authorities, and they argue. The phone rings, and Felix disables Clifford. Then Felix answers Clifford's phone. McFee Norbert is the caller and is both surprised and angry that Felix is there. McFee informs him that revolution day has arrived and orders Felix to relay Clifford's assignment, which is to stay out of sight for 48 hours. Felix is to immediately proceed to Mordan's office and kill him
- After McFee hangs up, Felix knocks Clifford out. Then he calls Mordan to inform him of the situation, but Mordan already knows and is in his office. After retrieving some of Clifford's sleeping pills, Felix drags him to the roof of his apartment building, puts him in Clifford's sky car, and flies it to Mordan's office. When Clifford comes to during the flight, Felix dissolves the pills in a cup of water and tricks him into drinking it. After landing, Felix breaks the car's communication system and autopilot system, but rigs it to fly in one direction out of the city. When Clifford wakes up, he finds the car is hovering over the Park of Giant Redwoods, which in the twenty-first century is called the Giant Forest of Sequoia National Park in California. Clifford lands the car at a maintenance station and arranges for it to be repaired.
- Meanwhile, he goes for a walk and finds the General Sherman Tree, a redwood. He visits the Moro Rock, a granite dome rock formation and contemplates killing himself by jumping. Then he sees the woman he met at that party months before, and she recognizes him as well and starts a conversation. They continue the conversation while walking around the park, which is officially closed because the rangers have been called elsewhere to put down the revolution. At sunset, they find a cabin and spend the night. When they wake up, they introduce themselves. Her name, Clifford learns, is Marion. Then she sneezes, so Clifford concludes that she is a control natural. He draws his gun and demands to see her tattoo on her left arm, but she punches him in the stomach and runs off. He loses her in the forest, so he goes back to the maintenance station, retrieves his car, and flies away.

- quiz/reading comprehension questions
 - 1. How old is the General Sherman Tree?
 - 2. What kind of animal do Clifford and Marion see on their walk and then Clifford later shoots?

Answers: 1-4,000 years. 2—Mule deer

- Suggestion for reflection and discussion: Everyone in this society has an identify tattoo. Ask the students if any of them have tattoos.
- Suggested activities/inquiry-based exploration: Have the students research the Sequoia National Park, especially the General Sherman Tree and the Moro Rock.

Chapter IX—"When we die, do we die all over?"

- Chapter Title: This is a quote from Felix when he wonders whether there is life after death.
- prepare to read:
 - vocabulary
 - shanghai (verb)
 - illumination
 - barricade
 - antagonist
 - martyr
 - manipulation
 - Focus question/initiating activity: The male citizens in this society are armed, but the females are not. Ask the students if they think this is fair.
- Chapter summary: As Clifford's sky car flies away, Felix enters Mordan's building, where he finds Mordan, his assistant Bainbridge Martha, and Longcourt Phyllis, who is armed. Felix informs them that members of the Survivor Club will be there almost immediately to take control of their office, especially the Plasm Bank which contains the sperm and eggs of two centuries of selective breeding. They call for help and send the staff home. Only the four remain with the intention of forcibly defending the facility. They take positions and shoot the invaders as they enter. Martha is wounded, and they run low on ammunition.

Finally, they are all knocked unconscious by a gas.

- quiz/reading comprehension questions
 - 1. Who is among the invaders?
 - (a) Frisby Gerald
 - (b) McFee Norbert
 - (c) Larsen Hazel
 - (d) Mordan's file secretary
 - 2. Where is Bainbridge Martha wounded?
 - (a) The left hand
 - (b) The right leg
 - (c) The stomach
 - (d) The neck

Answers: 1-d, 2-a

• Suggested activities/inquiry-based exploration: Have the students research the life and work of James Watson and Francis Crick.

Chapter X—"—the only game in town"

- Chapter Title: Heinlein compares life to a game, but it is one that is impossible to win because everyone eventually dies.
- Prepare to read:
 - vocabulary
 - monotonous
 - antidote
 - inversion
 - psychopath
 - megalomania
 - credence
 - myriad
 - pragmatic
 - putsch
 - tommyrot

- Chapter summary: Felix wakes up in a hospital with Mordan in the next bed. Their side gassed the entire building and administered the antidote afterwards. They also succeeded in putting down the revolution. Felix and Mordan talk and sleep until Felix is discharged. He then proceeds to Clifford's apartment, where he finds him waiting to be arrested. Felix reveals that he reported Clifford to be his agent, so Clifford is in no danger of imprisonment. They share their stories about the events after their separation. Felix tells Clifford to find Marion.
- quiz/reading comprehension questions
 - 1. Why does Felix find feeling sick to be unusual?
 - 2. What does Mordan propose in order to get Felix to father children?

