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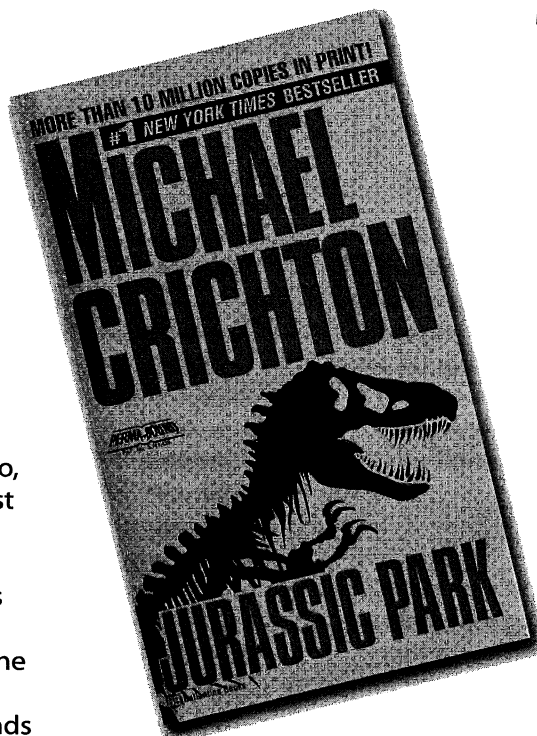
Synopsis

Introduction

The introduction is written ostensibly after the events of the novel and purports to frame them as historical fact. It describes the explosion of biotechnology in the twentieth century, its commercialization, and the rise of International Genetic Technologies, InGen. On October 5, 1989 InGen filed for Chapter 11 bankruptcy protection after an undisclosed incident at one of its properties in Costa Rica. The novel, then, is gathered from eyewitness accounts of the events in Costa Rica in late August 1989.

Prologue: The Bite of the Raptor

An InGen helicopter brings a wounded worker to Bahía Anasco, a fishing village on the west coast of Costa Rica, where Roberta Carter is a visiting physician. Ed Regis, an InGen employee, claims that the man was dragged by a backhoe, but Carter thinks that the wounds more closely resemble a mauling by an animal. The wounds are covered in a foul smelling foam that resembles saliva. While she photodocuments the wounds, the man whispers, "Lo sa raptor." The man then explosively vomits blood and dies. Carter's assistant claims that "raptor" means "hupia," a ghost that kidnaps children. Unconvinced, she looks the word up in both English and Spanish dictionaries and finds that it also means "bird of prey."



First Iteration

Almost Paradise

Mike Bowman and his wife, Ellen, and eight year old daughter, Tina, drive to a secluded beach on the west coast of Costa Rica while on vacation. Tina wanders off and is attacked by a three-toed lizard about the size of a chicken.

Puntarenas

Mike and Ellen drive Tina, who has numerous bites along her arm, to the hospital at Puntarenas, where Dr. Cruz treats her. Puzzled by the sticky saliva in the wound and her drawing of the lizard on its hind legs, Dr. Cruz calls in a biological researcher, Dr. Guitierrez, who initially determines that the lizard was a basilisk lizard. Later, he revises his opinion in light of several strange details and decides to investigate.

The Beach

Dr. Guitierrez goes to the beach at Cabo Blanco to find a specimen of the lizard that bit Tina, thinking it may be a previously undiscovered species. He is unable to locate one, but as he leaves, he finds a howler monkey eating what appears to be the lizard for which he is looking. He tranquilizes the monkey, recovers the remaining portion of the lizard, and decides to send it to New York for identification.

New York

In New York, the lizard fragment is forwarded to Dr. Richard Stone of Columbia University's Tropical Diseases Laboratory. It tests clean for any diseases, though it does display cross-reactivity to the venom of the Indian King Cobra, a detail Stone

omits in his report. Dr. Guitierrez assumes from Stone's memo that he has correctly identified the animal as an anomalous three-toed basilisk lizard. Elsewhere in Costa Rica, Elena Morales, a midwife, discovers a pack of lizards eating a newborn infant.

The Shape of the Data

Afraid she might be criticized for leaving the baby unattended, Morales reports the death as a case of SIDS. The analysis of the saliva sample from Tina Bowman's bites comes back with several oddities, including a poison related to cobra venom and an enzyme marker for genetic engineering. The latter is dismissed as a lab contaminant. In New York, Alice Levin, a technician, identifies Tina's drawing of the lizard as a dinosaur. She insists that they should try to identify the remains, but her concerns are dismissed.

Second Iteration

The Shore of the Inland Sea

Bob Morris, of the EPA, visits Alan Grant, a famed paleontologist, at his current dig in Montana. He questions Alan about funding he receives from the Hammond Foundation, which has been engaging in mysterious behavior, including shipping supercomputers and genetic sequencers to an island in Costa Rica. After Morris leaves, Grant receives a phone call from Alice Levin about identifying remains.

Skeleton

Levin faxes an x-ray of the remains. Grant and Ellie Sattler, a paleobotanist, identify the skeletal structure as Procompsognathus, a Triassic scavenger dinosaur. While they debate the possibility of a hoax, their principal funder, John Hammond of the Hammond Foundation calls and insists that they join him for the weekend on InGen's island in Costa Rica.

Cowain, Swain and Ross

InGen's investors have begun to become nervous, so InGen's legal counsel, Donald Gennaro, is sent to inspect Isla Nublar, InGen's Costa Rican island. He is to be accompanied by Alan Grant, Ellie Sattler, Ian Malcolm, a mathematician, and an unnamed computer specialist. Gennaro calls Grants and arranges to have the dinosaur specimen in New York sent to the island.

Plans

The next day, Grant and Sattler receive architectural plans for Isla Nublar. They are able to determine from the plans that it is a resort of some sort, but they are unable to decipher much more from the ambiguously coded drawings. In the field, they begin excavating a velociraptor.

Hammond

Gennaro meets Hammond on a private plane. Hammond describes the progress on the island and insists that the various mishaps are nothing more than normal production delays. He describes the island project as an amusement park with live attractions.

Choteau

Grant and Sattler join Hammond and Gennaro on the private plane. Gennaro and Sattler immediately dislike one another. Grant queries about the length of their visit. Gennaro claims that they have several issues to clean up while on the island, but Hammond insists that they'll be there no more than two days.

Target of Opportunity

Lewis Dodgson, head of product development at Biosyn addresses an emergency meeting of the board of directors. He "reverse engineers" rival companies' products so that Biosyn can make its own versions, which mostly involves industrial espionage. He informs them that InGen has successfully produced living dinosaurs, creating a new lucrative market in which Biosyn has no share. The board of directors informally approve his plan to procure samples of InGen's dinosaurs to "reverse engineer."

Airport

Dodgson meets his contact in InGen at the airport in San Francisco. He gives him half of the payment, seven hundred fifty thousand dollars, and a specially engineered shaving cream can in which the InGen man should store embryos of the dinosaurs and deliver to a waiting boat on the island.

Malcolm

In Dallas, Ian Malcolm joins the group on the airplane. He is an eccentric mathematician specializing in chaos theory. He briefly explains chaos theory and then uses it to predict the failure of Hammond's project, saying that it is a complex

system and that complex systems are inherently unstable.

Isla Nublar

In San José they pick up Dennis Nedry, a slovenly computer programmer. They then take a helicopter to Isla Nublar, descending through the thick fog for which the island is known. They are met by Ed Regis. Shortly after landing, the group sees its first dinosaur, a brontosaurus.

Welcome

While the entire group is impressed by the sight, Sattler and Grant are the most awestruck, making technical observations. Gennaro revises his opinion of the project and hopes all is well with production because he foresees the possibility of great profits.

Third Iteration

Jurassic Park

Grant and Sattler discuss how the park will render paleontology, their academic field, irrelevant. Along with Malcolm, they also speculate on how the park acquired dinosaur DNA in order to clone it. At the visitors' quarters, Sattler is disturbed to find poisonous ferns blithely planted by the pool, and she and Grant find the barred and narrow windows ominous.

When Dinosaurs Ruled the Earth

At the visitor's center, Gennaro describes the nature of the park and the group's purpose in visiting it. They are to determine if it is safe. He tells them of the partial dinosaur found nearby on the Costa Rican mainland, the public data on recent lizard attacks on children and elderly people, and spikes in the infant mortality rate. Malcolm asserts that dinosaurs have definitely escaped the island, based on the premise that the park is such a complex system that containment is impossible. He also says that the spikes in infant mortality must have some other cause, since they bear the marks of a normal chaotic system. Shortly after, Hammond's grandchildren, Lex and Tim Murphy, arrive. Gennaro objects vehemently to their presence.

