Mutation Study Guide

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Plot Summary

The brilliant biology researcher Victor Frank secretly uses advanced genetic techniques to create a son with incredible intelligence. The son, VJ, astounds everyone with his amazing intellectual abilities. However, at age three, VJ suffers an enormous drop in intelligence. Then, Victor's oldest son David dies of a rare form of liver cancer, and VJ's nanny Janice dies of the same type of cancer shortly after.

When VJ is ten-years-old, a series of confusing and somewhat sinister events occur in rapid succession. Victor is left feeling confused and vulnerable. Victor's wife Marsha, a child psychiatrist, begins to suspect that VJ is a disturbed child.

A series of interesting plot twists lead the Franks through an event-filled week. They gradually realize that their son VJ has long been involved in illegal and morally horrifying activities involving bio-technological research.

Although Victor does not want to believe VJ is involved in such terrible things, Marsha gathers enough evidence to finally convince Victor. They discover that VJ has built a secret biology laboratory where he is pursuing amoral and sinister biological research. Together, they confront VJ and discover that their worst fears, and more, are true. Determined to correct his terrible mistake, Victor destroys VJ's secret laboratory, in the process killing himself and VJ.



Prologue

Prologue Summary

The novel opens in a hospital in Detroit, Michigan, where Mary Millman is delivering a baby. Mary is acting as the surrogate mother for Dr. Victor Frank and his wife Dr. Marsha Frank, who are both present. The Franks are the biological parents of the baby, and Dr. Frank is a fertility specialist who has personally performed the in vitro fertilization and implantation.

Mary seems surprised by how painful the experience is. Marsha is a reassuring and experienced mother. Victor is exceptionally nervous and intrusive. The delivering doctor recalls how Victor made numerous exceptional demands during prenatal care, including the unnecessary application of the antibiotic cephaloclor for a specific three-week period during the pregnancy.

The baby is delivered, and Victor is greatly relieved to see that it appears to be normal and healthy. The baby does not cry, but instead manages to grab a suction bulb from the pediatrician and throw it to the floor. As Victor looks at the baby, he feels the baby is looking back at him. After three days, the Franks return home to North Andover, Massachusetts, where they are greeted at the door by Janice Fay, their long-time live-in nanny, and David Frank, their five-year-old son.

Prologue Analysis

Victor's nervousness seems all out of proportion to a normally progressing delivery, though the reason for this is not yet provided. Victor's unusual request for pre-natal cephaloclor will become significant later in the novel, as will the references to the baby's atypical abilities. The entire action of the prologue sets up foreshadowing of the mystery that will surround VJ Frank's early life.

The Franks appear to have a solid and fairly traditional relationship, and are clearly wealthy and educated. The prologue ends with a rather heavy-handed statement indicating Janice and David would both be dead within a few years.





Chapter 1 Summary

Chapter 1 begins on a Sunday and establishes the main timeline of the remainder of the novel. Ten and a half years have passed since the birth of VJ.

Marsha reflects on the death of David, five years earlier, from a rare form of liver cancer. After David's death, Janice became mentally unstable, claiming she was being poisoned. Then, Janice also died of the same rare form of liver cancer. Epidemiological investigations concluded the two cases were a freak occurrence, and not connected.

Marsha, a child psychiatrist, also reflects on VJ's personality. She finds his advanced maturity difficult to accept, but what particularly bothers her is VJ's apparent lack of emotion. During a dinnertime conversation, Marsha urges VJ to spend more time with school friends, but VJ prefers to spend his time at Victor's lab. Victor sides with VJ, and VJ continues to spend most of his free time at Victor's lab. After dinner, VJ surreptitiously uses Victor's computer, entering data into a hidden file. Meanwhile, Marsha expresses concern over VJ to Victor. Victor doesn't take her seriously, insisting that VJ is fine.

Chapter 1 Analysis

The deaths of David and Janice from the same rare form of liver cancer is extremely unlikely, but has been deemed coincidental. This issue will be addressed later in the novel. The confluence of improbable events is a recurrent theme in the novel.

Marsha, a child psychiatrist, seems to be particularly unobservant regarding her own son VJ. Throughout the novel, VJ will demonstrate extreme personality disorders and aberrant behavior, which began around age three, yet Marsha, the child psychiatrist, does not strongly suspect any of this for years. Even when Marsha begins to express concern, she is dismissed out-of-hand by Victor, who assures her that VJ's behavior is normal. As a child psychiatrist, she should know better, but apparently acquiesces to Victor's forceful opinion.

Chapter 1 establishes the rapid-pace timeline which will dominate the structure of the remainder of the novel. The entire series of events which follows in the subsequent fourteen chapters will occur within just nine days.



Chapter 2

Chapter 2 Summary

Chapter 2 happens on the same Sunday as Chapter 1. William and Sheila Hobbs' son, Maurice, is a child prodigy. At three years of age, he is able to win at chess against his proficient father. William and Maurice are playing a game of chess, when Maurice suddenly collapses and goes into seizures. They summon an ambulance. William and Sheila were unable to conceive on their own, so they used the services of Victor's lab, where William is an employee, to obtain Maurice through gamete-donation and a surrogate mother. Maurice was born with exceptional intelligence.

Meanwhile at the Franks' house, Victor cajoles VJ into a swimming race. As Marsha watches, VJ throws the race allowing Victor to win.

Meanwhile at the Murray house, Mark complains of a headache. Horace and Colette Murray's son, Mark, is another child prodigy. At two-and-a-half years of age, he is capable of astounding feats of intellect. However, earlier in the day he became sick, and he goes into seizures. They rush him to the hospital. Horace and Colette were unable to conceive on their own, so they used the services of Victor's lab, where Horace is an employee, to obtain Mark through in-vitro fertilization and a surrogate mother. Mark was born with exceptional intelligence.

Meanwhile at the Franks' house, Victor and Marsha get ready for bed. Marsha tells Victor that VJ threw the race, but Victor doesn't believe her. She again expresses concern for VJ, and again Victor dismisses her out-of-hand, insisting VJ is fine.

Chapter 2 Analysis

The two children, Maurice and Mark, attend daycare together at Chimera, where both of their fathers are employed. Additionally, both children were conceived using the services of Chimera's fertility clinic. The parallels are obvious and will be explored later in the novel. Although the Hobbs and Murray families play a key role in developing the novel's plot, they are all minor characters. Again, the simultaneous occurrence of apparently unrelated unlikely events is a recurrent theme in the novel.

Marsha again voices concerns about VJ and is brusquely dismissed by Victor. This theme, well established by Chapter 2, will continue practically throughout the remainder of the novel. It is unclear why a veteran child psychiatrist allows her professional opinion to be so easily dismissed by a biologist.



Chapter 3

Chapter 3 Summary

Chapter 3 begins the next day in the novel's timeline, Monday. Victor, Marsha and VJ eat breakfast together. Marsha urges VJ to play with school friends, but VJ wants to go to Victor's lab. Victor sides with VJ, and they go to the lab. However, as usual, VJ bikes and Victor drives.

Victor's lab is actually a sprawling compound of old buildings owned by Chimera, Inc. Victor is a principal owner of Chimera. The company is in the forefront of biological and genetics research, and makes a fortune performing in-vitro fertilizations and other related services. The compound is under constant guard. The buildings are very old, and only some of them have been renovated for active use. Many remain abandoned.

The compound is dominated by a large clock tower next to a river. The river runs into a millpond which in times past drained through a sluice gate through the clock tower's basement, driving a huge water wheel which provided mechanical power to the entire compound. Presently, the rusty sluice gate is bolted shut and the raging river crests a spillway over the millpond. Victor wants to renovate the clock tower, but has not yet appropriated the funds to do it.

VJ rides his bike to the bank on the way to Victor's lab. At the bank, VJ accesses his safety deposit box and adds numerous bound stacks of one-hundred dollar bills to his considerable cash reserve. He then continues to the lab.

At the lab, Victor faces four irritating and controversial situations. First, he is arguing with his friend and co-worker Ronald Beekman about the future direction of the company. This argument appears acrimonious and heated, though the two have a long relationship. Second, Chimera is involved in a lawsuit against George Gephardt, an employee on leave of absence for putative fraud and theft. Gephardt has also filed counter lawsuits. Third, Sharon Carver, a former employee, first tries to trade sex for employment. When that fails, she threatens to file a sexual harassment lawsuit if Victor will not reinstate her in her old job, which she lost for non-performance. Fourth, William Hurst, a Chimera employee, is violently upset, because Victor has ordered an independent review of Hurst's results. Hurst demands the review be cancelled, considering it an affront to his professional reputation. When Victor refuses, Hurst threatens him.

After dealing with the confrontational meetings, Victor is looking forward to performing some lab work, but is interrupted by a visit from William Hobbs. He tells Victor that Maurice has died and asks for some time off. Victor is notably disturbed, and probes for more information.



