

HARDFOUGHT

by Greg Bear

“Hardfought” was purchased by Shawna McCarthy toward the beginning of her regime and appeared in the February 1983 issue of IAsfm, with illustrations by H.R. Van Dongen. It was the first IAsfm story to carry a “warning label”—usually a notice that the story contains explicit sexual material and/or “hard” language; in the case of “Hardfought,” it was not so much used for that as to warn people that what they were about to read was wildly unlike anything that had ever appeared in IAsfm before—vaultingly ambitious, stunningly complex, and staggering in scope. The purchase of “Hardfought” was a real gamble on McCarthy’s part—and one that paid off handsomely. “Hardfought” became one of the most critically acclaimed stories of the year, hailed everywhere as a “breakthrough” novella, a step forward in the evolution of the genre. It went on to win a Nebula Award that year, as did Bear’s “Blood Music,” from our sister publication, Analog. Bear has not appeared subsequently in IAsfm, alas, but we intend to Keep After Him.

Born in San Diego, California, Greg Bear made his first sale at the age of fifteen to Robert Lowndes’ Famous Science Fiction, and has subsequently established himself as one of the top young professionals in the genre. His books include the novels *Hegira*, *Psychlone*, *Beyond Heaven’s River*, *Strength of Stones*, *The Infinity Concerto*, and the collection *The Wind From a Burning Woman*. His most recent books are the novels *Blood Music*, an expanded version of his Nebula winning story, *Eon*, *The Serpent Mage*, and *The Forge of God*.

Humans called it the Medusa. Its long twisted ribbons of gas strayed across fifty parsecs, glowing blue, yellow, and carmine. Its central core was a ghoulish green flecked with watery black. Half a dozen protostars circled the core, and as many more dim conglomerates pooled in dimples in the nebula’s magnetic field. The Medusa was a huge womb of stars—and disputed territory.

Whenever Prufrex looked at it in displays or through the ship’s ports, it seemed malevolent, like a zealous mother displaying an ominous face to protect her children. Prufrex had never had a mother, but she had seen them in some of the fibs.

At five, Prufrex was old enough to know the Mellangee’s mission and her role in it. She had already been through four ship-years of indoctrination. Until her first battle she would be educated in both the Know and the Tell. She would be exercised and trained in the Mocks; in sleep she would dream of penetrating the huge red-and-white Senexi seedships and finding the brood mind. “Zap, Zap,” she went with her lips, silent so the tellman wouldn’t think her thoughts were straying.

The tellman peered at her from his position in the center of the spherical classroom. Her mates stared straight at the center, all focusing somewhere around the tellman’s spiderlike teaching desk, waiting for the trouble, some fidgeting. “How many branch individuals in the Senexi brood mind?” he asked. He looked around the classroom. Peered face by face. Focused on her again. “Pru?”

“Five,” she said. Her arms ached. She had been pumped full of moans the wake before. She was already

three meters tall, in elfstate, with her long, thin limbs not nearly adequately fleshed out and her fingers still crisscrossed with the surgery done to adapt them to the gloves.

“What will you find in the brood mind?” the tellman pursued, his impassive face stretched across a hammerhead as wide as his shoulders. Some of the ferns thought tellmen were attractive. Not many—and Pru was not one of them.

“Yoke,” she said.

“What is in the brood-mind yoke?”

“Fibs.”

“More specifically? And it really isn’t all fib, you know.”

“Info. Senexi data.”

“What will you do?”

“Zap,” she said, smiling.

“Why, Pru?”

“Yoke has team gens-memory. Zap yoke, spill the life of the team’s five branch inds.”

“Zap the brood, Pru?”

“No,” she said solemnly. That was a new instruction, only in effect since her class’s inception. “Hold the brood for the supreme overs.” The tellmen did not say what would be done with the Senexi broods. That was not her concern.

“Fine,” said the tellman. “You tell well, for someone who’s always half-journeying.”

She was already five, soon six. Old. Some saw Senexi by the time they were four.

“Zap, Zap,” she went with her lips.

Aryz skidded through the thin layer of liquid ammonia on his broadest pod, considering his new assignment. He knew the Medusa by another name, one that conveyed all the time and effort the Senexi had invested in it. The protostar nebula held few mysteries for him. He and his four branch-mates, who along with the all-important brood mind made up one of the six teams aboard the seedship, had patrolled the nebula for ninety-three orbits, each orbit—including the timeless periods outside status geometry—taking some one hundred and thirty human years. They had woven in and out of the tendrils of gas, charting the infalling masses and exploring the rocky accretion disks of stars entering the main sequence. With each measure and update, the brood minds refined their view of the nebula as it would be a hundred generations hence when the Senexi plan would finally mature.

The Senexi were nearly as old as the galaxy. They had achieved spaceflight during the time of the starglobe when the galaxy had been a sphere. They had not been a quick or brilliant race. Each great achievement had taken thousands of generations, and not just because of their intellectual handicaps. In those times elements heavier than helium had been rare, found only around stars that had greedily absorbed huge amounts of primeval hydrogen, burned fierce and blue, and exploded early, permeating the ill-defined galactic arms with carbon and nitrogen, lithium and oxygen. Elements heavier than iron had been almost nonexistent. The biologies of cold gas-giant worlds had developed with a much smaller palette of chemical combinations in producing the offspring of the primary Population II stars.

Aryz, even with the limited perspective of a branchind, was aware that, on the whole, the humans opposing the seed-ship were more adaptable, more vital. But they were not more experienced. The Senexi with their billions of years had often matched them. And Aryz’s perspective was expanding with each day of his new assignment.

In the early generations of the struggle, Senexi mental stasis and cultural inflexibility had made them avoid contact with the Population I species. They had never begun a program of extermination of the younger, newly life-forming worlds; the task would have been monumental and probably useless. So when spacefaring cultures developed, the Senexi had retreated, falling back into the redoubts of old stars even before engaging with the new kinds. They had retreated for three generations, about thirty thousand human years, raising their broods on cold nestworlds around red dwarfs, conserving, holding back for the inevitable conflicts.

As the Senexi had anticipated, the younger Population I races had found need of even the aging groves of the galaxy’s first stars. They had moved in savagely, voraciously, with all the strength and mutability of

organisms evolved from a richer soup of elements. Biology had, in some ways, evolved in its own right and superseded the Senexi.

Aryz raised the upper globe of his body, with its five silicate eyes arranged in a cross along the forward surface. He had memory of those times, and times long before, though his twain hadn't existed then. The brood mind carried memories selected from the total store of nearly twelve billion years' experience, an awesome amount of knowledge, even to a Senexi. He pushed himself forward with his rear pods.

Through the brood mind Aryz could share the memories of a hundred thousand past generations, yet the brood mind itself was younger than its branch individuals. For a time in their youth, in their liquid-dwelling larval form, the branch inds carried their own sacs of data, each a fragment of the total necessary for complete memory. The branch inds swam through ammonia seas and wafted through thick warm gaseous zones, protoplasmic blobs three to four meters in diameter developing their personalities under the weight of the past; and not even a complete past. No wonder they were inflexible Aryz thought. Most branch inds were aware enough to see that—especially when they were allowed to compare histories with the Population I species, as he was doing—but there was nothing to be done. They were content Oa s they were. To change would be unspeakably repugnant. Extinction was preferable . . . almost.

But now they were pressed hard. The brood mind had to m a number of experiments. Aryz's team had been selected from the seedship's contingent to oversee the experiments, and Aryz had been chosen as the chief investigator. Two orbits past, they had captured six human embryos in a breeding device, as well as a highly coveted memory storage center. Most Senexi engagements had been with humans for the past three or four generations. Just as the Senexi dominated Population II species, humans were ascendant among their kind.

Experiments with the human embryos had already been conducted. Some had been allowed to develop normally; others had been tampered with, for reasons Aryz was not aware of. The tamperings had not been very successful.

The newer experiments, Aryz suspected, were going to take a different direction, and the seedship's actions now focused on him; he believed he would be given complete authority over the human shapes. Most branch inds would have dissipated under such a burden, but not Aryz. He found the human shapes rather interesting, in their own horrible way. They might, after all, be the key to Senexi survival.

The moans were toughening her elfstate. She lay in pain for a wake, not daring to close her eyes; her mind was changing and she feared sleep would be the end of her. Her nightmares were not easily separated from life; some, in fact, were sharper.

Too often in sleep she found herself in a Senexi trap, struggling uselessly, being pulled in deeper, her hatred wasted against such power.

When she came out of the rigor, Prufrax was given leave by the subordinate tellman. She took to the Mellangee's greenroads, walking stiffly in the shallow gravity. Her hands itched. Her mind seemed almost empty after the turmoil of the past few wakes. She had never felt so calm and clear. She hated the Senexi double now; once for their innate evil, twice for what they had made her overs put her through to be able to fight them. She was growing more mature wake by wake. Fight-budding, the tellman called it, hate coming out like blooms, synthesizing the sunlight of his teaching into pure fight.

The greenroads rose temporarily beyond the labyrinth shields and armor of the ship. Simple transparent plastic-and-steel geodesic surfaces formed a lacework over the gardens, admitting radiation necessary to the vegetation growing along the paths.

Prufrax looked down on the greens to each side of the paths without much comprehension. They were beautiful. Yes, one should say that, think that, but what did it mean? Pleasing? She wasn't sure what being pleased meant, outside of thinking Zap. She sniffed a flower that, the signs explained, bloomed only in the light of young stars not yet fusing. They were near such a star now, and the greenroads were shiny black and electric green with the blossoms. Lamps had been set out for other plants unsuited to such darkened conditions. Some technic allowed suns to appear in selected plastic panels when viewed from certain angles. Clever, the technicals.

She much preferred the looks of a technical to a tellman, but she was common in that. She wished a technical were on the greenroads with her. The moans had the effect of makingher receptive—what she

saw, looking in mirrors, was a certain shine in her eyes—but there was no chance of a breeding liaison. She was quite unproductive in this moment of elf-state.

She looked up and saw a figure at least a hundred meters away, sitting on an allowed patch near the path. She walked casually, as gracefully as possible with the stiffness. Not a technical, she saw soon, but she was not disappointed. Too calm.

“Over,” he said as she approached.

“Under,” she replied. But not by much—he was probably six or seven ship-years old and not easily classifiable.

“Such a fine elfstate,” he commented. His hair was black. He was shorter than she, but something in his build reminded her of the glovers. He motioned for her to sit, and she did so with a whuff, massaging her knees.

“Moans?” he asked.

“Bad stretch,” she said.

“You’re a glover.” He was looking at the fading scars on her hands.

“Can’t tell what you are,” she said.

“Noncombat,” he said. “Tuner of the mandates.”

She knew very little about the mandates, except that law decreed every ship carry one, and few of the crew were ever allowed to peep. “Noncombat, hm?” She mused. She didn’t despise him for that; one never felt strong negatives for a crew member.

“Been working on ours this wake,” he said. “Too hard, I guess. Told to talk.” Overzealousness in work was considered an erotic trait aboard the Mellangee. Still, she didn’t feel too receptive toward him.

“Glovers walk after a rough growing,” she said.

He nodded. “My name’s Clevo.”

“Prufrax.”

“Combat soon?”

“Hoping. Waiting forever.”

“I know. Just been allowed access to the mandate for a half-dozen wakes. All new to me. Very happy.”

“Can you talk about it?” she asked. Information about the ship not accessible in certain rates was excellent barter. “Not sure,” he said, frowning. “I’ve been told caution.”

“Well, I’m listening.”

He could come from glover stock, she thought, but probably not from technical. He wasn’t very muscular, but he wasn’t as tall as a glover, or as thin, either.

“If you’ll tell me about gloves.”

With a smile she held up her hands and wriggled the short, stumpy fingers. “Sure.”

The brood mind floated weightless in its tank, held in place by buffered carbon rods. Metal was at a premium aboard the Senexi ships, more out of tradition than actual material limitations.

Aryz floated before the brood mind, all these thoughts coursing through his tissues. He had no central nervous system, no truly differentiated organs except those that dealt with the outside world—limbs, eyes, perinea. The brood mind, however, was all central nervous system, a thinly buffered sac of viscous fluids about ten meters wide.

“Have you investigated the human memory device yet?” the brood mind asked.

“I have.”

“Is communication with the human shapes possible for us?”

“We have already created interfaces for dealing with their machines. Yes, it seems likely we can communicate.”

“Does it strike you that in our long war with humans, we have made no attempt to communicate before?”

This was a complicated question. It called for several qualities that Aryz, as a branch ind, wasn’t supposed to have. Inquisitiveness, for one. Branch inds did not ask questions. They exhibited initiative only as offshoots of the brood mind.

