



## Space Time

by  
Perry A. Chapdelaine, Sr.

The giant who entered was deep-space dark. His hair bushed upward and outward, crawling -- it seemed to Michael O'Hara -- in coiling links ever upward toward the outer stars, bushy and oily black. His eyes: deep brown pools streaked with thin red veins fracturing the white. His teeth, traditional mother-of-pearl, and flashing, long and hungry.

One large, brown hand reached to Michael's and slapped palms hard. "Hey there, man, you makin' out with the shit?"

*Oh no!* Michael thought. *Straight from the ghetto with talk. Bet Margaret Cleveland's hair bun she'd sent a man from Yale, or Princeton, Stanford, or Harvard. . . .*

"I'll jes' set my little ol' ass down hyere," said Margaret's newly graduated Culture and Customs Operator, and he did, taking the chair's every square inch to task with his bulk.

Michael O'Hara, Project Ozma X's long-time, dynamic project director, felt like shuffling papers, with his embarrassment. He looked, instead, into thickly garnished eyes and the eyes looked back, unashamed, bright and intelligent.

"You are?" Michael asked.

"Cydney, spelled with a 'C', Man."

Michael, discomfited by the unabashed stare, about to speak out to Margaret for confirmation on the new assignee, was distracted by Mary Clibourne's entrance. His secretary's blue eyes hinted mischief when she set the distinctly aromatic coffee on his rich solid walnut desk, whence Michael O'Hara, skin corded, tall, perpetually youthful, it seemed, flopped his pen, grinned, and asked his secretary, "This time. . . .?"

She whirled charmingly, her dress ribboning its melange outward toward both men, and then she stopped, as though holding for *Fashions*. "Do you like it?"

Michael's empty stomach gnawed. His unfinished speech for the *International Academy of Science Awards Dinner* was but three hours distant. Scattered notes circled him, a bizarre paper mache' skirt. Part of his mind cycled through one more vital task that was his before day's end. Perhaps that's why he missed it at first. His tired eyes traveled from her gray, open-toed shoes, noting her blue toe nails, up her trim legs, and still up pleasing curvaciousness to her blue eyes and her hair -- that last item, like the chameleon, oft changing color and shape and texture according to society's montage, time of day or evening, or -- and most probably -- according to mood as dictated by the eternal and mysterious vagaries of woman, in particular, this puckish woman. Though his weary eyes followed, his churning mind did not. Like some automaton, his mind and eyes turned back to the black giant before mind and eyes joined, bringing significance. "Oh no! Not you, too?" he groaned.

Mary's laughter bubbled warm in the paneled room, soft with rugs. She whipped four, long, trailing, red tentacles from around the back of her head, their blood-red contrasting sharply with her deep blue hair. "Well, everyone wears the Eridanian hair piece. Style, Chief.

Mary's warm smile made weary Michael feel good, like coming home to soft slippers and a restful evening. "I was only teasing, Chief," she whispered, also flashing her smile at Cydney. "On Grandeur One, it looks fine, natural, balancing his long six-foot length, his four-foot height, and his four big feet. His tentacles seem to create a -- well -- a kind of necessary symmetry about his sunken eyes and mouth. But as a hair piece on a human female. . . .?"

She removed the brilliant red head gear. "Women should look like Earth beings and Epsilon Eridani folks should look the way you'd expect, having come ten point eight light years. . . ."

"Emergency, Dr. O'Hara!" Samuel Chavits' quiet but forceful voice interrupted Michael's laughter.

O'Hara looked into the now vivid lumeniscent panel before his desk, and into the eyes of the Black Earth & Exo-biology chief, noting how his usually smooth skin wrinkled with concern.



® "Did you catch John Doanne first?" Michael asked.

"Public Relations and Information can't locate him, Michael."

"And -- ?"

"Dr. Win Lai called from Hang Chow, China. He's inside the Eridanian pressure dome with Grandeur One. Chinese Control's lost. Grandeur One is being subjected to outside disturbances and uncontrolled questioning."

"The other Eridanians?"

"Moved out two days ago. One to the Antarctica Base, two, Russia, one Egypt, one here, and so on."

"Grandeur One, being in the midst of joint experiments with Win Lai, chose to stay at Hang Chow 'til completion of their tests."

Michael, overwhelmingly successful as director of the world's first project to greet Earth's first space visitors, was not unused to sudden social urges and sometimes even fanatical social pressures. But now? With no forecasting from his unusually efficient departments?

"What kind of disturbance?" Michael asked, cautiously.

Samuel sighed, an unusual display of emotion for him. "Seems religious this time. 'Nine Lives of the Dragon', they call themselves."

Mary's buzzer, on override from her own office and responding to emergencies during her absence, sounded quietly in the background. She hopped to her feet, running swiftly back to her desk.

Cydney braced himself to leave, but was waved down by Michael.

Within seconds U.N. President Ownouchai's visage flashed beside that of Samuel Chavits'. "I'm dreadfully sorry," apologized the rough, gravelly voice laced with strong English accent, "but Dr. O'Hara, again something of major importance has come to my attention. Representatives of the People's Republic of China say they've lost control over the Eridanian pressure dome. Threats have been made, possibly using explosives to force entry."

"Thanks, President Ownouchai," Michael nodded politely toward his long-time political benefactor. "Sam Chavits is on the screen next to you. He's just briefed me."

"Can you communicate inside the dome?" asked President Ownouchai.

"Yes." Sam answered for Michael just as his screen rotated to face the U.N. President's image, as well as Michael. Dr. Lai has seventy-two hours oxygen. Food capsules and water recycler are adequate. Those pressure suits can handle much more than Grandeur One's three atmospheres, but not without occasional flushing out."

"Just a moment," Michael told his callers. He spoke aloud again, to Mary Clibourne, whence light speed, computer-coordinated switches acted. "Mary, call together the staff -- emergency." Then to the two visages, "*The Nine Lives of the Dragon!* What do they want of Grandeur One?"