Chapter 3 Analysis

The confrontation that Victor has with Ronald Beekman seems unsubstantiated - they have a long-term professional relationship and already know they differ in opinion. Throughout the remainder of the novel, Victor holds Ronald in high regard - a regard that is apparently mutual. It is, therefore, somewhat inexplicable that their casual meeting turns into a shouting match of threats.

The situation with Gephardt is somewhat more complex and will be further elaborated later in the novel. Sharon is simply another source of contention and will play only a minor role in the remainder of the novel. Hurst is a believable antagonist, and yet will play the most minor role of all. These confrontations foreshadow later confrontations in the novel, and will become symbolic of Victor's inability to effectively control his situation.



Chapter 4

Chapter 4 Summary

Chapter 4 happens on the same Monday as Chapter 3. Marsha provides psychotherapy counseling to a teenager who has various personality disorders. After the session, she compares the teenager to VJ, and becomes even more worried that VJ is somehow abnormal or worse.

Meanwhile at the lab, Victor is agitated. He tries to review a computer file he has kept on Maurice Hobbs, but discovers it has been deleted. He discovers his file on Mark Murray has also been deleted. Then he receives a telephone call from Horace Murray, informing him that Mark Murray is near death in the hospital. Victor rushes to the hospital and discusses the case with the parents and the pediatricians. While he is there, Mark Murray dies. Victor is obviously distressed. He returns to the lab where he discovers his file on VJ has also been deleted. He asks his IT department to investigate, and suspects that Hurst has deleted the files.

Chapter 4 Analysis

It is interesting that Marsha only realizes VJ's personality disorders when she diagnoses similar disorders in another child. This strange ignorance of developments within her family is a recurrent theme in the novel.

Victor's agitation over the deleted files is convincing, and his nervous and immediate visit to the Murray family at the hospital is interesting, and will be explained later in the novel. As a medical doctor and biologist, Victor immediately grasps the medical situation. When Victor visits the hospital, he is allowed access to reserved areas, so he can speak with staff about confidential patient issues. He's allowed this access, because he "acted at ease in the environment" (p. 59). This access to healthcare facilities and records will continue through the remainder of the novel, and is not particularly believable.



Chapter 5

Chapter 5 Summary

Chapter 5 happens on the same Monday as Chapter 4. After dinner, VJ goes to his bedroom while Victor and Marsha argue about VJ. As usual, Marsha voices concerns about VJ's personality. Victor quickly dismisses her. Then, Victor declares he wants VJ to undergo a complete neuro-medical workup. Marsha is taken aback, and assumes Victor is withholding information.

Victor and Marsha discuss VJ's past; he was born exceptionally gifted, but at age three and a half, he had an unobserved episode which resulted in a catastrophic drop in IQ and ability. Since that time, VJ has exhibited only an above-average IQ. Marsha finally agrees to medical procedures on the condition that Victor will explain his reasoning. Victor agrees, but says he will have to take her to the lab to explain.

Victor and Marsha go to VJ's room to tell him about the next day and tell him they are leaving for a few hours. VJ surreptitiously hides an expensive stamp collection when he hears them coming to his bedroom. Victor and Marsha leave. VJ receives an anonymous and threatening telephone call, with a message directed at Victor. VJ becomes afraid and locks up the house. He then places a call to an anonymous adult who consoles him and tells him everything will be taken care of.

Meanwhile, Victor and Marsha arrive at Victor's lab. In a long scene full of biological terms and processes, Victor explains to Marsha that years ago he isolated a gene, called nerve growth factor, or NGF, from an Aplasia - basically a large sea slug. The gene causes massive proliferation of nerve tissue. Victor experimented with NGF for several years, raising super-intelligent rats and sheep. Victor also discovered a way to use additional genes, promoter genes obtained from bacteria, to effectively construct an on-off switch for the NGF gene. The NGF gene would only activate in the presence of cephaloclor. Finally, when Marsha and Victor were undergoing in-vitro fertilization, Victor inserted the NGF gene into all eight of the fertilized embryos that were created. Then, he implanted one embryo that would become VJ into Marsha.

Marsha and Victor reminisce about VJ's early childhood and his amazing mental feats. Marsha recalls details about the day that VJ's IQ dropped. Marsha becomes very upset, and accuses Victor of immoral behavior, which Victor haltingly admits. Victor then explains that Maurice Hobbs and Mark Murray are actually two of the other eight embryos, VJ's biological brothers, and thus their deaths at roughly age three are very troubling.

Victor and Marsha discuss the ethics of Victor's actions. Marsha feels his actions are despicable, but Victor only admits they were probably not right. Marsha ponders whether there were additional side effects on VJ from the NGF gene - such as his personality disorder. Marsha asks Victor why he used the other embryos, and Victor



explains that he wanted to give the couples exceptional children. Marsha understandably becomes very upset. Victor and Marsha return home, where VJ relays the telephone threat. Victor tells VJ he is going to have a complete neuron-medical workup. Although VJ resists, Victor does not relent. Marsha determines to also have VJ take a battery of psychological exams after the medical exam.

Chapter 5 Analysis

The information presented by Victor in Chapter 5 is central to an understanding of the novel. Victor's bombshell explains why VJ was born so gifted and why his personality is so disturbed. It also finally makes sense of Victor's frequent nervous apprehension, and also his fascination with Maurice Hobbs and Mark Murray, his biological sons.

The episode of VJ's precipitous and instantaneous decline in ability is further explored in the novel's later chapters and is a recurrent theme. The telephone call that VJ places is unconvincing. Throughout the entire novel, VJ is in complete control of his associates - except in this single scene, where VJ is portrayed as a frightened kid seeking assurances from an authoritative adult.

Victor's use of the two embryos is problematic. By the novel's timeline, VJ's intelligence drop had occurred two years before Victor utilized the embryos - yet Victor inexplicably claims he used them because his project had been a success. Also, how Victor managed to introduce cephaloclor to the two mothers during pregnancy is not discussed, though they were warned that their children should never be exposed to the antibiotic.





Chapter 6 Summary

Chapter 6 begins the next day in the novel's timeline, Tuesday. Victor and Marsha travel to the hospital where VJ undergoes extensive and esoteric medical testing. The results are inconclusive and indicate VJ is in good health. After the testing, Victor goes to the pathology section and speaks with the doctors who are performing an autopsy on Maurice Hobbs. He observes part of the autopsy. He then obtains brain tissue samples from Maurice Hobbs and Mark Murray.

Meanwhile, Marsha and VJ return to Marsha's psychiatry offices where VJ undergoes an hours-long regimen of psychological profiling by Marsha's colleagues. These psychological tests indicate VJ's IQ is a high-normal 128 and his personality and skills are typical. Of note, the validity indicator on the personality test is nearly out of the normal range. Marsha discusses the results with her colleagues, and they come to a consensus that VJ is normal.

Victor returns to his lab, and passes the samples to Robert Grimes, his lab technician, requesting various esoteric tests. Victor then goes to the IT department and speaks with Louis Kaspwicz, the head of the department. Louis tells Victor that an audit shows the files were deleted by Victor. He tells Victor the date they were deleted. Victor returns to his office and looks at an old calendar to discover he was in the office that day. Victor thinks he may, perhaps, have deleted the files and then forgotten.

That night, Marsha and Victor share information and further discuss VJ. Victor is sure that the psychological tests indicate VJ is normal, though Marsha still harbors reservations. They also discuss the tests on the brain tissue samples, and Victor promises to share the results once he has them.

Marsha then attempts to make Victor promise to destroy the remaining five embryos, still in storage at Chimera, but Victor refuses. Their argument is cut short by the sound of shattering glass and VJ's screaming.

Chapter 6 Analysis

Credibility is again strained when Victor requests to not only watch an autopsy and be privy to the results, but to actually obtain brain tissue samples from two patients which he then hand-carries out of the hospital - all on his unsubstantiated assertion that he is a medical doctor.

VJ displays a familiarity with the psychological exams, and, coupled with his nearly abnormal validity score, gives Marsha suspicion that he may be somehow manipulating the exams' results. The book's fairly subtle portrayal of VJ's test-taking ability foreshadows later developments.



Chapter 7

Chapter 7 Summary

Chapter 7 begins on the same Tuesday as Chapter 6 and then proceeds to Wednesday. Victor and Marsha rush to VJ's bedroom and discover a brick has been thrown through his window. Victor runs outside and fails to catch the perpetrator. Marsha tries to calm VJ, but he repeatedly insists he will find and kill whoever threw the brick. The brick is wrapped in a note that says 'remember our deal.' Victor calls the police, and they show up and take a report. After the police leave, Victor tells Marsha about his problems at work, and they speculate on who could have thrown the brick. Victor doesn't understand what the note could mean. Everyone goes to sleep, and the novel timeline proceeds to Wednesday.

