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SCIENCE FICTION AND FANTASY

JULY 1990

"Heads" by Greg Bear

Plus new stories by Greg Egan, Ian Lee and others

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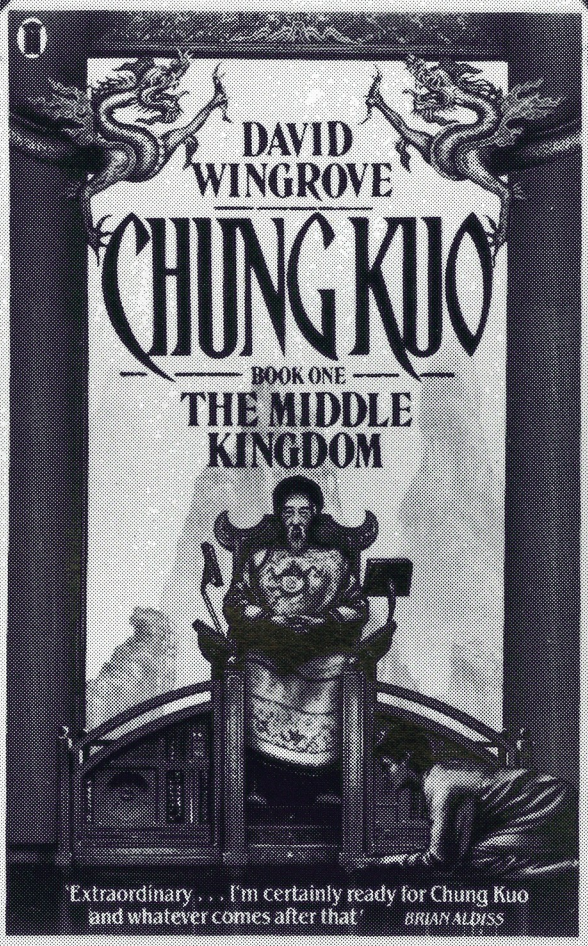

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interzone

SCIENCE FICTION AND FANTASY

No 37 **July 1990**

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Interface
David Pringle

Interzone is the current standard-bearer in a long line of professional (or would-be professional) British science-fiction magazines. Among them were *New Worlds* (200 issues, 1946-1970), *Science Fantasy* (93 issues, 1950-1967; renamed *Impulse* in its last year), *Authentic SF* (85 issues, 1951-1957), *Nebula SF* (41 issues, 1952-1959) and *Science-Fiction Adventures* (32 issues, 1958-1963). It will not escape your notice that *Interzone* has now outlived the last-named, in terms of number of issues published, and bids fair to overtake *Nebula* very soon. Roll on the day when we can claim to have outlived *Authentic* and *Science Fantasy*.

After *New Worlds* folded, there were many more-or-less abortive attempts to found a new British sf magazine: among them, *Vision of Tomorrow* (12 issues, 1969-1970), *SF Monthly* (28 issues, 1974-1976), *Other Times* (two issues, circa 1976), *Vortex* (five issues, 1977), *Ad Astra* (about a dozen issues, circa 1979-1980), *Extro* (three issues, 1982) and *UK Omni* (one issue, 1984). Nor, in spite of *Interzone*'s existence, do the attempts cease. To create a new magazine is one of the perennial aspirations of sf enthusiasts, almost as common as the desire to become a published short-story writer and novelist.

In the last year or two, we have seen **The Gate** (one issue, 1989) come and go – Maureen Porter has announced that she has resigned as editor; though neither she nor anyone else seems to know whether the publisher, Richard Newcombe, will produce a second issue. Now we are promised **R.E.M.** and **Psyko Candy**, quarterly magazines of way-out science fiction to be published, respectively, by Arthur Straker and Andrew Coates. Apparently these are paying the same word-rates as *Interzone*. Given the problems associated with any sf magazine's launch in the UK, Messrs Straker and Coates will be doing remarkably well if they reach two or three issues apiece. But we must give them both the benefit of the doubt: I recommend that you look out for their adverts in *IZ* and elsewhere, then judge for yourselves.

WHO ARE THE BIG SELLERS?

We have now published half a dozen essays in our series entitled "The Big Sellers" (there isn't one in this issue, because of the space devoted to the short novel by **Greg Bear**; and there won't be one in the next, because it is a special **Brian Aldiss** issue; but the series should recommence in the September *IZ*). The purpose is to comment on those sf, fantasy and horror novelists who sell the most copies – irrespective of literary merit, which arguably some possess (**Terry Pratchett**) and some don't possess (**L. Ron Hubbard**). We're not necessarily endorsing all these authors by writing about them in *IZ*; we're just fascinated by the phenomenon they represent. Why do some writers succeed financially where so many others fail? Why do masses of readers like some "brand-names" above others?

And, apart from those we have already covered, who are the big sellers anyway? Here's a partial answer to that last question. According to a recent issue of *SF Chronicle*, the bestselling sf/fantasy/horror novelists in the USA during 1989 were: **Stephen King** (*The Dark Half*: 1,562,000 copies in hardcover); **Dean R. Koontz** (*Midnight*: 310,000); **J. M. Dillard** (*The Lost Years*, a "Star Trek" novel: 200,000); **David Eddings** (*Sorceress of Darshiva*: 182,000; and *The Diamond Throne*: 120,000+); **Peter Straub** (*Mystery*: circa 150,000); **Anne McCaffrey** (*Renegades of Pern*: circa 150,000 copies); **Arthur C. Clarke** (*Rama II*, with Gentry Lee: 120,000+); **Isaac Asimov** (*Nemesis*: 100,000+). Oh, and our own **Salman Rushdie** achieved 747,000 American sales with his *The Satanic Verses*, a fantasy novel of sorts. All of these are approximate figures for hardcover sales, and they're quite staggering by British standards. I hope to say more on paperbacks and UK best-sellers next issue.

ARTHUR C. CLARKE AWARD

I'm delighted to report that this year's winner of the Arthur C. Clarke Award for the best new science-fiction novel published in Britain is **Geoff Ryman** for *The Child Garden* (Unwin Hyman). As many of you will remember, the first half of this novel was serialized in *Interzone* as "Love Sickness" (issues 20 and 21). The immediate runners up were, in second place: **Jonathan Carroll** for *A Child Across the Sky* (Century/Legend); in joint third place: **Lisa Goldstein** for *A Mask for the General* (Legend) and **Ian McDonald** for *Desolation Road* (Bantam).

The results were announced at the Groucho Club, London, in March 1990, and the chairman of the judges was **Maxim Jakubowski**. As usual, the money for the award was provided by Arthur C. Clarke, via his brother, Fred Clarke (who made the presentation). The Clarke Award, which is worth £1,000 to the winner, is now becoming an established event. The past winners are: **Margaret Atwood** for *The Handmaid's Tale*, **George Turner** for *The Sea and Summer* and **Rachel Pollack** for *Unquenchable Fire*.

One of the sponsoring bodies behind the Clarke Award is the **Science Fiction Foundation**, which publishes the thrice-yearly review journal *Foundation* (edited by Edward James). A new organization called "Friends of Foundation" has recently been formed to lend support to this august institution (housed at the Polytechnic of East London, and ever-threatened by educational cuts, it does need help). The principal organizer of this is **Rob Meades**, who can be contacted at 75 Hecham Close, Walthamstow, London E17 5QT (tel. 01-531 1703). Membership of the "Friends" costs £12.50 per annum (in the UK) and includes a subscription to the journal *Foundation* as well as a special newsletter (see our "Magazines Received" column for a description of the latter item). It's a worthy cause, and I urge all readers to consider joining – especially if you think you might one day want to make use of the SF Foundation's excellent research library.

PHILIP K. DICK AWARD

Also announced recently were the winners of another award named after a major sf writer. The overall winner of the Philip K. Dick Award for the best paperback-original novel published in America in 1989 was **Richard Paul Russo** for his book *Subterranean Gallery* (TOR). The runner-up, who also receives a small cash prize, was new writer **Dave Wolverton** for his *On My Way to Paradise* (Bantam/Spectra). Past winners of this award have included **Rudy Rucker** for *Software*, **Tim Powers for** *The Anubis Gates* and our own **Paul J. McAuley** for *Four Hundred Billion Stars* (the last-named title is just out in a UK paperback edition at last from Futura/Orbit).

HUGOS AND NEBULAS

One of our readers has written to ask: "Can you help me please? I wish to obtain a list of the **Hugo and Nebula Awards**, 1980 to date." It's a common query, so I'll attempt an answer, if only a partial one. There are many categories

Continued on page 74

Heads
(Part One)
Greg Bear

Order and cold, heat and politics. The imposition of wrong order: anger, death, suicide and destruction. I lost loved ones, lost my illusions and went through mental and physical hell, but what still haunt my dreams, thirty years after, are the great silvery refrigerators four storeys tall hanging motionless in the dark void of the Ice Pit; the force-disorder pumps with their constant sucking soundlessness; the dissolving ghost of my sister, Rho; and William Pierce's expression when he faced his lifetime goal, in the Quiet...

I believe that Rho and William are dead, but I will never be sure. I am even less sure about the four hundred and ten heads.

Fifty metres beneath the cinereous regolith of Ocean Procellarum, in the geographic centre of the extensive and largely empty Sandoval territories, the Ice Pit was a volcanic burp in the Moon's ancient past, a natural bubble almost ninety metres wide that had once been filled with the aqueous seep of a nearby ice fall.

The Ice Pit had been a lucrative water mine, one of the biggest pure water deposits on the Moon, but it had long since been tapped out.

Loth to put family members out of work, my family, the Binding Multiple of Sandoval, had kept it as a money-losing farm station. It supported three dozen occupants in a space that had once housed three hundred. It was sorely neglected, poorly managed, and worst of all for a lunar establishment, its alleys and warrens were *dirty*. The void itself was empty and unused, its water-conserving atmosphere of nitrogen long since leaked away and its bottom littered with rubble from quakes.

In this unlikely place, my brother-in-law William Pierce had proposed seeking absolute zero, the univeral ultimate in order, peace and quiet. In asking for the use of the Ice Pit, William had claimed, he would be turning a sow's ear into a scientific silk purse. In return, Sandoval BM would boast a major scientific project, elevating its status within the Triple, and therefore its financial standing. The Ice Pit Station would have a real purpose beyond providing living space for several dozen idle ice miners masquerading as farmers. And William would have something uniquely his own, something truly challenging.

Rho, my sister, supported her husband by using all her considerable energy and charm – and her standing with my grandfather, in whose eyes she could do no wrong.

Despite Grandfather's approval, the idea was subjected to rigorous examination by the Sandoval syndics – the financiers and entrepreneurs, as well as the scientists and engineers, many of whom had worked with William and knew his extraordinary gifts. Rho skilfully navigated his proposal through the maze of scrutiny and criticism.

By a five-four decision of the syndics, with much protest from the financiers and grudging acceptance from the scientists, William's project was approved.

Thomas Sandoval-Rice, the BM's director and chief syndic, gave his own approval reluctantly, but give it he did. He must have seen some use for a high-risk, high-profile research project; times were hard, and prestige could be crucial even for a top-five family.

Thomas decided to use the project as a training ground for promising young family members. Rho spoke up on my behalf, without my knowledge, and I found myself assigned to a position far above what my age and experience deserved: the new station's chief financial manager and requisitions officer.

I was compelled by family loyalties – and the pleas of my sister – to cut loose from formal schooling at the Tranquil and move to the Ice Pit Station. At first I was less than enthusiastic. I felt my calling to be liberal arts rather than finance and management; I had, in family eyes, frittered away my education studying history, philosophy and the terrestrial classics. But I had a fair aptitude for the technical sciences – less aptitude for the theoretical – and had taken a minor in family finances. I felt I could handle the task, if only to show my elders what a liberal mentality could accomplish.

Ostensibly I was in charge of William and his project, answerable to the syndics and financial directors alone; but of course, William quickly established his own pecking order. I was twenty years old at the time; William, thirty-two.

Inside the void, foamed rock was sprayed to insulate and seal in a breathable atmosphere. I oversaw the general clean-up, refitting of already existing warrens and alleys, and investment in a relatively spartan laboratory.

Large refrigerators stored at the station since the end of ice mining had been moved into the void, providing far more cooling capacity than William actually needed for his work.

Vibration is heat. The generators that powered the Ice Pit laboratory lay on the surface, their noise and reverberation isolated from the refrigerators and William's equipment and laboratory. What vibration remained was damped by suspension in an intricate network of steel springs and field levitation absorbers.

The Ice Pit's heat radiators also lay near the surface, sunk six metres deep in the shadow of open trenches, never seeing the sun, faces turned towards the all-absorbing blackness of space.

Three years had passed since the conversion. Again and again, William had failed to meet his goal. His demands for equipment had become more extravagant, more expensive and, more often than not, rejected. He had become reclusive, subject to even wider mood swings.

I met William at the beginning of the alley that led to the Ice Pit, in the main lift hollow. We usually saw each other only in passing as he whistled through the cold rock alleys between home and the laboratory. He carried a box of thinker files and two coils of copper tubing and looked comparatively happy.

William was a swarthy stick of a man, two metres tall, black eyes deep-set, long narrow chin, lips thin, brows and hair dark as space, with a deep shadow on his jaw. He was seldom calm or quiet, except when working; he could be rude and abrasive. Set loose in a meeting, or conversing on the lunar com net, he sometimes seemed contentious to the point of self-destruction, yet still the people closest to him loved and respected him. Some of the Sandoval engineers considered William a genius with tools and machines, and on those rare occasions when I was privileged to see his musician's hands prodding and persuading, seducing all instrumentality, designing as if by willing consensus of all the material parts, I could only agree; but I loved him much less than I respected him.

In her own idiosyncratic way, Rho was crazy about him; but then, she was just as driven as William. It was a miracle their vectors added.

We matched step. "Rho's back from Earth. She's flying in from Port Yin," I said.

"Got her message," William said, bouncing to touch the rock roof three metres overhead. His glove brought down a few lazy drifts of foamed rock. "Got to get the arbeiters to spray that." He used a distracted tone that betrayed no real intent to follow through. "I've finally straightened out the QL, Micko. The interpreter's making sense. My problems are solved."

"You always say that before some new effect cuts you down." We had come to the large, circular, white ceramic door that marked the entrance to the Ice Pit and stopped at the white line that William had crudely painted there, three years ago. The line could be crossed only on his invitation.

The hatch opened. Warm air poured into the corridor; the Ice Pit was always warmer than ambient, being filled with so much equipment. Still, the warm air *smelled* cold; a contradiction I had never been able to resolve.

"I've licked the final source of external radiation," William said. "Some terrestrial metal doped with twentieth-century fallout." He zipped his hand away. "Replaced it with lunar steel. And the QL is really tied in. I'm getting straight answers out of it – as straight as quantum logic can give. Leave me my illusions."

"Sorry," I said. He shrugged magnanimously. "I'd like to see it in action."

He stopped, screwed up his face in irritation, then slumped a bit. "I'm sorry, Mickey. I've been a real wart. You fought for it, you got it for me, you deserve to see it. Come on."

I followed William over the line and across the forty-metre-long, two-metre-wide wire and girder bridge into the Ice Pit.

William walked ahead of me, between the force-disorder pumps. I stopped to look at the ovoid bronze toruses mounted on each side of the bridge. They reminded me of abstract sculptures, and they were amongst the most sensitive and difficult of William's tools, always active, even when not connected to William's samples.

Passing between the pumps, I felt a twitch in my interior, as if my body were a large ear listening to something it could barely discern: an elusive, sucking silence. William looked back at me and grinned sympathetically. "Spooky feeling, hm?"

"I hate it," I said.

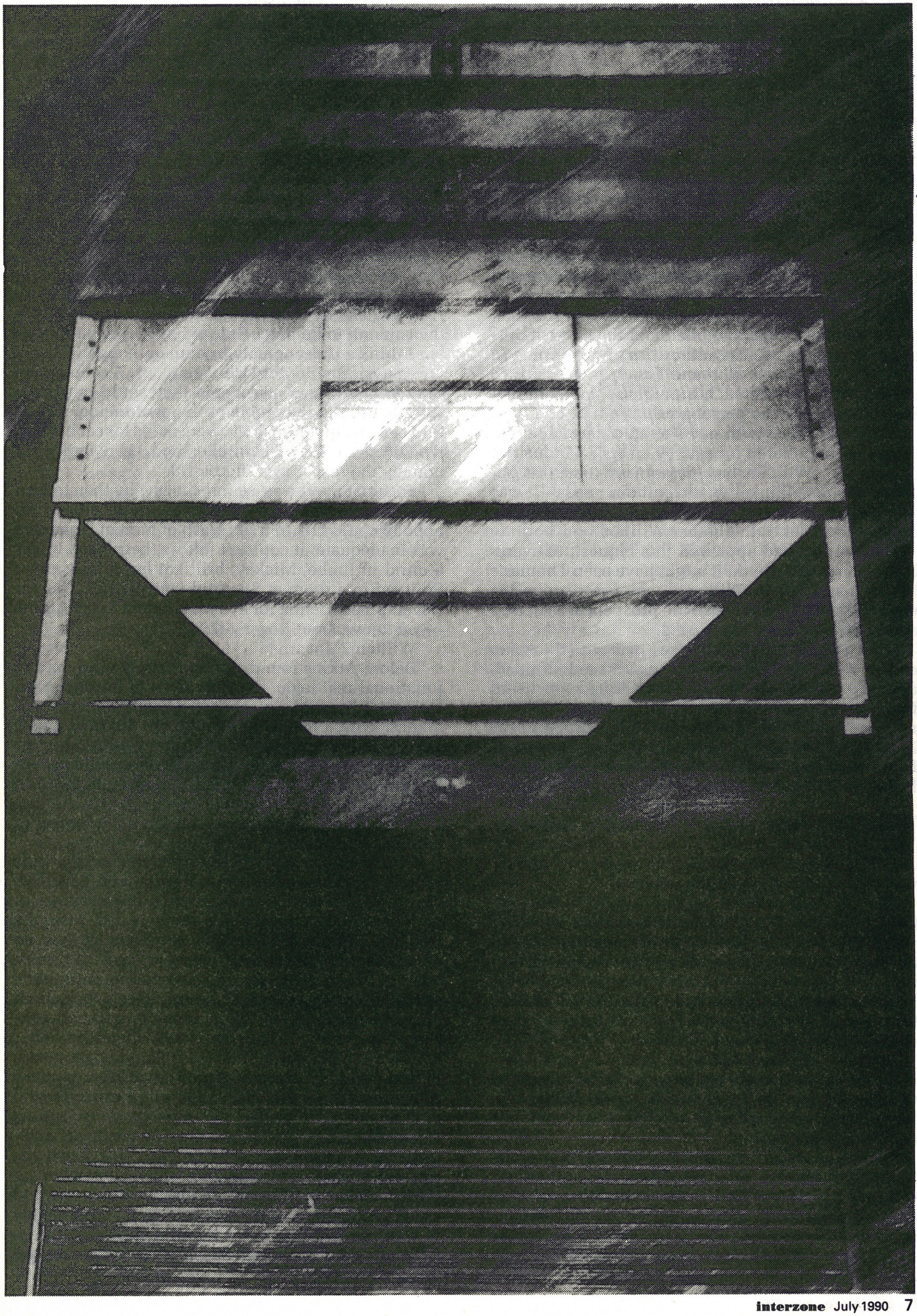
"So do I, but it's sweet music, Micko. Sweet music indeed."

