

Prelude to Foundation Study Guide

Prelude to Foundation by Isaac Asimov

(c)2015 BookRags, Inc. All rights reserved.



Contents

Prelude to Foundation Study Guide.....	1
Contents.....	2
Plot Summary.....	4
"Mathematician" (pp. 1-24).....	6
"Flight" (pp. 27-46).....	8
"University" (pp. 49-64).....	10
"Library" (pp. 67-88).....	12
"Upperside" (pp. 91-114).....	15
"Rescue" (pp. 117-133).....	18
"Mycogen" (pp. 137-155).....	20
"Sunmaster" (pp. 159-178).....	23
"Microfarm" (pp. 181-199).....	26
"Book" (pp. 203-222).....	29
"Sacrorium" (pp. 225-248).....	31
"Aerie" (pp. 251-273).....	34
"Heatsink" (pp. 277-302).....	37
"Billibotton" (pp. 305-326).....	40
"Undercover" (pp. 329-347).....	42
"Officers" (pp. 351-369).....	44
"Wye" (pp. 373-393).....	47
"Overthrow" (pp. 397-415).....	50
"Dors" (pp. 419-434).....	52
Characters.....	55
Objects/Places.....	62
Themes.....	66



Style..... 69
Quotes..... 72
Topics for Discussion..... 74



Plot Summary

Prelude to Foundation tells the story of mathematician Hari Seldon, fleeing around the enclosed planet Trantor, evading the Emperor who wants to control his psychohistory, and coming to understand that his invention can indeed have a practical application in predicting the fate of mankind.

Prelude to Foundation is set in the year 12,020 G.E. (Galactic era), during the rocky reign of the Emperor Cleon I. The Galactic Empire has been in decline for years when mathematician Hari Seldon arrives from Helicon to read a theoretical paper about "psychohistory" before the Decennial Mathematics Convention on Trantor, the galactic capital. The Emperor wants him to turn this into a practical tool to shore up his reign, and he begins a "flight", which takes him to four distinct sectors of this planetary "human beehive", directed by a journalist, Chetter Hummin, who warns that Cleon's chief of staff, Eto Demerzel, is a dangerous schemer. Demerzel takes Seldon to the Streeling University and introduces him to a young historian, Dora Venabili, whom he convinces to accompany Seldon and protect him. Seldon is frustrated with his progress in learning history and takes an excursion to "Upperside", where he narrowly avoids a prowling "jet-down" and dying of exposure.

Hummin moves them to Mycogen Sector, a severely ingrown and misogynous society led by the authoritarian High Elder, Sunmaster Fourteen. Venabili finds Seldon's plans for gaining access to local legends dubious, and he must treat Raindrop Forty-Three brutally to get her to talk. During a tour of a microfarm tour, Raindrop Forty-Three reveals that Mycogenians believe in history, not religion, and records that in a Book that she lends him. Reading the dull tome introduces Seldon to robots and leads him to risk invading the "Sacrorium", the sector's most sacred-and dangerous-place. Caught in the "Aerie" by Sunmaster, they appear doomed to death until Hummin appears and wins their release.

Hummin relocates them in Dahl Sector, a working class community. They clash with their landlords, the bigoted Tisalvers, but learn of a soothsayer who lives in the dangerous Billibotton slum. Mother Rittah reveals the names of the two legendary robots of from mankind's prehistory. Venabili proves a skilled knife fighter and becomes a local legend, defending them. Davan, a social activist trying to unite people against the Emperor, summons them back to Billibotton, and Seldon feels he can help the movement most by concentrating on psychohistory, which is beginning to look practical. Mistress Tisalver turns them in to the security forces. They resist arrest, and flee into the sewers, led by twelve-year-old Raych, their guide in Billibotton.

Hummin fails to appear, but Sgt. Emmer Thalus conveys them to Wye Sector, where Mayor Rashelle opulently hosts them. She has pretensions to unseat the Emperor and separate Trantor from the rest of the failing galaxy and wants psychohistory to validate the coup. Seldon refuses, like he refused the Emperor earlier. Demerzel reacts with a lightning coup that restores Rashelle's father to the throne. Rashelle fails in her attempt to kill Seldon rather than hand him over to Demerzel, whom she reveals is Sheldon's



"friend", Hummin. This dual personality convinces Seldon that his wanderings and misadventures helped him clarify his theory of psychohistory. After Seldon explains the evolution of his limited theory, which he owes thanks to Rashelle, he guesses that Hummin/Demerzel is the legendary robot he has been seeking. Finally, R. Daneel Olivaw confesses that he acts under both personae and explains how for millennia he has watched over humanity, obeying not only the three Laws of Robotics, but also a more demanding "Zeroeth Law". He sees psychohistory as a means of making that protection more certain. With the truth told, Olivaw promises to arrange all Seldon needs to continue his research and guarantees his safety through the Demerzel persona. They will see one another only rarely in the future. Seldon's feelings for Venabili have reached the point that he ignores the fact she is a robot, and she drops her objections that she is not right for him.



"Mathematician" (pp. 1-24)

"Mathematician" (pp. 1-24) Summary

Prelude to Foundation tells the story of mathematician Hari Seldon, fleeing around the enclosed planet Trantor, evading the Emperor who wants to control his psychohistory, and coming to understand that his invention can indeed have a practical application in predicting the fate of mankind.

Emperor Cleon I and Chief of Staff Eto Demerzel discuss one Hari Seldon, said by the Minister of Science to be a mathematician who claims he can foretell the future mathematically. Demerzel assures the emperor this is "a children's dream of magic" and "self-fulfilling" prophesies, but Cleon feels people will believe a mathematician without understanding him. Cleon wants Seldon brought in and knows that Demerzel has the "strings" everywhere to accomplish this.

Lt. Allen Wellis of the Emperor's Guard escorts Seldon through the wealthiest sections of Trantor to the only part of the planet that stands open to the sky, the grounds of the Imperial Palace. Certain that a low-level official will deal with him, Seldon is surprised to meet someone free from the grave, threatening expressions he has grown used to. Cleon I drops ceremony and they talk on equal terms. Seldon downplays his fame and laments that everyone has misunderstood his paper. Predicting the Empire's future in more than "broad sweeps" is impossible. Politicians and businessmen routinely make educated guesses as good as his. While it is theoretically possible to interview every member of the galaxy, the time required is prohibitive. Even the fastest computer would deliver results already obsolete. It is like dealing with subatomic particles in quantum mechanics, but complicated by humans' mental abilities. Order *must* underlie all things, but what it could be cannot be reduced to formulae. The Emperor angrily insists on having this useful tool; Seldon agrees, but warns that if people learn the results, this will skew and discredit them.

This delights Cleon, who wants the prediction of a good, useful future that humans can bring about naturally. When Seldon objects that one cannot work backwards, Cleon is disgusted and insists on predictions, whether mathematically justified or not. Worrying about his fate, Seldon apologizes that long-term predictions can interest no one, while short-term ones risk error and could destroy any chance of perfecting his system. Frustrated by Seldon's "insistence on impossibilities", Cleon demands to know whether he will be assassinated. Assured by Cleon's word of honor that he will not punish an "educated guess", Seldon gives him an obvious one in two historical chance. Most assassinations start as palace coups, and as soon as an emperor grows suspicion of a subordinate, a cycle of resentment, suspicion, and changed behavior begin that ends either in execution or in assassination. Judging Seldon useless, Cleon dismisses him.

Demerzel emerges to analyze the interview. Seldon is a "loose cannon", a provincial who stands up to the sovereign, dangerous because others may believe him or-worse-



he may come to believe that he *can* develop a practical system, something he has never considered. He must be kept out of the hands of rivals, like the Mayor of Wye. The Emperor is wise to free Seldon, for restraint of any sort would cause resentment that would inhibit his work. He is on an invisible leash and can be eliminated if anyone gets in the way. They are better off assuming Seldon is important than in dismissing him as a nonentity. Cleon need not know any unpleasant details.

Seldon sits in a small, mostly empty park as he awaits his flight home. Facing him sits a tall, grave man, studying teleprints and talking to himself. Everyone wears bright colors that contrast with his own outworldish brown. The man recognizes him from the Decennial Convention, introduces himself as Chetter Hummin, a journalist, depressed over reporting steadily downward-spiraling events. Seldon grows defensive over questions about the emperor, even off the record, and denies even hearing about Demerzel, Cleon's "alter ego", brain, and "evil spirit". Hummin assures him Demerzel had overheard him and the Emperor and will not let him go if he even believes he can foretell the future. As he absorbs the warning, Seldon senses intruders are near.

"Mathematician" (pp. 1-24) Analysis

The first section establishes characters, bringing together two thirty-two-year-olds, the Galactic Emperor Cleon I and the novel's protagonist, the mathematician Hari Seldon. The weakling monarch is disappointed that Seldon cannot turn his vaunted "psychohistory" into a practical tool that will benefit the reign, while Seldon regrets his newfound fame and wants simply to return home to obscurity. Cleon discusses the situation with his chief aide, Eto Demerzel, who at the end of the novel is revealed to be the same person as a pessimistic stranger whom Seldon meets in the park and warns him that the true power behind the throne-Demerzel-will grab him if his theory proves remotely possible.



"Flight" (pp. 27-46)

"Flight" (pp. 27-46) Summary

Two large thugs harass Seldon about his clothing and speech and demand he leave Trantor immediately. As the park empties, Hummin intervenes and the "lackeys" attack, only to be swiftly and painfully subdued. Hummin and Seldon complement one another before blending into the crowd just ahead of the police, who, Hummin explains, work for whoever targeted the thugs on him, based on his Heliconian clothes and perhaps a holograph. Hummin guides Seldon away from his hotel room to a small apartment complex, where he declares that Demerzel must believe Seldon is holding out for a higher price. Hummin orders Seldon to stay put while he buys him a change of clothing. The thugs' assignment is to get Seldon off Trantor before he can consider his situation and remain in the safest place in the galaxy: the planet is so incredibly interconnected technologically that Imperial forces dare not touch any part for fear of throwing the whole into chaos. Demerzel will be watching Helicon. A quirk of fate has brought them together and now Seldon must accept that he may spend the rest of his life here on Trantor.

Seldon examines himself in his new, rather subdued, ill-fitting clothing before they resume their flight from the police, who are certain to track them here soon. It is Hummin's free choice both to spend money on Seldon and to put himself in danger; they can discuss the philosophy later. They set out along walkways, Hummin keeping a close watch on the crowds and explaining that people in Imperial Sector do a lot of walking for convenience and health reasons. He asks if Seldon suffers acrophobia before taking him on an experimental "gravitic lift" down forty to fifty levels. The technology, unknown outside the Imperial Sector, is unnerving but rapid and painless. The late emperor had hoped his legacy would be the use of antigravity even for space flight, but most physicists doubt its feasibility, as it is very expensive just powering elevators.

While Hummin arranges a no-questions-asked air taxi from someone who owes him a favor, Seldon tries to look inconspicuous, observing the oddities of Trantorian clothing and accessories. They step into a two-seater, which is computerized for safety. Hummin explains the network of tunnels that honeycomb the subsurface, enabling long-distance travel at 350 km/hour. They are now safe from Imperial forces, but must worry about individual operatives-spies, agents, and assassins. Hummin has arranged for a bodyguard. As it sinks in that Seldon is a hunted man, he shudders and asks why Hummin would risk helping him. Hummin claims he knows Trantor intimately, has many people obligated to him, and is shrewd enough to survive, and admits he, like the Emperor, wants to use Seldon's predictive powers. Seldon is disappointed at being the "disputed prey of competing predators". He rues coming to Trantor and ruining his life.

Hummin differentiates himself from the Emperor. He wants to use Seldon's powers for the good of the galaxy rather than to save the dynasty and make the functionaries' lives



more secure. Humanity is far older than the Empire and legends exist about a time when all humans inhabit a single world. That must have been before "superluminal travel" becomes possible, perhaps 20,000 years ago. Quadrillions of humans will survive on various planets long after the Empire unravels, and it would be better to know their fate than simply assume it. Hummin would love to use psychohistory to that end. Seldon objects that the Emperor or Hummin desiring this does not make it possible for him to do it. Seldon realizes he could not accomplish it in a lifetime and is not "fool enough" to try. Hummin asks if it would matter that "The Galactic Empire is dying".

"Flight" (pp. 27-46) Analysis

Seldon's "Flight", which lasts most of the novel, begins as Hummin demonizes Demerzel and crafts an atmosphere of paranoia directed at this alter ego. Hummin also begins preaching that the Galactic Empire is doomed, which sinks in, and Seldon throughout the novel notices signs of breakdown, both mechanical and moral. Hummin also makes Seldon feel guilty enough to attempt the impossible. Hummin's description of the moral difference between why he wants psychohistory to work and why the Emperor/Demerzel does prefigures the novel's ending for reasons neither Seldon nor the reader can possibly anticipate. Note how Seldon's boldness with the Emperor gives way to passivity with Hummin. Seldon often wonders throughout the novel why the journalist has such an effect on him. Note also how Seldon dwells on the sexual while observing Trantorians. Sex remains a continual, albeit understated, theme throughout the novel.



"University" (pp. 49-64)

"University" (pp. 49-64) Summary

Seldon is uncomfortable with Hummin's statement. Psychohistory is no more than a mathematical game, and he lacks the historical grounding to go forward. Still, it is hard to accept that the 10,000-year-old Galactic Empire is dying. It has survived rebellions, dynastic wars, and other troubles barely scathed. The last four centuries have been harder, but worlds remain prosperous under the last two emperors. Few dislike Cleon, but many inveigh against Demerzel. Hummin must know Galactic history in detail to speak with such conviction. Seldon believes in the co-eternity of Empire and Universe and does not want to be dissuaded. For psychohistory to be practical one would have to understand the complex histories of twenty-five million worlds and how each and every one acts, reacts, and interacts with all others. Seldon quit skimming the one dull history book-film he has examined before the halfway point. Book-films are devoted to the important planets; what about lesser ones that gain brief importance and fade? "Helicon" yields only one citation in the index, and it relates to Galactic dynastic matters.

Instinct tells Hummin they can risk a brief stopover at a wayside diner, where Seldon quickly learns that Trantorian food outside the Imperial Sector is hard on the palate. Hummin warns him not to show distaste, as this will brand him either an aristocrat or an Outworlder - equally dangerous outside the Imperial Sector. There is nothing harmful in the food and he will get used to the "tang". Trantor imports much food and exports much waste, but it functions largely like an overgrown space settlement, with everything enclosed, artificially cycled, and ventilated. Trantor has real gravity, of course, and the best microfoods-yeast, fungi, and algae-in the galaxy.

Racing again down a tunnel, Seldon asks the nagging question: how can the Empire be dying? Hummin is privy to many statistics he cannot publish. Trantor has declined over twenty-five years, through a declining birthrate and unprecedented emigration. Trade is stagnating. While there are no open rebellions, there is infighting, unrest, and a general weariness as people give up. The rate of technological advance, slowing for centuries, now stands at a crawl. A mathematician ought to have noticed, but that Seldon does not is typical: for contemporary scientists everything is impossible or impractical. They debate which detects an "atmosphere of decay" in the Empire, and Hummin accepts that he might be wrong, because he is forced to guess. A working technique of psychohistory would fix that. Seldon argues that the human race will continue to exist, but Hummin fears universal war and anarchy, having no substitute for the Emperor or Imperial institutions. Hummin declares he is not ready to let go until he has something else in place.

Seldon wonders how Hummin can speak as though he controls the galaxy. He admits that the Empire will outlast him before someday crashing. Neither he nor Seldon has children (Hummin has checked), so they have no stake in the suffering of future generations. Hummin might have accepted that until Seldon becomes his tool. Seldon



despairs of ever being heard. All the space and time in the universe cannot remove the problems. Hummin needs only to know when the Empire will crash, and what might be done to prevent it or ameliorate the consequences. Seldon assures him that the history is filled with simple but unanswerable mathematical questions. Hummin needing to show objectively what is coming is like needing two even numbers to yield an odd sum. Hummin declares that Seldon is "part of the decay", and asks why not try? What better does he have to do with his life? Even if he fails, humanity is no worse off, and if he succeeds, quadrillions may benefit. Seldon agrees, although not knowing why.

Hummin and Seldon drop off the taxi in Streeling Sector. Taking the slow method rather than air-jets has hidden them from Demerzel. They will continue to their destination by Expressway, open monorails moving on electromagnetic fields, a conveyance that Seldon has used before. He observes many young people, belying Hummin's comments on the birthrate, and is pleased his clothing fits in. There are no private vehicles as in Imperial Sector. Hummin observes how the marvelous Expressway network is no longer properly maintained because funding is diverted unproductively to keep happy the massive armed forces, unused during fifty years of peace. Hummin recommends this be factored into psychohistory. Their destination is top-rated Streeling University, like all campuses, an "unbreachable sanctuary". As a good mathematician, Seldon will be not only safe, but also useful while developing his notions as promised.

Streeling Sector appears to be built largely underground. There are patches of green and trees. Dome lights dim in imitation of dusk, synchronized with conditions outside. This is done planet-wide as a psychological boost. Seldon realizes how little he knows of life outside Helicon, which reinforces his certainty that psychohistory is impractical. Psychohistory is like the childhood puzzle: one can make a square of platinum that people cannot lift unaided by making it too small to surround. At the University, under deep purple skies, Hummin calmly tells Seldon he may spend his life here. At any rate, that life is changed since he attracts Imperial-and perhaps others-attention. Seldon no longer belongs to himself any more.

"University" (pp. 49-64) Analysis

"University" uses travel from Imperial Sector to Streeling University as an extended forum for Hummin's disclaiming on the crumbling Empire and for continuing to push, more forcefully, for Seldon to work on a practical application for psychohistory. How he can speak with such certainty and sense of empowerment-as though he were in control of the situation a la Demerzel-becomes clear only at the end of the novel. At this point, it puzzles Seldon, who is beginning to feel responsibility, for the galaxy rests-unfairly-on his shoulders. Seldon begins seeing how various sectors of Trantor differ and glimpses why the grand civilization may be declining, which is Hummin/Demerzel's intent during the "flight".



"Library" (pp. 67-88)

"Library" (pp. 67-88) Summary

Seldon looks ruefully around the sparse, windowless room provided to him, but is assured he will receive comfortable accommodations in the morning. People in the university administration owe Hummin favors. Preparing to depart, Hummin leaves a credit tile to cover ordinary expenses and says Seldon is safe unless "student-agents" lure him off campus. No one is ever *absolutely* safe, so he should be cautious, but not cower. Others know Streeling better than he. Seldon tosses and turns that night, lamenting the loss of his only friend, before exhaustion claims him.

Seldon awakens in the dark to a red light, buzzer, and rapping at the door. A gentle female voice identifies Dors Venabili, and he asks half an hour to get himself together. Finishing, he peers out cautiously. Venabili points to a clock that reads 0903, apologizes for Hummin forgetting to warn Seldon about her visit and for alarming him with "radio-holographic identification." Seldon relaxes. Venabili is average height for a woman, slim, and well built; her hair is reddish-gold and curly (comical on Helicon), not amazingly beautiful but quite pleasant, and *very* young. She either reads minds or catches Seldon checking her out and calls him on it. She insists on using first names, for the university is quite informal, and asks him to consider her a friend and protector. The university is short of mathematicians and may hire him to program teaching computers. Outworlders are a minority at the university and suffer some bias. Venabili comes from Cinna. Heading to breakfast, she assures Seldon that menus in the faculty dining room are not bad. He is surprised that Venabili has had her doctorate for two years and will soon turn thirty. The exchange of pleasantries helps him get over being a stranger in this world.