The Tour

Ed Regis is summarily appointed as guardian of the children by Hammond, which displeases Regis. Tim, a dinosaur enthusiast, recognizes Grant as a leading dinosaur expert and pesters him, which Grant takes with good grace. The group's tour of the island begins in the laboratory where dinosaur DNA is extracted. Dr. Wu, the lead geneticist, explains that while it is possible to extract partial DNA fragments from crushed bones, most of their DNA comes from amber. The amber preserves insects, some of which are biting insects, some of which have bitten dinosaurs and extracted their blood. They use computers to decode the DNA and to repair broken segments of the strands. They are then shown the hatchery, where dinosaur embryos are incubated in plastic eggs, and the nursery, where they meet a baby velociraptor. Dr. Wu explains that the dinosaurs can't breed in the wild because they are all genetically engineered to be female and then irradiated as an extra precaution.

Control

Thinking of the x-ray from New York, Malcolm and Grant ask Wu if the park has developed any compys. Wu explains that they have produced a large number of them because they are scavengers and will eat the spoor of the large herbivores. Contemporary bacteria is unable to breakdown the spoor of the large herbivores, but it can use compy spoor. He adds that it's impossible for the dinosaurs to survive off of the island because they are genetically engineered to be lysine dependent and will die without regular doses. Grant, Ellie, Tim, and Ian go to view the velociraptors in a holding pen. They attack but are rebuffed by the electrified bars. Impressed by their speed, Grant is reminded more of birds than reptiles. Ian wonders how the animals have learned to attack humans, since predators usually must develop a taste for people.

Version 4.4

Wu approached Hammond about creating a new version of the dinosaurs, one slower and more docile, easier for the staff to manage. Hammond refuses to entertain the notion, saying that people want real dinosaurs. Wu retorts that people don't know what to expect, having never seen a real dinosaur, and that they will accept whatever is presented to them. Hammond adamantly rejects the idea.

Control

In the control room, John Arnold, the chief engineer, demonstrates the park's monitoring system. Motion sensors track and identify each animal, record the data, update it every thirty seconds, and checks the number of animals found against the number expected every fifteen minutes. Malcolm asks if the system can display the height distribution for the compys. When the graph displays a normal Gaussian distribution, he claims that this proves that some compys have escaped, since the distribution is for a "normal" population, which Jurassic Park is not.

The Tour

The tour commences in two automated electric Land Cruisers with CD-ROM guided tour notes. The first stop is to see the Hypsilophodontids, which the AI rouses with a recorded mating call. Lex is generally unimpressed.

Control

Arnold and Robert Muldoon, the park's game warden, discuss the park's various problems and setbacks, which irritates Hammond. Meanwhile, Nedry begins addressing the bugs in the computer system, which turns out to be a more extensive task than he had anticipated. The tour progresses past the Dilophosaurs, poisonous carnivores, and Triceratops, relatively docile herbivores.

Big Rex

While the tour waits for a Tyrannosaur to appear, Muldoon broods about the various dangers inherent in the park. The dilophosaurs are capable of spitting venom fifty feet and the velociraptors are vicious pack hunters. At the Tyrannosaur paddock, a live goat is used to lure the adult T-Rex into view.

Control

In the control room, Hammond listens to the conversations in the tour cars. He is angered by speculations about the consequences of an animal escape and blames Malcolm as the source of disquiet. Downstairs, Muldoon takes one of the island's two gasoline powered jeeps and a rocket launcher. While the tour admires Apatosaurs, Tim claims to see a juvenile velociraptor. He is dismissed by Ed Regis, but Malcolm seems to take his claim naturally. A developing storm coerces a supply ship to halt its unloading and head out of the relatively unprotected harbor.

Stegosaur

The tour stops and disembarks to meet Dr. Harding, the park's veterinarian, who is perplexed by the periodic illnesses of the stegosaurus. Sattler eventually realizes that the dinosaurs periodically ingest poisonous berries while swallowing fresh stones for their gizzards. Malcolm delivers a short lecture on chaos theory, in reaction to a gibe from Gennaro. Grant finds a piece of a velociraptor egg and deduces that the dinosaurs are breeding, despite the park's controls.

Control

Hammond insists that the shell must be from a bird, since the dinosaurs are unable to breed. Malcolm points out that the computer tracking system is designed to track the loss of animals, not the gain, since it begins with the number of expected animals and checks to make sure that number is found. When they expand the search parameters, they find increases in five types of dinosaurs, mostly compys and velociraptors.

Breeding Sites

Grant concludes that the dinosaurs are breeding in seven sites on the island and that the increase in raptors and compys explains the park's sudden decrease in vermin. He also thinks that the dinosaurs are able to breed because Wu used pieces of amphibian DNA to repair broken strands of dinosaur DNA, though he does not explain this conclusion. Lex spots juvenile velociraptors on the departing supply ship, but the cars can't communicate with the control room because Nedry has jammed every communication line. He then cuts the power to disable the security system, steals a set of dinosaur embryos, and takes the remaining jeep to deliver them to a waiting boat. Arnold and Muldoon realize that the cut in power has disabled the electric fences around the animals. Muldoon goes to continue the tour, but finds his jeep missing.

4th Iteration

The Main Road

The adult Tyrannosaur escapes her paddock and attacks the car carrying Lex, Tim, and Regis. Regis flees the scene. The T-Rex throws the car and then attacks the one with Grant and Malcolm. Malcolm tries to run, but is caught. Grant realizes that the dinosaur's vision is based on motion and evades it by remaining absolutely still.

Return

Returning to the visitor complex in Harding's jeep, Harding, Gennaro, and Sattler find the road blocked by a fallen tree and have to take a circuitous route. Arnold tries to restart the computer systems, but finds that Nedry has locked him out of access.

Nedry

Nedry takes a wrong turn on the way to the docks and comes to a dead end. When he exits the jeep to take his bearings, he is killed by a dilophosaur.

Bungalow

Over dinner in his bungalow, Hammond treats Wu to a petulant tirade about government intervention in biotechnology, the foolishness in making useful products like pharmaceuticals, and his estimates of the park's earning potential. Harding, Sattler, and Gennaro come across a group of compys moving towards what the reader assumes is Nedry's corpse and decide to follow them to see what's attracting them.

Tim

Tim regains consciousness in the Land Cruiser, which the T-Rex has deposited in a tree. He barely escapes before it plummets to the ground. He retrieves the night-vision goggles from the wreck and then finds Lex hiding in a drain pipe. Muldoon and Arnold remain unable to locate Nedry. Wu follows up on Grant's suspicion and finds that every multiplying species has frog DNA, though he cannot decipher the significance of the correspondence.

Lex

Grant finds the children relatively unhurt. Regis returns from hiding, but is killed by the juvenile T-Rex. Grant, Lex, and Tim flee into the park.

Control

Just as Harding, Gennaro, and Sattler are about to discover Nedry's corpse by following the pack of compys, Arnold reestablishes radio contact and orders them to return to the Safari lodge because they need their jeep. Hammond finally learns of the system crash, security breach, and predicament of his grandchildren and indulges in a furious but generally ineffectual rant. Arnold begins inspecting the system's code line by line, looking for the source of the problem.

The Road

Muldoon and Gennaro search for the tour group in the recently returned jeep. They find Regis' leg, and Muldoon reads the scene to indicate 1) a T-Rex attack and 2) that Lex, Grant, and Tim survived and fled on foot. They find Malcolm nearby, alive but with a mangled right leg.

Control

Hammond remains blithely optimistic and insists that the children will be found safe shortly. Arnold and Wu run a log of keystrokes on Nedry's console, which leads them to the backdoor in the code that Nedry used to disable the system. Because the outside communication lines remains jammed, they are unable to call a helicopter to take Malcolm to the hospital, so Harding and Sattler are assigned to care for him in the interim. Muldoon resumes his search for the others.

In the Park

Navigating by the labeled motion detectors, Grant and the children make their way out of the T-Rex paddock and take shelter in a feeding shed, where they sleep.

Control

Arnold disables Nedry's lockout and restores the park's power. Muldoon takes a maintenance crew out to repair shorted sections of the fences. The motion sensors fail to find Grant and the children, which they assume means that they are sleeping and thus not moving. Malcolm, on a high dose of morphine, is upbeat, but Sattler warns Gennaro that his condition is serious and that he requires a helicopter as soon as possible.