In the morning, Marsha tries to convince VJ to spend the day with his school friend Richie Blakemore, but VJ instead goes to the lab. Victor sees VJ to the lab where VJ hooks up with Philip Cartwright, a mentally retarded Chimera employee. Philip and VJ have been close friends for years, and VJ spends nearly all of his time at the lab with Philip. Philip's regular job duties are apparently suspended whenever he is accompanying VJ.

Victor notes that the river near the clock tower is running very high, and tells VJ to stay away from the river area. Victor then goes into his office and places calls to George Gephardt, William Hurst and Sharon Carver, telling them all to leave him alone. Victor then looks at some test results and realizes Maurice Hobbs and Mark Murray died because their brains were producing new cells as a result of the inserted NGF gene being turned on. He also discovers that VJ's inserted NGF gene is still turned off.

Victor reviews VJ's medical history and orders more esoteric tests on the samples in the lab. He then questions William Hobbs and Horace Murray to ensure their sons were not exposed to cephaloclor. Both men confirm that their sons had not been exposed.

Victor attempts to retrieve all of his paper files on the NGF project, and discovers the files have been stolen. He also discovers the five remaining embryos have been stolen. He becomes confused and ponders his situation. Victor investigates the computer file deletion further and discovers that the files were presumably deleted from his home computer at a time when he was not home. The IT department suggests it must be a hacker attack. Victor becomes worried for VJ's security and asks Philip to sleep over for a few nights.

Meanwhile, Marsha goes to her office and reviews VJ's test results. She contrasts the results with her own observations, and determines that VJ's behavior is substantially different from what the tests would indicate. Marsha goes to the preschool that VJ once attended. She discusses VJ with his old preschool teacher. His teacher recalls that VJ was once a social leader of children, but after his intelligence drop, he became a



follower and observer. She also recalls that VJ routinely let other children win in any competition.

That evening, Victor and Marsha exchange information. In a familiar pattern, Marsha expresses concern about VJ, Victor, again, dismisses her concerns. Marsha reviews Victor's journal on VJ's progress - the journal stops after VJ's intelligence drop. Victor says he stopped keeping the journal after the experiment proved a failure.

Chapter 7 Analysis

Chapter 7 continues to develop the backdrop of mystery surrounding many recent events in the Franks' life. It is dominated by Victor's continued biological investigation into the cause of death of the two infants. Victor seems confused about what is going on, and is genuinely concerned for VJ's physical well being.

Marsha continues to delve into VJ's past and starts to put all the pieces together. It remains unclear why, as a professional child psychiatrist, she has not previously pursued this angle of thinking. In a familiar pattern, Victor continues to withhold information from Marsha while simultaneously dismissing Marsha's concerns and ideas.

Victor's attitude toward VJ is contradictory - he stopped keeping his medical journal on VJ after his intelligence drops, because he deemed his experiment a failure. Yet, in Chapter 5 Victor claimed he used the additional embryos, because the experiment had been a success.



Chapter 8

Chapter 8 Summary

Chapter 8 takes place on the next day in the novel's timeline, Thursday. Victor returns to the hospital and obtains blood and urine samples taken from Maurice Hobbs and Mark Murray. He then obtains a preserved sample of his son David's liver tissue from the hospital sample storage area. Victor returns to his lab and orders many more esoteric medical tests on the new samples. Victor then coordinates with his IT staff to attempt to trace the next hacker access on the Chimera computer system.

Victor and Colleen then discuss George Gephardt, and Colleen points out that Gephardt's main offense appears to have been purchasing expensive lab equipment which was delivered to Chimera, but subsequently vanished. Victor assumes he was selling the items, although he can't imagine who would buy such expensive and esoteric equipment on the black market. He tries to call Gephardt to confront him, but can't get an answer.

Meanwhile, Marsha visits the Chimera daycare to discuss VJ's earlier childhood with the workers. She learns that VJ periodically drops in to help out at the daycare, and, in fact, spent several hours at the daycare on the previous weekend. Marsha learns that after VJ's intelligence drop, he stopped spending much time at the daycare and instead spent his time in Victor's lab. She also learns that VJ never had many friends at the daycare. Marsha then goes to VJ's present school and talks to the principle. She learns that VJ rarely attends school, and that when he does, he often gets into fights. Marsha learns that a few years ago, one instructor at the school took a particular interest in VJ and tried to engage him. The instructor subsequently died.

In the evening, Victor stops by Gephardt's house to confront him and discovers that Gephardt and his entire family have been murdered. He is shocked and summons the police.

When Marsha returns home, she finds the family cat dead and nailed to the garage door with a threatening note attached to it. When Victor arrives home, he calls the police who take a report. Later, Victor and Marsha share information. Victor does not see VJ's truancy as a problem, but does confess that when VJ is at the lab, he is completely unsupervised and has the run of the entire compound. Once again, Marsha expresses concern for VJ, and Victor curtly dismisses her opinion.

Chapter 8 Analysis

Again, the ease with which Victor obtains tissue samples to hand-transport out of the hospital for his own interest strains credulity. When he obtains the blood samples, for example, the doctor providing the samples suspects an infectious pathogen - yet he



hands a corked tube of potentially infectious blood to Victor, a stranger, who drops it in his pocket and walks off.

Victor notes "the smell of cordite" (p. 161) in the air at the Gephardt murder scene - an unfortunate but common literary mistake referencing an obsolescent British propellant not used in modern ammunition.

In the established pattern, Marsha, the child psychiatrist, presents an array of concerning information about VJ's behavior to Victor, who summarily dismisses her concerns. He insists VJ is a child prodigy and, therefore, beyond normal concerns. This type of character interaction is fully developed in the novel and presents a recurrent theme. Marsha's insistence is also a form of foreshadowing in that she is always presented as a credible professional.



Chapter 9

Chapter 9 Summary

Chapter 9 takes place on the next day in the novel's timeline, Friday. As Victor drives to work, he ponders Marsha's concerns. At the office, he is served with a summons in the Sharon Carver case, and Colleen tells him that the independent investigation of William Hurst has turned up glaring irregularities.

Victor reviews new test results, and discovers that Maurice Hobbs and Mark Murray both had cephaloclor in their systems when they died. Victor slowly realizes this means they were murdered, and he also realizes the antibiotic was probably given to them at the Chimera daycare. Victor also learns that the hacker calls have been traced back to his own home, from his own account login. Victor becomes concerned for VJ's safety, and tries to locate him in the lab. He searches the entire compound, and finally finds VJ near the river, at the clock tower. Victor hires private security to watch his house.

Meanwhile, Marsha meets with her colleagues and discusses VJ's test results and her own observations. She becomes convinced that VJ has some type of personality disorder.

At home that evening, Victor finally defers to Marsha's expertise and admits that VJ might need some professional help. He confronts VJ, who admits to logging into the Chimera computer system, but claims he only does it for fun. The police stop by and let the Franks know that they have traced the brick and the killing of their cat back to the now-dead George Gephardt. They also indicate that Gephardt was somehow involved with a Columbian drug cartel. The police believe the murders are drug-related. Late that night, the private security apprehends Sharon Carver trying to vandalize the Franks' house, and they turn her over to the police.

Chapter 9 Analysis

Chapter 9 marks a major shift in the novel. Victor is finally somewhat willing to listen to Marsha's concerns about VJ's aberrant behavior. Marsha, meanwhile, seems to have recovered from her initial shock of learning about Victor's experimental manipulation of VJ's genes. She also becomes aware that VJ needs, at the least, counseling. This chapter begins the central crisis of the novel.

Additionally, many of the novel's sub-plots are wrapped up - Gephardt is identified as the threatening vandal, Sharon Carver is arrested, and William Hurst has been correctly implicated in research fraud. From this point forward, these sub-plots are rarely discussed again. Victor starts to relax, assuming that all his troubles were caused by Gephardt.



When confronted by his parents, VJ freely admits to his troublesome truancy and computer hacking, assuring them that he doesn't mean any harm but is simply trying to learn interesting things.



Chapter 10

Chapter 10 Summary

Chapter 10 begins the next day in the novel's timeline, Saturday. Victor goes to the hospital where he obtains a sample of Janice Fay's liver tissue from the hospital sample storage area. Victor returns to his lab and orders many more esoteric medical tests on the new samples.

Victor then meets Louis Kaspwicz at the Frank home, where Louis looks over Victor's PC. Louis finds numerous hidden files on the PC which include DNA sequences, Chimera personnel files, Chimera purchasing files, and an extensive stock portfolio. Victor returns to the lab and tries to find VJ. He searches extensively through the compound, but only learns that VJ was seen with a security guard earlier in the day. When Victor contacts security, he learns that no guard has been with VJ.

Victor searches for VJ in the abandoned buildings on the campus. He notes that the river is very high, and that the sluice gates are strained to keep the water back. He sees that if a single large bolt were to give way, the water would rush through the sluice gates and violently flood the basement of the clock tower.