During breakfast, Venabili introduces Seldon to colleagues but knows no mathematicians. Her specialty is the rise of Royal Trantor. Seldon regrets never having studied history, which he now needs to fold in with mathematics. Brooding about his horrible, complicated, and likely hopeless specialization, Seldon considers how this woman may ease his exile, and recalls an ex-lover he has blocked from his mind. At least he has a scholarly companion. Hummin has briefed Venabili on psychohistory. Changing the subject, Seldon asks why the government leaves the university alone, since that is hardly the case at home. Venabili assures him that Trantor is nearly unique in this. Since most Imperial officials are educated on Trantor, to pick up the "patina", Outworlders must get something to compensate for uprooting themselves and assimilating. Status, power, money, and freedom are the package. Allowing students to demonstrate peacefully and experience liberty is not government forbearance-it is just clever. As Venabili intends to remain a scholar, teaching and producing book-films, and perhaps one day returning to dull Cinna as a professor, she is making no effort to become a Trantorian like future administrators. Venabili is sure that as a quasi-faculty member Seldon will be allowed to use the history library, but worries that he lacks the research skills specific to history. She suggests a non-credit course orienting undergraduates to library use, if he does not find that beneath his dignity. Seldon



realizes that he is beginning to like Venabili, wants to be educated by her, and finds himself wanting to "seize psychohistory by the throat". Venabili catches the suggestive tone in his voice, but maintains that classroom instruction has advantages. Seldon wonders if formidable Hummin has counted on his falling under Venabili's influence quickly.

Cleon I finishes another inescapable formal state dinner. His wife is no emotional help. Theirs is a political marriage that has produced an heir, so they ignore one another. The instant Cleon calls for Demerzel, he appears. Cleon hates those times when his chief of staff must be away on official business. Cleon asks about the mathematician fortune-teller, and forces him to admit he has failed to take care of the problem. Demerzel describes how his plan to return Seldon to his home planet swiftly is thwarted by Seldon's ability to fight and help from an unexpected passer-by. They know Seldon is at Streeling, temporarily untouchable. Cleon dislikes all such words that suggest his power is bounded. Ignoring the veiled threat, Demerzel hopes the environment will help Seldon realize psychohistory is not impractical. He might then join them voluntarily. Cleon worries about someone else, like the Mayor of Wye, snatching Seldon from the university, but Demerzel downplays this. Cleon maintains that if they know about Seldon, so does Wye. Should that happen, Demerzel observes, he will do whatever it takes to keep him from other hands-including having him killed.

Six weeks into his stay at the university, Seldon sits in the alcove assigned to him, furious with the compilers of history. All his notes and all he knows are useless. His unaided work on the computer is slow. His week of instruction yields useful techniques, but uncomfortable situations. To overcome feelings of inadequacy, he offers Venabili beginning tennis lessons, which she masters with astounding speed. His learning to think outside the mathematical model for use in history goes much more slowly. Seldon admits he has time only to browse rather than study deeply, but already sees that book-films concentrate on the same few events, mentioning just twenty-five of the twenty-five million worlds. Venabili steers him away to specialized localized histories, like Helicon's, but Seldon objects these are largely mythical and never mention the planet's contributions to galactic history. He cannot accept Venabili's contention there may have been none; influences are inevitable. Everything humans have discovered about mathematics over 20,000 years is stored in computers, but historians pick and choose. Venabili explains that mathematics is an "orderly thing of human invention", all one piece, while history deals with the "unconscious working out of the deeds and thoughts of quadrillions of human beings". When Seldon says he must know *all* of history before he can work out the laws of psychohistory, Venabili judges he will fail. Seldon is tired of hearing what he used to say, but now has begun to doubt. He is not ready to give up, but can think of no way out.

"Library" (pp. 67-88) Analysis

"Library" introduces another major character, Dors Venabili, as Hummin slips into the background. Seldon takes an instant liking to the pretty young historian, which immediately warms his dismal outlook on life and his work. Their disciplines are too



diverse methodologically for Venabili to be much practical help to Seldon, but her presence makes such a difference that he wonders if Hummin intends for her to boost his spirits. The quickness with which Venabili picks up tennis and apparent ability to read Seldon's mind only make sense to him later; at present, he is too busy adjusting to his new life and an academic field that has never interested him to give it much thought. That Wye Sector is a threat to the Imperium is hinted a second time, building anticipation that it must play a central part in the novel's outcome.



"Upperside" (pp. 91-114)

"Upperside" (pp. 91-114) Summary

Next day, Seldon is in the library chasing leads, unwilling to admit failure, when a passer-by alerts him to the fact he has been screaming. Seldon is aware that he does this when frustrated. Lisung Randa, an instructor in psychology, asks professionally how a history library can frustrate a mathematician. Seldon explains his situation and how he is not handling it well. Randa cannot understand Seldon's papers but is curious about *psychohistory*. Seldon assures him that it is an abstraction; to make it practical he needs to know history. Randa points out that Seldon has been at it for mere weeks and that it may take a lifetime to make an inroad. Rather than "driving himself to distraction", Seldon should see Randa's meteorologist friends, who face even greater complexity in trying to generalize the phenomena of weather on twenty-five million planets. Trantor presents a great puzzle, as urbanization has heated the atmosphere, changing "normal" weather patterns into constant cloudiness and frequent precipitation. Jenarr Leggen is part of a project deploying instruments on "Upperside". Most of the frustrated researchers are Outworlders, since Trantorianians suffer vertigo outside. Seldon believes going up might get his mind off his own problems for a while, and Randa opines that he may even learn something useful to psychohistory. Many things are possible but not practical, Seldon reminds himself.

Venabili is amused and figures it may be a welcome change, provided Seldon is not agoraphobic. She is too busy to accompany him and warns him to stay close to the meteorologists, as people have been known to get lost up there. Leggen is an "unmerry" character with a resonant voice. He lends Seldon a tattered sweater before heading up, leading two men and two women, all heavily and garishly dressed. They enter an "Official Use Only" elevator whose quivering reminds Seldon of Hummin's observations about societal decay. He asks Clowzia, whom he assumes to be an undergraduate or apprentice, how high they are going. She responds that they have started very deep, since energy costs are lower at depth, and the university uses a lot. A winter wind hits Seldon's face when the door opens. Baby-faced Clowzia offers him her hat.

Seldon finds himself standing on dull metal and notes that he leaves footprints in dust. Leggen approaches, asks if Seldon is as good a mathematician as Randa claims, offers Clowzia to answer questions, and indicates he may ask for help on an "intractable problem". Leggen explains how to use the elevator, should it get too cold to bear. Clowzia giggles that Leggen is always annoyed but today is particularly frustrated because his prediction of a break in the weather has failed. Seldon asks Clowzia why the ground is not level and she explains that the final connecting of Trantor's various domes is to blame. Accident has now become tradition. Seldon adds this to his mental catalog of trivial psychohistorical laws and wonders how many billions there must be. Clowzia is Trantorian and hates being on Upperside, but her specialty requires fieldwork. She mentions offhandedly that in warm weather vegetation abounds on the



domes. Soil accumulates in the creases where domes meet. There are also many animals here. Visitors report that Trantor looks like a lawn from space. Clowzia has seen nearby a copse of evergreens standing six meters high. Leggen summons Clowzia, with whom Seldon has wandered a good distance, and he continues walking, wondering if Clowzia is pulling his leg, but making careful note of his path, following moss growing in a crease.

Hearing mechanical sounds, Seldon dismisses them as necessary in such a technological world, until he realizes they are coming from overhead. Spotting a small, dark dot against the clouds, Seldon jumps to the conclusion that he is being hunted and runs for the trees. He begins making random observations until the "jet-down" appears, hovering like a soaring bird. Seldon can imagine no innocent reason for one to operate up here and assumes Uppeworld must be outside the university's jurisdiction, leaving him vulnerable. As the jet down noses around like a predator, Seldon fears it will discharge soldiers against whose neuronics his twisting moves will be useless. When the jet-down fails to land, Seldon considers it may belong to the meteorologists, making it foolish to hide.

As dark falls and the temperature drops, paranoia becomes dangerous, but Seldon indulges himself in conspiracy theory. How could Demerzel know he would be Upperside? Why would Randa raise the subject so forcefully unless he is a government agent? Why would Leggen make him such an easy target in this sweater? Could Clowzia have been putting him at ease to isolate him for easy pick-up? Even Venabili, conveniently busy, knows his plan and fails to stop him. Seldon's feet are frozen when the jet-down finally departs, but Seldon waits to be sure this is not a feint. It is twilight as he starts retracing his path, hoping the meteorologists will have artificial lights. As he walks, Seldon realizes multiple creases lead away from the copse and his turns are at best wishful thinking. The sky grows inky black. Leggen's party may have gone below. His life depends on assuming he is headed in the right direction. His timeband reads 1847, and with new spirit, he resolves to walk for thirty-five minutes before reevaluating his plan. He doubts it makes sense to shout, then criticizes himself for not shouting all along, and finally begins calling for help. He doubts anyone inside the dome can hear his voice or footsteps. When sleet begins to fall, Seldon wonders if it would not have been better to let the jet-down capture him. Even better: Hummin would not have interfered and he would be home on Helicon. He briefly rubs his frozen feet, reminds himself he dares not fall asleep, and promptly falls asleep.

"Upperside" (pp. 91-114) Analysis

"Upperside" begins by showing Seldon fighting academic frustration. He studies history because he enjoys Venabili's company and because he has promised Hummin. This contrasts with the boldness he shows with the Emperor. Note how easily paranoia sets in when he is lost Upperside; Hummin has planted the fear of Demerzel so deeply in Seldon's psyche that he jumps to conclusions and sees everyone he has met in the university plotting against him. He is, in truth, being pursued, but not by Demerzel. Several plausible explanations are offered here and in the following two sections for the

sequence of events that brings Seldon to the point of existential panic. Cold and darkness are the final straw, very effectively portrayed. It is easy to empathize with someone wandering around disoriented, panicked, and too exhausted to follow his survival instincts. The cliffhanger ending leads into a short-term resolution in "Rescue" and to Seldon's bonding even closer to Venabili, who's pursuit of Seldon is made clear only at novel's end.



"Rescue" (pp. 117-133)

"Rescue" (pp. 117-133) Summary

Leggen does not want to be distracted while entering data; he brusquely tells Venabili that Seldon is a useless, disinterested idiot who must have come down alone while no one is watching. Clowzia says Seldon is sharp and interested in everything, but she too has failed to see his exit. Both are concerned that Seldon might be on Upperside, but as an intern, Clowzia lacks authority and the key codes to search. Knowing Leggen will not help, Venabili searches everywhere she can think of, and then accesses a university computer to track down Rogen Benastra, Chief Seismologist. Racing to Benastra's apartment, she announces an emergency and leads him through a detailed search of records in the Seismology Building. Benastra assures her human footsteps will be scarcely detectable, but sets the equipment to maximum sensitivity, and advances the records in fifteen-minute intervals from 1500, concentrating on the vicinity of the meteorological station. They detect trudging footsteps that stop fifteen to twenty minutes ago. They get an angry Leggen on the phone, summarize the data, and Venabili threatens a murder charge if Seldon dies. The three ride the elevator up in silence, taking a thermal blanket and two photonic founts. None is dressed for wet snow. Venabili lights the founts and begins casting about in the dark. They find Seldon, alive, ten meters from the door, wrap him up, and carry him into the elevator. Leggen has grown contrite, but says others are to blame for Seldon ever coming up here.

The elderly attending doctor is delighted to see a case of exposure, but assures them he knows the treatment from reading about the Outer Worlds. Venabili does not leave his bedside for days. When he awakens, she takes his hand and declares how frightened she has been. He confesses that he had briefly thought her part of a conspiracy to get him outside the university confines. She informs him Sector jurisdiction extends from the planetary center to the sky. Venabili defends the busy meteorologists, including Clowzia, whom Seldon still suspects. As he tells her then nightmare in full detail, Venabili says the jet-down must be a hallucination; had Imperial forces taken Seldon up top, it would have raised as big a "rumpus" as on campus. She has no other explanation and worries about what Hummin will say; they must tell him.

Leggen comes to visit, looking back and forth between Seldon and Venabili, obviously awkward with small talk. He forces out an apology, to which Seldon says he should not have wandered off. Venabili takes Leggen aside to set his mind at rest about repercussions and thank him for his help. She asks whether he sees anything odd on Upperside, like a search vehicle. He remembers a hovering jet-down, but figures it was studying the clouds and upper atmosphere. The time and nature of their own experiments is published, so other stations might have wanted to coordinate measurements. Leggen cannot say what station might have sent it, and Seldon had been too frightened to observe markings. Pressed to guess, Leggen lists stations at Hestelonia, Wye, Ziggoreth, and North Damiano-but there are at least forty others.



Leggen denies telling anyone that Seldon would be along. When the meteorologist departs, Venabili straightens her patient's bed, and settles down to watch him sleep.

"Rescue" (pp. 117-133) Analysis

"Rescue" concludes Seldon's harrowing adventure in Streeling, recapping the people he has met and the events that have transpired, and examining the "plot" against him more dispassionately. Venabili shows fierce tenacity in fighting colleagues' apathy and denial to get to Seldon in the nick of time. The excuse making is amusing, except that the reader knows the seriousness of Seldon's situation. It can easily be seen as either a plot or a comedy of errors. The gathering of seismological evidence is engrossing. "Rescue" ends suggesting that Hummin will reappear and be none too happy with Seldon or Venabili.



"Mycogen" (pp. 137-155)

"Mycogen" (pp. 137-155) Summary

Hummin is frowning over him the next time Seldon awakes. He says he has been safe for two months and it is not easy for him to get away like this. He does not join Seldon and Venabili at breakfast. Both seem absorbed to Seldon. When Seldon finishes eating, Hummin blames Venabili for the crisis, but Seldon accepts full blame for insisting on going. He also reminds Hummin that she has fought great resistance to affect his rescue and save his life. Venabili is embarrassed and Hummin wants to go forward. With a Distortion Field deployed, they talk candidly. Seldon has been paranoid about Demerzel, thanks to Hummin's persuasiveness. Hummin says Demerzel might be hovering anywhere and Seldon would not know until it is all over. Venabili reports on Leggen's theory about the jet-down and Seldon cannot accept it as plausible. He thinks back carefully and says the jet-down's flitting in and out, seemingly homing on him, are not consistent with scientific research. Hummin points out inconsistencies in Leggen's behavior, including his acceptance of a visitor, the way he used Clowzia to set up an alibi, and not showing undue shock when Seldon is found alive. Seldon doubts Leggen is an agent because he thinks he needs a clever mathematician to help him. He had forecast sunshine, and became angry that the day's experiments cannot be carried out as planned. Seldon draws Clowzia into looking at vegetation and moves out of sight only after Leggen summons her. He suspects Randa, who may act like an anti-imperialist, as a cover for being an agent. Venabili refuses to believe this and insists Randa has simply arranged to clear Seldon's head. Even if Randa is not an agent, he may have talked too openly about Seldon's plans and been overheard by Demerzel's people. Hummin asks about Leggen's list of four suspect sectors, confirms that Seldon sees no insignia, and offers his hunch: Wye Sector is behind it.

Wye has been ruled by a single dynasty of Mayors for 3,000 years. About 500 years ago, two emperors and an empress from the House of Wye occupy the Imperial throne, and their descendants have never forgotten the legacy. While never openly rebellious, they remain neutral in civil wars, helping to prolong the crises in order for the combatants to turn to them for a compromise solution. The present Mayor is very capable and ambitious, albeit old. He stands a chance of succeeding Cleon I over Cleon's too young son. If the Mayor of Wye has heard of a "useful scientific prophet", he will want to control him for his own benefit. Seldon objects that all of this is speculation to which Hummin agrees, adding that the more talk about psychohistory, the more powerful people will want to secure Seldon's services. He needs a safer hiding place, and finding the right one requires thought.

Hummin remains silent through lunch and Seldon imagines him reviewing Trantor's immense geography. Helicon is marginally larger and has a smaller ocean, but it is sparsely populated, with only scattered cities. Trantor is *all* city. Helicon has twenty administrative sectors while Trantor has over 800, plus subdivisions. Seldon suggests they figure out the most benign competitor for his supposed powers and turn him over.



Seldon is surprised that Hummin would set himself on a level with the Mayor of Wye and the Emperor, but Hummin insists his desire to control Seldon equals theirs. They, however, look to strengthen their own power and wealth, while he seeks only the good of the galaxy. He asks Seldon about progress-the beginning of a solution.

Venabili interrupts to ask how one can know something is both possible and impractical and what suggests that psychohistory is in this category. Hummin would also like this explained to him, free of mathematics. Seldon struggles to comply. To understand some aspect of the universe, one must simplify it to truly essential elements, eliminating complications. Such a model/simulation can be represented on a computer screen or as a mathematical relationship. Ancient, non-relativistic gravitation theory is an example; without its equations, knowledge would be sparse indeed. As phenomena grow more complex, so do the equations, and simulations become harder to grasp. Simulations of simulations drop essential characteristics, rendering them useless. The "least possible simulation" (LSP) grows complex faster than the object being simulated and catches up with the phenomenon. Studying the universe, no simulation can be smaller than its complex reality. Simulations of smaller parts cannot be added together to produce a proper picture-and the parts themselves are infinite. Seldon can only predict future events statistically by comparing the probability of alternate sets of events, but if the process takes billions of years to run through, it is impractical. The university library does not help and Venabili can only suggest ways of looking at history. Hummin sees no reason, therefore, for them to remain here.

An idea has been "buzzing" in Seldon's head since before Upperside. Reading convinces him that galactic society is less complex 12,000 years ago, as the Empire is forming (ten million worlds), and more so 20,000 years ago (only 10,000). One might be able to look back to the single world of myth. Psychohistory could be worked out on those bases and checked against actual outcomes. Hummin sniffs that prior knowledge will skew the values plugged into equations. Venabili disagrees, for historical sources are sparse eleven millennia ago. Seldon is dismayed, believing that computers have surely stored ancient records. Venabili points out that up to a third of the records in the Imperial Library have degraded to rubbish and are retained only because of tradition. Streeling's collection is purged every ten years. Frequently used records remain useable and are widely reproduced, preserving essential points in history, but the farther back one goes the less is preserved. Seldon cannot believe that knowledge is allowed to disappear, but Venabili cites the cost of refurbishing data. Even science understands cost-effectiveness. This conversation suggests to Venabili that Mycogen Sector would be good for Seldon, and Hummin begins arranging their departure that night.

Venabili suggests Seldon rest, and he looks at her "hungrily" as they discuss sleeping places. Seldon apologizes for being so much trouble and interrupting her work, and says he will miss her. Venabili is going along: Hummin wants her to guard Seldon and has arranged a leave of absence. He is a remarkable, influential, and persuasive man, and a strong, idealistic dreamer. Unable to restrain himself, Seldon asks if they are intimately involved. Venabili declares this none of his business and finds the idea of being anyone's "property" insulting. Unable to sleep, Seldon asks why Mycogen is a



good place for him. Venabili explains that it is a small sector of some two million inhabitants, closed and traditional, and supposedly possessing unique ancient records. Outsiders consider Mycogenians "madcaps", but that may be unfair. Venabili insists they sleep, and somehow Seldon does.

Seldon and Venabili leave the university at 0300, with her in the lead. Seldon is still bothered by the degree of intimacy between her and Hummin. They wear hooded cloaks, because Hummin wants to take no chances after Upperside. He cannot accompany them, because staying away from work is risky. They ride a nearly empty Expressway car to an exit where Seldon is confused by wordless signage. Venabili explains the value in non-homogeneous worlds-another area of study for psychohistory. Seldon responds that billions of rules cannot produce generalizations. He worries about taking an air-jet, recalling Hummin's earlier caution, but Venabili points out that they are taking a private air-jet from an obscure port. Seldon again asks uneasily about her closeness to Hummin, and she declares him "the best". Venabili exchanges passwords with the pilot and they board the air-jet.

"Mycogen" (pp. 137-155) Analysis

"Mycogen" begins with a final analysis of the Upperside misadventure, with Hummin directing the discussion. Substantive information on Wye Sector is introduced, which becomes important at the end of the novel, and a running play on Wye/Why is launched, which survives to the final pages. After his rescue, Seldon struggles with growing feelings towards Venabili. This rising passion contrasts with Venabili's long explanation of how and why parts of history are preserved and other parts lost. It raises Seldon's level of frustration at being able to make psychohistory practical; mathematics has lost nothing since pre-historical times. Still, he feels compelled to continue trying. Note how Venabili's sounding a feminist chord leads to her suggesting-rather than the perpetual "string-puller" Hummin-their next stop, Mycogen Sector. She cannot know the misogynistic treatment that awaits her, which is told over the next four sections.