The Park

While Muldoon leads the maintenance crew, Arnold gives Gennaro a detailed explanation of Malcolm's predictions for the park and Chaos Theory, which Arnold eventually dismisses as inappropriate to the park and thus inaccurate. When they discover that a T-Rex has entered the Sauropod paddock, Hammond insists that they retrieve it immediately, but Muldoon refuses. He says that it's impossible because the only rocket launcher is in the missing jeep.

Dawn

Grant wakes in the Sauropod maintenance building, where Lex is awake and feeding a baby Triceratops. After its mother hustles it away, they start walking back to the lodge. Arnold resets the computer system in order to regain access to the communications systems. Grant, Tim, and Lex are nearly trampled by a stampede of hadrosaurs fleeing the T-Rex. Arnold observes the stampede on the monitors and sends Muldoon to investigate.

The Park

Grant, Lex, and Tim find a raft and a tranquilizer gun at a dock. The adult T-Rex is sleeping nearby, and Lex wakes her while they board the raft. It pursues them into the water, but abandons the chase when the juvenile T-Rex tries to steal her sauropod carcass.

5th Iteration

Search

While Gennaro and Muldoon investigate the remains of the T-Rex attack on the hadrosaurs, Arnold radios to say he's located Nedry on the video system. They retrieve the rocket launcher, the park's only heavy weapon, and leave Nedry to be devoured by the compys. Grant, Lex, and Tim float into the aviary, an unfinished area. They disembark in hopes of finding a phone to contact the control room and inform them about the raptors on the boat.

Aviary

Arnold remains unable to locate Grant and the children. Malcolm points out that, though the sensors cover 92% of the park's territory, the 8% uncovered is contiguous, meaning that animals can move freely through the park unnoticed. In the aviary, Grant, Lex, and Tim are attacked by pterodactyls and flee back to the boat. They float past the venom-spitting dilophosaurs, who are distracted by the arrival of the adult T-Rex.

Tyrannosaur

Malcolm and Gennaro locate the adult T-Rex and attempt to tranquilize it with rocket-propelled darts. Muldoon apparently misses both shots, and they are forced to flee. Grant, Tim, and Lex take the raft over a waterfall. The T-Rex is waiting at the bottom of the falls and almost catches Lex. They escape up a path behind the falls. Grant finds and

enters a recessed maintenance door, where he tranquilizes a juvenile velociraptor. While he's inside, the T-Rex sticks its tongue through the falls and starts to pull Tim into its mouth, then suddenly collapses.

Control

Apparently Muldoon had not missed the T-Rex, and the dart has just taken effect. Arnold realizes that the system has been running off of auxiliary power since he reset it, and the power has just ran out. He goes to try to restart the generators, but is killed by a raptor. Gennaro also attempts to restore power and is attacked by a velociraptor.

6th Iteration

Return

Grant, Lex, and Tim return to the visitor's center, Wu, Harding, Sattler, Malcolm, Hammond, and Muldoon are trapped in the lodge, where raptors are chewing through the steel bars on the skylight in their room. Grant goes to restart the generator, while Sattler runs outside to distract the velociraptors. He leaves Lex and Tim in the cafeteria. Sattler distracts two raptors, but the rest drop from the roof and kill Wu. After priming the pump, Grant starts the generator. He find Gennaro nearby in a truck. A velociraptor tracks the children into the cafeteria. Tim lures it into a walk-in freezer, in which he locks it. He and Lex take refuge in the control room, where Tim tries to restart the systems.

The Grid

Tim unsuccessfully tries to restore the park's systems. When more raptors appear, they take a dead security guard's card and flee through a locked door.

Lodge

Tim and Lex meet Gennaro and Grant. Gennaro takes the children, while Grant lures the raptors into the incubation room, where he kills them with poison. Once the dinosaurs are dead, the group hurries to the control room.

Control

Tim reactivates the security system's power in time to save the group at the lodge. Gennaro orders the supply ship back to the island.

7th Iteration

Destroying the World

Hammond voices his relief that the dinosaurs haven't escaped the island to "destroy the world." Malcolm sneers that the planet was never in danger, though they were, and launches into a lecture on the longevity of the planet.

Under Control

Although the Costa Rican National Guard is on the way, presumably to destroy the island, Grant insists that they must inspect the velociraptor nests to determine if any have escaped the island. Gennaro, Sattler, and Muldoon accompany him. On the way, he explains why the dinosaurs with frog DNA were able to reproduce. Some frog species are able to spontaneously change their gender when there is a gender imbalance in their population.

Almost Paradigm

Hammond goes for a walk, mulling over recent events. He decides that the park's failure was primarily the result of his employees' incompetence and plans to start anew on another island using embryos stored at InGen's headquarters. Lex and Tim, playing in the control room, broadcast a recorded T-Rex roar, which panics Hammond, who falls down a hill and breaks his ankle.

Descent

Grant, Sattler, and Gennaro descend into the raptors' subterranean nest. Grant counts the hatched eggs. The animals, who display odd social organizational patterns, suddenly run en masse down a tunnel.

Hammond

Attracted by wounded prey, compys attack and kill Hammond.

The Beach

Grant, Sattler, and Gennaro follow the raptors down the tunnel to a beach, where the dinosaurs silently watch the returning supply ship. Grant realizes that the animals don't want to escape; they want to migrate.

Approaching Dark

A helicopter scatters the raptors and picks up the group on the beach. Muldoon and the children are already aboard, Harding escaped on another helicopter, and Malcolm and Hammond have died. The helicopters begins bombarding the island.

Epilogue: San José

The Costa Rican government holds the survivors for questioning at a hotel in San José and seems disinclined to release them in the near future. Dr. Guitierrez visits Grant and informs him that animals they assume to be compys have migrated straight north into the jungles, eating crops rich in lysine along the way.

The Importance of Setting

Jurassic Park is set in Costa Rica, a well-developed Central American country yet, by its location, at a remove from the United States. The climate is moderate with cool temperatures relatively consistent throughout the year, thus making it a conducive environment to develop an outdoor research facility. In addition, Costa Rica has become a popular destination for eco-tourists as well as mecca for Western retirees.



Paleontology Timeline

- 610-425 BCE** Greek philosophers propose that marine fossils indicate that inland areas were once underwater.
- 1171 CE** A river bank collapse in Essex, England reveals fossilized bones that are supposed to be the remains of a forty-foot-tall human.
- 1500 CE** Echoing earlier Greek suppositions, Leonardo da Vinci claims that inland marine fossils were neither washed ashore nor created on the spot.
- 1546** In Germany, Georgius Agricola publishes the first published resource on paleontology, *On the Nature of Fossils*.
- 1565** Conrad Gesner publishes *A Book of Fossil Objects*.
- 1668** Robert Hooke presents a lecture criticizing the notion that biblical floods are responsible for fossils.
- 1670** Agostino Scilla publishes a treatise arguing that fossils are organic in origin.
- 1784** Cosimo Alessandro Collino publishes a description of a pterosaur.
- 1799** The Jurassic System is named after the Jura Mountains.
- 1810** First fossil ichthyosaur discovered.
- 1822** Omalius d'Halloy names the Cretaceous System.
- 1832** First fossil ankylosaur found.
- 1834** The Triassic System is named by Friedrich von Alberti.
- 1841** The Paleozoic, Mesozoic, and Cenozoic eras are named.
- 1868** Thomas Henry Huxley argues that birds are the descendents of dinosaurs.
- 1887** Henry Govier Seeley divides dinosaurs into saurischian and ornithischian categories.
- 1901** Harry Govier Seeley argues that dinosaurs were warm-blooded.
- 1921** William Diller Matthews argues that dinosaurs were driven to extinction by continental uplift and mammalian replacement.
- 1938** A coelacanth, a fish believed to be extinct, is found off the South African coast.
- 1956** M.W. de Laubenfels suggests that dinosaurs became extinct after a meteorite impact.

- 1972** Bob Bakker publishes an article arguing that dinosaurs were warm-blooded.
- 1980** Louis W. Alvarez, et al., suggest that dinosaurs became extinct as a result of an asteroid impact.
- 1991** Discovery of the Chicxulub crater supports Alvarez's theory.
- 2003** Jurassic and Cretaceous fossils are discovered in Antarctica.