Victor returns to the utilized portion of the lab compound, and finally locates VJ and Philip. He secretly observes them, and then follows them as they head back to the river, and walk into the abandoned clock tower. He follows them inside, but they have disappeared. Victor goes to the maintenance building and obtains copies of the clock tower blueprints, and then returns to the clock tower where he unsuccessfully tries to locate the clock tower basement. While searching for the stairs, he is assaulted and knocked unconscious.

Meanwhile, Marsha visits Janice Fay's parents, Harry and Mary. Marsha learns that Janice believed VJ had drugged and poisoned David. Marsha also learns that Janice was afraid of VJ and considered him to be evil. Marsha then visits the Blakemore house. Marsha believes that Richie Blakemore is VJ's good school friend, and intends to invite Richie to spend the evening at the Frank home. She is shocked to learn that Richie and VJ are not friends, and that, in fact, they have been involved in several physical fights.

Chapter 10 Analysis

The liver tissue sample is the last sample that Victor will retrieve from the hospital. The hospital staffer, on this visit, initially resists his request. However, he uses his charm to convince her there is no harm in handing out tissue samples to strangers.

When Victor discovers numerous hidden files on his home computer, he inexplicably concludes that VJ must be playing some sort of elaborate computer game. The DNA



sequences in the files that Victor discovers contain long lists of base-pair notations, and T is mistakenly said to represent "pyrimidine" (p. 213) - in fact, T represents Thymine, which belongs to a class of compounds known as pyrimidines. It is an unfortunate mistake in a novel featuring extensive biotechnology plot elements.

Marsha continues to discover more disturbing facts about her son VJ, and has nearly concluded that something is terribly wrong. Chapter 10 continues to escalate the central crisis of the novel. By this point in the narrative, it is obvious that something is seriously amiss with VJ, though the exact nature of the problem is still speculative.



Chapter 11

Chapter 11 Summary

Chapter 11 happens on the same Saturday as Chapter 10. Victor awakens to in the basement of the clock tower. He is surrounded by VJ, Philip, and several men dressed in Chimera security uniforms. VJ explains that Victor was accidentally attacked. VJ then shows Victor a new, secret lab - VJ's lab - built in the basement of the clock tower. Victor realizes that all of the missing Chimera equipment is here in this lab. The secret lab includes living quarters and other rooms that Victor does not enter.

VJ explains that he started assembling the lab at age three, with Philip's help. VJ explains that he needed seclusion to pursue serious investigative work without distractions. VJ explains he has solved the very biological problems that Victor has been researching for years - namely, how to implant zygotes with complete success. VJ claims this process has been tested on volunteer humans. Victor is excited.

Victor goes home and meets Marsha. She tells him about her disturbing discoveries, but falling into his old habits, Victor dismisses her concerns. He takes her to VJ's secret lab. At the secret lab, VJ explains that he faked his intelligence drop, because he realized as long as he was viewed as a child prodigy, he would be on public display. This would have prevented him from pursuing the life of anonymity that would have allowed him to pursue his research.

He explains that he used extortion and blackmail to force Chimera employees, including Gephardt, to assist him in assembling the laboratory. Victor then realizes that Gephardt's brick and dead cat threats had actually been directed at VJ. VJ also explains he has introduced his personal security guards into the Chimera payroll, and uses them in his lab.

Marsha is extremely concerned and agitated, and leaves the lab. Victor tries to calm her, assuring her she is being unreasonable. Victor is excited and feels triumphant that his experiment is an unqualified success, and that his son is a genius. Victor tries, mostly unsuccessfully, to allay Marsha's fears.

Chapter 11 Analysis

Chapter 11 provides another huge plot twist, though not an unexpected one. VJ finally admits that he has been leading a double life, and Victor and VJ together are excited about VJ's potential and discoveries. The novel presents a type of false denouement which temporarily convinces Victor that all can be set to rights concerning VJ.

Marsha realizes that VJ has severe personality disorders, but is typically dismissed by Victor. The exultant Victor Frank is, of course, highly reminiscent of Mary Shelley's



Victor Frankenstein. Marsha's continued doubt provides strong foreshadowing that Victor's assessment is, as usual, in error.

The novel's central premise of a gifted three-year-old child assembling an advanced biotechnology lab through blackmail and extortion, without being detected, is not particularly believable.

VJ appears to be in absolute control of the secret lab and the staff, composed of Colombian men dressed in Chimera security uniforms. They are portrayed as a tough crowd, but completely subservient to VJ. This contrasts markedly with the frightened VJ receiving assurances via telephone in Chapter 5.





Chapter 12 Summary

Chapter 12 takes place on the next day in the novel's timeline, Sunday. Early Sunday morning, Marsha wakes Philip and interrogates him. He tells her that VJ and Gephardt had an argument, and then VJ talked to someone named Orlando Martinez. VJ then awakens and stops the questioning.

Later that day, Marsha travels to VJ's school. David also attended the school before he died. Marsha talks with several instructors and counselors about David and VJ. She learns that David was afraid of VJ. She learns that David had apparently discovered some secrets about VJ, and then VJ had threatened to kill David. Marsha then goes to the hospital and convinces a staff member to look up some medical record details. Marsha learns that the instructor who tried to engage VJ died of the same rare form of liver cancer that killed David and Janice. Marsha then meets with Victor at home. Victor is convinced that VJ's research is Nobel-prize winning material. Marsha, now suspecting that VJ is a criminal, continues to voice concerns, which Victor angrily dismisses.

Later that evening, Victor tries to prepare a presentation on VJ's work to give at the next Chimera board meeting. Unable to concentrate, and wondering if Marsha's suspicions might be correct, Victor surreptitiously visits VJ's secret lab. Victor sneaks into the lab and tries to investigate the areas he has not been allowed to see, but he is prevented by an armed guard who threatens physical violence if Victor does not leave the premises.

Chapter 12 Analysis

Marsha continues to piece together the story of VJ's early life. It is somewhat unbelievable that an involved mother could be so unaware of her child's daily activities over the years, or that a practicing child psychiatrist could be so oblivious to the warning signs. It is also not particularly convincing that Marsha is able to visit a hospital and, just by asking, access personal medical records of non-relatives.

Marsha's continued discoveries begin to worry Victor, who finally begins to wonder if something is wrong. Victor's mental state, pride and excitement mixed with doubt, is interesting and credibly presented. Chapter 12 continues to develop the novel's central crisis.



Chapter 13

Chapter 13 Summary

Chapter 13 begins the final day in the novel's main timeline, Monday. Marsha tells VJ to go to school, but he refuses claiming there is no longer any particular need to maintain the fazade of normalcy. Victor and VJ proceed to the lab.

Marsha follows up on the hint she received from Philip, tracking down Orlando Martinez to a warehouse signed Martinez Enterprises. She looks around, and is then met by a gang of Colombian thugs who threaten her and tell her to go home.

At VJ's secret lab, VJ intimidates and dominates Victor who temporarily plays a subordinate role to his son. Victor leaves VJ's lab and returns to his own lab, where he reviews several test results and learns that the liver cancer which killed David and Janice was undoubtedly a bio-engineered and introduced cancer-causing pathogen. Victor then meets with Marsha, and they exchange information and return to VJ's secret lab. Victor and Marsha speculate that perhaps VJ is responsible for the deaths of David, Janice, and the schoolteacher.

Chapter 13 Analysis

Victor's discovery that the liver cancer was deliberately caused appears to be the point at which he changes his mind about VJ. To this point in the novel, he has dismissed Marsha's concerns as irrelevant. Even after these discoveries, however, he continues to harbor some illusions about VJ's behavior.

Marsha continues to perform her own investigation, coming to the conclusion that VJ's hired security is, in fact, composed of a bunch of thugs. The short role-reversal scene, where VJ mentally dominates Victor, is particularly interesting and well written. The scene is symbolic of the creator-monster theme borrowed from Mary Shelley's *Frankenstein*.



Chapter 14

Chapter 14 Summary

Chapter 14 happens on the same Monday as Chapter 13. Victor and Marsha return to VJ's lab and demand all the facts. VJ shows them a hidden area in the lab, where four fetuses are growing in plastic tanks. VJ tells them the fetuses have developed from four of the five embryos stolen from Victor's lab, and that the fifth embryo was used in an early experiment.

Marsha notices that the fetus' heads are deformed. VJ informs her that he has genetically engineered them to have severely limited mental capacity, because he has found the mentally retarded Philip to be the most useful person he knows. In a second room, VJ shows them an industrial-scale biotechnology operation which mass-produces cocaine. VJ explains that his expensive research is funded by cocaine sales, which are routed through his Colombian drug cartel connections.

In a confrontational argument, VJ admits that at age five, he had developed a recombinant-DNA technology which allowed him to bio-engineer cancer-causing genes. Fearing exposure from David, Janice, and later the schoolteacher, he drugged them and then injected them with the agent, causing their deaths. VJ also admits to introducing cephaloclor into the food of Maurice Hobbs and Mark Murray, deliberately killing them to avoid future competition. He also tacitly admits that he had the Gephardt family murdered.

