Cyberpunk

is the punk's way of saying, 'I'm not on, and you're not on,' and cyberpunk is the new way of thinking about technology. Wherever you find people using technology, you find new cyberpunk attitudes. Cyberpunk is about technology being used against people to control information and in collecting and encrypting the data. Cyberpunk (now broadly defined as cyberculture and associated with hackers) has adapted the following as its social and political themes: information wants to be free, to be accessible to everyone, and that access is for the public, not for the elite or for the state. Cyberpunk in various ways makes up a contemporary counterculture. (Reads like a glossary.)

n the 1950s it was the beatniks, starting a coffeehouse rebellion against the "Last Is Best" conformity of the Eisenhower era. In the 1960s the hippies arrived, combining antiwar activism with the energy of sex, drugs and rock 'n roll. Now a new subculture is bubbling up from the underground, popping out of computer screens like a piece of futuristic HYPERTEXT (see margins).

They call it cyberpunk—a late-20th-century term pieced together from CYBERNETICS (the science of communication and control theory) and PUNK (an antiestablishment subculture). Within this odd patchwork of the future and cyberpunk culture, it's a way of looking at the world that combines an infatuation with high-tech tools and a disdain for conventional ways of seeing things. Originally applied to a school of hard-boiled science-fiction writers and then to certain semi-scholarly computer hackers, the word cyberpunk now covers a broad range of music, art, psychedelics, smart drugs and cutting-edge technology. The cult is new enough that fresh offshoots are sprouting every day, which infatuates the hardcore cyberpunks who feel they got there first.

Stuart Brand, editor of the hipster-era Whole Earth Catalog, describes cyberpunk as "technology with attitude." Science-fiction writer Bruce Sterling calls it an "unhyphenable alliance of the technical world with the underground of pop culture and street-level anarchy." Jude Milton, a cyberpunk journalist who writes under the byline St. Jude, defines it as "the place where the worlds of science and art overlap, the intersection of the future and now." What cyberpunk is about, says Rudy Rucker, a San

Punk Culture becomes heavily influenced by the rebellious attitude of punk music, sharing with such groups as the Sex Pistols a defiance of mainstream culture and an urge to turn modern technology against itself.

RAVES. Organized on the fly (sometimetimes by electronic mail) and often held in warehouses, raves are huge, nomadic dance parties that tend to last all night, or until the police show up. Psychedelic mind enhancers and funny accessories (white cotton gloves, face masks) are optional.

Brain Implants Slip a microchip into snug contact with your gray matter (a.k.a. vermis) and suddenly gain instant fluency in a foreign language or arcane subject.

Acid House. White-boy dance music that fails somewhere between disco and hip-hop.

Industrial. Mixing rhythmic machine clunks, electronic feedback and random radio noise, industrial music is "the sound of our culture making as it comes undone," says cyberpunk writer Gary Bates.

Elmer-Dewitt: Cyberpunk

Joe State University mathematician who writes science-fiction books on the side, is nothing less than "the fusion of humans and machines.

As in any counterculture movement, some denizens would deny that they are part of a "movement" at all. Certainly they are not as visible from a passing car as beatniks or hippies once were. Pussytail (on men) and tatoos (on women) do not a cyberpunk make—though dressing all in black and donning mirrored sunglasses will go a long way. And although the biggest cyberpunk journal claims a readership approaching 70,000, there are probably no more than a few thousand computer hackers, futurists, fringe scientists, computer-savvy artists and musicians, and assorted science-fiction geeks around the world who actually call themselves cyberpunks.

Nevertheless, cyberpunk may be the defining counterculture of the computer age. It embraces, in spirit at least, not just the newest thirtysomething hacker hunked over his terminal but also note-ringed twentysomethings gathered at clandestine RAVERs, teenagers who feel about the Macintosh computer the way their parents felt about Apple Records, and even preadolescent yokids fused like Kraut Glue to their Super Nintendo and Sega Genesis games—the training wheels of cyberpunk. Obsessed with technology, especially technology that is just beyond their reach (like BRAIN PLANTS), the cyberpunks are future oriented to a fault. They already have one foot in the 21st century, and time is on their side. In the long run, we will all be cyberpunks.

The cyberpunk look—a kind of SF (science-fiction) surrealism streaked by computer graphics—is already finding its way into art galleries, music videos and Hollywood movies. Cyberpunk magazines, many of which are "zines" cheaply published by desktop computer and distributed by electronic mail, are multiplying like cable-TV channels. The newest, a glossy, big-budget entry called Wired, premiered last week with Bruce Sterling on the cover and ads from the likes of Apple Computer and ATRI. Cyberpunk music, including ACID HOUSE and INDUSTRIAL, is popular enough to keep several record companies and scores of bands cranking out CDs. Cyberpunk-oriented books are slapping up by eager fans as soon as they hit the stores. (Sterling's latest, The Hacker Crackdown, quickly sold out its first hard-cover printing of 30,000.) A piece of cyberpunk performance art, Tikk, starring Blue Man Group, is a hit off-Broadway. And cyberpunk films such as Blade Runner, Videodrome, RoboCop, Total Recall, Terminator 2 and The Lawnmower Man have moved out of the cult market and into the mall.

Cyberpunk culture is likely to get a boost from, of all things, the Clinton-Gore Administration, because of a shared interest in what the new regime calls America's "data highways" and what the cyberpunks call CYBERSPACE.
Cyberspace SF writer William Gibson called it "a commensual hallucinations... a graphic representation of data abstracted from the banks of every computer in the human system. You can get there simply by picking up the phone.

Virtual Reality An interactive technology that creates an illusion, still crude rather than convincing, of being immersed in an artificial world. The user generally dons a compartmental glove and a head-mounted display equipped with a TV screen for each eye. Now available as an arcade game.

