III. Discussion Questions

a. Individual Stories

Nathaniel Hawthorne, "Rappaccini's Daughter" (1844)

- 1. As an early sf tale, this story makes important contributions to the sf megatext. What images, situations, plots, characters, settings, and themes do you recognize in Hawthorne's story that recur in contemporary sf works in various media?
- 2. In Hawthorne's *The Scarlet Letter*, the worst sin is to violate, "in cold blood, the sanctity of the human heart." In what ways do the male characters of "Rappaccini's Daughter" commit this sin?
- 3. In what ways can Beatrice be seen as a pawn of the men, as a strong and intelligent woman, as an alien being? How do these different views interact with one another?
- 4. Many descriptions in the story lead us to question what is "Actual" and what is "Imaginary"? How do these descriptions function to work both symbolically and literally in the story?
- 5. What is the attitude toward science in the story? How can it be compared to the attitude toward science in other stories from the anthology?

Jules Verne, excerpt from Journey to the Center of the Earth (1864)

- 1. Who is narrator of this tale? In your opinion, why would Verne choose this particular character to be the narrator? Describe his relationship with the other members of this subterranean expedition. Many of Verne's early novels feature a trio of protagonists who symbolize the "head," the "heart," and the "hand." Why? How does this notion apply to the protagonists in Verne's *Journey to the Center of the Earth*?
- 2. Verne's works were among the first successful examples of didactic "hard" sf. Verne himself called them "novels of science," and one critic has described them as being more "scientific fiction" than science fiction. What is the difference between science fiction and scientific fiction? Where in this excerpt do you see examples of Verne teaching "hard" science to the reader?
- 3. The heroes' discovery of an underground forest of giant mushrooms is a scene that appears in virtually all movie versions of the novel (even the most unfaithful). Why? What is there about his particular scene that captures the imagination? How does it exemplify the epic nature of this "extraordinary voyage"?
- 4. Professor Lidenbrock says "Science, my boy, is built upon errors: but they are errors that are good to make, for they lead little by little to the truth." In this story, how is scientific knowledge obtained? How is nature portrayed? What is the role of the scientist? How are the scientist's discoveries ultimately rewarded?
- 5. Verne's narrative style is a constant oscillation between Romantic reverie and Positivistic realism, between flights of imagination and logical reason, between poetic description and dialogical debate. Where in this excerpt do you see this back-and-forth dynamic at work? How does it serve as a kind of narrative bridge between the "science" and the "fiction" in this story?

H.G. Wells, "The Star" (1897)

- 1. Why does Wells end "The Star" with comments by Martian astronomers? How does the story demonstrate "how small the vastest of human catastrophes may seem, at a distance of a few million miles?"
- 2. Unlike most of the "asteroids-careening-toward-Earth" stories and movies that followed it, "The Star" does not involve individual heroes or rescue projects. Why do you think Wells decided not to include them?
- 3. Some readers might see "The Star" as a moral parable; others, as a plausible scenario for a future encounter between Earth and a dangerous object in space. Could the story be told without either the moral point of view or the scientific details? What would it gain or lose?
- 4. Who is the narrator? How does the story's structure reinforce its message?
- 5. The basic plot of "The Star" has been used many times, from Wells's own day, to modern films like *Meteor*, *Armageddon*, and *Deep Impact*, all the way to contemporary scientific speculations about how to defend against errant asteroids. What is the appeal of such stories about objects in space threatening the Earth?

E.M. Forster, "The Machine Stops" (1909)

- 1. "The Machine Stops" is a classic example of the "if this goes on..." tale, in which the author warns readers that contemporary trends extrapolated into the future will endanger important values. What are the values most endangered in the story's vision? What are the trends that endanger them?
- 2. In contemporary terms, we might call the world of The Machine a total virtual-reality environment. Why is the replacement of empirical experience with such an environment considered a gain by its inhabitants?
- 3. Why do you think the Machine stops?
- 4. What does Kuno discover when he climbs to the surface? Is there hope for the future when the Machine stops?
- 5. Although it reflects the Victorian values of its time, many of today's readers consider "The Machine Stops" even more relevant now than it was in its own time. Can the story be retold in contemporary terms?

Edmond Hamilton. "The Man Who Evolved" (1931)

- 1. Describe the stages of evolution Dr. Pollard goes through in the story. Why do you think the evolutionary changes occur in this specific sequence?
- 2. How do Dr. Pollard's views and values change as he goes through the speeded-up evolution? How do his younger colleagues respond to these changes?
- 3. Taking this as a typical story of pulp-era super-science, what specific attitudes towards science does it seek to convey? Are we meant to be fascinated or frightened by the possibilities and perspectives science seems to open up?
- 4. How do the narrator and Dutton function in the story? Do they seem like full-fledged characters or merely foils for Dr. Pollard?
- 5. Analyze the way the author uses dialogue among the characters to present scientific exposition.

Leslie F. Stone, "The Conquest of Gola" (1931)

- 1. Who is the narrator in "The Conquest of Gola"? Who is the "you" to whom the story is being told? How does the narrative perspective contribute to the reader's experience and appreciation of the events in the story?
- 2. "The Conquest of Gola" is, among other things, an alien-invasion story. Who are the aliens in this story? What is the purpose of their invasion?
- 3. This story is also about "the battle of the sexes." How does the narrator contrast the women of Gola and the men of Detaxal?
- 4. What are some of the elements of pulp-era space opera that Stone incorporates into her story to give it color and drama?
- 5. In what ways can we read this story as a kind of precursor to Joanna Russ's feminist classic, "When It Changed"?

C. L. Moore, "Shambleau" (1933)

- 1. This story gains resonance from the associations its suggests between the alien figure of the Shambleau and such familiar myth figures as the Medusa and the vampire. How does Moore's story evoke these figures and what do they contribute to Moore's construction of her mysterious alien?
- 2. Moore's story belongs to the early pulp tradition of "space opera," stories of adventure that echo features of the western. What are some of the elements in this story that can be identified with the conventions of space opera?
- 3. Why does Northwest Smith protect the Shambleau from the Martian colonists who want to kill her?
- 4. What might be meant by the Shambleau's promise to Northwest Smith: "Someday I—speak to you in—my own language"?
- 5. Why does Smith's voice "waver" in the story's concluding sentence?

Stanley G. Weinbaum, "A Martian Odyssey" (1934)

1. The story is known for its parade of diverse Martian life-forms. Which of Weinbaum's aliens is the most "science fictional"—i.e., the most quirkily extrapolated from scientific information? Which creature is most "mythical"? Which of Weinbaum's aliens do you find most interesting?

- 2. In portraying Jarvis and Tweel, Weinbaum emphasizes their traits in common as well as their physical differences. In what ways are the human being and the Martian alike? How does Tweel's language differ from Jarvis's? How does Jarvis's language differ from that of his fellow crew-members?
- 3. The use of the word "Odyssey" in the title suggests Homer's epic poem. In what ways is Weinbaum's an *updated* epic? On the other hand, what traits of ancient epic does he retain?
- 4. Weinbaum's story was published in 1934. What are some specific ways in which it differs, in style, theme, and/or characterization, from today's sf stories?
- 5. Consider Jarvis's casual theft of the miraculous Martian "egg" in terms of European explorers who took the wealth of the Americas back to the Old World. In what ways does Weinbaum's story recapitulate this colonial pattern of exploitation of "new worlds"? On the other hand, given Weinbaum's serious illness at the time he was writing the story, might there also be some element of fantasy—a dream of instantaneous healing—in this single theft by Jarvis?