"Questions," Dr. Chavits answered swiftly. "Theological. Keep him at it night and day. Must have some kind of thing on each individual structuring their internal realities according to Eridanian standards."

"But safe?" Michael persisted, anxiety at last creeping into his tone.

"Yes. For now. Dr. Margaret Cleveland has her Culture and Customs section researching the splinter religion. Initial field crew departed ten minutes ago, but they'll have capacity only for supply and liason. We need expert help, and soon."

Michael thanked Chavits, asking to be kept informed. President Ownouchai thanked Michael, and also asked to be kept informed. Mary briefly reported her progress on the departmental emergency meeting, and Michael, not quite exploding with pressures past, and yet to come, reluctantly turned, not wanting to divide his attention between his urgent paper titled EGOGOMETRODYNAMICS and Cydney.

Mary entered unannounced, placing steaming, hot, aroma-charged coffee on his round desk, also removing the now cold cup she'd earlier placed there.

"Cydney," Michael at last began again, his slow speech underlying other serious concerns, "Margaret Cleveland's Culture and Customs -- 'Cu and Cu', or 'Copper and Copper', as some call it -- has a solid reputation for finding, training and placing the very best -- the world's finest."



® Cydney spread bright teeth, and simply smiled.

"Do you feel qualified to join us permanently, professionally, now that your training has terminated?"

"Sho' Boss man! Why not, Man?"

Michael's personal bubble just wasn't making contact with Cydney's personal bubble, and Michael was well aware of the fact. He didn't suffle his papers, but again he might as well have done so. "Are you familiar with Egoeometrydynamics?"

"You mean 'Ergo', don't you, Chief?" the Black giant still smiled.

That broke Michael's overserious concentration, and he looked upward. "No, 'Ego' is correct. You'll see," and he briefed his speech, partially reading from his papers. "Twenty and twenty-first century man is characterized by his obsession for maintaining an unnatural schism between what he chooses to call his objective world and his subjective world. The greater mass of us have preferred this culturual schism. Yet implicit in the Einstein-Schroedinger equations was a conjoining of reality and view which attracted but a handful in the main physicists."

"Boss man, you speakin' of the Eridanian view?"

Michael nodded: "The Eridanian view considers scientific method, itself, *in process* as well as *in propria persona*, that is, 'in one's own person' and reflecting both the limitations of the organismic observer -- his subjective states -- and his interaction with reality. Those who preceded Copernicus viewed ego as central to reality, and an external, single authority as a sole channel of communication between reality and ego.

"Prior to our contact with Epsilon Eridani, and their visit to us, we viewed the Copernican revolution as the successful crucial point from which the final scientific method evolved. But even before the pre-Copernican view, there was an even more chaotic view, where ego was prodded and misguided by a multiplicity of authorities, often changing in strength, one to another, and shifting in a bewildering pattern which was usually quite unpredictable. That was the period of the multiplicity of gods or other forces often pantheistic in kind.

"The two systems of thought -- pre-Copernican and post-Copernican -- are literally further away from each other than the pre-Copernican system is distant from the Copernican."

Michael paused, cup in hand. "Think I'll get across the point?"

"Doan' rightly know," the giant feigned heavy concentration. "Spouse you could give an example?"

Michael, prodding, snapped, "Picture to field, viewpoint to background?"

"Nawsir," the Black giant again grinned, teeth as straight and clean as a newly scrubbed and curving picket fence. "Could stand some little humor somewhere." Chuckling in a liquid roll, he added, "Hope the fuckin' chittlins pay the price anyways!"

Michael ignored the chide, paused, and then said, "Suppose you supply the humor, Cydney."

Without any pause at all, Cydney said, "Well, they's this story 'bout two theology students. They was praisin' the Big Man. Says one: 'For The Man, one thousand years is like a minute. And as He is THE Man, over all, a thousand dollahs is foh Him like a cent.' Says the other: 'Thass jes fine: Next time ah prays to Him, ah'll pray Big Man, give me a cent.' Says the first: 'Tain't gonna hep. He'll jes say, Wait a minute.'"

Samuel Chavits' image and voice choked off Michael's laughter, which was quite spontaneous, though the story was old. Splitting the screen into two equal parts, one with Chavits' image, the other with a view before the Hang Chow pressure dome, the situation was at once clear.

Two Chinese guards lay dead, one with legs twisted grotesquely, the other, an arm lying in pooled blood.

At the communicator outside the dome kneeled one of the *Nine Lives of the Dragon* fanatics, hands folded, cowed head bowed. Others stood in line, also cowed, awaiting their turn. "Grandeur One can't leave the viewing plate," Chavits explained. They've threatened to open pressure valves if he does.

"Win might be safe, but Grandeur One cannot tolerate Earth's mix and atmosphere. We can't get the transportation domes into Hang Chow on time, even if permitted their use.

"Chinese guards have all surely been immobilized or killed by the fanatics.



® "The domes are ecologically balanced for Eridanian comfort, as you know, and can safely sustain Grandeur One for many years, if necessary, but Win must be removed.

"*The Nine Lives of the Dragon* surround the compound in numbers and plan to stay indefinitely, threatening to kill all, including themselves, if their plans are thwarted."

Michael was concerned, but one part of his mind also noted Cydney's face and posture and their spontaneous return to alertness. The screen image expanded to the kneeling one, at the same time the computers took over translation: "... is not sex or sexless, unity or multiple, chaotic or unifying." It was Grandeur One attempting rational explanation. Grandeur One continued with, "You must understand the concept is based on differing physiognomy. God is more than person, it is untranslatable and differing, extensional, at the same time intensional. . . ."

Then, "You will teach me, Oh Great One. I will humbly do whatever you ask, make every sacrifice, throw myself upon sharpened stakes, if you but speak the Great Word, Oh Great One."

"There is no counterpart," Grandeur One answered quite calmly and rationally, at least as the computer translated him.