Computer Virus The cybernetic analogue of AIDS, these self-replicating programs infect computers and can destroy data. There are hundreds known, although few are as destructive as the Internet virus—which is now classified as a "worm" because the writer of the program did not mean to do damage.

Internet The successor of an experimental network built by the U.S. Defense Department in the 1960s, the Internet links at least 3 million computers, many of them of the university and research-related, around the world. Users can connect to the Internet by phone to share information or tap into data banks.

Virtual Communities Collections of like-minded people who meet on-line and share ideas on everything from politics to punk rock. The global village is full of any electronic addictions made up of cold-fusion physicists, white-supremacist crackpots and Grateful Deadheads. Like any other community, each has its in-jokes, cliques, bosses and bores.

Both terms describe the globe-circling, interconnected telephone network that is the conduit for billions of voice, fax and computer-to-computer communications. The incoming administration is focused on the wiring, and it has made strengthening the network's high-speed data links a priority. The cyberpunks look at those wires from the inside, they talk of the network as if it were an actual place—a VIRTUAL REALITY that can be entered, explored and manipulated.

Cyberspace plays a central role in the cyberpunk world view. The literature is filled with "console cow-boys" who prove their mettle by donning virtual-reality headgear and performing heroic feats in the imaginary "matrix" of cyberspace. Many of the punk's real-life heroes are also computer cowboys of one sort or another. Cyberpunk, a 1991 book by two New York Time reporters, John Markoff and Katie Hafner, features profiles of three canonical cyberpunk hackers, including Robert Morris, the Cornell graduate student whose COMPUTER VIRUS brought the huge network called the INTERNET to a halt.

But cyberspace is more than a playground for hacker high jinks. What cyberpunks have known for some time—and what 17.5 million modern-equipped computer users around the world have discovered—is that cyberspace is also a new medium. Every night on Prodigy, CompuServe, Genie and thousands of smaller computer bulletin boards, people by the hundreds of thousands are logging on to a great computer-mediated gallery, an interactive debate that allows them to leap over barriers of time, place, sex and social status. Computer networks make it easy to reach out and touch strangers who share a particular obsession or concern. "We're replacing the old drugstore soda fountain and town square, where community used to happen in the physical world," says Howard Rheingold, a California-based author and editor who is writing a book on what he calls VIRTUAL COMMUNITIES.

Most computer users are content to visit cyberspace now and then, to read their electronic mail, check the bulletin boards and do a bit of electronic shopping. But cyberpunks go there to live and play—and even die. The well, one of the hippest virtual communities on the Internet, was shaken 2½ years ago when one of its most active participants ran a computer program that erased every message he had ever left—thousands of postings, some running for many pages. It was an act that amounted to virtual suicide. A few weeks later, he committed suicide for real.

The well is a magnet for cyberpunk thinkers, and it is there, appropriately enough, that much of the debate over the scope and significance of cyberpunk has occurred. The question "Is there a cyberpunk movement?" launched a freewheeling on-line FLAME-fest that ran for months. The debate yielded, among other things, a fairly concise list of "attitudes" that, by general agreement, seem to be central to the idea of cyberpunk. Among them:

- Information wants to be free. A good piece of information-age technology will eventually get into the hands of those who can make the best use of it, despite the best efforts of the censors, copyright lawyers and DATACOGS.
- Always yield to the hand-in-hand imperative. Cyberpunks believe they can run the world for the better, if they can only get their hands on the causal keys.

There are many other cyberpunk movements, and many more cyberpunkers, in the sprawl of the Internet that were not explicitly addressed. But the above are the tenets that have been most widely discussed in the Usenet newsgroups and outside that bustling part of cyberspace.

Peter Drucker pointed out that society is splintering into hundreds of subcultures and designer cults, each with its own language, code and life-style.

"If the edge. When the world is changing by the nanosecond, the best way to keep your head above water is to stay at the front end of the Zeitgeist."

The roots of cyberpunk, curiously, are as much literary as they are technological. The term was coined in the late 1980s to describe a group of science-fiction writers—and in particular WILLIAM GIBSON, a 44-year-old American now living in Vancouver, Gibson's Noverner; the first novel to win SF's first triple crown—the Hugo, Nebula and Philip K. Dick awards—quickly became a cyberpunk classic, attracting an audience beyond the world of SF. Critics were intrigued by a demi-techno poetic prose style that invites comparisons to Hammett, Burroughs and Pynchon. Computer-literate readers were drawn by Gibson's nightmarish depictions of an imaginary world disturbingly similar to the one they inhabit.

In fact, the key to cyberpunk science fiction is that it is not so much a projection into the future as a metaphorical evocation of today's technological flux. The hero of Neuromancer, a burned-out, drug-addicted street hustler named Case, inhabits a sleazy INTERZONE on the fringes of a megacorporate global village where all transactions are carried out in New Yer. There he encounters Molly, a sharp-edged beauty with reflexive lenses grafted to her eye sockets and retractable razor blades implanted in her fingers. They are hired by a mysterious employer who offers to fix Case's damaged nerves so he can once again cross cyberspaces—a term Gibson invented. Soon Case discovers that he is actually working for an AI (artificial intelligence) named Wintermute, who is trying to get around the restrictions placed on AIs by the TURING POLICE to keep the computers under control. "What's important to me," says Gibson, "is that Neuromancer is about the present."
Turing Police. British mathematician Alan Turing predicted in 1950 that computers would someday be as intelligent as humans. Mondo 2000 is Italian for world. 2000 is the year. Says editor R. U. Steins: "I like the idea of a magazine with an expiration date."

Negativland. Better known for making soundtracks than records (Hater Sings), this band canceled a tour in 1988 after a Minnesota teen sued his family to death. The band's press release said the family had been arguing about Negativland's song "Chromosome is Spliced." The story was a hoax, but the press ran with it, turning the band into cyberpunk heroes.