Isaac Asimov, "Reason" (1941)

- 1. Is QT's logic reasonable? Why or why not?
- 2. Robots are not supposed to experience emotions, yet QT often seems to do so. Also, the three laws of robotics mandate obedience to human beings, yet QT seems to flout these laws. How do you account for this apparent contradiction?
- 3. What do you make of QT's claims of robot superiority? Does the story seem to support his views or refute them?
- 4. How does the story use humor and irony to mock QT's pretensions to grandeur? Does the story also mock Powell and Donovan and, by implication, all fallible human beings?
- 5. How does the author portray the relationship between reason, religion, and truth?

Clifford Simak, "Desertion" (1944)

- 1. How does the story explore differing attitudes toward colonization and adaptation?
- 2. How does it show both literal and metaphorical kinds of alienation?
- 3. How does the story dismantle stereotypical assumptions about heroism, gender roles, and human/animal relationships?
- 4. It has been claimed that settings in sf function as characters themselves. Compare the characters of the Dome and the planet outside the Dome.
- 5. What kinds of new perceptions does the planet make available, and how are they transformative to Fowler and Towser?

Theodore Sturgeon, "Thunder and Roses" (1947)

- 1. The last name of Pete Mawser's friend Sonny is Weisefreund—"wise friend" in German. Why might Sturgeon have chosen this name? Define the very different ways that the two friends react when they each realize that there is a way to strike back at the multiple enemies (east and west) who have destroyed the US. Do you understand Sonny's impulse to pull the lever? Given the situation Sturgeon describes, would you make the same choice as Pete?
- 2. A love song, "Thunder and Roses," gives the story its title. Pete at first thinks that Starr Anthim's choice is all wrong for her despairing audience of dying survivors. Yet this romantic ballad about the sublime (thunder) and beautiful (roses) begins Pete's conversion to Starr's viewpoint. Why do you think Sturgeon links *musical performance* with the best impulses of human civilization? For what reasons might his story portray *hatred* and bureaucratic *secrecy* (far more than military technology per se) as globally destructive forces?
- 3. "Thunder and Roses" was published two years after atomic bombs were dropped from American planes on the Japanese cities of Hiroshima (August 6, 1945) and Nagasaki (August 9, 1945). Sturgeon's first meditation on these events was published in the letters column of *Astounding Science Fiction* in December, 1945. (The piece appeared there because *Astounding*'s editor, John W. Campbell, rejected it as a paid submission.) Titled "August 6th, 1945," Sturgeon's brief, lyrical commentary ends with a description of a deeply scarred man who has been in a deep sleep, who now stands "with open eyes": "He is looking at himself, on the other side of

death. He knows—he learned on August 6, 1945—that he alone is big enough to kill himself, or to live forever." In what ways does "Thunder and Roses" re-stage and/or revise the same two alternatives?

- 4. What effect is created by Pete Mawser's tidy, conscientious following of routine—showering, shaving, picking up litter, etc.—despite the horrific events that have doomed his country and perhaps the rest of the world? How do you interpret Sturgeon's early emphasis on Pete's disciplined refusal to give up?
- 5. Starr Anthim and Pete Mawser discuss *One World or None*, an 86-page book published early in 1946 by the American Federation of Scientists (including Albert Einstein, Leo Slizard, and J. Robert Oppenheimer). It was aimed at raising public support for global surveillance of nuclear weapons research. Discuss the initially differing views of Starr Anthim and Pete Mawser over the idea of "one-world" loyalties versus exclusive loyalty to a single country. What factors help to change Pete's mind despite his initial skepticism?

Judith Merril, "That Only a Mother" (1948)

- 1. Who is Maggie? Describe the kind of world she is living in. Where is her husband? What year is it?
- 2. Why is Maggie nervous about having her baby? How does she react after her daughter's birth? How does the author clue us in that Maggie is delusional?
- 3. How does the story's narrative format (letters, first-person narration, etc.) enhance its overall effectiveness?
- 4. The story's setting (a modest middle-class home) is very different from most science fiction locales. How does the world of science/technology impinge on this domestic landscape?
- 5. What is the significance of the title? How is the title ironic?

Fritz Leiber. "Coming Attraction" (1950)

- 1. How do we know the story is set after a nuclear conflict between the United States and Russia? In what ways does the Cold War setting intrude upon the narrative?
- 2. Why do the women wear masks? What does this social convention indicate about the gender attitudes of this world? What is the point of the dramatic unmasking at the end?
- 3. What kind of person is the narrator? How does the fact that he is from England affect how he views—and interacts with—the American characters?
- 4. Why is there so much violence and cruelty in the story? In particular, what are the implications of the relationship between the girl and Zirk?
- 5. The story has a "hard-boiled" style, a tone of bitterness and cynicism. What does this contribute to the overall mood of the scenes described? Are we supposed to share the narrator's bitterness?

Ray Bradbury, "There Will Come Soft Rains" (1950)

- 1. How does Bradbury personify the house, and what is its personality?
- 2. In what ways does the story suggest a lost technological utopia, and in what ways does it show the dangers of technology?
- 3. Although the story's fictional date is 2026, it was published in 1950. How does it reflect the time in which it was written?
- 4. How does the poem by Sara Teasdale inform the story?
- 5. What techniques does Bradbury use that make it seem less science-fictional, more "mundane," that keep it from fitting genre expectations?

Arthur C. Clarke, "The Sentinel" (1951)

- 1. What event, according to this story, will prove that the human race has become fully mature as a species? How is this connected to Clarke's ongoing interest in themes of evolution?
- 2. The narration includes many details describing the lunar landscape. What does this contribute to Clarke's story, given that these details seem unnecessary to the plot?
- 3. How does the mysterious pyramid function as the "novum" in this story?
- 4. This story does not reach a conventional conclusion, but leaves the situation open-ended. How does this contribute to the impact of the story? What does the narrator mean when he speculates that "we have set off the fire-alarm and have nothing to do but to wait"?

5. Clarke's story was first published in 1951, in the early years of the Cold War between the US and the Soviet Union, a "war" that only came to an end with the fall of the Berlin Wall decades later. In what ways does this historical context seem to have influenced Clarke's story?

Robert Scheckley, "Specialist" (1953)

- 1. Sf critic Darko Suvin has defined the genre as a "literature of cognitive estrangement." Sheckley "estranges" readers by comically subverting sf's frequent emphasis on advanced technologies that culminate in a triumphant human "conquest" of space. Instead, he uses as viewpoint-characters a motley crew of alien beings, all from different planets, who band together to form an organic (not mechanical) spaceship and who find the technological preoccupations of Earthlings puzzling rather than dazzling. Contrast the "estranged" view of machines in Sheckley's story with a more optimistic vision of technology in any other story in this anthology.
- 2. For Sheckley's aliens, the key human trait is a knack (rare in the universe) for "Pushing." What do the *aliens* mean by this? In contrast, what do you think the *author* means? He gives some hint in final paragraphs of the story, when the human hero, searching his soul, has a vision of his own "tortured" face—which propels the Ship forward at eight times the speed of light. How do you interpret this conclusion?
- 3. What do Sheckley's aliens mean by the terms "Unspecialized," "Specialized," and "the Great Cooperation"? Looking back over the story, locate moments in which the "Pusher" totally misinterprets friendly signals from the alien crew-members. What is the link between these misunderstandings and the Crew's emphasis on Cooperation (versus the "Unspecialized" status of the Pusher)? In general, how do the aliens' assumptions differ from those of the human hero?
- 4. Sheckley's Crew are merchant spacegoers, yet he portrays this diverse group of shipmates (from very different home-planets, cultures, and even food-chains) in ways similar to the stereotypical portrayal of soldiers in war movies: the Kid from Brooklyn; the spoiled Rich Kid. In Sheckley's story, too, all Pushers look alike and all Walls are good-humored—if (as befits their function on the Ship) a little shallow. Sheckley showcases the sensitive, poetic temperament of Eye, the cocky personality of the youngest Crewmember, "Feeder," and the doughty courage of the "gallant" old Engine. In a war-movie, such cliches increase pathos, because most of these lovable characters will perish miserably in battle. Given Sheckley's suggestion that war would be unnecessary if the people of Earth only learned their destiny as Pushers, how does this story "estrange" us also from stereotypical representations of the military and of war?
- 5. In a similar vein, consider Sheckley's undercutting of B-horror movie stereotypes, in which rampaging monsters sport giant tentacles (like those of Feeder) or look like gigantic spiders (like Talker) or resemble the Bug-Eyed Monsters of pulp sf (like Sheckley's Eye—or like the one-eyed aliens of *It Came From Outer Space*, a film released the same year as "Specialist"). Locate any two scenes in which Sheckley presents the human being as the character who appears anomalous and "monstrous." One place to begin might be the scene in which Feeder "twitched his tendrils at the idea of a Pusher—one of the strangest sights in the Galaxy, with his multiple organs—being startled at someone else's appearance" (258).