Beyond the pumps and connected to the bridge by a short, narrow walkway, hung the Cavity, enclosed in a steel Faraday cage. Here, within a metre-wide sphere of perfect orbit-fused quartz, the quartz covered with a mirror coating of niobium, were eight thumb-sized ceramic cells, each containing approximately a thousand atoms of copper. Each cell was surrounded by its own superconducting electromagnet. These were the mesoscopic samples, large enough to experience the macroscopic qualities of temperature, small enough to lie within the microscopic realm of quantum forces. They were never allowed to reach a temperature greater than one-millionth Kelvin.

The laboratory lay at the end of the bridge, a hundred square metres of enclosed work space made of thin shaped steel framing covered by black plastic wall. Suspended by vibration-damping cords and springs and field levitation from the high dome of the Ice Pit, three of the four cylindrical refrigerators surrounded the laboratory like the pillars of a tropical temple, overgrown by a jungle of pipes and cables. Waste heat was conveyed through the rubble net at the top of the void and through the foamed rock roof beyond by flexible tubes; the buried radiators on the surface then shed that heat into space.

The fourth and final and largest refrigerator lay directly above the Cavity, sealed to the upper surface of the quartz sphere. From a distance the refrigerator and the Cavity might have resembled a squat, old-fashioned mercury thermometer, with the Cavity serving as bulb.

The T-shaped laboratory had four rooms, two in the neck of the T, one extending on each side to make the wings. William led me through the laboratory door – actually a flexible curtain – into the first room, which was filled with a small metal table and chair, a disassembled nano-works arbeiter, and cabinets of cubes and discs. In the second room, the QL thinker occupied a central platform about half a metre on a



Illustrations by Ian Sanderson

side. On the wall to the left of the table were a manual control board – seldom used now – and two windows overlooking the Cavity. The second room was quiet, cool, a bit like a cloister cell.

Almost from the beginning of the project, William had maintained to the syndics – through Rho and myself; we never let him appear in person – that his equipment could not be perfectly tuned by even the most skilled human operators, or by the most complicated of computer controllers. All of his failures, he said in his blackest moods, were due to this problem: the failure of macroscopic controllers to be in sync with the quantum qualities of the samples.

What he – what the *project* – needed was a Quantum Logic thinker. Yet these were being manufactured only on Earth, and they were not being exported. Because so few were manufactured, the black market of the Triple had none to offer, and the costs of purchasing, avoiding Earth authorities and shipping to the Moon were vast. Rho and I could not convince the syndics to make such a purchase. William had seemed to blame me personally.

Our break came with news of an older-model QL thinker being offered for sale by an Asian industrial consortium. William had determined that this so-called obsolete thinker would suit our needs – it was suspiciously cheap, however, and almost certainly out of date. That didn't bother William.

The syndics had approved this request, to everybody's surprise, I think. It might have been Thomas's final gift and test for William – any more expensive requisitions without at least the prospect of a success and the Ice Pit would be closed.

Rho had gone to Earth to strike a deal with the Asian consortium. The thinker had been packaged, shipped, and had arrived six weeks before. I had not heard from her between the time of the purchase and her message from Port Yin that she had returned to the Moon. She had spent four weeks extra on Earth, and I was more than a little curious to find out what she had been doing there.

William leaned over the platform and patted the QL proudly. "It's running almost everything now," he said. "If we succeed, the QL will take a large share of the credit."

The QL itself covered perhaps a third of the platform's surface. Beneath the platform lay the QL's separate power supplies; by Triple common law, all thinkers were equipped with supplies capable of lasting a full year without outside replenishment.

"Who'll get the Nobel, you or the QL?" I asked. I bent to the QL's level to peer at its white cylindrical container. William shook his head.

"Nobody off Earth has ever gotten a Nobel, anyway," he said. "Surely I get some credit for *telling* the QL about the problem." I felt the most affection for my brother-in-law when he reacted positively to my acidulous humour.

"What about this?" I asked, touching the interpreter lightly with a finger. Connected to the QL by fist-thick optical cables, covering another half of the platform, the interpreter was a thinker in itself. It addressed the QL's abstruse contemplations and rendered them, as closely as possible, in language humans could understand.

"A marvel all by itself."

"Tell me about it," I said.

"You didn't study the files," William chided.

"I was too busy fighting with the syndics to *study*," I said. "Besides, you know theory's never been my greatest strength."

William knelt behind the opposite side of the table, his expression contemplative, reverent. "Did you read about Huang-Yi Hsu?"

"Tell me," I said patiently.

He sighed. "You paid for it out of ignorance, Mickey. I could have misled you grievously."

"I trust you, William."

He accepted that with generous dubiety. "Huang-Yi Hsu invented post-Boolean three-state logic before 2010. Nobody paid much attention to it until 2030. He was dead by then; had committed suicide rather than submit to Beijing's Rule of Seven. Brilliant man, but I think a true anomaly in human thought. Then a few physicists in the University of Washington's Cramer Lab Group discovered they could put Hsu's work to use solving problems in quantum logic. Post-Boolean and quantum logic were made for each other. By 2060, the first QL thinker had been built, but nobody thought it was successful.

"Fortunately, it was against the law by then to turn off activated thinkers without a court order, but nobody could talk to it. Its grasp of human languages was inadequate; it couldn't follow their logic. It was a mind in limbo, Mickey; brilliant but totally alien. So it sat in a room at Stanford University's Thinker Development Center for five years before Roger Atkins – you know about Roger Atkins?"

"William," I warned.

"Before Atkins found the common ground for any functional real logic, the Holy Grail of language and thought... his CAL interpreter. Comprehensible All Logics. Which lets us talk to the QL. He died a year later." William sighed. "Swan song. So this," he patted the interpreter, a flat grey box about fifteen centimetres square and nine high, "lets us talk to *this*." He patted the QL.

"Why hasn't anybody used a QL as a controller before?" I asked.

"Because even with the interpreter, the QL – *this* QL at any rate – is a monster to work with," he said. He tapped the display button and a prismatic series of bars and interlacing graphs appeared over the thinker. "That's why it was so cheap. It has no priorities, no real sense of needs or goals. It thinks, but it may not *solve*. Quantum logic can outline the centre of a problem before it understands the principles and questions, and then, from our point of view, everything ends in confusion. More often than not, it comes up with a solution to a problem not yet stated. It does virtually everything but linear, time's-arrow ratiocination. Half of its efforts are meaningless to goal-oriented beings like ourselves, but I can't prune those efforts, because somewhere in them lies the solution to my problems, even if I haven't stated the problem or am not aware that I have a problem. A post-Boolean intelligence. It functions in time and space, yet ignores their restrictions. It's completely in tune with the logic of the Planck-Wheeler continuum, and that's where the solution to my problem lies."

"So when's your test?"

"Three weeks. Or sooner, if there aren't any more *interruptions*."

"Am I invited?"

"All doubters, front row seats," he said. "Call me when Rho gets in. Tell her I've got it."

My office lay along a north warren, in an insulated cylindrical chamber that had once been a liquid water tank. It was much larger than I needed, cavernous in fact, and my bed, desk, slate files and other furnishings occupied one small section of about five metres square near the door. I entered, set myself down in a wide air-cushion seat, called up the Triple Exchange – monetary rates within the Greater Planets economic sphere of Earth, Moon and Mars – and began my daily check on the Sandoval Trust. I could usually gauge the Ice Pit's annual operating expenses by such auguries.

Rho's shuttle landed at Pad Four an hour later. I was engrossed in trust investment performances; she buzzed my line second. William was not answering his.

"Micko, congratulate me! I've got something wonderful," she said.

"A new terrestrial virus we can't set for," I said.

"Mickey. This is serious."

"William says to tell you he's very very close."

"All right. That's good. Now listen."

"Where are you?"

"In the personal lift. *Listen*."

"Yes."

"How much extra cooling capacity does William have?"

"You don't know?"

"*Mickey*..."

"About eight billion calories. Cold is no problem here. You know that."

"I have a load of twenty cubic metres coming in. Average density like fatty water, I assume. What would that be, point nine? It's packed in liquid nitrogen at sixty K. Keeping it colder would be much better, especially if we decide on long-term storage..."

"What is it? Smuggled nano prochines to liberate lunar industry?"

"You wish. Nothing quite so dangerous. Forty stainless-steel Dewar containers, quite old, vacuum insulated."

"Anything William would be interested in?"

"I doubt it. Can he spare the extra capacity now?"

"He's never used it before, even when he was close, very close. But he's in no mood for –"

"Meet me at home, then we'll go to the Ice Pit and tell him."

"You mean ask."

"I mean *tell*," Rho said.

The Pierce-Sandoval home was two alleys south of my office, not far from the farms, off a nice double-width heated mining bore with smooth white walls of foamed rock. I palmed their home doorplate a half-hour later, allowing her time to freshen from the Copernicus trip, never a luxury run.

Rho came out of the bathnook in lunar cotton terry and turban, *zaftig* by lunar standards, shook out her long red hair, and waved a brochure at me as I entered.

"Have you ever heard of the StarTime Preservation Society?" she asked, handing me the ancient glossy folio.

"Paper," I said, hefting the folio carefully. "Heavy paper."

"They had boxes full of these on Earth," she said. "Stacked up in a dusty office corner. Leftovers from their platinum time. Have you heard of it?"

"No," I said, looking through the brochure. Men and women in cold suits; glass tanks filled with mysterious mist; bare rooms blue with cold. A painting of the future as seen from the early twenty-first century; the Moon, oddly enough, glass domes and open-air architecture. "*Resurrection in a time of accomplishment, human maturity and wonder*..."

"Corpsicles," Rho explained when I cast her a blank look.

"Oh," I said.

"Society capacity of three hundred and seventy; they took in fifty extra before close of term in 2064."

"Four hundred and twenty bodies?" I asked.

"Heads only. Voluntarily harvested individuals. Each paid half a million terrestrial US dollars. Four hundred and ten survivals, well within the guarantees."

"You mean, they were *revived*?"

"No," she said disdainfully. "Nobody's ever brought back a corpsicle. You know that. Four hundred and ten theoretically revivable. We can't bring them back, but Cailetet BM has complete facilities for brain scan and storage..."

"So I've heard – for live individuals."

She waved that off. "And doesn't Onnes BM have new solvers for the groups of human mental languages? You study their requests from the central banks, their portfolios. Don't they?"

"I've heard something to that effect."

"If they do, and if we can work a deal between the three BMs, just give me a couple of weeks, and I can read those heads. I can tell you what their memories are, what they were thinking. Without hurting a single frozen neuron. We can do it before anyone on Earth – or anywhere else."

I looked at her with less than brotherly respect. "Dust," I said.

"Flip your own dust, Mickey. I'm serious. The heads are coming. I've signed Sandoval to store them."

"You signed a BM contract?"

"I'm allowed."

"Who says? Christ, Rho, you haven't talked with anybody –"

"It will be the biggest anthropological coup in lunar history. Four hundred and ten terrestrial heads..."

"Dead meat!" I said.

"Expertly stored in deep cold. Minor decay at most."

"Nobody wants corpsicles, Rho –"

"I had to bid against four other anthropologists, three from Mars and one from the minor planets."

"Bid?"

"I won," she said.

"You don't have *that* authority," I said.

"Yes I do. Under family preservation charter. Look it up. 'All family members and legal heirs and – etc., etc. – free hand to make reasonable expenditures to preserve Sandoval records and heritage; to preserve the reputations and fortunes of all established heirs.'"

She had lost me. "What?"

Her look of triumph was carnivorous.

"Robert and Emilia Sandoval," she said. "They died on Earth. Remember? They were members of StarTime."

My jaw dropped. Robert and Emilia Sandoval, our great-grandparents, the first man and woman to make love on the Moon; nine months later, they became the first parents on the Moon, giving birth to our grandmother, Deirdre. In their late middle age, they had returned to Earth, to Oregon in the old United States, leaving their child on the Moon.

"They joined the StarTime Preservation Society. Lots of famous people did," she said.

"So...?" I asked, waiting for my astonishment to peak.

"They're in this batch. Guaranteed by the society."

"Oh, *Rhosalind*," I said, as if she had just told me someone had died. I felt an incredulous hollow sense of doom. "They're coming back?"

"Don't worry," she said. "Nobody knows but the society trustees and me, and now you."

"Great-Grandpa and Great-Grandma," I said.

Rho smiled the kind of smile that had always made me want to hit her. "Isn't it wonderful?"

William came from an unbound lunar family, the Pierces of Copernicus Research Centre Three. A lunar family – even then – was not just those born of a single mother and father, but a tight association of sponsored settlers working their way across the lunar surface in new-dug warrens, adding children and living space as they burrowed. Individuals usually kept their own surnames, or added surnames, but claimed allegiance to the central family, even when all the members of the central family had died, as sometimes happened.

As with our own family, the Sandovals, the Pierces were among the original fifteen families established on the Moon in 2019. The Pierces were an odd lot, unofficial histories tell us – aloof and unwilling to pull together with the newer settlers. The original families – called primes – spread out across the Moon, forming and breaking alliances, eventually coming together, under pressure from Earth, into the financial associations later called binding multiples. The Pierces did not bind with any of the nascent multiples, though they formed loose alliances with other families.

The unbound families did not flourish. The Pierces lost influence, despite being primes. Their final disgrace was cooperation with terrestrial governments during the Split, when Earth severed ties with the Moon to punish us for our presumptuous independence. Thereafter, for decades, the Pierces and their kind were social outcasts.

By contrast, the allied superfamilies handily survived the crisis.

The Pierces, and most unbound families like them, driven by destitution and resentment, contracted their services in 2094 to the Franco-Polish technological station at Copernicus. They became part of the Copernicus binding multiple of nine families and finally joined the mainstream economy of the post-Split Moon.

Still, the Pierces' descendants faced real prejudice in lunar society. They became known as a wild, churlish lot, and kept to themselves in and around the Copernicus station.

These difficulties had obviously affected William a a child, and made him something of an enigma.

When my sister met William at a Copernicus mixer barn dance, courted him (he was too shy and vulnerable to court her in turn) and finally asked him to join the Sandoval BM as her husband, he had to face the close scrutiny of dozens of dubious family members.

William lacked the almost instinctive urge to unity of a BM-bred child; in an age of rugged individuals tightly fitted into even more rugged and demanding multiples, he was a loner, quick-tempered yet inclined to sentimentality, loyal yet critical, brilliant but prone to choosing tasks so difficult he seemed doomed to always fail.

Yet in those tense months, with Rho's constant coaching, he put on a brilliant performance, adopting a humble and pleasant attitude. He was accepted into the Sandoval Binding Multiple.

Rho was something of a lunar princess. Biologically of the Sandoval line, great-grandchild of Robert and Emilia Sandoval, her future was the concern of far too many, and she developed a closeted attitude of defiance. That she should reach out for the hand of a Pierce was both expected, considering her character and upbringing, and shocking.

But old prejudices had softened considerably. Despite the doubts of Rho's very protective "aunts" and "uncles," and the strains of initiation and marriage, and despite his occasional reversion to prickly form, William was quickly recognized as a valuable adjunct to our family. He was a brilliant designer and theoretician. For four years he contributed substantially to many of our scientific endeavours, yet adjunct he was, playing a subservient role that must have deeply galled him.

I was fifteen when Rho and William married, and nineteen when he finally broke through this more or less obsequious mask to ask for the Ice Pit. I had never quite understood their attraction for each other; lunar princess drawn to son of outcast family. But one thing was certain: whatever William did to strain Rho's affections, she could return with interest.

I walked to the Ice Pit with Rho after an hour of helping her prepare her case.

She was absolutely correct; as Sandovals, we had a duty to preserve the reputation and heirs of the Sandoval BM, and, even by an advocate's logic, that would include the founders of our core family.

That we were also taking in four hundred and eight outsiders was quite another matter...But as Rho pointed out, the society could hardly sell individuals. Surely nobody would think it a *bad* idea, bringing such a wealth of potential information to the Moon. Tired old Earth didn't want it; just more corpsicles on a world plagued by them. Anonymous heads, harvested in the mid-twenty-first century, declared dead, stateless, very nearly outside the law, without rights except under the protection of their money and their declining foundation.

The StarTime Preservation Society was not actually *selling* anything or anyone. They were transferring members, chattels and responsibilities to Sandoval

BM pending dissolution of the original society; in short, they were finally, after one hundred and ten years, going cold blue belly-up. Bankruptcy was the old term; pernicious exhaustion of means and resources was the new. Well and good; they had guaranteed to their charter members only sixty-one years (inclusive) of tender loving care. After that, they might just as well be out in the warm.

"The societies set up in 2020 and 2030 are declaring exhaustion at the rate of two and three a year now," Rhosalind said. "Only one has actually buried dead meat. Most have been bought out by information entrepreneurs and universities."

"Somebody hopes to make a profit?" I asked.

"Don't by noisy, Mickey," she said, by which she meant incapable of converting information to useful knowledge. "These aren't just dead people; they're huge libraries. Their memories are theoretically intact; at least, as intact and death and disease allow them to be. There's maybe a five per cent degradation; we can use natural-languages algorithms to check and reduce that to maybe three per cent."

"Very noisy," I said.

"Nonsense. That's usable recall. Your memories of your seventh birthday have degraded by fifty per cent."

I tried to remember my seventh birthday; nothing came to mind. "Why? What happened on my seventh birthday?"

"Not important, Mickey," Rho said.

"So who wants that sort of information? It's out of date, it's noisy, it's going to be hard to prove provenance... much less check it out for accuracy."

She stopped, brow cloudy, clearly upset. "You're resisting me on this, aren't you?"