Answers: 1—He has never been sick before. 2—A project to scientifically prove that there is life after death.

- Suggestion for reflection and discussion: Ask the students whether they believe in life after death.
- Suggested activities/inquiry-based exploration: Have the students research religions that promise life after death.

Chapter XI—"—then a man is something more than his genes!"

- Chapter Title: This is a reference to Heinlein's belief that human beings are not completely programmed by their genes.
- Prepare to read:
 - vocabulary
 - propagate
 - transcript
 - finicky
 - descendent
 - mahogany
 - semantics
 - ballistic
 - Focus questions/initiating activity: One of the members of the Policy Board is from Patagonia. Ask the students to find it on a map.
- Chapter summary: Mordan presents Felix's idea for a scientific inquiry into life

after death to the Policy Board, the world's rulers. They debate the issue and tentatively decide to fund the inquiry. Then a member suggests expanding the inquiry to include telepathy, the origin and destination of the universe, and other problems of philosophy

- quiz/reading comprehension questions:
 - 1. Which of the problems they mention was originally Dr. Thorgsen's project?
 - (a) Life after death
 - (b) The origin and destination of the universe.
 - (c) Telepathy
 - (d) Epistemology

Answers: 1—b

- Suggestions for reflection and discussion: Ask the students if any of them have ever attended a mind-reading demonstration.
- Suggested activities/inquiry-based exploration: Thorgsen's project is similar to the work of Stephen Hawking. Have the students research the life and work of Hawking.

Chapter XII—"Whither thou goest—"

- Chapter Title: Heinlein quotes the King James translation of the Bible, specifically the book of *Ruth*, Chapter One, Verse Sixteen in which the title character insists that she accompany her mother-in-law back to Israel.
- Prepare to read:
 - vocabulary
 - gladiator
 - spheroid
 - barbarian
 - dilate
 - miscegenation
 - Focus questions/initiating activity: Ask the students if any of them have ever attended a live National Football League game.
- Chapter summary: Felix and Phyllis are discussing Smith's project to launch a professional football league. Felix plans to invest in it and tries to persuade

Phyllis to as well. Then the subject turns to marriage. He proposes and this time she accepts. In the meantime, Clifford is looking for Marion and finally finds her. He asks her to marry him, even if she is a control natural. She accepts and reveals that she is really a mutant. She carries a gene for emotional stability, which the genetics planners consider a desirable trait.

- quiz/reading comprehension questions:
 - 1. What is football called in this world?
 - 2. How many players are on each side in football?
 - 3. What is Marion's full name?
 - 4 How does Clifford find her?
 - 5. What does Phyllis want to name their first son?

Answers: 1—feetball; 2—eleven; 3—Hartnett Marion; 4—He goes through the guest list of the party where they first met, calls everyone on the list, and describes Marion. Finally, he finds someone whose cousin was named Marion and at the party. 5—Theobald.

- Suggestions for reflection and discussion: Ask the students if any of them know any married couples from different races and what their challenges are.
- Suggested activities/inquiry-based exploration: Have the students research the history of football, especially the 1920s.

Chapter XIII—"No more privacy than a guppy in an aquarium"

- Chapter Title: This is a reference to the attention paid to Felix, Phyllis, and Theobald by the genetics board and the world's rulers.
- Prepare to read:
 - vocabulary
 - urbane
 - heterodox
 - circumvent
 - balkiness
 - tvke
 - diploid
 - protoplasm