William Tenn, "The Liberation of Earth" (1953)

- 1. How does the story exemplify Angenot's idea of the absent paradigm (see Introduction)?
- 2. How does the story use elements of the epic to satirize power politics?
- 3. In what ways does the story comment upon the world politics of its time and in what ways is it relevant to contemporary world politics?
- 4. The story's narrator adopts all the prejudices of his "liberators," the Dendi and the Troxxt. How does this reflect the psychological impact of the state over the individual?
- 5. What warnings does the story give for accepting the status quo?

Alfred Bester, "Fondly Fahrenheit" (1954)

1. What causes the violent crimes of Vandaleur's Multiple-Aptitude android? (The graduate students Wanda and Jed are the first to see the correlation, the mathematician Blenheim is the first to explain it, and the psychometrician Nan Webb later adds details.) By the final paragraphs, readers have been given enough information to understand the reason for the ominous twitching, writhing, and violence of Vandaleur's cheap new android—even though they are now on a planet where the original triggering event can never recur. Piecing

the evidence together, how do you explain the crimes of the second android? How do you interpret Bester's conclusion?

- 2. Jean-Jacques Rousseau muses in *The Social Contract* (1764) that "a man thinks he is the master of others, whereas he is actually more of a slave than they"; in a letter written around the same time, he argues that "he who is a master cannot be free." How do Rousseau's ironic insights apply to the dilemma of Vandaleur in Bester's story? Why would the M.A. android declare that "Sometimes it is a good thing to be property" (294)? 3. Analyze the puzzling pronouns in the first sentence: "He doesn't know which of us I am these days, but they
- 3. Analyze the puzzling pronouns in the first sentence: "He doesn't know which of us I am these days, but the know one truth" (284). How does this initial sentence establish the story's focus on confusion of identity? Contrast Bester's distinctive writing style—including his choice of an opening sentence that cannot be understood until much later—with the more straightforward style of any other writer in this anthology.
- 4. James Paleologue Vandaleur's impressive name is at odds with his venal, selfish personality. Consider some flaws in motivation and character that are disclosed by his behavior over the course of the story. Some of the android's victims—including Wanda, Jed, and especially Dallas Brady—are almost as unlikeable. Are there any heroes in Bester's tale? Does a science-fiction story have to have a hero?
- 5. During the M.A. android's homicidal rampages, he performs a "lunatic rhumba" while repeating the silly lyrics of a pop song. Bouncy non-sequiturs such as "Now jeet your seat" were a feature of swing and jazz lyrics for some fifteen years. Bester writes his own "jive" lyrics, but Cab Calloway's "Jumpin' Jive" (1939; lyrics by Froeba and Palmer) was a real hit song of the period: "Palomar, shalomar, Swanee shore,/ Let me dig that jive once more,/ Boy!/....Now, don't you be that ickeroo...." Such lyrics, lighthearted in themselves, become disturbing when Bester links them to the lurid crimes of a rogue android. This unsettling intrusion of incongruously merry lyrics becomes one element in Bester's uncanny overall effect. What are some other elements or episodes that contribute to this story's sardonic, *noir* atmosphere?

Avram Davidson, "The Golem" (1955)

- 1. References to two kinds of movies frame this story: the silent comedies of the 1920s (long ago filmed in the Gumbeiners' LA neighborhood) and B-movies contemporary with the story. Among these films was "Robot Monster" (1953), so low in budget that the director, Phil Tucker, cast George Barrows as the robot solely because Barrows already owned a gorilla suit that could be adapted into a costume. The gently bickering, "ancient" Gumbeiners are themselves relics of the silent-movie era. Being rooted in another place and time, they fail to react to the rogue-android's horror-movie cues (the "flesh will melt from your bones in terror" [305]), with the usual screaming and running away. Discuss some comic moments in the story created by the Gumbeiners' disregard of the menacing threats of their movie-monster visitor.
- 2. While the story is so lightly sketched as to seem almost weightless, Davidson touches on an issue serious enough in Jewish history and culture. Mrs Gumbeiner refers to the wintry climate of their old home, Chicago, as being "cold and bitter as the Czar of Russia's heart" (305).Russian *pograms* were violent uprisings against Jewish communities in the former Russian empire throughout the 19th century, culminating in the aftermath of the 1917 Russian Revolution, when between 70,000 and 250,000 civilian Jews were killed. Davidson does not mention Hitler's quest to exterminate the Jewish people during World War II, but this, too, is part of the story's backdrop. The Gumbeiners are part of a community that between the era of silent films and the era of drive-in movies in fact had been repeatedly singled out for extinction. Why, in this context of *historical* horror and actual holocaust, might a single grey-faced person with porcelain teeth fail to faze Mr. and Mrs. Gumbeiner?
- 3. The word "golem" is not a neologism or sf coinage—the Talmud describes Adam, a being created from mud, as a golem. The Hebrew term can refer to an unshaped form, a pupa, an uncultivated person, an automaton or artificial being, or a clumsy, stupid man. In Jewish folklore, golems are automata fashioned from mud—usually by holy men, not by learned scientists—that, unlike Davidson's, usually do not speak. Golems are clumsy because even a very holy human being will create a far less satisfactory being than God. When Mr. Gumbeiner observes that the approaching visitor "walks like a golem," what kind of gait do you visualize? Which among the various meanings of "golem" does Davidson bring to bear in this story? What is Mr. Gumbeiner's prosaic medical explanation of the greyish cast to the golem's face (305)?
- 4. Mr. Gumbeiner takes a lump of clay to write the "Shem-ha-Mephorash"—"the 72-fold Name of God"—on the damaged golem's forehead. The formerly hostile golem—either controlled by this powerful magic or restored to a small part of its faculties by Mr. Gumbeiner's hasty replacement of some loose wires—becomes

perfectly obedient. Consider any three of the Hebrew or Yiddish terms introduced into the story. How, as in any sf story, are specialized words-from-elsewhere used to clarify the characters and set the mood?

5. Discuss some of the elements of humor in the story. Possible examples include the Gumbeiners' admiring list of Bud's college courses, the contrast between the domestic banter of the Gumbeiners and the monster's blood-curdling threats, and the moment of brief confusion when Gumbeiners wonder whether the golem's allusion to Mary Shelley's *Frankenstein* (1818) is a reference to Frankenthal, the merchant who provides them with seltzer.