"Sunmaster" (pp. 159-178)

"Sunmaster" (pp. 159-178) Summary

Seldon finds uncomfortable the meshed fabric that encircles him, but Pilot Endor Levanian explains it is needed only during take-off. He warns the "youngsters" that this is no ordinary air-jet. Seldon feels a "twinge of horror" as the craft springs into the air and acceleration crushes him into the seat. They plunge through a port and in less than ten minutes are spewed into the atmosphere, decelerate, and the mesh disappears. Venabili pats Seldon's hand to lessen his uneasiness. Above the clouds, stars appear, delighting Venabili and leaving Seldon speechless. This jet is powered by microfusion motor. There are few models in existence, all on Trantor and affordable only by the government. There is no market for more. Seldon whispers, "Decadent", and declines to explicate Hummin's theory. *Real* sunlight overtakes the jet briefly before they descend into dingy gray clouds. Upperside appears a mixture of wooded grottos and grasslands.

Levanian drops off his passengers at a deserted jetport and departs immediately. Venabili knows only that a "Sunmaster Fourteen" is to meet them. Their discussion of that odd name and their own names is interrupted by a deep, severe voice, addressing them as "tribesmen". An archaic ground-car has arrived, driven by a tall, vigorous old man wearing a white gown. Dark blue eyes look out from under a completely hairless head. Seldon answers with automatic politeness and is told that Hummin is being repaid for past services to the Brethren. Few visit Mycogen. They will have a room and be undisturbed and safe. Venabili offers thanks and is rebuked for speaking before being spoken to. Seldon refuses to accompany Sunmaster until he is assured that they will not be bent to customs against their nature; women, for instance, may speak whenever they have something to say. Sunmaster asks the bold tribesman's name and ignores Venabili. He promises to endure the woman's "impudence", but insists they cover their "cephalic hair" and eyebrows, as hair is repulsive and obscene, and Brethren of both sexes are depilated at puberty to remind them of their separateness from mere tribesmen. Seldon selects a skin cap from Sunmaster's supply and struggles to don it; Venabili watches him and puts hers on effortlessly. They joke about the new bald look and Seldon hopes they will not be here long enough to get used to it. Ignoring the comment, haughty Sunmaster drives them to Mycogen.

Venabili cannot believe they are still on Trantor. Everything is the same: vehicles, plain three-story buildings, grayness, and baldness. Seldon suspects it is egalitarianism. Venabili guess grays are women and whites men because the grays never walk alone while whites do-and Sunmaster wears white. When Seldon begins to ask a question, Sunmaster warns him that he is not required to answer anything. Nevertheless, he says they are a farming community entirely and the farms are on lower levels. Every Brother and his family live in "equivalent quarters" and every cohort has an equivalent community. There are no servants and no one glories over another. Gray and white gowns signify sex and the two visitors will be given appropriate ones. Mycogenians have no population increase, as this would require expanding their area, which



surrounding tribesmen would oppose, or lowering their quality of life. Sunmaster cuts off further questions; curiosity is permitted, but it tries his patience. Hummin's people will be safe as long as they do not violate the Micogenian way of life. Seldon chafes at the tone and determines not to stay here if he cannot get the information he needs.

Seldon is distressed by their cramped accommodations, but Venabili believes they are mature enough to manage. Seldon is annoyed at being considered tribespeople-even Hummin-and being restricted in what he can make his business. Venabili minimizes the historical value of ancient legends but sees Mycogenians as almost psychotically "ingrown". That Hummin has broken down those barriers is amazing. Venabili explains that "Mycogen" derives from ancient words for "yeast producer". They use ancient, secret processes, keep volume low and prices sky-high, and cater to the Imperial bureaucracy and the upper classes of other worlds. Riches are less important to the Mycogenians than the Imperials willingness to protect the flow of matchless microfoods. This allows the Mycogenians to preserve their haughty isolation.

Venabili finds a one-book scanner containing a cookbook-another example of waste-and an object that she remembers from a museum visit. It shows Mycogenians are deliberately archaic in order to make their way of life unpalatable to outsiders. The device goes on and Seldon takes it. Unable to provide a required number, he identifies himself by name and asks to speak with either Sunmaster Fourteen or his assistant. Neither is available. In time, someone will show them how everything works. They are cut off from Hummin. With his watch set to university time, Seldon has no idea if it is bedtime, but he is tired. He plans to ask for a tour of the microfood plantations that they seem proud of. Once they open up, he can broach the subject of legends. Seldon feels this is a clever strategy, but Venabili fears a trap.

Seldon awakens hungry and places an angry call to Sunmaster, who is unavailable. The kitchen may be stocked, but they cannot use the appliances. He demands someone be sent over. Two hours later a young man arrives, carrying pots. Graycloud Five is a novice, whose woman has prepared the food that Seldon eats greedily. Feeling less savage, Seldon asks the time and is ashamed to hear that it is the middle of the night. He apologizes profusely for the inconvenience and asks help understanding things at a more appropriate hour. Two Sisters-pardon the inconvenience of a feminine presence-will visit. Seldon believes that if they treat the Sisters like human beings, they will be grateful and will talk about their legends. Venabili doubts they are well enough educated for this to work.

The Sisters arrive six hours later and enter shyly, dressed in velvety gray "kirtles", each uniquely webbed. Shared glances comment on Venabili's eye make-up and lipstick. Similar twittering and chirping illustrates that Raindrop Forty-Three and Raindrop Forty-Five are biological sisters. They speak only with Venabili. Seldon observes the old one is graver and perhaps more puritanical. Venabili explains that she knows how to cook but finds their appliances and foods unfamiliar. The Raindrops offer to make a nourishing lunch and agree to explain what they are doing-although they doubt a tribeswoman can get a "feeling" for it.



"Sunmaster" (pp. 159-178) Analysis

"Sunmaster" brings Seldon and Venabili to a new sector, allowing them as scholars and as caring individuals to analyze a severely ingrown and misogynous society. This offers an opportunity to describe their home planets, however briefly, and to flirt a bit more overtly about living together in close quarters. Mycogen is a very difficult place for the reader to like, no matter how much one commiserates with the Mycogenians' desire simply to be left alone. The High Elder comes off very much as an authoritarian cult leader manipulating his followers, but they have fully embraced the signs that set them apart. The "tribespeople"-a designation that has to offend every reader of the novel-juggle frustration, amusement, righteous anger and contrition when they put folks out in the middle of the night with their demands. With his appetite whetted for local legends, Seldon sees hope for advancing psychohistory, and thinks he knows how to work around the taboo against males and females speaking directly. As a historian, knowing the limitations of oral history and some psychology, Venabili is dubious but goes along. Naivety and boldness increasingly blend in Seldon, and Venabili tries to direct him to a least-dangerous path. Upperside teaches her caution.



"Microfarm" (pp. 181-199)

"Microfarm" (pp. 181-199) Summary

Seldon proclaims the Sisters' meal much better than Graycloud's woman's hurried preparation. Seldon and Venabili discuss the infuriating way in which women are talked of here-and how the Sisters seem not to mind. Venabili sees many but not all of the Sisters' tricks. She doubts any customer-even the Emperor-eat this well. The Mycogenians doubtless reserve the best for themselves. If they stay too long, they will get spoiled. Venabili assures Seldon that the Sisters have heard enough complements about the smells that they know he is grateful for the meal. They are to return tomorrow to give her a kirtle and take her shopping for prepared meals. They take for granted that tribespeople cannot appreciate the artistry of cooking.

Seldon asks if Venabili's experience on Trantor suggests "supernaturalism" among the Mycogenians. Interpreting this to mean "religious", she says this would not be surprising. It is common on many worlds and has grown in recent turbulent centuries. Seldon again regrets his ignorance of history and asks if women tend to be more religious than men. Venabili says those with the smallest stake in the material world turn to supernaturalism, but in some cases, the rich and powerful practice it. Venabili would risk a week's income but not her life on "subhuman" Mycogenian women being religious and involved in the legends.

When Venabili jokes this is psychohistory Rule No. 47,854, Seldon is offended. He is looking for generalizations and a means of manipulation, like under what stimuli humanity will tend to become more religious. Venabili is horrified, but Seldon objects, claiming that individuals remain free agents. Hummin is anxious for a solution and he is anxious to please persuasive Hummin. Seldon can only convince himself and Hummin that psychohistory is not a "practical way out" by following all possible leads to show how they fail. Venabili is certain that no Mycogenian will describe their early world for him. She says successful religions tend to accumulate wealth, and many have a book or books of rituals, history, poetry, etc., which are sometimes used for proselytization, but often are secret. She has never heard about a Mycogenian book and doubts they will see one even if they exist. Seldon says grimly that this is at least a starting point.

The Sisters return, smiling, and present Venabili a folded gray kirtle. Raindrop Forty-Three then hands her a white one for Seldon, which he refuses to take from her. All three women freeze as Venabili pleads for him not to make the Sisters miserable. He knows the prohibitions. Seldon argues that the rule applies to Brothers, not tribesmen. He refuses to believe that an "honored guest" could be treated as though he does not exist. He plans to lodge a complaint. This breaks them and Raindrop Forty-Three begs him not do it. She hands him the kirtle and he accepts with thanks. In the bathroom, Venabili demands why he is so brutal, and he explains that her inhibitions should be broken down and she start talking. Emerging in kirtle, Seldon asks for a tour of the microfarms from Raindrop Forty-Three, striking a nerve by suggesting she may know



nothing about them. She announces proudly that all Brothers and Sisters work in them during their lives, agrees to take him tomorrow morning, but warns him icily not to expect to learn secrets.

Seldon sleeps badly after arguing Venabili out of accompanying them on the tour. He promises only that he will not treat her unnecessarily harshly. It is their first fight and Seldon is not convinced the Sisters will show up. They arrive take their charges their separate ways. Raindrop Forty-Three has obviously been steadying herself for this ordeal all night. He worries how she will react if they meet anyone she knows on the streets. Descending underground by staired ramps called "escalators" Seldon grows apprehensive. Earlier experience with microproducts has always turned his stomach. When the air remains clear countless levels down, Seldon asks when the microfarms begin. He explains his Helicon experiences, to which the Sister replies that they use exclusive ingredients and processes. They say the tribesman called Emperor eats only Mycogenian products. Observing the automated vats of algae, Seldon asks about the death of human workers. Raindrop replies that they work as needed and the details are none of his business. He assures her that he expects no state secrets, and recalls her statement that all Brothers and Sisters work here at some point. Raindrop is talking more freely, but whenever he touches her arm, she rubs the spot.

Passing through a swinging door, Seldon gets a whiff of the remembered odor. Some workers wear lighted headbands. He notices that Raindrop in profile under dimmer light is beautiful and grows angry at the Mycogenians for condemning her to baldness, and then recalls that he shaves daily because he finds stubble uncomfortable. He knows that there are worlds where men grow their facial hair wild and wonders what they would say, seeing him. Raindrop directs Seldon to a tray of little spheres and tells him to ask for a few from the attending Brother. The Brother heartily offers a handful. Seldon selects one, but Raindrop eagerly takes a handful. Explaining that these are raw "dainties", she savors one. Seldon is amazed at the indescribable sensation of having one dissolve in his mouth. Raindrop assures him no two taste alike. She recalls having a most unusual one at nine-and realizes she is speaking too freely. Seldon sees it is time to move the conversation to his purpose.

Talking quite freely now, Raindrop remarks viral infections occur requiring whole vats to be destroyed. Computer programs cannot predict the unpredictable. Shuddering, Seldon says this cannot be, since forces guide and care for humans. The Sister stiffens, studies him, and asks, "What?" Stumbling over unfamiliar words, Seldon tries to explain and Raindrop asks why he does not just say "religion", which is something for tribesmen. She controls herself and says flatly that Mycogenians are not a religious people and never have been. Seldon says he mentions this only because their customs seems so rigid. Raindrop says a charge of religion is insulting because it presumes they cannot take care of themselves. Seldon counters that he intends no offense. He is disheartened until she remarks, "We have something far better. We have *history*."



"Microfarm" (pp. 181-199) Analysis

"Microfarm" develops the theme of feminism and locks Seldon and Venabili in their first arguments. Seldon's plan in the previous chapter to treat the Raindrop Sisters humanely in order to get them to tell their stories disintegrates and he turns rapidly to an unexpected brutality, so focused has he become on breaking the taboo and getting his Mycogenian guide used to ignoring it. The technique appears to work, but two chapters later it will be seen to be not only cruel but also ineffectual. Deprogramming cult members comes to mind, with the gamut of pros and cons associated. It is hard to sympathize with Seldon in the apartment. He improves during the microfarm tour. Both seem to humanize and the psychological walls around Raindrop Forty-Three seem to be crumbling until religion is brought up. Venabili has set Seldon and the reader up to believe the Mycogenians are rather mindless practitioners, but surprisingly they are dedicated atheists and aficionados of history. That Seldon has "lucked out" seems very clear.



"Book" (pp. 203-222)

"Book" (pp. 203-222) Summary

Wild-eyed and breathing heavily, Raindrop leads Seldon up a ramp to a vacant room; she sits on the single chair and indicates he should take the cot. She will be cast out if anyone learns about this, but she must know what this talk about religion means. Raindrop has dropped all passivity and shyness. Seldon explains that he is a scholar seeking to understand human beings and understand history, and on many worlds ancient historical records have "decayed into myths and legends", often religious. Raindrop reiterates they have *real* history dating back 20,000 years. At this point, Seldon admits he is not a trained historian and wants to involve Venabili. Recalling stories of flying reptiles on ancient Helicon and other "self-serving heroisms and minidramas", Seldon asks how Mycogenian history begins. With a faraway look, Raindrop recalls *one world*, where they live happily for thousands of years before having to take refuge on Trantor. Here the food they grow buys them freedom to preserve their ways and dream of return.

Full details are preserved in a book that all Mycogenians carry at all times. They do not know where this world is but will find it one day. Raindrop suspects that Seldon wants something more than seeing a farm, but has not expected it to be the *Book*. She places one condition: Seldon must remove his skincap. She offers no explanation and as he begins to remove it, she does it herself. Panting, she insists on running her fingers through his damp hair and seeing and touching his eyebrows. As Raindrop sniffs her fingers, Seldon asks uncomfortably if that is it. She reserves the right to do this again and he agrees, provided he keeps the Book long enough to study it. She withdraws it and hands it over. As he restores his skincap, he notices Raindrop lick one finger.

Venabili looks like she might want to touch Seldon's hair as he tells the story. He pulls back, feeling like a pervert. Venabili laughs, asking if he was afraid of sex or hoped for it. She continues kidding him and explains how taboos generate sexual excitement in many cultures. Would Seldon be interested in women's breasts if they were routinely on display? She assures him he would not and tells a story about how on Cinna she had been sitting on a beach when a young man she has previously met steadies his balance as he sits on the arm of her chair, by putting his hand on her bare thigh. They talk about how unhidden skin loses its sexual quality, until the discussion makes him remove his hand. That night, Venabili dresses for dinner, finds the young man, and invites him to put his hand on the same spot in public. He tries but cannot violate proprieties. Seldon is certain he would have touched her thigh. He is aware that she has little on under her nightgown, but is not shocked by it. She supposes that if they are cooped up together, they must learn to ignore such things, to which he suggests they could *act* on them. Venabili continues talking about sexuality. Planet Derowd once allows complete hedonism before marriage and absolute monogamy afterward-and it works for 300 years until other planets complain about losing tourist business. At the university, she has observed social pressures and she doubts any two sectors treat sex the same way.



All this talk has convinced her she will never leave Seldon out of her sight again. What if he had been caught in "sexual escapades" with the Sister? He goes nowhere without her.

They turn to the Book. Raindrop has shown him how to activate the microprint on pages that appear to be blank and adjust the rate of line roll to one's reading speed. Venabili is disappointed to see the text in a pre-galactic language she cannot read, but Seldon demonstrates how to activate the translation. Venabili is delighted and cannot believe no outsider has discovered this. Seldon gushes that this Book may push him in the direction of psychohistory, but accepts Venabili's suggestion that he sleep first. He puts it under his pillow so she will not read it first. She has no intention to argue and asks what he had been about to say earlier. The hand-on-thigh has slipped his mind completely.

When Venabili wakes up, she finds Seldon reading in the bathroom. He is disappointed with this virtual encyclopedia whose index holds only useless names. There is nothing about the Galactic Empire or pre-Imperial kingdoms. It deals with a single world's internal politics. Venabili points to the biological arguments for a single human point of origin and says "Earth" is the popular name for this mystery planet. He finds a reference to "Aurora", and Venabili wishes they could research that at Streeling. She is certain Mycogen has no libraries. Seldon mentions that the Book talks of people living 300-400 years, which Venabili says is common in books of origins. The best cure for gullibility is sleep, she adds.

Awakening refreshed, Seldon is eager to continue studying. First, they debate the likelihood that contemporary Mycogenians live for centuries. Seldon asks what Venabili knows about "robots", and she says they are a very popular prehistoric legend on many worlds. They grow in numbers and abilities until they threaten humanity and are destroyed. The theme shows anxiety over encountering superior intelligences as humans begin exploring the galaxy. Seldon reports robots figure positively in the Book and asks he to see what Raindrop Forty-Five knows about some mythic structure. Venabili interrupts to provide the word: temple, another thing Mycogenians are unlikely to talk about.

"Book" (pp. 203-222) Analysis

"Book" serves as a debriefing on Seldon's adventure and an opportunity for him and Venabili to discuss in rather academic terms the not-unrelated subjects of sex and religion. Relations between Seldon and Venabili are heating up, but both hold them in check. Asimov takes the opportunity to suggest that alternative lines of technology are possible. The Book lies outside the norms that the rest of the literate galaxy has followed but is quite clever in operation and user-friendly. Note the scholars' prejudicial view that Mycogen cannot possibly have true libraries and that believers depend on just one Book. This may be covert commentary on the phenomenon of fundamentalism in the current world. Seldon remains frustrated by the limitations of history, but seems to be getting somewhere.



"Sacrorium" (pp. 225-248)

"Sacrorium" (pp. 225-248) Summary

When the Raindrops arrive, the younger is cheerful but the elder cannot look at Seldon. He asks Venabili to assure her that he will return the Book as soon as possible, but Venabili explains privately that if she even mentions the Book the poor woman will assume he has told the whole story and be totally shattered. He agrees. The women leave and Seldon resumes reading, but he is distraught by the time Venabili returns at dinnertime, not knowing how she is. Venabili doubts there are any communication devices in Mycogen, as they would facilitate unwanted contact with the outside. Based on what he has been reading, Seldon agrees. Venabili reports hearing about many temples, and has gotten directions to the central one, the "Sacrorium", along with a warning that women are allowed inside only on special occasions. The Sisters know only that it is dedicated to their former, better world, Aurora, a word that is taboo to pronounce to outsiders. Raindrop Forty-Three is apparently in trouble while he has the Book-and they will be, if found out. Returning it will be no loss, Seldon says, as 95 percent is dull political infighting, homilies, and self-righteousness. The last 5 percent, however, discusses Aurora and mentions robots that exactly resemble human beings and have extended life spans. Venabili warns not to take this seriously, but he continues: at least one survives and resides in the Sacrorium. Imagine how useful he would be for psychohistory. Venabili is adamant: they go together.

They set out guided by a booklet rather than a computomap, and there is no direct route. Fellow travelers ignore them as they board an outmoded gravi-bus to the connection to the Sacrorium station. Not surprisingly, this route is heavily traveled and transportation is a free service. Venabili whispers that they are being watched. The man she indicates is thin, swarthy, and very old-atypical of Brothers. He hands the tribesman a warning and mouths "Hair." Seldon adjusts his skincap and mouths thanks. In a normal voice, the man asks if they are going to the Sacrorium and suggests they go as a threesome. Venabili ignores the male as a Sister should, but pats Seldon's knee to signal approval. They speak no more until they arrive. The Mycogenian suggests they purchase lunch now to avoid the crowds and eat in his favorite outdoors spot. When Seldon suggests the grounds resemble the Imperial Palace, he says that *they* too have copied "our Dawn World".