He found, much to his dismay, that the question had occurred to him. “We have never captured a human memory store before,” he said, by way of incomplete answer. “We could not have communicated

without such an extensive source of information.”

“Yet, as you say, even in the past we have been able to use human machines.”

“The problem is vastly more complex.”

The brood mind paused. “Do you think the teams have been prohibited from communicating with humans?”

Aryz felt the closest thing to anguish possible for a branch ind. Was he being considered unworthy?

Accused of conduct inappropriate to a branch ind? His loyalty the brood mind was unshakeable. “Yes.”

“And what might our reasons be?”

“Avoidance of pollution.”

“Correct. We can no more communicate with them and remain untainted than we can walk on their worlds, breathe their atmosphere.” Again, silence. Aryz lapsed into a mode of inactivity. When the brood mind readdressed him, he was instantly aware.

“Do you know how you are different?” it asked.

“I am not . . .” Again, hesitation. Lying to the brood mind was impossible for him. He signalled his distress.

“You are useful to the team,” the brood mind said. Aryz calmed instantly. His thoughts became sluggish, receptive. There was a possibility of redemption. But how was he different? “You are to attempt communication with the shapes yourself. You will not engage in any discourse with your fellows while you are so involved.” He was banned. “And after completion of this mission and transfer of certain facts to me, you will dissipate.”

Aryz struggled with the complexity of the orders. “How am I different, worthy of such a commission?”

The surface of the brood mind was as still as an undisturbed pool. The indistinct black smudges that marked its radiating organs circulated slowly within the interior, then returned, one above the other, to focus on him. “You will grow a new branch ind. It will not have your flaws, but, then again, it will not be useful to me should such a situation come a second time. Your dissipation will be a relief, but it will be regretted.”

“How am I different?”

“I think you know already,” the brood mind said. “When the time comes, you will feed the new branch ind all your memories but those of human contact. If you do not survive to that stage of its growth, you will pick your fellow who will perform that function for you.”

A small pinkish spot appeared on the back of Aryz’s globe. He floated forward and placed his largest perineum against the brood mind’s cool surface. The key and command were passed, and his body became capable of reproduction. Then the signal of dismissal was given. He left the chamber.

Flowing through the thin stream of liquid ammonia lining the corridor, he felt ambiguously stimulated. His was a position of privilege and anathema. He had been blessed—and condemned. Had any other branch ind experienced such a thing?

Then he knew the brood mind was correct. He was different from his fellows. None of them would have asked such questions. None of them could have survived the suggestion of communicating with human shapes. If this task hadn’t been given to him, he would have had to dissipate anyway.

The pink spot grew larger, then began to make grayish flakes. It broke through the skin, and casually, almost without thinking, Aryz scraped it off against a bulkhead. It clung, made a radio-frequency emanation something like a sigh, and began absorbing nutrients from the ammonia.

Aryz went to inspect the shapes.

She was intrigued by Clevo, but the kind of interest she felt was new to her. She was not particularly receptive. Rather, she felt a mental gnawing as if she were hungry or had been injected with some kind of brain moans. What Clevo told her about the mandates opened up a topic she had never considered before. How did all things come to be—and how did she figure in them?

The mandates were quite small, Clevo explained, each little more than a cubic meter in volume. Within them was the entire history and culture of the human species, as accurate as possible, culled from all existing sources. The mandate in each ship was updated whenever the ship returned to a contact station. Clevo had been assigned small tasks—checking data and adding ship records—that had allowed him to

sample bits of the mandate. "It's mandated that we have records," he explained, "and what we have, you see, is man-data." He smiled. "That's a joke," he said. "Sort of."

Prufrax nodded solemnly. "So where do we come from?" "Earth, of course," Clevo said. "Everyone knows that." "I mean, where do we come from—you and I, the crew." "Breeding division. Why ask? You know."

"Yes." She frowned, concentrating. "I mean, we don't come from the same place as the Senexi. The same way." "No, that's foolishness."

She saw that it was foolishness—the Senexi were different all around. What was she struggling to ask? "Is their fib like our own?"

"Fib? History's not a fib. Not most of it, anyway. Fibs are for unreal. History is over fib."

She knew, in a vague way, that fibs were unreal. She didn't like to have their comfort demeaned, though.

"Fibs are fun," she said. "They teach Zap."

"I suppose," Clevo said dubiously. "Being noncombat, I don't see Zap fibs."

Fibs without Zap were almost unthinkable to her. "Such dull," she said.

"Well, of course you'd say that. I might find Zap fibs dull—think of that?"

"We're different," she said. "Like Senexi are different."

Clevo's jaw hung open. "No way. We're crew. We're human. Senexi are ..." He shook his head as if fed bitters.

"No, I mean ..." She paused, uncertain whether she was entering unallowed territory. "You and I, we're fed different, given different moans. But in a big way we're different from Senexi. They aren't made, nor act, as you and I. But ..." Again it was difficult to express. She was irritated. "I don't want to talk to you anymore."

A tellman walked down the path, not familiar to Prufrax. He held out his hand for Clevo, and Clevo grasped it. "It's amazing," the tellman said, "how you two gravitate to each other. Go, elfstate," he addressed Prufrax. "You're on the wrong greenroad."

She never saw the young researcher again. With glover training under way, the itches he aroused soon faded, and Zap resumed its overplace.

The Senexi had ways of knowing humans were near. As information came in about fleets and individual cruisers less than one percent nebula diameter distant, the seedship seemed warmer, less hospitable. Everything was UV with anxiety, and the new branch ind on the wall had to be shielded by a special silicate cup to prevent distortion. The brood mind grew a corniculum automatically, though the toughened outer membrane would be of little help if the seedship was breached.

Aryz had buried his personal confusion under a load of work. He had penetrated the human memory store deeply enough to find instructions on its use. It called itself a mandate and even the simple preliminary directions were difficult for Aryz. It was like swimming in another family's private sea, though of course infinitely more alien; how could he connect with experiences never had, problems and needs never encountered by his kind?

He observed the new branch ind once or twice each watch period. Never before had he seen an induced replacement. The normal process was for two brood minds to exchange plasm and form new team buds, then to exchange and nurture the buds. The buds were later cast free to swim as individual larvae. While the larvae swam through the liquid and gas atmosphere of a Senexi world often for thousands, even tens of thousands of kilometers, inevitably they returned to gather with the other buds of their team.

Replacements were selected from a separately created pool of "generic" buds only if one or more originals had been destroyed during their wanderings. The destruction of a complete team meant reproductive failure.

In a mature team, only when a branch ind was destroyed did the brood mind induce a replacement. In essence, then, Aryz was already considered dead.

Yet he was still useful. That amused him, if the Senexi emotion could be called amusement. Restricting himself from his fellows was difficult, but he filled the time by immersing himself, through the interface, in the mandate.

The humans were also connected with the mandate through their surrogate parent, and in this manner

they were quiescent.

He reported infrequently to the broodmind. Until he had established communication, there was little to report.

And throughout his turmoil, like the others he could sense a fight was coming. It could determine the success or failure of all their work in the nebula. In the grand scheme, failure here might not be crucial.

But the Senexi had taken the long view too often in the past.

And he knew himself well enough to doubt he would fail. He could feel an affinity for the humans already. Peering at them through the thick glass wall in their isolated chamber, his skin paling at the thought of their heat, their poisonous chemistry. A diseased affinity. He hated himself for it. And reveled in it. It was what made him particularly useful to the team. If he was defective, and this was the only way he could serve, then so be it.

The other branch inds observed his passings from a distance, making no judgments. Aryz was dead, though he worked and moved. His sacrifice had been fearful. Yet he would not be a hero. His kind could never be emulated.

It was a horrible time, a horrible conflict.

She floated in language, learned it in a trice; there were no distractions. She floated in history and picked up as much as she could, for the source seemed inexhaustible. She tried to distinguish between eyes-open—the barren, pale gray-brown chamber with the thick green wall, beyond which floated a murky roundness—and eyes-shut, when she dropped back into language and history with no fixed foundation.

Eyes-open, she saw the Mam with its comforting limbs and its soft voice, its tubes and extrusions of food and its hissings and removal of waste. Through Mam's wires she learned. Mam also tended another like herself, and another unlike either of them, more like the shape beyond the green wall.

She was very young, and it was all a mystery.

At least she knew her name. And what she was supposed to do. She took small comfort in that.

They fitted Prufrax with her gloves, and she went into the practice chamber, dragged by her gloves almost, for she hadn't yet knitted the plug-in nerves in her right index digit and her pace control was uncertain.

There, for six wakes straight, she flew with the other glovers back and forth across the dark spaces like elfstate comets. Constellations and nebula aspects flashed at random on the distant walls, and she oriented to them like a night-flying bird. Her glovemates were Ornin, an especially slender male, and Ban, a red-haired female, and the special-projects sisters Ya, Trice, and Damu, new from the breeding division.

When she let the gloves have their way, she was freer than she had ever felt before. Control was somewhere uncentered, behind her eyes and beyond her fingers, as if she were drawn on a beautiful silver wire where it was best to go. Doing what was best to do. She barely saw the field that flowed from the grip of the thick, solid gloves or felt its caressing, life-sustaining influence. Truly, she hardly saw or felt anything but situations, targets, opportunities, the success or failure of the Zap. Failure was an acute pain. She was never reprimanded for failure; the reprimand was in her blood, and she felt as if she wanted to die. But then the opportunity would improve, the Zap would succeed, and everything around her—stars, Senexi seedship, the Mellangee, everything—seemed part of a beautiful dream all her own.

She was intense in the Mocks.

Their initial practice over, the entry play began.

One by one, the special-projects sisters took their hyperbolic formation. Their glove fields threw out extensions, and they combined force. In they went, the mock Senexi seedship brilliant red and white and UV and radio and hateful before them. Their tails swept through the seedship's outer shields and swirled like long silky hair laid on water; they absorbed fantastic energies, grew bright like violent little stars against the seedship outline. They were engaged in the drawing of the shields, and sure as topology, the spirals of force had to have a dimple on the opposite side that would iris wide enough to let in glovers. The sisters twisted the forces and Prufrax could see the dimple stretching out under them.

The exercise ended. The elfstate glovers were cast into sudden dark. Prufrax came out of the mock

unprepared, her mind still bent on the Zap. The lack of orientation drove her as mad as a moth suddenly flipped from night to day. She careened until gently mitted and Channeled. She flowed down a tube, the field slowly neutralizing, and came to a halt still gloved, her body jerking and tingling.

“What the breed happened?” she screamed, her hands beginning to hurt.

“Energy conserve,” a mechanical voice answered, Behind Prufrax the other elfstate glovers lined up in the catch tube, all but the special-projects sisters. Ya, Trice, and Damu had been taken out of the exercise early and replaced by simulations. There was no way their functions could be mocked. They entered the tube ungloved and helped their comrades adjust to the overness of the real.

As they left the mock chamber, another batch of glovers, even younger and fresher in elfstate, passed them. Ya held her hands up, and they saluted in return. “Breed more every day,” Prufrax grumbled. She worried about having so many crew she’d never be able to conduct a satisfactory Zap herself. Where would the honor of being a glover go if everyone was a glover?

She wriggled into her cramped bunk, feeling exhilarated and irritated. She replayed the mocks and added in the missing Zap, then stared gloomily at her small narrow feet.

Out there the Senexi waited. Perhaps they were in the same state as she—ready to fight, testy at being reined in. She pondered her ignorance, her inability to judge whether such things were even possible among the enemy. She thought of the researcher, Clevo. “Blank,” she murmured. “Blank, blank.” Such thoughts were unnecessary, and humanizing Senexi was unworthy of a glover.

Aryz looked at the instrument, stretched a pod into it, and willed. Vocal human language came out the other end, thin and squeaky in the helium atmosphere. The sound disgusted and thrilled him. He removed the instrument from the gelatinous strands of the engineering wall and pushed it into his interior through a stretched permeum. He took a thick draft of ammonia and slid to the human-shapes chamber again.

He pushed through the narrow port into the observation room. Adjusting his eyes to the heat and bright light beyond the transparent wall, he saw the round mutated shape first—the result of their unsuccessful experiments. He swung his sphere around and looked at the others.

For a time he couldn’t decide which was uglier—the mutated shape or the normals. Then he thought of what it would be like to have humans tamper with Senexi and try to make them into human forms. . . . He looked at the round human and shrank as if from sudden heat. Aryz had had nothing to do with the experiments. For that, at least, he was grateful.

Aryz placed the tip of the vocalizer against a sound-transmitting plate and spoke.