VJ then imprisons Victor and Marsha, and they have a somewhat lengthy discussion of ethics and the morality of Victor's actions. Victor and Marsha are determined that they must stop VJ's activities. Victor subsequently convinces VJ that he should be released. Victor praises VJ, who responds as a child, and tells him he wants to show the world VJ's incredible accomplishments. VJ allows Victor to leave the lab, but insists that one of his Colombian thugs accompany Victor. VJ forces Marsha to remain imprisoned.

Chapter 14 Analysis

In the final denouement, the novel takes a turn into the sinister world of VJ where bioengineered fetuses are being developed as slave labor, and cocaine production is used to finance further questionable research. VJ's utter lack of morals become clear as he explains without remorse how he has murdered several individuals, including his own brother.

Dr. Frank's monster is thus revealed. Victor and Marsha are determined to stop VJ's activities. Since VJ will only let one of them leave at a time, Victor determines to somehow rescue Marsha and simultaneously expose VJ. Chapter 14 is the critical point of the novel. Character development is complete, all of the plot twists have been revealed, sub-plots have been concluded, and all that remains is the climax.



Chapter 15

Chapter 15 Summary

Chapter 15 happens on the same Monday as Chapter 14. In captivity, Marsha is introduced to Mary Millman, VJ's surrogate mother. VJ has hired her as his personal secretary. Mary, apparently unaware of VJ's sinister activities, appears to be in awe of the child and happily chatters with Marsha.

Meanwhile, Victor proceeds to his own lab accompanied by VJ's thug. He works for a few hours, then goes home where he manages to drug VJ's thug and imprison him in a room. Victor then goes to the police station and talks to a police officer, but quickly decides the police won't believe him. Victor leaves the police station and returns to his lab where he manufactures a small explosive device with a detonating timer.

Victor sneaks to the clock tower and secretly plants the bomb along the millpond's sluice gates. He then enters the lab and tries to convince VJ to let Marsha go while Victor remains a hostage. However, Mary overhears a whispered conversation between Victor and Marsha, and alerts VJ that they are planning something. VJ is also suspicious that Victor has returned without VJ's assigned thug.

Just as VJ's security thugs are closing in on Victor and Marsha, Victor's timed bomb explodes, and the rumbling of the water becomes audible. Victor shouts that the whole place is about to be destroyed by the rushing flood, and everybody bolts for the doors to escape.

Instead of running, Victor grabs VJ and lifts him off the floor. As Marsha, Mary, and the rest flee the lab, Victor holds VJ and waits for the crushing wall of water which sweeps them away. Just before the water arrives, Victor apologizes to VJ for creating him. Outside, Marsha watches in horror as the violent flood rips through the clock tower, destroying the foundation. The entire tower collapses.

Chapter 15 Analysis

Chapter 15 contains nearly all of the action scenes in the novel. After a complicated series of plot twists, Victor and Marsha are finally in possession of all the facts and become determined to take action. Mary's devotion to VJ is somewhat confusing, as no motivation is provided for Mary's attitude - other than being VJ's surrogate mother.

Victor's plan, though ultimately successful, nearly fails because VJ becomes suspicious at the last moment. The physical arrangement of the river, millpond and sluice gates are well established through various scenes in the novel, and the success of Victor's explosive and the resultant destruction are credible. The climax is presented in the final chapter, consistent with the medical-thriller construction of the novel.





Epilogue Summary

The epilogue takes place approximately one year later. Marsha sits in her practice waiting for her next client. She thinks about Victor, VJ and David. She remembers the day that the lab was destroyed, and recalls how Victor and VJ were never found. She also remembers that the four developing fetuses were never found.

Her clients then enter the office, and she meets for the first time Josephine Steinberger, and her daughter Judith. Josephine explains that Judith is mentally slow and became pregnant a few years ago when a boy had paid her money to "put his little tube in her" (p. 335.) Josephine mistaken believes this to be a reference to sexual intercourse.

Josephine then explains the problem is Judith's baby, who is also present. She says the baby is incredibly intelligent and impossible to control.

Marsha looks at the one-year-old child who appears to be reading a psychiatry journal, and she realizes that Judith is the surrogate mother of the fifth and final embryo, obviously implanted during another of VJ's terrible experiments. Disturbed by her realization, she ends the appointment and goes to meet her new boyfriend, David's old school teacher.

Epilogue Analysis

The epilogue does not explain how VJ ensured that Judith received cephaloclor during her pregnancy. Judith is obviously one of the so-called volunteers that VJ used during his human trials of the new zygote implantation process, and her son is the result of the embryo that VJ claimed was wasted.

The epilogue sets up several interesting possibilities for a sequel, but is otherwise largely unimportant to the novel. Marsha appears to have survived her loss and moved on with her life. Thus, the novel's denouement is terse and sparse.



Characters

Mary Millman

Mary is a 22-year-old secretary who works in downtown Detroit. She acts as the surrogate mother for the Franks, successfully delivering Victor Jr. ("VJ"). She was selected by the Franks, in part, because she lives in Michigan, the only state which allows pre-birth adoptions. She receives a large sum of money for her services, which she uses to pay off debts incurred by her mother's illness.

After acting as the surrogate mother, Mary vanishes for most of the novel, reappearing only towards the end when VJ hires her to be his assistant. She seems completely enthralled by VJ's abilities and appears to completely trust him.

Marsha Frank

Marsha is the wife of Dr. Victor Frank and the mother of David and VJ. Marsha is a practicing child psychiatrist with a thriving practice. She has been married to Victor for sixteen years. Marsha has not fully recovered from the death of her five-year-old son David.

Marsha worries that VJ does not seem like a normal child, but inexplicably does not seem to further investigate the situation until the last week of VJ's life.

Marsha definitely plays a subordinate role in her relationship with Victor. For example, she constantly presents Victor with information she has gathered only to have Victor dismiss her information and concerns. Conversely, Victor routinely withholds information from Marsha.

When she learns that Victor has performed genetic experimentation on their child, she is shocked and outraged, but still sleeps in the same bed as Victor. Their relationship continues without noticeable harm.

Nevertheless, Marsha is the most normal character in the novel - she wants to be a devoted mother but does not let ambition or emotions cloud the reality of the situation. She seems particularly adept at social interactions, meeting numerous people over the course of the novel and acting as a proficient investigator.

Marsha is one of the three main characters in the novel.

Victor Frank

Victor is the husband of Dr. Marsha Frank and the father of David and VJ. Victor has been married to Marsha for sixteen years.



Victor, a medical doctor, together with Ronald Beckman and Clark Fitzsimmons Foster, founded Chimera, Inc., an enormously successful biotechnology company. He is on the board of directors of Chimera, and also serves as a Senior Vice President at the company and acting director of a department.

In addition, he is the President and managing director of the fertility subsidiary business of Chimera.

Victor's experimental biology work has led him to some esoteric discoveries. Victor bioengineers a gene that causes rapid nerve growth. Victor and Marsha decide to have another child, but must use in-vitro fertilization and a surrogate mother. Victor performs the fertilization himself, but also introduces his nerve-growth gene into the embryo before he implants it into Mary Millman, the surrogate mother.

The resultant child, Victor Jr., or VJ, is phenomenally intelligent but absolutely amoral. Victor is thrilled that his experiment has been successful at creating a super-intelligent baby, and does not appear to give much thought to the morality of his actions.

Victor is portrayed as very intelligent and very arrogant. He dominates his relationship with Marsha, and generally dismisses her concerns and fears without much thought. In numerous dialogues, he runs roughshod over her feelings and then walks out of the room. He frequently withholds vital information from her. Victor appears to value his son VJ solely on VJ's intellect.

When Victor is in the process of killing VJ, he compares VJ to the Biblical Isaac, though the allusion is not well supported in the novel.

Victor is one of the three main characters in the novel.

Victor Frank, Jr. ("VJ")

VJ is the second son of Dr. Victor Frank and Dr. Marsha Frank, and younger brother to David Frank. VJ has blonde hair and icy blue eyes, and is described as physically fit and somewhat large for a ten-year-old.

Unknown to his mother Marsha, VJ is the result of advanced bioengineering experiments conducted by his father Victor. VJ's intelligence is beyond the genius range. By age one, he is literate; by age three, he is bilingual and conversant in advanced science.

At age three, VJ apparently suffers a sudden and large decrease in his mental abilities, becoming reduced to a simply gifted child. In actuality, this event is staged by VJ so he will be perceived as less of an anomaly.

From age three to ten, VJ assembles a secret but world-class laboratory in an abandoned building on his father's company grounds. VJ blackmails and extorts company officials to get the funds, staff and equipment he requires.