- euphemism
- troupe
- astrophysics
- kibitz
- esoteric
- bacilli
- Focus question/initiating activity: Ask the students if any of them have any younger brothers or sisters and what it was like when their mother was pregnant.
- Chapter summary: Espartero Carvala, the member of the Policy Board from Patagonia, pays Felix and Phyllis, who is pregnant, a visit. Although Felix is at home, she really wants to see Phyllis. Felix is essentially the deputy director of the Great Research, which includes Thorgsen's project. Clifford has changed jobs and is one of the mathematicians working under him. Marion is his "special secretary".
- quiz/reading comprehension questions
 - 1. What name does Carvala suggest for Felix's and Phyllis's first daughter?
 - (a) Susan
 - (b) Sally
 - (c) Justina
 - (d) Leah
 - 2. Life had been found on all the planets of the Solar System except?
 - (a) Mercury and Pluto
 - (b) Jupiter and Mars
 - (c) Saturn
 - (d) Neptune
 - 3. What is Larsen Hazen doing now?
 - (a) She is choreographer on Broadway.
 - (b) She has her own reality show.
 - (c) She is teaching dance.
 - (d) She has come out of retirement and is touring the Solar System.

Answers: 1-c; 2-a; 3-d

• Suggestions for reflection and discussion: Ask the students if they think there is life on other planets.

• Suggested activities/inquiry-based exploration: Have the students research the life and work of Swedish chemist Svante Arrhenius.

Chapter XIV—"—and beat him when he sneezes"

- Chapter Title: This is a quotation from Lewis Carroll's *Alice's Adventure in Wonderland*, Chapter six. The speaker is the Duchess who initially is unpleasant to Alice but later is friendly.
- Prepare to read:
 - vocabulary
 - auk
 - dodo
 - egocentric
 - altruism
 - optimum
 - histrionic
 - pedagogy
 - eidetic
 - embryo
 - anodyne
 - Initiating activity: Ask the students when they learned to read.
- Chapter summary: Felix and Mordan are sitting in the waiting room while Phyllis has Theobald, who is born healthy. He was talking after fourteen months, learned to read after thirty months, and demonstrated that he had an eidetic memory. Phyllis and Felix also suspect that Theobald is telepathic.
- quiz/reading comprehension questions
 - 1. Where does Phyllis want to move?
 - 2. The gene for hemophilia is what kind?
 - 3. Why does Mordan believe the gene for eidetic memory is recessive?
 - 4. What annoying habit does Theobald develop?
 - 5. When does Felix first suspect that Theobald is telepathic?

Answers: 1—the country; 2—recessive; 3—The disadvantages outweigh the advantages; 4—He corrects people about trivialities; 5—On a trip to the beach.

- Suggestions for reflection and discussion: Ask the students if they would like an eidetic memory.
- Suggested activities/inquiry-based exploration: Have the students research hemophilia.

Chapter XV—"Probably a Blind Alley—"

- Chapter Title: This is an admission by Heinlein that most scientific research never discovers anything of importance.
- prepare to read:
 - vocabulary
 phenomena
 thymus
 grandiose
 collaboration
 calculus
 mnemonic
 notation
 memorandum
 superconductor
 bolometer
 sine qua non
 - Initiating activity: Heinlein uses the N-word in Darlington Smith's dialogue. Explain to the students that the N-word is not used in polite society in twenty-first century America.
- Chapter summary: Felix takes Theobald to a laboratory used to test for telepathy, but nothing comes of it. Nonetheless, Felix directs some research in that area. Theobald raises rabbits. Felix's own research into life-after-death leads him in the direction of spiritualism and the para-normal.
- Since much of the material dates back to the early twentieth century, Felix recruits Darlington Smith to help him. In the meantime, Smith finds himself challenged to a duel. Felix advises him to apologize, but Smith refuses, so Felix tries to negotiate a settlement with the other party but fails. He consults Mordan, who suggests that they dispense with guns and fight with fists instead. Smith loses, but he does not die.

- quiz/reading comprehension questions
 - 1. How many people are working on the Great Research?
 - 2. Why do Martha and Mordan not have any children?
 - 3. What is the advantage of Pluto as a research site?

Answers: 1—About eight thousand. 2—Martha is sterile. 3—It is a natural laboratory for low temperature experiments.

- Suggestions for reflection and discussion: What does Smith's use of the N-word show about the social status of control naturals?
- Suggested activities/inquiry-based exploration: Have the students research superconductors.