“Hello,” came the sound within the chamber. The mutated shape looked up. It lay on the floor, great bloated stomach backed by four almost useless pods. It usually made high-pitched sounds continuously. Now it stopped and listened, straining on the tube that connected it to the breed-supervising device.

“Hello,” replied the male. It sat on a ledge across the chamber, having unhooked itself.

The machine that served as surrogate parent and instructor stood in one corner, an awkward parody of a human, with limbs too long and head too small. Aryz could see the unwillingness of the designing engineers to examine human anatomy too closely.

“I am called—” Aryz said, his name emerging as a meaningless stretch of white noise. He would have to do better than that. He compressed and adapted the frequencies. “I am called Aryz.”

“Hello,” the young female said.

“What are your names?” He knew them well enough, having listened many times to their conversations.

“Prufrax,” the female said. “I’m a glover.”

The human shapes contained very little genetic memory. As a kind of brood marker, Aryz supposed, they had been equipped with their name, occupation, and the rudiments of environmental knowledge.

“I’m a teacher, Prufrax,” Aryz said.

“I don’t understand you,” the female replied.

“You teach me, I teach you.”

“We have the Mam,” the male said, pointing to the machine. “She teaches us.” The Mam, as they called it, was hooked into the mandate.

“Do you know where you are?” Aryz asked.

“Where we live,” Prufrax said. “Eyes-open.”

“Don’t talk to it,” the male said. “Mam talks to us,” Aryz consulted the mandate for some understanding of the name they had given to the breed-supervising machine. Mam, it explained, was probably a natural expression for womb-carrying parent. Aryz severed the machine’s power.

“Mam is no longer functional,” he said. He would have the engineering wall put together another less identifiable machine to link them to the mandate and to their nutrition. He wanted them to associate comfort and completeness with nothing but himself.

The machine slumped, and the female shape pulled herself free of the hookup. She started to cry, a reaction quite mysterious to Aryz. His link with the mandate had not been intimate enough to answer questions about the wailing and moisture from the eyes. After a time the male and female lay down and became dormant.

The mutated shape made more soft sounds and tried to approach the transparent wall. It held up its thin arms as if beseeching. The others would have nothing to do with it; now it wished to go with him.

Perhaps the biologists had partially succeeded in their attempt at transformation; perhaps it was more Senexi than human.

Aryz quickly backed out through the port, into the cool and security of the corridor beyond.

It was an endless orbital dance, this detection and matching of course, moving away and swinging back, deceiving and revealing, between the Mellangee and the Senexi seedship.

Filled with her skill and knowledge, Prufrax waited, feeling like a ripe fruit about to fall from the tree. At this point in their training, just before the application, elfstates were most receptive. She was allowed to take a lover, and they were assigned small separate quarters near the outer greenroads.

The contact was satisfactory, as far as it went. Her mate was an older glover named Kumnax, and as they lay back in the cubicle, soothed by air-dance fibs, he told her stories about past battles, special tactics, how to survive.

“Survive?” she asked, puzzled.

“Of course.” His long brown face was intent on the view of the greenroads through the cubicle’s small window.

“I don’t understand,” she said.

“Most glovers don’t make it,” he said patiently.

“I will.”

He turned to her. “You’re six,” he said. “You’re very young. I’m ten. I’ve seen. You’re about to be applied for the first time, you’re full of confidence. But most glovers won’t make it. They breed thousands of us. We’re expendable. We’re based on the best glovers of the past but even the best don’t survive.”

“I will,” Prufrax repeated, her jaw set.

“You always say that,” he murmured.

Prufrax stared at him for a moment.

“Last time I knew you,” he said, “you kept saying that. And here you are, fresh again.”

“What last time?”

“Master Kumnax,” a mechanical voice interrupted.

He stood, looking down at her. “We glovers always have big mouths. They don’t like us knowing, but once we know, what can they do about it?”

“You are in violation,” the voice said. “Please report to S.” “But now, if you last, you’ll know more than the tellman tells.”

“I don’t understand,” Prufrax said slowly, precisely, looking him straight in the eye.

“I’ve paid my debt,” Kumnax said. “We glovers stick. Now I’m going to go get my punishment.” He left the cubicle. Prufrax didn’t see him again before her first application.

The seedship buried itself in a heating protostar, raising shields against the infalling ice and stone. The nebula had congealed out of a particularly rich cluster of exploded fourth-and fifth-generation stars, thick with planets, the detritus of which now fell on Aryz’s ship like hail.

Aryz had never been so isolated. No other branch ind addressed him; he never even saw them now. He made his reports to the brood mind, but even there the reception was warmer and warmer, until he could

barely endure to communicate. Consequently—and he realized this was part of the plan—he came closer to his charges, the human shapes.

The brood mind was interested in one question: how successfully could they be planted aboard a human ship? Would they be accepted until they could carry out their sabotage, or would they be detected? Already Senexi instructions were being coded into their teachings.

“I think they will be accepted in the confusion of an engagement,” Arys answered. He had long since guessed the general outlines of the brood mind’s plans. Communication with the human shapes was for one purpose only, to use them as decoys, insurgents. They were weapons. Knowledge of human activity and behavior was not an end in itself; seeing what was happening to him, Arys fully understood why the brood mind wanted such study to proceed no further.

He would lose them soon, he thought, and his work would be over. He would be much too human-tainted. He would end, and his replacement would start a new existence, very little different from Arys’s—but, he reasoned, adjusted. The replacement would not have Arys’s peculiarity.

He approached his last meeting with the brood mind, preparing himself for his final work, for the ending. In the cold liquid-filled chamber, the great red-and-white sac waited, the center of his team, his existence. He adored it. There was no way he could criticize its action.

Yet—

“We are being sought,” the brood mind radiated. “Are the shapes ready?”

“Yes,” Arys said. “The new teaching is firm. They believe they are fully human.” And, except for the new teaching, they were. “They defy sometimes.” He said nothing about the mutated shape. It would not be used. If they won this encounter, it would probably be placed with Arys’s body in a fusion torch for complete purging.

“Then prepare them,” the brood mind said. “They will be delivered to the vector for positioning and transfer.”

Darkness and waiting. Prufrax nested in her delivery tube like a freshly chambered round. Through her gloves she caught distant communications murmurs that resembled voices down hollow pipes. The Mellangee was coming to full readiness.

Huge as her ship was, Prufrax knew that it would be dwarfed by the seedship. She could recall some hazy details about the seedship’s structure, but most of that information was stored securely away from interference by her conscious mind.

More information would be fed to her just before the launch, but she knew the general procedure. The seedship was deep in a protostar, hiding behind the distortion of geometry and the complete hash of electromagnetic energy. The Mellangee would approach, collide if need be. Penetrate. Release. Find. Zap. Her fingers ached. Sometime before the launch she would also be fed her final moans—the temaers—and she would be primed to leave elfstate. She would be a mature glover. She would be a woman.

If she returned

will return.

Her fingers ached worse.

The tempers came, moans tiding in, then the battle data. As it passed into her subconscious, she caught a flash of

Rocks and ice, a thick cloud of dust and gas glowing red but seeming dark, no stars, no constellation guides this time. The beacon came on. That would be her only way to orient once the gloves stopped inertial and locked onto the target.

The seedship

was like

a shadow within a shadow

twenty-two kilometers across, yet

carrying

only six

teams

LAUNCH she flies!

Data: The Mellangee has buried herself in the seedship, plowed deep into the interior like a carnivore's muzzle looking for vitals

Instruction a swarm of seeks is dashing through the seed-ship, looking for the brood minds, for the brood chambers, for branch inds. The glovers will follow.

Prufrex sees herself clearly now. She is the great avenging comet, bringer of omen and doom, like a knife moving through the glass and ice and thin, cold helium as if they weren't there, the chambered round fired and tearing at hundreds of kilometers an hour through the Senexi vessel, following the seeks.

The seedship cannot withdraw into higher geometries now. It is pinned by the Mellangee. It is hers.

Information floods her, pleases her immensely. She swoops down orange-and-gray corridors, buffeting against the walls like a ricocheting bullet. Almost immediately she comes across a branch ind, sliding through the ammonia film against the outrushing wind, trying to reach an armored cubicle. Her first Zap is too easy, not satisfying, nothing like what she thought. In her wake the branch ind becomes scattered globules of plasma. She plunges deeper.

Aryz delivers his human charges to the vectors that will launch them. They are equipped with simulations of the human weapons, their hands encased in the hideous gray gloves.

The seedship is in deadly peril; the battle has almost been lost at one stroke. The seedship cannot remain whole. It must self-destruct, taking the human ship with it, leaving only a fragment with as many teams as can escape.

The vectors launch the human shapes. Aryz tries to determine which part of the ship will be elected to survive; he must not be there. His job is over, and he must die.

The glovers fan out through the seedship's central hollow, demolishing the great cold drive engines, bypassing the shielded fusion flare and the reprocessing plant, destroying machinery built before their Earth was formed.

The special-projects sisters take the lead. Suddenly they are confused. They have found a brood mind, but it is not heavily protected. They surround it, prepare for the Zap—

It is sacrificing itself, drawing them into an easy kill and away from another portion of the seedship.

Power is concentrating elsewhere. Sensing that, they kill quickly and move on.

Aryz's brood mind prepares for escape. It begins to wrap itself in flux bind as it moves through the ship toward the frozen fragment. Already three of its five branch inds are dead; it can feel other brood minds dying. Aryz's bud replacement has been killed as well.

Following Aryz's training, the human shapes rush into corridors away from the main action. The

special-projects sisters encounter the decoy male, allow it to fly with them ... until it aims its weapons.

One Zap almost takes out Trice. The others fire on the shape immediately. He goes to his death weeping, confused from the very moment of his launch.

The fragment in which the brood mind will take refuge encompasses the chamber where the humans had been nurtured, where the mandate is still stored. All the other brood minds are dead, Aryz realizes; the humans have swept down on them so quickly. What shall he do?

Somewhere, far off, he feels the distressed pulse of another branch ind dying. He probes the remains of the seedship. He is the last. He cannot dissipate now; he must ensure the brood mind's survival.

Prufrex, darting through the crumbling seedship, searching for more opportunities, comes across an injured glover. She calls for a mediseek and pushes on.

The brood mind settles into the fragment. Its support system is damaged; it is entering the time-isolated state, the flux bind, more rapidly than it should. The seals of foamed electric ice cannot quite close off the fragment before Ya, Trice, and Damu slip in. They frantically call for bind cutters and preservers; they have instructions to capture the last brood mind, if possible.

But a trap falls upon Ya, and snarling fields tear her from her gloves. She is flung down a dark distintegrating shaft, red cracks opening all around as the seedship's integrity fails. She trails silver dust and freezes, hits a barricade, shatters.

The ice seals continue to close. Trice is caught between them and pushes out frantically, blundering into the region of the intensifying flux bind. Her gloves break into hard bits, and she is melded into an ice wall

like an insect trapped on the surface of a winter lake.

Damu sees that the brood mind is entering the final phase of flux bind. After that they will not be able to touch it. She begins a desperate Zap. and is too late.

Aryz directs the subsidiary energy of the flux against her. Her Zap deflects from the bind region, she is caught in an interference pattern and vibrates until her tiniest particles stop their knotted whirlpool spins and she simply becomes space and searing light.

The brood mind, however, has been damaged. It is losing information from one portion of its anatomy.

Desperate for storage, it looks for places to hold the information before the flux bind's last wave.

Aryz directs an interface onto the brood mind's surface. The silvery pools of time binding flicker around them both. The brood mind's damaged sections transfer their data into the last available storage device—the human mandate.

Now it contains both human and Senexi information.

The silvery pools unite, and Aryz backs away. No longer can he sense the brood mind. It is out of reach but not yet safe. He must propel the fragment from the remains of the seedship. Then he must wrap the fragment in its own flux bind, cocoon it in physics to protect it from the last ravages of the humans.

Aryz carefully navigates his way through the few remaining corridors. The helium atmosphere has almost completely dissipated, even there. He strains to remember all the procedures. Soon the seedship will explode, destroying the human ship. By then they must be gone.

Angry red, Prufrex follows his barely sensed form, watching him behind barricades of ice, approaching the moment of a most satisfying Zap. She gives her gloves their way and finds a shape behind her, wearing gloves that are not gloves, not like her own, but capable of grasping her in tensed fields, blocking the Zap, dragging them together. The fragment separates, heat pours in from the protostar cloud. They are swirled in their vortex of power, twin locked comets—one red, one sullen gray.

“Who are you?” Prufrex screams as they close in on each other in the fields. Their environments meld.

They grapple. In the confusion, the darkening, they are drawn out of the cloud with the fragment, and she sees the other's face.

Her own.

The seedship self-destructs. The fragment is propelled from the protostar, above the plane of what will become planets in their orbits, away from the crippled and dying Mellangee.