Michael again made note of Cydney's virtually unconscious headshake, in the negative, as though saying that Grandeur One answered wrongly. Michael could see Grandeur One's four red tentacles violently waving about his pucker-like mouth, like a sea anemone in search of food, so acridly disgusted was the star traveler.

"Oh Great One, begin from the beginning," the voice pleaded, and the cowed head bowed lower even as the lotus position was taken. The would-be acolyte's head touched concrete thrice. "I will be an infant."

Dr. Win Lai's liquid Polynesian voice surfaced. "Tell him to come back in ten minutes."

Grandeur One did as Lai suggested. The image shifted. Inside the dome sharp nearly actinic lights laced in bright blues were filtered out. Grandeur One's long, quadrapedal body turned almost lazily toward the diminutive Lai. A low buzzing sound preceded the translation. "Are these sick ones never to understand?" asked Grandeur One.

"I'm deeply apologetic," Win Lai answered. "It is something not anticipated. . . . A small group strategically positioned. . . .!"

"Oh Great Red One!" The shout had come again, almost a ritual. When one of the *Nine Lives of the Dragon* was put off, another took his place. Pipes pounded on the transparent steel-alloyed dome, a clangorous din. Grandeur One wearily turned to his viewscreens.

Very soon afterwards Michael called for Margaret Cleveland. She was not available, so Michael studied the Black man before him. Cydney's feet were bare, calloused and dirty. His toes, like those of an enormous statue, pointed directly at Michael. Strong, thick thighs, covered with patchwork over worn jeans, they flexed and unflexed as their toes dug into the soft, thick pile. Strong arms seemed to float gently over the chair's arms, and they were dark black and bare. A thin undershirt, now streaked with dust and sweat, almost, but not quite, covered a throbbing, hairy chest.

"Cydney what?" Michael suddenly asked.

"Naow come on, Man," the giant grinned. "I doan' ask who your fuckin' daddy was. It's Cydney, thass all. Jes Cydney. You take me or dap out!"

That last was said in a serious mein, a tight, fast control over Cydney's facial muscles.

Michael, in spite of urgency, could not force his mind away from Non-commie problems of several years ago. The best agent came dressed in tux, half-shaved head and other paraphernalia too outlandish for reflection. *Now this!* Shrugging mentally he forced himself to ask, "Cydney, are you knowledgeable on religions?"

Cydney, eyes wide, smiled big again, his red eye-veins showing like lacework above a row of fine white. "Yassuh, an' all the African religions like Christian, Hebrew, Mohammadism.!"

Michael let the obvious probe pass.

Margaret, now on the large screen, seemed stern; as was her custom, old maidish but natural auburn hair



® had been pulled and tied behind her head, forming her characteristic feature, the hair bun.

"Cydney is here, Margaret. Is he real?"

She, glancing quickly at Michael's interviewee, reached behind her view screen, and pulled to her a small, green folder. She read: "Stanford University, Anthropology, Ph.D.; Languages, seven, Ph.D.; special studies, exo-biology, theology, philosophy and philosophy of science; additional studies in . . . .

"Enough," Michael raised his hand. "His name?"

She said, quite simply, "Cydney," and she also came very close to laughter.

Later Michael again studied the giant, who was not uneasy during the tight scrutiny. Michael finally said, "This may be a job for you, Cydney, but will your skin and racial background mix with *The Nine Lives of the Dragon*?"

Cydney's eyes narrowed as his palm turned outward, and at last, as Michael knew must happen, Cydney's language became cultured, normal. "They have no racial boundaries, although roots twist through oriental thoughts -- personal incarnation. I am --" Cydney bowed, "-- also Zen master, or Shaolin priest, if you wish."

Michael, somewhat relieved, chuckled, though he knew he was being tested with exaggerations in other ways. "No. I just wanted to be sure that you felt equal to the task, and especially that you could work with some degree of safety. You've heard the problem. Do you want it?"

"Yassuh, Bossman!" Dr. Cydney facetiously drawled.

The departmental meeting was desultory. Dr. John Doane, tall, middle-aged, scholarly both with mind and in appearance, headed Communications and Cryptography, otherwise referred to as "C and C".

Samuel Chavits, Earth and Exo-biology head, did not report in person, partaking of the meeting through the large panel screens.

Win Lai, Physics and Chemistry chairman, almost painfully appeared on vision screens, for behind him futilely explained Grandeur One to the religious fanatics.

Margaret Cleveland -- pure copper, some said -- carried surprisingly thin folders containing latest findings on the Culture and Customs of the small splinter group.

Peter Machtrix, Language and Context, otherwise known as "L and C", reported: "Overcompensation from the GIMITIS, really. When *God is Made in Terran Image Society* was so soundly discredited during their televised and unsuccessful attempt to destroy the Eridanians, some swung too far in the opposite direction."

"In China?" Michael queried skeptically.

"*Nine Lives of the Dragon* stems from certain splinter Zen sects that were buried under Maoism, resurrected under wide, sweeping religious reforms during anti-Maoism, and then isolated during later scientific awakenings. It's philosophical construct leads to deep personal insecurity. . . .!"

"Paranoia?"

"Yes."

Margaret Cleveland confirmed the evaluation.

Dr. John Doane added, "We can't seem to wring more from their dialogue than appears on the surface. Must be a spontaneous nut group. Has anyone identified leadership?"

No one answered.

President Ownouchai's dark features suddenly appeared on screen. "We've checked through Chinese officials at Hang Chow, Dr. O'Hara. We're so sorry to report that the dome lays over solid granite, probably as deep as any in those parts. No tunnels, no hidden passageways."

Michael nodded. "U.N. Air?"

"Sentries are sighting on explosives placed beneath the tank. Any air activity, and they threaten to blow up the tank."

"Did you get estimates on their numbers?"

"About one thousand throughout China, but only two hundred and fifty at the tank compound. Moved in,



bedrolls, rice bowls, children, animals, bicycles. . . ." Ownouchi sighed, ". . . continuous guards, trigger-quick fanatics, say the Chinese delegates."

"Talk?"