The man introduces himself as Mycelium Seventy-Two and invites Venabili to sit with them and speak if she wishes. Mycelium explains Mycogenian naming conventions and tells Seldon how dangerous his protruding lock could have been. As a scholar, he has nothing against tribespeople. He is a graduate of the Sacrorium School and is licensed to use both the tribal library and computerized reference library. They eat in silence until Seldon observes that every Brother who enters or leaves the building wears a red sash. Mycelium explains that the "obiah" symbolizes joy and the blood one would spill to defend the Sacrorium. He confesses that no one has shed blood thus and inside there is mostly silly wailing and prostrating over the Lost World. He is a



scholar, not a believer. Admitting to sixty-seven years, Mycelium says someone has been talking out of turn if they know about myths of extended lifespans. They eat more nutritionally than most, but 100 is a long life. Mycelium has read the great literature of the tribespeople and knows about discrimination in other cultures, which is why he has never traveled.

Seldon asks if tribespeople may enter the Sacratorium as observers. Only "Sons of the Dawn" may enter, with Daughters on certain days and times. Mycelium attends as a child but finds it depressing: no conversations, laughter, or even looking at one another. Attention must be totally on the Lost World. Seldon says they too are scholars, which fits, says Mycelium, because Mycogen allows only Imperial officials, diplomats, traders, and scholars. Mycelium shows surprise when Seldon admits he has read the Book about the Lost World and robots. That is why he wants to enter the Sacratorium: to see the robot. Mycelium dismisses this as nonsense. There is no indication that any robot exists in the Elders' aerie. Warning them not to try to go there, Mycelium hurries away, apparently spooked by the approach of a tall, angry-looking man. Seldon identifies them to Skystrip Two, Elder of the Sacratorium, and claims that they are studying Mycogen by authority of Sunmaster Fourteen. The man who has just departed hurriedly is a stranger who has told them that tribespeople may not enter the Sacratorium. Skystrip warns that the people would riot if they heard a tribesperson had invaded their area. When Seldon mentions the robot, Skystrip whispers ominously that they had better leave instantly.

Not until breakfast next day does Venabili bring up the fiasco. Seldon claims the Elder's reaction confirms a robot inside, and he intends to buy an obiah and see it. He will enter the library annex where data are kept on tribespeople, proceed into the Sacratorium, where everyone keeps his eyes down in meditation, and finally find the Elders' aerie, probably in the central tower. It is too late for him to back down; he has a gut feeling this is the key to psychohistory. Venabili announces she will don a white kirtle and obiah and go along. It is a risk she must take-and she will restrain Seldon if disagrees. They go shopping, noting the weather, the antique ground-cars, and the many close-cropped children-proof that the Mycogenians do not practice infanticide. Venabili assures Seldon that "credits sanitize everything" and he uses it to buy a white kirtle and two obiah. When no gray kirtle raises a cry against them, Seldon decides this portends well for the upcoming invasion. Changing in the room, Venabili looks like a boy. They practice donning the obiah until it looks natural. Armed with credit tile and the Book, they set out.

"Sacratorium" (pp. 225-248) Analysis

"Sacratorium" narrows Seldon' focus to the most sacred- and dangerous- place in Mycogen. It is a turning point, because if the ancient legends are correct and an immortal robot can be tapped for historical details, psychohistory can be made practical. Venabili is powerless to prevent him making this quest but cannot be kept from accompanying and protecting him as best she can. On an initial reconnoitering of the Sacratorium, two minor characters are introduced. Both make it clear that Seldon and Venabili are heading into grave trouble. Old Mycelium Seventy-Two in addition serves



as a foil for discussing the phenomenon of prejudice throughout the universe, previously mentioned during Seldon's seduction and to be dealt with definitively during the pair's sojourn in Dahl Sector. Having met Sisters who do not believe in religion, Seldon and Venabili now meet a scholar who, of course, has set such ritual foolishness aside. Such rationalism is, of course, a common theme in history. The scholar quickly scuttles away when the temple authority comes to deliver the official warning to the tribespeople: stay away. There is no indication yet that this is part of an organized effort to capture them in the act of sacrilege.



"Aerie" (pp. 251-273)

"Aerie" (pp. 251-273) Summary

No one gives the travelers a second look. They saunter toward the Library and enter. The man at the desk working an antique computer does not look up as he invites the scholars to enter. Seldon wonders at the informality but Venabili figures he is happy to have any visitors to this dead place. The old non-Mycogenian print-books are, in her quick estimation, part classic and part worthless. Not allowing themselves to be delayed, they follow a sign to the Sacrotorium. Donning their obiahs, they discuss defense in the event they are discovered. Hummin has ordered Venabili to protect Seldon and she intends to. She will not run to save herself and to suggest it is insulting. Almost in unison, they step inside a large, unfurnished room whose walls are adorned at uneven intervals by antique television sets. The few people present do not mingle but watch the sets. When they walk, their eyes are downcast. The atmosphere is funereal. Seldon and Venabili imitate their manners as they approach a monitor showing an idyllic garden. As they draw close, narrative goes on. The tribesmen realize they can use this as cover for conversation. Seldon spies a monitor that shows a robot and indicates they should move to it.

A pilgrim approaches, and whispers greetings, which Seldon returns. He is startled and has no idea what the correct formula might be. They each salute Aurora and make small talk before the man leaves. Venabili advises caution, but Seldon wants to find the aerie. Meandering screen-to-screen, they come upon a faint rectangle between two screens and a slight discoloration that suggests many palms have been placed there to gain admittance. The door opens soundlessly and they slip through. It closes behind them. Had they been observed or suspected of not being Elders, the attack would have been instantaneous. They are in a narrow, furnished room that brightens as they enter further. Venabili says it is typical of the ruling class not to be ascetical—a good psychohistory aphorism. There is no robot. Seldon begins climbing a carpeted stairway. Three flights up, they enter an unlocked door, over Venabili's objections. A flood of light hits them as they face an inert metallic being. From behind it steps Sunmaster Fourteen.

The High Elder invites them to sit, saying they are in no physical danger from him. Sunmaster runs through the broken taboos to confirm they know they are in the wrong. Seldon refuses to say how he knows about the robot and denies that Hummin has sent them here to study robots. They are scholars desirous of understanding a little-known sector. The Elder objects that Mycogenians do not want to be known and that they decide what is harmful or harmless here. When Seldon insists general rumor has brought them here, Sunmaster offers a soliloquy about long cooperation with Hummin and his misgivings about protecting his friends. Suspicion has led him to send the trusted Sisters to cooperate and draw them out. Seldon ought to have wondered why Raindrop Forty-Three would take him to the microfarm, but has flattered himself that he wins her over. The poor woman's self-sacrifice will not be forgotten. Sunmaster demands her Book. The desecrated volume must be destroyed. He informs the



tribesmen that they have been under surveillance the whole time, their skincaps have fooled no one, and the Sacratorium has been emptied to facilitate their capture. Skystrip Two has offered them a forceful last warning, so they cannot claim to have been lured here. Venabili says firmly they could have been turned away today and they have in no way harmed the building, this room, or the disappointing robot. Hearing her out, Sunmaster replies that the robot is no "dead lump of metal" but a symbol of their longing to return home. He will not allow them to leave Mycogen as Venabili wishes.

In Mycogenian eyes, the tribespeople have committed a grave crime, punishable by death. Their culture is as old, complex, civilized, and humane as Seldon's. They will be tried and executed quickly and painlessly according to the law. If they try to escape the Sacratorium, the emotional Brothers below will, in their rage, assure them of a painful death. Seldon proclaims that as non-Mycogenians, they have a right to trial before an Imperial court, but Sunmaster assures him they have long enjoyed autonomy in punishing sacrilege and they are, in fact, fugitives from the Emperor. Seldon insists this would set too dangerous a precedent for the Emperor to allow. With a smile, Sunmaster offers an alternative: the Mycogenians will stay the executions until the emperor reviews the case. The Emperor will have his authority upheld and his hands on them. From behind them comes Hummin's voice, offering a third alternative.

Venabili is relieved, announcing she gets in touch with Hummin as soon as she realizes she cannot dissuade Seldon. Hummin, in kirtle, sash, and skincap, explains why it has taken him so long to get here. Sunmaster demands to know how he has gotten in, and Hummin quotes Venabili: he is very persuasive. People remember the good he has done as an honorary Brother. Hummin can be personally forgiven for this sacrilege but the others cannot. Hummin accuses the High Elder of contacting Demerzel and takes silence as confirmation. He warns that in these "degenerate days", Demerzel has little to offer as reward, but Hummin can offer Mycogen the first fruits of psychohistory, if the two scientists succeed in their work. The Emperor believes in this "unlikely speculation", and will welcome Seldon and Venabili. The future likely holds steady decentralization, but the question is how might Demerzel adjust it to his liking, using such a tool. The prisoners will surely remember Sunmaster's mercy and help his people find a world of their own to terraform as a close replica of the Lost World. A tiny chance is better than no chance at all. Sunmaster allows them to leave, never to be seen here again.

Hummin's face is like granite as they ride the tunnel out of Mycogen, destination unknown. Seldon and Venabili chat about relief in wearing normal clothes again and no skincaps. Venabili petulantly asks where they are headed, and Hummin replies only that it will be somewhere they cannot get into trouble. Hummin is in no mood to apportion blame and asks only why they want to see a robot. Seldon replies that reading the Book suggests the survival of a humaniform robot that could provide a link to antiquity. Hummin wonders how they could not have seen through the Sisters' obvious charade. Hummin is certain he has read more than Seldon of the dreadfully boring, totally unreliable, and one-sided Book. Seldon says the Book mentions a robot called "Renegade", which intrigues him. Venabili, who hears this for the first time, explains that the word means "traitor". Hummin notes that the Mycogenians are unlikely to venerate such an enemy. Seldon says the Book suggests Renegade can tap and influence



human emotions. Hummin shrugs this off as the charisma every politician uses. Seldon sighs that he had hoped to learn details of primordial society to produce a proto-psychohistory. Venabili and Hummin agree so old a robot could have suffered memory loss, leaving only particular data preserved. Seldon despairs and wonders why he is still trying. Hummin tells him to give it more time and pulls off for dinner at a rest area. The food is unpalatable after Mycogen. Hummin confirms that Seldon may not be the person of genius that the project needs, but there are no ready alternate candidates. Seldon promises to keep trying, and is convinced more than ever he may succeed.

"Aerie" (pp. 251-273) Analysis

"Aerie" concludes the fugitives' stay in Mycogen, with an impressive *deus ex machina* appearance by Hummin. The rituals enacted in the Sacratorium are lightly mocked and certainly play into Seldon and Venabili's hands-keeping them essentially invisible. The holocaust of a robot is disappointing after what Seldon has read in the Book. The psychology of sanctuary and inner sanctuary, common in many religions, is examined sociologically and psychologically, with the inevitable outcome that trespassing outsiders-non-believers-must be slain. Imperial legal policy and local autonomy on Trantor are discussed at some length, as Sunmaster is looking to please the Emperor by handing over fugitives he has been seeking. While the robot they find is disappointing, the significance of robots in history is elevated, convincing Seldon that he is on the right track, despite Venabili's warnings about mythology. Note that Hummin has studied the Book and is rather surprised that Seldon is able to find a copy. This becomes significant at the end, when he reveals he might have acted more forcefully to keep Seldon off the lead, had he known he would succeed where no human had in 20,000 years.



"Heatsink" (pp. 277-302)

"Heatsink" (pp. 277-302) Summary

The Emperor is worn out from greeting visiting functionaries. Demerzel has discretely recorded the event to make sure Cleon has given away nothing important. Cleon envies his chief of staff's freedom to wander the galaxy, while he may never leave the palace. Demerzel never lets himself be seen on the grounds, in order to remain a fearsome and invisible presence. It amuses Cleon to realize he could eliminate Demerzel at any moment, but he would be lost without him and would have no one to blame for failures. At any rate, clever Demerzel would anticipate assassination and engineer a preemptive coup. Cleon is certain Demerzel will not attempt to succeed him. After Cleon retires to his private quarters, Demerzel materializes and assures the Emperor how essential such events are to keeping the Empire running smoothly. Demerzel freezes at the thought of usurping Cleon's dull infant son and asks what might have inspired such a thought. Cleon switches subjects to Seldon: could he invent a way to be emperor without endless ceremony? Demerzel highly doubts anyone can accomplish that.

Cleon wants an update on life among the "baldheads". Demerzel admits another failure. His subtle plan to get them handed over on appeal after committing some blasphemous act has been foiled and he suspects they have been outbid, perhaps by Wye Sector, which is under constant surveillance. Demerzel argues against punishing Mycogen, as the disruption will play into Wye's hands. Seldon has become convinced psychohistory *may* be practical and his actions on Mycogen are an attempt to solve part of the problem. He should not be taken until he is nearer a solution. Cleon warns Demerzel coldly not to make another mistake.

Jirad Tisalver of Dahl Sector is shorter than Seldon, and is handsome, smiling, sports a thick black mustache and curly black hair. He and his wife Casilia, both in their thirties, live with a daughter in a clean but largely bare seven-room apartment. Hummin is paying them generously for upstairs rooms. Dahl is a poor sector and the Tisalvers are not among its better-off people. This third refuge is so in the open that Demerzel ought not to look here, provided that Seldon and Venabili try harder to stay out of trouble-including with the Tisalvers, good if peculiar people with whom Hummin has dealt previously. The Tisalvers are curious about places outside Dahl and avidly listen to stories after a plentiful if bland dinner traditionally eaten standing up. Only the effete use "body shelves" (chairs), Casilia assures them. The Tisalvers disapprove of what they hear about Mycogen and are amazed that Seldon has visited the Palace. The Emperor's simplicity is a disappointment. Three evenings of stories wear Seldon out.

Seldon reads during the day, using the daughter's book-viewer, but is frustrated by the endless detail and scope. Venabili suggests that humans must have seen no order in the sky until they discover the galactic structure. Seldon admits physics once seemed a disorganized mass of data, before generations of scientists make sense of it. Twice bitten, Seldon is suspicious about their curious hosts. Venabili suggests he ask the



Tisalvers about local history. Seldon wants to go home and resume work on the mathematics of turbulence. That evening, Seldon asks Tisalver about what he does for a living. He responds by saying that he programs at a local holovision station. His wife adds, at least he does not work in the heatsinks. Venabili is curious about what that means. Tisalver explains that Dahl is best known for supplying power to much of Trantor. He is incredulous that they know nothing about these renowned heatsinks. The Tisalvers want to hear about Helicon, but Seldon insists only Trantor is different from other planets; saying this makes Venabili's hand-on-thigh story flash briefly in his mind. Tisalver offers to take Seldon to see a heatsink. Venabili wants to go too and suggests they all go, but the Mistress says that is "no place for a decent woman". Seldon apologizes for the gaff as the Master warns about the extreme heat down there.

Tisalver lends them light clothing for the trip and they set out under Casilia's disapproving glare. It is early evening, mild, and everyone seems to be walking. Black mustaches in Dahl are as ubiquitous as baldness in Mycogen. Everyone looks at Venabili's ruddy hair-like a gold coin in a pile of coal. Seldon finds the strolling very pleasant. As they take the elevator down, Tisalver warns that the whole operation is computer controlled, so no one likely will be able to explain how it works. Experts take care of rare emergencies. Stepping out of the elevator, they are hit with a blast of heat. The magma layer is very close, which is what makes heat mining feasible. They do not air condition the work area to minimize costs. Tisalver warns Venabili that she may draw some rude remarks from men. Hano Lindor approaches and offers to lead a tour. He suggests, for comfort's sake, everyone remove their shirts. Venabili obeys, displaying "considerable cleavage". Lighting is kept dim as a psychological help to workers. Computers and humans check and correct one another.

At the C-3 level, they come upon workers on break. Men and women alike are shirtless, with the women wearing functional devices for ventilation under their breasts but conceal nothing. Venabili sees the utility but declines to remove her bra as Seldon suggests. Lindor introduces them as visiting scholars. A young man with intense, deep-set eyes recognizes Seldon as a mathematician. Yugo Amaryl asks to talk and Seldon suggests they do so before his shift tomorrow. Tisalver is reticent to have a heatsinker to the house, but Seldon reminds him that they pay rent. Back home, Casilia objects strenuously. Venabili offers additional rent for the day, but Casilia worries about the smell, and what the neighbors will say. Venabili points out that before work Amaryl will hardly stink. If she refuses, they will move elsewhere and inform Hummin. Later, behind closed doors, Venabili asks why Seldon needs to see him, and he responds that it is curiosity of why an undereducated person would take an interest in the Decennial Convention and psychohistory. Venabili smells another trap, but she will be there to deal with them.

Amaryl arrives early and wary, smelling of excessive perfume. They usher him up to their room. Amaryl reveals he wants to be a mathematician but cannot get a real education. A nice elderly librarian has helped him learn to use computers. He enjoys number theory and has worked up things not included in textbooks. Seldon studies his, noting they are naive but impressive, and asks for certified copies to submit to Streeling University, where Venabili can get him a scholarship. Amaryl laments that Streeling



does not accept Dahlites because of their mustaches (a sign of manhood not to be removed), dirtiness, and smell. A few Dahlites like Tisalver have clean jobs, but they too face discrimination outside the sector. Meanwhile, folks like them make themselves feel good by treating others like dirt. Seldon promises not to forget Amaryl once he is home on Helicon. As a historian, Venabili says Amaryl is correct about irrational, "ritualistic hatred". Amaryl says it is high time everyone realized they are all descendents of Earth.

Wide-eyed, Seldon asks a clarification. Does Amaryl mean Aurora? Venabili explains that Earth is a mythical world, but Amaryl interrupts: it is a real planet, he has a Dahlite book that tells its history, and Mother Rittah in Billibotton has many stories about it. Amaryl warns against trying to go to Billibotton, because they will never return. If they go, they had better have knives and know how to use them. As he pulls his knife to show them, Venabili's hand is on his right wrist in a flash. Seldon asks Amaryl to write down his name and hypercomputer code where he can be reached. He promises to contact him as soon as he can. With his future now hanging on Seldon's survival, Amaryl begs him not to go to Billibotton and begs Venabili to prevent him.

"Heatsink" (pp. 277-302) Analysis

"Heatsink" begins a four-section sojourn in Dahl Sector and serves primarily as an introduction to two characters, the Tisalvers, whom the reader wants to like but cannot. By the end of the Dahl sequence, the wife is utterly despicable and the milquetoast husband pitiable. Much space is given to contrasting Mycogenian and Dahlite cultures, including the forms in which discrimination occurs in each. Dahl's middle class is systematically cruel to the laboring class. How explosive the situation is will be developed in the upcoming chapters. Seldon's sexual interest in Venabili is growing. This amuses her, but she is described by the telling adjective, "disinterested", whose significance becomes clear only in the final paragraphs of the novel, when she confesses she is a robot, incapable of love or passion. Amaryl, destined to be a major character in Asimov's other *Foundation* novels, is introduced, largely as a means of moving Seldon and Venabili to Billibotton.



