Waldo Study Guide

Waldo by Robert A. Heinlein

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Introduction

While Heinlein utilizes his favorite themes in this piece (self-reliance and independence), his warning about hidden dangers in new technology seems somewhat unusual. Heinlein, and the other authors of the "Golden Age" of science fiction (notably Arthur C. Clarke and Isaac Asimov), generally glorify technology as a kind of savior of the human race. However, in several of the main characters, Heinlein reiterates his insistence on the independence of the individual. Waldo tries to live his own life without any reliance on others; Dr. Grimes and Gramps Schneider live in their own ways and are not concerned with how other people see them. The ultimate concentration of the story, then, continues Heinlein's theme of self-reliance.

The mechanical "hands" or series of mechanical joints used today in engineering and mechanical puppetry are now called "waldoes" after this Heinlein story, demonstrating the significant impact that Heinlein's works have enjoyed over the years.

Author Biography

For the next five years, Heinlein attended graduate school (which he was forced to abandon due to further health problems), architecture, real estate, silver mining, and politics before discovering an ad in *Thrilling Wonder Stories* which offered a fifty dollar prize for the best piece of amateur fiction. Heinlein wrote the short story "Life-Line" in four days. He considered the story too good for the "pulp" magazine (literally, a magazine printed on pulp, or poor quality, paper) that had placed the ad and sent the story to John W. Campbell at *Astounding Science-Fiction* where it was ultimately published. For the rest of his life, Heinlein maintained that he did not write for art, but for cash.

Over the course of his career, however, the quality of his writing garnered him four Hugo awards. In 1975, the Science Fiction Writers of America presented him with a special Grand Master Nebula Award for lifetime achievement. Heinlein's works are usually divided into three categories: short fiction, juvenile novels, and adult novels. The juvenile novels, however, should not be dismissed merely as children's literature—the theme of selfreliance and independence that he uses in the juvenile fiction appears in his other fiction as well.

Considered one of the "Big Three" authors of science fiction (alongside Arthur C. Clarke and Isaac Asimov), Heinlein wrote more than thirty novels and story collections. He was influential in the development of NASA's space suits and was a guest commentator during the Apollo 11 lunar landing.

Perhaps his best-known work is *Stranger in a Strange Land,* which has enjoyed immense popularity since its publication in 1961. By the end of his career he was interested in bringing most, if not all, of his fictional characters together into one "multiverse" by developing a theory that strong fiction writers did not just create believable stories but actually created alternate universes or realities. Heinlein includes characters from his own works in this multiverse. Many critics praise his vivid and engaging depiction of this world, his ability to create characters that live and breathe on the page.

Plot Summary

Problem Two

Stevens meets with Doc Grimes, an eccentric doctor who dresses in anti-radiation suits and is Waldo's only friend. Grimes berates Stevens for his out- of-shape condition and speculates that the reason for Stevens's out-of-shape condition is not solely overwork, as Stevens maintains, but that humanity cannot "pour every sort of radiant energy through the human system year after year and not pay for it." Grimes's thesis is that the radiant energy that NAPA uses for power is dangerous to humans. Grimes maintains that even though it was tested before being put into widespread use, the power source was not tested long enough to determine whether it would be dangerous to humans who were exposed to it every day, day in and day out. Grimes hypothesizes that this radiant energy is running down the human race—people act tired and thus don't exercise enough. He has kept records for years, noting that in athletic events, the all-time records are no longer getting broken and the top athletes of the present day could not compete with athletes from previous times—humankind is getting weaker physically instead of continuing to strengthen and improve.

Stevens finally asks Grimes to introduce him to Waldo. Grimes considers Waldo's disorder, *myasthenia gravis,* which affects the muscles. Essentially, Waldo is as relatively weak as a newborn baby—he cannot move in Earth's gravity and so he has moved to his own space station and moves with relative ease in an anti-gravity environment. Grimes agrees to take Stevens up to Freehold, Waldo's space station, to meet Waldo and attempt to convince him to take on the problem of the failing deKalb receptors. Once at Freehold, Grimes convinces Waldo not only to take on the NAPA problem, but also to devise a way to fix the problem that will do away with the radiant power that Grimes believes is causing the tired and rundown feeling in the human race.

Finding a Solution

Stevens returns to NAPA only to discover that one set of deKalbs has been miraculously fixed. Stevens's assistant, Mac, had a failed set of deKalbs in his air-car. Since he was near his hometown, he went walking and came to the house of Gramps Schneider, who fixed the deKalbs by "thinking" them fixed. If that weren't unscientific enough, the rigid metal "fingers" of the deKalbs now wiggle like fingers reaching for the power they need to operate.

The story then shifts back to Waldo's attempt to discover the cause for the failing deKalbs. He tries to determine if the manufacturing or the operation of the deKalbs is at fault, but so far, Waldo has discovered no reason for the deKalbs to be faulty. He also has discovered that Doc Grimes's theory on humankind becoming weaker is true, and is discovering that radiant energy is in fact the prime reason— humankind is slowly poisoning itself on the radiant energy technology. Meanwhile, Stevens has sent the

deKalbs that Gramps Schneider fixed to Waldo. Dr. Rambeau, the physicist, calls Waldo to explain that he, too, can make the deKalbs work. He tells Waldo: "You are here and I am there. Or maybe not. Nothing is certain. Nothing, *nothing,* NOTHING is certain! Around and around the little ball goes, and where it stops nobody knows. Only I've learned how to do it." He goes on to tell Waldo that "nothing is certain any more. . . . Chaos is King and Magic is loose in the world!" Rambeau disappears soon after his conversation with Waldo (before he is locked up as a lunatic) and Waldo must study the wiggling deKalbs (Rambeau has made a second set behave in the same way) and discover an answer to the problems on his own.