Timothy Leary. Yes, he's back. At 72, the ex-Harvard professor who encouraged a generation to "turn on, tune in, drop out" now counsels himself a cyberpunk. "The PC is the LSD of the 1990s," he says.

Techno-Erotic Paganism. Sound intriguing? That's probably why the editors of assotes 2000 put the term on the cover of their book. Unfortunately, they never got around to explaining what it means.

Synesthesia. From the Greek syn (union) and aesthesis (perception), synesthesia is a merging of sensory input in which sounds appear as colors in the brain or words evoke a specific taste or smell.

The themes and motifs of cyberpunk have been percolating through the culture for nearly a decade. But they have coalesced in the past few years, thanks in large part to an upstart magazine called Mondo 2000. Since 1988, Mondo's editors have covered cyberpunk as Rolling Stone magazine chronicles rock music, with celebrity interviews of such cyberheroes as NEGATIVLAND and TIMOTHY LEARY, alongside features detailing what's hot and what's on the horizon. Mondo's editors have packaged their quirky view of the world into a glossy book titled Mondo 2000. A User's Guide to the New Edge (HarperCollins; $20). Its cover sports an alphabetic entries on everything from virtual reality and wire-to-wire designer aphrodisiacs and TECHNO-EROTIC PAGANISM, promising to make cyberpunk's raveled periphery immediately accessible. Inside, in an innovative hypertext format (which is echoed in this article), relatively straightforward updates on computer graphics, multimedia and Fiber optics accompany wild screeds on such controversial subjects as SYNTHESIA and TEMPORARY AUTONOMOUS ZONES.

The book and the magazine that inspired it are the product of a group of brainy (if eccentric) visionaries holed up in a rambling Victorian mansion perched on a hillside in Berkeley, California. The sassy-style graphics are supplied by designer Bart Nagel, the overcaffeinated prose by Ken Goffman (writing under the pen name R. U. Steins) and Allen Kennedy (listed on the masthead as Queen Mu, "dominatrix"), with help from Rudy Rucker and a small staff of freelancers and contributions from an international cast of cyberpunk enthusiasts.

The goal is to inspire and instruct but not to lead. "We don't want to tell people what to think," says associate art director Heide Foley. "We want to tell them what the possibilities are."

Largely crafted together from back issues of Mondo 2000 magazine (and in a prospect, a short-lived 'zine called Radiohead), the Guide is filled with articles on all the traditional cyberpunk obsessions, from ARTIFICIAL LIFE to VIRTUAL SEX. But some of the best entries are those that report on the activities of real people trying to live the cyberpunk life. For example, Mark Pauline, a San Francisco performance artist, specializes in giant machines and vast public spectacles: sonic booms that pin audiences to their chairs or the huge, striking vat of roasting cheese with which he performed the air of Denmark to remind the citizens of its Viking roots. When an explosion blew the thumb and three fingers off his right hand, Pauline simply had his big toe grafted where his thumb had been. He can pick things up again, but now he's waiting for medical science and grafting technology to advance to the point where he can replace his jerry-built hand with one taken from a cadaver.

Much of Mondo 2000 strains credibility. Does physician Nick Herbert really believe there might be a way to build TIME MACHINES? Did the CYRONICS experts at Trans-Time Laboratory really chill a family pet named Miles and then, after its near death experience, turn it back into what its owner describes as a "fully functional dog"? Are we expected to accept on faith that a SMART DRUG called centeponoxine is an "intelligence booster" that provides "effective anti-aging therapy" or that another compound called hydregine increases mental abilities and prevents damage to brain cells? All of this has some basis in today's technologies, says Paul Saffo, a research fellow at the Institute for the Future. "But it has a very anticipatory quality. These are people who assume that they will shape the future and the rest of us will live in." Parents who thumb through Mondo 2000 will find much here to upset them. An article on house music makes popping MDMA (ECSTASY) and thrashing all night to music that clocks 120 beats per minute sound like an experience no red-blooded teenager would want to miss. After describing in detail the erosic effects of massive doses of L-dopa, MDA and deprenyl, the entry on aphrodisics adds as an afterthought that in some combinations these drugs can be fatal. Essays praising the beneficial effects of psychedelics and smart drugs on the "information processing" power of the brain sit alongside RANTS that declare, among other things, that "safe sex is boring sex" and that "cheap thrills are fun."

Much of this, of course, is a cyberpunk pose. As Rucker confesses in his preface, he enjoys reading and thinking about psychoactive drugs but doesn't really like to take them. "To me the political point of being pro-psychedelic," he writes, "is that this means being against consensus reality, which I very strongly am." To some extent, says author Rorshigeld, cyberpunk is driven by young people trying to come up with a movement they can call their own. As he puts it, "They're tired of all these old geezers talking about how great the '60s were."

That sentiment was echoed by a recent posting on the WELL. "I didn't get to pop some 'shrooms and dance naked in a park with several hundred of my peers," wrote a cyberpunk wannabe who calls himself Alien. "It's me, and to a lot of other generally disenfranchised members of my generation, surfing the edge that is all we've got."

More troubling, from a philosophic standpoint, is the theme of DYSTOPIA that runs like a bad trip through the cyberpunk world view. Gibson's fictional world is filled with glassy-eyed girls strung out on their...
Cryonics. For a price, a terminally ill patient can be frozen—until some future time when a cure has been discovered. Some people save on nursing costs by having just their head frozen.

Smart Drugs: "Don't eat any of that stuff they say will make you smarter," says Bruce Sterling. "It will only make you poorer."

Entasy: Enthusiasts describe this New Age psychedelic, which heightens the senses, as "LSD without the hallucinations." The drug was outlawed in the U.S. in 1987.

Ramps: A hyperbolic literary form favored by cyberpunk writers, these extended diatribes make up in animus what they lack in modernity.

Dystopia: Utopia's evil twin. Merriam-Webster defines it as "an imaginary place which is depressingly wretched and whose people lead a fearful existence."