"Billibotton" (pp. 305-326)

"Billibotton" (pp. 305-326) Summary

Venabili is unhappy about a seemingly suicidal mission to chase a universal legend. Seldon reminds her of the hand-on-thigh story and how it flashes through his mind at the Tisalvers'. Something is hovering at the edge of his mind, encompassing all of this. Venabili notes that folklorists, biologists, and mystical historians speculate about a single world but "sober history" never mentions it. Amaryl is a natural mathematician, and his originality and ingenuity may move psychohistory forward. His promise to help Amaryl is more probable than Hummin's to the Mycogenians. Seldon wants to find Mother Rittah and is prepared to go alone. Venabili forbids it. Mistress Tisalver and her daughter return, sniff for traces of Amaryl, and disappear. Dinner passes in silence until Seldon asks about Billibotton. Casilia declares it a slum and denies hearing of a Mother Rittah. Her husband offers that Rittah is supposedly a fortuneteller and is not surprised at a question about Earth. Everyone knows about it and the uneducated actually believe in it. There are no taboos about mentioning Earth or rules preventing outsiders from visiting Billibotton, but it is even more dangerous and violent than Dahl. People actually use their knives in Billibotton. The government does not care when Dahrites are killed, but might if outsiders are. Seldon says he would not carry a knife because he does not know how to use one skillfully. Annoyed, Venabili asks where to buy knives and how to get to Billibotton. Getting directions to both, she insists that if Seldon goes, so does she—no matter how women are treated.

At the appliance store, the dealer at first refuses to sell an illegal knife to Venabili, until she assures him she is not an agent and intends to visit Billibotton with her friend. Declaring outsiders are crazy but willing to take their credits, the dealer shows her "the best woman's knife made". She wants something heavier, and tries out a butcher knife that deploys with a twist and squeeze. Venabili buys two and a double belt and walks home looking resolute. Seldon says if they survive and he sees Hummin again, she is fired or he quits psychohistory.

Seldon and Venabili exit the Expressway at Billibotton and take in the pungent aroma and litter. The many pedestrians seem self-absorbed in surviving, ignoring one another—but staring at these outsiders and seeming to wish them ill. They have no idea where to start looking for Mother Rittah. Seldon gestures to a twelve-year-old and asks for directions. The tough-talking kid, who calls himself Raych, offers to take them to Rittah in return for one of Venabili's knives. Seldon offers instead a small computer and software so he can learn to read. Raych leads them to an apartment complex and into the inner decay. At No. 2782, he advises them to knock loudly and runs away with his prize. Rittah is well into her 70s and moves with difficulty. She recognizes Outworlders by their scent. She has nowhere decent for them to sit, so the interview is conducted standing. Her poor hearing is beyond fixing. She is delighted that Seldon wants to talk about the past, because predicting what customers want to hear is a chore. Seldon is willing to pay well for information about Earth. She talks about the dawn of the galaxy



and frowns when he mentions Aurora. That is a place never to be mentioned. For millions of years humans inhabit only Earth. Rittah knows stories from her ancestors but has no children to pass them on to. She can tell them about Ba-Lee, a great hero. When Seldon mentions robots, Rittah shudders again and says they have been destroyed and should never be mentioned. Seldon asks about a special one that the Evil worlds hate. Rittah identifies him as Da-Nee, Ba-Lee's friend, who remains alive, waiting to his time come to return. Da-Nee has promised to restore the great old days and remove all evil. Seldon doubles Rittah's ten-credit fee and promises 1,000 credits if she will record her tales of Earth on computer discs. He leaves a contact number.

As they walk in the direction Rittah indicates, Seldon pronounces he is satisfied with what he has learned. At a broad rest area, a group of large, muscular Dahlites has gathered, clearly waiting for the Outworlders. Marron identifies himself and announces they must pay to leave the district. Seldon challenges him to a fight. Admiring Seldon's bravery, Marron declares he will have his way with the girl and then hurt him. Seldon is held at knifepoint as Marron approaches Venabili and is amused to see her twin knives. Marron draws his own knife and Venabili calls all to witness that she has tried to avoid hurting anyone. Dodging two thrusts, Venabili meets the third with a long slash across Marron's chest. The next thrust results in a slashed left palm. Marron calls for another knife, but Venabili deflects the toss. Seldon pulls free, downs his two captors, and confiscates their knives. Venabili kneels on Marron's back and holds knives to his throat when he makes his next move. He yields as ordered and staggers to his feet. Venabili slashes again, hacking away his mustache and part of the lip as a warning to stay away. Venabili cuts the belts and slits the trousers of Seldon's captives to slow them. No one admits tossing the knife to Marron. Venabili promises than anyone who comes at her will die. The seven flee and Seldon and Venabili leave before the news gets out.

"Billibotton" (pp. 305-326) Analysis

"Billibotton" is a busy and critical section of the novel. It introduces Mother Rittah, whose aged mind preserves the names of the two legendary robots of antiquity. These names, and the controversy over where and what the original world of humankind is, eventually draw the truth out of Hummin. The investigating is paying off; Seldon is seeing critical patterns, and Venabili can only hope this is worth the risk. The physical risk is shown in the novel's greatest action sequence, when this female novice with knives demonstrates unimaginable finesse. She becomes an instant hero in this tough neighborhood. Seldon adds this observation to his bank of suspicions that Venabili is somehow extraordinary. Slicing off Marron's lip shows vindictiveness not earlier evident in Venabili. She wants the vaunted mustache never to re-grow, lest his ability to lead a gang and rape women return. It is tactically useful move, inviting an "ends-justify-the-means" debate. Finally, this section introduces a character of great importance going forward. Young Raych's language adds color to the telling, with a later tie-in to Wye Sector. The ragamuffin quickly endears himself to the couple that eventually adopts him.



"Undercover" (pp. 329-347)

"Undercover" (pp. 329-347) Summary

Fresh from baths, Seldon and Venabili are confronted by both Tisalvers about an alleged knife fight. Rumor says she has killed 100 thugs. An "urchin" is on the porch, "Trash from the street," ruining their reputation in the neighborhood. Venabili reminds the Tisalvers that they pay for their rooms. The young man is a Dahlite, a Trantorion, a citizen of the Empire, and a human being-and now he is their guest. Her right hand drops to a knife and Tisalver bravely pulls his indignant wife aside. Seldon is amused, but Venabili continues fuming about how respectable but contemptuous people create hooligans. Psychohistory must deal with the phenomenon.

Raych comes upstairs, intimidated. He complements Venabili on her fighting, wants her to teach him, and finally gets to the point: Davan wants to see them. Raych explains that Davan lives without a knife in Billibotton, reads a lot, and helps people who have trouble with the government. He has not come himself because Dahl makes him sick. Seldon and Venabili now have "free run of Billibotton, so they can meet Davan there, and Raych will lead them. The three step out at sunset to face a crowd, many, clearly, from Billibotton. When Seldon raises a hand, people applaud and ask to see some of the lady's knife tricks. A man approaches, identifies himself as Marlo Tanto of the "Trantorion HV News", and insists on hearing how they fought off many men. Neither will respond to questions. Raych warns that Tanto is probably an Imperial agent. Venabili warns the crowd against violence, and the trio slips through.

Davan (no last name) waits in a room behind a dilapidated diner, where he feels safe from the government. Seldon promises Raych a big dinner if he does not abandon them here. Davan's face softens when he sees Raych, who presents his companions and leaves. Davan is the first Dahlite-including the bullies-that he has seen who is not clean-shaven. Davan wonders why Seldon does not use a false name and change his abode frequently, since the Empire wants him. Davan confirms that Seldon has talked with Amaryl, who claims Seldon can predict the future. That could be useful. Seldon sighs at the misrepresentation and only frustrates Davan with his standard explanation. He turns to Venabili and asks if Seldon is telling the truth. She teases by asking, what if they both are lying? Davan has hoped that after the way they treat Amaryl they will have sympathy for those who oppress the downtrodden.

If the heatsinkers were to go on strike, Trantor would experience almost immediately a massive energy shortage, but the wealthy would hire hoodlums to break it swiftly. The Imperial government does anything to weaken the criminal element anywhere because Trantor has grown so complex the only possible policy is "hands off". Seldon recalls Hummin's complaints about degeneration. People are hindered from uniting in common cause against central tyranny by encouraging intersector suspicions and intrasector social class war. Davan has devoted years, unsuccessfully, to building solidarity, but is seeing some progress. The "knifers" who attack Seldon and Venabili are a minority of



the unconverted, while the unarmed masses who defend them against the agent (the would-be newsman) represent the majority. Such exist in every neighborhood and increase in number daily.

Seldon and Venabili would be worth hundreds if they agree to lead the uneducated. Davan resents Seldon's suggestion that he wants merely a "veneer of respectability"; they need him to "penetrate the mists of the future", by informed intuition, should psychohistorical accuracy prove impossible. Seldon denies he has truly studied history and yields to Venabili. She speaks of many past uprisings against tyranny, regional, planetary, and galactic, in which one ruling class replaces another, and the downtrodden remain downtrodden. Rioting cannot have a permanent effect while a well-armed army remains willing to attack the people. The security forces must be won over-or at least have their loyalty shaken. Davan observes that some sector governments are anti-Imperial, but cannot name one that would act. Venabili suggests Wye, whose Mayor may well want to succeed to the throne, but will not risk his present situation to bring justice to people he cares nothing about. Using a ruler and then betraying him is a "recipe for chaos". Seldon and Venabili are willing to help, but need psychohistory to determine likely scenarios and the actions that could make the happiest unfold. Developing psychohistory is the greatest contribution Seldon can make to their cause. That could take forever, but he can be of no better use elsewhere. He is beginning to believe psychohistory is not an absolute impossibility. It is intuition-and may be mere illusion-but it is worth continuing. Davan warns Seldon that the Emperor and his toady, Demerzel, will not wait for psychohistory any more patiently than he.

Raych is finishing a bad-smelling meal provided by Davan's people when Seldon and Venabili arrive and remind him of the promise of dinner. He asks for a knife instead, but is offered five credits to get them home safely. Davan's people shadow them (not silently enough) as a security guard to the edge of Billibotton. Casilia glares from the porch as they bid Raych farewell. She is angry about the near riot by *their* street vermin. She acts as though this is a last straw, and they wonder what will happen next.

"Undercover" (pp. 329-347) Analysis

"Undercover" chronicles Seldon and Venabili's second trip into the depths of Billibotton, where they enjoy heroic status. They meet a would-be revolutionary leader and discuss cooperation. Seldon must still insist that psychohistory is not yet a practical science and may never be, but notes how rapidly Davan wins him over, and how positive Seldon has grown about psychohistory: the idea of Trantor as microcosm is only beginning to brew in his mind, but he sees clearly that developing his theory is how he can best use his life. Davan describes how the Empire operates to sow division on Trantor, making the Mycogenians' concerns more sympathetic, and is impatient with Seldon's obstacles. The literary illusion behind the adjective "quixotic" that Seldon uses is apt, but seems out of place, considering how few "ancient" words Seldon has been seen to understand and his general non-humanities orientation.



"Officers" (pp. 351-369)

"Officers" (pp. 351-369) Summary

Next morning, dressed from the waist down, Seldon knocks on Venabili's door. She is dressed similarly, embarrassing him. She seems indifferent as she finishes drying her hair. He wants to talk about Wye Sector; specifically its Mayor, whom Hummin and Davan have both mentioned. Venabili knows only it is a large, populous sector near the South Pole. The excess heat generated all over Trantor is piped there for discharge into space. The melting of snow and ice that occurs in the process of piping accounts for Upperside weather. Whether Wye profits from this is unknown, but it wields great political power because a shutdown would instantly raise temperatures around the planet, while Wye could open itself to the polar air. The Mayor is said to be a recluse, a skilled political manipulator, but too old to fall for the crazy "Imperial wish". Seldon asks why, if Trantor is so huge, interlocked, conflicting, and ungovernable, the Emperor does not move elsewhere and establish himself on a simpler world. Venabili laughs and then explains that the Imperial Palace is more important historically than the Emperor. Seldon frowns as the hand-on-thigh story comes back to him, but he still cannot say how that connects with what they are discussing. They go down to breakfast, prepared for Mistress Tisilver's wrath.

Casilia smiles tightly and Jirad leans moodily against the wall. Two uniformed men stand stiffly in the center of the room: Sector Officers Lanel Russ and Gebore Astinwald. They are investigating a riot instigated by one Hari Seldon yesterday. Russ dismisses Venabili's claim of freedom of speech under the circumstances. Casilia testifies that the mob is looking for trouble when Venabili knowingly stirs them up. Casilia has lodged the complaint after days of trouble and the tarnishing of her reputation. Russ affirms it is legal to speak to Dahlites before asking Venabili why she suspects the newsman is an agent. She surmises it from his non-Dahlite mustache. Seldon interjects that they plead with the crowd not to harm the man. Russ informs them that after they depart, the mob roughs the man up badly. Seldon suggests they administer a Psychic Probe to the liar. Russ replies that the law forbids this for victims of crime and asks rhetorically if they, the accused criminals, would like to submit to a probe.

Astinwald speaks for the first time, asking about the knife fight in Billibotton in which a Dahlite, Elgin Marron, is badly hurt. Seldon and Venabili admit they have fought but claim self-defense after being attacked and Venabili nearly raped. Astinwald wonders how neither of them is injured while Marron is hospitalized. There are three witnesses claiming they are the aggressors. Seldon is sure Marron has a criminal record and six of his friends have not joined in the affidavit-any more than they rally to Marron's help in the street. Astinwald has also heard that the two have met with one Davan, a known subversive. Seldon refuses to speak further and Russ announces they must come into headquarters for further interrogation. Seldon announces this is pure harassment. When Venabili refuses to submit, Casilia warns about her knives. Venabili is asked for her permit to carry knives and ordered to turn the illegal weapon over. She dares them to



take them. Exasperated, Russ points out they have blasters and a neuronc whip. Seldon urges Venabili to surrender her knives, just as frantic pounding sounds at the door.

Raych has remained in the neighborhood last night and has seen the security ground-car arrive. Recalling how kind Venabili has been to him-even offering to let him take a warm bath-he pushes through the crowd of curious onlookers, races up the stairs, and begins squeaking, "Lady! Lady!" Raych warns that his whole gang is gathering and Russ orders reinforcements. When Raych protests, Russ fires his neuronc whip at him. Raych falls, shrieking, and "wriggles madly". Seldon swiftly disarms Russ and dislocates his shoulder to immobilize him. Astinwald lifts his blaster but instantly feels Venabili's knife at his throat. He drops his weapons. Seldon scoops them up and warns Tisalver that the mob will invade and trash their home if they do not cooperate. He orders Venabili to knock Astinwald out, which she does, with a wince. Outside, Seldon orders the mass of "poorly washed humanity" to forget the helpless "Sunbadgers" and flee before reinforcements arrive. He says they will not be back, and Raych promises to take care of them. The crowd parts and Raych leads them to a place even Davan does not know about. He apologizes that it is in the sewer levels and "sort of stinky".

The hiding place is a large loft reached by ladder. Venabili guesses it is used in recycling waste to fertilizer. Seldon worries it must be checked on periodically, but Raych claims never to have seen anyone. Venabili believes they are safe, and Raych promises to bring food and water regularly. The smell may have depressed hunger, but it will return, and they must drink. Venabili says she has contacted Hummin, reluctantly, because that admits she has again failed to protect Seldon. She is certain they now face the full armory. Raych is confident they will not be found, any more than Davan. Venabili ruffles the boy's hair happily and suggests he leave before he too is captured. Raych says his duty is to provision them and find even more obscure hiding places. Venabili is afraid that the authorities are serious about arresting people who have hurt two of their own, while Davan is merely an annoyance. They will sweep every passage until they succeed. Seldon wonders what will happen to them once they are arrested. If sentenced to prison, they can appeal to the Emperor, adds Venabili. Seldon believes that is a bad idea, given how hard they have tried to evade him. Venabili qualifies that it is just a diversion while they think of something else. For the first time, Venabili declares Hummin less than "do-it-all"; surely, he cannot withstand the entire Dahlite security force. Venabili first hears Davan arriving.

Davan asks why the Sunbadgers want to arrest Seldon and Venabili personally; it cannot be for consorting with him, as they ignore him. Davan has powerful friends who can also protect them. They can talk to the Mayor of Dahl on behalf of the famous Dr. Seldon, but he can only see that they are safely whisked out of the sector. Seldon is relieved and proclaims this is Mycogen all over again. How does Hummin do it? Venabili is skeptical. Davan admits not knowing about Raych's loft; he remains a perfect "corridor creature". A heat-seeker set to 37°C shows only humans, and they are the only three in these forgotten places. Too many people want Seldon to stay here. A new 37°C target is approaching, Davan's important friend. It is not Hummin.



"Officers" (pp. 351-369) Analysis

"Officers" completes the adventure in Dahl. Preparing for the final chapters, Venabili explains why Wye is of such strategic value to Trantor. These serious matters are discussed while Seldon is as distracted as an adolescent by Venabili's naked breasts. This amusing bit of sexual titillation sets up the final scenes of the novel, which take place in Wye Sector. Yet, another action scene occurs as security officers come to arrest the Outworlders. Before the violence erupts, the workings of the Trantorian legal system are discussed, with an appeal to the Emperor as in Mycogen, appearing to be Seldon and Venabili's best option. Because of Hummin's early conditioning, Seldon believes falling into the hands of the Emperor and Demerzel is the last thing he wants; he has spent months avoid it. Note that Venabili for the first time doubts Hummin's ability to fix everything. Why she does so is never fully resolved.



"Wye" (pp. 373-393)

"Wye" (pp. 373-393) Summary

Uniformed, erect, with a long blond mustache curled at the tips, Sgt. Emmer Thalus summons Seldon to accompany him, but blocks Venabili; his orders cover only Seldon. When Seldon refuses to budge without his "companion", Thalus moves to carry him off bodily, and Seldon slows him with a precise blow to his upper arm. Raych positions himself behind the sergeant and Venabili draws her knives. Thalus warns them that his instructions do not preclude harming anyone but Seldon. Raych seizes the neuronomic whip. Seldon hastens to defuse the situation, asking if the sergeant's orders explicitly forbid bringing others. Gradually he convinces him that this provides a way out of the standoff. Thalus gives his word as a soldier not to harm any of them. Seldon's partners disarm reluctantly. Before leaving with the sergeant, Seldon asks Davan to forget what he has just seen and tell Amaryl that he will not forget him.

Raych is speechless during his first ride on an air-jet. Upperside's domes are covered with green. Venabili doubts that Hummin is in charge here, because: 1) he would have informed Thalus about her; 2) he would have come in person as at Streeling and Mycogen; and 3) he would not have sent such a "conspicuous and lavish flying palace." This has the markings of a double-double-cross. Seldon has no answer. Upperside shows signs that they are nearing a pole and they soon descend into a tunnel heading for a destination Venabili is certain Seldon will not like.

On landing, Thalus opens the door, smiles, half-salutes, thanks Seldon, and conveys them in a lavish ground-car to an imposing four-story structure. Thalus motions them to follow, warning that *others* may not feel beholden to his word of honor. At the top of an escalator, which challenges Raych's dexterity, two young women, identically dressed and moving in unison, meet these wretched refugees from Billibotton and convey them to a middle-aged, motherly woman who seems unfazed by the companions' presence. She offers them an opportunity to rest and clean up from their travels. Asking Raych's name, she finds it coincidental-and perhaps a good omen-that her name is Rashelle. When Venabili asks where they are, Rashelle responds, "Wye, dear," and then apologizes for the confusing homonym. They are in Wye Sector, where Seldon has been wanted since his speech and nearly was taken Upperside at Streeling.

Recovering takes a full day. Soldiers posted outside the lavish dining room suggest to Seldon that they are in for a velvet glove and iron fist treatment. Raych is unrecognizable and ill at ease. Seldon thanks her, gravely, for the first-class treatment and answers her as succinctly as possible. When his turn to ask questions comes, he asks why Rashelle wants him and what makes her think he has psychohistory. Rashelle cannot believe it impractical after the "pseudo-Emperor" summons him. Cleon, she claims, has no legitimate claim to the throne and has been like a cat pursuing a mouse since the visit. Cleon dares not pursue Seldon here. Had *she* been pursuing Seldon, he would have been here earlier. Failure is a mark of Demerzel. Doting on Raych, Rashelle



talks about the Mayor's autocracy before revealing that *she* is the Mayor of Wye. Raych laughs raucously, proclaiming, "Mayors is guys". Imitating him precisely, Rashelle begs to differ and explains how a Dahlite friend in her youth teaches her to talk tough. Raych resembles him.