Learning

Waldo finally comes down to Earth in order to meet Gramps Schneider and hopefully learn how Gramps Schneider made the deKalbs work—and wiggle. Essentially, Gramps tells Waldo that he told the deKalbs to reach into the "Other World" for energy and implies that Waldo could do the same in order to be cured of his *myasthenia gravis.* Gramps Schneider also tells Waldo that the deKalbs seem to be failing not because of any mechanical problem— but because the operators of the deKalbs are "tired and fretting," and essentially think their deKalbs into not working.

Waldo returns to Freehold interested, but puzzled by Gramps Schneider's ideas about how the deKalbs and other machinery work. After Stevens calls Waldo and warns him that time is growing short and they need an answer quickly, Waldo reconsiders the "Other World" and begins researching magic and begins to accept that the "Other World" is a reality. Eventually, Waldo also makes a set of broken deKalbs wiggle and work.

However, while visiting with Doc Grimes, they notice that the "fixed" deKalbs aren't using the radiant energy. They are taking energy from somewhere else, and Waldo hypothesizes that they are taking energy from the "Other World." Hence, by "hexing" all of the deKalbs (or simply building "Schneider-deKalbs"), he has solved both problems: There will be no more need for the radiant energy that was causing humankind's muscles to deteriorate, and he can create functioning deKalbs.

Waldo considers the nature of the "Other World" and its relation to our own:

Suppose *Chaos were* king and the order we thought we detected in the world about us a mere phantasm of the imagination; where would that lead us? In that case, Waldo decided, it was entirely possible that a tenpound weight *did* fall ten times as fast as a one-pound weight until the day the audacious Galileo decided in his mind that it was not so. Perhaps the whole meticulous science of ballistics derived from the convictions of a few firm-minded individuals who had sold the notion to the world. Perhaps the very stars were held firm in their courses by the unvarying faith of the astronomers. Orderly Cosmos, created out of Chaos— by Mind!. . .

More recently it had been different. A prevalent convention of materialistic and invariable causation had ruled the world; on it was based the whole involved technology of a machine-served civilization. The machines *worked,* the way they were designed to work, because everybody believed in them.

Until a few pilots, somewhat debilitated by overmuch exposure to radiation, had lost their confidence and infected their machines with uncertainty—and thereby let magic loose in the world. (Excerpt from "Waldo")

Waldo continues to study the phenomenon of the "Other World" and begins to apply what he has learned to his own condition, *myasthenia gravis,* until he can finally walk and endure in gravity again. He returns to Earth as a whole man—a brilliant mind and a vibrant body.

Characters

Grandfather See Gramps Schneider Doc Grimes

Doc Grimes is a somewhat eccentric doctor who delivered Waldo despite his concerns that something was wrong with the infant. Only Grimes has the audacity to speak plainly to the adult Waldo. He treats Waldo like the bright, but spoiled man that Waldo has become. He believes that humankind is gradually becoming weaker as they are continually exposed to low levels of radiation. He thus convinces Waldo to not only take on the problem of the failing deKalb receptors, but to find a solution that would also solve the problem of radiation exposure.

Dr. Augustus Grimes

See Doc Grimes

Dr. Gus Grimes

See Doc Grimes

Uncle Gus

See Doc Grimes

Waldo F. Jones

Waldo F. Jones is an eccentric genius who has a serious muscle disorder that renders him physically weak. To compensate for this physical handicap, Waldo has developed his mental capabilities. Moreover, Waldo invented a device to act as a strong hand for him. Though this device requires little strength to properly function, it demands the user's complete control. Waldo lives in an isolated space station of his own design, orbiting Earth. With his muscle disorder, Waldo is convinced that he is intellectually superior to the "smooth apes" that inhabit the Earth and perform physical labor for him.

Mac

See Hugh Donald MacLeod

Hugh Donald MacLeod

Dr. Stevens's assistant, Hugh introduces the hex doctor, Gramps Schneider.

Gramps Schneider

A "hex doctor" who ultimately shows Waldo how to fix the balky deKalb receptors and his own body by reaching into the "Other World" for energy, Gramps Schneider is a childhood acquaintance of Hugh MacLeod. Gramps Schneider dislikes machines and technology, yet agrees to fix the broken deKalbs that Hugh brings him because he likes to help "boys."

James Stevens

As the Chief Traffic Engineer for North American Power-Air, Dr. James Stevens must find a solution for the failing power in the "infallible" deKalb receptors. Dr. Stevens is a practical man looking for a practical solution where none exists. He decides to consult Waldo to help him solve the problem. He solicits his friend, Doc Grimes, to help him convince Waldo to solve the problem of the failing deKalbs.

Themes

Individual vs. Machine

Heinlein modifies this theme somewhat in "Waldo," as Waldo really is part machine in the beginning of the story. Since he cannot move easily on his own, Waldo creates machines (which bear his name, further emphasizing his connection and dependence on machines) that will help him manipulate the world around him. He also builds Freehold, nicknamed "Wheelchair," the space station in which he lives. Freehold has earned its nickname because it is the machine that allows Waldo some semblance of a mobile life; without it, he would be at the mercy of others and essentially motionless. By the end of the story, however, Waldo has freed himself from the waldoes he created, and from his "wheelchair" in order to become his own complete person.