"Not to anyone, except Grandeur One. I've tried. Won't accept any kind of communication, I've been told. Gave orders, described consequences, and shut themselves off."

"Is there anything, Sir?" Michael asked.

The U.N. President shook his head, then paused. His usually quick smile and open optimism was lacking. Then, "There's -- well, you understand, Michael. . . ." He flashed his smile again. "Your group. Project Ozma X. I am so sorry to place yet another burden upon you, but. . . ."

Michael nodded. "Thank you for your confidence, President Ownouchi. We'll keep you posted."

The remainder of Michael's staff meeting stretched strangely long. Michael called for a brief break while Mary Clibourne searched for Cydney, who was completing some required but unimportant routine tasks, and when the Black giant returned, Michael did not introduce him, the staff already having participated in either Cydney's orientation or training. Except for Cydney who appeared fresh, energetic, interested, and who kept silent, others chopped their words. Ideas half formed among them, and then dropped. Pads scribbled aimlessly, feet shuffled against luxurious carpets, making soft swishing noises. Coffee was sipped slowly, quietly.

At last Michael dismissed them, directing that they use all of their enormous resources in each respective department during this emergency.

Cydney was directed to stay.

Mary was told to cancel Michael's speech.

Samuel Chavits was asked to inform the other Eridanians of the emergency in Hang Chow. Then, raising his voice slightly, he said, "Win Lai." His vocal print matched against millions of information bits, light rays shunted electron flows from endlessly circling pathways, light speed switched activated, and his voice connected with the link in the Eridanian chambers at Hang Chow, China.

"Yes, Dr. O'Hara." The Polynesian's voice filtered soft, yet untrobled.

"Dr. Lai, I'm terribly sorry to report that we've discovered no way that either one or both of you won't be endangered. For what it's worth, we've the whole project at work, and most of the world's organizations."

Hesitantly, almost apologetically, Win Lai suggested a remote, possible alternative that had occurred to him.

"Any idea -- for God's sake -- is better than just sitting," Michael nearly shouted.

"Well -- I don't want to get up hopes, and it is a wild idea. . . ."

"Get it out!"

"Grandeur One works with me on Superspace concepts. We've reached breadboard stage, but theory is quite clear." Win waited, as often does the specialist, for Michael's understanding.

"Soooo?"

"Geometries! Selection and activation of differing geometries!"

"Win, Michael impatiently prodded, "I can't follow your suggestion if I don't comprehend it. And don't give me the mathematics. My temperament, you've noticed, is short."

"Win's slick, shiny face remained impassive. "Well. . . if we could complete our laboratory mockup, maybe we'd shorten distance between Hang Chow dome and. . . well. . . one of the Eridanian domes?"

Michael's pause was pronounced, and he deliberately did not face Cydney, so remote was the possibility of success for Win Lai, he felt.

Margaret Cleveland's stern visage flashed next to Win Lai's. Michael asked Win to stand by while Margaret explained that Cydney was administratively clear and in Michael's responsibility.

After the interruption, Win began again, having found bright, fluorescent yellow chalk and blue chalk board. He scrawled undecipherable green mathematics on the board, meanwhile lecturing as though he were back at the university, and in no danger whatsoever. He explained, "There are two clues buried in the Schroedinger-



® Einstein equations, and that also correlate with some natural phenomenon.

"Think of a star where mass of the core exceeds critical mass. Matter of the core will pour torrentially inward from all directions, like billions of Niagara Falls, on its way down to ever smaller size. A thermonuclear reaction may at most briefly flicker, and at most drive off a minor amount of matter. No supernova flashes. In one kind of collapse, the core, endowed with less than critical mass, ends as a neutron star, and we see a supernova. Where critical mass is exceeded, the collapse continues to completion."

Pacing his swift steps, and waving his yellow chalk, Win rhetorically asked: "What right have we to talk of complete collapse? What do we know about the behavior of matter at densities above nuclear? What lets us say that there is not some further stopping point on the way in to complete collapse? Can you answer that, Dr. O'Hara?"

"Not much. But there is an upper limit to the rigidity of matter. The higher the rigidity of matter the greater the speed of sound." Michael frowned momentarily. "The maximum rigidity gives a speed of sound equal to the speed of light. No higher rigidity is permissible. Else the speed of sound would exceed the speed of light and a thoroughly tested principle of special relativity would be violated."

"Ah yes! Michael. However the critical elasticity simply is not enough to stop the collapse. 'Collapse is inevitable', so the prediction reads. Into that prediction enters not only a principle about the upper limit to the elasticity of matter, but also Einstein's theory of how gravitation acts under extreme conditions.

"But Grandeur One and I have asked, 'What right do we have to assume that our Einstein's great standard 1915 geometrical theory of gravitation -- his geometrodynamics -- makes sense under these conditions?'"

"Well --," Michael pondered, "I'm aware that one can look for the effects of individual black holes in space, and one can also ask about the gravitational influence of large numbers of black holes spread through space, and we do detect gravitational collapse --."

"Exactly. But what goes on inside the black holes? The time scale inside is totally different from the time scale outside. According to general relativity, a standard clock far away outside and a standard clock located on the falling matter inside will keep at quite different rates. As seen from the outside, the black hole will live for eons. But to an observer who rides inward on a collapsing ball of matter, the density goes up faster and faster and in less than a second is predicted to go to infinity."

Michael shrugged, and Big Cydney spoke for the first time, saying in a cultured voice, "Something's wrong with the prediction, then. Any phenomenon which is predicted to go to infinity must be found, or the prediction is wrong. We've yet to measure an infinite mass anywhere."

"Yes," Win nodded. "Cydney has the point. An infinity is a clue that important factors are not accounted for. You're familiar with quantization of Einstein's general relativity, or geometrodynamics, Michael?"

Michael thumped the papers at his desk. "I was working on a speech for the IAS, and relating geometrodynamics to egogeometrodynamics -- man's persistent efforts to see himself as a nexus, a center of everything, even in the spacetime era. But where might this lead, Win?"