Cordwainer Smith, "The Game of Rat and Dragon" (1955)

- 1. The malevolent entity here lurks "underneath space itself" (312). It is linked to the human psyche, "the primordial id itself, the volcanic source of life" (314); and the "rats/dragons" are indeed id-like in their manifestation as a death-drive that violently disintegrates the human ego. The briefest of contacts can pull the soul out of the body (311), delivering such a "ruinous psychic blow" (313) that even survivors are left incurably psychotic. This story's Partners—rather like the oysters in Smith's first published story, "Scanners Live in Vain"—are animals who help humans oppose the destructive death-force of the id. How do you interpret Smith's psychological emphasis—his presentation of a menace that is derived from the human psyche? How is this story's portrayal of menace different from that of such tales as Arthur C. Clarke's "The Sentinel" (241-49), in which alien artifacts and entities are presented as utterly incomprehensible and "other"?
- 2. "Rat" and "dragon" are the names given by Partners and humans to the prey that they stalk. Yet the terms might simultaneously point to the Chinese zodiac, in which "rats" and "dragons" are seen as ideal partners. Those born in the year of the Rat present a confident face to the world but are inwardly insecure, while those born in the year of the Dragon are grounded and secure. The Dragon will enjoy the Rat's affection and the Rat's cunning and ability to think ahead will provide for the Dragon. In these terms, with which Smith was familiar as a student of Chinese language and culture, which of the two in the "partnership"—human or cat—is the cunning, far-sighted, inwardly anxious "rat"? Which is the secure and centered "Dragon"?
- 3. Choose any five words in Smith's story that are either new to you or are familiar words used in a new sense. Some possible examples include "planoform," "pinlighting," "Partner," "jump," and "Go-Captain." Define how each comes to be clarified in the story and consider what Smith's coined and newly adapted words add to the story's playful style.
- 4. Consider the diverse makeup of the Fighting Room. Among the pinlighters are young Underhill, Woodley, an "old" pinlighter planning to retire soon at age 26, Father Moontree, a 45-year-old farmer recruited in midlife and "fantastically old" for "this kind of business" (315), and "West," a little girl. Because pinlighters are chosen for their telepathic prowess, age and gender are incidental. Yet like today's soldiers, Smith's are subject to post-traumatic stress disorders: pinlighters are hospitalized after every fight. Consider similarities and differences between Smith's pinlighters and military personnel today. How, for instance, are these "battles" different? (How long do they take, for instance? What are the weapons and how are they deployed?) Is teamwork—cooperation among "partners"—also important today?
- 5. Lady May is a highly bred Persian cat "more complex than any human woman" (317). Smith's story depicts, among other things, mutual infatuation between a human male and a female cat, concluding with the question "Where would he ever find a woman who could compare with her?" (323). Do you read this question as playful or perhaps slyly mischievous? Or do you think Smith seriously crosses a line, raising questions about the psychic boundaries assumed to separate people from the other animals, limiting their emotional/libidinal bonding? To approach the question from a slightly different angle, did you find this story charming or slightly creepy—or perhaps a mixture of the two?

Robert Heinlein, "All You Zombies—" (1959)

1. The story is told as a series of reports reminiscent of a ship's log. The time is noted military style (2217 for 10:17PM in the opening entry, for instance), followed by the narrator's giving his time-orientation in terms of his distance from Greenwich Mean Time: the Rockies base near Denver is VII, or seven hours behind GMT; New York and Cleveland are V, or five hours behind. In what ways does this no-nonsense naval-log format help to orient readers, providing realistic ballast as Heinlein advances ever more deeply into his outrageous and fantastic plot? The narrator, Pop, travels to New York City in what year? When is he in Cleveland? What is the year of his return to his Rocky Mountain base?

- 2. The song "I'm My Own Grandpaw," played on a jukebox, figures in the final section of Heinlein's story; the phrase was among the working titles for Heinlein's tale and also the title of a hit song of the later 1940s, written by Dwight Latham and Moe Jaffee and subsequently performed by singers ranging from The Muppets to Willie Nelson. The songwriters got their idea from Mark Twain, but Twain himself was recirculating a tall-tale from Britain first printed in the US in 1822; it involves a narrator who has married a widow; they have had a son. At the same time, his step-daughter has married his father and *they* have had a son. In this way, he is the "grandpa" of his own father's son. Discuss Heinlein's science fictionalization of this whimsical pop tune/folk tale—his movement away from broad humor to sardonic time-paradox. What elements in Heinlein's story are assisted by imagined, not-yet-possible technologies?
- 3. Transgender operations were performed in Europe as early as the 1920s and 1930s, but in this story, hermaphroditic Jane's account of her outward transformation from female to male may draw on post-war accounts of the male-to-female surgeries of two real people mentioned in the story: Roberta Cowell (1951) and the better-known Christine Jorgensen (1952). (*The New York Daily News* Jorgensen headline for Dec. 2, 1952 was "Ex GI Becomes Blonde Beauty.") The English Roberta Cowell's 1954 *Autobiography* describes her surgery in terms similar to Jane's account: Cowell, a fighter-pilot in World War II and race-car driver before the operations, described hellishly extensive surgeries to remove his undeveloped male sexual organs and to be reconstructed as female. Discuss the style and tone in which sexuality (including transsexuality) is discussed in Heinlein's story. Might his intended market, *Playboy*, have directed some of his choices, including his sf-*noir* tone? Do you agree with Pop's grim observation that "you can't resist seducing yourself" (334)?
- 4. The story's first-person narrator, Pop the bartender, says of the true-confessions writer known as The Unmarried Mother that "I didn't like his looks—I never had" (325). In retrospect, once you've finished the story, how are Pop's name (and this early assertion) *ironic*?
- 5. The *ouroborous*—a circular image of a serpent devouring its own tail—dates back to ancient Egypt. In Plato's "Timaeus" (third century BCE), this becomes an emblem for self-sufficiency: "there was nothing which went from him or came into him: for there was nothing besides [i.e., except] him." Pop wears a ring that bears this image. Why is this eternal circle a fitting insignia of the time-corps, as well as for Pop's own life-story?

J.G. Ballard. "The Cage of Sand" (1962)

- 1. Where is the story located? Why has the area been evacuated? How does the deserted beach community, as a setting, affect the overall mood of the story?
- 2. What are the three main characters' motives for staying in the quarantined area? What are they seeking? Are they delusional? Is the story mocking them or affirming them?
- 3. What is the story saying about the American space program? Has it been a success or a failure?
- 4. The story's title is "The *Cage* of Sand." How do images of enclosure or entrapment—physical or psychological—operate in the story?
- 5. The protagonist, Bridgman, cries out "We made it!" at the very end. What do you think he means?

R.A. Lafferty's "Slow Tuesday Night" (1965)

- 1. Why do things move so fast in this future world? What are some of the social effects of this speeded-up lifestyle?
- 2. How do the characters in the story relate to each other? How do they deal with the impermanence and rapid turnover in their relationships?
- 3. What forms of culture—thought and art—does this sped-up future tend to produce?
- 4. The tone of the story is almost that of a fable or folktale. What does this tone add to the events being described?
- 5. Is the story a satire? If so, what is it criticizing or poking fun at?

Harlan Ellison, "'Repent, Harlequin!' Said the Ticktockman" (1965)

1. Why does Ellison open the story with a long quotation from Henry David Thoreau's essay "On Civil Disobedience"? Are the ideas represented in this quotation exemplified in the story, and if so, how? What is the effect of including this excerpt? Why address the quotation directly to those readers who tend to "ask, what is it all about?"

- 2. Describe the nature of the social "Machine" that must be "Kept ... Running Smoothly" for this near-future world to function. What are its basic political and cultural norms? How are they enforced? How do the citizens relate to one another, and to the political regime that runs the social Machine? Why, for example, do people routinely wear masks?
- 3. What is the Ticktockman's basic job? Why does this society need him? Why are precise timetables emphasized throughout the story? What is Ellison saying about the regimentation of time in modern bureaucratic societies?
- 4. What does the Harlequin hope to accomplish with his stunts and pranks? Why are they so silly and seemingly random? How do the citizens respond to them? Why does the Ticktockman believe the Harlequin must be captured and forced to repent his ways?
- 5. At the end, the Ticktockman shows up late for the first time ever, murmuring nonsense syllables. Why do you think Ellison ends the story this way?