Search for Identity

As in some of his juvenile novels, Heinlein explores humanity's search for a sense of individuality, a sense of self. Waldo, at the beginning of the story, is hardly distinguishable from his own machines, his waldoes. He is completely dependent on technology to keep him functioning, and so in a sense, his identity is lost in the machines around him. Forced from childhood into a life of physical inactivity, Waldo threw himself into the only activity remaining to him: that of intellectual exercise. However, Waldo the intellectual is only half of a man, and despite his constant posturing to the contrary, he realizes that he is incomplete.

Within the framework of the story, Waldo is both a dancer and a brain surgeon, melding both the physical with the intellectual. By Waldo's choice of professions, Heinlein emphasizes the importance of this balance between the physical and the intellectual and implies that both are necessary for a person to be complete. Waldo's search for an answer to the problem of why the infallible fails, mirrors his search for his complete self; he must reach beyond the machines and technology for his own identity, and for solutions to his immediate problem.

Style

Heinlein begins and ends "Waldo" with a glimpse of an older, more mature Waldo than is seen in the rest of the story. This is a Waldo who is both physically and intellectually fit, he is both a body and a brain (a dancer and a brain surgeon). When a reporter asks Waldo how he got started in dance, the story flashes back to Dr. Stevens and the problems at North American Power-Air with the non-functioning deKalb receptors. The rest of the story unfolds in a straightforward chronological pattern explaining how Waldo solves both the problems of the balky deKalbs and the radiant power that is weakening humankind. At the end of the story, Heinlein closes his frame by returning to the older, physically fit Waldo in order to emphasize the fitness (and politeness) of Waldo now that he has become a whole person in mind and body.

Historical Context

While various technologies were tested for short-term effects on the environment and on human health, little was done to test whether or not there might be any long-term effects from the technologies discovered. For example, X- ray machines were placed in shoe stores in the 1950s because merchants wanted to use the new technology to show their customers how well their shoes fit. It was discovered later that too much radiation was harmful to the human body. Consequently, the Xray machines were quickly removed from the stores. It is this lack of foresight to consider possible consequences of technologies that Heinlein highlights in "Waldo." How do we really know what the effects of those technologies will be unless we test them over a period of time? Since Heinlein writes science fiction, he sets the story somewhat in the future, which seems to divorce it from a distinct historical perspective, but the concerns of his own time period show through the text itself.

Critical Overview

Nor is "Waldo" the only story that critics have derided this tension between the rational world of science and the more irrational world of fantasy. Heinlein's entire canon, particularly *Assignment in Eternity,* demonstrates this science fiction versus fantasy tension.

Other critics have commented on Heinlein's ability to draw a complete world in his fiction, not simply a single technological difference to distinguish the fictional world from the actual, but a well- fleshed-out new world that is still somehow familiar. Brown comments on this when he states that "broadcast power is the invention that makes the world of "Waldo" possible. Instead of just replacing automobiles with radiant power vehicles, Heinlein mentions some of the changes which have happened. . . . There is enough background texture."

While Heinlein's worlds are often praised, his characterizations have more often drawn fire from the critics, especially his characterizations of women. Despite lip service given to the idea of the equality of women and men by creating competent and intelligent female characters, Heinlein's actual characterizations of female characters are almost invariably sexist. For example, in E. F. Bleiler's *Science Fiction Writers,* Peter Nicholls writes that the main character from *Podkayne of Mars* "is the least bearable of all of Heinlein's heroines. Although her competence is high, her language is arch, whimsical, and frankly sticky throughout. Heinlein's usual inability to create women who can communicate directly with other people in any terms other than coy banter is one of his most obvious flaws." Over the course of a long career in writing, Heinlein's writing gained commercial popularity.

However, he also suffered disapproval from critics who often considered his novels to be somewhat symptomatic of what was wrong with science fiction as a genre. Some commentators maintained his work featured too much science and too little skill in the art of creating fully believable worlds *and* characters, as well as stories that engaged the reader in terms of craft, not just sensationalism.

Criticism

- Critical Essay #1
- Critical Essay #2

Critical Essay #1

Science fiction stories are often characterized as stories about technology and gadgetry. We often expect science fiction to laud the merits of technology, especially the "golden age" of science fiction, such as Heinlein's early works, which have earned a reputation for painting a rosy picture of a future filled with time-saving gadgets and robots. "Waldo," however, is an early example of one of Heinlein's most prominent themes—that man should rely on himself and his own intelligence, not solely on technology.

First of all, Heinlein has created a central character who, by all rights, should be dependent on other people. Waldo has *myasthenia gravis,* a muscle disorder which renders Waldo quite incapable physically. He must use two hands in order to feed himself with a spoon, and even at that, the process is quite tiring and laborious. If Waldo were to remain on Earth at our normal gravity, he would have to have caretakers to pander to his every need, from feeding him, to turning the pages of a book if he wished to read.