"Well, as you know, Michael, the Eridanians are about a generation ahead of us in many aspects, which is perhaps why they visited us rather than the other way. And they've successfully passed through the -- well, what we call the Coperinican era, where at last everything is converted from personal forces to overly objective forces -- and now they've returned to the more natural 'science-as-a-personal-viewpoint'." Win came as near to frowning as he probably could. "That's the best translation we have for the joining of what we call 'objective' scientific methods, to personal 'subjective' scientific methods.

"Based on their methodology, and our breadboard abilities, we were constructing a small mockup based on principles that seem to -- well -- maybe will shorten space. Consequences? The Eridanians could return home more swiftly, the stars will be more easily available to us, and new principles will be discovered --."

"Ah. I see the point, at last," Michael nodded. "As you said, though, it is barely possible -- breadboard to perfect success at the first try? Dare we risk it?"

"Michael, the air reading is sixty four hours."



® "Your point is made, and well made. All right. What do you want us to do?"

"I can't work it myself. I need to consult with Grandeur One, as he does with me. *The Nine Lives of the Dragon* do not permit him rest, and if he refuses them attention, they bang on the tank so the sound drives him back to the screen."

Michael advised that he'd work on the problem, and call back. He made another check, perhaps prematurely, on results from his department heads, learning that U.N. military elements had the cult surrounded with overwhelming but useless force.

Then, he said, "Cydney. You're sure your skin color and Afro features will permit the freedom we need?"

"What is it you want, Bossman? Blood oath?"

Michael raised his hand, peace-palm outward. "No. No. It's just that our operators are permitted virtually complete authority. This is a unique and difficult problem. So much depends on it. Frankly, Cydney, I'm not questioning you, just the problem."

Cydney's eyebrows puckered -- perhaps "hunkered" would be the better descriptor -- and his voice returned to simulated high wailing ghetto. "You Big Man, in charge this great B-I-G impotent project, and you say, chickenshit, man, you not thinkin' o' me, jes the problem? If it ain't little ol' Black dog turd me and it's the problem, then you saying the problem's too big for this little ol' Black dog turd. Say it, Man! You want a little ol' Black dog turd, or does this pile dap out?"

"Alright, it's yours," Michael snapped, now angry. *Racial prejudism? In Project Ozma? Great Epsilon Eridana*, Michael thought, Not me!

"You've the world to draw upon, Cydney," Michael spoke harshly. Standing, he reached out his hand to shake Cydney's, but was again slapped, palm to palm, and the giant was gone.

Michael, at last alone, turned his attention back to Win Lai's immediate problem. Reflecting on the probabilities, he felt truly that neither Win's suggestion nor Cydney's activities, whatever they might become, were to be of much consequence. Again telling himself it was not prejudism, but experience, he yet searched for something that had not quite come through to his conscious mind about the new operator's behavior. Sophisticated analysis on the Eridanian communication forms, both via star-to-star communications, and in their immediate presence, had taught much regarding external behavior, and patterns, as modes of communication, as opposed to simply the expression and transmission of culturally dependent, but exo-culturally arbitrary symbols. *What was it the big Black man was saying?*

Then he had it.

He switched at once to Hang Chow pressure tank, telling Win Lai, "Advise Grandeur One to speak to *The Nine Lives of the Dragon* people as though deep philosophical concepts are just for them, but let the subject be on the physics and problems of your mutual project."

Win was delighted with the idea, and in moments he had conveyed it to Grandeur One, who, slowly turning from the viewscreen, tossed tentacles toward Michael in acknowledgement.

At first Grandeur One spoke in general terms: "Failure of time in small places is related to problems of the nature of large spaces. Think of time as representing merely a path along which dynamical geometries operate. Your Einstein extended three-dimensions to include time and called it four-dimensional, and this was a nice way to express the relationship of space and time. But space and time must be unwrapped again to explain the black hole phenomenon, as well as the creation of the universe hypotheses. . . ."

The gathered faithful, now numbering in the fifties, sighed as one body at Grandeur One's use of the word "creation." As he talked, Grandeur One traced diagrams with what appeared to be a light pen, and Win Lai, voice unheard by the assembled faithful, continued his breadboard construction.

"Classical Earth Geometrodynamics is infinitely careful where it treads in Superspace," Grandeur One explained his evolving, abstruse mathemtiacs. "But our view is like a foam awash on a shore, the leading edge



is the probability wave of space, while each bubble is a possible space, each having its own probability value for existence, each only as likely and as real as the moment will permit. This explains why Terran physics found only probability at the very small, say at  $10^{-33}$  cm, the so-called Planck length or critical distance, where these small fluctuations become all important. At these distances it is completely out of the question, according to quantum geometrodynamics, to conceive of space having the character of an ideal, as you Terrans say, Euclidean perfection."

Grandeur One wrote out more equations, and Win Lai traced them and discussed some.

Meanwhile, the assembled multitude waited, apparently still absorbing the last words of wisdom. Grandeur continued with, "If there is no such thin as 'the' geometry of space at small distances, then it is also true that there is no such thing as 'the' universe at large distances. The wave that propagates in superspace bursts out of the narrow zone to which your classical theory assigns the history of any universe -- there is no unique history that one can ascribe to the universe. Instead there is a certain probability of this, that and the other history of the universe. In the coallapse of certain stars, indeterminism dominates the entire collapse. One history of the universe finds itself inescapably coupled with other, alternative histories, and to speak of the words 'before' and 'after' and 'next' have lost all meaning. Your Chaos theory is closer to our view, with an ever-expanding universe creating a multiplicity of universes forever onward, each unique having physical quantum and relativity constants of their own. The 'new' histories of space which near *end*, join onto, and are so strongly coupled to the 'old' history of the universe they have no correspondance whatsoever, one with the other. Quantum mechanical coupling by probability waves, yes. Historical continuity, no. At this point of coupling any use of the word 'time' in any normal sense of this word is completely out of the question.