Desperate, Prufrex uses all her strength to drill into the fragment. Helium blows past them, and bits of dead branch inds.

Aryz catches the pair immediately in the shapes chamber, rearranging the fragment's structure to enclose them with the mutant shape and mandate. For the moment he has time enough to concentrate on them.

They are dangerous. They are almost equal to each other, but his shape is weakening faster than the true glover. They float, bouncing from wall to wall in the chamber, forcing the mutant to crawl into a corner and howl with fear.

There may be value in saving the one and capturing the other. Involved as they are, the two can be carefully dissected from their fields and induced into a crude kind of sleep before the glover has a chance to free her weapons. He can dispose of the gloves—fake and real—and hook them both to the Mam, reattach the mutant shape as well. Perhaps something can be learned from the failure of the experiment.

The dissection and capture occur faster than the planning. His movement slows under the spreading flux bind. His last action, after attaching the humans to the Mam, is to make sure the brood mind's flux bind is properly nested within that of the ship.

The fragment drops into simpler geometries.

It is as if they never existed.

The battle was over. There were no victors. Aryz became aware of the passage of time, shook away the sluggishness, and crawled through painfully dry corridors to set the environmental equipment going again. Throughout the fragment, machines struggled back to activity.

How many generations? The constellations were unrecognizable. He made star traces and found familiar

spectra and types, but advanced in age. There had been a malfunction in the overall flux bind. He couldn't find the nebula where the battle had occurred. In its place were comfortably middle-aged stars surrounded by young planets.

Aryz came down from the makeshift observatory. He slid through the fragment, established the limits of his new home, and found the solid mirror surface of the brood mind's cocoon. It was still locked in flux bind, and he knew of no way to free it. In time the bind would probably wear off—but that might require life spans. The seedship was gone. They had lost the brood chamber, and with it the stock.

He was the last branch ind of his team. Not that it mattered now; there was nothing he could initiate without a brood mind. If the flux bind was permanent, then he might as well be dead.

He closed his thoughts around him and was almost completely submerged when he sensed an alarm from the shapes chamber. The interface with the mandate had turned itself off; the new version of the Mam was malfunctioning. He tried to repair the equipment, but without the engineer's wall he was almost helpless. The best he could do was rig a temporary nutrition supply through the old human-form Mam. When he was done, he looked at the captive and the two shapes, then at the legless, armless Mam that served as their link to the interface and life itself.

She had spent her whole life in a room barely eight by ten meters, and not much taller than her own height. With her had been Grayd and the silent round creature whose name—if it had any—they had never learned. For a time there had been Mam, then another kind of Mam not nearly as satisfactory. She was hardly aware that her entire existence had been miserable, cramped, in one way or another incomplete.

Separated from them by a transparent partition, another round shape had periodically made itself known by voice or gesture.

Grayd had kept her sane. They had engaged in conspiracy. Removing themselves from the interface—what she called “eyes-shut”—they had held onto each other, tried to make sense out of what they knew instinctively, what was fed them through the interface, and what the being beyond the partition told them.

First, they knew their names, and they knew that they were glovers. They knew that glovers were fighters. When Aryz passed instruction through the interface on how to fight, they had accepted it eagerly but uneasily. It didn't seem to jibe with instructions locked deep within their instincts.

Five years under such conditions had made her introspective. She expected nothing, sought little beyond experience in the eyes-shut. Eyes-open with Grayd seemed scarcely more than a dream. They usually managed to ignore the peculiar round creature in the chamber with them; it spent nearly all its time hooked to the mandate and the Mam.

Of one thing only was she completely sure. Her name was Prufrex. She said it in eyes-open and eyes-shut, her only certainty.

Not long before the battle, she had been in a condition resembling dreamless sleep, like a robot being given instructions. The part of Prufrex that had taken on personality during eyes-shut and eyes-open for five years had been superseded by the fight instructions Aryz had programmed. She had flown as glovers must fly (though the gloves didn't seem quite right).

She had fought, grappling (she thought), with herself, but who could be certain of anything?

She had long since decided that reality was not to be sought too avidly. After the battle she fell back into the mandate—into eyes-shut—all too willingly.

But a change had come to eyes-shut, too. Before the battle, the information had been selected. Now she could wander through the mandate at will. She seemed to smell the new information, completely unfamiliar, like a whiff of ocean. She hardly knew where to begin. She stumbled across:

that all vessels carry one, no matter what their size or class, just as every individual carries the map of a species. The mandate shall contain all the information of our kind, including accurate, and uncensored history, for if we have learned anything, it is that censored and untrue accounts distort the eyes of the leaders. Unders are told lies. Leaders must seek and be provided with accounts as accurate as possible, or we will be weakened and fall.

What wonderful dreams the leaders must have had. And they possessed some intrinsic gift called truth,

through the use of the mandate. Prufrax could hardly believe that. As she made her tentative explorations through the new fields of eyes-shut, she began to link the word mandate with what she experienced. That was where she was.

And she was alone. Once, she had explored with Grayd. Now there was no sign of Grayd. She learned quickly. Soon she walked along a beach on Earth, then a beach on a world called Myriadne, and other beaches, fading in and out. By running through the entries rapidly, she came up with a blurred eidon and so learned what a beach was in the abstract. It was a boundary between one kind of eyes-shut and another, between water and land, neither of which had any corollary in eyes-open.

Some beaches had sand. Some had clouds—the eidon of clouds was quite attractive. And one had herself running scared, screaming.

She called out, but the figure vanished. Prufrax stood on a beach under a greenish-yellow star, on a world called Kyrene, feeling lonelier than ever.

She explored further, hoping to find Grayd, if not the figure that looked like herself. Grayd wouldn't flee from her. Grayd would. . .

The round thing confronted her, its helpless limbs twitching. Now it was her turn to run, terrified. Never before had she met the round creature in eyes-shut. It was mobile; it had a purpose. Over land, clouds, trees, rocks, wind, air, equations, and an edge of physics she fled. The farther she went, the more distant from the round one with hands and small head, the less afraid she was.

She never found Grayd.

The memory of the battle was fresh and painful. She remembered the ache of her hands, clumsily removed from the gloves. Her environment had collapsed and been replaced by something indistinct. Prufrax had fallen into a deep slumber and had dreamed.

The dreams were totally unfamiliar to her. If there was a left-turning in her arc of sleep, she dreamed of philosophies and languages and other things she couldn't relate to. A right-turning led to histories and sciences so incomprehensible as to be nightmares.

It was a most unpleasant sleep, and she was not at all sorry to find she wasn't really asleep.

The crucial moment came when she discovered how to slow her turnings and the changes of dream subject. She entered a pleasant place of which she had no knowledge but which did not seem threatening. There was a vast expanse of water, but it didn't terrify her. She couldn't even identify it as water until she scooped up a handful. Beyond the water was a floor of shifting particles. Above both was an open expanse, not black but obviously space, drawing her eyes into intense pale blue-green. And there was that figure she had encountered in the seedship. Herself. The figure pursued. She fled.

Right over the boundary into Senexi information. She knew then that what she was seeing couldn't possibly come from within herself. She was receiving data from another source. Perhaps she had been taken captive. It was possible she was now being forcibly debriefed. The tellman had discussed such possibilities, but none of the glovers had been taught how to defend themselves in specific situations. Instead it had been stated—in terms that brooked no second thought—that self-destruction was the only answer. So she tried to kill herself.

She sat in the freezing cold of a red-and-white room, her feet meeting but not touching a fluid covering on the floor. The information didn't fit her senses; it seemed blurred, inappropriate. Unlike the other data, this didn't allow participation or motion. Everything was locked solid.

She couldn't find an effective means of killing herself. She resolved to close her eyes and simply will herself into dissolution. But closing her eyes only moved her into a deeper or shallower level of deception—other categories, subjects, visions. She couldn't sleep, wasn't tired, couldn't die.

Like a leaf on a stream, she drifted. Her thoughts untangled, and she imagined herself floating on the water called ocean. She kept her eyes open. It was quite by accident that she encountered:

Instruction. Welcome to the introductory use of the mandate. As a noncombat processor, your duties are to maintain and, if necessary, protect or destroy the mandate. The mandate is your immediate over. If it requires maintenance, you will oblige. Once linked with the mandate, as you are now, you may explore any aspect of the information by requesting delivery. To request delivery, indicate the core of your subject

Prufrax! she shouted silently. What is Prufrax?

A voice with different tone immediately took over.

Ah, now that's quite a story. I was her biographer, the organizer of her life tapes (ref. GEORGE MACKNAX), AND KNEW HER WELL IN THE LAST YEARS OF HER LIFE. SHE WAS BORN IN THE FERMENT 26468. HERE ARE SELECTED LIFE TAPES. CHOOSE EMPHASIS.

ANALYSES FOLLOW.

Hey! Who are you? There's someone here with me... .

Shh! Listen. Look at her. Who is she? They looked, listened to the information.

Why, she's me ... sort of.

She's us.

She stood two and a half meters tall. Her hair was black and thick, though cut short; her limbs well muscled though drawn out by the training and hormonal treatments. She was seventeen years old, one of the few birds born in the solar system, and for the time being she had a chip on her shoulder. Everywhere she went, the birds asked about her mother, Jayax. "You better than her?"

Of course not! Who could be? But she was good; the instructors said so. She was just about through training, and whether she graduated to hawk or remained bird she would do her job well. Asking Prufrax about her mother was likely to make her set her mouth tight and glare.

On Mercior, the Grounds took up four thousand hectares and had its own port. The Grounds was divided into Land, Space, and Thought, and training in each area was mandatory for fledges, those birds embarking on hawk training. Prufrax was fledge three. She had passed Land—though she loathed downbound fighting—and was two years into Space. The tough part, everyone said, was not passing Space, but lasting through four years of Thought after the action in nearorbit and planetary.

Since she had been a little girl, no more than five—Five! Five what?

and had seen her mother's ships and fightsuits and fibs, she had known she would never be happy until she had ventured far out and put a seedship in her sights, had convinced a Senexi of the overness of end—

The Zap! She's talking the Zap!

What's that?

You're me, you should know.

I'm not you, and we're not her.

The Zap, said the mandate, and the data shifted.

"Tomorrow you receive your first implants. These will allow you to coordinate with the zero-angle phase engines and find your targets much more rapidly than you ever could with simple biologic. Are there any questions?"

"Yes, sir." Prufrax stood at the top of the spherical classroom, causing the hawk instructor to swivel his platform. "I'm having problems with the zero-angle phase maths. Reduction of the momenta of the real."

Other fledge threes piped up that they, too, had had trouble with those maths. The hawk instructor sighed. "We don't want to install cheaters in all of you. It's bad enough needing implants to supplement biologic. Individual learning is much more desirable. Do you request cheaters?" That was a challenge.

They all responded negatively, but Prufrax had a secret smile. She knew the subject. She just took delight in having the maths explained again. She could reinforce an already thorough understanding.

Others not so well versed would benefit. She wasn't wasting time. She was in the pleasure of her weapon—the weapon she would be using against the Senexi.

"Zero-angle phase is the temporary reduction of the momenta of the real." Equations and plexes appeared before each student as the instructor went on. "Nested unreals can conflict if a barrier is placed between the participator princip and the assumption of the real. The effectiveness of the participator can be determined by a convenience model we call the angle of phase. Zero-angle phase is achieved by an opaque probability field according to modified Fourier of the separation of real waves. This can also be caused by the reflection of the beam—an effective counter to zero-angle phase, since the beam is always compoundable and the compound is always time-reversed. Here are the true gedanks—"

Zero-angle phase. She's learning the Zap.

She hates them a lot, doesn't she?

The Senexi? They're Senexi.

I think ... eyes-open is the world of the Senexi. What does that mean?

That we're prisoners. You were caught before me. —Oh.

The news came as she was in recovery from the implant. Seedships had violated human space again, dropping cuckoos on thirty-five worlds. The worlds had been young colonies, and the cuckoos had wiped out all life, then tried to reseed with Senexi forms. The overs had reacted by sterilizing the planets' surfaces. No victory, loss to both sides. It was as if the Senexi were so malevolent they didn't care about success, only about destruction.

She hated them. She could imagine nothing worse.

Prufrax was twenty-three. In a year she would be qualified to hawk on a cruiser/raider. She would demonstrate her hatred.

Aryz felt himself slipping into endthought, the mind set that always preceded a branch find's self-destruction. What was there for him to do? The fragment had survived, but at what cost, to what purpose? Nothing had been accomplished. The nebula had been lost, or he supposed it had. He would likely never know the actual outcome.

He felt a vague irritation at the lack of a spectrum of responses. Without a purpose, a branch find was nothing more than excess plasm.