However, Waldo is not content to remain so reliant on those around him. By the age of ten he has invented a machine which will hold a book for him as well as both light the pages and turn them with a simple control panel sensitive to Waldo's touch. While Waldo must have someone else build his invention for him at that age, by the time Waldo becomes an adult, he is capable of building his own inventions. Waldo, trying to become more independent, realizes that he must escape Earth's gravity if he is ever to be able to take care of himself. Without gravity to hold him down, his muscular weakness will not matter, he will not need to exert a great amount of force to accomplish simple tasks. Heinlein, however, very specifically tells his readers that Waldo's home, Freehold, is nothing more than a fancy crutch rather than a cure when he has Dr. Stevens refer to Waldo's home as Wheelchair. Nor is Freehold/Wheelchair the only crutch on which Waldo relies. Waldo has also invented a mechanical "hand" of sorts, a series of joints that he can control by making small movements in a glove which acts as a remote control for the mechanical hand. This invention gives Waldo the strength he needs to be able to do anything. For example, he uses one of these mechanical hands to catch his dog, Baldur, when the dog rushes a visitor. Other people call this invention a waldo, after their creator. In a sense, they are very right to name the invention after the inventor, for Waldo cannot exist on his own without the aid of his waldoes. He has, to a certain extent, become machine himself since he is reliant on both his space station and the mechanical hands which bear his name in order to exist "on his own."

Despite Waldo's seeming independence from others, Heinlein emphasizes just how dependent Waldo really is on technology. In fact, Heinlein goes on to have Doc Grimes underline Waldo's dependence, not just on technology, but on other people as well, in the very beginning of the novella. When Waldo first learns of the failing deKalb receptors and North American Power-Air asks Waldo for help, he brushes NAPA off, claiming that the problem is interesting, but that he will not help them discover the answer. Doc Grimes reminds him just how dependent on other people Waldo still is.

Waldo imports all of his food, an obvious necessity and a surprising dependence on others. Once reminded of this dependence, Waldo agrees to tackle both the problem of the failing deKalb receptors as well as the problem that Grimes reveals to him: the use of radiant, broadcast energy (such as the deKalbs) is causing humans to become weaker and weaker. His decision to solve these two problems eventually leads to Waldo solving his own personal problem as well: his own physical weakness.

Waldo has two types of dependency, then. First, he is reliant on his technological gadgetry to lead the life of a normal person. Second, he relies on other people to make sure that he has all of the necessities of life. A smaller third dependence is his reliance on Doc Grimes, Uncle Gus to Waldo, to keep him acting somewhat civilized. Despite Heinlein's insistence on self-reliance in the first two categories, though, he makes it quite clear in this novella that self-reliance does not equal a complete isolation from others.

With the types of dependency established, we can now examine exactly how Heinlein goes about convincing the reader that self-reliance is the answer, not technology. First, of course, we see Waldo's determination to be independent of others, to not have to rely on them to do everything for him. Since Waldo is the title character, we can assume that we are to learn something from him. In most ways, however, Waldo seems to be a character hard to like or to learn from. His personality is overbearing and arrogant. His only redeeming quality seems to be his fierce independence. But, as previously stated, Waldo is not quite as independent as he first seems.

He is entirely dependent on technology, from the very house in which he lives to the mechanical waldoes which allow him to lead some semblance of a normal life. He is also dependent on others to make sure that he is provided with the necessities of life. What at first seemed to be Waldo's saving grace is a bit more complicated than it appeared. However, by looking closely at the frame (a device which both begins and ends the story) of the novella, Heinlein's insistence on self-reliance is, in fact, one of the main tropes of the story.

In the framing device of the novella, Heinlein gives a small episode with Waldo. In the beginning, Heinlein spends several paragraphs explaining that this character has it all—a lucrative performing career (in ballet-tap, indicating great physical grace, strength and endurance) as well as being a brain surgeon (indicating a great physical dexterity, but more importantly, this profession indicates intelligence). Heinlein does not reveal to the reader just who this paragon of the physical and the intellectual is, but instead he jumps back in time by having a reporter ask the great performer/surgeon how he came to take up dancing. Heinlein then begins narrating "Waldo" in a more-or-less chronological order beginning with a description of the immediate problems to be solved and ending with the solution of those problems. He then concludes the novella with Waldo telling the reporter that the reason he went into dance is quite a long story and implies that it is one that he does not have time to go into at the moment.

But Heinlein's characterization of Waldo in this framing device is dramatically different than that of Waldo in the central story. Waldo in the frame is a polite and genuinely nice individual.

Rather than dismiss the reporters and photographers, he thanks them for their attention and offers them drinks in his dressing room. He thinks of them as "grand guys" repeatedly. When the former head of NAPA, Gleason, approaches Waldo with a batch of legal papers to sign, Waldo does so without reading them, telling Gleason that if the papers are to Gleason's satisfaction, then they are to Waldo's satisfaction as well. Heinlein ends the story with Waldo's thought, "They were all such grand guys." However, in the course of the main story, Heinlein portrays Waldo as a man nearly incapable of behaving politely. When Waldo first meets Stevens, for example, Waldo acts as if he will help solve the problem of the balky deKalb receptors but finally tells Stevens that he will do nothing to help NAPA out of its troubles. He goes so far as to tell Stevens that he is no "roller-skate mechanic for apes," implying that the men on Earth mean as little to him as apes do to humans; he is contemptuous of them. Even when Gramps Schneider reveals the answer to the deKalbs as well as eliminating the need for radiant power, he thinks of Gramps Schneider as that "hex doctor," as if it is an accident that this man was able to discover the answer when Waldo had been unable to do so himself.