With Raych safe in his room, Rashelle makes clear that armed guards surround them. Venabili asks if Mannix IV, for forty years Mayor of Wye, is not alive and in his senses. Mannix is Rashelle's father and remains in the Emperor's eyes as Mayor. He is tired by his duties, however, and has turned ruling over to her, his only child and trained heir. The armed forces have sworn allegiance to her, which is what counts. Seldon asks why Mannix IV, Rashelle I, or Cleon I, would want to hold him. Without a practical psychohistory, he is of use to no one. Rashelle calls him napve about history. He should know that the House of Wye is descended from the Dacian dynasty. Venabili interjects that the Dacians ruled 5,000 years ago and in over 150 generations, their line has been diluted throughout the galaxy. Speaking coldly for the first time, Rashelle assures them that her genealogical claims are genuine and her family has at times have ruled the galaxy. Venabili corrects: the Wye rulers are normally termed "anti-Emperors".

Rashelle assures them that Wye will rule again and, with Seldon's help, this need not require civil war. Mannix IV has always been a man of peace and has kept Wye a prosperous pillar of Trantor and the Empire. Mannix has built an army powerful enough to launch a lightning strike to put her on the throne, and return peaceful to Trantor. Speaking as a historian, Venabili disputes the ability of any security force to stand up to Imperial forces backed by twenty-five million worlds. Rashelle observes that Wye's forces are concentrated and ready to act before scattered Imperial forces can rally, and some provinces may seek their own interests rather than the Empire's. Her intention is to rule only Trantor and its province; all those other millions of worlds just drag down the throne, so let the galaxy splinter. Every militarist can rule his own splinter; there are plenty for all without fighting.

Venabili insists that they *will* fight. No one will be satisfied with just a province. The wars will be endless, and Trantor will be drawn in. Rashelle concedes, contemptuously, that this is history's ordinary lesson, but she looks beyond-to what Seldon alone can offer. Her father has for ten years been primed to strike at the moment the Empire can be taken over in a day and transfers power to Rashelle as soon as he hears Seldon's paper. Whether Seldon can foretell the future does not matter if people *believe* he can scientifically predict a break-up of the Galactic Empire into peacefully coexisting kingdoms. Seldon refuses to "play the charlatan" for Rashelle any more than for the Emperor, who suggests the same falsehood. In a coaxing voice, Rashelle points to the differences between her intentions and Cleon's. Seldon admits to hearing this argument before. Rashelle continues: if Seldon helps her consolidate power on Trantor, there need be no war. The rest of the galaxy will find its own way. Rashelle's ambition is moderate and offers peace and freedom rather than war and slavery. Seldon doubts that anyone will believe him more than they would Rashelle, but she plans to devote time to building his image and picking the right moment for him to make his prediction. Wye strikes like lightning and establishes a New Order. She asks how Seldon can refuse her.



"Wye" (pp. 373-393) Analysis

This section is set in prosperous Wye Sector and spends a good deal of its space in describing the refugees' lush new environment. Asimov takes the opportunity to debate at some length the virtues and psychology of administrative decentralization. Note Raych's childish bit of male chauvinism, which emerges full-blown in the Wyan officer corps in the next section. Like Hummin, Rashelle argues that her use of Seldon and psychohistory is more benign than the Emperor's. She tells Seldon cynically that how the masses perceive his authority is more important than any science he puts forth. The ends again justify the means. Seldon might be expected to cooperate with such an unexpected and magnanimous policy, but he has come to certain realizations, which he reveals in the next section.



"Overthrow" (pp. 397-415)

"Overthrow" (pp. 397-415) Summary

Over breakfast, Raych announces Rashelle is taking him to the zoo. Seldon and Venabili debate why they are enjoying the high life here. Rashelle's willingness to fragment the galaxy must be stopped. Venabili is certain the Hummin would get word to her if were wrong, and her certainty perplexes Seldon. Rashelle understands that Seldon does not have psychohistory, but is convinced it does not matter. She will claim he has scientific proof whether he speaks up or not. The build-up may take a year, but Seldon doubt Rashelle is that patient-or that Mannix has that long to live. Seldon insists they gain their freedom, because he has solved enough of the problem to begin practical work in proper facilities. The Empire must be held together until he or his successors learn how to minimize the effects of the break-up.

During their fifth day in Wye, Raych is dressed formally for his zoo outing. Venabili feels sorry for Rashelle's unhappy love affair. Seldon asks if Venabili has ever had a broken heart. She has always been too busy for that. Seldon admits to a bad break-up, and then wonders why nothing is happening after five days. Venabili suggests they are being "fattened for the slaughter"-as is the Empire. Seldon has seen no evidence of a propaganda campaign to build his image, to which Venabili replies he is useless as a "seer". That would only warn Demerzel and affect no one because social/psychological inertia is as strong as the physical. Exaggerated data needs to be fed to relatively few high-placed people disenchanted with Cleon. Once the loyalists are confused, Rashelle can strike and establish her New Order before anyone can resist.

Raych returns, and talk of animals dominates a dinner from which Rashelle is absent. Raych recalls Rashelle getting angry when a "different guy" in a gray uniform whispers something to her about some officers swearing "religious to Rashelle's old man" because they will not obey a "dame". Rashelle threatens to their heads and cancels the rest of the outing. Venabili orders Raych to forget this. Later, Venabili says that women have often succeeded to various high offices without problem, and there have been Empresses. She wonders why a problem would arise in Wye. Mycogen is an anomaly but most sectors are "equisexual", and male dissent is not a factor. They agree that this is too unnatural for Hummin not to be behind it.

On their tenth day, Seldon hears Raych screaming about war. News holocausts show jets and somber crowds and urge Wyan soldiers to lay down their arms. Venabili remarks that the Imperials have executed a perfect coup. Mannix IV appears on camera, coerced, and calls for calm and loyalty to the Emperor. No one is mentioning Rashelle, although her residence has obviously not been attacked. Rashelle appears, smiling coldly and claiming that she has been betrayed and laments the wasted planning. She is certain that Demerzel is behind it. Officers are using her sex as an excuse to mutiny. Because Seldon is Demerzel's ultimate target, she is determined not to grant him this victory. Ordered to blast him, Thalus draws his blaster, but Seldon reminds him of his



oath, throwing the sergeant in a quandary. Thalus drops the weapon, Rashelle recovers it and slays her unfaithful servant, and turns it on Seldon. Raych jumps between them before she can fire, giving Venabili time to attack. Raych recovers the blaster and insists no one kill the lady who has been nice to him. A new voice sounds-Hummin's. Rashelle demands who this is, and when Seldon identifies him as his protector, she laughs and calls him an idiot. She invites Seldon to look into Venabili's face and realize that she knows he has fallen into a trap far worse than Rashelle's.

Hummin and Seldon lunch alone in silence. At the end, Seldon asks how to address him. While his identities are not distinct, he prefers Hummin. Both parts have wanted to renew the Empire if possible and avert disaster if not-either way using psychohistory. As Demerzel, he handles well-meaning but incompetent Cleon to prevent mistakes, helps govern Trantor and the Empire, and labors hard to prevent Wye from doing harm. He has managed a countermove to every one of Mannix's moves until he passed power to his incautious daughter who takes power for granted and sees no limitations. When Rashelle seizes Seldon, Hummin has to move. Seldon wants to know why Hummin has planted such dread of Demerzel in him. It helps Seldon to: 1) view psychohistory as more than a mathematical game; 2) side with an idealist; and, 3) see sides of Trantor he would have missed in his "ivory tower." Seldon admits he has made progress, but only the barest beginning. By spending time here, where two sectors believe in a single ancestral world, he has narrowed the scope of psychohistory from twenty-five million worlds to reconciling the differences in this particular myth. It fails until Venabili's trivial hand-on-thigh story helps him see the various sectors as separate worlds. This only complicates matters until Rashelle helps him see Trantor as distinct from the "distant nothings". Trantor is complex enough to make psychohistory meaningful but not too complex to be practical. The interactions between Trantor and the Outer Worlds are secondary and can be added to the core theories later. Hummin is relieved and promises to help Seldon in his research. After commenting on "Hummin" being a take-off on "human", Seldon guesses that his interlocutor is a robot.

"Overthrow" (pp. 397-415) Analysis

In "Overthrow", Seldon drops the bomb about partially solving psychohistory, and awakens the next day to see Rashelle's lightning coup against the Emperor brilliantly pre-empted. She relishes informing Seldon that his friend Hummin is the dreaded Demerzel. The rest of the section is given over to this dual personality trying to convince Seldon that all his wanderings and misadventures have served the purpose of helping him clarify psychohistory. After explaining how his limited approach to psychohistory has evolved-ironically, thanks to poor overthrown Rashelle-for she showed him how to isolate Trantor from the rest of the galaxy, Seldon guesses that Hummin is too good to be human and must be the robot he has been seeking.



"Dors" (pp. 419-434)

"Dors" (pp. 419-434) Summary

Seldon is determined to make Hummin speak first. When he does, he equivocates, so Seldon talks about how his flight has revealed Earth and Aurora, each attached to a robot. Aurora's is a traitor, while Earth's is a salvific hero. Seldon wonders if they are identical. The two planets might coexist or, Earth may be a degeneration of Aurora. Micogen today embodies Earth and Dahl Aurora. Technologically advanced Aurora could have produced robots indistinguishable from humans, including a renegade who escapes to Earth, where he is hailed as a hero. Rittah is convinced that her heroic robot survives and will return when needed. Immortality depends only on the replacement of worn-out parts, including the brain. Rittah hints at strange mental powers, capable of altering history and allowing Earth to conquer Aurora. Hummin scoffs at Seldon for beginning to believe in the superhuman.

Seldon is not one to be taken in by fairy tales, but he has experienced odd events, including their first meeting, which swiftly turns him into a wanderer-quite out of character. Hummin has also, simply by asking, gotten Venabili, Sunmaster Fourteen, the Tisalvers, Cleon and his tyrannical father, and Mannix all to turn renegade from their normal behavior. Hummin suggests that he is a tactful person who has built up a fund of favors to be called in. Surely, Seldon argues, the Wyan army has known long enough that Rashelle would succeed Mannix, but shown no signs of discontent. Hummin is *too* persuasive to be human. Seldon insists on hearing the truth: he is Rittah's Da-Nee, friend of Ba-Lee. Hummin admits that Seldon is ingenious but denies that obligates him to admit anything. Some of the facts may be true, but leave Seldon's interpretation false. Supernaturalism is unnecessary. Seldon somehow senses that Hummin is sincere when he affirms his belief that the Empire is falling, that psychohistory is the only way to save it or cushion the fall, and that only Seldon can work out the details. Seldon complains that without understanding certain key facts, such as those about Earth and Aurora, the abandonment of robots, and the genesis of the Empire on Trantor, the project can only be retarded. Seldon knows nothing about the capacity of robotic minds, but cannot conceive of a robot withholding information. Unless Hummin convinces him he is Da-Nee, psychohistory will fail. Hummin admits the logic is irrefutable and introduces himself as R. Daneel Olivaw (the "R" stands for "robot").

No one in 20,000 years has guessed the truth against Olivaw's will. Robots have been abandoned so long ago that few humans know of them. He can detect human emotion and affect it with difficulty. He interferes only when he must and tries only to strengthen what he finds available. Sunmaster Fourteen is an honorable man and requires no "tampering" to accept them, but does in order not to punish them. With Seldon's distrust of Imperials (shared by most humans), Olivaw has needed no tampering to convince him the Empire is degenerating. Seldon is proud of psychohistory as a theory and would be prouder still if he can prove it practical. The danger posed by Demerzel intensifies Seldon's determination to find an answer. Had Olivaw foreseen that Seldon would



discover his secret, he might have stopped him. Rashelle had to be stopped to prevent "feudal anarchy". Minds are easily bent, and most males resent and fear women.

Olivaw reveals that he is governed by Three Laws of Robotics: 1) a robot may not injure a human being, 2) a robot must obey human orders, and 3) a robot must protect its own existence (the last two with provisions that they not conflict with the previous laws). Some 20,000 years ago, a robot-friend suggests a "Zeroeth Law", which puts not harming *humanity* at the head of the list. Identifying humanity is far harder than human beings; so not harming it is more difficult. When that robot cannot save humanity with certainty, it deactivates itself and leaves care of the galaxy to Olivaw. He has never gambled, because the Zeroeth Law makes no allowance for inadvertent harm, and that he is still functioning is proof of success. As the Empire begins to decline, Olivaw assumes the role of Demerzel to stave off ruin. Seldon's speech suggests the possibility of a tool for identifying what is good or evil for humanity, so he arranges for Cleon to summon Seldon. Ever since, he has worked to convince Seldon that he can make psychohistory work. Daunted, Seldon understands everything. Olivaw insists on being called Hummin when they infrequently meet. He will provide any information needed, and as Demerzel will protect him. Seldon agrees never to speak of Olivaw, for this would impede plans. Olivaw chides him about wanting full credit anyway; that pride will help keep the secret.

Olivaw confirms Seldon's suspicion that Venabili knows the secret. She is under a similar ban, but they may now discuss him together. Soon both will return to the university, with Raych and Amaryl, if he likes. Seldon will have a staff, computers, and reference materials. He must fend for himself with intellectual resistance from colleagues. If Seldon fails to develop a practical psychohistory, Olivaw has a second plan on another world working a different way. It is more radical and difficult. Two roads are always safer. Olivaw departs to his normal work.

Seldon announces that the palace is cleared, Rashelle will not be harmed, and Seldon is to return to the Imperial Sector. She presumes she will follow and resume teaching. When Seldon insists she work with him on psychohistory, she argues that there are better historians, and leaves it to Hummin to decide. Seldon declares that if she refuses, he will return to Helicon and let the Empire destroy itself. The Law of Robotics forbids Hummin from making arbitrary decisions. Seldon denies wanting Venabili's protection any longer; he wants her because she is herself. The tennis and knives have convinced him that she is a robot, but Seldon does not care. She has kissed passionately only as a social convention, never asked to be kissed or kissed a second time; she has had sex but never felt love. Crestfallen, Seldon tries to think rationally, gives up, sweeps her into his arms, and kisses her. Venabili's arms tighten and she asks to be kissed again.

"Dors" (pp. 419-434) Analysis

Most of the final section, "Dors", is devoted to the explanation of how R. Daneel has watched over humanity for 20,000 years. The Laws of Robotics are a standard feature in Asimov's fiction, but the Zeroeth Law is an innovation. Olivaw needs psychohistory in



order more safely to guide humanity away from degeneration and calamity, and agrees to set Seldon up to complete his crucial work. Whether Seldon will ever succeed is left in limbo. He will, however, continue to enjoy Venabili's company because without it he will refuse to work-and the Zeroeth Law would be violated. More than that, Seldon has fallen in love with Venabili and does not care that she too is a robot. After telling Seldon all the reasons for why this cannot work, Venabili yields to his passion.



Characters

Hari Seldon

The novel's protagonist, Hari Seldon, is a mathematician from an obscure "Outworld," Helicon, who travels to the center of the Galactic Universe, Trantor, to deliver a theoretical paper on psychohistory. Background information on Seldon is sparse: he is born in the same year as the Emperor Cleon I (11,988 G.E.), he is adept in both mathematics and the manual arts ("twisting"), but knows little history. He has had a relationship with a woman who cannot accept his attachment to mathematics, and continues to feel the pain of the breakup. He is thirty-two years old at the time of the novel, 1.73 m. (five foot, seven inches) tall, dark-haired, smooth-faced, cheerful, and dressed unmistakably as a provincial-hardly the white-haired "demigod" confined to a wheelchair, as he is most remembered once he achieves fame. The *Encyclopedia Galactica* says Seldon's wife's name is forgotten, along with the circumstances under which they adopt their son Raych.

Seldon's paper claims only that one ought to be able, theoretically, to predict the Galactic Empire's future, but no one believes his sincere contention that it is not and may never be a practical application. The Emperor summons Seldon to a meeting to arrange control over this useful tool, and reluctantly lets him go but keeps him under surveillance. Waiting to return to Helicon, Seldon is attacked by local thugs, fights them off, and is befriended by a news reporter, Chetter Hummin, who warns him that the true power behind the Imperial Throne is Eto Demerzel. Seldon falls under the influence of this sympathetic character, accepts being placed in the protection of history professor Dors Venabili, and set off on an adventurous "flight" from Demerzel. It takes the pair to Strelling University, Mycogen Sector, and Dahl Sector. At each stop, Seldon picks up pieces that clarify how psychohistory might be made into a practical science. It all comes together in Wye sector, as Imperial forces quash a coup for which the Mayor intends psychohistory to serve as cover. When Seldon figures out that Hummin is the mythical robot about which he hears in Mycogen and Dahl, Hummin confesses the truth-which includes that his second identity is Demerzel and that his real name is R. Daneel Olivaw. Seldon suspects that Venabili's extraordinary capacities mean that she too is a robot, but he loves her too much to let that stand between them.

Dors Venabili

Hari Seldon's protector and eventual love interest during his "flight" from the Eto Demerzel, Venabili (whose first name means "Spring Gift"), is born and educated on Cinna, a planet as obscure as Seldon's Helicon, and earns a doctorate in history there. Her specialty is the rise of Royal Trantor. She has been teaching at prestigious Strelling University on Trantor for three years when Chetter Hummin pulls her from the classroom to watch over the newly famous Seldon. Venabili is average height for a woman, slim, and well built; her hair is reddish-gold and curly; she is not amazingly



beautiful but instead quite pleasant, and appears to Seldon to be very young (she is only two years younger than he). Once her mission with Seldon is over, Venabili intends to remain a scholar, teaching and producing book-films. She is making no effort to assimilate to Trantorian ways, and may one day return to dull Cinna as a professor. During the flight, she helps Seldon understand the methods of history, introduces him to unknown subjects like religion, explains historical contexts and patterns, and urges him not to jump to conclusions-or to give up.

Venabili fails to protect her charge adequately at their first two stops, allowing him to go "Upperside" at Streeling (but later rescuing him) and allowing him to desecrate the Sacratorium in Mycogen, for which they are nearly condemned to death. There she shows her passionate concern for the rights of women and oppressed minorities. She does better in Dahl, gaining a reputation as a knife-fighter in the slums. This sets Seldon to thinking about her unusual abilities, which he notices from the start. She appears to be able to read his mind, masters both tennis and knife fighting with alacrity, and manages to communicate with Hummin under seemingly impossible conditions. Why she does so becomes understandable only after Hummin reveals that Demerzel is his alter ego and together they comprise the humanoid robot named R. Daneel Olivaw. By then, Seldon suspects that Venabili is also a robot, but he loves her too much to let that stand between them. The *Encyclopedia Galactica* says Seldon's wife's name is forgotten, along with the circumstances under which they adopt their son Raych.

R. Daneel Olivaw (a.k.a. Eto Demerzel a.k.a. Chetter Hummin a.k.a. Da Nee)

Only in the last two chapters does the protagonist Seldon figure out that his friend and protector Chetter Hummin is too persuasive to be human and gets him to admit he is R. Daneel Olivaw (the "R" stands for "robot"), who has remained undetected for 20,000 years. Olivaw is governed by Three Laws of Robotics to which he and a friend-robot prefix a stringent "Zeroeth Law", which makes not harming humanity the first duty of a robot. The task is too difficult for his friend, which deactivates itself, leaving Olivaw in care of the galaxy. He can detect human emotion and affect it with difficulty, interferes only when he must and then as little as possible. That he is still operational is proof of his success.

As the Empire begins declining in the reign of Stanel VI, Olivaw assumes the role of Eto Demerzel, chief of staff, to stave off ruin. He retains the post under the tyrant's ineffectual but well-meaning son, Cleon I. Seldon's speech about psychohistory suggests the possibility of a tool for identifying what is good or evil for humanity; therefore, the Demerzel persona arranges for Cleon to summon and try to recruit Seldon, and after that fails, he befriends Seldon in his Hummin persona, claiming to be a journalist and dedicated foe of the ostensibly evil Demerzel. Hummin arranges for historian Dors Venabili to serve as Seldon's companion during his "flight", places them in three supposedly safe environments, and intervenes directly in Mycogen to rescue them from mortal danger. He has built up an impressive collection of debts that he can call in. When Mayor Rashelle of Wye seeks to use Seldon to cover a coup, Demerzel is



forced to intervene, bringing about the revelation of his complex personality and history. With the truth told, Olivaw promises to arrange all Seldon needs to continue his research on psychohistory and guarantees his safety through the Demerzel persona. They will see one another only rarely in the future, always as the Hummin persona.