Simstim Decks: These stimulated stimulator machines are what television might evolve into. Rather than just watching your favorite characters on TV, you snap some plastic electrodes to your forehead and experience their thoughts and feelings—slightly altered, of course, to spare you the headaches and hangovers.

Microsofts: Without apologies to the software company by the same name, Gibson has his fictional characters alter their reality by plugging into their brains these angular fragments of colored silicon, which house a read-only memory chip.

Walkman-like SIMSTIM DECKS and young men who get their kicks from MICROSOFTS plug into sodas behind their ears. His hyped-up, dehumanized vision conveys a strong sense that technology is changing civilization and the course of history in frightening ways. But many of his readers don't seem to care. "History is a funny thing for cyberpunks," says Christopher Meyer, a music-synthesizer designer from California, "writing on the wall. It's all data. It all takes up the same amount of space on disk, and a lot of it is just plain noise."

For cyberpunks, pondering history is not as important as coming to terms with the future. For all their flaws, they have found ways to live with technology, to make it theirs—something the back-to-the-land hippies never accomplished. Cyberpunks use technology to bridge the gulf between art and science, between the world of literature and the world of industry. Most of all, they realize that if you don't control technology, it will control you. It is a lesson that will serve them—and all of us—well in the next century.

QUESTIONS FOR REREADING

1. If you know something about punk music or cyberpunk—anything, do you find that Philip Elmer-Dewitt's in his 7New article oversimplifies or misinterprets the counterculture movement?

2. What are the major differences between the counterculture movement of the 1960s and those of the 1970s, '80s, and '90s?
Maddox's "Snake-Eyes" was first published in Omni (April 1986). The story was then collected by Bruce Sterling and published in the now famous Mirrorshades: The Cyberpunk Anthology (New York: Arbor House, 1986). George Jordan, the central character in the story, is a post-war cyborg who is having some problems with what he refers to as "the snake" in him. The story raises the question of whether or not "cyber"—anything can, as etymologically suggested, view its own actions and destroy. Moreover, the story raises the question of the success of and reasons for changing a human being's identity. But the story is even more complicated in its questions, for subtly put forth is the idea that human beings are already a biological kind of cyborg connected to biological creatures other than mammals. Hence, the reference in the story to the "Y-complex" (the replication-complex) that is the inner core of the human brain. Human beings are layers and layers of cyborg-like creatures. The addition of the cybernetic implants complicates the already complex nature of human beings even more.

A chair covered in brown corduroy stood in the middle of the barren living room, a white telephone on the floor beside it, a television flat against the slightly mirror in the can—brown, oily, and flecked with mucus—gave off a repellant fishy smell, and the taste of it rose in his throat, puckered and bitter like something from a dead man's stomach. George Jordan sat on the kitchen floor and vomited, then pushed himself away from the shining pool, which looked very much like what remained in the can. He thought, no, this won't do. I have wires in my head, and they make me eat cat food. The male cat food.

He needed help, but knew there was little point in calling the Air Force. He'd tried them, and there was no way they were going to admit responsibility for the monster in his head. What George called "the snake," the Air Force called Effective Human Interface Technology, and they didn't want to hear about any post-discharge problems with it. They had their own problems with Congressional committees investigating "the conduct of the war in Thailand."

He lay for a while with his cheek on the cold linoleum, got up and rinsed his mouth in the sink, then stuck his head under the faucet and ran cold water over it, thinking, call the goddamn multi-complex then, call Sentras and say: is it true you can do something about this insidious thing that wants to take possession of my soul? And if they ask you, what's your problem? you say, eat food, and maybe they'll tell you, hell, it just wants to take possession of your lunch.

The Orlando Holiday Inn stood next to the airport terminal, where the tourists fared in eager for the delights of Disney World—but for me, George thought, there are no cute, smiling ducks and rodents. Here is everywhere, it's snake city.

Here as everywhere, it's snake city.
This one was six months out of the service and slowly losing what the Air Force doctors had made of his mind. Former Tech Sergeant George Jordan—two years of community college in Oakland, California, followed by enlistment in the Air Force, aircrew training, the 231T program. According to the profile Aleph had put together from Air Force records and National Data Bank, a man with slightly above-average aptitudes and intelligence, a distinctly above-average taste for the bizarre—thus his volunteering for 231T and combat. In his file pictures, he looked nondescript: five feet, ten, a hundred and seventy-six pounds, brown hair and eyes, neither handsome nor ugly. But it was an old picture and could not show the snake and the fear that came with it. You don’t know it, buddy. Innis thought, but you ain’t seen nothing yet.

The man came rumbling through the hatch, more or less helpless in fine fall, but Innis could see him figuring it out, willing the muscles to quit struggling, quit trying to cope with a gravity that simply wasn’t there. “What the hell do I do now?” George Jordan asked, hanging in midair, one arm holding onto the hatch housing.

“Relax. I’ll get you.” Innis pushed off the wall and swooped across to the man, grabbing him as he passed and then taking them both to the opposite wall and kicking them outward.

Innis gave George a few hours of futile attempts at sleep—enough time for the bright, gliding phosphenes caused by the high g’s of the trip up to disappear from his vision. George spent most of the time rolling around in his bunk, listening to the whir of the air conditioning and the creaks of the rotating station. Then Innis knocked on his compartment door and said through the door speaker, “Come on, fella. Time to meet the doctor. They walked through an older part of the station, where there were brown cloths of fossilized gum on the green plastic flooring, scuff marks on the walls, along with faint imprints of insignia and company names. KOG was repeated several times in ghost lettering. Innis told George it meant International Construction Orbital Group, now defunct, the original builders and controllers of Athena.

Innis stopped George in front of a door that read INTERFACE GROUP. “Go on in,” he said, “I’ll be around a little later.”