"It is through the manipulation of spatial constants that we can -- in a sense -- "travel" through other "histories.

"Your Schroedinger gave the world the 'wave equation', a simple, definite idea; and out of it he quickly found the energy levels of the hydrogen atom. The idea explosion produced such revolutionary concepts as 'probability amplitude', 'probability event', the 'uncertainty principle', and 'complementarity'.

"If your Schroedinger equation was a time bomb, then quantum geometrodynamics is a supertime bomb. In combining the Eridanian concepts with Terran, already one can see revolutionary consequences -- superspace: the failure of the idea of time at small distances; quantum fluctuations in the geometry of space; 'coupling between alternative histories of the universe' in the final stages of gravitational collapse, perhaps the actual control of space itself, as independent from your Einstein's concept of space-time. . . ."

Interspersed between Grandeur One's phrasing, Win Lai consulted Grandeur One's mathematics and worked desperately. But as Grandeur One expounded and wrote out the abstruse, alien mathematics, the throngs outside grew, each member having convinced themselves that here, at last, was truth cascaded from the chosen one to the chosen few.

Hang Chow, capital of the old Che-kiang province, lay ancient on a plain at the southern terminus of the also ancient Imperial Canal, and within two miles of the head of the estuary of the Tsien-tang River, about 50 miles from the open sea, and nearly 100 miles southwest of feverish Shanghai.

Reconstructed from original rubble, the high, well-built wall circuted old Hang Chow in a 12 mile long oblong.

Cydney passed quickly from the airport through the clean, paved streets, passing triumphal arches, monuments to great men, and gorgeous Buddhist temples.

Hang Chow, once alive with fine silk manufactures, skilled ivory carvers, brilliant literary and devote ecclesiastical life, once the most important and richest city in China, now achieved fame, by Eridanian choice, as a permanent location for one of the Eridanian living quarters.

Cydney breathed deeply of the hot, thick air as his vehicle rushed him through and past multitudes. "*Kinsai*" or as some recorded it, "*Kinsay*" of Marco Polo, Cydney mused, *Hang Chow the greatest, most interesting chapter of the Polos' long trek from so-called civilization.*

Once past the dense suburbs, and at his request, he took to foot yet miles from the Eridanian tank. The odor



of life, spread so evenly on the fields, hung heavy in the air. A black-eyed sparrow cocked its head and twittered innocently. Cydney trudged the unseasonably dusty trail ancient before paper dragons flew high for the delight of children and oldsters. Dust sifted upward and downward again, also in ancient rhythm to the transient passage of feet or bicycle tread. On his back, attached to broad shoulders like some miniature child's toy, was his bedroll, and inside it was wrapped ordinary items: cooking utensils, tiny charcoal or dung burner, some dried fruits, length of rope, thin plastic raincape, an extra pair of carved wooden sandals. . . .

Cydney also wore the brown dirt-stained robe and cowl, his black hair squirming outward and forming an incomplete black halo about his dark forehead. Across his front and back was duplicated the cult's insignia: nine dragons arising as one from the ying and yang symbol. Beside the Black giant, apparently arranged by accident, stepped lightly the young, sallow faced girl, perhaps not more than 16 years of age, but already she'd taken the vows for unnecessary speech, a true devotee of *The Nine Lives of the Dragon*. She, too, was robed and carried upon her back in time-honored tradition her bedroll and utensils.

Cydney could not induce her to talk, so already his first plan had failed. They, therefore, trudged silently to the top of a small artificial rise when suddenly the total scene washed brilliantly and alarmingly.

Reflected along two lines at top and bottom of the otherwise transparent dome the afternoon sunlight nearly blinded Cydney. When his eyes adjusted the dome became the center of what appeared to be carnival or circus atmosphere: tents surrounded the dome, each waving *The Nine Lives of the Dragon* pennant. The village compound, a small but modern university with its specially designed old-world atmosphere, surrounded the whole, as though designed by intent.

Very faintly Cydney spotted the long, red undulating Grandeur One through the dome's transparent surface.

Between the tank and the tents were bedrolls, bicycles, baskets, children running and jumping, or sleeping, and -- from Cydney's vantage point -- only three riflemen lying prone, eye and gun aimed toward the tank, presumably at the placed explosive charges.

It reminded of an extraordinarily large, ornate pastry -- there was the multitude, like a large period at the end of a colorful exclamation point, and at the center of the pastry, perhaps one hundred strong, little fruit dots, the people, each now sitting patiently awaiting a turn before the great one and his salvation wisdom from the heavens.

But of all these sights and impressions that passed through Cydney's eye and mind like the quick flutter of sparrows suddenly disturbed along the pathway, the most immediate barrier and most immediately disturbing was the sight of crudely bound and gagged cult members, four of them, forcibly squatting over bamboo poles tied to their legs, their arms also being bound to a pole. A fifth cult member thrashed about, crying aloud with pain, as one of the U.N. forces thrashed his back with thin split bamboo strips.

Cydney barely heard his diminutive traveling companion's startled gasp before he propelled himself among the diminutive guards, a surging tank among dominoes. His one large leg tumbled the two standing, even while his fingers flew to another's neck. He lifted the smaller man like a tiny puppy dog and shook. Setting the man down, the guard simply fell off balance and onto the other downed members.

Crouching, Cydney snapped the bonds of each prisoner, shoved each ahead on the trail, and within moments was behind them, again trudging toward the ridiculous and increasingly noisy encampment below.

"Contact, plan two, successful," Cydney's subvocal microphone relayed to Michael O'Hara. "Please thank the U.N. members for me, and apologize to them in my name."

"Will do," Michael's voice, like a whispering thought, appeared inside Cydney's ear, unheard by any other. "Time, fifty hours, Cydney. We've paratroops overhead high. Military surrounds the area and sharpshooters are positioning to sight on those who have explosives under aim."

"I expected as much, Dr. O'Hara, but please hold off'til I signal."