What changes from the main text of the story to the framing device? The answer is simple. Waldo is no longer reliant on his Wheelchair or on his waldoes. Waldo's joining of the human race is the result of his leaving behind the technology that he had relied upon to make him independent. Once he thought of himself as free of that dependence, he became free of it in reality as well. It is in the frame, which seems at first as only a superficial reason for the telling of the story, that Heinlein's main focus becomes readily apparent: by relying on our own selves instead of technology we can find the strength we need to do whatever it is we need to do.

Source: Robin MacRorie, "Overview of 'Waldo,'" for *Short Stories for Students,* The Gale Group, 2000.

. . . "Waldo" develops Heinlein's cosmic personality by focusing on an individual who is transformed from a physically inferior person (although mechanically brilliant) into someone who is superior in the sense that the new Waldo begins successfully to create the world of men in his own image. The story moves from the self-isolation of the physically inferior, compensating individual to a totally new spatial and temporal orientation on the part of that genius who, as a result of his newly positive attitude toward the rest of humanity, shares his discovery with others. As in "Universe" weightlessness symbolizes the freedom of outer space where one is closer to one's own true nature as a dweller in space. Waldo's genius has lifted him above the physical confines of gravity. Out there he becomes aware of another world which is a source as well as a depository of energy. The Other World is the place where Waldo searches for speed, where he compares electricity to nerve impulses. Waldo proceeds on the assumption that the energy from the Other World is also subject to laws which can be discovered and used if the formulas are known.

Heinlein's shallowness in character portrayal reveals itself here in these machinations. His characters avoid traumatic shock by refusing to confront something unpredictable within a system. Waldo calls Gramps Schneider a hex doctor and then proceeds to work out basic rules for tapping the power source of the unpredictable. Like Heinlein, Waldo is the mechanical genius who avoids the confrontation with the all-encompassing theoretical implications of this new energy. Rambeau really seems more consistent when he loses his sanity because of the traumatic shock to his rigid scientific outlook. Waldo remains, however, a very clever child intrigued by the possibilities and blind to the real import.

But there are some interesting insights in Waldo's attempts to develop a terminal for the power source. When he mentally reduces the Other World to the size of an ostrich egg, he shows his own mastery of a comprehensive structure—a process which in itself becomes the new source of his strength. In this way Waldo has gone beyond the mere sense of another world, as in "Magic, Inc.," and as an individual, beyond the helpless exposure to other dimensions, as in *Methuselah's Children.* Energy from the Other World makes him into a complete human being who wants nothing more than to be surrounded by other people who like him.

Here again Heinlein's conceptual weakness becomes obvious. The Other World is actually other people, and learning how to manipulate energy corresponds to learning how to interact with the other people, and at the same time, learning how to be a man. But the real interaction with the Other World has to admit its basic mystery, as the theoretician would even while he speculated about it. The author allows the energy exchange between Waldo and his counterpart in the Other World to degenerate into "nerve surgery"—a mechanical and most inadequate description of the process that Waldo thinks he has discovered. The emotional complexity of the exchange is missing, therefore the intimation of the Other World is flat.

Waldo's transformation from an embittered, weak genius into a physical superman is an obvious spin-off from Faust and Nietzschean motifs. The greatness of Goethe's masterpiece is due, among other things, to a consistent following through in the bargain that Faust makes with Mephistopheles. Faust's reign of glory is always in the shadow of the final payment. Every ounce of energy that he receives demands its physical and emotional price.

His return to youth at the beginning is balanced by the mistakes of youth and the blindness of old age. The wisdom, wealth, and power that he gains bring with them an emotional winnowing. In the science fiction novel it is the lack of an accompanying developmental trauma that suggests Waldo's powers are spurious. Only in Rambeau's madness and a short description of Waldo's bitter hatred of the "smooth apes" are there the rudiments of an emotional interaction to intense experiences, but these lines are never developed. Though Waldo decides that mental concentration can prevent the myasthenia gravis which is weakening the people below and is the source of his own crippled state, he does not analyze the nature of mental control over the body. His mechanics lead nowhere, and nothing important is really demonstrated. But the positive point made is that Waldo becomes a "real" man, even wants to impress girls (echoing

Faust's pathetic wish to fall in love), when he can draw off the energy of the Other World not only to heal himself, but to give himself physical capabilities that others do not possess.

Source: Alice Carol Gaar, "The Human as Machine Analog: The Big Daddy of Interchangeable Parts in the Fiction of Robert A. Heinlein," in *Robert A. Heinlein,* edited by Joseph D. Olander and Martin Harry Greenberg, Taplinger Publishing Company, 1978, pp. 64-82.

Critical Essay #2

Beyond the fact that it was originally published in a science fiction magazine, I am certain that ["Waldo"] is a science fiction story rather than a fantasy story, but I am very far from certain that I can satisfactorily explain why.

The basic elements of "Waldo" are four: a Pennsylvania hex doctor who may be well over a hundred years old and whose magic actually works; "deKalb power receptors" that have suddenly ceased to operate properly though nothing seems to be wrong with them; a rising incidence of general myasthenia—abnormal muscular weakness and fatigue— in the population; and Waldo, an engineering genius and paranoid misanthrope afflicted by myasthenia gravis who lives in a satellite home popularly known as "Wheelchair." Heinlein has managed to tie this all together into a fascinating whole.