Author Sketch

Michael Crichton was born in Chicago, IL on October 23, 1942. After graduating from Harvard University in 1964, he began a varied career as a writer and filmmaker. He is the only person to have had the number one book, movie, and television show in the United States at the same time. His books, thirteen of which have been made into movies, have sold more than 150 million copies and been translated into thirty-six languages. He has been awarded numerous television, film, and literary awards, including an Emmy, an Academy of Motion Pictures Arts and Sciences Technical Achievement Award, a Peabody, Writer's Guild of America award, and an Association of American Medical Writers Award. In 2002, a newly discovered dinosaur, *Crichtonsaurus Bohlini*, was named after him.



Critic's Corner

Popular fiction reviews of *Jurassic Park* primarily focus on the quick-paced plot, suspense, and use of plausible science. In fact, the novel and movie have become a keyword in popular science writings, advances in genetics and paleontology being framed in terms of the novel's premise. Literary reviews deride the characterization as relatively weak and focus on the novel's many themes, including globalization, the privatization of scientific research, ethics and science, and greed. In-depth literary analyses have focuses on such wide ranging topics as women in Central America to literary representations of theme parks.

As a classroom resource, *Jurassic Park* is well suited to cross-disciplinary studies, especially with genetics, computer technology, paleontology, chaos theory, and mathematics. Thematically, the novel serves well as a contemporary counterpart to such novels as Mary Shelley's *Frankenstein* and Robert Louis Stevenson's *Dr. Jekyll and Mr. Hyde*. Lower-to-middle level readers should enjoy the novel's quick pace and relatively simple vocabulary, while advanced readers will be able to perform structural and thematic analyses.

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Selected Other Works by the Author

Fiction

- The Andromeda Strain*, 1968
The Terminal Man, 1972
The Great Train Robbery, 1973
Westworld, 1974
Eaters of the Dead, 1976
Congo, 1980
Sphere, 1987
Rising Sun, 1991
Disclosure, 1993
Twister, 1996 (with Anne-Marie Martin)
Airframe, 1996
Timeline, 1998
Prey, 2002
State of Fear, 2004

Nonfiction

- Five Patients*, 1970
Jasper Johns, 1977
Electronic Life: How to Think about Computers, 1983
Travels, 1998

Films

- Westworld*, MGM, 1973 (writer/director)
Coma, MGM, 1978 (writer/director)
The Great Train Robbery, United Artists, 1979 (writer/director)
Looker, The Ladd Company, 1981 (writer/director)
Runaway, Tri-Star, 1984 (writer/director)
Physical Evidence, Columbia, 1989 (director)
Jurassic Park, Universal, 1993 (co-writer)
Rising Sun, 20th Century Fox, 1993 (co-writer)

Disclosure, Warner Brothers, 1994 (co-producer)
Twister, Warner Brothers/Universal, 1996 (co-writer,
co-producer)
Sphere, Warner Brothers, 1997 (co-producer)
13th Warrior, Touchstone, 1999 (co-producer)

Films Based on Novels

The Andromeda Strain, Universal, 1971
The Carey Treatment, MGM, 1972
*Dealing: Or the Berkeley to Boston Forty-Brick Lost
Bag Blues*, Warner Brothers, 1972
The Terminal Man, Warner Brothers, 1974
Congo, Paramount, 1995
Lost World: Jurassic Park, Universal, 1997
Timeline, Paramount, 2003

Television

E.R., NBC, 1994 (creator, co-executive, producer)

Media Versions

DVD

Jurassic Park, MCA Home Video, 1993

Download

Jurassic Park, Random House, 2000 (abridged
audiobook)

Large Print

Jurassic Park, GK Hall, 1991

Audiobook

Jurassic Park, Random House, 2002

General Objectives

1. To read a full-length novel.
2. To develop reading comprehension.
3. To develop vocabulary skills.
4. To develop critical thinking.
5. To evaluate science fiction as a literary genre.
6. To access the novel through cross-curricular approaches.
7. To apply and understand literary terminology.
8. To use the novel to prepare for standardized testing.
9. To compare/contrast literary elements and characters.
10. To formulate and express personal reactions and judgments of the novel.

Specific Objectives

1. To discuss the role of greed in the park's creation and demise.
2. To interpret the novel's division into "Iterations."
3. To understand Malcolm's representation of chaos theory.
4. To evaluate the novel's use of point of view.
5. To analyze the dramatic use of Lex and Tim.
6. To compare private/public scientific research.
7. To read the novel as a critique of Western science.
8. To contrast the novel with its film version.
9. To identify examples of foreshadowing.
10. To comment on the novel's structure.

Literary Terms and Applications

Characterization the assembly of actions, speech patterns, attitudes, and habits that defines a character. Hammond is easily recognizable by his almost childish petulance, his adamant refusal to recognize the reality of a situation, and his unflagging greed. Lex is also marked in a generally negative manner. She is characterized by incessant complaints, mostly about being hungry. Muldoon is also a strongly distinct character. He is marked by his bleak realism, whiskey drinking, and sardonic demeanor.

Foreshadowing narrative elements that allude to forthcoming events, either directly or indirectly. In the prologue, the dying workman's "Lo sa raptor" foreshadows later events in the novel in several ways. His wounds are similar to the effects of later attacks, "Lo sa raptor" sounds like "velociraptor," and the assistant's association with hupia predicts the compy attacks on infants.

Point of View the perspective form which a narrative is told. The story often shifts between the perspectives of the characters. Sometimes this shift is based on location, i.e. the perspective shifts based on which characters are present in a particular location. The most significant use of point of view is the shifts into the children's perspectives during times of danger. Telling the story from the perspective of a child in danger heightens the tension.

Cross-Curricular Sources

DVD/VHS

Pi, Artisan, 1998
The Butterfly Effect, New Line Home Video, 2004
Jurassic Park, MCA Home Video, 1993
The Lost World: Jurassic Park, MCA Home Video, 1997
Jurassic Park III, MCA Home Video, 2001
Gattica, Sony, 1997

Novels

David Gerrold, *When H.A.R.L.I.E. Was One*
 Robert Heinlein, *Stranger in a Strange Land*
 Adolus Huxley, *Brave New World*
 Mary Shelley, *Frankenstein*
 Robert Louis Stevenson, *Dr. Jekyll and Mr. Hyde*
 H.G. Wells, *The Island of Dr Moreau*

Short Stories

Ray Bradbury, "A Sound of Thunder"
 Nathaniel Hawthorne, "Rappaccini's Daughter"
 Ursula K. Le Guin, "The Ones Who Walk Away from Omelas."

Internet

Chaos and Complexity Resources for Students and Teachers
<http://www.societyforchaostheory.org/tutorials/>
 The Dinosauria
<http://www.ucmp.berkeley.edu/diapsids/dinosaur.html>

Earth's Geologic Timeline

<http://www.wesleyan.edu/its/acs/modules/evolution/era.html>

Human Genome Project Education Resources

http://www.ornl.gov/sci/techresources/Human_Genome/education/education.shtml

Nonfiction

James Gleick, *Chaos: Making a New Science*
 Rob DeSalle and David Lindley, *The Science of Jurassic Park and The Lost World*

Themes and Motifs

Themes

- chaos theory
- dangers implicit in technology
- scientific recklessness
- life/death
- greed
- role of government oversight
- courage
- paleontology
- chance

Motifs

- crucial timing
- similarities between dinosaurs and birds
- adamant nearsightedness
- differences between expectations and reality
- predation/pursuit

Meaning Study

1. Science has claimed the power to eventually control everything, through its understanding of natural laws. But in the twentieth century, that claim has been shattered beyond repair. First, Heisenberg's uncertainty principle set limits on what we could know about the subatomic world. (p. 313)
(Malcolm is explaining why the traditional scientific viewpoint is limited and mistaken. It assumes that, if one could track enough variables, one could predict such complex phenomena as weather patterns. Malcolm argues that some systems are inherently unpredictable, and that there are limits on what one can know. Heisenberg's principle of uncertainty states that the very act of observing a phenomenon changes it and thus one can either know the velocity or position of a subatomic particle, but not both.)