"Rho, I'm in charge of project finances. I *have* to ask dumb questions. What value are these heads to us, even if we can extract information? And" – I held up my hand, about to make a major point – "what if extraction of information is intrusive? We can't dissect these heads – you've assumed the contracts."

"I called Cailetet from Tampa, Florida, last week. They say the chance of recovery of neural patterns and states from frozen heads is about eighty per cent, using non-intrusive methods. No nano injections. Lamb shift tweaking. They can pinpoint every molecule in every head from *outside* the containers."

However outlandish Rho's schemes, she always did a certain amount of planning ahead. I leaned my head to one side and lifted my hands, giving up. "All right," I said. "It's fascinating. The possibilities are –"

"Luminous," Rho finished for me.

"But who will buy historical information?"

"These are some of the finest minds of the twentieth century," Rho said. "We could sell shares in future accomplishments."

"*If* they're revivable." We were coming up to the white line and the big porcelain hatch to the Ice Pit. "They're currently not very active and not very creative," I commented.

"Do you doubt we'll be able to revive them someday? Maybe in ten or twenty years?"

I shook my head dubiously. "They talked revival a century ago. High-quality surgical nano wasn't enough to do the trick. You can make a complex machine shine like a gem, fix it up so that everything fits, but if you don't know where to kick it... Long time passing, no eyelids cracking to light of a new day."

Rho palmed the hatch guard. William took his own sweet time answering. "I'm an optimist," she said. "I always have been."

"Rho, you've come when I'm busy," William said over the com.

"Oh, for Christ's sake, William. I'm your wife and I've been gone for three months." She wasn't irritated; her tone was playfully piqued. The hatch opened, and again I caught the smell of cold in the outrush of warm.

"The heads are ancient," I said, stepping over the threshold behind her. "They'll need retraining, re-everything. They're probably elderly, inflexible... But those are hardly major handicaps when you consider that, right now, they're *dead*."

She shrugged this off and walked briskly across the steel bridge. She'd once told me that William, in his more tense and frustrated moments, enjoyed making love on the bridge. I wondered about harmonics. "Where's the staff?" she asked.

"William told me to let them go. He said we didn't need them with the QL in control." We had been working for the past three years with a team of young technicians chosen from several other families around Procellarum. William had informed me two days after the QL's installation that these ten colleagues were no longer needed. He was coldly blunt about it, and he made no dust about the fact that I was the one who would have to arrange for their severance.

His logic was strong; the QL would not need additional human support, and we could use the BM exchange for other purchases. Despite my instincts that this was bad manners between families, I could not stand alone against William; I had served the notices and tried to take or divert the brunt of the anger.

Rho cringed as she sidled between the double toruses of the disorder pumps, whether in reaction to her husband's blunt efficiency or the pumps' effect on her body. She glanced over her shoulder sympathetically. "Poor Micko."

William opened the door, threw out his arms in a peremptory fashion, and enfolded Rho.

I love my sister. I do not know whether it was some perverse jealousy or a sincere desire for her well-being that motivated my feeling of unease whenever I saw William embrace her.

"I've got something for us," Rho said, looking up at him with high-energy, complete-equality adoration.

"Oh," William said, eyes already wary. "What?"

I lay in bed, unable to get the noiseless suck of the pumps out of my thoughts, purged from my body. After a restless time I began to slide into my usual lunar doze; made a half-awake comparison between seeing William embrace Rho and feeling the pumps embrace me; thought of William's reaction to Rho's news; smiled a little; slept.

William had not been pleased. An unnecessary intrusion; yes there was excess cooling capacity; yes his arbeiters had the time to construct a secure facility for the heads in the Ice Pit; but he did not need the

extra stress or any distractions now because he was *this close* to his goal.

Rho had worked on him with that mix of guileless persuasion and unwavering determination that characterized my sister. I have always equated Rho with the nature-force shakers of history; folks who in their irrational stubbornness shift the course of human rivers, whether for good or ill perhaps not even future generations could decide.

William had given in, of course. It was after all a small distraction, as he finally admitted; the raw materials would come out of the Sandoval BM contingency fund; he might even be able to squeeze in some mutually advantageous equipment denied him for purely fiscal reasons. "I'll do it mostly for the sake of your honoured ancestors, of course," William had said.

The heads came by shuttle from Port Yin five days later. Rho and I supervised the deposit at Pad Four, closest to the Ice Pit lift entrance. Packed in cubic steel boxes with their own refrigerators, the heads were slightly bulkier than Rho had estimated. Six cartloads and seven hours after landing, we had them in the equipment lift.

"I've had Nernst BM design an enclosure for William's arbeiters to build," Rho said. "These'll keep for another week as is." She patted the closest box, peering through her helmet with a wide grin.

"You could have chosen someone cheaper," I groused. Nernst had gained unwarranted status in the past few years; I would have chosen the more reasonable, equally capable Twinning BM.

"Nothing but the best for our progenitors," Rho said. "Christ, Mickey. Think about it." She turned to the boxes mounted in a ring of two crowded stacks in the round lift, small refrigerators sticking from the inward-pointing sides of the boxes. We descended in the shaft. I could not see her face, but I heard the emotion in her voice. "Think of what it would mean to access them..."

I walked around and between the boxes. High-quality, old-fashioned bright steel, beautifully shaped and welded. "A lot of garrulous old-timers," I said.

"Mickey." Her chiding was mild. She knew I was thinking.

"Are they labelled?" I asked.

"That's one problem," Rho said. "We have a list of names, and all the containers are numbered; but StarTime says it can't guarantee a one-to-one match. Records were apparently jumbled after the closing date.

"How could that happen?" I was shocked by the lack of professionalism more than by the obvious ramifications.

"I don't know."

"What if StarTime goofed in other ways, and they really *are* just cold meat?" I asked.

Rho shrugged with a casualness that made me cringe, as if, after all her efforts and the expenditure of hard-earned Sandoval capital, such a thing might not be disastrous. "Then we're out of some money," she said. "But I don't think they made that big a goof."

We slowly pressurized at the bottom of the shaft, Rho watching the containers for any sign of buckling. There was none; they had been expertly packed. "Nernst BM says it will take two days for William's machines to make this enclosure. Can you supervise? William refuses..."

I pulled off my helmet, kicked some surface dust from my boots against a vacuum nozzle, and grinned miserably. "Sure. I have nothing better to do."

Rho put her gloved hands on my shoulders. "Mickey. Brother."

I looked at the boxes, intrigue growing alarmingly. What if they were alive in there, and could – in their own deceased way – tell us of their lives? That would be extraordinary; historic. Sandoval BM could gain an enormous amount of publicity, and that would reflect on our net worth in the Triple. "I'll supervise," I said. "But you get Nernst BM to send a human over here and not just an engineering arbeiter. It should be in their design contract; I want someone to personally inspect upon completion."

"No fear," Rho said. Gloves removed but skinsuit still on, she gave me a quick hug. "Let's roll!" She guided the first cartload of stacked boxes through the gate into the Ice Pit storage warren, where they'd be kept for the time being.

The first sign of trouble came quickly. Janis Granger, assistant to Fiona Task-Felder, visited barely six hours after the unloading of the heads.

I had neglected to inform Rho about what had happened in lunar politics since her departure to Earth: Fiona Task-Felder's election to president of the Multiple Council, something I would have said was impossible only a year before.

Janis Granger made a meeting request through the Sandoval BM secretary in Port Yin. I okayed the request, though I didn't have the slightest idea what she wanted to talk about. I could hardly refuse to speak with a representative of the council president.

Her private bus landed at Pad Three six hours after I gave permission.

I received her in my spare but spacious formal office in the farm management warrens.

Granger was twenty-seven, black-haired with Eurasian features and Amerindian skin – all tailored. She wore trim flag-blue denims and a white ruffle-necked blouse, the ruffles projecting a changing pattern of delicate white-on-white geometrics. Janis, like her boss and "sister" Fiona, was a member of Task-Felder BM.

Task-Felder had been founded on Earth as a lunar BM, an unorthodox procedure that had raised eyebrows fifty years before. Membership was allegedly limited to Logologists – nobody knew of any exceptions, at any rate – which made it the only lunar BM founded on religious principles. For these reasons, Task-Felder BM had been outside the loop and comparatively powerless in lunar politics, if such could be called politics: a weave of mutual advantage, politeness, small-community cooperation in the face of clear financial pressures.

The Task-Felder Logologists tended their businesses carefully, played their parts with scrupulous attention to detail and quality, and had carefully distributed favours and loans to other BMs and the council, working their way with incredible speed up the ladder of lunar acceptance, all at the same time as believing six impossible things before breakfast.

"I have the BM Project Status report from the council," Janis Granger said, seating herself gracefully in

a chair across from mine. I did not sit behind a desk; that was reserved for contract talks or financial dealings. "I wanted to discuss it with you, since you manage the major scientific project undertaken by Sandoval BM at this time."

I had heard something about this council report; in its early drafts, it had seemed innocuous, another BM mutual-activity consent agreement.

"We've gotten a consensus of the founding BMs to agree to consult with each other on projects which may affect lunar standing in the Triple," Granger said.

Why hadn't she gone to the family syndics in Port Yin? Why come all this way to talk with me? "All right," I said. "I assume Sandoval's representative has looked over the agreement."

"She has. She told me there might be a conflict with a current project, not your primary project. She advised me to send a representative of the president to talk with you; I decided this was important enough I would come myself."

Granger had an intensity that reminded me of Rho. She did not take her eyes off mine. She did not smile. She leaned forward, elbows still on the chair rests, and said, "Rhosalind Sandoval has signed a contract to receive terrestrial corpsicles."

"She has. She's my direct sister, by the way."

Granger blinked. With any family-oriented BM member, such a comment would have elicited a polite "Oh, and how is your branch?" She neglected the pleasantry.

"Are you planning resuscitation?" she finally asked.

"No," I said. *Not as yet.* "We're speculating on future value."

"If they're not resuscitated, they have no future value."

I disagreed with a mild shake of my head. "That's our worry, nobody else's."

"The council has expressed concern that your precedent could lead to a flood of corpsicle dumping. The Moon can't possibly receive a hundred thousand dead. It would be a major financial drain."

"I don't see how a precedent is established," I said, wondering where she was going to take this.

"Sandoval BM is a major family group. You influence new and offshoot families. We've already had word that two other families are considering similar deals, in case you're on to something. And all of them have contacted Cailetet BM. I believe Rhosalind Sandoval-Pierce has tried to get a formal exclusion contract with Cailetet. Have you approved all this?"

I hadn't; Rho hadn't told me she'd be moving so quickly, but it didn't surprise me. It was a logical step in her scheme. "I haven't discussed it with her. She has Sandoval priority approval on this project."

This seemed to take Granger by surprise. "BM charter priority?"

"Yes."

"Why?"

I saw no reason to divulge family secrets. If she didn't already know, my instincts told me, she didn't need to know. "Business privilege, ma'am."

Granger looked to one side and thought this over for an uncomfortably long time, then returned her eyes to me. "Cailetet is asking council advice. I've issued a chair statement of disapproval. We think it

might adversely effect our currency ratings in the Triple. There are strong moral and religious feelings on Earth now about corpsicles; revival has been outlawed in seven nations. We feel you've been taken advantage of."

"We don't think so," I said.

"Nevertheless, the council is considering issuing a restraining order against any storage or use of the corpsicles."

"Excuse me," I said. I reached across to the desk and brought out my manager's slate. "Auto counsellor, please," I requested aloud. I keyed in instructions I didn't want Granger to hear, asking for a legal opinion on this possibility. The auto counsellor quickly reported: "Not legal at this time" and gave citations.

"You can't restrain an autonomous chartered BM," I said. I read out the citations, "Mutual benefit agreement 35 stroke 2111, reference to charter family agreements, 2102."

"If sufficient BMs can be convinced of the unwisdom of your actions, and if the financial result could be ruinous to any original charter BM, our council thinker has issued an opinion that you can be restrained."

It was my turn to pause and think things over.

"Then it seems we might be heading for council debate," I said.

"I'd regret causing so much fuss," Granger said. "Perhaps we can reach an agreement outside of council."

"Our syndics can discuss it," I allowed. My backbone was becoming stubbornly stiff. "But I think it should be openly debated in council."

She smiled. If, as was alleged by the Logologists, their philosophy removed all human limitations, judging by Janis Granger, I opposed such benefits. There was a control about her that suggested she had nothing to control, neither stray whim nor dangerous passion; automatous. She chilled me.

"As you wish," she said. "This is really not a large matter. It's not worth a lot of trouble."

Then why bother? "I agree," I said. "I believe the BMs can resolve it among themselves."

"The council represents the BMs," Granger said.

I nodded polite agreement. I wanted nothing more than to have her out of my office, out of the Ice Pit Station.

"Thank you for your time," she said, rising. I escorted her to the lift. She did not say good-bye; merely smiled her unrevealing mannequin smile.

Back in my office, I put through a request for an appointment with Thomas Sandoval-Rice at Port Yin. Then I called Rho and William.

Rho answered. "Mickey! Cailetet has just accepted our contract."

That took me back for a second. "I'm sorry," I said, confused. "What?"

"What are you sorry about? It's good news. They think they can manage it. They say it's a challenge. They're willing to sign an exclusive."

"I just had a conversation with Janis Granger."

"Who's she?"

"Task-Felder. Aide to the president of the council," I said. "I think they're going to try to shut us down."

"Shut down Sandoval BM?" Rho laughed. She thought I was joking.

"No. Shut down your heads project."

"They can't do that," she said, still amused.

"Probably not. At any rate, I have a call in to the director." I was thinking over what Rho had told me. If Cailetet had accepted our contract, they they were either not worried about the council debate, or...

Granger had lied to me.

"Mickey, what's this all about?"

"I don't know," I said. "I'll field it. The new council president is a Task-Felder. You should keep up on these things, Rho."

"Who gives a rille? We haven't had any complaints from other BMs. We keep to our boundaries. Task-Felder. Dust them, they're not even a lunar-chartered BM. Aren't they Logologists?"

"They have the talk seat in council," I said.

"Oh, for the love of," Rho said. "They're crazier than mud. When did they get the seat?"

"Two months ago."

"How did they get it?"

"Careful attention to the social niceties," I said, tapping my palm with a finger.

Rho considered. "Did you record your meeting?"

"Of course." I filed an automatic BM-priority request for Rho and transferred the record to her slate address.

"I'll get back to you, Mickey. Or better yet, come on down to the Ice Pit. William needs someone besides me to talk to, I think. He's having trouble with the QL again, and he's still a little irritated about our heads."

My brother-in-law was in a contemplative mood. "On Earth," he said, "in India and Egypt, centuries before they had refrigerators, they had ice, cold drinks. Air conditioning. All because they had dry air and clear night skies."

I sat across the metal table from him in the laboratory's first room. Outside, William's arbeiters were busily, noisily, constructing an enclosure for Rho's heads, using the Nernst BM design. William sat in a tattered metal sling chair, leaving me the guest's cushioned armchair.

"You mean, they used storage batteries or solar power or something," I said, biting on his nascent anecdote.

He smiled pleasantly, relaxing into the story. "Nothing so obvious," he said. "Pharaoh's servants could have used flat, broad, porous earthenware trays. Filled them with a few centimetres of water, hoping for a particularly dry evening with clear air."

"Cold air?" I suggested.

"Not particularly important. Egypt was seldom cold. Just dry air and a clear night. *Voilà*. Ice."

I looked incredulous.

"No kidding," he said, leaning forward. "Evaporation and radiation into empty space. Black sky at night; continuous evaporation cooling the tray and the liquid; temperature of the liquid drops; and, given almost no humidity, the tray freezes solid. Harvest the ice in the morning, fill the tray again for the next night. Air conditioning, if you had enough surface area, enough trays, and some caves to store the ice.

"It would have worked?"

"Hell, Micko, it *did* work. Before there was electricity, that's how they made ice. Anyplace dry, with clear night skies..."

"Lose a lot of water through evaporation, wouldn't you?"

William shook his head. "You haven't a gramme of romance in you, Micko. Not at all tempted by the thought of a frosty mug of beer for the Pharaoh."

"Beer," I said. "Think of all the beer you could store in Rho's annex." Beer was a precious commodity in a small lunar station.

He made a face. "I saw the record of that Granger woman. Is she going to give Rho trouble?"

I shook my head.

"Serves Rho right," William said. "Sometimes..." He stood and wiped his face with his hands, then squeezed thumb and pointing finger together, squinting at them. "You were right. A new problem, Micko, a new *effect*. The QL says the disorder pumps have to be tuned again. It'll take a week. Then we'll hit the zeroth state of matter. Nothing like it since before we were all a twinkle in God's eye."

We had been through this before. My teasing seemed a necessary anodyne to him when he was bumping against another delay. "Violation of third law," I said casually.

He waved that away. "Mickey, you're an infidel. The third law's a mere bagatelle, like the sound barrier–"

"What if it's more like the speed of light?"

William shut one eye halfway and regarded me balefully. "You've laid out the money this far. If I'm a fool, you're a worse fool."

"From your point of view, I wouldn't find that reassuring," I said, smiling. "But what do I know? I'm a dry accountant. Set me out under a clear terrestrial night sky and my brain would freeze."

William laughed. "You're smarter than you need to be," he said. "Violating the third law of thermodynamics – no grief there. It's a sitting duck, Micko. Waiting to be shot."

"It's been sitting for a long time. Lots of hunters have missed. *You've* missed for three years now."

"We didn't have quantum logic thinkers and disorder pumps," William said, staring out into the darkness beyond the small window, face lit orange by flashes of light from the arbeiters at work in the pit below.

"The pumps make me twitch," I confessed, not for the first time.

William ignored that and turned to me, suddenly solemn. "If the council tries to stop Rho, you'd better fight them with all you've got. I'm not a Sandoval by birth, Mickey, but by God, this BM better stand by her."

"It won't get that far, William," I said. "It's all dust. A burble of politics."

"Tell them to cut the damned politics," William said softly. The rallying cry of all the Moon's families, all our tightly-bound yet ruggedly individual citizens; how often had I heard that phrase? "This is Rho's project. If I – if *we* let her have the Ice Pit for her heads, nobody should interfere. Damn it, that's what the Moon is all about. Do you believe all you hear about the Logologists?"

"I don't know," I said. "They certainly don't think like you and me." I joined William at the window. "Thank you," I said.

"For what?"

"For letting Rho do what she wants."

"She's crazier than I am," William said with a sigh. "She says you weren't too pleased at first, either."

"It's pretty gruesome," I admitted.

"But you're getting interested?"

"I suppose."

"The Task-Felder woman made you even more interested?"