He looked in on the captive and the shapes, all hooked to the mandate, and wondered what he would do with them. How would humans react to the situation he was in? More vigorously, probably. They would fight on. They always had. Even without leaders, with no discernible purpose, even in defeat. What gave them such stamina? Were they superior, more deserving? If they were better, then was it right for the Senexi to oppose their triumph?

Aryz drew himself tall and rigid with confusion. He had studied them too long. They had truly infected him. But here at least was a hint of purpose. A question needed to be answered.

He made preparations. There were signs the brood mind's flux bind was not permanent, was in fact unwinding quite rapidly. When it emerged, Aryz would present it with a judgment, an answer.

He realized, none too clearly, that by Senexi standards he was now a raving lunatic.

He would hook himself into the mandate, improve the somewhat isolating interface he had used previously to search for selected answers. He, the captive, and the shapes would be immersed in human history together. They would be like young suckling on a Population I mother-animal—just the opposite of the Senexi process, where young fed nourishment and information into the brood mind.

The mandate would nourish, or poison. Or both.

Did she love?

What—you mean, did she receive?

No, did she—we—I—give?

I don't know what you mean.

I wonder if she would know what I mean... .

Love, said the mandate, and the data proceeded.

Prufrax was twenty-nine. She had been assigned to a cruiser in a new program where superior but untested fighters were put into thick action with no preliminary.

The Cruiser was a million-ton raider, with a hawk contingent of fifty-three and eighty regular crew. She would be used in a secondwave attack, following the initial hardfought.

She was scared. That was good; fright improved basic biologic, if properly managed. The cruiser would make a raid into Senexi space and retaliate for past cuckoo-seeding programs. They would come up against thornships and seedships, probably.

The fighting was going to be fierce.

The raider made its final denial of the overness of the real and pipsqueezed into an arduous, nasty sponge space. It drew itself together again and emerged far above the galactic plane.

Prufrax sat in the hawks wardroom and looked at the simulated rotating snowball of stars. Red-coded numerals flashed along the borders of known Senexi territory, signifying where they had first come to

power when the terrestrial sun had been a mist-wrapped youngster. A green arrow showed the position of the raider.

She drank sponge-space supplements with the others but felt isolated because of her firstness, her fear. Everyone seemed so calm. Most were fours or fives—on their fourth or fifth battle call. There were ten ones and an upper scatter of experienced hawks with nine to twenty-five battles behind them. There were no thirties. Thirties were rare in combat; the few that survived so many engagements were plucked off active and retired to PR service under the polinstructors. They often ended up in fibs, acting poorly, looking unhappy.

Still, when she had been more naive, Prufrax's heron had been a man-and-woman thirty team she had watched in fib after fib—Kumnax and Arol. They had been better actors than most.

Day in, day out, they drilled in their fightsuits. While the crew bustled, hawks were put through implant learning, what slang was already calling the Know, as opposed to the Tell, of classroom teaching. Getting background, just enough to tickle her curiosity, not enough to stimulate morbid interest.

There it is again. Feel?

I know it. Yes. The round one, part of eyes-open . . .

Senexi?—No, brother without name.

Your . . . brother?

No . . . I don't know.

Still, there were items of information she had never received before, items privileged only to the fighters, to assist them in their work. Older hawks talked about the past, when data had been freely available.

Stories circulated in the wardroom about the Senexi, and she managed to piece together something of their origins and growth.

Senexi worlds, according to a twenty, had originally been large, cold masses of gas circling bright young suns nearly metal-free. Their gas-giant planets had orbited the suns at hundreds of millions of kilometers and had been dusted by the shrouds of neighboring dead stars; the essential elements carbon, nitrogen, silicon, and fluorine had gathered in sufficient quantities on some of the planets to allow Population II biology.

In cold ammonia seas, lipids had combined in complex chains. A primal kind of life had arisen and flourished. Across millions of years, early Senexi forms had evolved. Compared with evolution on Earth, the process at first had moved quite rapidly. The mechanisms of procreation and evolution had been complex in action, simple in chemistry.

There had been no competition between life forms of different genetic bases. On Earth, much time had been spent selecting between the plethora of possible ways to pass on genetic knowledge.

And among the early Senexi, outside of predation there had been no death. Death had come about much later, self-imposed for social reasons. Huge colonies of protoplasmic individuals had gradually resolved into the team-forms now familiar.

Soon information was transferred through the budding of branch inds; cultures quickly developed to protect the integrity of larvae, to allow them to regroup and form a new brood mind. Technologies had been limited to the rare heavy materials available, but the Senexi had expanded for a time with very little technology. They were well adapted to their environment, with few predators and no need to hunt, absorbing stray nutrients from the atmosphere and from layers of liquid ammonia. With perceptions attuned to the radio and microwave frequencies, they had before long turned groups of branch inds into radio telescope chains, piercing the heavy atmosphere and probing the universe in great detail, especially the very active center of the young galaxy. Huge jets of matter, streaming from other galaxies and emitting high-energy radiation, had provided laboratories for their vicarious observations. Physics was a primitive science to them.

Since little or no knowledge was lost in breeding cycles, cultural growth was rapid at times; since the dead weight of knowledge was often heavy, cultural growth often slowed to a crawl.

Using water as a building material, developing techniques that humans still understood imperfectly, they prepared for travel away from their birthworlds.

Prufrax wondered, as she listened to the older hawks, how humans had come to know all this. Had

Senexi been captured and questioned? Was it all theory? Did anyone really know—anyone she could ask?

She's weak.

Why weak?

Some knowledge is best for glovers to ignore. Some questions are best left to the supreme overs.

Have you thought that in here, you can answer her questions, our questions?

No. No. Learn about me—us—first.

In the hour before engagement, Prufrax tried to find a place alone. On the raider, this wasn't difficult. The ship's size was overwhelming for the number of hawks and crew aboard. There were many areas where she could put on an environs and walk or drift in silence, surrounded by the dark shapes of equipment wrapped in plexerv.

She pulled herself through the cold Gless tunnels, feeling slightly awed by the lonesomeness, the quiet. One tunnel angled outboard, toward the hull of the cruiser. She hesitated, peering into its length with her environs beacon, when a beep warned her she was near another crew member. She was startled to think someone else might be as curious as she. She scooted expertly up the tunnel, spreading her arms and tucking her legs as she would in a fightsuit.

The tunnel was filled with a faint milky green mist, absorbing her environs beam. It couldn't be much more than a couple of hundred meters long, however, and it was quite straight. The signal beeped louder. Ahead she could make out a dismantled weapons blister. That explained the fog: a plexery aerosol diffused in the low pressure. Sitting in the blister was a man, his environs glowing a pale violet. He had deopaqued a section of the blister and was staring out at the stars. He swiveled as she approached and looked her over dispassionately. He seemed to be a hawk—he had fightform, tall, thin with brown hair above hull-white skin, large eyes with pupils so dark she might have been looking through his head into space beyond.

"Under," she said as their environs met and merged.

"Over. What are you doing here?"

"I was about to ask you the same."

"You should be getting ready for the fight," he admonished.

"I am. I need to be alone for a while."

"Yes." He turned back to the stars. "I used to do that, too." "You don't fight now?"

He shook his head. "Retired. I'm a researcher."

She tried not to look impressed. Crossing rates was almost impossible. A bitalent was unusual in the service.

"What kind of research?" she asked.

"I'm here to correlate enemy finds."

"Won't find much of anything, after we've done with the zero phase."

It would have been polite for him to say, "Power to that," or offer some other encouragement. He said nothing. "Why would you want to research them?"

"To fight an enemy properly, you have to know what they are. Ignorance is defeat."

"You research tactics?"

"Not exactly."

"What, then?"

"You'll be in tough hardfought this wake. Make you a proposition. You fight well, observe, come to me, and tell me what you see. Then I'll answer your questions."

"Brief you before my immediate overs?"

"I have the authority," he said. No one had ever lied to her; she didn't even suspect he would. "You're eager?"

"Very."

"You'll be doing what?"

"Engaging Senexi fighters, then hunting down branch inds and brood minds."

"How many fighters going in?"

“Twelve.”

“Big target, eh?”

She nodded.

“While you’re there, ask yourself—what are they fighting for? Understand?”

“Ask, what are they fighting for. Just that. Then come back to me.”

“What’s your name?”

“Not important,” he said. “Now go.”

She returned to the prep center as the sponge-space warning tones began. Overhawks went among the fighters in the lineup, checking gear and giveaway body points for mental orientation. Prufrex submitted to the molded sensor mask being slipped over her face. “Ready!” the overhawk said. “Hardfought!” He clapped her on the shoulder. “Good luck.”

“Thank you, sir.” She bent down and slid into her fightsuit. Along the launch line, eleven other hawks did the same. The overs and other crew left the chamber, and twelve red beams delineated the launch tube. The fightsuits automatically lifted and aligned on their individual beams. Fields swirled around them like silvery tissue in moving water, then settled and hardened into cold-scintillating walls, pulsing as the launch energy built up.

The tactic came to her. The ship’s sensors became part of her information net. She saw the Senexi thornship—twelve kilometers in diameter, cuckoos lacing its outer hull like maggots on red fruit, snakes waiting to take them on.

She was terrified and exultant, so worked up that her body temperature was climbing. The fightsuit adjusted her balance.

At the count of ten and nine, she switched from biologic to cyber. The implant—after absorbing much of her thought processes for weeks—became Prufrex.

For a time there seemed to be two of her. Biologic continued, and in that region she could even relax a bit, as if watching a fib.

With almost dreamlike slowness, in the electronic time of cyber, her fightsuit followed the beam. She saw the stars and oriented herself to the cruiser’s beacon, using both for reference, plunging in the sword-flower formation to assault the thornship. The cuckoos retreated in the vast red hull like worms withdrawing into an apple. Then hundreds of tiny black pinpoints appeared in the quadrant closest to the sword flower.

Snakes shot out, each piloted by a Senexi branch ind. “Hardfought!” she told herself in biologic before that portion gave over completely to cyber.

Why were we flung out of dark through ice and fire, a shower of sparks? a puzzle;

Perhaps to build hell.

We strike here, there;

Set brief glows, fall through and cross round again.

By our dimming, we see what Beatitude we have. In the circle, kindling together, we form an exhausted Empyrean. We feel the rush of igniting winds but still grow dull and wan.

New rage flames, new light, dropping like sun through muddy ice and night and fall

Close, spinning blue and bright.

In time they, too, Tire. Redden.

We join, compare pasts cool in huddled paths, turn gray.

And again.

We are a companion flow of ash, in the slurry, out and down.

We sleep.

Rivers form above and below. Above, iron snakes twist, clang and slice, chime, helium eyes watching, seeing Snowflake hawks, signaling adamant muscles and energy teeth. What hunger compels our venom spit?

It flies, strikes the crystal flight, making mist gray-green with ammonia rain.

Sleeping we glide, and to each side unseen shores wait with the moans of an unseen tide.

She wrote that. We. One of her—our—poems. —Poem?

A kind of fib, I think.

I don't see what it says.

Sure you do! She's talking hardfought.

Do you understand it?

Not at all . . .

She lay back in the bunk, legs crossed, eyes closed, feeling the receding dominance of the implant—the overness of cyber—and the almost pleasant ache in her back. She had survived her first. The thornship had retired, severely damaged, its surface seared and scored so heavily it would never release cuckoos again.

It would become a hulk, a decoy. Out of action. Satisfaction/out of action/Satisfaction ...

Still, with eight of the twelve fighters lost, she didn't quite feel the exuberance of the rhyme. The snakes had fought very well. Bravely, she might say. They lured, sacrificed, cooperated, demonstrating teamwork as fine as that in her own group. Strategy was what made the cruiser's raid successful. A superior approach, an excellent tactic. And perhaps even surprise, though the final analysis hadn't been posted yet.

Without those advantages, they might have all died.

She opened her eyes and stared at the pattern of blinking lights in the ceiling panel, lights with their secret codes that repeated every second, so that whenever she looked at them, the implant deep inside was debriefed, reinstructed. Only when she fought would she know what she was now seeing.

She returned to the tunnel as quickly as she was able. She floated up toward the blister and found him there, surrounded by packs of information from the last hardfought. She waited until he turned his attention to her.

"Well?" he said.

"I asked myself what they are fighting for. And I'm very angry."

"Why?"

"Because I don't know. I can't know. They're Senexi." "Did they fight well?"

"We lost eight. Eight." She cleared her throat.

"Did they fight well?" he repeated, an edge to his voice. "Better than I was ever told they could."

"Did they die?"

"Enough of them."

"How many did you kill?"