Frederik Pohl. "Day Million" (1966)

- 1. The narrator begins by promising to tell us a "love story" but then keeps overturning our expectations. How is this not a conventional love story? How is Don not really a "man" and Dora not really a "woman"?
- 2. What sort of assumptions does the narrator make about the story's reader? Is the narrator addressing a particular type of reader? If so, describe this reader in as much detail as you can.
- 3. What has happened to the human race in this far future? How have they adapted to technological changes? Is there enough left even to call them "human" any more?
- 4. What is the narrator's attitude toward the processes of change? Are we supposed to be appalled by this far future Earth or to accept it?
- 5. At the end the narrator says that Don and Dora are as similar to the story's reader as the story's reader is to Attila the Hun. What does the narrator mean by this comparison?

Philip K. Dick, "We Can Remember It For You Wholesale" (1966)

- 1. What is ironic about the title, "We Can Remember It For You Wholesale?" The story includes many examples of linguistic irony; words and phrases often seem to mean two different, impossible, or contradictory things. Why do you think Dick indulges in such linguistic play?
- 2. Does the creation of artificial memories by technology seem plausible to you? What would the implications be if memories could be changed as bodies are changed by cosmetic surgery?
- 3. Aside from REKAL itself, what other signs are there of a futuristic society? How is the future portrayed?
- 4. "We Can Remember It For You Wholesale" was adapted into the Movie *Total Recall*, in which Douglas Quail was played by Arnold Schwarzenegger. What do you think of this casting decision?
- 5. Dick's stories usually take the perspective of little people living everyday lives, rather than flashy heroes in grand adventures. Why is this an important feature of "We Can Remember It For You Wholesale?"

Samuel R. Delany. "Aye, and Gomorrah..." (1967)

- 1. What is a spacer? What is a frelk?
- 2. What are the implications of the fact that "frelk" is a masculine noun in Spanish and a feminine one in French?
- 3. How do the gay man in Paris and the lesbian in Mexico view the spacers? Why are the spacers outcasts from even these socially marginal communities?
- 4. Is the encounter between the narrator and the female student in Istanbul a typical spacer-frelk hook-up? What is the nature of their mutual attraction or bond? Why are they unable to come to an understanding based on it?
- 5. What is the significance of using a Biblical allusion as a title? Is the title offering some sort of judgment on this future world, or is it more ironic?

Pamela Zoline, "The Heat Death of the Universe" (1967)

1. When interpreting an ironic perspective, it can be helpful to consider the author's probable satiric *targets*. In your view, which among these concerns of Zoline is *most* important to understanding her story: consumerism, overly high expectations for perfect parenting and housekeeping, or California/suburban lifestyles?

- 2. Many students are inclined to dwell on the main character's distraction from her responsibilities as a mother: her inability, for instance, to remember exactly how many children she has. Do you agree or disagree that Sarah Boyle is herself a target of Zoline's critique?
- 3. The title's reference to "heat death" refers to the end-stage of entropy. (An internet search should provide you with definitions of "entropy" and "heat death"; see also the head-note to this story.) In physics, entropy accounts for why, *in a closed system*, available energy will inevitably decline to zero. In what ways is Sarah Boyle's comfortable suburban house a "closed system"?
- 4. How does Zoline's numbering of paragraphs alter, enrich, and/or complicate the experience of reading this story?
- 5. Zoline's story was written in 1967. Is it still more or less applicable to the lives of suburban, middle-class mothers of preschoolers? If not, what elements have changed in our own day? Have any elements remained constant?

Robert Silverberg. "Passengers" (1968)

- 1. What are the "Riders"? How do they operate? What is the experience of being a "passenger"?
- 2. How have human beings adapted, psychologically and culturally, to the presence of the Riders? Have they been compelled to develop new ethical norms or modes of social etiquette?
- 3. What sort of person is our narrator, Charles Roth? How does he view himself? What are his opinions about the Riders?
- 4. Why is it so hard for Charles and Helen to develop a relationship? How much of the blame lies with the Riders and how much with themselves?
- 5. What is the effect of the sudden twist ending? How are we supposed to react? Is the story making some sort of comment on sexual behavior during the 1960s?

Brian Aldiss, "Super-Toys Last All Summer Long" (1969)

- 1. The background details of the future depicted in this story suggest that, in spite of its many technological advances, this world is more dystopian than utopian. What are some of the negative features of the world depicted in "Super-Toys Last All Summer Long"?
- 2. Science fiction stories often explore possible transformations in social relations resulting from developments in science and technology. What are some of the ways in which social relations are shaped by technology in this story?
- 3. In spite of its brevity, "Super-Toys" gains resonance and depth through its indirect evocation of the well-known story of Pinocchio, the wooden puppet who desperately desires to be a real boy. How is David like a science-fictional version of Pinocchio?
- 4. David is programmed to love Mrs. Swinton as if she were his real mother. Do you think that there is any significant difference between David's love for Mrs. Swinton and the love of a "real" child for a "real" mother? Why do you think that Mrs. Swinton cannot love David?
- 5. The future world of "Super-Toys" is marked by a desperate reliance on illusion and artificiality. How does the first sentence introduce this thematic element? What other details in the story contribute to this atmosphere of illusion? How might we read the concluding sentence of the story in this context?

Ursula K. Le Guin, "Nine Lives" (1969)

- 1. Le Guin's "singletons" and the clones of the late John Chow have come into being under very different conditions. Yet this difference is conveyed quite subtly, as when Le Guin matches a plural ("two") with a singular ("clone") in an early scene: "Two of the clone stayed in the dome" (461). Name some differences, whether major or subtle, that Pugh and Martin soon notice between themselves and the cloned beings.
- 2. Le Guin is extrapolating from cutting-edge scientific ideas. The scientific research began as early as 1885, but the term "clone" itself was not coined until 1963—by the biologist J.B.S. Haldane. The first gene was not isolated until 1969, the year this story was published. Though the story is well-grounded in science, would you say that Le Guin's extrapolation of this topic is primarily centered on scientific extrapolation? Or is she more interested in meeting the challenge of *characterizing* the engineered human beings of the future?

- 3. "Nine Lives," like Brian Aldiss's "Super-Toys Last All Summer Long," was published in 1969, and both texts envision future societies attempting to adapt to severe population pressures. Both Aldiss and Le Guin might have been inspired by John Brunner's magisterial novel on the same topic, *Stand on Zanzibar*, which had appeared the year before. In Le Guin's backstory, nations that do not restrict family size become virtually extinct. What are the circumstances by which the world depicted here has passed in a single generation from being overpopulated to being de-populated?
- 4. Consider how the planet Libra—by nature untamed, volcanic, violent—contrasts with "human nature" (singleton and clone) as depicted by Le Guin. Pugh and Martin strive to strike a social balance, to coexist in peace despite occasional interpersonal friction. At the beginning of the story, how do the clones interact with Pugh and Martin? How do the clones interact with each other? Consider how the situation has changed by the story's end. How does Kaph adapt? Do you think that Pugh and Martin assist him? If so, in what ways?