VJ also starts mass manufacturing cocaine to fund his research projects which are aimed at solving the biological problems his father is researching. He assembles a gang of Colombian thugs to provide security and simple labor.

VJ lives a secret life of deceit filled with sinister research. He is completely amoral and resorts to murder on several occasions to remove people he feels are obstacles. Nevertheless, he is an incredibly gifted biological researcher, mastering recombinant-DNA technology by age five and producing Nobel-prize caliber research by age ten.

VJ does appear to crave his father's praise and attention, though this does not appear to be critical. He also periodically feels that it is unfortunate that he does not particularly fulfill Marsha's idea of what a child should be. VJ's actions are from time to time somewhat inexplicable, and he makes an interesting if somewhat unbelievable character.

VJ is one of three main characters in the novel.

Janice Fay

Janice is the long-term live-in nanny of Dr. Victor Frank and Dr. Marsha Frank. Janice's parents are Harry and Mary Fay, and Janice was probably abused as a child by her alcoholic father.

Janice has a close bond with David Frank but does not bond with VJ. After David's untimely death, Janice becomes somewhat unstable, and feels she is being poisoned. She begins to lock herself in her room at night, and becomes very particular about what she will eat. She also develops a strong religious fervor, and openly accuses VJ of being evil. VJ subsequently manages to infect Janice with a rare form of liver cancer, killing her within days.

David Frank

David is the first son of Dr. Victor Frank and Dr. Marsha Frank, and older brother to VJ Frank. David is five years older than VJ, but the two brothers never get along very well. When David is ten, he apparently discovers some disturbing things about VJ and threatens to disclose them. VJ manages to infect David with a rare form of liver cancer, killing him within days. It is interesting that Victor names his first son David, and names his second son Victor, Jr. David is a minor character in the novel.

William Hobbs

William is the husband of Sheila and the father of Maurice. William is an employee of Chimera, Victor's biotechnology company. Unable to conceive on their own, William and Sheila utilized the services of Victor's lab to receive an in vitro fertilization from donor gametes, resulting in their son Maurice.



Horace Murray

Horace is the husband of Colette and the father of Mark. Horace is an employee of Chimera, Victor's biotechnology company. Unable to conceive on their own, Horace and Colette utilized the services of Victor's lab to receive an in vitro fertilization from donor gametes, resulting in their son Mark.

Ronald Beekman

Ronald is a business associate of Victor Frank. Together with Clark Fitzsimmons Foster, they founded Chimera, Inc. Ronald and Victor differ in their opinion on how the company should be run, but otherwise seem generally friendly to each other.

Colleen

Colleen is Victor's attractive and competent secretary. Although Colleen appears numerous times in the novel, she is a minor character. She is portrayed as timely, persistent and professional.

George Gephardt

Gephardt is the director of personnel for a subsidiary of Chimera and former purchasing supervisor of Chimera. Gephardt is on a forced leave of absence and is suspected of fraud and theft.

In reality, Gephardt is being blackmailed by VJ and is ordering equipment subsequently diverted to VJ's secret lab. The novel also suggests that Gephardt is involved in other aspects of VJ's illicit activities, though this involvement is not detailed.

Gephardt eventually becomes threatening to VJ, who has Gephardt and his family executed at their home. They are presumably executed by Orlando Martinez and his gang of thugs.

Sharon Carver

A former employee of Chimera, dismissed for incompetence. Sharon is described as attractive, sexually promiscuous, and provocative. Sharon files a sexual harassment lawsuit against Victor in an attempt to be reinstated in her old job. Later, Sharon is arrested for vandalizing the Franks' home. She agrees to drop the baseless sexual harassment lawsuit when Victor decides not to press vandalism charges.



Philip Cartwright

Philip is a mentally retarded employee of Chimera. Philip is strong and loyal, and is befriended by VJ. They roam the lab and Chimera compound together, and Philip does what VJ instructs him to do without talking about it. Although Philip is present in many of the novel's principle scenes he remains a minor character, essentially serving as single labor for VJ.

Philip has free range of the entire Chimera facility, but appears to be completely unsupervised. For someone with severe mental deficiency, he seems to enjoy a great deal of unsupervised access.

William Hurst

William is an employee of Chimera, who has falsified data and published invalid scientific papers. Victor orders an independent lab to verify all of Hurst's work, which Hurst sees as a personal affront and damaging to his professional reputation. In response, Hurst threatens to ruin Victor's reputation, insinuating that he knows about Victor's darker experiments. Aside from one acrimonious meeting full of shouting and threats, Hurst plays a minor role in the novel.

Robert Grimes

Robert is an employee of Chimera, and Victor's head laboratory technician. Robert performs many of the technical processes for Victor, while Victor engages in other activities. Although Robert is mentioned several times in the novel, he is a minor character. He is portrayed as a highly skilled and efficient lab worker without much personality.

Louis Kaspwicz

Louis is an employee of Chimera, and the manager of the IT department. Louis is portrayed as a typically proficient and dedicated computer operator. Louis performs some computer maintenance and auditing tasks for Victor, but is otherwise a minor character.

Richie Blakemore

Richie is the son of Carl of Edith Blakemore. Richie and VJ are classmates at school. In the early part of the novel, VJ claims that Richie is his good friend. Marsha Frank eventually discovers that Richie is not VJ's friend, and that the two have been involved in physical fights at the school resulting in a broken nose for Richie. Richie is described as a somewhat sullen and quiet boy.



Orlando Martinez

Orlando is the Colombian owner of Martinez Enterprises, a putative furniture sales business which is a simple cover for a ring of drug smugglers. Orlando and his gang are hired by VJ to manufacture drugs and provide security for VJ's secret lab. Orlando also executes the Gephardt family after George Gephardt tries to terrorize VJ. Orlando is described as a stereotypical Colombian drug lord.

Judith Steinberger

Judith is the daughter of Josephine Steinberger and mother of an unnamed infant boy. Judith appears only in the Epilogue, where she seeks professional counsel from Marsha Frank. Marsha realizes that Judith's son resulted from an implantation experiment carried out by VJ Frank. Judith is described as mentally slow, thin and noncommunicative.



Objects/Places

Chimera Compound

Victor's biotechnology company, Chimera, is housed on a sprawling compound of old buildings. Roughly half of the buildings have been renovated and are in daily use, but the other half remain abandoned. The compound is under constant security and receives a large amount of high-tech shipping. A large river borders one side of the compound. The compound is the location of most of the novel's action.

The Chimera Daycare

Chimera operates an on-grounds daycare facility for their employees. The facility operates seven days a week. The Frank children, David and VJ, were cared for at the facility, and VJ periodically stops by the facility to help out.

The Clock Tower

The Chimera compound's tallest building is an eight-story clock tower. The tower is abandoned, but Victor intends to one day renovate it. The tower sits next to an old sluice gate and millpond, and houses a huge paddle wheel and series of mechanical shafts. Decades ago, the sluice gates diverted river water through the basement of the clock tower to drive the wheel and provide mechanical power to the compound. In the time period of the novel, the sluice gates are closed. VJ's secret lab is hidden in the basement of the clock tower.

The Frank Home

The Frank home is an upscale but fairly traditional family home in a semi-rural suburban area of North Andover. The home is apparently easily accessible from the street, but in most other respects unexceptional.

Kissa

Kissa is the Franks' house cat. Kissa is afraid of VJ and is bonded to Marsha. Marsha's early suspicions of VJ are fueled by the realization that VJ is unable to make friends or even bond in any way to the family pet. George Gephardt kills Kissa and nails her to the Franks' house along with a threatening note in an unsuccessful attempt to frighten VJ into submission.



Victor's Lab

Victor's lab is located in one of the renovated buildings in the Chimera compound (VJ and Victor routinely refer to the entire compound as the lab). Victor also maintains office space in an administrative area of the building. The lab is extremely high-tech and staffed by very competent technicians.

Victor's Computer

Victor's home computer is identified as a Wang PC with an internal hard drive and modem. It is capable of quickly connecting to the Chimera computer system. Although anachronistic by today's standards, when the book was published Victor's computer was state-of-the-art. Victor appears to have very limited computer knowledge. VJ uses Victor's computer to access and manipulate Chimera's personnel and purchasing data, and to play Pac Man.

NGF Gene

The NGF is a complicated gene composed of genetic material extracted from animals and bacteria. The gene is bio-engineered by Victor Frank. The gene causes massive cell division in nerve cells, and is turned on only in the presence of the antibiotic cephaloclor. If the gene is activated during fetal development, the resulting child has super-intelligence. If the gene is activated after primary development has completed, it causes the brain to swell and results in death by cerebral edema.

NGF Embryos

Eight embryos are created when Victor and Marsha undergo fertility treatment. Victor genetically modifies all eight of the embryos by inserting the NGF gene. One embryo becomes VJ, one becomes Maurice Hobbs, one becomes Mark Murray, four are further modified to by sub-intelligent by VJ, and the final embryo becomes Judith Steinberger's son.