I nodded.

William tapped the window's thick glass idly. "Mickey, Rho has always been protected by Sandoval, by living here on the Moon. The Moon has always encouraged her; free spirit, small population, place for young minds to shine. She's a little naive."

"We're no different," I said.

"Perhaps you aren't, but I've seen the rough."

I leaned my head to one side, giving him that much. "If by *naive*, you mean she doesn't know what it's like to be in a scrap, you're wrong."

"She knows intellectually," William said. "And she's sharp enough that that may be all she needs. But she doesn't know what a dirty fight really is."

"You think this is going to get dirty?"

"It doesn't make sense," William said. "Four hundred heads is gruesome, but it isn't dangerous, and it's been tolerated on Earth for a century..."

"Because nothing ever came of it," I said. "And apparently the toleration is wearing thin."

William rubbed thumb and forefinger along his cheeks, narrowing his already narrow mouth. "Why would anyone object?"

"For philosophical reasons, maybe," I said.

William nodded. "Or religious reasons. Have you read Logologist literature?"

I admitted that I hadn't.

"Neither have I, and I'm sure Rho hasn't. Time we did some research, don't you think?"

I shrugged dubiously, then shivered. "I don't think I'm going to like what I find."

William clucked. "Prejudice, Micko. Pure prejudice. Remember *my* origins. Maybe the Task-Felders aren't all that forbidding."

Being accused of prejudgment irritated me. I decided to change the subject and scratch an itch of curiosity. He had shown the QL to me earlier, but had seemed to deliberately avoid demonstrating the thinker. "Can I talk to it?"

"What?" William asked, then, following my eyes, looked behind him at the table. "Why not. It's listening to us now. QL, I'd like to introduce my friend and colleague, Mickey Sandoval."

"Pleased to meet you," the QL said, its gender neutral, as most thinker voices were. I raised an eyebrow at William. Normal enough, house-trained, almost domestic. He understood my expression of mild disappointment.

"Can you describe Mickey to me?" he asked, challenged now.

"In shape and form it is not unlike yourself," the thinker said.

"What about his extensions?"

"They differ from yours. Its state is free and dynamic. Its link with you is not primary. Does he want controlling?"

William smiled triumphantly. "No, QL, he is not an instrumentality. He is like myself."

"You are instrumentality."

"True, but for convenience's sake only," William said.

"It thinks you're part of the lab?" I asked.

"Much easier to work with it that way," William assured me.

"May I ask another question?"

"Be my guest," William said.

"QL, who's the boss here?"

"If by boss you mean a node of leadership, there is no leader here. The leader will arise at some later date, when the instrumentalities are integrated."

"When we succeed," William explained, "then there will be a boss, a node of leadership; and that will be the successful result itself."

"You mean, QL thinks that if you achieve absolute zero, that will be the boss?"

William smiled. "Something like that. Thank you, QL."

"You're welcome," the QL replied.

"Not so fast," I said. "I have another question."

William extended his hand, be my guest.

"What do you think will happen if the cells in the Cavity reach absolute zero?"

The interpreter was silent for a moment, and then spoke in a subtly different voice. "This interpreter is experiencing difficulties translating the QL thinker's response," it said. "Do you wish a statement in post-Boolean mathematical symbols by way of direct retinal projection, or the same transferred to a slate address, or an English interpretation?"

"I've already asked this question, of course," William told me. "I have the mathematics already, several different versions, several different possibilities."

"I'd like an English interpretation," I said.

"Then please be warned that response changes from hour to hour in significant ways," the interpreter said. "This might indicate a chaotic wave-mode fluctuation of theory within the QL. In other words, it has not yet formulated an adequate prediction, and cannot. This thinker will present several English-language responses, but warns that they are inadequate for full understanding, which may not be possible for organic human minds at any rate. Do you wish possibly misleading answers?"

"Give us a try," I said, feeling a sting of resentment. William sat at the manual-control console, willing to let this be my own contest.

"QL postulates that achievement of absolute zero within a significant sample of matter will result in a new state of matter. Since there is a coupling between motion of matter in spacetime and other forces within matter, particularly within atomic nuclei – the principle upon which the force-disorder pumps operate – then this new state of matter may be stable, and may require substantial energy input to return to a thermodynamic state. There is a small possibility that this new state may be communicable by quantum forces, and may induce a similar state in closely associated atoms."

I glanced at William. "A very small possibility," William said. "And I've protected against it. The copper atoms are isolated in a Penning trap and can't come in contact with anything else."

"Please go on," I told the interpreter.

"Another possibility involves a hitherto undiscovered coupling between states of spacetime itself and thermodynamic motion of matter. If thermodynamism ceases within a sample, the nature of spacetime around the sample may change. Quantum ground states may be affected. Restraints on probabilities of atomic positions may induce an alignment of virtual particle activities, with amplification of other quantum effects, including remote release of quantum information normally communicated between particles and inaccessible to non-communicants."

"All right," I said, defeated. "William, I need an interpreter for your interpreter."

"What the math says," William said, eyes shining with what must have been joy or pride – it could not have been sadness, "is that a kind of crystallization of spacetime will occur."

"So?"

"Spacetime is naturally amorphous, if we can poetically use terms reserved for matter. Crystallized space would have some interesting properties. Information of quantum states and positions normally communicated only between particles – through the so-called exclusive channels – could be leaked. There could even be propagation of quantum information backwards in time."

"That doesn't sound good," I said.

"It would be purely local," William said. "Fascinating to study. You could think of it as making space a superconductor of information, rather than the highly limited medium it is now."

"But is it likely?"

"No," William said. "From what I can understand, no QL prediction is likely or unlikely at this point."

The Ice Pit farms and support warrens occupied some thirty-five hectares and employed ninety family members. That was moderately large for an isolated research facility, but old habits die hard – on the Moon, each station large and small is designed to be autonomous, in case of emergency, natural or political. Stations are more often than not spread so far apart that the habit makes hard sense. Besides, each station must act as an independent social unit, like a village on Earth. The closest major station to us, Port Yin, was six hours away by shuttle.

I had been assigned twelve possible in-family girlfriends at the age of thirteen. Two resided at the Ice Pit. I had met one only casually, but the other, Lucinda Bergman-Sandoval, had been a love friend since we were sixteen. Lucinda worked on the farm that grew the station's food. We saw each other perhaps once a month now, my focus having shifted to extra-family women, as was expected when one approached marriage age. Still, those visits were good times, and we had scheduled a chat dinner date at the farm café this evening.

I've never cared much what women looked like. I mean, extraordinary beauty has never impressed me, perhaps because I'm no platinum sheen myself. The Sandoval family had long since accepted pre- and post-birth transforms as a norm, as had most lunar families, and so no son or daughter of Sandoval BM was actively unpleasant to look at. Lucinda's family had given her normal birth, and she had chosen a light transform at seventeen: she was black-haired,

coffee-skinned, purple-eyed, slender and tall, with a long neck and pleasant, wide face. Like most lunar kids, she was bichemical – she could go to Earth or other higher-gravity environments and adjust quickly.

We met in the café, which overlooked the six-hectare farm spread on the surface. Thick field-reinforced windows separated our table from high vacuum; a brass bar circled the enclosure to reassure our instincts that we would not fall off to the regolith or the clear polystone dome below.

Lucinda was a quiet girl, quick and sympathetic. We talked relationships for a while – she was considering an extra-family marriage proposal from a Nernst engineer named Hakim. I had some prospects but was still barn dancing a lot.

"Hakim's willing to be name-second," she said. "He's very generous."

"Wants kids?"

"Of course. He told me they could be ex-utero if I was squeamish." Lucinda smiled.

"Sounds rad," I said.

"Oh, he's not. Just...generous. I think he's really sweet on me."

"Advantages?"

She smirked slightly. "Lots of advantages. His branch controls Nernst Triple contracts."

"Nernst's done some work for us," I said.

"Tell," she instructed me softly.

"I probably shouldn't. I haven't even thought it through..."

"Sounds serious."

"It could be, I suppose. The council president may try to stop something my blood-sister is doing."

Lucinda raised her wide, thin eyebrows. "Really? On what grounds?"

"I'm not sure. The president is Task-Felder..."

"So?"

"She's a Logologist."

"Mm hmm. So? They have to play by the rules, too."

"Of course. I'm not making any accusations...But what do you know about Logologists?"

Lucinda thought for a moment. "They're tough on contracts. Daood – that's Hakim's brother – he administered a design contract to the Independence Station near Fra Mauro. That's a Task-Felder station."

"I know. I was invited to a barn dance there last month."

"Did you go?"

I shook my head. "Too much work."

"Daood says they rode the Nernst designers for eight weeks, jumped them between three different specs. Seemed to be a management lag – Task-Felder niggles from the top down. No independent thinking from on-site managers. Daood was not impressed."

I smiled. "We've upset some Nernst people ourselves. Last year, on the refrigerator repairs and radiator upgrades."

"Hakim mentioned that...Daood said we were saints compared to Task-Felder."

"Good to know we're appreciated by our brother BMs."

She mused for a moment. Our food came on an arbeiter delivery cart. "I've heard about Io, of course. That was hard to believe. Have you read any of Thierry's works?" Lucinda asked. "They were popular when we were kids."

"I managed to avoid them," I said. K.D. Thierry, an Earth-born movie producer who called himself a philosopher and acted like a dictatorial guru, had founded Chronopsychology in the late twentieth century, and then had spun it off into Logology.

"He must have written about three hundred books and LitVids. I read two – *Planetary Spirit* and *Whither Mind?* They were pretty strange. He tried to lay down rules for everything from what to dream to toilet training."

I laughed. "Why did you read them?"

Lucinda shrugged. "I used to scan a lot of LitVids. They were in the library. I called them up, paid the fee – about half what most LitVids cost. Lots of pretty video stuff. Sparkling lakes and rivers on Earth...pictures of Thierry riding his solar-powered yacht around the world. That sort of thing. All very attractive to a Moon girl."

"Did you read anything that explained what happened on Io?"

"I remember something about Thierry being told by an angel that humans were the spawn of warring gods, superbeings. They lived before the birth of our Sun. He said that deep within us were pieces of the personalities of some of these gods."

"I'll buy that," I said.

"The rest of the gods' minds had been imprisoned, buried by their enemies under sulphur on the 'Hell-moon.' They were waiting for us to liberate them and join with them again. Something like that." She shook her head.

I knew the rest of the story; it was in files on recent history I had studied in secondary. In 2090, Logologists on Mars had taken out a thousand-year development lease on Io from the Triple; violent, useless Io, visited only twice in history by human explorers. The new leaseholders set up a human-occupied station on Io in 2100. The station was lost with all occupants during the formation of a new Pelean-class sulphur lake. Seventy-five loyal Logologists died and were never recovered; they are still there, entombed in black sulphur.

The Logologists had never admitted to looking for lost gods.

I shuddered. "I didn't know what they were after. That's interesting."

"It's spooky," Lucinda said. "I stopped reading him when I realized he thought he was writing history. These folks think he's practically a god himself."

"They do?"

"You're dealing with them, and you don't know what they think?"

"My shortcomings are legendary," I said, raising my hands. "What kind of god?"

"They say he didn't die, that he was in perfect health. He just left his body behind like a husk. Now he's supposed to advise the Logologists through spiritual messages to his chosen disciples, each generation. He anoints them with blue cold, they say. Whatever that is. So what does Rho want to do that they don't like?"

"My lips are sealed. Rho gives the press conferences around here."

"But the president knows?"

"I presume she must."

"Thanks for trusting me, Micko." She gave me a

narrow grin to let me know she was teasing. Still, I felt uncomfortable.

"I can say I don't like any of it," I confessed. "It makes things a lot more complicated."

"Better get on with your homework, then," she advised.

The deeper I dug into Logology, the more fascinated I became. And repelled – though fascination won out in the end. Here was a creed without a coherent philosophy – a system without a sensible metaphysic. Here was puerile hypothesis and even outright fantasy masquerading as revealed truth. And it was all based on a single supposed insight into the human mind, something so audacious – and so patently ridiculous – that it was fascinating.

K.D. Thierry had exploited everybody's deeply held wish to participate in the unfolding of a Big Event. In this he was little different from other prophets and messiahs; the real differences lay in how much we knew about Thierry, and how ridiculous it seemed that a man such as he could be vouchsafed any great truth.

Thierry had been an actor in his youth. He had played small roles in bad chemstock films, one or two tiny appearances in good ones. He was known to film buffs but not to many others. In time he found his real strength lay in putting together deals, and so he began to produce and even direct films not so much bad as lustreless, soon forgotten.

By the late 1980s he had made a reputation as the director of a series of bizarre mystery films in which a peculiar flavour, half lunacy, half ironic humour, attracted a faithful following. He began to lecture at colleges and universities. He allegedly once told a screenwriter in New York that "Movies are a weak shadow. Religion is where we ought to go."

And so he went. Not an uneducated man, he joined the chorus of psychologists then intent on knocking the last crumbling chunks of Freudian doctrine from its pedestal. He tried to add all the rest of psychology to the scraps; his first wife had been a psychotherapist, and the parting had been memorably cruel to both.

Then, when he was forty-three years old, came a night of revelation. Sitting on a beach near the California city of Newport, he was confronted – so he claimed – by a massive figure, tall as a skyscraper, who gave him a piece of rock crystal the size of his fist. The figure was female in shape, but masculine in strength, and it said to him, "I don't have much time. I've been dead too long to stay here and talk to you in person. This crystal tells the entire story."

Thierry surmised that the huge figure was a *hologram* – which seemed to me to be primitive technology for a god to use when manifesting herself, but then, Thierry's imagination was limited by his times, and to reach his presumed audience of scientific naives he used the jargon and concepts of the 1990s.

He stared into the crystal, wrote down what he saw in a series of secret books not published in his lifetime, and then produced an epitome for public consumption. That epitome was called *The Old and the New Human Race*, and in it he revealed the cosmic science of Chronopsychology.

The enormous hologram had been the last of the True Humans, and the crystal she had given him had helped him unlock the power of his mind.

He published and promoted the book personally. It sold ten thousand copies the first year, and five hundred thousand copies the next. Later editions revised the name and some of the doctrines of the cosmic science: it became Logology, his final break with even the name *psychology*.

The Old and the New Human Race was soon available not just in paper, but in cube text, LitVid, Vid and five interactive media.

Through a series of seminars, he converted a few disciples at first, then multitudes, to the belief that humanity had once been godlike in its powers, and was now shackled by ancient chains which made us small, dependent on our bodies, and stupid. Thierry said that all humans were capable of transforming themselves into free-roving, very powerful spirits. The crystal told him how to break these chains through a series of mental exercises, and how to realize that humanity's ancient enemies – all but one, whom he called Shaytana – were dead, powerless to stop our self-liberation. All one's personal liberation required was concentration, education and discipline – and a lifetime membership in the Church of Logology.

Shaytana was Loki and a watered-down Satan combined, too weak to destroy us or even stop strong individuals from breaking free of the chains, wily enough and persistent enough to convince the great majority of humans that death was our destiny and weakness our lot.

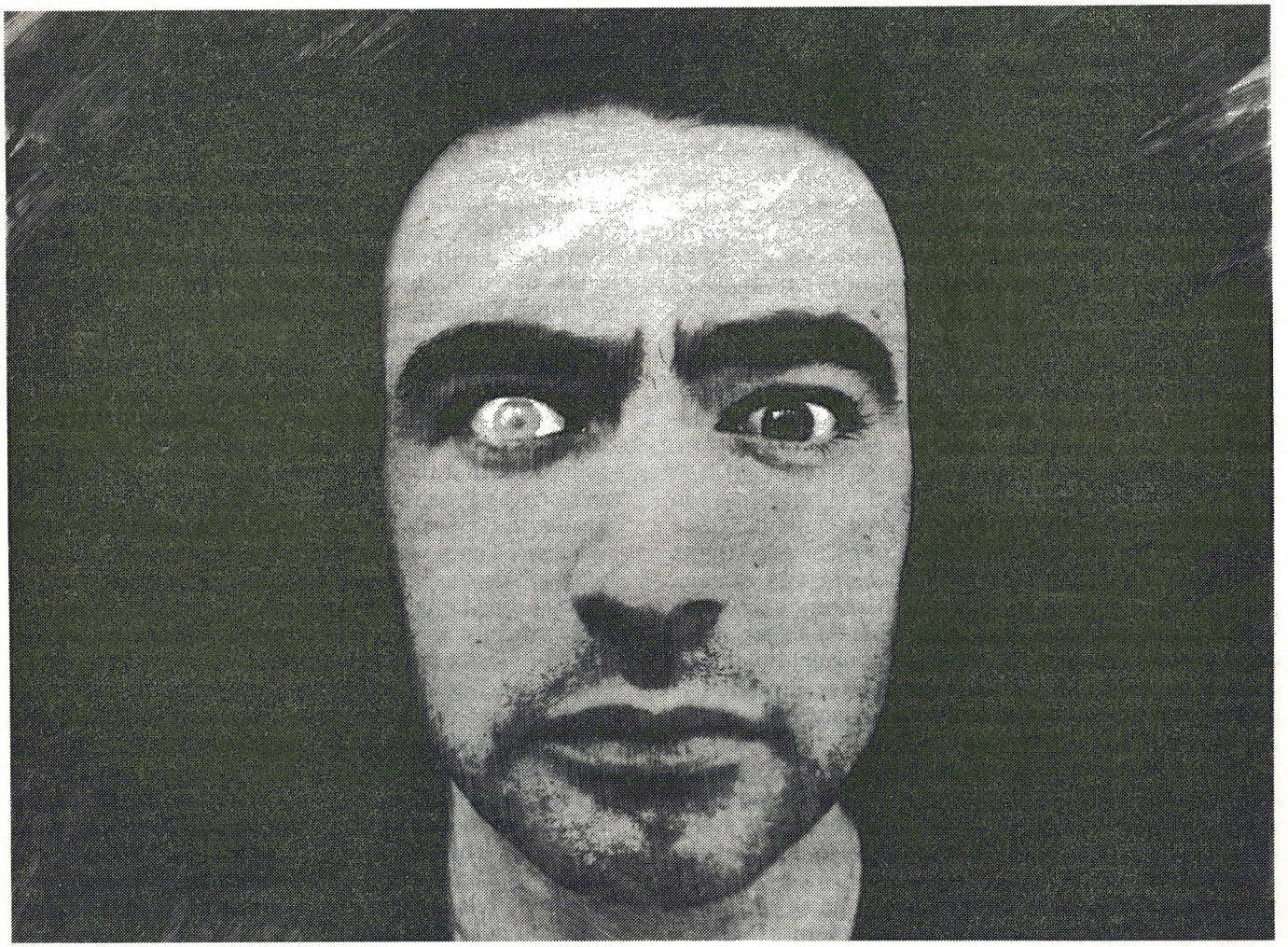
Those who opposed Thierry were dupes of Shaytana, or willing cohorts (as Freud, Jung, Adler and all other psychiatrists and psychologists had been). There were many dupes of Shaytana, including presidents, priests, and fellow prophets.