Cleon I

The last Galactic Emperor of the Entun dynasty, Cleon, like Hari Seldon, is born in 11,988 G.E. and succeeds his tyrannical father, Stanel VI, at age 22 in 11,988 G.E. Cleon detests the trappings of office and insists during his meeting with Seldon that they speak as equals. This disappears as Seldon consistently argues that he has nothing practical to offer the Empire in his theory of psychohistory. Long-term predictions are of no interest to anyone, while short-term ones risk being inaccurate and could destroy his opportunity to develop a workable program. Disgusted by such a reality, Cleon dismisses the disappointing man, allowing him to return to his home planet. The obscure but ubiquitous Eto Demerzel, Cleon's chief of staff, "alter ego," brain, and "evil spirit" overhears everything and volunteers to keep tabs on the mathematician, allowing no one else to control him, and keep the emperor ignorant of any unpleasantries that become necessary. Cleon's wife is no emotional help to him. Theirs is a political marriage that has produced an heir, so they ignore one another. The powerful Mayor of Wye disputes the legitimacy of the Entun dynasty and is on the verge of revolution when Demerzel thwarts her plans, leading to the revelation that Demerzel is an ancient robot that has been protecting humanity for millennia. He sums Cleon I up as well meaning but ineffectual as a monarch.

Yugo Amaryl

A native of the Dahl Sector of Trantor, Amaryl is languishing as a heatsinker when Hari Seldon and Dors Venabili tour the underground plant. Amaryl visits them at their apartment, bringing a mathematical solution he has worked out on his own. It demonstrates a rare mathematical talent, and Seldon promises to place him in a university program once his "flight" from Demerzel ends. The *Encyclopedia Galactica* states that Amaryl is the "mathematician who, next to Hari Seldon himself, may be considered most responsible for working out the details of psychohistory". While a minor character in this novel, Amaryl is prominent in other Foundation works.

Clowzia

An apprentice to meteorologist Jenarr Leggen at Streeling University, Clowzia is assigned to answer Hari Seldon's questions when he visits "Upperside". Clowzia has a happy round face and russet hair of a hue Seldon has never seen. She is a native of Trantor and hates being Upperside, but needs the fieldwork for her specialty. She tells Seldon about the existence of trees behind a dome before Leggen summons her to rejoin him. Seldon wanders off in the general direction she indicates and spends a



harrowing evening and night in the darkness before Dors Venabili arranges his rescue. Seldon briefly suspects Clowzia is part of an Imperial conspiracy to kidnap him.

Davan

Living without a knife in dangerous Billibotton, Davan (no last name) has spent decades trying to break down the intersector suspicion and intrasector social class war that the Imperium fosters. He is finally seeing some progress. He asks Seldon and Venabili to lead his uneducated followers, not just to give the movement a "veneer of respectability", but also to "penetrate the mists of the future". They are willing to help, but by developing psychohistory into a practical science. Davan is disappointed. When "Sunbadgers" try to arrest Seldon and Venabili but fail, Davan finds them hiding in a sewer and proposes to set them up with powerful friends who can protect them outside Dahl Sector.

Jenarr Leggen

The head of a meteorological project deploying instruments on "Upperside", Leggen is a friend of psychology instructor Lisung Randa, who introduces him to Hari Seldon. Leggen has a dark look about him, despite a fair complexion. He is "unmerry", speaking gruffly but with great resonance. He assigns apprentice Clowzia to answer Seldon's questions, and indicates that he wants mathematical help with an "intractable problem". Leggen explains how to use the elevator, should it get too cold for Seldon to bear. Leggen resists Venabili's demands that he take her Upperside to find Seldon after he fails to appear for hours. Only the threat of a murder charge moves him to act, and after the rescue, he is sincerely contrite about the oversight.

Mannix IV

The Mayor of Wye Sector on Trantor, Mannix IV is much feared by the Emperor Cleon I because of his Imperial ancestry and refusal to relinquish the throne to the upstart Entun dynasty. Immediately after watching a holocaust of Hari Seldon's Decennial Mathematics Convention, Mannix transfers his office to his daughter, Rashelle, whom he has groomed for the job. He is elderly and sickly, but wants to see the security forces he has built up, armed, and trained overthrow the pretender. When Cleon's chief of staff Eto Demerzel preempts them, Mannix meekly makes the required calls for peace and loyalty to the Emperor.

Elgin Marron

A gang leader in the tough Billibotton slum of Dahl Sector on Trantor, Marron intends to rape Dors Venabili and cut up Hari Seldon, but is hospitalized when the quick-moving woman slashes off his prized mustache and a portion of his upper lip. When Dahl security police investigate, Seldon and Venabili claim self-defense, contrary to what



three of Marron's followers charge. The officers hold that Marron's criminal record and alleged holding an illegal weapon are irrelevant. Six gang members fail to join in the affidavit-as they rally to rally to Marron's help in the street.

Mycelium Seventy-Two

An aged, atypical looking Mycogenian, Mycelium Seventy-Two happens upon Seldon and Venabili on a gravi-bus en route to the Sacratorium and quietly warns Seldon that hair is showing from his skincap. Mycelium explains the "obiah" (red sash) and silly rituals inside the temple. Mycelium claims to be well read in the great literature of the tribespeople and knows about discrimination in other cultures. That is why he has never traveled. Mycelium is, in fact, a plant by High Elder Sunmaster Fourteen, who is seeking an excuse for seizing the two tribespeople foisted on him by the persuasive Chetter Hummin.

Raindrop Forty-Three and Raindrop Forty-Five

Mycogenian sisters assigned by Sunmaster Fourteen to help Hari Seldon and Dors Venabili adjust to life in the xenophobic and sexist Mycogen Sector, Raindrop Forty-Five is a giggly girl, and Raindrop Forty-Three is her staid sister. Raindrop Forty-Three agrees with surprisingly little hesitation to lead Seldon on a tour of the microfarms for which the sector is renowned. When Seldon suggests that Mycogenians might harbor religious beliefs-he has only learned about "religion" from Venabili-Raindrop Forty-Three takes offense and reveals that her people remember a perfect lost world where humanity originates. She breaks taboo by lending him her copy of "The Book", after lustily demanding to be able to touch his hair, another Mycogenian taboo. In the end, it is revealed that the sisters are spies for High Elder Sunmaster Fourteen in his efforts to catch the visitors doing something illegal and eliminate them. The Sisters struggle horribly carrying out disgusting tasks like talking with a male, and will be rewarded for their obedience.

Lisung Randa

An instructor in psychology at Streeling University, Randa is a short, cheerful man, a typical "Easterner". Randa is the nephew of the famed mathematician, Kiangtow Randa, and is intrigued by psychohistory. As a child on the planet Hopara, Lisung Randa "throws sticks" to bilk napve people out of money by fortune telling. Hari Seldon assures him psychohistory is strictly abstract and impractical. Randa's description of a large-scale meteorological project on "Upperworld" intrigues Seldon and they agree a visit may be beneficial to the frustrated mathematician. Seldon briefly believes Randa may be part of an Imperial conspiracy to kidnap him during the nearly disastrous Upperworld adventure.



Rashelle

The middle-aged, motherly woman to whom Hari Seldon, Dors Venabili, and Raych are conveyed from Dahl Sector, Rashelle gradually reveals that she is the Mayor of Wye. Her father, Mannix IV, who has held the office for forty years, is alive and in his senses, but has ceded her power, certain that psychohistory will soon put her on the Imperial throne. She intends to cut Trantor loose from the millions of other worlds and rule it alone. Seldon refuses to "play the charlatan" for her any more than for the Emperor. When Eto Demerzel, the Emperor's chief of staff, quashes the plan by convincing officers not to obey a woman, Rashelle orders Seldon killed to prevent his falling into Demerzel's hands, but is foiled. Through the intercessions of young Raych, whom she befriends, Rashelle suffers no physical harm.

Mother Rittah

A fortuneteller of some renown in Dahl Sector, Mother Rittah is well into her 70s, hard of hearing, and moves with difficulty. She lives in squalor in Billibotton. She is delighted to receive Hari Seldon and Dors Venabili, and the opportunity to talk about the past rather than the more difficult future. She talks about the dawn of the galaxy and a planet Earth that humans for millions of years have inhabited exclusively. Ba-Lee is a great hero, but robots are detestable. One, Da-Nee, Ba-Lee's friend, survives and is waiting for his time to return and remove all evil. Seldon doubles Rittah's ten-credit fee and promises 1,000 credits if she will record her tales of Earth on computer discs. He leaves a contact number.

Raych Seldon

Raych is a tough twelve-year-old street urchin whom Hari Seldon and Dors Venabili encounter quite by accident in the wretched slums of Billibotton on the edge of the economically depressed Dahl Sector of Trantor. Raych serves as their guide in meeting Mother Rittah and Davan, is painfully injured by a security officer's neuronic whip, leads them in their flight into the sewers, and accompanies them on their trip to Wye Sector, where Raych quickly becomes a favorite of the Mayor, Rashelle. Raych's intercessions prevent her suffering any physical harm when her rebellion against the Emperor is quashed. The *Encyclopedia Galactica* claims that the circumstances of Raych's adoption by Seldon and his forgotten wife are unknown.

Sunmaster Fourteen

The authoritarian "High Elder" (mayor) of Mycogen, an intensely xenophobic sector of the planet Trantor which specializes in the production of food products, Sunmaster Fourteen agrees to protect Chetter Hummin's young refugee friends, Hari Seldon and Dors Venabili, provided they obey local taboos against showing "cephalic hair" and social contact between the sexes. Sunmaster assigns Raindrop Forty-Three and



Raindrop Forty-Five to show the "tribespeople" how to use Mycogenian appliances and to shop for appropriate clothing. When the visitors break all taboos by obtaining a copy of the Book and invading the Sacratorium, Sunmaster Fourteen is waiting for them and pronounces an immediate death sentence. It will, at least, be painless; if he turned them over to the pious crowds, they would be torn to pieces. Chetter Hummin appears at the last moment to negotiate a way out. Should Seldon's psychohistory ever prove practical and show a way back to longed-for ancestral Aurora, Mycogen will profit.

Emmer Thalus

A massive sergeant in security forces of the Why Sector, Thalus journeys to Dahl to arrest Hari Seldon. When Seldon refuses to leave without Dors Venabilis and Raych, Thalus moves to draw a weapon but has it snatched away and turned on himself. Seldon convinces Thalus that his orders to bring him in do not exclude the others coming also, and he gives his word of honor that no harm will come to any of them. Delivering his charges to Mayor Rashelle, Thalus remarks that *others* may not honor his word, but he will. Thalus gets caught between loyalties when Rashelle orders him to blast Seldon, to deny Demerzel his prize after her overthrow. Thalus draws his blaster but then drops it. Rashelle recovers it and slays her unfaithful servant,

Jirad and Casilia Tisalver

The thirty-something landlords with whom Chetter Hummin places Hari Seldon and Dors Venabili as paying tenants in their third stop on Trantor, Jirad programs at the local holovision station and Casilia keeps their seven-room house spotless. They have a half-grown daughter. Jirad is shorter than Seldon, with black curly hair and a thick black mustache, a universal characteristic of Dahlite males. Casilia is plump, and has dark hair pulled back into a bun, and beautiful dark eyes. Casilia is intensely prejudiced against heatsinkers and other members of the lower class. Jirad is a milquetoast who stays out of Casilia's way. The threat of lost income and facing Hummin convinces them to permit two disreputable Dahlite friends to visit their tenants' rooms, but when Casilia hears rumors of a knife fight in Billibotton and crowds gather outside her house to see the heroes, it is the last straw and she summons the security forces. Seldon and Venabili resist arrest violently and flee the Tisalver house, warning them that the mobs outside would be happy to trash everything they own.



Objects/Places

Trantor

The capital of the First Galactic Empire and self-styled "Eternal World", Trantor has the distinction of being entirely domed (200 million square kilometers), except for the grounds of the Imperial Palace. Trantor is a world of "unimaginable technological and cultural complexity". Imperial Sector enjoys the highest standard of living anywhere in the galaxy and is populated entirely by government officials. The rest of the planet's forty billion people are divided into 800 semi-autonomous regions whose civilizations and subcultures differ widely. Most places are untouchable by Imperial forces because the technology is so interrelated that the whole planet could be crippled by any given connection being interrupted. Emergency plans are in place to deal swiftly with earthquakes, volcanoes, and storms to keep the planet from tottering. The Empire does not advertise this vulnerability, but as a journalist, Chetter Hummin knows many things that he is not permitted to publish. The Emperor and his chief of staff, Eto Demerzel, know that disturbing Trantor means disturbing the Empire, so Trantor is the safest place for mathematician Hari Seldon to hide from them as they seek to control his psychohistory. Underground tunnels honeycomb Trantor where traffic travels at 350 km/hour. The interface between the "human hive" and the planetary atmosphere is referred to as "Upperside". The novel follows Seldon and Venabili in turn through Streeling, Mycogen, Dahl, and Wye sectors.

Billibotton

The wretched slum area on the edge of the working-class, economically depressed sector of Dahl on the planet Trantor, Billibotton is home to a twelve-year-old waif, Raych, who becomes Hari Seldon and Dors Venabili's guide and eventual adopted son. Raych also leads them to meet the social activist Davan, who has for years been trying to eliminate class and regional differences, the better to stand up to Imperial tyranny. Police keep their hands off Billibotton, where everyone owns a knife and many use them, in order to keep tensions high. Billibotton is the site of a knife fight that earns Venabili great fame and an enthusiastic following.

Cinna

The outer world on which Dors Venabili is born is by her telling a dull place, full of farms. She imagines it is little more important than Hari Seldon's native Helicon. She envies its slower lifestyle after two years on Trantor, the center of the Galactic Empire, and believes she may move back to Cinna as a professor of history. At least a third of Cinna practices tritheism, but Venabili is not among them.



Dahl

The third refuge that Chetter Hummin arranges for Hari Seldon and Dors Venabili during Seldon's "flight" from Eto Demerzel, Dahl is an economically depressed sector of the planet Trantor. Dahl produces energy in heatsinks deep underground near the superheated magma, and thus is so vital to the entire planet that Imperial forces keep their hands off. The work takes place under terrible physical conditions and the workers suffer severe class prejudices. The men all grow dense black moustaches and are shorter than average. Touring a heatsink, Seldon meets a self-taught mathematician, Yugo Amaryl, who is languishing in the heatsinks, and promises to place him in a university program once his flight ends. The most wretched and violent part of Dahl is called Billibotton, which Seldon and Venabili visit and meet Raych. During their stay in Dahl, Seldon and Venabili are paying tenants on the second floor of the Tisalver home. They flee the sector after violently resisting arrest by the security police, summoned by Mistress Tisalver when disreputable Dahlites visit her tenants and congregate outside her house, ruining her reputation among neighbors.

The Galactic Empire

The Galactic Empire consists of twenty-five million inhabited worlds, all colonized so long ago that no one remembers a time when all humans inhabit a single tiny planet. Some cultures remember a mythical "Aurora", while others remember an "Earth". The emblem of the Empire is the Spaceship and Sun. Its capital is the planet Trantor, a complex of 800 semi-autonomous sectors at the center of the Galaxy. The Galactic Empire succeeds a 2,000-year virtual empire ruled by Trantor, and has in its 10,000-year existence, survived occasional rebellions, dynastic wars, and periods of serious breakdown, but appears to prosper. In 12,010 G.E., Cleon I succeeds his tyrannical father, Stanel VI, and is in the tenth year of his declining reign when mathematician Hari Seldon presents a paper about psychohistory, which Cleon and his chief of staff, Eto Demerzel, see as being able to shore up the Empire. At the end of the novel, it is revealed that Demerzel is R. Daneel Olivaw, a humanoid robot who for 20,000 years has been watching over humanity, intervening as little as possible, but doing so since signs of degeneration begin under Stanel. Hearing Seldon's paper about "psychohistory", Olivaw believes this may make it possible quantitatively for robots not to harm humanity and sets out to control and promote the project. Rashelle, Mayor of Wye, which is a particularly vital sector because it cools the planet, intends to seize the throne and separate Trantor from the rest of the galaxy, which will naturally fall under the control of local warlords. The plot forces Olivaw's hand, revealing his identity and plans to Seldon, who agrees to continue working for a way to prevent or ameliorate the inevitable fall of the Galactic Empire.

Helicon

The outer world on which mathematician Hari Seldon is born, raised, and educated, Helicon is located on the opposite side of a black hole from Trantor, the capital of the



Galactic Empire which Seldon visits to present a paper on psychohistory. Travel between the worlds by hypership is a chore. Helicon has never rebelled against Imperial power, on which it depends for protection against larger neighboring worlds. After rescuing Seldon from thugs intent on returning him home a day early, Chetter Hummin warns him that imperial watchdogs will keep him under constant supervision on Helicon in full cooperation with the local government. Seldon finds "Helicon" listed only once in the index to a history book-film; it refers to its support for a failed claimant to the Imperial throne. Helicon is lucky to be too insignificant to be worth punishing. Helicon, which is slightly larger than Trantor, has a larger island and far fewer cities, sectors, and people, has normal weather patterns, and where Seldon comes from is generally mild and rainy. It is populated almost entirely by "Westerners".

The Three Laws of Robotics

These are the basic precepts programmed into all robots that they must obey or disable themselves. The are: 1) "A robot may not injure a human being or, through inaction, allow a human being to come to harm"; 2) "A robot must obey orders given it by human beings except where such orders would conflict with the First Law"; and, 3) "A robot must protect its own existence as long as such protection does not conflict with the First or Second Law." R[obot]. Daneel Olivaw postulates a "Zeroeth Law" that, viz.: "A robot may not harm *humanity*, or, by inaction, allow humanity to come to harm". Working out how this broader responsibility can be carried out in practice, Olivaw over millennia observes humans, intervenes only when necessary, and watches for an opportunity to introduce a new science, "psychohistory".

Mycogen

The second refuge that Chetter Hummin arranges for Hari Seldon and Dors Venabili during Seldon's "flight" from Eto Demerzel, Mycogen is a strongly xenophobic sector of the planet Trantor. It is led by the authoritarian Head Elder Sunmaster Fourteen. Inhabitants have been trained over generations to consider facial hair-including eyebrows and even long lashes-as an abomination. The few visitors are forced to cover all hair meticulously. At puberty, all Mycogenians are dilapidated as a sign of their belonging to the community. All wear "kirtles", which are long gowns; white for males, and gray for females. Females are forbidden to talk until talked to and may never speak with anyone of the opposite sex to whom they are not related. The scholar in Seldon is determined to learn about Mycogenian history, and in the process discovers a sacred Book and invades the sacrosanct temple in search of a legendary robot. There he is confronted by Sunmaster Fourteen and summarily condemned to death, until Hummin miraculously appears and arranged their release. The underdeveloped sector is "a splinter in the body of Trantor". Cohorts share a common name-astronomical ones for Elder families and agricultural ones for the lower classes-with individuals receiving a numerical designation.



Psychohistory

Hari Seldon's combination of history, sociology, and mathematical statistics, first described in a paper delivered at the Decennial Mathematics Convention on Trantor, psychohistory requires the following: 1) very large groups of people; and, 2) ignorance of the results by the population. The Galactic Empire, which numbers in the quadrillions, meets the criterion but is too massive to be practical. It cannot be reduced to less complex model(s) and can at best predict probabilities among options. In this, it resembles quantum mechanics, where examining subatomic particles can produce *probabilities*, but not predict the action of any given particle. In fact, this is the tool that R. Daneel Olivaw (a.k.a. Eto Demerzel a.k.a. Chetter Hummin) has been seeking for millennia to make it safe for robots like himself to watch over the safety of humanity. By traveling successively through Streeling, Mycogen, Dahl, and Wye sectors and soaking up the local cultures, Seldon comes to believe that psychohistory can be made practical by concentrating on Trantor as a microcosm of the Galactic Empire. It meets the criteria and the outlying areas can be added later. Olivaw promises to set up and support research for Seldon's lifetime and as long beyond as necessary to perfect the system.