"I don't know." But she did. Eight.

"You killed eight," he said, pointing to the packs. "I'm analyzing the battle now."

"You're behind what we read, what gets posted?" she asked.

"Partly," he said. "You're a good hawk."

"I knew I would be," she said, her tone quiet, simple. "Since they fought bravely—"

"How can Senexi be brave?" she asked sharply.

"Since," he repeated, "they fought bravely, why?" "They want to live, to do their . . . work. Just like me."

"No," he said. She was confused, moving between extremes in her mind, first resisting, then giving in too much. "They're Senexi. They're not like us."

"What's your name?" she asked, dodging the issue. "Clevo."

Her glory hadn't even begun yet, and already she was well into her fall.

Aryz made his connection and felt the brood mind's emergency cache of knowledge in the mandate grow up around him like ice crystals on glass. He stood in a static scene. The transition from living memory to human machine memory had resulted in either a coding of data or a reduction of detail; either way, the memory was cold, not dynamic. It would have to be compared, recorelated, if that would ever be possible.

How much human data had had to be dumped to make space for this?

He cautiously advanced into the human memory, calling up topics almost at random.

He backed away from sociological data, trying to remain within physics and mathematics. There he could make conversions to fit his understanding without too much strain.

Then something unexpected happened. He felt the brush of another mind, a gentle inquiry from a source made even stranger by the hint of familiarity. It made what passed for a Senexi greeting, but not in the proper form, using what one branch ind of a team would radiate to a fellow; a gross breach, since it was obviously not from his team or even from his family. Ayz tried to withdraw. How was it possible for minds to meet in the mandate? As he retreated, he pushed into a broad region of incomprehensible data. It had none of the characteristics of the other human regions he had examined.

This is for machines, the other said. —Not all cultural data are limited to biologic. You are in the area where programs and cyber designs are stored. They are really accessible only to a machine hooked into the mandate.

What is your family? Ayz asked, the first step-question in the sequence Senexi used for urgent identity requests.

I have no family. I am not a branch ind. No access to active brood minds. I have learned from the mandate.

Then what are you?

I don't know, exactly. Not unlike you.

It was the mind of the mutated shape, the one that had remained in the chamber, beseeching when he approached the transparent barrier.

I must go now, the shape said. Ayz was alone again in the incomprehensible jumble. He moved slowly, carefully, into the Senexi sector, calling up subjects familiar to him. If he could encounter one shape, doubtless he could encounter the others—perhaps even the captive.

The idea was dreadful—and fascinating. So far as he knew, such intimacy between Senexi and human had never happened before. Yet there was something very Senexi-like in the method, as if branch inds attached to the brood mind were to brush mentalities while searching in the ageless memories.

The dread subsided. There was little worse that could happen to him, with his fellows dead, his brood mind in flux bind, his purpose uncertain.

What Ayz was feeling, for the first time, was a small measure of freedom.

The story of the original Prufrex continued.

In the early stages she visited Clevo with a barely concealed anger. His method was aggravating, his goals never precisely spelled out. What did he want with her, if anything?

And she with him? Their meetings were clandestine, though not precisely forbidden. She was a hawk one now with considerable personal liberty between exercises and engagements. There were no monitors in the closed-off reaches of the cruiser, and they could do whatever they wished. The two met in areas close to the ship's hull, usually in weapons blisters that could be opened to reveal the stars; there they talked.

Prufrex was not accustomed to prolonged conversation. Hawks were neither raised to be voluble, nor selected for their curiosity. Yet the exhawk Clevo talked a great deal and was the most curious person she had met, herself included, and she regarded herself as uncharacteristically curious.

Often he was infuriating, especially when he played the "leading game," as she called it. Leading her from one question to the next, like an instructor, but without the trappings or any clarity of purpose. "What do you think of your mother?"

"Does that matter?"

"Not to me."

"Then why ask?"

"Because you matter."

Prufrex shrugged. "She was a fine mother. She bore me with a well-chosen heritage. She raised me as a hawk candidate. She told me her stories."

"Any hawk I know would envy you for listening at Jayax's knee."

"I was hardly at her knee."

"A speech tactic."

"Yes, well, she was important to me."

"She was a preferred single?"

“Yes.”

“So you have no father?”

“She selected without reference to individuals.”

“Then you are really not that much different from a Senexi.”

She bristled and started to push away. “There! You insult me again.”

“Not at all. I’ve been asking one question all this time, and you haven’t even heard. How well do you know the enemy?”

“Well enough to destroy them.” She couldn’t believe that was the only question he’d been asking. His speech tactics were very odd.

“Yes, to win battles, perhaps. But who will win the war?”

“It’ll be a long war,” she said softly, floating a few meters from him. He rotated in the blister, blocking out a blurred string of stars. The cruiser was preparing to shift out of status geometry again. “They fight well.”

“They fight with conviction. Do you believe them to be evil?”

“They destroy us.”

“We destroy them.”

“So the question,” she said, smiling at her cleverness, “is who began to destroy?”

“Not at all,” Clevo said. “I suspect there’s no longer a clear answer to that. We are the new, they are the old. The old must be superseded.”

“That’s the only way we’re different? They’re old, we’re not so old? I don’t understand.”

“Nor do I, entirely.” “Well, finally!”

“The Senexi,” Clevo continued, unperturbed, “long ago needed only gas-giant planets like their homeworlds. They lived in peace for billions of years before our world was formed. But as they moved from star to star, they learned uses for other types of worlds. We were most interested in rocky Earth-like planets. Gradually we found uses for gas giants, too. By the time we met, each of us encroached on the other’s territory. Their technology is so improbable, so unlike ours, that when we first encountered them we thought they must come from another geometry.”

“Where did you learn all this?” Prufrax squinted at him suspiciously.

“I’m no longer a hawk,” he said, “but I was too valuable just to discard. My experience was too broad, my abilities too useful. So I was placed in research. It seems a safe place for me. Little contact with my comrades.” He looked directly at her. “We must try to know our enemy, at least a little.”

“That’s dangerous,” Prufrax said, almost instinctively.

“Yes, it is. What you know, you cannot hate.”

“We must hate,” she said. “It makes us strong. Senexi hate.”

“They might,” he said. “But, sometime, wouldn’t you like to . . . sit down and talk with one, after a battle? Talk with a fighter? Learn its tactic, how it bested you in one move, compare—“

“No!” Prufrax shoved off rapidly down the tube. “We’re shifting now. We have to get ready.”

She’s smart. She’s leaving him. He’s crazy.

Why do you think that?

He would stop the fight, end the Zap.

But he was a hawk.

And hawks became glovers, I guess. But glovers go wrong, too. Like you.

Did you know they used you? How you were used? —That’s all blurred now.

She’s doomed if she stays around him. Who’s that? —Someone is listening with us.

The next battle was bad enough to fall into the hellfought. Prufrax was in her fightsuit, legs drawn up as if about to kick off. The cruiser exited sponge space and plunged into combat before sponge space supplements could reach full effectiveness. She was dizzy, disoriented. The overhawks could only hope that a switch from biologic to cyber would cure the problem.

She didn’t know what they were attacking. Tactic was flooding the implant, but she was only receiving the wash of that; she hadn’t merged yet. She sensed that things were confused. That bothered her. Overs did not feel confusion.

The cruiser was taking damage. She could sense at least that, and she wanted to scream in frustration.

Then she was ordered to merge with the implant. Biologic became cyber. She was in the Know.

The cruiser had reintegrated above a gas-giant planet. They were seventy-nine thousand kilometers from the upper atmosphere. The damage had come from ice mines—chunks of Senexi-treated water ice, altered to stay in sponge space until a human vessel integrated near by. Then they emerged, packed with momentum and all the residual instability of an unsuccessful return to status geometry. Unsuccessful for a ship, that is—very successful for a weapon.

The ice mines had given up the overness of the real within range of the cruiser and had blasted out whole sections of the hull. The launch lanes had not been damaged. The fighters lined up on their beams and were peppered out into space, spreading in the famous sword flower.

The planet was a cold nest. Over didn't know what the atmosphere contained, but Senexi activity had been high in the star system, concentrating on this world. Over had decided to take a chance. Fighters headed for the atmosphere. The cruiser began planting singularity eggs. The eggs went ahead of the fighters, great black grainy ovoids that seemed to leave a trail of shadow—the wake of a birthing disruption in status geometry that could turn a gas giant into a short-lived sun.

Their time was limited. The fighters would group on entry sleds and descend to the liquid water regions where Senexi commonly kept their upwelling power plants. The fighters would first destroy any plants, loop into the liquid ammonia regions to search for hidden cuckoos, then see what was so important about the world.

She and five other fighters mounted the sled. Growing closer, the hazy clear regions of the atmosphere sparked with Senexi sensors. Spiderweb beams shot from the six sleds to down the sensors. Buffet began. Scream, heat, then a second flower from the sled at a depth of two hundred kilometers. The sled slowed and held station. It would be their only way back. The fightsuits couldn't pull out of such a large gravity well.

She descended deeper. The pale, bloated beacon of the red star was drooping below the second cloudtops, limning the strata in orange and purple. At the liquid ammonia level she was instructed to key in permanent memory of all she was seeing. She wasn't "seeing" much, but other sensors were recording a great deal, all of it duly processed in her implant. "There's life here," she told herself. Indigenous life. Just another example of Senexi disregard for basic decency: they were interfering with a world developing its own complex biology.

The temperature rose to ammonia vapor levels, then to liquid water. The pressure on the fightsuit was enormous, and she was draining her stores much more rapidly than expected. At this level the atmosphere was particularly thick with organics.

Senexi snakes rose from below, passed them in altitude, then doubled back to engage. Prufrex was designated the deep diver; the others from her sled would stay at this level in her defense. As she fell, another sled group moved in behind her to double the cover.

She searched for the characteristic radiation curve of an upwelling plant. At the lower boundary of the liquid water level, below which her suit could not safely descend, she found it.

The Senexi were tapping the gas giant's convection from greater depths than usual. Above the plant, almost undetectable, was another object with an uncharacteristic curve. They were separated by ten kilometers. The power plant was feeding its higher companion with tight energy beams.

She slowed. Two other fighters, disengaged from the brief skirmish above, took positions as backups a few dozen kilometers higher than she. Her implant searched for an appropriate tactic. She would avoid the zero-angle phase for the moment, go in for reconnaissance. She could feel sound pouring from the plant and its companion—rhythmic, not waste noise, but deliberate. And homing in on that sound were waves of large vermiform organisms, like chains of gas-filled sausage. They were dozens of meters long, two meters at their greatest thickness, shaped vaguely like the Senexi snake fighters. The vermiforms were native, and they were being lured into the uppermost floating structure. None were merging. Her backups spread apart, descended, and drew up along her flanks.

She made her decision almost immediately. She could see a pattern in the approach of the natives. If she fell into the pattern, she might be able to enter the structure unnoticed.

It's a grinder. She doesn't recognize it.

What's a grinder?

She should make the Zap! It's an ugly thing; Senexi use them all the time. Not a planet with grinders, like a cuckoo, but for larger operations.

The creatures were being passed through separator fields. Their organics fell from the bottom of the construct, raw material for new growth—Senexi growth. Their heavier elements were stored for later harvest.

With Prufra in their midst, the vermiforms flew into the separator. The interior was hundreds of meters wide, lead-white walls with flat gray machinery floating in a dust haze, full of hollow noise, the distant bleats of vermiforms being slaughtered. Prufra tried to retreat, but she was caught in a selector field. Her suit bucked and she was whirled violently, then thrown into a repository for examination. She had been screened from the separator; her plan to record, then destroy, the structure had been foiled by an automatic filter.

"Information sufficient." Command logic programmed into the implant before launch was now taking over. "Zero-angle phase both plant and adjunct." She was drifting in the repository, still slightly stunned. Something was fading. Cyber was hissing in and out; the over logic-commands were being scrambled. Her implant was malfunctioning and was returning control to biologic. The selector fields had played havoc with all cyber functions, down to the processors in her weapons.

Cautiously she examined the down systems one by one, determining what she could and could not do. This took as much as thirty seconds—an astronomical time on the implant's scale.

She still could use the phase weapon. If she was judicious and didn't waste her power, she could cut her way out of the repository, maneuver and work with her escorts to destroy both the plant and the separator. By the time they returned to the sleds, her implant might have rerouted itself and made sufficient repairs to handle defense. She had no way of knowing what was waiting for her if—when—she escaped, but that was the least of her concerns for the moment.

She tightened the setting of the phase beam and swung her fightsuit around, knocking a cluster of junk ice and silty phosphorescent dust. She activated the beam. When she had a hole large enough to pass through, she edged the suit forward, beamed through more walls and obstacles, and kicked herself out of the repository into free fall. She swiveled and laid down a pattern of wide-angle beams, at the same time relaying a message on her situation to the escorts.