In 1997, Thierry tried to purchase a small South Pacific island to create a community of Unchained. He was rebuffed by the island's inhabitants and forced to move his seedling colony to Idaho, where he started his own small town, Ouranos, named after the progenitor of human consciousness. Ouranos became a major political centre in Idaho; Thierry was in part responsible for the separation of the state into two sections in 2012, the northern calling itself Green Idaho.

He wrote massively and still made movies occasionally. His later books covered all aspects of a Logologist's life, from pre-natal care to funeral rites and design of grave site. He packaged LitVid on such topics as world economics and politics. Slowly, he became a recluse; by 2031, two years before his death, he saw no one but his mistress and three personal secretaries.

Thierry claimed that a time of crisis would come after his own "liberation," and that within a century he would return, "freed of the chains of flesh," to put the Church of Logology into a position of "temporal power over the nations of the Earth." "Our enemies will be cinderized," he promised, "and the faithful will see an aeon of spiritual ecstasy."

At his death, he weighed one hundred and seventy-five kilogrammes and had to move with the aid of a massive armature, part wheelchair, part robot. Press releases, and reports to his hundreds of thousands of disciples in Ouranos and around the world, described



his death as voluntary release. He was accompanying the spirit who had first appeared to him on the beach in California on a tour of the galaxy.

His personal physician – a devoted disciple – claimed that despite his bulk, he was in perfect health, and that his body had changed its internal constitution in such a way as to build up massive amounts of energy necessary to power him in the first few years of his spiritual voyage.

Thierry himself they called the Ascended Master. Allegedly he had made weekly reports to his mistress on his adventures. She lived to a ripe old age, eschewed rejuvenation legal or otherwise, grew massive in bulk and, so the story went, joined her former lover on his pilgrimage.

A year after his death, one of his secretaries was arrested in Green Idaho on charges of child pornography. There was no evidence that Thierry had ever participated in such activities; but the ensuing scandal nearly wrecked the Church of Logology.

The Church recovered with remarkable speed when it sponsored a programme of supporting young LitVid artists. Using the programme as a stepping stone to acceptance among politicians and the general public, Logology's past was soon forgotten, and its current directors – anonymous, efficient and relatively colourless – finished the job that Thierry had begun. They made Logology a legitimate alternative religion, for those who continued to seek such solace.

The Church prospered and made its beginning moves on Puerto Rico. Logologists established a free hospital and "psychiatric" training centre on the island in 2046, four years before Puerto Rico became the fifty-first state. The island was soon controlled by a solid sixty per cent majority population of Logologists, the greatest concentration of the religion on Earth. Every Puerto Rican representative in the United States Congress since statehood had been a Logologist.

The rest was more or less familiar, including an in-depth history of the Io purchase and expedition.

When I finished poring over the massive amounts of material, I was drained and incredulous. I felt that I understood human nature from a somewhat superior perspective – as someone who was not a Logologist, who had not been taken in by Thierry's falsehoods and fantasies.

I dreamed that night of walking along an irrigation canal in Egypt. Dawn came intensely blue in the east, stars still out overhead. The canal had frozen during the night, which pleased me; it lay in jumbled cubes of ice, clear as glass, and the cubes were rearranging themselves like living things into perfect flat sheets. *Order*, I thought. *The Pharaoh will be pleased.* But as I looked into the depths of the canal, I saw fish pinned in by the layers of cubes, unable to move, gills flexing frantically, and I realized that I had sinned. I looked up to the stars, blaming them, but they refused to accept responsibility; then I looked to the sides of the canal, among the reeds, and saw copper double toruses on each side, sucking soundlessly. All my dream-muscles twitched and I came awake.

It was eight hundred hours and my personal line was blinking politely. I answered; there were two messages, one from Rho, left three hours earlier, and

one from Thomas Sandoval-Rice, an hour after hers.

Rho's message was voice only, and brief. "Mickey, the director wants to meet with both of us today in Port Yin. He's sending an executive shuttle for us at ten hundred."

The director's message was extensive text and a vocal from his secretary. "Mickey, Thomas Sandoval-Rice would like you to meet with him in Port Yin as soon as possible. We'd like Rhosalind to be there as well." Accompanying the message was text and Lit-Vid on Logology, much of the same material I'd already studied.

I arranged my affairs for the day and cancelled a meeting with family engineers on generator maintenance.

Rho was uncharacteristically sombre as we waited in the Pad Four lounge. Outside, it was lunar night, the brilliant glow of field lights blanking out the stars. A full Earth was above us, a thumbnail-sized spot of bluish light through the overhead ports. All we could see through the lounge windows was a few hectares of ashen churned lunar soil, a pile of rubble dug out from the Ice Pit warrens decades before, the featureless grey concrete of the field itself.

"I feel like they're pushing my nose in the dust," Rho said. The lights of the executive bus became visible above the horizon. "This is pretty fancy treatment. The director has never paid us so much attention before."

I tried to reassure her. "You've never reeled in Great-Grandma and Great-Grandpa before," I said.

She shook her head. "That isn't it. He sent a stack of research on Logologists."

I nodded. "Me, too. You've read it?"

"Of course."

"What did you think?"

"They're odd people, but I can't find anything that would make them object to this project. They say death isn't liberation unless you're enlightened – so frozen heads could just be more potential converts..."

"Maybe Thomas knows something more," I said.

The bus landed, sleek and bright red, an expensive full-pressure, full-cabin late-model Lunar Rover. I had never ridden on the Sandoval limo before. The interior was very impressive; automatic adjustment seats, restaurant unit – I regretted I'd already eaten breakfast, but nibbled on Rho's eggs and mock ham – and complete communications centre. We could have called Earth or Mars or any of the asteroids using Lunar Cooperative or even the Triple satellites if we'd wished.

"Makes you realize how far out of the Sandoval mainstream we are at the Ice Pit," I said as Rho slipped her plate into the return.

"I haven't missed it," she said. "We get what we need."

"William might not agree."

Rho smiled. "It's not luxury he's after."

Port Yin was Procellarum's main interplanetary commerce field and largest city, hub for all the stations in the ocean. Procellarum was the main territory of Sandoval BM, though we had some twenty stations and two smaller ports in the Earthside highlands. Besides being a transportation hub, Port Yin was surrounded by farms; it fed much of the Earthside Moon south and west of the ocean. For lunar citizens, a farm station of sufficient size also acts as a resort – a chance to admire forests and fields.

We passed over the now-opaqued rows of farm domes, thousands of hectares spaced along the south-east edge of the port, and came in at the private Sandoval field half an hour before our appointment. That gave us little time to cross by rail and walkway through Yin City's crowds to Centre Port.

The director's secretary led us down the short hall to his small personal office, centrally located among the Sandoval syndic warrens. Thomas Sandoval-Rice was trim, resolutely grey-haired, with a thin nose and ample lips, a middling seventy-five years old, and he wore a formal black suit with red sash and mooncalf slippers. He stood to greet us. There was barely room for three chairs and a desk; this was his inner sanctum, not the show office for Sandoval clients or other BM reps. Rho looked at me forlornly as we entered; this did seem like the occasion for a dressing-down.

"I'm pleased to see both of you again," Thomas said as he offered us chairs. "You're looking well. Mickey, it's been three years, hasn't it, since we approved your position at the Ice Pit?"

"Yes, sir," I said.

Thomas looked at Rho's wary face and smiled reassurance. "This is not a visit to a dental mechanic," he said. "Rho, I smell a storm coming, and I'd like to have you tell me what kind of storm it might be, and why we're sailing into it."

"I don't know, sir," Rho said steadily.

"Mickey?"

"I've read your text, sir. I'm puzzled, as well."

"The Task-Felder BM is behind all this, everybody's assured me of that. I have friends in the United States of the Western Hemisphere Senate. Friends who are in touch with California Logology, the parent church, as it were. Task-Felder BM is less independent than they want to appear; if California Logology nods its hoary head, Task-Felder jumps. Now, you know that no lunar BM is supposed to operate as either a terrestrial representative or to promote purely religious principles...That's in the Lunar Binding Multiples Agreements. The constitution of the Moon."

"Yes, sir," I said.

"But Task-Felder BM has managed to avoid or ignore a great many of those provisions, and nobody's called them on it, because no BM likes the image of making a council challenge of another fully chartered BM, even one with terrestrial connections. Bad for business, in brief. We all like to think of ourselves as rugged individualists, family first, Moon second, Triple third...and to hell with the Triple if push comes to shove. Understood?"

"Yes, sir," I said.

"I've served as chief syndic and director of Sandoval BM for twenty-nine years, and in that time, I've seen Task-Felder grow powerful *despite* the distaste of the older, family-based binding multiples. They're sharp, they're quick learners, they have impressive financial backing, and they have a sincerity and a drive that can be disconcerting."

"I've noticed that, sir," I said.

Thomas pursed his lips. "Your conversation with Janis Granger was not pleasant?"

"No, sir."

"We've done something to offend them, and my sources on Earth tell me they're willing to take off their gloves, get down in the dust and spit up a volcano if they have to. Mud, mud, mud, crazier than."

"I don't understand why, sir," Rho said.

"I was hoping one or both of you could enlighten me. You've gone through the brief on their history and beliefs. You don't find anything suggestive?"

"I certainly don't," Rho said.

"Our frozen Great-Grandma and Great-Grandpa never did anything to upset them?"

"Not that we know of."

"Rho, we've got some two-facing from our fellow family BMs, haven't we? Nernst and Cailetet are willing to design something for us and take our cash, but they may not stand up for us in the council." He rubbed his chin for a moment with his finger, making a wry face. "Is there anybody else interesting in the list of heads, besides Great-Grandma and Great-Grandpa?"

"I've brought along my files, including the list of individuals preserved by StarTime. There's a lacuna I was not aware of, sir – three viable individuals – and I've asked StarTime's advocate in New York for an accounting, but I haven't gotten an answer yet."

"You've correlated the list?"

"Pardon?" Rho asked.

"You've run cross-checks between Logology connections and the list? In history?"

"No."

"Mickey?"

"No, sir."

Thomas glanced at me reproachfully. "Let me do it now, then," he said. He took Rho's slate and plugged it into his desktop thinker. With a start, I realized this small green cube was Ellen C, *the* Sandoval thinker, advisor to all the syndics. Ellen C was one of the oldest thinkers on the Moon, somewhat obsolete now, but definitely part of the family. "Ellen, what do we have here?"

"No interesting strikes or correlations in the first or second degree," the thinker reported. "Completed."

Thomas raised his eyebrows. "Perhaps a dead end."

"I'll look into the unnamed three," Rho said.

"Do that. Now, I'd like to rehearse a few things with you folks. Do you know our weaknesses – your own weaknesses? And the weaknesses of the lunar BM system?"

I could not, in my naivety, come up with any immediate response to this question. Rho was equally blank.

"Allow an older fool to lecture you a bit, then. Grandpa Ian Reiker-Sandoval favoured Rho, doted on her. Gave her anything she wanted. So Rho has the man she wanted, someone from outside who doesn't meet the usual Sandoval criteria for eligible matches. Still, William has done his work admirably, and we all look forward to a breakthrough. However –"

"I'm spoiled," Rho anticipated him.

"Let's say...that you've had a rich girl's leeway, without the corruption of free access to fabulous wealth," Thomas said. "Nevertheless, you have substantial BM resources at your disposal, and you have a way of getting us into trouble without really seeing it coming."

"I'm not sure that's fair," I said.

"As judgments go, it's extremely fair," Thomas said, staring at me sharply. "This is not the first time...or are memories short in the younger Sandovals?"

Rho looked up at the ceiling, then at me, then at Thomas. "The tulips," she said.

"Sandoval BM lost half a million Triple dollars. Fortunately, we were able to convert the farms to tailored pharmaceuticals. But that was before your marriage to William, and it was minor...although typical of your early adventures. You've matured considerably since then, as I'm sure you'll both agree. Still, Rho has never been caught up in a freefall scuffle. She has always had Sandoval BM firmly behind her. To her credit, she's never brought in the kind of trouble that could reflect badly on the BM. Until now, and I can't pin the blame on her for this, except to say she's not terrible prescient."

"You blame her for *any* aspect of this?" I asked, still defensive before Thomas's relaxed gaze.

"No," Thomas said after a pregnant pause. "I blame you. You, my dear lad, are a focused dilettante, very good in your area, which is the Ice Pit, but not widely experienced. You don't have Rho's ambition, and you haven't shown many signs of her innovative spark... You've never even taken advantage of your Earth sabbatical. Micko, if I may be familiar, you've done the job of managing the Ice Pit well enough, certainly nothing for us to complain about, but you've had very little experience in the bigger arena of the Triple, and you've grown a little soft sitting out there. You didn't check out Rho's scheme."

I straightened in my chair. "It had BM charter –"

"You should *still* have checked it out. You should have smelled something coming. There may be no such thing as prescience, but honed instincts are crucial in our game, Micko.

"You've cultivated fine literature – terrestrial literature – fine music and a little history in the copious time you've had between your bursts of economic activity. You've become something of a lady's man in the barn dances. Fine; you're of an age where such things are natural. But now it's time that you put on some muscle. I'd like you to handle this matter as my accessory. You'll go to the council meetings – one is scheduled in a couple of days – and you'll study up on the chinks in our system's armour."

I settled back, suddenly more than just uneasy, and not about my impending debut in larger BM politics. "You think we're approaching a singularity?"

Thomas nodded. "Whatever your failings, Micko, you are sharp. That's exactly right. A time when all the rules could fail, and all our past oversights come back to haunt us. It's a good possibility. Care to lecture me for a minute?"

I shrugged. "Sir, I –"

"Stretch your wings, lad. You're not ignorant, else you wouldn't have made that last remark. What singularity faces the BMs now?"

"I can't really say, sir. I don't know which weakness you're referring to, specifically, but –"

"Go on." Thomas smiled like a genial tiger.

"We've outgrown the lunar constitution. Two million people in fifty-four BMs, that's ten times as many

as lived on the Moon when the constitution was written. And actually, it was never written by an individual. It was cobbled together by a committee intent on not stretching or voiding individual BM charters. I think that *you* think Task-Felder isn't above forcing a constitutional crisis."

"Yes?"

"If they are planning something like that, now's the time to do it. I've been studying the Triple's performance for the past few years. Lunar BMs have gotten increasingly conservative, sir. Compared with Mars, we've been..." I was on a nervous high; I waved my hands, and smiled placatingly, hoping not to overwhelm or offend.

"Yes?"

"Well, a little like you accuse me of being, sir. Self-contented, taking advantage of the lull. But the Triple is going through a major shake-up now, Earth's economy is suffering its expected forty-year cyclic decline, and the lunar BMs are vulnerable. If we stop cooperating, the Moon could be put into a financial crisis worse than the Split. So everybody's being very cautious, very...conservative. The old rough-and-tumble has given way to don't-prick-the-seal."

"Good," Thomas said.

"I haven't been a worm, sir," I said with a pained expression.

"Glad to hear it. And if Task-Felder convinces a significant number of BMs that we're rocking the boat in a way that could lower the lunar rating in the Triple?"

"It could be bad. But why would they do that?" I asked, still puzzled.

Rho picked up my question. "Tom, how could a few hundred heads bring this on? What's Task-Felder got against us?"

"Nothing at all, dear daughter," Thomas said. BM elders often referred to family youngsters as if they were their own children. "That's what worries me most of all."

Rho returned to the Ice Pit to supervise completion of the chamber for the heads; I stayed behind to prepare for the council meeting. Thomas put me up in Sandoval guest quarters reserved for the family, spare but comfortable. I felt depressed, angry with myself for being so vulnerable.

I *hated* disappointing Thomas Sandoval-Rice.

And I took no satisfaction in the thought that perhaps he had stung me to get my blood moving, to spur me to action.

I wanted to avoid any circumstance where he would need to sting me again.

Thomas woke me up from an erratic sleep of one hour, post twelve hours of study. My head felt like a dented air can. "Tune to general net lunar news," he said. "Scroll back the past five minutes."

I did as he told me and watched the LitVid image.

News of the quarter-hour. Synopsis: Earth questions jurisdiction of Moon in Sandoval BM buy-out of StarTime Preservation Society Contract and transfer of corpsicles.

Expansion 1: The United States Congressional Office of Triple Relations has issued an advisory alliance alert to the Lunar Council of Binding Multiples that Sandoval BM purchase of preservation contracts of four hundred and ten frozen heads of deceased twenty-first-century individuals may be invalid, under a late twentieth-century law regarding retention of archaeological artifacts within cultural and national boundaries. StarTime Preservation Society, a deceased-estate financed partnership group now dissolved on Earth, has already transferred "members, chattels, and responsibilities" to Sandoval BM. Sandoval Chief Syndic Thomas Sandoval-Rice states that the heads are legally under control of his binding multiple, subject to...

The report continued in that vein for eight thousand words of text and four minutes of recorded interviews. It concluded with a kicker, an interview with Puerto Rican Senator Pauline Grandville: *"If the Moon can simply ignore the feelings and desires of its terrestrial forebears, then that could call into question the entire matrix of Earth-Moon relations."*

I transferred to Thomas's line. "It's amazing," I said.

"Not at all," Thomas said. "I've run a search of the Earth-Moon LitVids and terrestrial press. It's in your hopper now."

"I've been reading all night, sir –"

Thomas glared at me. "I wouldn't have expected any less. We don't have much time."

"Sir, I'd be able to pinpoint my research if you'd let me know your strategy, your plan of battle."

"I don't have one yet, Micko. And neither should you. These are just the opening rounds. Never fire your guns before you've chosen a target."

"Did you know about this earlier? That California would tell Puerto Rico to do something like this?"

"I had a hint, nothing more. But my sources are quiet now. No more tattling from Earth, I'm afraid. We're on our own."

I wanted to ask him why the sources were quiet, but I sensed I'd used up my ration of questions.

Never in my life had I faced a problem with interplanetary implications. I finished a full eighteen hours of research, hardly more enlightened than when I had started, though I was full of facts: facts about Task-Felder, facts about the council president and her aide, yet more facts about Logology.