Streeling University

Hari Seldon's first, brief refuge during his "flight" from Eto Demerzel, Streeling University is the top-flight institution where Dors Venabili teaches history before being assigned by Chetter Hummin as Seldon's bodyguard. Streeling Sector is located 2,000 km. from Imperial Sector. It is named for some obscure figure, as most of the sectors are. Prejudice exists at the university against Outworlders in general and Dahlites in particular because of their characteristic mustaches and alleged smell.

Wye

A powerful sector of the planet Trantor, Wye is situated at the south pole, where it dissipates the enclosed planet's excess heat into space. Without this service, Trantor would rapidly be destroyed. Wye has been ruled by a single dynasty of Mayors for 3,000 years. About 500 years ago, two emperors and an empress from the House of Wye occupied the Imperial throne, and their descendants have never forgotten the legacy. While never openly rebellious, they remain neutral in civil wars, helping to prolong the crises in order for the combatants to turn to them for a compromise solution. The present Mayor is very capable and ambitious, albeit old. He stands a chance of succeeding Cleon I over Cleon's too young son. If the Mayor of Wye has heard of a "useful scientific prophet", he will want to control him for his own benefit. Hari Seldon, Dors Venabili, and young Raych are taken from their third refuge, Dahl sector, brought to Wye, and installed in comfort in the Mayor's house. Rashelle, daughter of Mannix IV, who has governed the sector for forty years, has taken over his duties and intends to use Seldon's psychohistory to time and vindicate an overthrow of Emperor Cleon I. The danger is so great that Eto Demerzel, the man behind Cleon's throne, intervenes by invading Wye.



Themes

Taboo

Taboo is a sociological term that Dors Venabili has to explain to the mathematician Hari Seldon when they first encounter it in Mycogen Sector. Males and females alike are depilated at puberty to mark them off as precious few among "swarms and hordes", and this is carried over to distinctive clothing, behavior, and way of life. They farm to make themselves valuable the rest of Trantor and expect, in exchange, to be left alone. Mycogenians are horrified to see the slightest display of "cephalic hair". Such a strong taboo suggests a religious base, but Mycogenians are adamantly non-religious. Instead, they venerate history and a time when humanity is united on a single planet. That state will some day be restored. A Sister entraps Seldon by insisting on acting out her (pretended) hair fetish before she will turn over her precious Book. Reading it leads Seldon and Venabili to invade not only the "Sacrorium," which is taboo for "tribesmen" (non-Mycogenians) and Sisters except on special occasions, but also the "Elder's Aerie," taboo for all non-Elders. They narrowly avoid being executed for sacrilege. In Dahl sector, their next stop, males have a mustache fetish. The common people believe in a primeval world of human perfection on a world called Earth. Intellectuals, of course, belittle this. Pronouncing Mycogen's name for the planet, Aurora, is in Dahl a strong taboo.

Venabili senses Seldon's interest in sex and talks academically about how taboos generate sexual excitement in many cultures. Would Seldon be interested in women's breasts if they were routinely on display? She assures him he would not and tells a story about how on Cinna she had been sitting on a beach when a young man she had previously met steadied his balance as he sat on the arm of her chair by putting his hand on her bare thigh. They talked about how unhidden skin loses its sexual quality, until the discussion made him remove his hand. That night, Venabili dressed for dinner, found the young man, and invited him to put his hand on the same spot in public. He tried but cannot violate proprieties. The planet Derowd formerly allows complete hedonism before marriage and absolute monogamy afterward - and it worked for 300 years until other planets complain about losing tourist business. At the university, she has observed social pressures and she doubts any two sectors treat sex the same way.

Scholarship

Scholarship is at the heart of *Prelude to Foundation*. The protagonists are both upcoming junior professors and they meet at Streeling University, one of the premier schools in the Galactic Empire. Hari Seldon is visiting the capital planet, Trantor, to read a theoretical paper about "psychohistory" at the Decennial Mathematics Convention, and quickly finds himself pursued and/or helped by various people who want to control psychohistory once it becomes a practical science. To everyone, Seldon insists sincerely and plaintively, that the scope of the project renders it utterly impractical. At



Streeling, he is put under the protection of a history professor from another outlying planet, who has spent two full years on Trantor. Dors Venabili has no aptitude for mathematics, which Seldon adores, and he has perhaps even less aptitude for history, which bores him endlessly. Unfortunately, he needs to learn it for psychohistory to work. Seldon is utterly frustrated when a psychology professor happens by and tells him about a colleague who faces an even more daunting problem: systematizing meteorology on the twenty-five million inhabited worlds in the universe. All knowledge at base is one.

Much of the book is given over to Seldon and Venabili explaining their respective methodologies to each other. Their discipline-specific computers have different data structures and search methods. Seldon is proud that everything humans have discovered about mathematics over 20,000 years is stored in computers, while historians pick and choose. Venabili explains that mathematics is an "orderly thing of human invention", all one piece, while history deals with the "unconscious working out of the deeds and thoughts of quadrillions of human beings". When Seldon says he must know *all* of history before he can work out the laws of psychohistory, Venabili judges he will fail.

Power

Hari Seldon's "flight" around Trantor is largely about who will enjoy the power of psychohistory, once he has turned the theoretical into the practical. His paper at the Decennial Mathematics Convention makes clear (he believes) that this is a strictly theoretical field; its scope-the twenty-five million inhabited worlds of the Galactic Empire-is too vast to be covered in several lifetimes, and by the time the fastest computer delivers an answer to a question, it is obsolete. No one in power hears Seldon, however. The Empire has been degenerating for decades and its downfall seems likely. Emperor Cleon I, wants a tool that can prevent this. His more practical chief of staff, Eto Demerzel, wants at least to ameliorate the effects of the break-up. Hearing Seldon proclaim he cannot deliver such a tool, they put him under reconnaissance and Demerzel is prepared to "eliminate" Seldon should a "competitor" try to control him.

Not until the novel's end is it revealed that Demerzel is the same person as the kindly journalist, Chetter Hummin, who befriends Seldon and arranges for a bodyguard and safe lodging. Hummin admits he wants this powerful tool, but in order to benefit humanity as a whole rather than the Emperor grasping at straws to preserve his power. Seldon insists he cannot do the impossible, but is more inclined to try for these altruistic ends. Another "player" is the Mayor of Wye Sector, Rashelle. Her family, which has ruled Wye for 3,000 unbroken years, cannot forget the brief period in which ancestors sat on the Imperial throne 500 years ago. Rashelle is bent on taking back the throne but seeks power only on Trantor. She is willing to let the rest of the galaxy be seized by local warlords. Psychohistory could justify her coup, so since the Decennial Convention, she has been maneuvering to capture Seldon. She paints her interest in the same humanitarian shades Hummin has used. She wants peace and freedom rather than war and slavery for the human race. Before she can strike, Demerzel preempts. Under the



circumstances, he cannot continue to reveal that he is also the trusted Hummin, and both personae are the creation of R. Daneel Olivaw, a robot who for millennia has been looking after humanity, exercising his powers as rarely and benignly as possible.

On a smaller scale, power is examined in Mycogen Sector, where women have no rights, and in Dahl, where the working class is despised and discriminated against, to the extent that they cannot get into the university. A social activist, Davan, is trying to overcome the Imperium's active encouragement of intersector suspicions and intrasector social class war in hopes of hindering the people's struggle for power. Davan has devoted years, unsuccessfully, to building solidarity, but is seeing some progress, and also wants psychohistory on his side. Of all the contenders, Seldon seems to favor Davan most.



Style

Point of View

A wholly anonymous storyteller of *Prelude to Foundation* follows with considerable sympathy and empathy the adventures of mathematician Hari Seldon and historian/bodyguard Dors Venabili during their "flight" from the Emperor's ostensibly evil and manipulative chief of staff, Eto Demerzel. *Prelude to Foundation* is told in the third person past tense, largely through narrative connecting extensive dialog, without delving into the characters' inner thought processes. There are indications that the storytelling is as much as twenty years after-the-fact (based on a comment that Emperor Cleon I is the last of his dynasty to sit on the Imperial throne). It also acknowledges that the Hari Seldon who appears here is a far cry from the white-haired, wheelchair-bound cultural icon he is destined to become.

Apart from that one reference, the narrator is far from a hagiographer. All of the well-rounded characters have flaws, the hapless protagonist in particular. Asimov introduces his characters quite naturally and builds detail about them and interactions between and among them gradually, releasing hints to what is *actually* going on far too subtly to be detected until the final reckoning, which is filled with "aha" moments. A second reading, knowing the outcome would, doubtless, be rewarding. *Prelude to Foundation* makes reading and appreciating Asimov's classic *Foundation* trilogy easier.

Setting

Prelude to Foundation is precisely set in the year 12,020 G.E. (Galactic era), during the rocky reign of the Emperor Cleon I. The Galactic Empire has been in decline for years and is showing it in many ways. The action covers a span of months in the late fall/early winter, beginning when mathematician Hari Seldon reads a theoretical paper about "psychohistory" before the Decennial Mathematics Convention on Trantor, the capital of the Galactic Empire. The Emperor wants him to turn this into a practical tool to shore up his reign, and Seldon flees.

Seldon's "flight" takes him to four distinct sectors of this planetary "human beehive"-Streeling (a major university setting), Mycogen (a closed, conservative enclave), Dahl (economically challenged and including a squalid slum, Bellibotton), and Wye (the powerhouse that most challenges Imperial power)-are visited and their cultural peculiarities (Mycogen and Dahl being particularly peculiar) are experienced. All told, Trantor has a population of forty billion people, divided into 800 semi-autonomous regions.

The major characters, all academic types, contrast life and customs in these various locales with those on their remote home worlds, which are consistently more primitive than the technological wonder that is Trantor. They are, however, far advanced over



twentieth-century civilization on Earth, which is lost in the mists of time. There are several competing myths of a single home world for the human race, which can only be described in broad, fairy tale-like strokes. In the end, Seldon realizes that Trantor has sufficient population to isolate as a test study for his theory of psychohistory. The Galactic Empire is too vast (twenty-five million inhabited worlds and a quadrillion people) to be studied practically and power is so concentrated on Trantor that it is the critical heart of the problem.

Language and Meaning

Prelude to Foundation is told in smooth, flowing English. In each of the sectors of the planet Trantor that protagonist Hari Seldon and his companion/protector Dors Venabili visit during Seldon's "flight" from the Emperor's evil advisor, Eto Hummin, there are speech variants. Included is a modicum of distinct vocabulary for cultural items, but the meaning is always transparent. The widest variation from standard English is in the Billibotton slum, where the young waif Raych, Seldon and Venabili's guide, speaks in a tough, wise-guy style, which the Lady Mayor of Wye has learned as a lark in her youth and uses to bond with Raych.

In his quest for a practical psychohistory, Seldon needs to make up for his deficiency in history, and much of the dialog is given over to Venabili, a history professor, explaining antique concepts to him. These prominently include religion, which some humans practice and others despise. Seldon repeatedly attempt to explain psychohistory to those who see its use for their own purposes and refuse to believe it cannot become practical. These passages are dense, particularly in the earliest presentations, but become clearer as the reader becomes familiar with the arguments and Seldon begins to intuit that a practical solution is possible.

Seldon and Venabili are both scholars and naturally discuss such matters as religion and mythology; sexual, racial, and class discrimination; politics and technology. The discussions tend to be lucid with mind-opening application to readers in the 21st century.

Structure

Prelude to Foundation consists of nineteen titled chapters broken into ninety-four continuously numbered sections. It is preceded by an "Author's Note" that explains the evolution of the 1.45 million words Asimov has devoted to novels about robots and the Galactic empire since 1942. The present novel, the latest in the series, falls chronologically at position nine in a fourteen novel list. It relates how a humble young mathematician Hari Seldon evolves from believing his "psychohistory" can only be theoretical to seeing how a subset limited just to the planet Trantor can be made practical. The book alludes to the fact that Seldon will become the most extraordinary person in the galaxy in later years and enter myth when the facts of his life are forgotten in the mists of history. There is minimal referencing backward or forward, except



Venabili's "hand-on-thigh" story, which recurs frequently, and very sparse reference to the earlier lives of the characters on other planets.

Each chapter is headed by an excerpt from the 116th edition of the *Encyclopedia Galactica* published in 1,020 F.E. (Federation Era), which corresponds to 13,086 G.E. (Galactic Era), the resetting of chronology that begins in the year of Seldon's death. These excerpts consistently indicate that few of the events in the novel, which dates from 12,020 G.E., are currently recalled. Nevertheless, they serve as a handy introduction to major characters, events, and institutions.

The novel proceeds in a strictly linear fashion; beginning with "Mathematician", where the protagonist meets the Emperor and offends him by insisting psychohistory can never become a practical science. The next five sections ("Flight," "University," "Library," "Upperside," and "Rescue") introduce a journalist, Eto Hummin, and history teacher, Dors Venabili, and follow Seldon and Venabili as he settles into research at Streeling University. It ends with Seldon's rescue from a life-threatening situation. The next six sections ("Mycogen," "Sunmaster," "Microfarm," "Book," "Sacrorium," and "Aerie" are set in an ultra-conservative, misogynistic sector, Mycogen; it ends with Seldon and Venabili committing sacrilege and narrowly avoiding execution. The next four sections ("Heatsink," "Billibotton," "Undercover," and "Officers") is set in Dahl Sector, where Seldon and Venabili's future adoptive son is introduced, and the three narrowly escape capture by Dahlite security forces. The final three sections ("Wye," "Overthrow," and "Dors") are set in Wye Sector and deal with an abortive attempt to overthrow the Emperor. There, Hummin reveals not only that he has Demerzel as an alter ego, but also that he is a 20,000-year-old robot trying to protect the human race.



Quotes

"What I have done, however, is to show that, in studying human society, it is possible to choose a starting point and to make appropriate assumptions that will suppress the chaos. That will make it possible to predict the future not in full detail, of course, but in broad sweeps; not with certainty, but with calculable probabilities." "Mathematician" p. 10.

"He must have. Here I am." "That means nothing. he knows where you are and he'll continue to know. And when he wants you, he'll get you, wherever you are. And if he decides you're useful, he'll squeeze the use out of you. And if he decides you're dangerous, he'll squeeze the life out of you." Seldon stared. 'What are you trying to do. Frighten me?' "I'm trying to warn you." "Mathematician" p. 24.

"He continued to scan the sky, vertical creases appearing between his eyes and then, far off - "It was a small dark spot, showing up against the gray. And whatever it was it seemed to be moving about as though getting its bearings before it was obscured by the clouds again. "Then, without knowing why, he thought, They're after me. "And almost before he could work out a line of action, he had taken one. He ran desperately along the crease toward the trees and then, to reach them more quickly, he turned left and hurtled up and over a low dome, treading through brown and dying fernlike overgrowth, including thorny springs with bright red berries." "Upperside" p. 106.

"The doctor was delighted.

" 'I've never seen a case of exposure,' he explained. 'One doesn't get exposed on Trantor.' " 'That may be,' said Dors coldly, 'and I'm happy you have the chance to experience this novelty, but does it mean that you do not know how to treat Dr. Seldon?' "The doctor, an elderly man with a bald head and a small gray mustache, bristled. 'Of course, I do. Exposure cases on the Outer Worlds are common enough - an everyday affair - and I've read a great deal about them.'" "Rescue" p. 127.

"'No no.' Hummin lifted his right forefinger as if lecturing a young student. 'W-y-e. It's the name of a sector on Trantor. A very special sector. It has been ruled by a line of Mayors for some three thousand years. It has been a continuous line, a single dynasty. There was a time, some five hundred years ago, when two Emperors and an Empress of the House of Wye sat on the Imperial throne.'" "Mycogen" p. 143.

"'Comfort is for all of us,' said Seldon, perhaps a little more loudly than was necessary, 'and we will not budge from this place unless we are assured that we will not be forcibly bent to your liking against our own natures. It is our custom that a woman may speak whenever she has something to say. If you have agreed to keep us secure, that security must be psychological as well as physical.' "Sunmaster gazed at Seldon levelly and said, 'You are bold, young tribesman. Your name?'" "Sunmaster" p. 165.



" 'Don't think it, tribesman. If our customs are rigid, it is because we are mere millions surrounded by billions. Somehow we must mark ourselves off so that we precious few are not lost among your swarms and hordes. We must be marked off by our hairlessness, our clothing, our behavior, our way of life. We must know who we are and we must be sure that you tribesmen know who we are. We labor in our farms so that we can make ourselves valuable in your eyes and thus make certain that you leave us alone. That's all we ask of you ... to leave us alone.'" "Microfarm" p. 199.

"They were approaching the group now. There were men and women (Dahl seemed to be a more or less amphisexual society) and both sexes were shirtless. The women wore devices that might be called brassieres, but they were strictly functional. They served to lift the breasts in order to improve ventilation and limit perspiration, but covered nothing. "Dors said in an aside to Seldon, 'That makes sense, Hari, I'm soaking wet there.' "Take off your brassiere, then,' said Seldon. 'I won't lift a finger to stop you.' "Somehow,' said Dors, 'I guessed you wouldn't.' She left her brassier where it was." "Heatsink" p. 292.

"The next morning, dressed from the waist down, having washed and shaved, Seldon knocked on the door that led to Dor's adjoining room and said in a moderate voice, 'Open the door, Dors.' "She did. The short reddish-gold curls of her hair were still wet and she too was dressed only from the waist down. "Seldon stepped back in embarrassed alarm. Dors looked down at the swell of her breasts indifferently and wrapped a towel around her head. 'What is it?' she asked. "Seldon said, looking off to his right, 'I was going to ask you about Wye.' "Dors said very naturally, 'About why in connection with what? And for goodness sake, don't make me talk to your ear. Surely, you're not a virgin.'" "Officers" p. 351.

"The servers were many and silent and when the door opened it seemed to Seldon that he caught a glimpse of soldiers, armed and at the ready, outside. The room was a velvet glove, but the iron fist was not far distant. "Rashelle was gracious and friendly and had clearly taken a particular liking to Raych, who, she insisted, was to sit next to her. "Raych - scrubbed, polished, and shining, all but unrecognizable in his new clothes, with his hair clipped, cleaned, and brushed - scarcely dared say a word. It was as though he felt his grammar no longer fit his appearance. He was pitifully ill at ease and he watched Dors carefully as she switched from utensil to utensil, trying to match her exactly in every respect." "Wye" p. 384.

" 'But I that what you want?' asked Seldon wonderingly. 'Are you telling me that you look forward to ruling over an Empire that will breakup into splinters?' "Rashelle said, 'That is exactly right. I would rule over Trantor, over its outlying space settlements, over the few nearby planetary systems that are part of the Trantorian Province. I would much rather be Emperor of Trantor than Emperor of the Galaxy.'" "Wye" p. 391.

"Dors made no move and he kissed her - slowly, lingeringly, and then passionately - and her arms suddenly tightened around him. "When he stopped at last, she looked at him with eyes that mirrored her smile and she said: "Kiss me again, Hari. Please.'" "Dors" p. 343.



Topics for Discussion

Name three analogies Hari Seldon offers to show how impossible it is to make psychohistory practical. Select the one you consider most convincing and explicate it.

How early in the novel do you suspect Eto Demerzel and Chetter Hummin are one? What gives it away?

How early in the novel do you suspect Dors Venabili is a robot? What gives it away?

What is meant by "project chauvinism" in Hari Seldon's discussion with Lisung Randa?

How does agoraphobia figure in the novel?

How does the planet Derowd figure in the novel?

What effects does living a while in Mycogen have on Seldon and Venabili after they move on?

What is Mother Rittah's contribution to the novel?