 5. How do you interpret Le Guin's title, "Nine Lives"? What scenes in the story refer to, or partly explain, this title?

Frank Herbert, "Seed Stock" (1970)

- 1. Early in the story, Kroudar—his name is really just a job category, "menial laborer," given to him and few other colonists (480)—muses on the scientists' failure over the last three years to establish earth-based animals and technology on the alien planet. Name any three earth-derived resources, at first relied on by the colonists, that have become unsustainable or have completely vanished some three years later. On the other hand, what native resources have been successfully tapped before the story's conclusion? Why does Kroudar consider the burning of native wood for cookfires a "victory" rather than (like many of the colonists) a regression into primitivism? In general, what would you say is Herbert's message about sustainable patterns of consumption and conservation of resources?
- 2. "Sometimes," slow-witted Kroudar thinks, "you had to search out a problem with your flesh and not with your mind" (481). What do you think he—or Herbert—means by this? How are Kroudar's actions a demonstration of this statement? How is Herbert defining heroism in this story? In what ways do the scientists among the colonists fail to respond adequately, let alone heroically, to the challenges of their new environment? 3. Technician Honida, a well-educated, articulate woman, chooses homely and taciturn Kroudar as the father of her children. The story shows why. Explain several ways in which Herbert conveys that they are very well-matched. For one thing, if Kroudar is a "sea peasant" (483), Honida is associated (as a hydroponics expert) with the cultivation of plants and foods—including successful introduction of a hybrid maize into the soil of the poisonous, inhospitable planet. How is Honida's cultivation of maize appropriate given her "Amerind ancestry" (484)? Why—notwithstanding her high status in the colony as a Technician—are her caution (485), her hoarding (487), and her approach to child-rearing (as well as her careful cultivation of resources and tending of food-bearing plants) seen as "peasant" traits?
- 4. As the story concludes, Kroudar plans a voyage of eight days to find the hidden source of the earth-born falcons' food. How are the falcons different from the other earth-species introduced by the colonists? What does their collective survival tell Kroudar? What are the dangers, and the significance, of his voyage? Why are Kroudar and Honida so sure that if the explorers return successfully, they will finally be able to name the planet?
- 5. What reasons does Herbert suggest for a general failure to thrive among children born on the planet? Why do the twins born to Honida and Kroudar sleep so much? How does Kroudar imagine the changing appearance and bodies of descendants of the colonists, including the descendants of his own children?

Stanislaw Lem, "The Seventh Voyage" from *The Star Diaries* (1971)

- 1. The title evokes tales of travel to magical places by fantastic adventurers—Sinbad, Gulliver, the European tall-tale hero Baron von Münchhausen. What sort of adventure hero is Ijon Tichy?
- 2. Do you consider the story an example of true sf with plausible scientific content or only a fanciful parody?
- 3. What are the time-travel paradoxes that Lem relies on in "The Seventh Voyage?"
- 4. Lem is perhaps the most respected European writer of sf. How is "The Seventh Voyage" different from most sf stories that you know?

5. How would you compare "The Seventh Voyage" to another famous story in which identities proliferate because of time-travel. Heinlein's "All You Zombies—"?

Joanna Russ, "When It Changed" (1972)

- 1. At the beginning of the story, how is life on the planet Whileaway portrayed? What kind of people live there? What is role of violence in their lives?
- 2. At what point in the story did you begin to suspect that the narrator is a woman?
- 3. What is parthenogenesis? Are human males really needed for species reproduction? If not, what other purpose do they serve, if any?
- 4. How are the returning men described? How does the narrator succeed in "defamiliarizing" them, in making the reader view them as repulsive "aliens"?
- 5. Exactly how is this story "feminist"? What kinds of situations does it seek to address/redress?

James Tiptree, Jr., "And I Awoke and Found Me Here On the Cold Hill's Side" (1972)

- 1. Tiptree's title is taken from John Keats's poem, "La Belle Dame Sans Merci" (1819), about a young man deserted and left bereft by a mysterious and magical lover. How does this choice of title contribute to the meaning of the story?
- 2. As in many of Tiptree's stories, human sexuality is depicted here as brutal and hierarchical. What are some of the details in this story that support this depiction?
- 3. This story was written as by "James Tiptree, Jr." Are there elements in the story that seem to support the idea of a male author?
- 4. Who is the narrator of this story? What does he want? Why does he not heed warnings to stay away from the various alien species in the story?
- 5. How is this story a critique of colonialism? How do gender and colonialism intersect in this story?

John Varley, "Air Raid" (1977)

- 1. What eco-catastrophe has overtaken the future world Varley describes? Do you agree with this story's drastic solution to the problem of a ruined gene-pool and planet? Discuss the circumstances Varley establishes under which the time-travelers can take some people into their far-future. What limitations govern these kidnappings, and what limits in the technology (and the nature of time) can complicate these missions?
- 2. The use of prosthetics is widespread in the future era of Varley's story, which also emphasizes that one of Mandy's friends, Dave, can easily be fitted up to double for Diana, a female flight-attendant. For Varley, evidently, a person's spirit/character/essence is not dictated by the anatomical details of his/her body. Debilitated and slowly deteriorating Mandy says scornfully of the healthy but unfit twentieth-century passengers, "Muscles like horses, all of them, but they can hardly run up a flight of stairs" (533). Despite her multiple disabilities, Mandy is clearly this story's hero. In what traits does Varley suggest that her heroism lies? What details of Mandy's behavior on this mission belie her tough-talking persona? Finally, if the captured twentieth-century passengers and crew are to survive as far-future colonists, what traits does Varley suggest that *they* will need?
- 3. Varley's story devises a number of "future" meanings for familiar words of the late-twentieth century. In Mandy's future-speak, what are "wimps"? (Why does Mandy say that she "hates" them?) What does she mean by "slippage," "goats," and "Snatching"?
- 4. A chapter in *Millennium* (1983), the full-length novel expanded from this story of 1977, is titled "All You Zombies—" in tribute to a classic time-paradox story of this title by Robert A. Heinlein (see 324-34). Compare Heinlein's and Varley's hard-boiled *tone* and time-travel *plot*. On the other hand, consider how Varley updates Heinlein, fitting his references and allusions to his own late-1970s and far-future time-frames. (One of the more important references is to the increased frequency of sky-jacking during the 1970s.)
- 5. Heinlein's story travels between various time-frames from the 1940s through the early 1990s. What is the significance of the much *broader* time-span navigated by Varley's time-travelers? In what century does Mandy live, and to what date does she travel in this story? What are we to imagine has occurred in the centuries between the twentieth century and Mandy's time? How does this longer time-frame affect the description of technology in this story?

Carol Emshwiller, "Abominable" (1980)

- 1. In what ways are women portrayed as aliens or animals? How do these portrayals comment on attitudes toward women?
- 2. How are men portrayed in the story? How do these portrayals comment on men's prejudices and on the limits those prejudices bring to men's lives? How sympathetic is the portrayal of men?
- 3. What are the purpose and the effect of the charts on the story? How would the story be different without them?
- 4. What can you tell about the world of the story? What seems to be left out and what is the effect on the reader of those omissions?
- 5. In what ways is this story science fiction? In what ways is it not?

William Gibson, "Burning Chrome" (1982)

- 1. How does Gibson's language create the illusion that the reader is already in the future? How does his use of words and images make the unfamiliar seem familiar?
- 2. How does Gibson simulate the experience of being in cyberspace (a term he invented)?
- 3. What sort of world does "Burning Chrome" imagine will exist in the future? Who has power? Who is Chrome?
- 4. What are the steps of Automatic Jack's and Bobby Newmark's raid on Chrome?
- 5. Why do you think prostheses (artificial body parts) are so significant in the story?

Octavia Butler, "Speech Sounds" (1983)

- 1. How does the dystopic near future of the story comment on the state of the world now?
- 2. Everything about the future depicted in this story stems from one novum, the illness that impairs communication. How does communication function as a central theme in the story?
- 3. In what ways do economics, gender, and the environment affect the lives of the characters in this story?
- 4. Personal responsibility is a deep concern in all of Butler's fiction. How is it explored here?
- 5. In what ways does the story explore human/animal difference or ideas about devolution?