I was depressed and angry. I sat head in hands for fully an hour, wondering why the world was picking on me. At least I had a partial answer to Thomas's criticisms – short of actual precognition, I didn't think anybody could have intuited such an outcome to Rho's venture.

I lifted my head to answer a private-line call, routed to the guest quarters.

"I have a live call direct from Port Yin for Mickey Sandoval."

"That's me," I said.

The secretary made the connection and the face of Fiona Task-Felder, president of the council, clicked into vid. "Mr Sandoval, may I speak to you for a few minutes?"

I was stunned. "I'm sorry, I wasn't expecting...a call. Not here."

"I like to work direct, especially when my underlings screw up, as I trust Janis did."

"Uh..."

"Do you have a few minutes?"

"Please, Madam President...I'd much rather hold this conversation with our chief syndic tied in..."

"I'd rather not, Mr Sandoval. Just a few questions, and maybe we can patch all this up."

Fiona Task-Felder could hardly have looked more different from her aide. She was grey-haired, in her late sixties, with a muscular build that showed hours of careful exercise. She wore stretch casuals beneath her short council collar and seal. She looked vigorous and friendly and motherly, and was a handsome woman, but in a natural way, quite the reverse of Granger's studied, artificial hardness.

I should have known better, but I said, "All right. I'll try to answer as best I can..."

"Why does your sister want these heads?" the president asked.

"We've already explained that."

"Not to anybody's satisfaction but your own, perhaps. I've learned that your grandparents – pardon me, your great-grandparents – are among them. Is that your sole reason?"

"I don't think now's the time to discuss this, not without my sister being available, and certainly not without our director."

"I'm trying hard to understand, Mr Sandoval. I think we should meet casually, without any interference from aides and syndics, and straighten this out quickly, before somebody else screws it up out of all proportion. Is that possible?"

"I think Rho could explain –"

"Fine, then bring her."

"I'm sorry, but –"

She gave me a motherly expression of irritation, as if with a wayward son – or irritating lover. "I'm giving you a rare opportunity. In the old lunar spirit of one-to-one, and cut the politics. I think we can work it out. If we work fast."

I felt way out of my depth. I was being asked to step outside formal procedures...to make a decision immediately.

I knew the only way to play *that* game was to ignore her unexpressed rules.

"All right," I said.

"I have an appointment available on the third at ten hundred. Is that acceptable?"

That was three days away. I calculated quickly; I'd be back in the Ice Pit Station by then, and that meant I'd have to hire a special shuttle flight. "I'll be there," I said.

"I'm looking forward to it," Task-Felder said, and left me alone in the guest room to think out my options.

I did not break the unexpressed rules of her game. I did not talk to Thomas Sandoval-Rice. Nor did I tell Rho what I was doing. Before leaving Port Yin for a return trip to the Ice Pit, I secretly booked a non-scheduled round-trip shuttle, spending a great deal of Sandoval money on one passenger; thankfully, because of my position at the station, I did not have to give details.

I doubted that Thomas or Rho would look for me during the time I was gone; six hours going, a few hours there, and six back. I could leave individual messages for whoever might call, including Rho or Thomas or – much less likely – William.

To this day I experience a sick twist in my stomach when I ask myself why I did not follow through with my original thought, and tell Thomas about the President's call. I think perhaps it was youthful ego, wounded by Thomas's dressing-down; ego plus a strange gratification that the council *president* was going to see me personally, to put aside a block of her time to speak to someone not even an assistant syndic. Me. To speak to *me*.

I knew I was not doing what I should be doing, but like a mouse entranced by a snake, I ignored them all – a tendency of behaviour I have since learned I was not unique in possessing. A tendency common among lunar citizens.

We habitually cry out, "Cut the politics." But the challenge and intrigue of politics seduces us every time.

I honestly thought I could best Fiona Task-Felder.

As our arbeiters executed the Nernst design, the repository for the heads resembled a flattened doughnut lying on its side, a wide circular passageway with heads stored in seven tiers of cubicles around the outer perimeter. It would lie neatly in the bottom cup of the void, seven metres below the laboratory, out of range of whatever peculiar fluctuations might occur in the force-disorder pumps during William's tests, and easily connected to the refrigerators. Lunar rock would insulate the outer torus; pipes and other fittings could be neatly dropped from the refrigerators above. A small lift from the side of the bridge opposite the Cavity would give access.

It was a neat design, as we expected from Nernst BM. Our arbeiters performed flawlessly, although they were ten years out of date.

Not once did anyone mention problems with the council. I started to feel cocky; the plans I'd had of talking to Thomas about the visit to the president faded in and out with my mood. I could handle her; the threat was minimal. If I was sufficiently cagey, I could drop right in, leap right out, no harm although perhaps no benefits, either.

The day after I finished oversight and inspection on the chamber, and received a Nernst designer's inspection report, and after the last of Rho's heads had been installed in their cubicles, I stamped my approval for final payment to Nernst, called in the Cailetet consultants to look over the facilities, packed my travel bag, and was off.

There is a grey sameness to a lunar ocean's surface that induces a state of hypnosis, a mix of fascination at the lifeless expanse, never quite encompassed by memory, and incredible boredom. Part of the Moon are beautiful in a rugged way, even to a citizen. Crater walls, rilled terrain, even the painted flats of ancient vents.

Life on the Moon is a process of turning inwards, towards interior living spaces, towards an interior you. Lunar citizens are exceptional at introspection and decoration and indoor arts and crafts. Some of the finest craftsmen and artists in the solar system reside on the Moon; their work commands high prices throughout the Triple.

Two hours into the journey, I fell asleep and dreamed of Egypt again, endless dry deserts beyond the thin green belts of the Nile, deserts populated by mummies leading camels. Camels carrying trays of ice, making sounds like force-disorder pumps...

I awoke quickly and cursed William for that story, for its peculiar fascination. What was so strange about space sucking heat from trays of water? That was the principle behind our own heat exchangers on the surface above the Ice Pit. Still, I could not conceive of a sky on Earth as black as the Moon's, as all-forgiving, all-absorbing.

The shuttle made a smooth landing minutes later at Port Yin, and I disembarked, part of me still believing I would go to Thomas's office first, an hour before my appointment.

I did not. I spent that hour shopping for a birthday present for a girl in Copernicus Station. A girl I was not particularly courting at the time; something to pass an hour. My mind was blank.

The offices of the council president were located in the council annex to Port Yin's western domicile district; in the suburbs, as it were, and away from the centre BM activity, as befitted a political institution. The offices were numerous but not sumptuous; the syndics of many small BMs could have displayed more opulence.

I walked and took the skids, using the time to prepare myself. I was not stupid enough to believe there was no danger; I even felt with one part of my mind that what I was doing was more likely to turn out badly than otherwise. But I skidded along towards the council president's offices regardless, and in my defence I must say that my self-assurance still overcame my doubts. On the average, I felt more confident than ill-at-ease.

It was politics. My entire upbringing had ingrained in me the essential triviality of lunar politics. Council officers were merely secretaries to a bunch of congenial family businesses, dotting the i's and crossing the t's of rules of cooperation that probably would have been followed anyway, out of simple courtesy and for the sake of mutual benefit.

Most of our ancestors had been engineers and miners exported from the Earth; conservative and independent, suspicious of any authority, strongly convinced that large groups of people could live in comparative peace and prosperity without layers of government and bureaucracy.

My ancestors worked to squash the natural growth of such layers: "Cut the politics" was their constant cry, followed by shaking heads and raised eyes. Political organization was evil, representative government an imposition. Why have a representative when you could interact personally? Keep it small, direct and uncomplicated, they believed, and freedom would necessarily follow.

They couldn't keep it small. The Moon had already grown to such a point that layers of government and representation were necessary. But as with sexual attitudes in some Earth cultures, necessity was no guarantee of responsibility and planning.

From the beginning, our prime families and founders – including, I must say, Emilia and Robert – had screwed up the lunar constitution, if the patched-up collations of hearsay and station charters could even be called such.

When complex organization did come, it was haphazard, unenthusiastically organic, undisciplined. When the Split broke our economic supply lines with Earth, and when the first binding multiples came, the Moon was a reservoir of naively amenable suckers, but blessedly lucky – at first. The binding multiples weren't political organizations – they were business families, extensions of individuals, the Lunars said. Lunar citizens saw nothing wrong with family structures or even syndicates; they saw nothing wrong with the complex structures of the binding multiples, because somehow they did not qualify as government.

When the binding multiples had to set up offices to work with each other, and share legal codes written and unwritten to prevent friction, that was not government; it was pragmatism. And when the binding multiples formed a council, why, that was nothing more sinister than business folks getting together to talk and achieve individual consensus. (That oxymoron – individual consensus – was actually common then.) The Council of Binding Multiples was nothing more than a committee organized to reduce frictions between the business syndicates – at first. It was decorative and weak.

We were still innocent and did not know that the price of freedom – of individuality – is attention to politics, careful planning, careful organization; philosophy is no more a barrier against political disaster than it is against plague.

Think me naive; I was. We all were.

To be concluded next issue

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Greg Bear was born in California and now lives in Washington State. He worked as a lecturer, technical writer and planetarium operator (among other things) before he became a full-time author. He is the author of *Blood Music* (1985), *Eon* (1985), *The Forge of God* (1987), *Eternity* (1988) and *Queen of Angels* (1990; just out in this country from Gollancz) – among other well-received and very popular science-fiction novels. His short stories have been collected in *Tangents* (1989). The above story, which marks his first appearance in *Interzone*, is part one of a short novel called *Heads*, which will be published in book form by Century Hutchinson this September (£8.99 hardcover; £4.50 trade paperback), as part of their new "Legend Novellas" line.

BACK ISSUES

Back issues of *Interzone* are still readily available (except for issues 1, 5 and 7). They cost £2.30 each inland (postage included), or £2.50 each overseas (USA: $4 sea mail, or $5 air mail). However, UK purchasers who buy *three or more* in one order may have them at £1.95 each (i.e. post free).

Greg Bear

Interview by Gregory Feeley

Greg Bear is unashamedly a science-fiction writer, whose career has not taken either of the paths common in recent years for literate and ambitious sf writers: he has not attempted to create either a body of work which ranges well beyond genre categories (as Brian W. Aldiss and Thomas M. Disch have done), nor has he sought to use the figures and strategies of fantastic literature to write a contemporary fiction often likened to "magic realism" (as writers as different as Harlan Ellison, Christopher Priest, and Lucius Shepard have variously done). Bear is, as Disch noted in praising his novel Blood Music, *an "echt science fiction" writer, and all of his ten published novels have occupied recognizable genre categories: science fiction, horror, Celtic (at least in part) fantasy.*

*Born in 1951, Bear published his first story in 1967, and was appearing regularly in science-fiction magazines from the mid-Seventies onward. His first novels (*Hegira *and* Psychlone, *both published in 1979) are unusually intelligent genre works, modestly and exactingly executed. After a few more novels and a volume of stories, Bear's careful journeymanship began to pay off: he achieved a rapid prominence in the early Eighties, winning several awards for his short fiction and writing more assured and finished novels such as* Blood Music *and* The Infinity Concerto.

With the 1985 Eon *Bear began to work on a larger scale, publishing a number of long and monumentally-conceived "hard" science-fiction novels.* Eternity *and* The Forge of God *won Bear a large audience, while prompting misgivings among some critics who had admired his earlier work. Bear's new novel* Queen of Angels *is perhaps his most ambitious to date, an attempt to orchestrate numerous scientific, ethical, and metaphysical themes into a complexly plotted but unified work.*

Your recent novels have shown an increased concern with ethical issues: *The Forge of God* ends with an almost Biblical evocation of retribution and accountability, while *Queen of Angels* explicitly raises questions of justice and punishment.

Well, if you go back to *Strength of Stones* you will find all of those themes there. And *Psychlone* shows a concern about the consequences of human technology; these are concerned with ethics, too.

In your recent novels, however, they seem more –

More mature, may be the word you're looking for. *Queen of Angels* deals directly with the question of punishment and whether or not it's advisable or useful. And it establishes a pretty extensive theory of how punishment and the idea of retribution are related to self-awareness. In that way, yes, the book concentrates on that issue almost completely.

You seem to like the diptych as a form: *The Infinity Concerto* and *The Serpent Mage*, *Eon* and *Eternity*, and now an announced sequel to *The Forge of God*. Most sequels eventually lead to third volumes, whether originally intended or not: are you happier with paired novels, or simply impatient with the prevalence of trilogies?

Actually, there might be a sequel to *Eternity*. It's just a matter of the number of books required to fully develop an idea. If the idea is fully developed in two books, as in *The Infinity Concerto* and *The Serpent Mage*, then that's that. In fact those two books are really one novel, and should be published in one volume. *Anvil of the Stars* will be almost an expansion of the last chapter of *The Forge of God*. If the books are reprinted together, the last chapter of the first may be eliminated altogether. There could be a third for *The Forge of God*, but that's kind of nebulous right now, and I won't know whether I'm going to write it until I finish *Anvil of Stars*.

What might the successor to *Eternity* be?

Probably a history of the universe. It would be a very Stapledonian effort, with a very simple title, such as *Time* or *The Play of Time*. It would finish the story off such as nothing else would finish it off, so I wouldn't be able to write anything in the same universe after that.

Several British critics had quarrels with *Eon*. There seemed to be a sense that a novel which portrayed a nuclear war started by the Soviet Union was politically unacceptable.

I went back and looked at *Eon*, and it's ambiguous as to how the war started. In fact I was speaking with an American publisher of somewhat conservative sensibility, and he was incensed that I had the United States starting the war. What is given to the Russians is a motive for starting a war. Now they did in fact start an assault on the Stone, but where the nuclear war actually began is never stated.

But the British critics are probably right: it *was* probably the Russians, acting under extreme desperation. Remember, the book was written back around 1980 to 1983. Under those circumstances it was easy to portray the Soviet hierarchy as being desperate and rather single-minded. Of course the book is completely dated under current circumstances, and I hope it remains dated.

Have you ever considered writing a novel outside the sf-and-fantasy field – a contemporary or historical novel?

I've thought about it, but I haven't given it serious thought yet. I haven't mined this field completely. I've got five or six science-fiction novels backed up in my head. And this is what I've always wanted to do; I've never had the idea that sf or fantasy was limiting. I feel that I would have to damp down my fires a bit to write a contemporary novel.

One of these days I probably will; most science-fiction authors take their crack at it. But probably after I've raised a couple of kids and gotten the social issues down. I imagine that raising teenagers would make me want to write a contemporary novel.

You have revised several of your early novels in recent years. Is there some point in your past career after which you feel your books no longer called for revision, or can you imagine wanting to tinker with everything after six years or so?

I might always want to tinker in terms of fine-tuning the prose, but as far as major revisions go, not for most of the books I have written in the last, say, nine years. I am going to be going back and doing a tinker on *Strength of Stones*, but it may not be extensive.

Some of your early novels bore dedications that acknowledged the influence

of other writers – Joseph Conrad, Lafcadio Hearn, James Blish. Do you feel that your more recent books are also offering variants to, or adding upon, classic ideas of other writers?

Well, I hope they are. They are certainly classic themes. *Beyond Heaven's River* was influenced by Joseph Conrad; it is structurally based on his novel *Victory*. And James Blish came up with the basic idea of *Psychlone*: in *The Day After Judgment* he had one of his generals watch the effect of an atomic bomb in disrupting a city of demons and sending them into the air. And he decides that if we had just the right sort of neutron bomb, we may be able to destroy an immortal soul.

Blish said it was actually Poul Anderson who gave him the idea. Anderson had speculated that any supernatural agency that interacts with this universe could in turn be acted upon, so you could launch a secular assault on some corner of Heaven or Hell. Blish disagreed, and thought the notion symptomatic of a mind-set he dramatized in that Air Force General.

He never had the circumstance come up.

Well, the General launched an assault that was utterly routed.

Yeah, the atomic bombs were not strong enough.

Blish believed that nothing would have worked, that the supernatural of the Christian cosmos would exist wholly beyond any worldly forces. To believe otherwise constituted for Blish a kind of secular abomination which he saw as typical of Western technocracy.

He's one of my favourite authors, and one of the best idea authors in science fiction because his ideas cover such a wide range. I keep finding myself stumbling onto notions I want to use but discover that James Blish already used. I was interested in his ethical ideas, and more particularly in his quantum mechanical ideas. A book like *Jack of Eagles* threw off these evocative ideas, such as tuning Planck's constant to move between universes. I'm sure quantum physicists would raise their eyebrows, but still it was fascinating.

Despite his literary sensibility, Blish paid a lot of attention to the formal science of his speculations. His fiction of the 1950s contained ideas based on the work of living scientists like Bethe, Blackett, and Dirac, whom few other sf writers had likely heard of.

Paul Dirac is the perfect scientist for science-fiction writers.

For a long time Blish was the only writer to follow the work of *theoretical* scientists, although, you know, a lot of *Analog* writers doubtless kept up with *Scientific American*.

He was the only one for a long time who addressed quantum mechanics. It was also Blish who introduced me to James Joyce, about whom he was a scholar, and also James Branch Cabell. He led me down that garden path, and I've benefited ever since.