Marsha's Psychiatry Practice

Marsha Frank is a successful child psychiatrist and maintains an office where she meets her clients. Her office is not well described, but appears to be in a multi-story building primarily housing other psychiatrists and psychologists. Her office is equipped with computer equipment used to administer and interpret psychological assessments and is noted to be full of scientific journals.



VJ's Stamp Collection

VJ maintains a large and valuable stamp collection which his parents do not know much about. Although it plays a very minor role in the novel, its early appearance in the novel indicates that VJ keeps secrets from his parents and has access to a large amount of funds.

VJ's Safety Deposit Box

VJ maintains a safety deposit box at a local bank in which he makes frequent deposits of bound stacks of hundred dollar bills. Although the safety deposit box plays a minor role in the novel, its early appearance in the plot suggests that VJ is involved in some shady dealings.

VJ's Secret Lab

From the ages of three through ten, VJ assembles a world-class biotechnology laboratory in the basement of an abandoned building. He fills the lab with equipment costing millions of dollars, and staffs it with Colombian thugs. He uses the lab to produce Nobel-prize caliber research dealing with embryo implantation and development.

Secret Rooms in VJ's Secret Lab

VJ's lab houses several secret rooms where sinister experimentation takes place. Even after Victor discovers VJ's lab, he is prevented from seeing several portions of it. In one room, VJ mass produces cocaine to fund his research. In another area, VJ is incubating fetuses that have been bio-engineered to be mentally incompetent, so they can be used as willing slave labor. In a final area, VJ has a small living quarters room which can be locked from the outside - essentially a jail cell.



Social Concerns And Themes

In Mutation, Cook explores the possible results of genetic engineering, zygote implantation, and surrogate motherhood. Currently, doctors are attempting to alter a child's genetic structure to cure her disease. If successful, the procedure will be a revolutionary treatment and a first step in curing other diseases through genetic manipulation.

Cook, however, suggests an altogether different outcome. Since sperm and egg can be joined outside the womb, he reasons, what if the genetic materials were also manipulated so that the child would have an intelligence level of a genius? Surely arranging for extremely bright children would help solve many of society's problems. Or would it?

Mutation affords a look at a child genius who solves important human problems but lacks the moral maturity to understand the social consequences of his actions. The novel focuses on the American fear of the super-intelligent, and touches upon scientists' ethical and moral responsibilities regarding their creations.



Techniques/Literary Precedents

Mutation is more subtle and complex than most of Cook's novels. He employs an omniscient narrator and the reader can see into the characters' minds and learn why they think and act as they do, but character development continues to be subordinated to plot. Victor Frank, although somewhat unbelievable in the secret manipulation of his child's genetic material, is realistic in his slow change from pride in his creation to anguished horror at what he has wrought.

Cook opens his novel with an epigram from Mary Shelley's Frankenstein (1818), and not only borrows the theme of the over-reaching creator, but also the name of her character, Victor Frankenstein.



Themes

Biotechnology Thriller

The novel functions best as a fast-paced thriller. The straightforward writing and accessible language, coupled with believable and terse dialog, are engaging. The biological and medical sciences are a plausible blend of real and imagined technologies, though the outcomes at times are not particularly credible. Although somewhat dated, the computer technology is described in simple enough terms that it does not present an anachronistic stumbling block for a contemporaneous reader.

Minimal character development, limited and focused location, a simple timeline, and straightforward structure all serve to advance the plot at a rapid pace. Foreshadowing is plentiful and obvious. The novel is enjoyable as a fast read, though deeper analysis quickly reveals several plot inconsistencies.

The focused nature of the plot lends a feel of exciting realism to the genetic manipulation and bioengineering tone of the novel. Victor's use of esoteric medical and biological tests to expose plot elements is reminiscent of other popular forensic science literature, and is an effective element of the novel. Marsha's use of psychiatric evaluations complements Victor's investigations.

VJ's secret lab and sinister experimentation at the end of the novel complete the theme of this biotechnology thriller.

Unrestrained Scientific Investigation

The novel suggests, particularly in Chapters 13 and 14, that unrestrained scientific investigation is wrong. The novel proposes that science should be strongly coupled to a social morality; "Science runs amok when it shakes loose from the bonds of morality and consequence" (Chapter 14, p. 299). Most of the ethics presented are delivered as dialogue between Victor and Marsha Frank.

Examples of amoral science run amok are plentiful: William Hurst's faked research data; Victor's secret genetic manipulation of embryos; Victor's surreptitious implantation of genetically manipulated embryos in Marsha Frank, Sheila Hobbs and Colette Murray; Victor's eager willingness to profit from VJ's sinister experimentation; VJ's bioengineered cancer infections; VJ's cephaloclor murders; VJ's mass manufacture of cocaine; VJ's secret manipulation of embryos; and VJ's so-called voluntary human experimentation on Judith Steinberger. All of these activities are damaging to the individuals involved and also to a wider sphere of characters.

In counterpoint, Robert Grimes and Ronald Beekman's scientific endeavors are limited in scope and are viewed as acceptable, even laudable, uses of science. The medical services offered by the hospital, though often unsuccessful, are presented as morally



correct uses of science. The non-experimental fertility services offered by Chimera are also examples of so-called good science, as is Marsha's routine psychiatry investigations.

Marsha accuses Victor of fundamentally amoral behavior when she discovers he had genetically engineered their son VJ's intelligence. By the end of the novel, Victor appears to believe he has made a mistake. He purposefully kills himself and VJ, simultaneously destroying VJ's lab and research.

Family Relations

In essence, the novel deals exclusively with a single family. Victor, Marsha and VJ Frank are the only detailed characters in the novel. David Frank and Janice Fay are somewhat developed characters and are also inside the family structure.

On a wider scale, Maurice Hobbs and Mark Murray are the biological children of Victor and Marsha Frank, as are the four developing fetuses and the Steinberger baby. Thus, Victor, Marsha, their nine sons, and their long-term live-in nanny compose the primary and many of the secondary characters in the novel.

The novel's primary locations are the Frank home and Victor's lab - not simply the place of his employment, but a place he owns and developed. Victor and VJ actually prefer the lab to home.

Victor and Marsha's character development focuses around the events of their family. Marsha dwells on her relationship with David and is deeply scarred by his death. Victor and Marsha are both very concerned for VJ's well-being, even after they discover numerous disturbing things about him. VJ and David are contrasted as sons, and the proper role of a son occupies much of Marsha's thought.

The novel's plot functions around the family structure, and the traditional family structure is used to provide an immediately familiar and accessible social paradigm as a base to the novel's tone.

Finally, the novel ends with the beginning of the Steinberger family and the suggestion that Marsha is ready to let go of her past family and try to start another family structure.



Style

Point of View

The novel is related in a third-person point of view. The narrator is omniscient and reliable. The narrative sometimes reveals thoughts of major and minor characters, but most of the story is told through action and dialogue. Nearly all of the scenes in the novel center around three main characters - Victor, Marsha and VJ Frank. Frequently, of course, two or even three of these characters are involved in a single scene. The narrative often reveals thoughts of Victor and Marsha, although they also exchange a fair amount of opinion through dialogue.

The plot of the novel relies heavily on a chronological series of events that are frequently interpreted differently by the main characters. Thus, the main characters' differing knowledge at the time of critical plot events is also a major plot element. For example, VJ's early behavior elicits a different response from Victor than it does from Marsha, because Victor knows things that Marsha does not know. The successful interaction between these two plot elements requires an omniscient third-person narrator to retain a simple and intelligible chronological structure. The third-person omniscient narrative technique is successful in the novel.

Setting

The prologue of the novel begins in Detroit, Michigan, and ends in North Andover, Massachusetts. The remainder of the novel takes place in the North Andover and Boston areas.

Most of the novel is set in two locations. The first is the Frank home, an upscale but fairly traditional family home in a semi-rural suburban area of North Andover. Their house is apparently easily accessible from the street, as they suffer several episodes of common vandalism. The Franks are both professional people and are obviously very wealthy people of discriminating taste. However, beyond minimal details, their home is not otherwise well described.

The second location in the novel is the lab compound of Chimera, Victor Franks' biotechnology company. The compound is fairly well described in the novel, and consists of dozens of structures. Originally built as a textile mill, the compound is very old and borders a large river which was once used to drive a huge water wheel in a large clock tower. About half of the buildings in the compound have been fully renovated and are used on a daily basis, but the other buildings have remained essentially abandoned. The compound is secured and under constant security supervision.

The Frank home is close enough to the lab that VJ frequently rides his bike back and forth between the two locations. The lab is also close enough to VJ's school that he apparently can easily travel from school to the lab.



Throughout the novel, Victor and Marsha Frank make several short trips to Boston, primarily to a hospital there.

Language and Meaning

The novel is written in clear and concise language which is easily accessible and readily understandable. Character development, scene development and background information are all kept to a minimum allowing the novel to focus on the successful development of a fairly complex and fast-paced plot.