The escorts were not in sight. The separator was beginning to break up, spraying debris through the almost opaque atmosphere. The rhythmic sound ceased, and the crowds of vermiforms began to disperse.

She stopped her fall and thrust herself several kilometers higher—directly into a formation of Senexi snakes. She had barely enough power to reach the sled, much less fight and turn her beams on the upwelling plant.

Her cyber was still down.

The sled signal was weak. She had no time to calculate its direction from the inertial guidance cyber. Besides, all cyber was unreliable after passing through the separator.

Why do they fight so well? Clevo's question clogged her thoughts. Cursing, she tried to blank and keep all her faculties available for running the fightsuit. When evenly matched, you cannot win against your enemies unless you understand them. And if you truly understand, why are you fighting and not talking? Clevo had never told her that—not in so many words. But it was part of a string of logic all her own. Be more than an automaton with a narrow range of choices. Never underestimate the enemy. Those were old

Grounds dicta, not entirely lost in the new training, but only emphasized by Clevo.

If they fight as well as you, perhaps in some ways they fight-think like you do. Use that.

Isolated, with her power draining rapidly, she had no choice. They might disregard her if she posed no danger. She cut her thrust and went into a diving spin. Clearly she was on her way to a high-pressure grave. They would sense her power levels, perhaps even pick up the lack of field activity if she let her shields drop. She dropped the shields. If they let her fall and didn't try to complete the kill—if they concentrated on active fighters above—she had enough power to drop into the water vapor regions, far

below the plant, and silently ride a thermal into range. With luck, she could get close enough to lay a web of zero-angle phase and take out the plant.

She had minutes in which to agonize over her plan. Falling, buffeted by winds that could knock her kilometers out of range, she spun like a vagrant flake of snow.

She couldn't even expend the energy to learn if they were scanning her, checking out her potential.

Perhaps she underestimated them. Perhaps they would be that much more thorough and take her out just to be sure. Perhaps they had unwritten rules of conduct like the ones she was using, taking hunches into account. Hunches were discouraged in Grounds training—much less reliable than cyber.

She fell. Temperature increased. Pressure on her suit began to constrict her air supply. She used fighter trancing to cut back on her breathing.

Fell.

And broke the trance. Pushed through the dense smoke of exhaustion. Planned the beam web. Counted her reserves. Nudged into an updraft beneath the plant. The thermal earned her, a silent piece of paper in a storm, drifting back and forth beneath the objective. The huge field intakes pulsed above, lightning outlining their invisible extension. She held back on the beam.

Nearly faded out. Her suit interior was almost unbearably hot.

She was only vaguely aware of laying down the pattern. The beams vanished in the murk. The thermal pushed her through a layer of haze, and she saw the plant, riding highabove clear atmosphere turbulence. The zero-angle phase had pushed through the field intakes, into their source nodes and the plant body, surrounding it with bright blue Tcherenkov. First, the surface began to break up, then the middle layers, and finally key supports. Chunks vibrated away with the internal fury of their molecular, then atomic, then particle disruption. Paraphrasing Grounds description of beam action, the plant became less and less convinced of its reality. "Matter dreams," an instructor had said a decade before. "Dreams it is real, maintains the dream by shifting rules with constant results. Disturb the dreams, the shifting of the rules results in inconstant results. Things cannot hold."

She slid away from the updraft, found another, wondered idly how far she would be lifted. Curiosity at the last. Let's just see, she told herself; a final experiment.

Now she was cold. The implant was flickering, showing signs of reorganization. She didn't use it. No sense expanding the amount of time until death. No sense at all.

The sled, maneuvered by one remaining fighter, glided up beneath her almost unnoticed.

Aryz waited in the stillness of a Senexi memory, his thinking temporarily reduced to a faint susurrus. What he waited for was not clear.

Come.

The form of address was wrong, but he recognized the voice. His thoughts stirred, and he followed the nebulous presence out of Senexi territory.

Know your enemy.

Prufax . . . the name of one of the human shapes sent out against their own kind. He could sense her presence in the mandate, locked into a memory store. He touched on the store and caught the essentials—the grinder, the updraft plant, the fight from Prufax's viewpoint.

Know how your enemy knows you.

He sensed a second presence, similar to that of Prufax. It took him some time to realize that the human captive was another form of the shape, a reproduction of the . . .

Both were reproductions of the female whose image was in the memory store. Aryz was not impressed by threes—Senexi

mysticism, what had ever existed of it, had been preoccupied with fives and sixes—but the coincidence was striking. —Know how your enemy sees you.

He saw the grinder processing organics—the vermiform natives—in preparation for a widespread seeding of deuterium gatherers. The operation had evidently been conducted for some time; the vermiform populations were greatly reduced from their usual numbers. Vermiforms were a common type-species on gas giants of the sort depicted. The mutated shape nudged him into a particular channel of the memory, that which carried the original Prufax's emotions. She had reacted with disgust to the

Senexi procedure. It was a reaction not unlike what Aryz might feel when coming across something forbidden in Senexi behaviour. Yet eradication was perfectly natural, analogous to the human cleansing of food before eating.

It's in the memory. The vermiforms are intelligent. They have their own kind of civilization. Human action on this world prevented their complete extinction by the Senexi.

So what matter they were intelligent? Aryz responded. They did not behave or think like Senexi, or like any species Senexi find compatible. They were therefore not desirable. Like humans.

You would make humans extinct?

We would protect ourselves from them.

Who damages the other most?

Aryz didn't respond. The line of questioning was incomprehensible. Instead he flowed into the memory of Prufrax, propelled by another aspect of complete freedom, confusion.

The implant was replaced. Prufrax's damaged limbs and skin were repaired or regenerated quickly, and within four wakes, under intense treatment usually reserved only for overs, she regained all her reflexes and speed. She requested liberty of the cruiser while it returned for repairs. Her request was granted.

She first sought Clevo in the designated research area. He wasn't there, but a message was, passed on to her by a smiling young crew member. She read it quickly:

"You're free and out of action. Study for a while, then come find me. The old place hasn't been damaged. It's less private, but still good. Study! I've marked highlights."

She frowned at the message, then handed it to the crew member, who duly erased it and returned to his duties. She wanted to talk with Clevo, not study.

But she followed his instructions. She searched out high-lighted entries in the ship's memory store. It was not nearly as dull as she had expected. In fact, by following the highlights, she felt she was learning more about Clevo and about the questions he asked.

Old literature was not nearly as graphic as fibs, but it was different enough to involve her for a time. She tried to create imitations of what she read but erased them. Nonfib stories were harder than she suspected. She read about punishment, duty; she read about places called heaven and hell, from a writer who had died tens of thousands of years before. With ed supplement guidance, she was able to comprehend most of what she read. Plugging the store into her implant, she was able to absorb hundreds of volumes in an hour.

Some of the stores were losing definition. They hadn't been used in decades, perhaps centuries.

Halfway through, she grew impatient. She left the research area. Operating on another hunch, she didn't go to the blister as directed, but straight to memory central, two decks inboard the research area. She saw Clevo there, plugged into a data pillar, deep in some aspect of ship history. He noticed her approach, unplugged, and swiveled on his chair. "Congratulations," he said, smiling at her.

"Hardfought," she acknowledged, smiling.

"Better than that, perhaps," he said.

She looked at him quizzically. "What do you mean, better?"

"I've been doing some illicit tapping on over channels." "So?"

He is dangerous!

"For what?"

"You may have a valuable genetic assortment. Overs think you behaved remarkably well under impossible conditions." "Did I?"

He nodded. "Your type may be preserved."

"Which means?"

"There's a program being planned. They want to take the best fighters and reproduce them—clone them—to make uniform top-grade squadrons. It was rumored in my time—you haven't heard?"

She shook her head.

"It's not new. It's been done, off and on, for tens of thousands of years. This time they believe they can make it work."

"You were a fighter, once," she said. "Did they preserve your type?"

Clevo nodded. "I had something that interested them, but not, I think, as a fighter."

Prufrax looked down at her stubby-fingered hands. "It was grim," she said. "You know what we found?"
"An extermination plant."

"You want me to understand them better. Well, I can't. I refuse. How could they do such things?" She looked disgusted and answered her own question. "Because they're Senexi."

"Humans," Clevo said, "have done much the same, sometimes worse."

"No!"

No!

"Yes," he said firmly. He sighed. "We've wiped Senexi worlds, and we've even wiped worlds with intelligent species like our own. Nobody is innocent. Not in this universe." "We were never taught that."

"It wouldn't have made you a better hawk. But it might make a better human of you to know. Greater depth of character. Do you want to be more aware?"

"You mean, study more?"

He nodded.

"What makes you think you can teach me?"

"Because you thought about what I asked you. About how Senexi thought. And you survived where some other hawk might not have. The overs think it's in your genes. It might be. But it's also in your head."

"Why not tell the overs?"

"I have," he said. He shrugged.

"They wouldn't want me to learn from you?"

"I don't know," Clevo said. "I suppose they're aware you're talking to me. They could stop it if they wanted." "And if I learn from you?"

"Not from me, actually. From the past. From history, what other people have thought. I'm really not any more capable than you . . . but I know history, small portions of it. I won't teach you so much as guide."

"I did use your questions," Prufrax said. "But will I ever need to use them—think that way—again?"

Clevo nodded. "Of course."

You're quiet.

She's giving in to him.

She gave in a long time ago.

She should be afraid.

Were you—we—ever really afraid of a challenge?

No.

Not Senexi, not forbidden knowledge.

Clevo first led her through the history of past wars, judging that was appropriate considering her occupation. She was attentive enough, though her mind wandered; sometimes he was didactic, but she found she didn't mind that much.

She saw that in all wars, the first stage was to dehumanize the enemy, reduce the enemy to a lower level so that he might be killed without compunction. When the enemy was not human to begin with, the task was easier. As wars progressed, this tactic frequently led to an underestimation of the enemy, with disastrous consequences. "We aren't exactly underestimating the Senexi," Clevo said. "The overs are too smart for that. But we refuse to understand them, and that could make the war last indefinitely."

"Then why don't the overs see that?"

"Because we're being locked into a pattern. We've been fighting for so long, we've begun to lose ourselves. And it's getting worse." He assumed his didactic tone, and she knew he was reciting something he'd formulated years before and repeated to himself a thousand times. "There is no war so important that, to win it, we must destroy our minds."

She didn't agree with that; losing the war with the Senexi would mean extinction, as she understood things.

Most often they met in the single unused weapons blister that had not been damaged. They met when the

ship was basking in the real between sponge-space jaunts. He brought memory stores with him in portable modules, and they read, listened, experienced together. She never placed a great deal of importance in the things she learned; her interest was focused on Clevo. Still, she learned.

The rest of her time she spent training. She was aware of a growing isolation from the hawks, which she attributed to her uncertain rank status. Was her genotype going to be preserved or not? The decision hadn't been made. The more she learned, the less she wanted to be singled out for honor. Attracting that sort of attention might be dangerous, she thought. Dangerous to whom, or what, she could not say.

Clevo showed her how hero images had been used to indoctrinate birds and hawks in a standard of behavior that was ideal, not realistic. The results were not always good; some tragic blunders had been made by fighters trying to be more than anyone possibly could or refusing to be flexible.

The war was certainly not a fib. Yet more and more the overs seemed to be treating it as one. Unable to bring about strategic victories against the Senexi, the overs had settled in for a long war of attrition and were apparently bent on adapting all human societies to the effort.

"There are overs we never hear of, who make decisions that shape our entire lives. Soon they'll determine whether or not we're even born, if they don't already."

"That sounds paranoid," she said, trying out a new word and concept she had only recently learned. "Maybe so."

"Besides, it's been like that for ages—not knowing all our overs."

"But it's getting worse," Clevo said. He showed her the projections he had made. In time, if trends continued unchanged, fighters and all other combatants would be treated more and more mechanically, until they became the machines the overs wished them to be.

No.

Quiet. How does he feel toward her?

It was inevitable that as she learned under his tutelage, he began to feel responsible for her changes. She was an excellent fighter. He could never be sure that what he was doing might reduce her effectiveness. And yet he had fought well—despite similar changes—until his billet switch. It had been the overs who had decided he would be more effective, less disruptive, elsewhere.

Bitterness over that decision was part of his motive. The overs had done a foolish thing, putting a fighter into research. Fighters were tenacious. If the truth were to be hidden, then fighters would be the ones likely to ferret it out. And pass it on. There was a code among fighters, seldom revealed to their immediate overs, much less to the supreme overs parsecs distant in their strategospheres. What one fighter learned that could be of help to another had to be passed on, even under penalty. Clevo was simply following that unwritten rule.