The deKalbs are failing, and their proprietors, North American Power-Air Co., are worried. They can't lick the problem and are convinced that the only man who might is Waldo. However, the company once cut Waldo out of some patents that he is convinced should have been his and they are far from sure that he will do any further business with them.

Dr. Gus Grimes, Waldo's personal physician since childhood and his only friend, is worried by the rise of myasthenia in the population and is convinced that background radiation has something to do with it. He wants Waldo to take on the problem of the failing deKalbs and not only work out a solution, but find one that will necessitate cutting down the amount of general radiation.

Waldo's own problem is his sickness and his misanthropy, the misanthropy being a direct result of his sickness. His success is a matter of overcompensation, and the more successful he is the more alienated he becomes, thus leaving him with that much more to compensate for.

Gramps Schneider, the Pennsylvania hex doctor, has no problems except that he has no particular love for machines and complicated living. He is, however, the key to the whole situation. Waldo takes on NAPA's problem, but then is unable to solve it, let alone in the manner Dr. Grimes would prefer. For all that he can tell, the machines *ought* to be working properly. Gramps Schneider, however, can fix the machines, and he is able to give Waldo the insights by which he solves the problem of the failing deKalbs, the problem of radiation and general myasthenia, and the problem of his own sickness.

Completely aside from the main problem, Heinlein has included some truly lovely conceits. The best-known of these are the machines known as "waldoes," devices for remote control manipulation. Similar machines are in commercial use today, first developed for handling radioactive material, and are generally known as waldoes after those described in the story. But this is not the only ingenious idea given. Waldo's satellite home and the behavior of Waldo's pets, a canary and a mastiff, raised from

birth in free fall, are particularly wellimagined. None of this is necessary to the story, but it does add richness to it.

The reason for my original puzzlement as to how "Waldo" should be categorized-science fiction or fantasy—is the nature of the solution to the various given problems. It turns out that the deKalbs are failing because their operators are thinking negative thoughts. Gramps Schneider fixes the deKalbs by reaching for power into the "Other World." And Waldo fixes both himself and the failing deKalbs by learning to reach for power into the Other World, too.

More than this, Waldo becomes convinced that the various magical arts are all aborted sciences, abandoned before they had been made clear; that the world has been made what it is by minds thinking it so (the world *was* flat until geographers decided it was round, and the deKalbs worked because their operators thought they would); that the Other World does exist; and that he, Waldo, can make the Other World what he wants it to be, for all time, by deciding its nature and convincing everybody else of his ideas.

Throughout much of his fiction, Heinlein has injected bits of mysticism, just as he did here in "Waldo." What keeps "Waldo" and most of the others from being fantasies, it seems to me, is his approach to the mysticism. "Magic, Inc." is a fantasy because the answers are cut-and-dried. Magic does work, period. Do thus-and-such and thus-andthus will result. In "Waldo" we only know one thing for certain: there *is* something out there, call it the "Other World" for convenience, from which power can be siphoned. All the rest is Waldo's tentative construction of the state of affairs—he may be right or he may be wrong, but we have no certain way of knowing. In part, this is Heinlein's way of saying, "There are more things in heaven and earth than are dreamt of in your philosophy," and that is a far from illegitimate thing for a science fiction story to say. In part, too, I think this derives from Heinlein's background and training. As a writer, he remains very much an engineer. His interest has always been not so much in why things work as in how they work, and as long as he exposits the "how" clearly, he is willing to leave the "why" as a tentative answer.

If the answers Heinlein were to give were not tentative, if the story said, "And this is exactly what those things in heaven and earth you haven't dreamt of are," and these answers fall outside what we think the world to be like, the story would be a fantasy. As long as the answers remain tentative, as in "Waldo," the story remains one that I can point to when I say "science fiction," even though the answers may again be ones that fall outside the bounds of what we think the world to be like.

Source: Alexei Panshin, "The Period of Influence," in *Heinlein in Dimension: A Critical Analysis,* Advent Publishers, Inc., 1968, pp. 9-40.

Topics for Further Study

Research the use of waldoes. What is a waldo, and in what discipline is it most commonly used today?

Do some research on the differences between fantasy and science fiction literature. Is "Waldo" a science fiction story or a fantasy story? Why do you think so?

Research the levels of radiation that we receive from everyday appliances such as computers, televisions, and microwaves. How could these levels of radiation affect our bodies? Could Heinlein have been serving a warning to us against using such technologies? Use examples from the story to support your view.

Compare and Contrast

1940s: Workers during the Great Depression are faced with unemployment rates as high as 25% and relief comes through socialistic government programs. The U.S. also increases defense spending as the nation enters World War II in 1941.

1990s: Unemployment stands around 6%, but corporate downsizing has many workers concerned about their future. The government must reduce a multi-billion dollar deficit, yet the stock market continues its strong performance.

1940s: Blacks are excluded from the suburban housing boom of the era. The Federal Housing Authority practices "redlining": on city maps it draws red lines around predominantly black inner- city areas and refuses to insure loans for houses in those areas. This practice contributes to the demise of the inner city.

1990s: Though many upper- and middle-class blacks live and work in the suburbs, poor blacks are often confined to substandard housing in decaying urban areas, or ghettos.

1940s: Technological advances increase dramatically during the war years. In the later part of the decade, as wartime economy is replaced by peacetime economy, America is still in the forefront of technical exploration and knowledge.