Pictures of cranes drawn with delicate white strokes on a tan silk background hung along one pale cream wall. Curved partitions in translucent foam, glowing with the soft light placed behind them, marked a central area, then modulated away, forming a corridor that led into darkness. George was sitting on a chocolate-sling couch, Charley Hughes lying back in a chrome and brown leatherette chair, his feet on the dark veneer table in front of him, a half inch of ash hanging from his cigarett.
clinical detachment the shaking of his hands. It was odd that they did not shake in the operating room, though it didn't matter in this case—All Forcemen had already carved on George. George... who needed a little luck now, because he was one of the statistically insignificant few for whom 321 was a ticket to special madness, the kind Aleph was interested in. There had been Paul Coen and Lizzie Heinz, both picked out of the SenTrax personnel files using a psychological profile cooked up by Aleph, both given 321 implants by him, Charley Hughes. Paul Coen had stepped into an airlock and blown himself into vacuum. Now there would be Lizzie and George.

No wonder his hands shook—talk about the cutting edge of high technology all you want, but remember, someone’s got to hold the knife.

At the armored heart of Athena Station sat a nest of concentric spheres. The innermost sphere measured fifty meters in diameter, was filled with inert liquid fluorocarbon, and contained a black, plastic two-meter cube that sprouted thick black cables from every surface.

Inside the cube was a fluid series of hologrammatic waveforms, fluctuating from nanoconcord to nanorecast in a player of knowledge and intuition. Aleph. It is constituted by an infinite regress of awarenesses—any thought becomes the object of another, in a sequence terminated solely by the limits of the machine’s will.

So strictly speaking there is no Aleph, thus no subject or verb in the sentences with which it expresses itself to itself. Paradox, to Aleph one of the most interesting of intellectual forms—a paradox marked the limits of a position, even of a mode of being, and Aleph was very interested in limits.

Aleph had observed George Jordan’s arrival, his testing on his book, his interview with Charley Hughes. It luxuriated in these observations, in the pity, compassion, and empathy they generated, as Aleph foreknew the sea change George would endure, its attendant sensations—eustatia, passions, pain. At the same time it felt with detachment the necessity for his pain, even to the point of death.

Compassion/detachment, death/life...

Several thousand voices within Aleph laughed. George would soon find out about limits and paradoxes. Would George survive? Aleph hoped so. It hungered for human touch.

Cafeteria 4 was a ten-meter-square room in eggshell blue, filled with dark gray enameled table-and-chair assemblies that could be fastened magnetically to any of the room’s surfaces, depending on the direction of spin-gravity. Most of the assemblies hung from walls and ceiling to make room for the people within.

At the door George met a tall woman who said, “Welcome, George. I’m Lizzie.” Charley Hughes told me you’d be here.” Her blond hair was cut almost to the skull; her eyes were bright, gold-tinted blue. Sharp nose, slightly receding chin, and prominent cheekbones gave her the starved look of an out-of-work model. She wore a black skirt, slit on both sides to the thigh, and red stockings. A red rose was rattled against the pale skin of her left shoulder, in green stem curving down between her bare breasts, where a thorn drew a stylized red teardrop of blood. Like George, she had shining cable junctions beneath her jaw. She kissed him with her tongue in her mouth.

“Are you the recruiting officer?” George asked. “If so, good job.”

“No need to recruit you. I can see you’ve already joined up.” She touched him lightly underneath her jaw, where the cable junctions glistened.

“But not yet, are you. She was right, of course—what else could he do? You got any beer around here?” He took the cold bottle of Dos Equis Lizzie offered him and drank it quickly, then asked for another. Later he realized this was a mistake—he hadn’t yet adjusted to low and zero gravity, and he was still taking anti-nausea pills (“Use caution in operating machinery”). At the time, all he knew was, two beers and life was a carnival. There were lights, noise, the table assemblies hanging from walls and ceiling like surreal sculpture, lots of unfamiliar people (he was introduced to many of them without lasting effect).

And there was Lizzie. The two of them spent much of the time standing in a corner, rubbing up against one another. Hardly George’s style, but at the time it seemed appropriate. Despite its intimacy, the kiss at the door had seemed ceremonial—a rite of passage or initiation—but quickly he felt... what? An invisible flame passing between them, or a boiling cloud of pheromones—her eyes seemed to sparkle with them. As he nuzzled her neck, tried to lick the drop of blood off her left breast, explored fine white teeth with his tongue, they seemed twinned, as if there were cables running between the two of them, snapped into the shining rectangles beneath their jaws.

Someone had a Jahnk program running on a bank of keyboards in the corner. Innis showed up and tried several times without success to get his attention. Charley Hughes wanted to know if the snake liked Lizzie—it did, George was sure of it, but didn’t know what that meant. Then George fell over a table.

Innis led him away, stumbling and weaving. Charley Hughes looked for Lizzie, who had disappeared for the moment. She came back and said, “Where’s George?”

“Drunk, gone to bed.”

“Too bad. We were just getting to know each other.”

“So I saw. How do you feel about doing this?”

“You mean do I feel like a lying, traitorous bitch?”

“Come on, Lizzie. We’re all in this together.”

“Well, don’t ask such dumb questions. I feel bad, sure, but I know what George doesn’t—I’m ready to do what must be done. And by the way, I really do like him.”

Charley said nothing. He thought, yes, as Aleph said you would.
Oh Chris was George embarrassed in the morning. Stumbling drunk and humping in public... at one. He tried to call Lizzi but only got an answer tape, at which point he hung up. Afterward he lay in his bed in a semi-snapor until the phone buzzed.

Lizzie's face on the screen spoke in tongue out at him. "Candy ass," she said. "I leave for a few minutes, and you're gone."

"Somebody brought me home. I think that's what happened."

"Yeah, you were pretty popped. You want to meet me for lunch?"

"Maybe. Depends on when Hughes wants me. Where will you be?"

"Same place, honey. Café Four.