Several sub-plots are developed to maintain the suspense of the main plot. Most of the main plot elements are initially misunderstood by the main protagonists because of their involvement in sub-plot elements. The novel is successful in weaving these elements together, though most of the sub-plots are insignificant to the novel's conclusion.

The novel deals with biological and medical research, and does present a fair amount of technical details which are interesting. Even these details are largely presented in simple language, though occasional technical terminology is used.

The book has clear parallels to Mary Shelley's Frankenstein, but the philosophy of morality is not nearly as well developed. One of the main protagonists, Victor Frank, essentially admits his actions were amoral, but lamely excuses himself with a seemed-like-a-good-idea-at-the-time attitude. The main discussion of bio-ethics occurs in the penultimate chapter of the book and is a fairly trivial investigation of the topic.

While generally well written and focused, the novel's central premise - a super-intelligent ten-year-old villain gone awry - is not particularly believable. The plot, so central to the novel's success, has numerous small inconsistencies.

Structure

The 338-page novel is divided into a brief prologue and epilogue with fifteen intervening chapters. The fifteen main chapters are roughly equal in length and cover a span of approximately nine days.

The chapters generally divide the novel into broad periods of time within a day, though Chapter 7 spans two days. Within each chapter, several sub-plots are usually developed in parallel. The chapter divisions assist is making the timeline easy to follow.

The novel's structure is straightforward and traditional. The plot is unfolded in chronological order, with occasional flashbacks providing required background information. The novel includes a large amount of well-written dialogue between characters.

Overall, the novel is structured in a way that makes it easy to read and easy to understand.



Quotes

"Dr. Frank!" Dr. Stedman said sternly. "You have a choice: either stop interfering or leave the delivery room. Take your pick." Dr. Stedman had had enough. He'd already put up with a number of Frank's orders, such as performing every known prenatal test, including amniocentesis and chorionic villus biopsy. He'd even permitted Mary to take an antibiotic called cephaloclor for three weeks in the early part of the pregnancy. Professionally, he'd felt none of these things were indicated, but he'd gone along with them because Dr. Frank had insisted and because the surrogacy status made the situation unique." (Prologue, p. 8)

"Having two cases of such a rare form of liver cancer in the same household within a year prompted extensive epidemiological investigations. But the results had all been negative. There was no environmental hazard present. The computers determined that the two cases were simply rare chance occurrences." (Chapter 1, p. 17)

"'Gotcha!' he said, playfully grabbing the boy's leg. "At his touch, VJ leaped up, his hands ready to defend himself. "Whoa! Were you concentrating or what?' Victor said with a laugh. "VJ's turquoise eyes bore into his father. 'Don't ever do that again!' he said. "For a second, Victor felt a familiar surge of fear at what he had created." (Chapter 2, p. 29)

"At the western corner of the property and dominating the site was an eight story clock tower designed as a replica of Big Ben in London. It soared above the other buildings from the top of a three-story structure built partially over a concrete dam across the Merrimack. With the river as swollen as it was, the millpond behind the dam was filled to overflowing. A thunderous waterfall at the spillway in the center of the dam filled the air with a fine mist." (Chapter 3, p. 37)

"He [VJ] knew she [Marsha] was upset, but there was nothing he could do about it. Ever since he was a baby he realized there was something she wanted from him, something other mothers got from their children that he couldn't give her. Sometimes, like now, he felt sorry." (Chapter 5, p. 70)

"I don't know if I can help that much,' Martha said. 'There certainly was a big change, and it occurred so quickly. VJ went from being a confident child whose mind seemed infinite in its capability, to a withdrawn child who had few friends. But it wasn't as if he was autistic. Even though he stayed by himself, he was always uncannily aware of everything going on around him."' (Chapter 7, p. 124)

"Marsha read the final pages. The last entry was for May 6, 1982. It described the experience at the day-care center at Chimera that Marsha remembered so vividly. It then dispassionately summarized VJ's sudden diminution in intelligence. The last sentence read: 'VJ appears to have suffered an acute alteration in cerebral function that now appears stable." (Chapter 7, p. 143)



"Starting out in the lab just as he had done on Wednesday, he began asking if anyone had seen VJ. But no one had seen either him or Philip for some time. Victor left the lab building and went to the cafeteria...

"I'm looking for my son again,' Victor said.

"'He hasn't been in yet,' Curt said..." (Chapter 9, p. 183)

"You've created a monster,' Marsha said softly, her voice breaking. She bit her lip. Why couldn't she control her tears? 'You've created a monster and I'll never forgive you for it.'

"Give me a break,' Victor said, exasperated." (Chapter 11, p. 248)

"I don't want to talk about it anymore,' Victor said angrily, 'at least not now.' He was still high from the day's tour of VJ's lab. Was there a darker side to his son's genius? At times in the past, he'd had his suspicions, but they were all too easy to dismiss. VJ seemed such a perfect child. But now Marsha was expressing the same kind of doubts and backing them up so that they made a kind of evil sense. Could the little boy who gave him a tour of the lab, the genius behind the new implantation process, also be behind unspeakable acts? The murder of those children, of Janice Fay, of his own son David? Victor couldn't consider the horror of it all. He banished such thoughts. It was impossible." (Chapter 12, p. 269)

"'Lady, I think I should give you some advice. If I were you, I'd go home and enjoy life. Don't interfere in what you don't understand. It will cause trouble for everyone.' Then he raised his hand and pointed at one of the other men. 'Josy, show this lady out before she gets herself hurt."' (Chapter 13, p. 279)

"What Victor did in creating you was born out of unthinking arrogance. He didn't stop to consider the possible outcome; he was so obsessed with the means and his singular goal. Science runs amok when it shakes loose from the bonds of morality and consequence." (Chapter 14, p. 299)

"I'm sorry, VJ.' But the apology was not for what he was doing at that minute. For that he was not sorry. But Victor felt he owed his son an apology for the experiment he'd carried out in a lab a little over ten years ago. The experiment that had yielded the brilliant but conscienceless son. 'Good-bye, Isaac.'" (Chapter 15, p. 330)



Topics for Discussion

The infants Maurice Hobbs and Mark Murray are Victor and Marsha Frank's biological children. Discuss Victor's motivation for surreptitiously using his own embryos during standard fertility services. Are Victor's actions believable?

The sub-plots introduced in the beginning of the novel are effective at providing alternative plausible explanations of events. How does Victor attempt to make sense of the seemingly random events happening?

Was VJ's antisocial personality disorder caused by Victor's genetic experimentation?

Victor bio-engineers a super-intelligent being. VJ bioengineers mentally deficient beings. In what other ways are Victor's and VJ's actions opposed?

Discuss how the author's use of limited location and limited details adds to the fastpaced flow of the novel.

The novel contains extensive dialogue. The police, for example, typically speak in an informal and somewhat uneducated manner, while VJ speaks in a highly formal manner. Describe how the novel uses dialogue to create character.

Victor is dismayed when he discovers VJ is mass producing cocaine to fund further research. Does Victor react negatively because cocaine is morally wrong, or because the illegal activity complicates and threatens the funded research?

Marsha is an experienced, practicing child psychiatrist, yet it takes her over ten years to realize her son is deviant and amoral. What explanations could be offered to explain Marsha's ignorance?

Compare and contrast Robin Cook's Mutation and Mary Shelley's Frankenstein.

Victor compares VJ to the Biblical Isaac moments before they are both killed. Is this literary allusion justified and supported in the novel?

In addition to being super-intelligent, VJ displays a solid grasp of social norms and customs. Is social understanding simply a matter of intelligence, or is long-term experience also necessary for mastery?

Is VJ's personality a result of genetics ("nature"), upbringing ("nurture"), or both?

If the novel was re-written today, how would the technology presented in the novel be different?

The novel's plot is effectively paced through several mechanisms, including Victor's slow but constant discoveries made through forensic science. Discuss other methods used to pace the plot.



Related Titles

Godplayer (1983) also explores the wisdom of humans, who attempt to make godlike decisions of life, death, and fate.



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Beacham's Guide to Literature for Young Adults

Editor - Kirk H. Beetz, Ph.D.

Library of Congress Cataloging-in-Publication Data

Beacham's Guide to Literature for Young Adults
Includes bibliographical references.
Summary: A multi-volume compilation of analytical essays on and study activities for fiction, nonfiction, and biographies written for young adults.
Includes a short biography for the author of each analyzed work.
1. Young adults Books and reading. 2. Young adult literature History and criticism. 3.
Young adult literature Bio-bibliography. 4. Biography Bio-bibliography.
[1. Literature History and criticism. 2. Literature Bio-bibliography]
I. Beetz, Kirk H., 1952
Z1037.A1G85 1994 028.1'62 94-18048ISBN 0-933833-32-6

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Printed in the United States of America First Printing, November 1994