Chapter XVI—The Quick and the Dead

- Chapter Title: This is a phrase that originated in the King James translation of Bible (Acts Chapter 10, Verse 42) and popularized in the Apostles Creed. "Quick" is used as a synonym for "alive".
- Prepare to read:
 - vocabulary
 - cosmic
 - antipathy
 - thalamus
 - cerebration
 - Initiating activity: Ask the students if any of them knew anyone who died of old age.
- Chapter summary: Espartero Carvala pays Phyllis and Felix another visit, but the person she really wants to see is Theobald. They have a conversation that neither Phyllis nor Felix can hear. She dies from a fall shortly after leaving their house. Research in telepathy advances to the point where a telepathic machine is developed. Phyllis becomes pregnant with a daughter, but Theobald avoids her, because he does not like his prospective sister. They decide to have their baby in

Buenos Aires.

- quiz/reading comprehension questions
 - 1. What is Carvala doing when she has her fatal fall?
 - (a) Riding an escalator
 - (b) Taking a shower
 - (c) Working in the garden
 - (d) Cleaning house
 - 2. Why does Theobald avoid his mother's company while she is pregnant?
 - (a) Sibling rivalry
 - (b) He hates his mother
 - (c) He is afraid of his mother
 - (d) He identifies Justina with Carvala
 - 3. Why do Felix and Phyllis decide to have their daughter in Buenos Aires?
 - (a) The hospitals are better.
 - (b) The stars are different in the southern hemisphere.
 - (c) There is a telepathic machine there, and they think Justina will be telepathic.
 - (d) It is a beautiful city.

- Suggestion for reflection and discussion: Ask the students who have brothers and sisters whether they ever fight with them.
- Suggested activities/inquiry-based exploration: Have the students research the life and work of Joseph Banks Rhine.

Chapter XVII—Da Capo

- Chapter Title: This is an Italian musical term meaning "from the beginning".
- Prepare to read:
 - vocabulary
 - cantankerous
 - Initiating activity: Ask the students whether they have seen a birth or have

been in the waiting room while a relative or friend was giving birth.

- Chapter summary: Felix, Phyllis, Theobald, and Mordan are all in Buenos Aires
 when Phyllis gives birth in the room next door to the telepath machine. It gives
 confusing results.
- quiz/reading comprehension questions
 - 1. Although Theobald is in another room at the moment when Phyllis gives birth, what does he do?
 - (a) He screams.
 - (b) He passes out.
 - (c) He does nothing unusual.
 - (d) He attacks Mordan.
 - 2. Why does Mordan accompany the family to Buenos Aires?
 - (a) He had other business in the city.
 - (b) He likes Buenos Aires.
 - (c) Felix feels it would help in handling Theobald.
 - (d) He is acting as their bodyguard.

Answers: 1—a; 2—c

- Suggestion for reflection and discussion: Ask the students what they think is happening in this chapter.
- Suggested activities/inquiry-based exploration: Have the students research the concept of metempsychosis, also known as the transmigration of souls or reincarnation.

Chapter XVIII—"Beyond This Horizon—"

- Chapter title: Heinlein concludes the novel with the realization that there is indeed life after death
- Prepare to read:
 - vocabulary
 - amnesia
 - dahlia
 - Initiating activity: Ask the students if any of them feel they have past lives.

- Chapter summary: Felix, Phyllis, Theobald, and newly born Justina are visiting the beach. Felix decides that life has been good to him.
- quiz/reading comprehension questions
 - 1. Felix believes that Justina has proven what?
 - (a) That reincarnation, a.k.a. the transmigration of souls, is real.
 - (b) That genes determine a person's character.
 - (c) That the early environment determines a person's character.
 - (d) That a combination of b and c determines a person's character.
 - 2. Whom does Theobald believe Justina is the reincarnation of?
 - (a) Eleanor Roosevelt
 - (b) Marie Antoinette
 - (c) Espartero Carvala
 - (d) Shirley MacLaine

Answers: 1—a; 2—c

• Suggestion for reflection and discussion: Ask the students if they plan to have children when they grow up.

Suggestions for more extended papers/projects, which allow students to reflect on major themes in the book as a whole:

- The word "utopia" is used in the book's sub-title. Contrast and compare this utopia with one or more utopias, such as Plato's *Republic*, Thomas More's *Utopia*, Francis Bacon's *The New Atlantis*, Samuel Butler's *Erewhon*, Edward Bellamy's *Looking Backward*, Aldous Huxley's *Island*, and B.F. Skinner's *Walden Two*.
- Compare with modern science fiction dystopias such as those found in *The Hunger Games* and *Divergent*.
- As a reward, consider showing the 1997 film *Gattaca*, which depicts a future which is dominated by genetically-engineered people, but the main character is a control natural.