Nancy Kress, "Out of All Them Bright Stars" (1985)

- 1. Why does the author choose to write the story in first person and present tense?
- 2. Why is Sally angry at John at the end of the story?
- 3. Kress says she writes science *fiction* rather than *science* fiction. How is that evident here?
- 4. In what ways is it appropriate to use an alien to examine racism in the story? What are some significant ways in which the alien is not an apt metaphor for racial difference?
- 5. What feminist and classist issues are explored in this story and how?

Pat Cadigan. "Pretty Boy Crossover" (1986)

- 1. What is a Pretty Boy? What do they value, as a group? What are some of the other youth subcultures we encounter in the story?
- 2. What do the corporate bigwigs want with the protagonist? What have they done with Bobby?
- 3. What is the nature of the appeal—for Bobby and the protagonist—of the technological transformation the corporate bigwigs promise them? Why does Bobby accept, and why does the narrator reject, the invitation?
- 4. How is the setting (a dance club) important to the themes of the story?
- 5. What is the story saying about the power of celebrity?

Kate Wilhelm. "Forever Yours, Anna" (1987)

- 1. What does Gordon Sills do for a living? How is his job important to the plot?
- 2. Who is Anna? What is her relationship to Gordon? How does he (and how do we) eventually figure this out?
- 3. What has happened to Mercer? Why is the Draper Fawcett company so eager to find out?
- 4. How does Gordon change over the course of the story? How is Anna responsible for these changes?
- 5. Describe how time travel functions in this story.

Bruce Sterling, "We See Things Differently" (1989)

- 1. How can we tell that the near-future America depicted in this story is in economic and social decline? What global events have led to this "gloom-and-doom" situation?
- 2. What is the narrator's opinion of America and Americans? How does he express it, both to characters within the story and to the reader? Are we meant to share his view or be critical of it?
- 3. List some moments in the story when inter-cultural miscommunication happens, and discuss the implications of these scenes. How does Sterling show the failure of mutual understanding between Western secular democracies and Islamic theocracies? Does the story suggest any possibility of true contact between such disparate world-views?
- 4. Why does the author highlight the rock-and-roll music scene in such detail? Are global cultural forces such as rock a point of potential connection between Western and non-Western peoples, or just another source of conflict?
- 5. What are the implications of the story's title? Who does the "we" refer to?

Misha Nogha, "Chippoke Na Gomi" (1989)

- 1. At Hiroshima and Nagasaki, the temperature within three seconds of atomic-bomb impact was 1,000-2,000 degrees centigrade. People at ground zero were vaporized at once, but non-combustible buildings sometimes survived, bearing the shadowy traces of the flash-burned victims' bodies. Hiroshima's Peace Museum preserves what appears to be the shadow-outline of someone sitting on the steps waiting for the Sumitomo Bank to open when the first atomic blast occurred at 8:45 AM. How do you interpret this story's final image of a girl's outlined body remaining "permanently scorched into the station wall" (636)? Who is this girl? Why does her skin peel off when the scientist reaches out to take her hand (636)?
- 2. How has the shadow-girl arrived at the train station? You might want to look at the scene in which, looking at dust under his microscope, the scientist sees "a human face trapped between two tiny pieces of dust" (635). If she is a kind of ghost or apparition, why is it fitting that she has chosen a scientist to haunt?
- 3. The atom bomb that destroyed Hiroshima used uranium, but the bomb dropped on Nagasaki used plutonium, the existence of which became known only after the destruction of Nagasaki. In the case of the Nagasaki bomb, one fourth of 1% (.25%) of fallout descended directly on the city and some was expended in the detonation process; but 91.65% of the fallout drifted across the Northern hemisphere. Given this global drift of radioactive contamination, why might the author have chosen to set this story in the North American West rather than in Japan itself? Are there other possible reasons for setting this story far from Japan?
- 4. This story was published forty-five years after the destruction of Hiroshima and Nagasaki, at which point hundreds of broad-canvas post-nuclear tales had been published. Misha Nogha takes a different approach, using an intimate scale and lyric style. Analyze the sentences in italics that are interspersed throughout the story. These seem to move readers back to the viewpoint of an original witness, conveying the moment of impact in a more immediate way. Explain what the italicized sentences say; consider, too, what they contribute to the story as a whole. How do these passages in italics contrast with the stolid figure of the story's scientist?
- 5. The "carbonated bone" of the 70,000+ victims of Nagasaki, mixed in among other detritus of the bombings and carried in vials in the satchel of the story's scientist (a "konologist" whose specialty is dust) mixes here with more familiar forms of dust: the gritty dial of a pay-phone, the dust-storm that has delayed the scientist's train. Consider at least six references to varying forms of dust in this story, and reflect also on the wider symbolic significance of this image.

Eileen Gunn, "Computer Friendly" (1989)

- 1. The aim of the future state in "Computer Friendly" is "to optimize for predictability." What does this mean?
- 2. What are some of the elements of this high-tech future world that suggest that it is a technological dystopia?
- 3. Why do you think that the author chose to tell this story from a young child's point of view? How might this point of view affect the reader's experience of this future world?
- 4. What is the purpose of the "tests" that every child in this future must undergo when they reach the age of seven? What does it mean that children who fail these tests will be sent to the "Asia Center"?
- 5. This is a story in which some characters have become "posthuman." How has technology transformed Elizabeth's mother and brother into efficient "tools" of the future state?

John Kessel, "Invaders" (1990)

- 1. The motif of time travel is often used by sf writers to juxtapose, for purposes of comparison and contrast, different times, places, and events. How does "Invaders" use time travel to this effect? What are the different time-frames juxtaposed in this story?
- 2. "Invaders" also juxtaposes absurd humor and deadly seriousness. What is the effect of introducing a historical tragedy such as the Spanish destruction of the Incan Empire into a story about time travel and zany aliens? How does the alien invasion of 2001 parallel the Spanish invasion of 1532?
- 3. The story introduces cocaine into each of its time-frames. How does cocaine function both literally and metaphorically in the development of the story.
- 4. At the end of the story, the author/narrator fulfills one of the most powerful fantasies of science fiction, that is, he goes back into the tragic past and he changes it. What is the effect of presenting the story's "happy ending" in the conventional words of the fairy-tale?
- 5. How is "Invaders" a metageneric story, that is, how does it work as a commentary about writing and reading science fiction? (Note that the description that the author/narrator gives of himself in the story closely matches that of the "real" John Kessel.)

Gene Wolfe, "Useful Phrases" (1992)

- 1. Where or what is Tcôvé?
- 2. What happens to the narrator at the end of the story?
- 3. Who is the "you" to whom the narrator writes the story?
- 4. How is this a ghost story?
- 5. How does the story explore the problems of translation both literal and metaphorical?

Greg Egan, "Closer" (1992)

- 1. What is the "Ndoli device"? How does it ensure an individual's virtual immortality?
- 2. What are some of the details of this future world that suggest its radical difference from our own present-day reality? What are some of the ways in which Egan's characters have become posthuman?
- 3. The story concludes with the end of the love affair between Michael and Sian: "Together, we might as well have been alone, so we had no choice but to part." What does Michael mean by this? What does this conclusion suggest about his obsessive drive to *really* know his lover?
- 4. How might this story be read as a variation on the many stories about aliens that are so much a part of the history of science fiction?
- 5. Egan's fiction has often been associated with the philosophical position most famously encapsulated in René Descartes's statement "Cogito, ergo sum" (I think, therefore I am) that values the human mind as the core of human identity and tends to relegate the body to the position of material envelope for mind. Does "Closer" seem to support this Cartesian position?