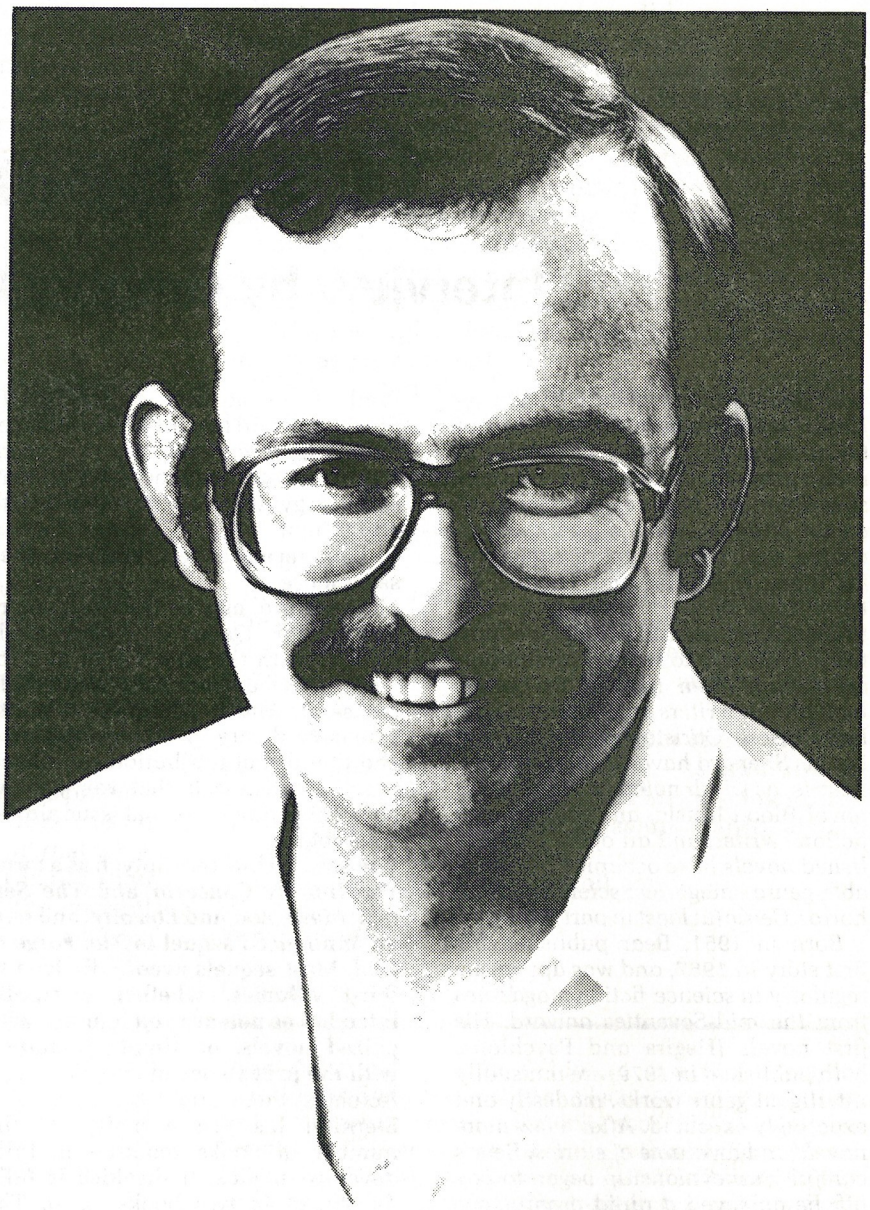


Photo of Greg Bear courtesy of Victor Gollancz Ltd

I remember reading Blish's reviews in *F&SF* around 1970, at an impressionable age, and being forcefully reminded of the wider fields beyond science fiction. Blish would take up some New Wave story that everyone was either hailing or execrating, and point out how it simply borrowed technical tricks that Joyce or Dos Passos had utilized in the early 1920s. It did a lot to keep one – to keep me, anyway – from slipping into that belief, very seductive to fifteen-year-olds who've read sf more than the classics, that science fiction is literature's real avant garde.

Well, it's true to a certain extent. We are avant-garde in that we are not bound up in simply considering style and contemporary mores to be the subjects that we work with. If you take a look at some of the best writers who confine themselves to contemporary literature, and some of the best science-fiction writers, there is a definite difference there. There is no sense of unrelenting philosophical tongue-in-cheek in a lot of very good sf writers. They are earnest; they really believe the future will exist and will be different. That's not often true of mainstream literature; you get a confused sense of time in mainstream literature, as though time is limited to one's lifetime, so you can write a massive novel about one single life, but if you go beyond that you're sort of stepping on God's toes. Science-fiction writers don't mind stepping on God's toes.

I don't know how much credit sf deserves for this, but certainly more contemporary writers are paying attention to science these days – not just how technology is transforming society, but theoretical science. Thomas Pynchon, Joseph McElroy,

and Don DeLillo have all shown this.
Well, in terms of style, Pynchon and DeLillo can certainly be enjoyed. In terms of their social ideas and ideas for reform, they're quite limited. Pynchon for example has explored the notion of paranoia in *Gravity's Rainbow*. But like every other mainstream 20th-century author, most of his characters are drunks, fools, or mad geniuses. And in many science-fiction stories you are going to find people who are *competent*. Competency – the ability to cope, even to prosper – is left out of a lot of contemporary literature, which believes that the world cannot be sensible. A science-fiction author is much more likely to say that, Yes, the world *is* sensible.

The universe.
The *universe* is sensible, and we can discover and explore it. *Gravity's Rainbow* is a continuous expression of man's fall from grace. In one case it's the fall of a harmonica into a toilet. The search for that lost instrument – it's a very powerful evocation, but it's not suggestive to a generation of children of what they should go out and do with their lives. It's a cry of despair.

That reminds me of the first John W. Campbell Award, given around 1972. It went to Barry Malzberg for *Beyond Apollo*.
Which Campbell would have had a fit over. It's the case of every award that's named after somebody. The Clarke Prizes generally have not gone to books that Arthur would have chosen.

The inscription for that first Campbell Award mentioned the necessity of sf acknowledging "Man's fallen state."
Did that come from Harrison and Aldiss?

I believe they were among the first judges, yes.
For being such basically positive writers, it was an interesting thing for them to say. I wrote a letter vociferously objecting to it. My attitude is: Why limit literature? Why limit science fiction to one particular philosophical notion – that Man has fallen from grace? That's a very Biblical thing, and why limit ourselves to Biblical ethics? What grace did we have to have fallen from? It's an amazing concept, and I think that to limit literature to such a credo is to hamstring it.

Of course you can *explore* that theme. I think *Queen of Angels* is kind of a discussion of the fall from grace. On the other hand, a continuous fall is a fairly steady state. And if you take a look at natural history, you'll see that every creature has its day in the sun, falls from it, and passes on. Maybe we'll be the first to hold up. Probably not, but we can always hope.

You have sold a novel called *Moving Mars*. That certainly suggests the supercession of normal limits.
It will be a good old sf novel in the Forties Heinlein sense but with a Nineties sensibility, I hope. It's going to be very high tech, broad scale, interstellar travel – "Doc" Smith with a conscience.

You've published only a few short stories in the last few years.
I write about a novel a year, and it takes me about a year and two months to produce a revised and finished book. In between novels I rest for about a month, so I don't have much time for short stories. When I do write short stories it's in order to treat different subjects that I really love, that let me slip into a different mode and exercise other muscles.

Have you considered screenwriting or nonfiction?
I've written nonfiction as a freelance journalist, and although I've never written a nonfiction book, one of these days I'll probably end up doing that. I aspire to be kind of a proselytizer, and that's one way to do it.

As far as screenplays go, probably not. Right now what one gets for writing screenplays is a fair amount of money, but not equal to what I get for writing a book. And a screenplay is an awful lot of work. In the proper circumstance, with a director I admired, I could do it. But that is probably not going to happen.

Do you have any plans for a sequel to *Blood Music*?
It would be pretty hard. I thought of doing a short story set in the Thought Universe, but it never developed.

No dramatic conflict possible?
It's possible, but it would operate on such a high level that most people wouldn't be interested. In any universe there will be conflict, the question is at what intellectual level, and how interesting it would be to us as physical beings.

There would also be a question of how credibly a merely human writer could dramatize the conflicts of superhuman intelligences.
It has been done in the past, but always within the context of current thinking, current ethics. And that would be difficult to avoid.

Are you thinking of Stapledon's *Odd John*?
Actually, *Odd John* comes closest to giving the reader a sense of intellect beyond our own, but does so by a kind of *neti neti*, not this, not that. It's kind of a description by negation – what John is *not* thinking.

***Neti neti*?**
Yes, it's an old Sanskrit saying. Also, Stapledon had a really marvellous talent in describing creatures who were not like us. He had a genius for it. I might want to take a crack at it sometime, but not as a sequel to *Blood Music*.

Has anyone sought to film *Blood Music*?
The option for *Blood Music* was bought by Lewis John Carlino about a year ago. I assume he is going to try and sell it to a studio, perhaps to direct himself. He has directed *The Great Santini*, which I liked a great deal, as well as written screenplays, such as *Seconds*.

At least one of your stories has been dramatized on TV.
Yes, "Dead Run" was done on the new *Twilight Zone*. I had exceptional good luck on that one. The script was written by Alan Brennert, who is a good friend, and he consulted with me a good deal. Enough of my ideas got into the final script that it was probably a kind of collaboration, but I liked his ending better than mine, and eventually used it in revising the story, so the collaboration works both ways.

I think the story of yours that would make the most appealing movie is probably "Petra."
Someone is actually trying to do that, a British writer named Duncan Johnstone. He has done a very fine screenplay for "Petra" which he is showing around, perhaps for independent production. I'm really quite amazed that he did it so well. He got it down practically verbatim in terms of the story, yet it works as a script.

Would he be able to film it in Notre Dame?
I kind of doubt it (laughs). The film will be hard enough to make, with all the creatures. They'll need the entire Muppet factory to do it.

A NOTE ON THE INTERVIEWER

Gregory Feeley, who conducted the above interview with Greg Bear, is himself an sf writer. His first novel, *The Oxygen Barons*, is due to appear in the USA this July.

He lives in Connecticut, and has hitherto been best known for his reviews and criticism in *Foundation* and other journals. Previous interviews he has contributed to *Interzone* include those with John Sladek (issue 30), Thomas M. Disch (issue 24) and John Crowley (issue 21).

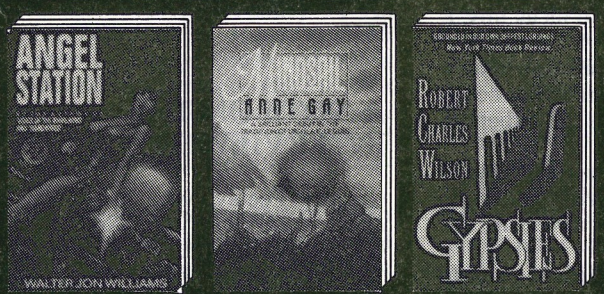
THE SAGA CONTINUES...

The Scions of Shannara

TERRY BROOKS

'A new myth-making talent'

THE NEW YORK TIMES BOOK REVIEW



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All of the above and over a thousand others have detailed entries in **David Pringle**'s entertaining reference book *Imaginary People: A Who's Who of Modern Fictional Characters* (Grafton Books, 1987, hardcover, £14.95), which contains over 500 pages of *vital information* – see pages 7-8 of Kim Newman's story "The Original Dr Shade" (*Interzone* 36) for an apocryphal sample entry.

The publishers have now made several hundred copies of the hardback first edition of this book available to *Interzone* readers at a knock-down price. Order yours from us at **just £6**, postage and packing included – less than half the original cover price of £14.95. Make your cheques or postal orders payable to *Interzone* and send them to **124 Osborne Road, Brighton BN1 6LU**. The above price of £6 is good for UK residents only; persons overseas please send £7.50 (USA $12 seamail or $15 airmail).

'A fictional Valhalla where the characters never die... a fascinating companion' – *The Listener*

A Lot of Mackerel, A Lot of Satellites

Ian Lee

In Skibbereen the mackerel have staring eyes but they see nothing. They lie there on the market slab; cheap, silvery and plentiful and no-one gives them a second look. Fish are just fish after all, that's the attitude. The sea is the sea and the stars the stars. Life goes on and we don't worry and the bars stay open all day on market day. Though satellites are overhead, watching every move we make, mostly they're just wasting their time. There are hundreds of thousands of them now, each with its own silvery globule of atmosphere, spread out like a man-made shoal of altocumulus – a mackerel sky. They lie there in space; cheap, silvery and plentiful and no-one gives them a second look.

Generations ago the future moved on – the way it had once moved from China to Greece to Los Angeles. It moved offworld with knitted brows, searching for itself in progress through space, time and ontology – and left us in peace. Now it visits us from time to time and we make it as welcome as we can; sometimes it brings a small personal catastrophe with it, which we incorporate later into the legends we tell to our children and to each other.

Down here the country people farm, weave, fish and chop wood they way they have always done and when the day's work is over, they go to their favourite bar for some conversation and a pint of stout. Once a month there is a *ceilidh*, where conversation gives way to music and dancing, the eternal verities. The land is green and wet and smells of cows, butter and the sea. The ocean is also green and deep and wet; and to be sure it is salty, vast and mysterious as it has always been. Pigs still smell, wood goes rotten if you leave it in the rain and people are still people.

Except, I suppose, that the position regarding clones is not totally and completely clear.

Here in Ireland we say that many things are the same as they always were and those that are not are different. It's a consoling thought, if you think about it. We also have a saying, which is quite succinct, though lacking in the verb department. If something is too difficult to resolve with our vestigial powers of reasoning, debate and analysis, people simply say: "A lot of mackerel, a lot of satellites." Sometimes they say it with a little shrug and a Continental sort of look. I think it has something to do with accepting the possibility that things may or may not be connected in a meaningful way.

My name is Brian O'Driscoll. I'm the storyteller and philosopher of the family. My brother is called Finbar. He has the gift of knowledge, as we say, and he owns the bar down by the harbour. He knows everyone and everyone knows him. We've lived here all our lives and I doubt either of us has ever entertained a thought of going anywhere else. "Here" is Baltimore – a fishing and holiday village down the road a couple of hours' walk from Skibbereen. I suppose we've missed out on a lot of travel and foreign parts but then they've missed out on us too so that's about even. I should mention at the outset that Finbar and I are natural twins. Most people around here are but I understand that it is not universally the case.

I own the grocery store myself and I do a little fishing if business is slack. Sometimes we get a tourist or two from offworld and I take them out to see Cape Clear or tell them stories about the high deeds of Finn Macool. But to be honest, I find those old myths rather dull; I prefer something a bit more modern, more complex, more incoherent, more "down to earth" (no pun intended). These are the ones – like the one that follows – that I tell to Finbar and the regulars as we spend the long winter evenings in his tavern. Even so, although I start with good intentions – sticking to the facts as I know them and the places and people we all recognize – I can't help a little embellishment; and soon the story passes beyond my intervention and I find myself listening to myself along with everyone. This is what I call a local legend.

Seymour and Jocasta were long-stay tourists of the sort I mentioned. They had come from offworld to get away from it all now that Earth was considered safe again. Apparently, Seymour was a famous composer and Jocasta was a famous painter. They lived on one of the artistic colony satellites over the Americas – a good life in many ways but depressingly identical to all the other colonies around the globe. They had come down to earth by satellite capsule, being jettisoned from the colony on a one-way ticket. Not that they might not have been intending to return; but they did not want to be tied, they said. The normal method of capsule disembarkation was for a fishing boat from the village to go out and meet the capsule and tow it, with its occupants, back to shore. There was a reasonable recovery fee available

from Shannon Aerospace if you could stand the paperwork. If you combined the trip with a little fishing you could make it pay quite nicely. As I said; a lot of mackerel, a lot of satellites.

Famous they might have been back home; here in Baltimore no-one had heard of either Seymour or Jocasta. They were just another couple of offworlders (O'Ws, as we call them, with characteristic humour).

But there was something about them that was different, something more haunted or hunted than just the usual aura of O'W anxiety. From the moment they arrived Finbar O'Driscoll, the aforementioned local publican, sibling and savant, watched every move they made. It is what Finbar likes to do. Like a surveillance satellite, wasting his time. He could see that they were on the run, so to speak; but there was no escape. Baltimore is at the end of the world. Save for Sherkin Island, offshore, where only a few goatherds live, and Clear Island, beyond that, where no-one lives at all, there is nowhere to go beyond Baltimore. The road to the headland ends in sheer bloody cliffs and the road that comes into the village is the same one that leaves. You can come by sea, of course, like the satellites and the mackerel, but I'm sure they will agree that there's no way out by that route either.

Seymour was forty and Jocasta was forty-two. Seymour had said it was time to take stock, to get off the merry-go-round (which is what the colony dwellers call the satellite they're on, I'm told). He wanted to think about some serious composing, to find some roots, to escape the suffocating emptiness of an enclosed life in space. It was like dying before you'd even been born. Jocasta too felt the melancholy of ageing and had agreed to the break in the hope that somehow it would unwind the spring that was coiling around their souls. Ireland itself, they said, in their rather solemn off-world way, seemed to be getting younger and younger, slipping back through time by the simple expedient of standing still as the rest of the universe galloped on.

We like it here. The evening sky changes colour most beautifully above Sherkin Island as the sun goes down over the edge of the world. The gold deepens on each puff of the altocumulus and becomes blood red as the sun sinks lower; then it is washed away in deep watery blue-green as the night begins. The satellites wink at each other and transfer data digitally to their hearts' content. It doesn't take very long.

Habakkuk was a clone. But they hadn't got him quite right: he didn't want to die. He knew that his only hope for survival was to find his benefactor. The fact that he had outlasted the natural lifespan of a clone several times over did not hold him back. He had a powerful desire to live and all else was as nothing beside the bright glow of that objective. The fact that his survival would necessitate the demise of his benefactor caused only the briefest flicker of emotion to pass across his steely blue eyes as he plummeted earthwards.

Seymour spent his days composing. He would sit in the large drawing room on the first floor of the house where he and Jocasta were staying and tinker with ideas on the grand piano as he looked out across the bay to Sherkin. The house was right on the road above the harbour and he could watch the fishermen and yachtsmen too and try to glean some miserable crumbs of inspiration from the rhythms of their flapping sails or chugging diesel engines. The pickup trucks would stand outside his window, their loads of basketed mackerel staring up at him dolefully. On difficult days he would wonder whether perhaps he should not have been a writer. Phrases would form in his head and he would fall in love with them momentarily, like pretty women in the street. On the other hand, he reflected, he was lucky to be alive at all. There were plenty who weren't. "This is more like it," he would say to himself, to keep his spirits up.