Cydney's eyes unobtrusively studied the cult members now at his side. He searched for little things: muscular configurations and motions, looks between one another, sounds, perhaps even small cues in vocal tones from



subvocal and unvoiced thoughts. His body, bulky as a bear, absorbed. . . .

"Win Lai's project?" Cydney subvocalized.

"Negative, as expected. They've got their breadboard. Win actually passed a mouse into the -- ah -- 'field', I guess it could be called -- until a better term has been invented. The outcome is a small bottle of red, brown and white fluid, a random mixture of chemicals.

Michael reflected: *This was an experiment that would normally have been classified as fantastic success during normal times, but now? A mouse into red, brown and white fluid? Hardly a means of extracting Grandeur One.*

Michael asked Cydney to identify how many men were sighted at explosives and to provide any insight on handling of same, other than the means now being reluctantly arranged. By then Cydney and his small, silent group had reached the periphery of the cult where guards insisted on a thorough search before further access.

Inside the largest tent were regions tied off by ropes, and between two such ropes Cydney and his group were herded until they stood before one with cracking voice, and who was cowed in brilliant red. He methodically questioned each in their turn.

As Cydney had earlier predicted to Michael, there were other Blacks scattered among the cult. Since he was new, and no one except those he'd saved could validate him, he was obviously under moderate suspicion, but nonetheless accepted. By the time long shadows stretched awkwardly across tent tops, Cydney at last was assigned a number representing his turn before Grandeur One, and also he was ushered to his resting place, a small barren spot in a tent at the compound's furthest periphery, where he was also seated.

He sat stilled: There was the whisper of guards, the scratching of millenia old cicada, the rasping snores from sleeping tent-mates blended with sweat and manure, the cries of newly born and the eternal dusty heat.

Cydney waited, a patient giant among children.

At last the murmurs and snicks and coughs reduced to a minimum, and the golden moon slid behind a hazy cover. Cydney crawled through the newly made tear quietly, as would the leopard ride the radiant ground heat.

"Forty three hours," Michael O'Hara seemed to whisper. "Suggestions, anyone?"

Margaret, who was tied into the circuit, asked, "Can they connect two transmitters if they find the balance?"

Michael, quickly, wearily, said, "Successfully? Win and John say no."

Sam Chavits asked if Win could manufacture oxygen using the transmitter.

Michael said, "No. The elements transmitted were elements and compounds that seem to have been produced at random, with no connection to source."

Cydney, rising like a bear, muffled the involuntary grunt from the dark form before him. In moments he had gagged and bound the guard and moved off through blackness interspersed here and there with the only fires and light permitted by the guards, those near the guards themselves.

Sam said, "Win tried picking up atmosphere from outside the dome?"

Michael said, "Same answer. got a blue liquid, unidentifiable, and radiation."

Silence.

Threading his way between tent pegs, he came upon a tiny water and food dump probably stolen from the People's Republic of China hours earlier. He waited. And then, silent as a Jaguar, within seconds he stepped behind a second guard, and then a third.

Michael's voice filtered through, tired, almost lonely: "Guns -- explosives -- the world's first matter transmitter, or transmatter. Wonder what will be its eventual use -- Chemical industries,? Creation of lower echelon energy configurations? -- If they could isolate and control variables. . . .we're yet so blind -- Cydney! Have you identified their numbers?"

Cydney, again awaiting passage of a pacing guard, did not reply. Then finally he said, "At least seven, Dr. O'Hara. I'm but a third of the way around."

"Good god!" Came Michael's fevered shout. "We anticipated four or five. But so many? Can you," he pleaded, "take them?"



®  
OF AMERICA  
"Nawsuh, Bossman," Cydney reverted. "They's watchin' me. 'Sides, they's as many as two to a point. Little ol' dog turd me jes ain't trusted near them, so's nobody else trusted near them."  
"I understand," Michael sighed, ignoring Cydney's thrust. "But what's next?"  
"Ah'se countin', Massah. They's still tomorry."

The cult's security force was sweeping through the compound searching for secret agent infiltrators which they presumed had attacked their guards the night before. So far, all they had found were their own apparently loyal followers.

Towering over most like a giant mastiff might tower over an assembly of poodles, at last Cydney was permitted to wait his turn among those who sat before the Great Red One. Each was cowed and immobile, and silent in prayer -- excepting an occasional exclamation. Cydney, too, vibrated his bulk, but tuned to absorb everything.

*The Nine Lives of the Dragon* was an institution, be it tiny, and nonconforming. But as an institution it had to have a network of procedures centered upon certain nuclear interests. Economic institutions center upon production, the allocation and distribution, and the use and consumption of goods; and their behavioral networks of food production and the manufacture of artifacts; barter, exchange, sale, preemption, gift, and inheritance; utilization, hoarding, and consumption; and ownership, possession, and usufruct -- everything that focusses upon production and utilization of goods and services.

Marital institutions focus upon organization of intersexual relations, particularly the stabilization of mating, the nurture and enculturation of the young, household economic activities, the establishment and maintenance of mutual aid between kinship groups, and the legalizing of inheritance.

Religious institutions -- and certainly *The Nine Lives of the Dragon* was a religious institution -- focus upon the definition of the supernatural, the formulation of effective ritual for dealing with the supernatural, and symbolic representation of the social entirety.

All institutions within any society overlap and interweave, and the vertex, so to speak, of the overlapping, was the individual: Just as the individual was placed by status, and modified by his "culture," so did each individual play a role -- role, the customary complex of behavior associated with a particular status.

Cydney searched for institutional forms common to *Homo sapiens*, their particular form and functions, the requisite roles required by bona fide members. The command to "Just be yourself," did not mean what it says, Cydney had long ago concluded, but rather, that one should "Suppress conscious awareness of roles that must be enacted" A person's behavior became "natural" only when one became so habituated to all one's roles that one did not register awareness of time while performing them.

Twenty five hours! Grandeur One, normally untiring by earth standards, began to slow, yet *The Nine Lives of the Dragon* persisted upon him.

"Can Win focus upon the explosives, and transmute them into the tank as harmless chemicals?" someone asked.