2. there haven't been any advances. Not really. Thirty thousand years ago, when men were doing cave paintings at Lascaux, they worked twenty hours a week to provide themselves with food and shelter and clothing. The rest of the time, they could play, or sleep, or do whatever they wanted. (p. 285)
(Malcolm is arguing that the "advances" of science and technology have not considerably improved human quality of life, that thirty thousand years ago the average person worked half as much as a contemporary person and that they lived in a cleaner, more beautiful world. Although this argument is superficially compelling, it is somewhat flawed. Malcolm fails to mention changes in such relevant quantifiables as infant mortality rate and average life expectancy. However, this quote should provide a good starting point for a discussion of what "quality of life" should/does mean.)
3. scientific power is like inherited wealth: attained without discipline. (p. 306)
(Malcolm's critique of scientific power compares it to other kinds of power. He argues that most types of power require personal sacrifice and discipline to attain, and that the discipline one learns while attaining that power limits how one is inclined to use it. He uses the example of a black belt in karate, who can kill someone with his/her bare hands, but has learned the discipline not to use that skill. Malcolm says that scientific knowledge/power is received, that one learns what others have done and can extend beyond those boundaries without having to duplicate their steps. While Malcolm's critique may be compelling morally, it ignores the necessity of such a system of received knowledge. Scientific "advances" would be few and far between if scientists had to duplicate the entirety of scientific knowledge before proceeding with their own research.)
4. From a business standpoint ... helping mankind [is] a very risky business. Personally, I would never help mankind. (p. 200)
(Hammond is complaining that making useful products like pharmaceuticals is bad business because of the various obstacles, including FDA approval and pricing limits. He complains that FDA tactics are heavy handed, but that entertainment is largely unregulated and thus one can make as much money as one likes. This

monologue is revealing in two ways. First, it reveals Hammond's basic avaricious character, which explains many of his decisions regarding the park. In a more general sense, his analysis of the FDA provides the basic for discussing pharmaceuticals as big business and the necessity of government oversight.)

5. "Please, señor, who is in charge?"
"Nobody," Grant said. (p. 397)
(After Grant, Sattler, and Gennaro are rescued by the Costa Rican helicopter, a soldier asks him who is in charge of the island. Grant's reply is literally true, since the park's ostensible authority figures, like Hammond, Arnold, Wu, and Regis, are dead. It is also a general statement about the park. No one is in control of the park at all; it has descended into chaos.)
6. Parties to that settlement, including the distinguished scientific board of advisors, signed a nondisclosure agreement, and none will speak about what happened; but many of the principal figures in the "InGen incident" are not signatories, and were willing to discuss the remarkable events leading up to those final two days in August 1989 on a remote island off the west coast of Costa Rica. (p. xii)
(The Introduction is interesting because, though it purports to be fact, it is an extension of the fictive novel. It frames the events of the novel as historical fact. This claim, in combination with the relatively plausible genetic processes described, subtly shifts the novel from a strict science fiction framework and adds a sense of urgency to the novel's events. Presumably the "principal figures" referred to are the survivors from the island: Lex, Tim, Grant, Sattler, Harding, Muldoon, and Gennaro.)
7. Inevitably, underlying instabilities begin to emerge. (title page, Fourth Iteration)
(The Iteration title pages each bear a theoretic quote from Malcolm, which when read together, detail the escalation of problems on the island from a theoretic standpoint. This quote provides the basis for discussing one of the basic conflicts in the novel: chance vs. necessity. Many of the escalating failures that result in the island's eventual collapse are apparently random, the result of chance. However, Malcolm consistently insists that they are predicted in his theory, that they are inevitable and necessary.)

8. "But they're not real now," Wu said. "That's what I'm trying to tell you. There isn't any reality here." (p. 122)
(Wu is trying to convince Hammond to allow him to begin work on a new version of the dinosaurs, a slower, more docile version that would be easier to manage. Hammond objects that "then the dinosaurs wouldn't be real." Wu's point is that the dinosaurs are not real in a meaningful sense. The DNA Wu extracts from crushed bones and amber is fragmentary, and he has filled in the gaps as best he could. Thus the dinosaurs are, at best, an approximation, an educated guess. The dinosaurs have also already been genetically modified to be patentable, lysine dependent, and to mature at an accelerated rate.)
9. But if planting deadly ferns at poolside was any indication, then it was clear that the designers of Jurassic Park had not been as careful as they should have been. (p. 86)
(Ellie Sattler notices a poisonous fern planted poolside at the Safari Lodge and scoffs at how naïve most people are about plants, usually considering them more as decoration than living organisms. This particular detail is indicative of Jurassic Park's general planning and specifically foreshadows the disasters to come, most of which are the result of negligence or oversight. It underlines the vast complexity of the park as an endeavor, as does the later poisoning of the stegosaurus. As Malcolm often reminds them, Jurassic Park is more than a novel zoo; it is an entire ecosystem.)
10. Standard elephant gets about two hundred cc's, but they're only two or three tons each. Tyrannosaurus Rex is eight tons, and a lot meaner. That matters to the dose. (p. 289)
(Muldoon is discussing the appropriate dose of tranquilizer for a T-Rex with Gennaro. This conversation is interesting because it highlights the wildly divergent perspectives from which the characters view the animals. Muldoon considers them as animals to be hunted and controlled. Wu thinks of them primarily as genetic code. Hammond conceives of them primarily in terms of their earning ability as attractions. Arnold treats them as units to be tracked and counted. Only Sattler, Grant, and to a lesser extent, Tim, really consider the dinosaurs as dinosaurs.)

Comprehension Study

- How does Malcolm use chaos theory to predict the park's failure?
(Generally, Malcolm claims that complex systems are generally unstable and unpredictable. Chaotic systems display 1) a high sensitivity to initial conditions and 2) a nonlinear relationship between cause and effect. Malcolm's theory predicts that the park will tend away from order and that minute causes can have disproportionately catastrophic effects. The "Malcolm Effect" states that these changes will reach a tipping point where the disintegration of order rapidly accelerates. One example of the nonlinearity of the cause/effect relationship is the disastrous consequences of the relatively small act of incorporating amphibian DNA into the dinosaurs' genes.)
- What ethical issues does the novel raise? *(The novel's primary ethical issues revolve around scientific enquiry. It raises such questions as:*
 - Is scientific progress for its own sake a good thing?*
 - To what degree should science be subject to government regulation?*
 - Does scientific progress necessarily make our lives "better?"*
 - What is the difference between "can" and "should" in scientific enquiry?*
 - Is science inherently amoral?*
 - Who should fund scientific research?*
 - How does funding affect the type of research done?*

The other main ethical issues involve greed and personal responsibility. Hammond consistently denies his personal responsibility in the park's failure and the associated deaths. Gennaro, goaded by Muldoon, eventually accepts his share of responsibility in the park's creation. Greed fuels both the park's creation and destruction. Hammond founded the park primarily out of greed, and his subsequent instructions value profit more than human life. Similarly, Nedry's greed provides the initial conditions for the park's demise.)

3. Analyze the significance of who and who does not die.
(In a general sense, the "good" people survive, while the "bad" people die. Nedry, the first causality, is the most obvious example of this distinction. Likewise, the people directly responsible for the park, Ed Regis, Hammond, Wu, and Arnold, also die. Of the survivors, only Muldoon is directly employed by the park, and his stance towards the park and its inherent dangers allies him with the other survivors. The only significant exception to this pattern is Malcolm. It is interesting that, while the novel is loosely based on chaos theory, there is a seemingly moral order underlying the events.)
4. How does Crichton use Lex and Tim as narrative devices?
(The inclusion of the children performs several functions. First, they heighten the perceived danger. Most of the perilous close calls involve Lex and Tim. The presence of children amplifies the reader's perception of danger, since they are relatively innocent. They also demonize the dinosaurs. Instead of predators acting as predators, they become dangerous baby killers. The attacks on children and infants in the prologue add to this perception. Crichton also uses the children to simplify some technical explanations. He shifts into their perspectives or uses their interruptions to allow technical explanations to 1) remain at the average, nonspecialist reader's level and 2) not become too detailed as to become boring. When Lex complains, "I'm bored," her complaint shortens the conversation so that the reader does not also become bored.)
5. Compare the roles of chance and human error in the park's spectacular failure.
(Generally, human error allows chance events to escalate. The majority of critical events are directly caused by humans. For example, Nedry shuts down the security system and jams the communication lines, which escalates when he is killed in a chance attack. The apparently random storm also escalates through a series of human errors. Within the park, the dinosaurs act as a force of chaos because their alien nature renders them unpredictable. It is important to note that they are situationally unpredictable, rather than inherently so. If humans knew more about dinosaur behavior, as they do

about mammalian behavior, they could roughly predict how the animals would act in given circumstances.)