1990s: Technology has a ever-increasing role in American life. Nearly all business transactions are done via computer; databases hold vital information to every aspect of human life. Critics warn that privacy is impossible in such a society. Meanwhile, the Internet makes it possible to communicate quickly and efficiently, and its possible uses are still being explored. Critics charge that it further alienates people from each other and disseminates subversive information to young children and adults.

What Do I Read Next?

In *Assignment in Eternity* (1953), Robert A. Heinlein again tackles the ability of the mind to perform a kind of magic, or extra-sensory perception. A series of four short stories, each deals in some way with humanity's reaching into the "Other World" or another dimension.

Heinlein's 1965 novel, *The Moon Is a Harsh Mistress,* deals with Manny, Wyoh, and Professor de la Paz trying to free their land from the tyranny of Earth with the help of a sentient computer named Mike. While the revolution is deadly serious to the humans involved, it begins solely as an elaborate practical joke for the bodiless Mike until he realizes his own mortality.

Mercedes Lackey's The Last Herald-Mage trilogy— *Magic's Pawn* (1989), *Magic's Promise* (1990), and *Magic's Price* (1990)—deals with the "science" of magic and how it works in the land of Valdemar. Young Vanyel must learn the laws of magic as well as use that magic to protect his family and friends.

Further Study

Franklin, H. Bruce. "From Depression into World War II: The Early Fiction," in *Robert A. Heinlein: America as Science Fiction,* Oxford University Press, 1980, pp. 17-63.

Contends that "Waldo" is characterized by the contradictory points of scientific faith and power of the mind.

Bibliography

Nicholls, Peter. Quoted in *Science Fiction Writers,* edited by E. F. Bleiler, New York: Scribner, 1982.

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Introduction

Purpose of the Book

The purpose of Short Stories for Students (SSfS) is to provide readers with a guide to understanding, enjoying, and studying novels by giving them easy access to information about the work. Part of Gale's□For Students□ Literature line, SSfS is specifically designed to meet the curricular needs of high school and undergraduate college students and their teachers, as well as the interests of general readers and researchers considering specific novels. While each volume contains entries on □classic□ novels

frequently studied in classrooms, there are also entries containing hard-to-find information on contemporary novels, including works by multicultural, international, and women novelists.

The information covered in each entry includes an introduction to the novel and the novel's author; a plot summary, to help readers unravel and understand the events in a novel; descriptions of important characters, including explanation of a given character's role in the novel as well as discussion about that character's relationship to other characters in the novel; analysis of important themes in the novel; and an explanation of important literary techniques and movements as they are demonstrated in the novel.

In addition to this material, which helps the readers analyze the novel itself, students are also provided with important information on the literary and historical background informing each work. This includes a historical context essay, a box comparing the time or place the novel was written to modern Western culture, a critical overview essay, and excerpts from critical essays on the novel. A unique feature of SSfS is a specially commissioned critical essay on each novel, targeted toward the student reader.

To further aid the student in studying and enjoying each novel, information on media adaptations is provided, as well as reading suggestions for works of fiction and nonfiction on similar themes and topics. Classroom aids include ideas for research papers and lists of critical sources that provide additional material on the novel.

Selection Criteria

The titles for each volume of SSfS were selected by surveying numerous sources on teaching literature and analyzing course curricula for various school districts. Some of the sources surveyed included: literature anthologies; Reading Lists for College-Bound Students: The Books Most Recommended by America's Top Colleges; textbooks on teaching the novel; a College Board survey of novels commonly studied in high schools; a National Council of Teachers of English (NCTE) survey of novels commonly studied in high schools; the NCTE's Teaching Literature in High School: The Novel;and the Young Adult Library Services Association (YALSA) list of best books for young adults of the past twenty-five years. Input was also solicited from our advisory board, as well as educators from various areas. From these discussions, it was determined that each volume should have a mix of □classic□ novels (those works commonly taught in literature classes) and contemporary novels for which information is often hard to find. Because of the interest in expanding the canon of literature, an emphasis was also placed on including works by international, multicultural, and women authors. Our advisory board members□educational professionals□ helped pare down the list for each volume. If a work was not selected for the present volume, it was often noted as a possibility for a future volume. As always, the editor welcomes suggestions for titles to be included in future volumes.

How Each Entry Is Organized

Each entry, or chapter, in SSfS focuses on one novel. Each entry heading lists the full name of the novel, the author's name, and the date of the novel's publication. The following elements are contained in each entry:

- Introduction: a brief overview of the novel which provides information about its first appearance, its literary standing, any controversies surrounding the work, and major conflicts or themes within the work.
- Author Biography: this section includes basic facts about the author's life, and focuses on events and times in the author's life that inspired the novel in question.
- Plot Summary: a factual description of the major events in the novel. Lengthy summaries are broken down with subheads.
- Characters: an alphabetical listing of major characters in the novel. Each character name is followed by a brief to an extensive description of the character's role in the novel, as well as discussion of the character's actions, relationships, and possible motivation. Characters are listed alphabetically by last name. If a character is unnamed□for instance, the narrator in Invisible Man-the character is listed as □The Narrator□ and alphabetized as □Narrator.□ If a character's first name is the only one given, the name will appear alphabetically by that name. □ Variant names are also included for each character. Thus, the full name □Jean Louise Finch□ would head the listing for the narrator of To Kill a Mockingbird, but listed in a separate cross-reference would be the nickname □Scout Finch.□
- Themes: a thorough overview of how the major topics, themes, and issues are addressed within the novel. Each theme discussed appears in a separate subhead, and is easily accessed through the boldface entries in the Subject/Theme Index.
- Style: this section addresses important style elements of the novel, such as setting, point of view, and narration; important literary devices used, such as imagery, foreshadowing, symbolism; and, if applicable, genres to which the work might have belonged, such as Gothicism or Romanticism. Literary terms are explained within the entry, but can also be found in the Glossary.
- Historical Context: This section outlines the social, political, and cultural climate in which the author lived and the novel was created. This section may include descriptions of related historical events, pertinent aspects of daily life in the culture, and the artistic and literary sensibilities of the time in which the work was written. If the novel is a historical work, information regarding the time in which the novel is set is also included. Each section is broken down with helpful subheads.
- Critical Overview: this section provides background on the critical reputation of the novel, including bannings or any other public controversies surrounding the work. For older works, this section includes a history of how the novel was first received and how perceptions of it may have changed over the years; for more recent novels, direct quotes from early reviews may also be included.
- Criticism: an essay commissioned by SSfS which specifically deals with the novel and is written specifically for the student audience, as well as excerpts from previously published criticism on the work (if available).

- Sources: an alphabetical list of critical material quoted in the entry, with full bibliographical information.
- Further Reading: an alphabetical list of other critical sources which may prove useful for the student. Includes full bibliographical information and a brief annotation.

In addition, each entry contains the following highlighted sections, set apart from the main text as sidebars:

- Media Adaptations: a list of important film and television adaptations of the novel, including source information. The list also includes stage adaptations, audio recordings, musical adaptations, etc.
- Topics for Further Study: a list of potential study questions or research topics dealing with the novel. This section includes questions related to other disciplines the student may be studying, such as American history, world history, science, math, government, business, geography, economics, psychology, etc.
- Compare and Contrast Box: an □at-a-glance□ comparison of the cultural and historical differences between the author's time and culture and late twentieth century/early twenty-first century Western culture. This box includes pertinent parallels between the major scientific, political, and cultural movements of the time or place the novel was written, the time or place the novel was set (if a historical work), and modern Western culture. Works written after 1990 may not have this box.
- What Do I Read Next?: a list of works that might complement the featured novel or serve as a contrast to it. This includes works by the same author and others, works of fiction and nonfiction, and works from various genres, cultures, and eras.

Other Features

SSfS includes □The Informed Dialogue: Interacting with Literature,□ a foreword by Anne Devereaux Jordan, Senior Editor for Teaching and Learning Literature (TALL), and a founder of the Children's Literature Association. This essay provides an enlightening look at how readers interact with literature and how Short Stories for Students can help teachers show students how to enrich their own reading experiences.

A Cumulative Author/Title Index lists the authors and titles covered in each volume of the SSfS series.

A Cumulative Nationality/Ethnicity Index breaks down the authors and titles covered in each volume of the SSfS series by nationality and ethnicity.

A Subject/Theme Index, specific to each volume, provides easy reference for users who may be studying a particular subject or theme rather than a single work. Significant subjects from events to broad themes are included, and the entries pointing to the specific theme discussions in each entry are indicated in boldface.

Each entry has several illustrations, including photos of the author, stills from film adaptations (if available), maps, and/or photos of key historical events.

Citing Short Stories for Students

When writing papers, students who quote directly from any volume of Short Stories for Students may use the following general forms. These examples are based on MLA style; teachers may request that students adhere to a different style, so the following examples may be adapted as needed. When citing text from SSfS that is not attributed to a particular author (i.e., the Themes, Style, Historical Context sections, etc.), the following format should be used in the bibliography section:

□Night.□ Short Stories for Students. Ed. Marie Rose Napierkowski. Vol. 4. Detroit: Gale, 1998. 234-35.

When quoting the specially commissioned essay from SSfS (usually the first piece under the □Criticism□ subhead), the following format should be used:

Miller, Tyrus. Critical Essay on □Winesburg, Ohio.□ Short Stories for Students. Ed. Marie Rose Napierkowski. Vol. 4. Detroit: Gale, 1998. 335-39.

When quoting a journal or newspaper essay that is reprinted in a volume of SSfS, the following form may be used:

Malak, Amin. □Margaret Atwood's □The Handmaid's Tale and the Dystopian Tradition,□ Canadian Literature No. 112 (Spring, 1987), 9-16; excerpted and reprinted in Short Stories for Students, Vol. 4, ed. Marie Rose Napierkowski (Detroit: Gale, 1998), pp. 133-36.

When quoting material reprinted from a book that appears in a volume of SSfS, the following form may be used:

Adams, Timothy Dow. □Richard Wright: □Wearing the Mask,□ in Telling Lies in Modern American Autobiography (University of North Carolina Press, 1990), 69-83; excerpted and reprinted in Novels for Students, Vol. 1, ed. Diane Telgen (Detroit: Gale, 1997), pp. 59-61.

We Welcome Your Suggestions

The editor of Short Stories for Students welcomes your comments and ideas. Readers who wish to suggest novels to appear in future volumes, or who have other suggestions, are cordially invited to contact the editor. You may contact the editor via email at: ForStudentsEditors@gale.com. Or write to the editor at:

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