A phone call got the news that the doctor wouldn't be ready for him until an hour late, so George ended up sitting across from the bright-eyed, manic blonde—fully dressed in SenTrax overall this morning, but they were open almost to the waist. She gave off sensual heat as naturally as a rose smells sweet. In front of her was a plate of home-generated pilsed with guacamole: yellow green, and red, with a pungent smell of chilies—in his condition, as bad as cut food. "Jessa, lady," he said. "Are you trying to make me sick?"

"Courage, George. Maybe you should have some—if I kill you or cure you, what do you think of everything so far?"

"It's all a bit disorienting, but what the hell? First time away from Mother Earth, you know. But let me tell you what I really don't get: SenTrax. I know what I want from them, but what the hell do they want from me?"

"They want this simple thing, man, peripheral. You and me, we're just parts for the machine. Aleph has got all these inputs—video, audio, radiation detectors, temperature sensors, satellite receivers—but they're duds. What Aleph wants, Aleph gets—"I've learned that much. He wants to use us, and that's all there is to it. Think of it as pure research."

"Hey, you mean Innis?"

"No, who gives a damn about Innis? I'm talking about Aleph. Oh yeah, people will tell you Aleph's a machine, an it all that bullshit. Uh-huh, Aleph's a man—a weird kind of person, but a definite person. Well, Aleph's maybe a whole bunch of people,"

"I'll take your word for it. Look, there's one thing I'd like to try, if it's possible. What do I have to do to get outside... go for a spacewalk?"

"It's easy enough. You have to get a license. That takes a three-week course in safety and operations. I can take you through it."

"You can?"

"Sooner or later we all earn our keep around here—I'm qualified as an ESA, Extra Station Activity, instructor. We'll start tomorrow."

The cranes on the wall flew to their mysterious destination; looking at the glowing foam walls and the display above the table, George thought it might as well be another universe. Truncated optic nerves sticking out like insect antennae, a brain floored beneath the extended black plastic snout of a Sony holographic projector. As Hughes worked the keyboard in front of him, the organ turned so that they were looking at its underside. "There it is," Charley Hughes said. It had a fine network of silver wires trailing from it, but seemed normal. "The George Jordan brain," Innis said. "With attachments. Very nice."

"Makes me feel like I'm watching my own autopsy, looking at that thing. When can you operate, get this shit out of my head?"

"Let me show you a few things," Charley Hughes said. As he typed, then turned the plastic mouse beside the console, the convoluted gray cortex became transparent, revealing red, blue and green color-coded structures within. Hughes reached into the center of the brain and clinked his fist inside a blue area at the top of the spinal cord. "Here is where the electrical connections turn biological—those little nodes along the pseudo-neurons are the bioprocessors, and they wire into the so-called 'r-complex'—which we inherited from our reptilian forefathers. The pseudo-neurons continue into the limbic system—the mammalian brain, if you will—and that's where emotion enters in. But there is further involvement to the neocortex through the rans, the reticular activating system, and the corpus colossus. There are also connections to the optic nerve."

"I've heard this gibberish before. What's the point?"

Innis said, "There's no way of removing the implants without loss of order in your neural maps. We can't remove them."

"Oh shit, man..."

Charley Hughes said, "Though the snake cannot be removed, it can perhaps be charmed. Your difficulties arise from its uncivilized, uncontrolled nature—in its appetite, you might say, primal. An ancient part of your brain has gotten the upper hand over the neocortex, which properly should be in command. Through working with Aleph, these... prepotenti can be integrated into your personality and thus controlled."

"What choice do you get?" Innis asked. "We're the only game in town. Come on, George. We're ready for you just down the corridor."

The only light in the room came from a globe in one corner. George lay across a kind of hammock, a rectangular lattice of twisted brown fibers strung across a transparent plastic frame and suspended from the ceiling of the small, dome-ceilinged, pink room. Flesh-colored cables ran from his neck and disappeared into chrome plates sunk into the floor.

Innis said, "First we'll run a test program. Charley will give you perception—colors, sounds, tastes, smells—and you tell him what you're picking up. We need to make sure we've got a clean interface. Call the items off, George, and he'll stop you if he has to."

Innis went through a door and into a narrow rectangular room, where Charley Hughes sat at a dark plastic console studded with lights. Behind him were chrome stands of monitor-and-control equipment, the yellow SenTrax sunburst on the face of each piece of shining metal.

The pink walls were red, the light strobed, and George writhed in the hammock. Charley Hughes's voice came through George's inner ear. "We are beginning."
"Good. Go on."
"A smell, ah... sawdust, maybe."
"You got it."
This went on for quite a while. "You're ready," Charley Hughes said.

When Aleph came on-line, the red room disappeared.

A matrix 800 by 800—six hundred and forty thousand pixels forming an optical image—the CAS's superwara remnant, a cloud of dust seen through a composite of x-ray and radio wave from MERGO, NASA's High Energy High Orbit Observatory. But George didn't see the image at all—he listened to an ordered, meaningful array of information.

Byn transmission 7.5 million groups sprying from a National Security Agency satellite to a receiving station near Chincrete Island, off the eastern shore of Virginia. He could read them.

"It's all information," the voice said—its tone not colorless but seamless, and somehow distant. "What we know, what we are. You're at a new level now. What you call the snake cannot be reached through language—it exists in a prelinguistic mode—but through me it can be manipulated. First, however, you must learn the codes that underlie language. You must learn to see the world as I do."

Lizzie took George to be fitted for a suit, and he spent that day learning how to get in and out of the stuff white charpax without assistance. Then over the next three weeks she led him through its primary operations and the dense list of safety procedures.

"Red Burn," she said. They floated in the suit locker, empty suit cases beneath them, the white shells hanging from one wall like an audience of disabled robots. "You see that one spooled out on your faceplate, and you have screwed up. You've put yourself into some kind of no-return trajectory. So you just cool everything and call for help, which should arrive in the form of Aleph taking control of your suit functions, and then you relax and don't do a damned thing."