6. Would you classify this novel primarily as a thriller or science-fiction?
(Since Michael Crichton is credited as the "father of the techno-thriller," it is unsurprising that Jurassic Park incorporates elements of the thriller and science-fiction. Generally, the novel's structure and timing are that of a thriller, while specific details belong to science-fiction. The novel's basic premise, the idea that dinosaurs have been cloned from recovered DNA, is currently impossible but technically plausible. This premise is speculative, but close enough to reality to place the novel in the near future. The novel's compressed time-frame, use of suspense, and representations of immediate danger are hallmarks of a thriller.)
7. Discuss the importance of setting in the novel.
(Isla Nublar, off the coast of Costa Rica, provides InGen the privacy it requires to produce Jurassic Park. The island is geographically remote and perpetually covered in fog, an ideal location. This geographic isolation also provides another barrier to animals' escaping. However, the island is also politically remote. InGen has chosen a location away from more stringent American regulation. In terms of the narrative effect, the island heightens the tension because the characters are, in essence, trapped on the island with the dinosaurs. Some feminist scholars have pointed at the island's political location and the problematic breeding of the dinosaurs and claimed that the novel is, in essence, a hysterical denunciation of uncontrolled breeding by women in the third world. Although this reading has some merit, it is external to the novel itself.)
8. List the main characters and their specialties.
Staff
John Hammond, owner and spokesperson
Dr. Henry Wu, lead geneticist
John Arnold, chief engineer
Robert Muldoon, game warden
Ed Regis, publicist
Dr. Harding, park veterinarian

Visitors

Dr. Ellie Sattler, paleobotanist
 Dr. Alan Grant, paleontologist
 Dr. Ian Malcolm, mathematician
 Dennis Nedry, computer system designer
 Donald Gennaro, legal council
 Tim Murphy, child & dinosaur enthusiast
 Lex Murphy, child

9. Discuss the differences between expectations and reality.

(Many of the problems involved with the park stem from incorrect assumptions or unrealistic expectations. For example, the unexpected speed and agility of the dinosaurs presents handling problems. The computer system fails to recognize the presence of additional dinosaurs because it was designed to detect the loss, not gain, of animals. Similarly, since it was considered impossible for animals to breed or escape, the park was unprepared for the escape of bred-in-the-wild compys and raptors. Tim is nearly killed by the T-Rex because Muldoon shoots it with an inadequate dose of tranquilizer. As Wu, Muldoon, and Malcolm point out, the dinosaurs are an unknown quantity. Wu goes so far as to suggest designing a more docile version of the animals, since the public's expectations are not based on reality.)

10. Discuss the novel's division into "Iterations."
(The novel is divided into seven "Iterations." The term "iteration" is a reference to fractals, which are recursively self-similar geometric patterns, i.e. at any scale of magnification a fractal looks the same. Scientists and mathematicians use computer programs to generate fractals. The program usually uses a recursive algorithm, a mathematical function that repeats itself. Each full repetition is an iteration. Since fractals expand geometrically, each Iteration of the novel can be seen as an expansion of the plot. As the iterations progress, the problems on the island expand by orders of magnitude. The iterations are roughly self-similar, since although the relative danger to the characters increases, the types of problems they encounter remain the same.)

How Language Works

1. Dodgson's conversation in the airport with Nedry explains several later events, including Nedry's jamming all communication lines: "we think the island maintains constant radio contact with InGen corporate headquarters in California, so—" (p. 71)
2. During the most technical part of the facility's tour, Crichton shifts to Tim's perspective: "Tim felt a growing impatience as the tour continued. He liked technical things, but, even so, he was losing interest." (p. 105)
 The shift to a child's perspective allows Crichton to gloss over technical jargon that might confuse or disinterest a reader.
3. When asked how many species Jurassic Park has produced, Wu responds, "I'm not exactly sure . . . I stopped counting after the first dozen." (p. 111)
 Wu's response is indicative of the generally negligent attitude Wu, Hammond, and Arnold assume towards the park and its inherent dangers.
4. After viewing the velociraptors, Malcolm reasons that they must have already attacked a human: "large predators such as lions and tigers are not born man-eaters . . . These animals must learn somewhere along the way that human beings are easy to kill . . . these dinosaurs must be even more reluctant than lions and tigers. After all, they come from a time before human beings . . . So I wonder: have they learned, somewhere along the way, that humans are easy to kill?" (p. 119-120) This line of reasoning confirms the reader's suspicions that the causality in the prologue was the product of a raptor attack and foreshadows later attacks.
5. Hammond refuses to take responsibility for any of the park's failures. When it becomes apparent that the dinosaurs are breeding, he immediately concludes that Wu is to blame: "Of course I know what this means, Henry. It means you screwed up." (p. 166)

6. Although Malcolm is ostensibly talking about paradigm shifts, he is also talking about his own death as a paradigm shift: "Because ... everything looks different ... on the other side." (p. 384)

The contextual ambiguity of this statement allows the reader to hope/believe that Malcolm has not, in fact, died, until later in the novel.

Across the Curriculum

Drama

1. In groups, assign characters and act out improvisational situations among the group. Profile your characters and respond to the situation as you think they would.
2. Choose one of the Iterations and, as a group, script it as a play. Include notes for performance and stage directions. Consider various technical difficulties. For example, if the Iteration includes a dinosaur, how would you represent it onstage?

Art

1. Without reference to other sources, sketch pictures of the dinosaurs from the novel based on Crichton's descriptions. Then compare your sketches to pictures from books on dinosaurs. How are your drawings different? Does Crichton's descriptions apply to both versions equally well?
2. Choose and illustrate ten remarkable quotes from *Jurassic Park*.
3. Draw portraits of the main characters. Explain your artistic decisions with references to the novel.
4. Sketch a storyboard for what you consider to be the most important moment in the novel. Include key characters, objects, dialogue, and setting. Present your storyboard in class and discuss your choices.
5. Using a computer art program, select what you consider to be an important event and illustrate it and the events that foreshadow it. For example, if you choose the Velociraptor attack on the Safari Lodge, include also the "Lo sa raptor" scene from the prologue and

the mock attack shortly after the visitors arrive on the island.

Psychology

1. Research megalomania. Stage a formal debate in which each side argues that Hammond either is or is not a megalomaniac.
2. Make an oral report on Post Traumatic Stress Disorder. What are its main signs, symptoms, and treatments? Is it reasonable to assume that one or all of the survivors of Jurassic Park will suffer some form of PTSD?

Geography

1. Make a map of Isla Nublar. Assign each main character a color, and draw their movements through the park in that color. Label major incidents.
2. Present and explain a map of Costa Rica in relation to the events of the novel. What real locations are mentioned? Where are they? Where are the approximate locations of fictional locations?

Gender Studies

1. Break into groups, each group selecting one character from the novel and listing the adjectives used to describe him or her. Compare lists. Do patterns of description emerge along gender lines? What can be surmised about gender roles from the language ascribed to the characters?
2. Make an oral presentation on women in science. What major achievements have women accomplished? Are women underrepresented in the sciences? What arguments have been made to justify this disparity?

Science

1. Make an oral report on genetics. What exactly is DNA? How does DNA determine traits? What practical applications has the study of genetics developed? How does cloning work? Is the scenario of *Jurassic Park* plausible from a scientific point of view?
2. In a chalk talk, explain major developments in science in the twentieth century. Include both major achievements, like the development of atomic theory or molecular biology,

and major paradigmatic shifts, like the privatization of research and the development of chaos theory.

3. Make a website explaining the basic concepts of chaos theory. Include: order, entropy, fractals, strange attractors, Lorenz attractors, Cantor sets, nonlinearity, recurrence, nonlinear dynamics, turbulent flow, phase space, complexity, sensitivity to initial conditions, far-from-equilibrium, self-organization, bifurcation.
4. Using a computer art program, create a booklet illustrating and explaining the dinosaurs of *Jurassic Park*. Include: Tyrannosaurs, Maiasaurs, Stegosaurs, Triceratops, Procompsognathids, Othnielia, Velociraptors, Apatosaurs, Hadrosaurs, Dilophosaurs, Pterosaurs, Hysilophodontids, Euoplocephalids, Styracosaurus, Microceratops.