Passing on the fact that, at one time, things had been different. That war changed people, governments, societies, and that societies could effect an enormous change on their constituents, especially now—change in their lives, their thinking. Things could become even more structured. Freedom of fight was a drug, an illusion-

No! used to perpetuate a state of hatred.

"Then why do they keep all the data in stores?" she asked. "I mean, you study the data, everything becomes obvious."

"There are still important people who think we may want to find our way back someday. They're afraid we'll lose our roots, but—" His face suddenly became peaceful. She reached out to touch him, and he jerked slightly, turning toward her in the blister. "What is it?" she asked.

"It's not organized. We're going to lose the information. Ship overs are going to restrict access more and more. Eventually it'll decay, like some already has in these stores. I've been planning for some time to put it all in a single unit—"

He built the mandate!

"and have the overs place one on every ship, with researchers to tend it. Formalize the loose scheme still in effect, but dying. Right now I'm working on the fringes. At least I'm allowed to work. But soon I'll have enough evidence that they won't be able to argue. Evidence of what happens to societies that try to obscure their histories. They go quite mad. The overs are still rational enough to listen; maybe I'll push it

through.” He looked out the transparent blister. The stars were smudging to one side as the cruiser began probing for entrances to sponge space. “We’d better get back.”

“Where are you going to be when we return? We’ll all be transferred.”

“That’s some time removed. Why do you want to know?” “I’d like to learn more.”

He smiled. “That’s not your only reason.”

“I don’t need someone to tell me what my reasons are,” she said testily.

“We’re so reluctant,” he said. She looked at him sharply, irritated and puzzled. “I mean,” he continued, “we’re hawks. Comrades. Hawks couple like that.” He snapped his fingers. “But you and I sneak around it all the time.”

Prufrax kept her face blank.

“Aren’t you receptive toward me?” he asked, his tone almost teasing.

“It’s just that that’s not all,” she said, her tone softening. “Indeed,” he said in a barely audible whisper.

In the distance they heard the alarms.

It was never any different.

What?

Things were never any different before me.

Don’t be silly. It’s all here.

If Clevo made the mandate, then he put it here. It isn’t true.

Why are you upset?

I don’t like hearing that everything I believe is a . . . fib.

I’ve never known the difference, I suppose. Eyes-open was never all that real to me. This isn’t real, you aren’t . . . this is eyes-shut. So why be upset? You and I . . . we aren’t even whole people. I feel you. You wish the Zap, you fight, not much else. I’m just a shadow, even compared to you. But she is whole. She loves him. She’s less a victim than either of us. So something has to have changed.

You’re saying things have gotten worse.

If the mandate is a lie, that’s all I am. You refuse to accept. I have to accept, or I’m even less than a shadow. —I don’t refuse to accept. It’s just hard.

You started it. You thought about love.

You did!

Do you know what love is?

Reception.

They first made love in the weapons blister. It came as no surprise; if anything, they approached it so cautiously they were clumsy. She had become more and more receptive, and he had dropped his guard. It had been quick, almost frantic, far from the orchestrated and drawn-out ballet the hawks prided themselves for. There was no pretense. No need to play the roles of artists back once more into the past, through the dim gray millennia of repeating ages. History began to manifest again, differences in the record.

On the way back to Mercior, four skirmishes were fought. Prufrax did well in each. She carried something special with her, a thought she didn’t even tell Clevo, and she carried the same thought with her through their last days at the Grounds.

Taking advantage of hawk liberty, she opted for a posthardfought residence just outside the Grounds, in the relatively uncrowded Daughter of Cities zone. She wouldn’t be returning to fight until several issues had been decided—her status most important among them.

Clevo began making his appeal to the middle overs. He was given Grounds duty to finish his proposals. They could stay together for the time being.

The residence was sixteen square meters in area, not elegant—natural, as rentOpts described it.

On the last day she lay in the crook of Clevo’s arm. They had done a few hours of nature sleep. He hadn’t come out yet, and she looked up at his face, reached up with a hand to feel his arm.

It was different from the arms of others she had been receptive toward. It was unique. The thought amused her. There had never been a reception like theirs. This was the beginning. And if both were to be duplicated, this love, this reception, would be repeated an infinite number of times. Clevo meeting

Prufrax, teaching her, opening her eyes.

Somehow, even though repetition contributed to the death of history, she was pleased. This was the secret thought she carried into fight. Each time she would survive, wherever she was, however many duplications down the line. She would receive Clevo, and he would teach her. If not now—if one or the other died—then in the future. The death of history might be a good thing. Love could go on forever. She had lost even a rudimentary apprehension of death, even with present pleasure to live for. Her functions had sharpened. She would please him by doing all the things he could not. And if he was to enter that state she frequently found him in, that state of introspection, of reliving his own battles and of envying her activity, then that wasn't bad. All they did to each other was good.

Was good

Was

She slipped from his arm and left the narrow sleeping quarter, pushing through the smoke-colored air curtain to the lounge. Two hawks and an over she had never seen before were sitting there. They looked up at her.

"Under," Prufrax said.

"Over," the woman returned. She was dressed in tan and green, Grounds colors, not ship.

"May I assist?"

"Yes."

"My duty, then?"

The over beckoned her closer. "You have been receiving a researcher."

"Yes," Prufrax said. The meetings could not have been a secret on the ship, and certainly not their quartering near the Grounds. "Has that been against duty?"

"No." The over eyed Prufrax sharply, observing her perfected fightform, the easy grace with which she stood, naked, in the middle of the small compartment. "But a decision has been reached. Your status is decided now."

She felt a shiver.

"Prufrax," said the elder hawk. She recognized him from fibs, and his companion: Kumnax and Arol. Once her heroes. "You have been accorded an honor, just as your partner has. You have a valuable genetic assortment—"

She barely heard the rest. They told her she would return to fight, until they deemed she had had enough experience and background to be brought into the polinstruc division. Then her fighting would be over. She would serve better as an example, a hero.

Heroes never partnered out of function. Hawk heroes could not even partner with exhawks.

Clevo emerged from the air curtain. "Duty," the over said. "The residence is disbanded. Both of you will have separate quarters, separate duties."

They left. Prufrax held out her hand, but Clevo didn't take it. "No use," he said.

Suddenly she was filled with anger. "You'll give it up? Did I expect too much? How strongly?"

"Perhaps even more strongly than you," he said. "I knew the order was coming down. And still I didn't leave. That may hurt my chances with the supreme overs."

"Then at least I'm worth more than your breeding history?" "Now you are history. History the way they make it." "I feel like I'm dying," she said, amazement in her voice.

"What is that, Clevo? What did you do to me?"

"I'm in pain, too," he said.

"You're hurt?"

"I'm confused."

"I don't believe that," she said, her anger rising again. "You knew, and you didn't do anything?"

"That would have been counter to duty. We'll be worse off if we fight it."

"So what good is your great, exalted history?"

"History is what you have," Clevo said. "I only record." —Why did they separate them?

I don't know. You didn't like him, anyway.

Yes, but now... .

I don't understand.

We don't. Look what happens to her. They took what was best out of her. Prufrax went into battle eighteen more times before dying as heroes often do, dying in the midst of what she did best. The question of what made her better before the separation—for she definitely was not as fine a fighter after—' has not been settled. Answers fall into an extinct classification of knowledge, and there are few left to interpret, none accessible to this device.

So she went out and fought and died. They never even made fibs about her. This killed her?

I don't think so. She fought well enough. She died like other hawks died.

And she might have lived otherwise.

How can I know that, any more than you? —They—we—met again, you know. I met a Clevo once, on my ship. They didn't let me stay with him long.

How did you react to him?

There was so little time, I don't know.

Let's ask... .

In thousands of duty stations, it was inevitable that some of Prufrax's visions would come true, that they should meet now and then. Clevos were numerous, as were Prufraxes. Every ship carried complements of several of each. Though Prufrax was never quite as successful as the original, she was a fine type. She—She was never quite as successful. They took away her edge. They didn't even know it!

They must have known.

Then they didn't want to win!

We don't know that. Maybe there were more important considerations.

Yes, like killing history.

Aryz shuddered in his warming body, dizzy as if about to bud, then regained control. He had been pulled from the mandate, called to his own duty.

He examined the shapes and the human captive. There was something different about them. How long had they been immersed in the mandate? He checked quickly, frantically, before answering the call. The reconstructed Mam had malfunctioned. None of them had been nourished. They were thin, pale, cooling. Even the bloated mutant shape was dying; lost, like the others, in the mandate.

He turned his attention way. Everything was confusion. Was he human or Senexi now? Had he fallen so low as to understand them? He went to the origin of the call, the ruins of the temporary brood chamber. The corridors were caked with ammonia ice, burning his pod as he slipped over them. The brood mind had come out of flux bind. The emergency support systems hadn't worked well; the brood mind was damaged.

"Where have you been?" it asked.

"I assumed I would not be needed until your return from the flux bind."

"You have not been watching!"

"Was there any need? We are so advanced in time, all our actions are obsolete. The nebula is collapsed, the issue is decided."

"We do not know that. We are being pursued."

Aryz turned to the sensor wall—what was left of it—and saw that they were, indeed, being pursued. He had been lax.

"It is not your fault," the brood mind said. "You have been set a task that tainted you and ruined your function. You will dissipate."

Aryz hesitated. He had become so different, so tainted, that he actually hesitated at a direct command from the brood mind. But it was damaged. Without him, without what he had learned, what could it do? It wasn't reasoning correctly.

"There are facts you must know, important facts—"

Aryz felt a wave of revulsion, uncomprehending fear, and something not unlike human anger radiate from the brood mind. Whatever he had learned and however he had changed, he could not withstand that

wave.

Willingly, and yet against his will—it didn't matter—he felt himself liquefying. His pod slumped beneath him, and he fell over, landing on a pool of frozen ammonia. It burned, but he did not attempt to lift himself. Before he ended, he saw with surprising clarity what it was to be a branch ind, or a brood mind, or a human. Such a valuable insight, and it leaked out of his permea and froze on the ammonia.

The brood mind regained what control it could of the fragment. But there were no defenses worthy of the name. Calm, preparing for its own dissipation, it waited for the pursuit to conclude.

The Main set off an alarm. The interface with the mandate was severed. Weak, barely able to crawl, the humans looked at each other in horror and slid to opposite corners of the chamber.

They were confused: Which of them was the captive, which the decoy shape? It didn't seem important. They were both bone-thin, filthy with their own excrement. They turned with one motion to stare at the bloated mutant. It sat in its corner, tiny head incongruous on the huge thorax, tiny arms and legs barely functional even when healthy. It smiled wanly at them.

"We felt you," one of the Prufraxes said. "You were with us in there." Her voice was a soft croak.

"That was my place," it replied. "My only place." "What function, what name?"

"I'm ... I know that. I'm a researcher. In there, I knew myself in there."

They squinted at the shape. The head. Something familiar, even now. "You're a Clevo ..."

There was noise all around them, cutting off the shape's weak words. As they watched, their chamber was sectioned like an orange, and the wedges peeled open. The illumination ceased. Cold enveloped them.

A naked human female, surrounded by tiny versions of herself, like an angel circled by fairy kin, floated into the chamber. She was thin as a snake. She wore nothing but silver rings on her wrists and a thin torque around her waist. She glowed blue-green in the dark.

The two Prufraxes moved their lips weakly but made no sound in the near vacuum. Who are you?

She surveyed them without expression, then held out her arms as if to fly. She wore no gloves, but she was of their type.

As she had done countless times before on finding such Senexi experiments—though this seemed older than most—she lifted one arm higher. The blue-green intensified, spread in waves to the mangled walls, surrounded the freezing, dying shapes. Perfect, angelic, she left the debris behind to cast its fitful glow and fade.

They destroyed every portion of the fragment but one. They left the mandate behind unharmed.

Then they continued, millions of them thick like mist, working the spaces between the stars, their only master the overness of the real.

They needed no other masters. They would never malfunction.

The mandate drifted in the dark and cold, its memory going on, but its only life the rapidly fading tracks where minds had once passed through it. The trails writhed briefly, almost as if alive, but only following the quantum rules of diminished energy states. Briefly, a small memory was illuminated.

Prufrax's last poem explained the mandate reflexively.

How the fires grow!

Peace passes

All memory lost.

Somehow we always miss that single door,

Dooming ourselves to circle.

Ashes to stars, lies to souls,

Let's spin 'round the sinks and holes.

Kill the good, eat the young.

Forever and more

You and I are never done.

The track faded into nothing. Around the mandate, the universe grew old very quickly.