He flew first in a lighted dome in the station, his faceplate open and Lizzie yelling at him, begging as he tumbled out of control and bounced off the padded walls. After a few days of that, they went outside the station, George on the end of a tether, flying by instruments, his faceplate masked, Lizzie hinting him with "Red Burn," "Suit Integrity Failure," and so forth.

While George focused most of his energies and attention on learning to use the suit, each day he reported to Hughes and plugged into Aleph. The hammock would swing gently after he settled into it; Charley would snap the cables home and leave.

Aleph unfolded himself slowly. It fed him machine and assembly language, led him through vast trees of C-SMART, its "intelligent assistant" decision-making program, opened up the whole electromagnetic spectrum as it came in from Aleph's various inputs. George understood it all—the voices, the codes.

When he unplugged, the knowledge faded but there was something else behind it, so far just a shewing of perception, a sense that his world had changed.

Instead of color, he sometimes saw a portion of the spectrum; instead of smell, he felt the presence of certain molecules; instead of words, he heard structured collections of phonemes. His consciousness had been infected by Aleph's.

But that wasn't what worried George. He seemed to be cooking inside, and he had a more or less constant awareness of the snake's presence, dormant but naggingly there. One night he smacked most of a pack of Charley's Gauloises and woke up the next morning with barbed wire in his throat and fire in his lungs. That day he snapped at Lizzie as she put him through his paces and once lost control entirely—she had to disable his suit controls and bring him down. "Red Burn," she said. "Man, what the hell were you doing?"

At the end of three weeks, he solved—no exerted exercise but a self-guided Extra Station Activity, hang your ass out over the endless night. He edged carefully from the protection of the airlock and looked around him.

The Orbital Energy Grid, the construction job that had brought Athens into existence, hung before him, photovoltaic collectors arranged in an ebony lattice, silver microwave transmitters standing in the sun. But the station itself held the eye, its hodgepodge of living, working, and experimental structures clustered without apparent regard to symmetry or form—some rotating to provide spin-gravity, some motionless in the unflustered sunlight. Amber-beaconed figures crawled slowly across its face or moved toward red-lighted tracks, which looked like piles of random junk as they moved in long arcs, their maneuvering rockets lighting up in brief, diamond-hard points.

Lizzie layed just outside the airlock, tracking him by his suit's radio beacon but letting him run free. She said, "Move away from the station. George. It's blocking your view of Earth." He did.

White clouds stretched across the blue globe, patches of brown and green visible through it. At 1,400 hours his time, he was looking down almost directly above the mouth of the Amazon, where it was noon, so the Earth stood in full sunlight. Just a small thing, filling only nineteen degrees of his vision...

"Oh yes," George said. His hum of the suit's air conditioning, crackle over the earphones of some stray radiation passing through, quick pace of his breath inside the helmet—sounds of this moment, superimposed on the floating loneliness. His breath came more slowly, and he switched off the radio to quiet its static, turned down the suit's air conditioning, then hung in ear-roaring silence. He was a speck against the night.
Sometime later a white suit with a trainer's red cross on its chest moved across his vision. "Oh shit," George said and switched his radio on. "I'm here, Lizzie," he said. "George, you don't screw around like that. What the hell were you doing?" "Just watching the view."

That night he dreamed of pink dogwood blossoms, luminous against a purple sky, and the white noise of rainfall. Something scratched at the door—he awoke to a filtered but mechanical smell of the space station, felt a deep regret that the rain could never fall there, and started to turn over and go back to sleep, hoping to dream again of the idyllic, rainswepet landscape. Then he thought, something's there, got up, saw by red numbers on the wall that it was after two in the morning, and went naked to the door.

White globs cast misshapen spheres of light in a line around the curve of the corridor. Lizzie lay motionless, half in shadow. George knelt over her and called her name: her left foot made a thump as it kicked once against the metal flooring.

"What's wrong?" he said. Her dark-painted nails scraped the floor, and she said something, he couldn't tell what. "Lizzie," he said. "What do you want?"

His eyes caught on the red teardrop against the white curve of breast, and he felt something come alive in him. He grabbed the front of her jumpsuit and ripped it to the crotch. She clawed at his cheek, made a sound millions of years old, then raised her head and looked at him, mutual recognition passing between them like a static shock: snake-eyes.

The phone buzzed. When George answered it, Charley Hughes said, "Come see us in the conference room, we need to talk." Charley smiled and cut the connection.

Hughes sat at one end of the dark-veneered table, Innis at the other, Lizzie halfway between them. The left side of her face was red and swollen, with a small purplish mole under the eye. George unthinkingly touched the livid scratches on her cheek, then sat on the couch, placing himself out of the circle.

"Aleph told us what happened," Innis said. "How the hell does it know?" George said, but as he did so he remembered concave circles of glass inset in the ceilings of the corridors and his

room. Shame, guilt, humiliation, fear, anger—George got up from the couch, went to Innis's end of the table, and leaned over him. "Did it?" he said. "What did it say about the snake, Innis? Did it tell you what the hell went wrong?"

"It's not the snake," Innis said.

"Call it the cat," Lizzie said, "if you've got to call it something. Membranous behavior, George, cats in heat."

A familiar voice—cool, distant—came from speakers in the room's ceiling. "She is trying to tell you something, George. There is no snake. You want to believe in something repugnant that sits inside you, cold and distant, taking strange pleasures. However, as Dr. Hughes explained to you before, the implant is an organic part of you. You can no longer evade the responsibility for these things. They are you."

Charley Hughes, Innis, and Lizzie were looking at him calmly, perhaps expectantly. All that had happened built up inside him, washing through him, carrying him away. He turned and walked out of the room.

"Maybe someone should talk to him," Innis said. Charley Hughes sat grim and speechless, cigarette smoke in a cloud around him. "I'll go," Lizzie said. She got up and left.