Cinema

1. Watch the film version of *Jurassic Park*. Stephen Jay Gould argued that the film version overly simplified the moral issues of the novel. Do you agree? Are the main themes of the novel and film different? What other changes do you see?
2. Watch *Pi*, (Artisan, 1998) and/or *The Butterfly Effect* (New Line Home Video, 2004). Discuss the film(s)'s representations of chaos theory with the novel's. Do(es) the film(s) open new avenues of access to the novel?
3. Watch *Gattica* (Sony, 1997). Discuss the film's vision of genetics with the novel's. How are they both worst case scenarios? Although the events are the different, are the two thematically linked?

Language

1. Using a computer art program, illustrate a glossary of the animals and plants Crichton mentions in *Jurassic Park*.
2. Select five sentences from each chapter at random. Divide the sentences among a group. Parse each sentence, taking note of grammatical structure and diction. As a group, present your conclusions concerning

what distinctive grammatical structures and vocabulary choices mark Crichton's writing style as unique.

3. Choose any paragraph and rewrite it in your own words. Discuss how your style of writing differs from Crichton's. How do the styles affect the content? Which is more clear? Which is more pleasing aesthetically?
4. Choose one character and compile a list of words used to describe him or her. Discuss how Crichton uses language to create a sense of personality. What words are used most often to describe your character? What do the words have in common with one another? In your opinion, is your character fully developed or slightly flat?

Journalism

1. Compose a literary review of *Jurassic Park*, as if it were a new release. Include a brief synopsis, a judgment concerning its literary quality, a rating out of five stars, and an ideal location to read --the beach? --by the fire?).
2. Stage an interview with Grant, Sattler, Muldoon, Gennaro, Harding, Lex, and Tim shortly after they escape the island. What would they have to say about its destruction? How would they characterize their experiences?
3. Write a financial article about InGen's bankruptcy. What details would be released to the public? How would the bankruptcy be expected to affect other companies?

Composition

1. Write an essay in which you identify and explain one of the novel's major themes.
2. Rewrite the ending of the novel as you see fit. What do you change? And why? Discuss your alternate endings in class.
3. Choose two characters from the novel and write an essay comparing/contrasting them. Be sure to consider their personalities, relationships with other characters, professions, actions, attitudes, and functions in the plot.

4. Choose your favorite character from the novel and compose a short story, scene, poem, or journal entry from their perspective.
5. Write a series of journal articles from Tim's perspective after the escape from the island. What does he remember from the island? Is he sad that it was destroyed? Is he still interested in dinosaurs?

Literature

1. Make a list of the literary genres from which *Jurassic Park* borrows characteristics. Discuss and defend your selections.
2. Analyze the division of the novel into iterations. Write a plot synopsis for each iteration and try to determine if there is a pattern or repeating events or types of events.
3. Track Crichton's shifts through point of view. When do they occur? To what end? Is any character's point of view excluded from the narrative?
4. Choose what you consider to be the novel's most important line or paragraph and write an essay explaining its significance.
5. Choose what you consider to be the novel's most interesting line or paragraph and write an essay explaining its significance.
6. Read Nathaniel Hawthorne's *Rappaccini's Daughter*. Compare the story's themes to the novel's. How are both related to placing ethical limits on science?

Alternate Assessment

1. Write a short story set after the events of the novel, in which you explain what happens to each major surviving character? How long are they held in Costa Rica by the authorities? Are Lex and Tim emotionally scarred? Where do Muldoon and Harding find employment? How does Gennaro explain the events on the island to his law firm?
2. Read Mary Shelley's *Frankenstein*. Compare the novel's themes with those of *Jurassic Park*. How are both novels interested in scientific enquiry, its potential limits, and its ethical limits?
3. Make a character list for the novel. Include full name, profession, relation to other characters, relation to the park/InGen, physical description, significant personality traits, distinctive speech patterns, and, if applicable, cause of death.
4. Write a conversation between one of InGen's Costa Rican laborers and his/her family. How does s/he understand the park? Does s/he have a scientific understanding of the animals, or a superstitious one, like the hupia? Does InGen pay well? Why does s/he assent to work on Isla Nublar?

Standardized Assessment Preparation

Vocabulary

1. Keep a vocabulary journal while you read the novel. Note at least five words in each chapter that you do not know, look them up, and write their definitions. Determine whether the word is 1) a commonly accepted word that you did not know 2) slang or 3) a technical scientific/mathematical term.

Grammar and Mechanics

1. Choose and outline two sentences from each chapter. At least one of each pair should be a compound or complex sentence.
2. There are seven ways to use a comma in the English language. Find and copy down an example of each usage from the novel.

Critical Thinking

1. Using a bar graph, with one bar representing each chapter, chart the action of the novel. The bars should ascend through the rising action, peak at the climax, and decline in the falling action.
2. In one word, summarize the function of each chapter in the novel. Example functions include: climax, mystery, flashback, characterization, comparison, problem, solution, relationship, description, resolution.
3. Using the following list of common analogy patterns, create a test of twenty analogies. Trade tests with a partner, take them, and then switch back to grade.

Action and Meaning (shiver : cold), Age (puppy : dog), Antonyms (large : small), Cause and Effect (explosive decompression : pulmonary embolism), Class and Member (rodent : rat), Defining Characteristic (genius : intelligence), Definition (visage : expression), Degree (angry : livid), Function (keyboard : typing), Group and Member (whale : pod), Location (sunset : west), Manner (laugh : snicker), Part and Whole (lens : glasses), Relation (father : son), Sex (bull : sow), Symbol and Symbolized (heart : love), Synonyms (happy : merry), Time Sequence (incubate

: hatch), Tool and Purpose (knife : cut), Worker and Work (engineer : build), Worker and Place (sailor : ship), Worker and Product (photographer : photograph), Worker and Tool (photographer : camera)

ex: Nedry : Computer

- a) Lex : hunger
- b) Grant : Tyrannosaur
- c) Muldoon : Tranquilizer
- d) Harding : Stegosaur

The correct answer is c. Nedry's work uses computers, just as Muldoon's work uses tranquilizers. The pattern is Worker and Tool.

Writing

1. Compose an essay about the necessity of government oversight of scientific research. It should have an introductory paragraph with a thesis statement, a body with at least three main ideas and a topic sentence in each paragraph, and a conclusion.
2. Select a character from *Jurassic Park*. In five minutes, do a quick brainstorm on everything you know about that character. Then organize your notes into a rough outline of a paper on that character. Trade outlines with a partner and discuss possible improvements in the structure of your outlines.
3. With a partner, select a chapter from the novel. You should each write a one paragraph synopsis of the chapter. Once you are finished, trade and evaluate your partner's writing. Discuss which events you both chose to include, differences between your synopses, and the structure of your paragraph.

Vocabulary

Select the letter for the word that best completes the sentence.

1. If the body does not produce a certain enzyme, then one must find a(n) _____ source.
 - a) extraneous
 - b) exogenous
 - c) exothermic
 - d) exorbitant
2. Because of his odd and unconventional behavior, the neighbors considered Henry to be _____.
 - a) erratic
 - b) egregious
 - c) eccentric
 - d) effete
3. A cheetah's coat is _____ with individual spots.
 - a) dappled
 - b) dank
 - c) dapper
 - d) dabbled
4. The _____ in the park consists mostly of small shrubs and deciduous trees.
 - a) foibles
 - b) follicles
 - c) foliage
 - d) folium
5. The Dean of Admissions arranged a lunch with _____ students, hoping to bolster next year's incoming class.
 - a) proscribed
 - b) prostrate
 - c) propitious
 - d) prospective
6. As you age, your _____ slows down and you have pay closer attention to what you eat.
 - a) metallurgy
 - b) metabolism
 - c) metacarpals
 - d) metamorphosis
7. Although no bodies were found, the passengers of the cruise boat were _____ to be dead.
 - a) consumed
 - b) presumed
 - c) subsumed
 - d) resumed
8. The government has refused to _____ on the cause of the mysterious illness recently afflicting the indigenous ferret population.
 - a) specialize
 - b) spectate
 - c) speculate
 - d) specify
9. Even the veteran detective was shocked by the _____ scene in the partially burnt slaughterhouse.
 - a) grim
 - b) grimy
 - c) grizzled
 - d) groggy
10. After winning the lottery, Ginny and George purchased many _____ things like an ostrich petting zoo, a fifty foot tall carton of chocolate milk, and a purple racecar.
 - a) friable
 - b) frilly
 - c) frivolous
 - d) frilly
11. Nihilists argue that there is no universal moral code and thus human action is completely _____.
 - a) arbitrated
 - b) archaic
 - c) archetypical
 - d) arbitrary
12. Most cows are _____ animals, easily integrated into routine behavior and seldom attacking their owners.
 - a) docent
 - b) docile
 - c) dodgy
 - d) dogged

Vocabulary (Page 2)

13. Alternating between self-indulgent lethargy and frenetic activity, Michael's efforts at housekeeping were _____ at best.
- a) soporific
 - b) spruce
 - c) spurious
 - d) sporadic
14. After observing several _____ signs that day, including black skies, a plague of locusts, and hail the size of basketballs, they decided to cancel the company picnic.
- a) onerous
 - b) ontological
 - c) ominous
 - d) omnivorous
15. Mary offered no _____ to explain why she moved to Zimbabwe.
- a) rationale
 - b) rating
 - c) rattan
 - d) ratio

Comprehension Test A

Part I: Character Identification (30 points)

Name the character(s) who fit(s) these descriptions.