"No," Samuel Chavits' voice strained. "They can't focus on anything without dual coupling. Cydney can't get near enough to a terrorist rifleman to place a unit."

Cydney's mind searched, integrating recent memories, and there, just at the tip of consciousness, at last a thought. "Remove me from the network, Bossman" he barely subvocalized, wanting to rid himself of distraction.

"... only one personality, according to your perceptions," Grandeur One exclaimed through the jury-rigged loud-speaker system. "... one universe, one you."

Cydney sat among them, where each of Grandeur One's statements brought about a response not unlike a fundamentalist revival. He knew his brain and nervous system held sufficient facts for solution of this anthropological problem if the thought would but surface. . . .

"... when even your great scientists speak of alternative physics, alternative histories, and describe them by



® mathematics and probability couplings. . . .," Grandeur One repeated, and then Cydney had it. The thought blossomed into his awareness like a large orchid, vivid, bright, delicate, fresh, beautiful. . . .

"Michael O'Hara," he subvocalized quickly. "There are certain objects I'll need this evening, Bossman." He described where he'd be, outside the cult guard, and how many he'd need, and how to package them.

Michael cautioned on the limited time available, but Cydney's only response was, "Yassuh, Bossman. Ah's watchin' the big hand, an' the little hand, too!"

Project Ozma X's department heads, together again, watched the replay on wall screens. First in one's then in two's, and then in larger groups, cowled cult members -- heads still decorated in the latest Eridanian headpiece, red and wiggly -- strode away from the area. U.N. guards at their perimeter almost politely permitted them passage. Within an hour, their passage became a route, and what was left standing about the cylindrical dome was detritus from a long, almost death-dealing occupation.

Grandeur One chose to stay at the Hang Chow dome, but this time protected in full by the People's Republic of China.

Win Lai seated himself next to Michael O'Hara, and all about the long, rich conference table were decidedly happy department heads. Michael passed along toast brought by Mary, and all, at one time or another, congratulated the dominating giant, Cydney.

"Who would think it so easy?" Sam Chavits spoke to no one, but spoke for all.

Margaret Cleveland smiled thinly, nodding to her protege'.

"Tell us," Michael almost pleaded.

Cydney grinned, proud, white teeth against his blackness. He deliberately sipped at his social reward, and then: "It had to do with the roles being assumed by *The Nine Lives of the Dragon*. They were paranoid, yes. But that in itself was a role. The difference between real paranoia, as an organic disease, and the role as induced by society is, well, great. And while everyone was focussing on that apparently dominating aspect of the -- ah -- institution, I learned that *The Nine Lives of the Dragon* was a rather rigid religious institution which, by definition, like any religious institution, focusses upon the supernatural and -- if I may take the liberty to say it -- the 'What's in it for me?' a syndrome of the West.

"One who is uninterested in self, certainly has no interest in a supposed hereafter, nor a creator, nor the created. So in that sense *The Nine Lives of the Dragon* corresponded more to Western world religious conviction than to Eastern, as their title and history would otherwise indicate."

"But why the headpieces?" asked Mary Clibourne

"Look around. What's the latest style among woman, today?"

"The bright, red Eridanian headpiece," Mary answered, still puzzled.

"And who must look at those headpieces?"

"Men, of course, and other woman?"

"Correct," Cydney laughed. "There you have it. All of society has gone through a transition period with the arrival of extraterrestrials. First some feared and rejected star visitors, culminating in the *God is Made in Terran Image Society*, the very ones who nearly destroyed our visitors. Then, due to the vast dramatization of that incident on television, and its failure, most mankind followed a well known sympathy curve, in sympathico, with the alien visitors -- identifying in many different ways with them, such as wearing outlandish Eridanian headpieces, men and woman both."

"I still don't understand how the simple passing out of Eridanian headpieces to cult members caused their sudden and dramatic breakup this morning," Michael stated flatly.

The room quited in wait, then Cydney answered, saying, "Simple." He held his large palm outward. "they didn't think of Grandeur One as a God so much as a symbol against which to project their own individual



personalities. Then they wished to become identified with the symbol. As a God he would either have been indestructible, or terrible in punishment, or too valuable to expose to the risk of explosions and destruction.

"*The Nine Lives of the Dragon* held their cultural bindings more by virtue of individual roles than by long-standing institutionalization. Once I was permitted to walk among them, to listen and to study them, it became apparent that they were egoistic, self-centered, more or less immature individuals. Their lack of consideration for their elected "God," their individual determination to gain personal ambitions, their regimentation by semi-military bodies for the common goal, which itself was for individual gain, and, of course, their long-standing separation from normal society --.

"I viewed the situation as a whole sub-society subliminally absorbing outside impulses, but not being free by virtue of their own conditioning to exercise those absorbed impulses. Whatever the reason for modern society to emulate the Eridanians with un-humanoid, repulsive, dangling, red headgear, those same impulses had had to affect the cult. Yet none of *The Nine Lives of the Dragon* wore the current Eridanian hairpieces from Western society, indeed, none had been exposed to it.

"Yet that style of the West was a natural, though unconscious, solution to their inner psychological pressures, just as it seems to be for the West: It permitted them almost complete identification with their symbolic model, Grandeur One. It tied in nicely with his physics on possible alternative histories, which seemed to tell them that their idea of reincarnation was absolutely correct. It acted as the separation force that unglued their personal egos from their cultural domination. . . . The key, of course, was their complete lack of understanding of Grandeur One's message. Groans in the wrong places, so to speak. . . ."

"The red hairpiece spoke their language?" Michael interrupted.

Cydney paused, and then looked directly into Michael's eyes. "Yawssuh, Bossman! Wasn't it you, Uncle Charley, what tole this little ol' dog turd of ego-geo-metro-dynamics. . . ." and Cydney's voice, quoting like the brilliant scholar and role player he was, falsettoed, ". . . man's persistent efforts to see himself as nexus, a center of everything, even in this space-time era. . . ."