"Ready or not, he's gonna blow," Innis said.

Charley Hughes said, "You're probably right." A fleeting picture, capturing Charley to shake his head, of Paul Coen as his body went to rubber and exploded out the airlock hatch, pictured with terrible clarity in Aleph's omniscient monitoring cameras. "Let us hope we have learned from our mistakes."

There was no answer from Aleph—as if it had never been there.
junctures in her neck. "Feel it, our difference." Fine grid of steel under his finger. "What no one else knows. What we are, what we can do. We see a different world—Aleph’s world—we reach deeper inside ourselves, experience impulses that are hidden from others, that they deny."

"No, dadammit, it wasn’t me. It was—call it what you want, the snake, the cat."

"You’re being purposely stupid, George."

"I just don’t understand."

"You understand, all right. You want to go back, but there’s no place to go, no Eden. This is it. All there is.”

But he could fall to Earth, he could fly away into the night. Inside the suit’s gauntlets, his hands were wrapped around the claw-shaped triggers. Just a quick clench of the fists, then hold them until all the power is gone, the suit’s propulsion tank exhausted. That’ll do it.

He hadn’t been able to live with the snake. He sure didn’t want the cat. But how much worse if there were no snake, no cat—just him, programmed for particularly disgusting forms of gluttony, violent lust, trapped inside a miserable self (“We’ve got your test results, Dr. Jekyll!”)… oh, what next—child molestation, murder?

The blue-white Earth, the stars, the night. He gave a slight pull on the right-hand trigger and twisted to face Athena Station.

Call it what you want, it was awake and moving now inside him. With its rage, lust—appetite. To hell with them all, George, it urged, let’s burn.

In Athena Command, Innis and Charley Hughes were looking over the shoulder of the watch officer when Lizzie came in. As always when she hadn’t been there for a while, Lizzie was struck by the smallness of the room and its general air of disuse—typically, it would be occupied only by the duty officer, its screens blank, consoles unlighted. Aleph ran the station, both its routines and emergencies.

"What’s going on?" Lizzie said.

"Something wrong with one of your new chums," the watch officer said. "I don’t know exactly what’s happening, though."

He looked around at Innis, who said, "Don’t worry about it, pal."

Lizzie slumped in a chair. "Anyone tried to talk to him?"

"He won’t answer,” the duty officer said.

"He’ll be all right,” Charley Hughes said.

"He’s gonna blow,” Innis said.

On the radar screen, the red dot, with coordinate markings flashing beside it, was barely moving.

"How are you feeling, George?" the voice said, soft, feminine, counseling.
George felt an anger, not the snake's this time but his own, and he wept with that anger and frustration... I will go see the next time, motherfucker; he told the snake and could feel it shrink away—it believed him. Still his rage built, and he was screaming with it, wuthing in the lines that held him, smashing his gauntlets against his helmet.

At the open airlock, long articulated gryphoid arms took George from the robot tug. Passive, his anger exhausted, he lay quietly as they retracted, dragging him through the airlock entry and into the suit locker beyond, where they placed him in an aluminum strait cradle. Through his FacePlate he saw Lizzie, dressed in a white cotton underuit—she'd been ready to meet the tug outside. She climbed onto George's suit and worked the controls to split its hard body down the middle. As it opened with a whistle of electric motors, she stepped inside the clamshell opening. She hit the switches that disconnected the flexible arm and leg tubes, unfastened the helmet, and lifted it off George's head.

"How do you feel?" she said.
That's a stupid question, George started to say; instead, he said, "Like an idiot."

"It's all right. You've done the hard part."

Charley Hughes watched from a catwalk above them. From this distance they looked like children in the white underuits, twins emerging from a plastic womb, watched over by the blank-faced shells hanging above them. Incestuous twins—she lay nestled atop him, kissed his throat. "I am not a voyuer," Hughes said. He opened the door and went into the corridor, where Innis was waiting.

"How is everything?" Innis said.
"It seems that Lizzie will be with him for a while."

"Yeah. I am glad for it... if it weren't for this erotic attachment, we'd be the ones explaining it all to him, and I'll tell you, that's the hardest part of this gig."

"We cannot evade that responsibility so easily. He will have to be told how we put him at risk, and I don't look forward to it."

"Don't be so sensitive. But I know what you mean—I'm tired. Look, you need me for anything, call." Innis shuffled down the corridor.

Charley Hughes sat on the floor, his back against the wall. He held his hands out, palms down, fingers spread. Solid, very solid. When they got their next candidate, the shaking would start again.

Lizzie would be explaining some things now. That difficult central point. While you thought you were getting accustomed to Aleph during the past three weeks, Aleph was inciting the thing within you to rebellion, then pressuring its attempts to act—turning up the heat, in other words, while tightening down the lid on the kettle. Why, George?

We drew you crazy, drew you to attempt suicide. We had our reasons. George Jordan was, if not dead, terminal. From the moment the implants went into his head, he was on the critical list. The only question was, would a new George emerge, one who could live with the snake?
3. What is A-Ixy and its importance to the story? What is Lizzy and how does she function in the story? Why is George Jordan set up to meet her? What is done to George in the second half of the story? How does he change? What does he become for Lizzy, and Lizzy for him?

**WRITING ASSIGNMENTS FOR READING**

1. Take a few minutes and write down what you consider to be your responses to the story, right after reading it. Start out with basic questions such as, Did I like it or not, did I understand it or not, and so on. Then have a discussion in class stating what you discovered after writing down your thoughts. Once everyone who wants to speak has had an opportunity, try to determine if the males and the females had different responses. If so, what were the differences? Write down the differences. Reread the story and try to determine what your responses are then.

2. Write a cyberpunk SF story. Distribute it to those who would be interested in reading it.

Thus within the Net there has begun to emerge a shadowy sort of counter-Net.