- _____ 1. complains often of being hungry
- _____ 2. steals sample embryos
- _____ 3. paleobotanist
- _____ 4. locks a velociraptor in a freezer
- _____ 5. predicts the park's failure
- _____ 6. lead geneticist at Jurassic Park
- _____ 7. shoots the Tyrannosaur with a rocket-propelled tranquilizer dart
- _____ 8. killed by the juvenile Tyrannosaur
- _____ 9. frequently impatiently insists on the park's safety
- _____ 10. leads Lex and Tim to safety through the park
- _____ 11. killed by compys
- _____ 12. killed by a dilophosaur
- _____ 13. EPA agent investigating InGen
- _____ 14. receive funding from the Hammond Foundation
- _____ 15. advocates engineering more docile dinosaurs

Part II: Fact or Opinion (20 points)

Mark the following statements either T for true, F for false or O for opinion.

- _____ 1. Jurassic Park was doomed to failure from the beginning.
- _____ 2. Dr. Wu extracts dinosaur DNA from amber.
- _____ 3. Hammond secretes some embryos off the island, just before its destruction.
- _____ 4. Grant is killed by a stampede of sauropods.
- _____ 5. Velociraptors are able to chew through steel bars.
- _____ 6. Ed Regis enjoys looking after Tim and Lex.
- _____ 7. There should be more government oversight of biotechnology research.
- _____ 8. Malcolm thinks that it is impossible for animals to escape the island.
- _____ 9. Isla Nublar is perpetually covered in fog.
- _____ 10. The dinosaurs in Jurassic Park are warm-blooded.

Comprehension Test A (Page 2)

Part III: Description (20 points)

Describe the defining characteristics of each dinosaur in the space provided.

1. Tyrannosaur
2. Stegosaur
3. Triceratops
4. Procompsognathids
5. Velociraptor
6. Dilophosaur
7. Othnielia
8. Apatosaur
9. Pterosaur
10. Hadrosaur

Part IV: Essay (30 points)

Choose two and answer in complete sentences.

1. Explain the Malcolm Effect.
2. Describe the processes by which Jurassic Park clones dinosaurs.
3. Why are the dinosaurs able to breed?
4. Contrast Lex and Tim.
5. Why does the computer system not initially recognize the presence of additional animals?

Comprehension Test B

Part I: Identification (30 points)

Identify speakers of quotations.

- _____ 1. Universities are no longer the intellectual centers of our country.
- _____ 2. I remember. Fifteen species, frozen embryos.
- _____ 3. I wear only two colors, black and gray.
- _____ 4. Dinosaurs mature rapidly, attaining full size in two to four years.
- _____ 5. The EPA is concerned about the activities of the Hammond Foundation.
- _____ 6. I'm hungry.
- _____ 7. I finally found the command to restore the original code.
- _____ 8. This is my island, and I can invite whomever I want.
- _____ 9. Stuffed in a bloody pipe. And I'm very popular at the moment.
- _____ 10. They don't want to escape at all They want to migrate.
- _____ 11. Of course he can swim, you little idiot!
- _____ 12. The number of hours women devote to housework has not changed since 1930, despite all the advances.
- _____ 13. We measure time in beer.
- _____ 14. I'm tired. Carry me, Dr. Grant.
- _____ 15. If you don't turn that boat around and return to this island immediately, you will be found in violation of Section 509 of the Uniform Maritime Act.

Part II: Short Answer (20 Points)

Provide an answer to each of these questions.

- _____ 1. What does Dr. Guitierrez mistake for a basilisk lizard?
- _____ 2. How much is Biosyn's initial payment for the dinosaur embryos?
- _____ 3. How many species of dinosaurs has Jurassic Park produced?
- _____ 4. What animal accompanied Hammond while he was raising money for Jurassic Park?
- _____ 5. Why is the supply ship ordered back to the island?
- _____ 6. What does Grant use to kill several velociraptors?
- _____ 7. What does the pterodactyl take from Lex?
- _____ 8. What animal does the Tyrannosaur resemble while swimming?
- _____ 9. How many species of dinosaurs are breeding on the island?
- _____ 10. On the tour, how is the Tyrannosaur lured into view?

Comprehension Test B (Page 2)

Part III: Fill-in (20 points)

Fill in the words that complete each statement.

1. The stegosaurus become ill when they eat poisonous _____ along with _____.
2. At the dock, Grants finds a _____ that they use to escape the Tyrannosaur and a _____ that he later uses on a juvenile velociraptor.
3. Tim realizes that there is something wrong with the _____ skeleton at the Museum of Natural History by counting its _____.
4. Wu is sure the dinosaurs can't breed because they are all _____ and they have been _____.
5. _____ deduces that Tim survived the Tyrannosaur attack after he finds a broken _____ in the Land Cruiser.

Part IV: Essay (30 points)

Choose two and answer in complete sentences.

1. Contrast Malcolm and Hammond's opinions of Jurassic Park.
2. Discuss the role of chance in the breakdown of the park.
3. Discuss the role of greed in the park's creation and demise.
4. Explain why chaos theory states that weather is fundamentally unpredictable.
5. Why is the EPA investigating InGen and the Hammond Foundation?

Answer Key

Vocabulary

- | | | | | |
|-------|-------|-------|-------|-------|
| 1. B | 2. C | 3. A | 4. C | 5. D |
| 6. B | 7. B | 8. C | 9. A | 10. C |
| 11. D | 12. B | 13. D | 14. C | 15. A |

COMPREHENSION TEST A

Part I: Character Identification (30 points)

- | | |
|------------|-----------------------|
| 1. Lex | 9. Hammond |
| 2. Nedry | 10. Grant |
| 3. Sattler | 11. Hammond |
| 4. Tim | 12. Nedry |
| 5. Malcolm | 13. Bob Morris |
| 6. Wu | 14. Grant and Sattler |
| 7. Muldoon | 15. Wu |
| 8. Regis | |

Part II: Fact or Opinion (20 points)

- | | |
|------|-------|
| 1. O | 6. F |
| 2. T | 7. O |
| 3. F | 8. F |
| 4. F | 9. T |
| 5. T | 10. T |

Part III: Description (20 points)

1. large carnivore, chases Grant, Lex, and Tim
2. placid, sick from berries in gullet stones
3. three horns
4. scavengers, poisonous bites, escapes to mainland
5. fast and intelligent, pack hunters
6. can spit poison
7. placid herbivore, first dinosaur on tour
8. formerly Brontosaur, first dinosaur seen by visitors, long neck
9. flying, territorial
10. herbivore, stampede towards Grant, Lex, and Tim

Part IV: Essay (30 points)

Answers will vary.

COMPREHENSION TEST B

Part I: Identification (30 points)

- | | |
|---------------|-------------|
| 1. Hammond | 9. Muldoon |
| 2. Nedry | 10. Grant |
| 3. Malcolm | 11. Tim |
| 4. Wu | 12. Malcolm |
| 5. Bob Morris | 13. Grant |
| 6. Lex | 14. Lex |
| 7. Arnold | 15. Gennaro |
| 8. Hammond | |

Part II: Short Answer (20 Points)

1. a compy
2. \$750,000
3. 15
4. miniature elephant
5. there are velociraptors on it
6. poison
7. her baseball mitt
8. crocodile
9. five
10. a goat

Part III: Fill-in (20 points)

1. berries, gullet stones
2. raft, tranquilizer gun
3. Tyrannosaur, vertebrae
4. female, irradiated
5. Muldoon, watch

Part IV: Essay (30 points)

Answers will vary.

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