James Patrick Kelly, "Think Like a Dinosaur" (1995)

- 1. What is the narrator's job at Tuulen Station?
- 2. What does "balancing the equation" mean in the context of this story?
- 3. This is, among other things, a story about ethical choice. Are the alien Hanen correct to conclude that "there is no identity in dead meat," so that it does not matter which version of Kamala Shastri continues to exist and which is killed? Has the narrator committed murder or has he no choice but to act according to the logic of "the cold equations" of the physical universe?
- 4. To "think like a dinosaur" conventionally means to think in ways that are no longer useful. Is this what the story seems to imply about the alien "dinos"? What else might "to think like a dinosaur" mean in this story? What does the narrator mean when, after disposing of Kamala, he proudly concludes that he "could think like a dinosaur"?
- 5. Given the irrational/emotional elements that contribute to human identity, which we see in the "secret" stories that Kamala and Michael tell each other, does the story finally support or critique "thinking like a dinosaur"?

Geoff Ryman, "Everywhere" (1999)

- 1. How is the narrator's youth demonstrated and how does it affect the content of the story?
- 2. In what ways is this a utopian future and what do we know about how it operates economically?
- 3. What are the limits and restrictions of this utopia?
- 4. What is the Angel of the North and what is Everywhere?
- 5. In what ways is the story an example of Mundane Science Fiction as described in the headnote?

Charles Stross, "Rogue Farm" (2003)

- 1. Stross's story is set in a post-Singularity future inhabited by a diversity of human and posthuman subjects. What kind of creature is a "rogue farm"? What kind of creature is Bob the dog?
- 2. What are some of the technological developments that Stross imagines as commonplace in this future English countryside?
- 3. What are some of the political and environmental costs of such rampant technoscientific development? What is suggested by the fact that both Maddie and Brenda are military veterans?
- 4. What seems to be the cause of Maddie's breakdowns? What form does her latest "fatal" breakdown take? How does Joe go about fixing her up again?
- 5. "Lamarckian inheritance" is a discredited theory of evolution that holds that organisms can pass on to their descendents traits acquired during the course of a single life-time. What does the story seem to be suggesting about the potential for technology directly to intervene in the evolutionary process in its passing references to "a Lamarckian clade" and to "self-sufficient posthuman Lamarckian colonists."

Ted Chiang, "Exhalation" (2008)

- 1. This story presents readers with a world utterly different from our own, and inhabitants of that world who more closely resemble Asimov's robots than they do organic human beings. Even the most apparently familiar elements in the world are unfamiliar and unexpected. What, for instance, are the "filling stations" referred to by the narrator? What are some other significant features of this very unusual sf world?
- 2. The narrator is a scientist whose speciality is anatomy. What are some of the reasons he gives for his people's lack of knowledge of their own physiology?
- 3. Like Wells's "The Star," this story invites us to appreciate the power of the sentient mind to understand the universe that is its natural environment, even if it cannot overcome the forces in that universe that threaten to destroy it. How is this particular narrative developed in "Exhalation" and how is it connected to sf's capacity to evoke "the sense of wonder" in its readers?
- 4. It is often observed that sf stories can gain much of their impact through the literalization of metaphor. How does this story literalize the metaphor of the "body as machine" and to what effect?
- 5. Who is the reader for whom the narrator is writing down his story?

b. Themes

SF/General

- 1. Science fiction often explores alternative belief systems (religious, philosophical, political, etc.) or the impact on current ideologies of various futuristic changes or alien ideologies. Discuss this point with reference to any two of the above texts. How are our opinions and beliefs linked to social and/or technological systems? What happens when alien or opposed ideologies come into confrontation or conflict? How do sf texts reflect "conservative" tendencies (salvaging or recuperating settled norms of belief) and how do they suggest "radical" or "revolutionary" possibilities (the subversion or supersession of pregiven norms)?
- 2. Much science fiction is about technology and its impact on/in the world. Discuss this point with reference to any two of the above texts. How does the evolution of technology affect the possibilities for self-understanding and social connection? Do technologies promote specific social values and norms of behavior, or do values and behavior define and constrain technologies? What are the implications of the fusing of humans and machines in the form of cyborgs? Does technology in these stories appear to be principally a utopian or a dystopian force?
- 3. Science fiction imagines situations that are estranged from our world and that are also reflections of the world in which they were written. What concerns of the time and place in which it was written are reflected in a work? What present concerns do you see reflected in the work? What significant differences from the real world does the work portray and what is their metaphorical or thematic importance?
- 4. Science fiction is in conversation with itself. That is, each work answers back to the works written before in some way. How is each work different from previous works in the course? How is it similar to them?
- 5. Science fiction is as much about the formal ways in which future or alien worlds are depicted as it is with the represented content of those worlds. Discuss this point. How does the very mode of representation (word-choice, literary style, forms of textual ordering) limit or enable the sorts of worlds represented? How do sf texts incorporate information about their futures into the very fabric of their textual worlds? Does the representation of future worlds seem to demand some sort of "futuristic" method of representation?

Alien Encounters

1. A perennial theme of science fiction is the encounter between humans and the "alien" (not merely literal extraterrestrials but the more complex experience of alienness and otherness). Discuss this point with reference to any three of the texts you have read. What does an encounter with the alien/other reveal about the human self and its assumptions and values? Does the confrontation with alienness transform human beings' sense of possibility or does it produce xenophobic reactions, or both? How can sf's aliens be seen as metaphorical extrapolations of human qualities and desires? Are the stories hopeful about the possibilities of communication across boundaries of difference (cultural, racial, sexual, etc.), or not?

Apocalypse/Post-apocalypse

1. Is it possible to imagine an apocalypse that is *not* human-centered? To what extent are all visions of TEOTWAWKI (the end of the world as we know it) inherently biased and focused exclusively on the survival of the human species? In what ways might the apocalyptic end of the humanity be good for the world as we know it?

Artificial/Posthuman Lifeforms

1. What does each work have to say about what it means to be human? For instance, where is the dividing line between human and non-human: animal, machine, artificial intelligence, created being, alien, clone, etc. What are the ethical, philosophical, and/or moral implications the work raises concerning these issues? How are these questions relevant in metaphorical terms to the world we live in?

Computers/Virtual Reality

- 1. What is the "Singularity" and how might it affect the traditional relationship between humans and technology?
- 2. What are the advantages and potential dangers of artificial intelligence?

Evolution and Environment

- 1. Science fiction is the literature of change. How does each work treat change? Among the kinds of change to consider are evolution, devolution, education, difference, innovation, etc. Is change always inevitable? Can it be controlled?
- 2. How is the natural environment portrayed in these works? Are the humans working with it or fighting against it? Compare the early sf works of the pulp era with more contemporary sf works—what differences do you see in how nature is depicted?

Gender/Sexuality

1. Many of the stories we have read foreground issues related to gender and sexuality. Discuss this point with reference to any two of the above texts. What do futuristic or "experimental" models of gender/sexual relationships say about contemporary norms and values? How are gender identities and/or sexual practices transformed by technological developments? If gender roles are in some sense dependent on historical/social contexts, what do sf texts achieve by manipulating or rearranging these contexts?

Time Travel/Alternate History

- 1. There are many different ways to conceive of space-time and of the possibility of travel through it. Identify at least three and explain the ramifications of each.
- 2. What kinds of paradoxes or chronological conumdrums are sometimes created by time travel? Are there fewer problems travelling back in time versus travelling forward in time? Why?

Utopias/Dystopias

1. Science fiction often explores alternative social-political structures or the implications of present structures extrapolated into future contexts. Discuss this point. What does the persistent focus on dystopian worlds--e.g. repressive police states--say about relationships based on power and control? How does the future (d)evolution of the city connect with contemporary concerns about urban spaces? How do the social structures of future or alien worlds affect the possibilities for social interaction and personal development? How do work and leisure practices change with changes in social structures?

War/Conflict

1. Does sf tend to portray war and human conflict differently from other genres? How?