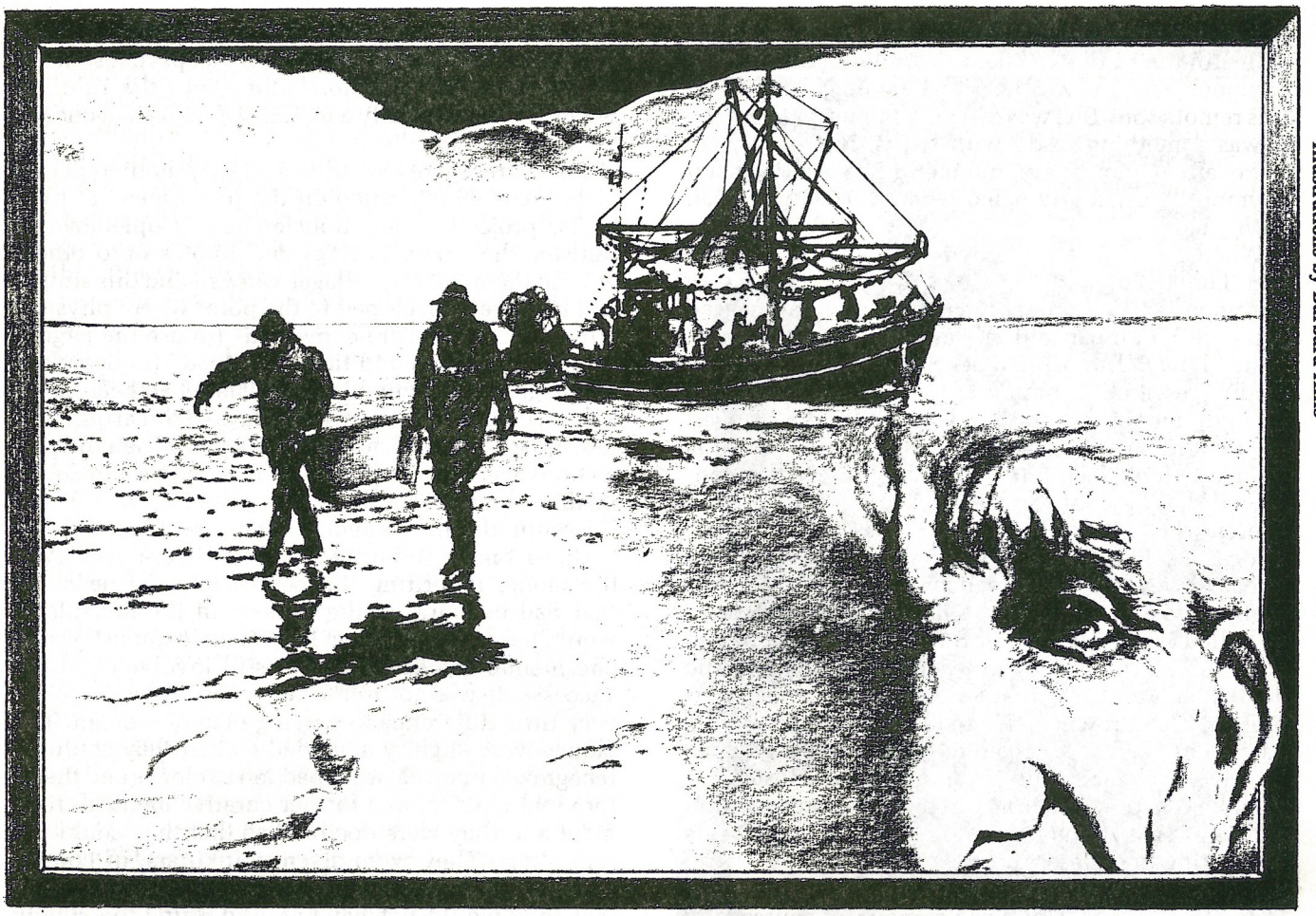
"And how are the tunes today, Mr Tuft, if I may ask?" asked Finbar, as they settled onto stools at the counter one typically inconsequential day.

"Oh, they're around all right," said Seymour, as though describing mackerel, "but it's catching them that's the very devil."

"That it is, that it is," confirmed Finbar. "You wet your whistle now and then you'll catch the tunes all right." He turned away, pleased with his little joke, lips pursed and emitting a high pitched sound, somewhere above top A. A mouse ran across the floor at the end of the bar and Finbar's cat jumped down off its chair and went to investigate. That's what it was programmed to do.

Habakkuk was a clone. But that didn't mean he didn't have feelings too. He had feelings just like me and you – except for those that had been removed at the time of his "birth." He knew he was a clone – he had awareness of himself, as they say, qua clone. This set him above the animals at least and presented a whole new field of ethics to anyone who was interested – a rich vein, a new fishing ground. In Skibbereen and surrounding districts, however, not many were, but only because it is beyond our grasp to see that you could make a living out of an inevitable activity, such as "discussing things." Sure, that would be like getting paid for breathing.

Habakkuk, ironically, was indeed a famous writer. He published under a pseudonym and did not reveal that he was a clone, since clones were kept apart from human society, in the same way as rubbish dumps were kept away from towns. Clones, after all, were simply repositories for the psychic and physical debris which life generates in human kind. They had been created as surrogates for human suffering – hosts onto whom the most serious illnesses could be transferred to run their course. Thus their lives were typically short and preoccupied with teleology, fulfilled by certain death. Habakkuk, however, had fought back, jumped colony when his sell-by date had passed and had managed to mingle with human satellite society. He had started to write, because no-one would employ him without medical records. His books became well-known but their author remained shrouded in mystery. His benefactor – the quaint term in common usage for the clone's as-it-were parent/twin – had no idea that Habakkuk was still alive. Indeed Habakkuk himself would wake each day surprised to find himself still there.



Illustrations by Barbara Hills

The heatshield was cooling now and his parachute opened to swing him down more slowly, silhouetted against Gemini in the dark heavens above.

People come to Baltimore for the sailing and for the birdwatching. Families come down from Dublin to spend the summer. Some have holiday cottages here. Also some of the visiting O'Ws have cottages and some retire here once the desire to be a part of offworld society has withered and fallen from their bones. Then there are the returnees like Mrs Fry, who lives in the old house to the North of the harbour on the other side of my grocery. She used to work as a secretary in offworld government but she has been back here a good few years now.

Mrs Fry had twin teenage nieces staying with her from Dublin. One was called Emer and the other was called Victoria. Like many twins, they were both identical and complementary. It was not always easy to see how they achieved this feat, since complementarity demands variance. Yet they managed it somehow. Emer was fractionally older than Victoria and would start sentences which Victoria would finish. Emer would hang around staring in a shop window while Victoria would tug at her sleeve and say, "Come on now, Emer, we haven't got all day to be standing here like a pair of Belisha beacons." Don't ask me what it means.

They were lovely girls and they blended in just fine with all the twins in the village. As I said, there is a tradition of twins here and we defend it vigorously. A twin never feels alone and draws a strength from that complementary presence. There is something about having an identical copy of yourself standing beside you that makes you feel unique...

Jocasta was immediately drawn to Mrs Fry, who appeared to know more than she was telling. Mrs Fry had also retained that air of morose delectation the O'Ws have, the thirst for meaning and analysis and the thrill of the chase in pursuit of anxiety and neurosis. What else can you hunt in a satellite? She had scraps of paper pasted around her house on which she had written philosophical notes to herself in red copper-plate. "There is a dark side to every idyll and every Utopian quest will precipitate unpalatable challenges." "At the heart of comedy lies tragedy and tragedy dissolves in laughter." But she had retained some of our ways too; she had twenty cats, no electricity or running water and a twinkle in her eye. "Progress," she would say, in that Delphic way she had with her, "is measured by where you have been, not where you are going."

Jocasta visited the old lady frequently, first simply to share tea, later to help in jam-making or pressing wild flowers or updating the crochet software in her portable craft kit. Eventually, Mrs Fry agreed to be painted and Jocasta knew that she would get no better opportunity to study the source of her fellow-feeling.

Finbar observed that Jocasta was beginning to dress like Mrs Fry and pin her hair in a similar style. He remarked to me that the quest of a son for the father was a common theme in mythology but that here was an example of a daughter in search of her mother. To me, they were beginning to look more like twins.

But Jocasta was still objective enough to realize that the selection of Baltimore was unlikely to have been

truly random; that some force of Fate or conscience or instinct had drawn them – or more particularly, Seymour, since it was he who had suggested it – to this remote spot. She was even conscious that perhaps it was something to do with twins. Not only were there an extraordinary number in the village but Seymour consistently paled whenever he was faced with a pair.

When I had first explained soon after he arrived that there twenty or thirty times the global average in Baltimore and environs, Seymour's jaw had sagged perceptibly. Finbar told me later that when he mentioned how Baltimore had been instrumental in early cloning research, a similar sag had been accompanied by a glimmer of recognition deep in Seymour's eyes. Or it could have been fear. (As a publican, Finbar is trained to look deep into people's eyes.) He was convinced that Seymour was experiencing some sort of *aperçu*.

Jocasta said nothing to Seymour about her intimations, however. He often dismissed her interpretations of his unconscious motivations – "satellite talk" he called it, disparagingly. But underneath, unseen, there lurked in him memories of the mind's oceanic depths; and he knew that an ocean that can support life can also drown it. There was an episode in his past he had never divulged to Jocasta nor to anyone; but the search for Earthly tranquillity and a lost youth was about to precipitate an unpalatable confrontation with that past which Seymour had spent many years attempting to suppress.

Habakkuk's benefactor was Seymour, of course, and the gift Seymour had bequeathed was a cancer. A man with a cork eye could have guessed that the moment Habakkuk, following Seymour's footsteps, came ashore from his satellite capsule and walked up the main street of Baltimore. As a clone, naturally, he looked identical, except that his hair was a trifle longer, his skin was very slightly paler and he was beginning to show rather worrying dark rings under his eyes. He had paid that little bit more and got a capsule that could propel itself across the swelling waves to landfall – he obviously wasn't as interested in being popular with the locals.

Habakkuk was tracking Seymour down. He didn't quite know what would happen when he caught up with him but he felt reasonably certain that something would. And as long as something was happening he was alive.

When his cancer had been diagnosed, Seymour had been still a young man, barely an adult. He had been offered the option of euthanasia or clonal projection. The latter had been a relatively new technique at that time and the results could not be guaranteed. It worked on the principle that cancer was an introjection (sometimes call an internalization) which had passed across the barriers between the mental and the physical worlds. It had been well known for many generations, of course, that people had a higher risk of cancer when they were divorced or lost their jobs or when a loved one died. But it had been a long time before the mechanism had been discovered whereby the mental upsets represented by such events became transformed into physical symptoms. Old-time one-dimensional medicine had rather clung to the belief that psychosomatic illness was the exception rather than the rule but Seymour was basically a modernist, so he had chosen to go for the clonal solution.

The cure involved advanced psychotherapeutic techniques which relied on the phenomena of hypnosis, projection and transference. People love to transfer their own failings and foibles onto others around them – as any villager knows – and this simple fact had been developed to the point where physical ailments could be "re-converted" (to use the jargon) into mental states and then "dumped" (to use plain language) onto a suitable host. There had been problems of course in the very early days – ethical quibbles too, before cloning had been perfected, when the projections were made onto various derelicts and social misfits – and protest groups had been formed.

Eventually, the patient could be replicated down to the last mole and tuft of unwanted nasal hair. And the clone, inheriting the benefactor's propensities that had encouraged the tumour in the first place, would become the perfect host. Considerable therapy and mental conditioning was still involved and the success rate was not 100%; but it was as close as made very little difference to a dying man or woman. The clones were slightly amended so that they could be recognized upon close inspection as clones and therefore ineligible for any further curative medical treatment and they were doctored so that they could not reproduce. They were given painkillers, of course, and allowed to pass away in comfort; but it was hoped that they would not hang around dying too slowly and looking reproachful. The donors were counselled to ensure that they looked upon the cloning and transference as a sort of advanced psychosurgery. The organized protests had withered away.

Habakkuk was a clone. But they hadn't got him quite right. After several remissions and nearly twenty years, he was still alive. And although on the surface he was looking friendly and apprehensive, underneath, it must be admitted, he was also looking unmistakably reproachful. And he was looking for Seymour.

Mrs Fry had been persuaded to sit in a rocking chair outside her front door in order to be painted by Jocasta. There was a small paved area there, weedy between the flagstones, but encapsulating the tranquillity and charm of this corner of Ireland. The cream-washed house was beginning to decay slightly – moss on the window sills, streaks of muddy deposits under the eaves, where the house martins nested. An old rusting milk churn stood beside the door, with a bowl of pink geraniums upon it. It made a necessary point of colour in the blue-green tableau. Jocasta mixed her oils, trying to establish a link between the blue of the shutters on the downstairs windows on one side of the composition and the deep blue of the background vista out across the sea to Sherkin Island on the other. As she mixed, she was thinking too about how to depict Mrs Fry and had a sudden idea to put her in a long skirt and shawl, suggesting a fisherman's wife in the ancient world, waiting for her husband to return from the sea.

As she painted, Jocasta found herself identifying even more strongly with Mrs Fry and could not help thinking also of Seymour. Then she remembered something, making a connection that released an electric shiver up her spine. Dr Terence Fry – the husband, surely – had been the pioneer of cloning research but for ethical reasons had turned against the technique and dropped out – literally. He had left his wife and taken a capsule from his research satellite back to Earth... But Dr Fry had died six months later from a cancer contracted during a transference that had been improperly screened. Jocasta struggled with the proposition that she didn't believe in premonitions, a struggle that remained unconcluded as a voice broke into her thoughts.

As Mrs Fry spoke, identical thoughts were in her mind too, though in her case, the premonition was a memory. The complementary twins. She let her gaze run past Jocasta's easel and down to the harbour, where, despite her age, her keen eyesight picked out the figure of a man extracting himself from a satellite capsule. The scene appeared to Mrs Fry to be a re-enactment of a thousand dreams – her husband plummeting earthwards, coming ashore pale and exhausted to die. But there were also dreams in which ethical purity had been forgotten, in which he came ashore and managed to project his illness onto a long-lost twin; then she would be with him again and they would be together until a natural death in a perfect future. On the other hand, this current apparition was different: it was being combined with someone else's nightmare and redoubling its strength, while losing all predictable direction. The man emerging from the capsule looked remarkably like Jocasta's husband.

Mrs Fry betrayed in her expression not the slightest hint of recognition but continued to watch the figure as it made its way ashore and headed in the direction of Finbar's bar, outside which two auburn-haired girls were sitting on the kerbside. All this was behind Jocasta's back. She, Jocasta, saw only a momentary flicker in the older woman's eyes, then heard Mrs Fry continue to speak to her, her words apparently a continuation of some internal thought.

"There is nothing to fear in death, my dear. Take it from an old widow: life goes on."

Seymour was dozing on a beach. It was that very special beach upon which peace and freedom rest like sunshine. He didn't know how he had got there and there was no sense of impending departure or of any need for the condition of life to alter in any way. The moment was the moment was the moment. Is this contentment? he dreamed. Is this real? He could hear swelling waves washing gently on the shore, splashing, sighing, like the breath of the sleeping ocean. He was alone and warm and beatific and deeply unconscious. Seagulls wheeled overhead, each the image of the next, like reflections in the fragments of a broken mirror. Beneath his silent body, in grooves created by the wind and tide, a million million particles of sand clung together for strength. He dreamed that each was identical to the next and with every other grain of sand in the known universe. A deep yearning filled him, to be absorbed within these universal particles and to drift and fall through space, falling and drifting, drifting and falling... Then a gust

of cooler breeze blew and in Seymour's dream a small unexpected cloud came across the sun and a sudden chill struck his heart.

Emer stood next to the motionless body, deliberately letting the shadow of her head fall across the eyes of the sleeping man. The eyelids flickered then opened blinkingly. It took Seymour some time to wake and remember where he was, out on the headland called Satellite Point, overlooking the ocean. His eyes focused slowly. He had seen a paleskinned, auburn-haired girl like this in the village but had not spoken to her. Now she had multiplied by two.

"Good day to you too," said Emer politely. "We've seen you in the village."

"You're staying down by the harbour," added Victoria, as though he had asked her the question.

Seymour smiled at the local intelligence. He looked at Emer and Victoria in turn and was struck deeply by the perfect resemblance. Mixed emotions were disturbed and swirled within him. It was as though someone had poked a stick into the sediment at the bottom of a clear pool.

"Well, you're very well-informed young ladies; perhaps you know my name too."

"You're Mr Tuft, the composer," said Victoria, emboldened by his seeming friendliness and the protective presence of her very slightly older sister.

"We're twins," continued Emer, unnecessarily emphatically, "and we've just seen something that will interest you."

"What's that?"

"We've seen your twin down in Baltimore."

"He came in a satellite too," added Victoria helpfully. "And he's even paler than you are."

At this, Seymour paled further to match his recalcitrant doppelgänger. He wished it were true but he was not a twin like them. He could never have matched their youth and innocence.

"Where was he?"

"He was going into Finbar's bar to ask where to find you," said Emer. "He only just arrived. He's got a suitcase... Just look at the way that one's hovering on the edge of that cliff now! Over there!"

Her attention had been taken by a gull which had found the perfect updraught from the cliff face. It hung in the air with wings outstretched, apparently motionless as its weight and orientation exactly balanced the air beneath it. Seymour felt that it was looking at him and that it had a small sardonic smile on its bill. Behind it hundreds of identical gulls swooped mockingly in the turbulent air. The single, balanced bird waited just long enough for Seymour to begin to imagine he was dreaming again and then dropped like a stone out of sight.

When Seymour spotted Habakkuk coming towards him the first thing he noticed was the expression of mingled apprehension and reproach on his face. It was the look of one who encounters a long-lost friend but doesn't know whether the reunion will be welcomed. Many, after all, are not. Seymour supposed that his own face betrayed at least an equal number of mixed emotions. Emer and Victoria seemed to have sunk into the undergrowth without trace.

For several moments no words were exchanged, while the gulls continued to squawk overhead unsympathetically.

"So, you're still alive," said Seymour, finally.

"Yes," replied Habakkuk.

"How are you?" It was a simple, but loaded question. Habakkuk paused before replying, deciding in the end to take it simply, one step at a time.

"I was better for a long time but I'm worse again now. It seems I was more of a fighter than they gave me... you... credit for."

"You've been looking for me, haven't you?"

"Yes."

"I knew. I could tell you were still around somewhere. I didn't know what to do. I came down here to get away from it all... to find it all, I don't know which. You know this is the place where cloning research started? They are strange down here; they don't take things seriously; they seem to like living in the past."

Seymour stopped himself abruptly, conscious of having begun to babble. He paused again, reasoning that in this case, paradoxically, it was for the pursuer to make the running. Eventually Habakkuk did speak.

"I need your help, Seymour. The cancer is beginning to spread again and this time I know it's not going to stop. Only you can save me."

"How?"

"We still have the mental link, Seymour. You said yourself you could feel I wasn't dead. I want you to let me project the cancer back to you. They didn't get me right – you know that yourself – I don't want to die. They won't clone me but you could be re-cloned; they don't know I'm still alive."

Seymour felt the surveillance satellites boring holes in the back of his neck. They knew what was going on all right. They just weren't interested. He looked into Habakkuk's eyes and instantly saw twenty years' of dreams and premonitions in that mackerel stare. The "link" – a highly developed form of hypnotic suggestibility – was indeed still present and, if he accepted this fate, it would only take a matter of minutes for the transference to take place. But could he go through it all again?

To be afraid, as Mrs Fry might have said, requires you to feel either superior or inferior. As the link was made, Seymour found himself feeling remarkably equal.

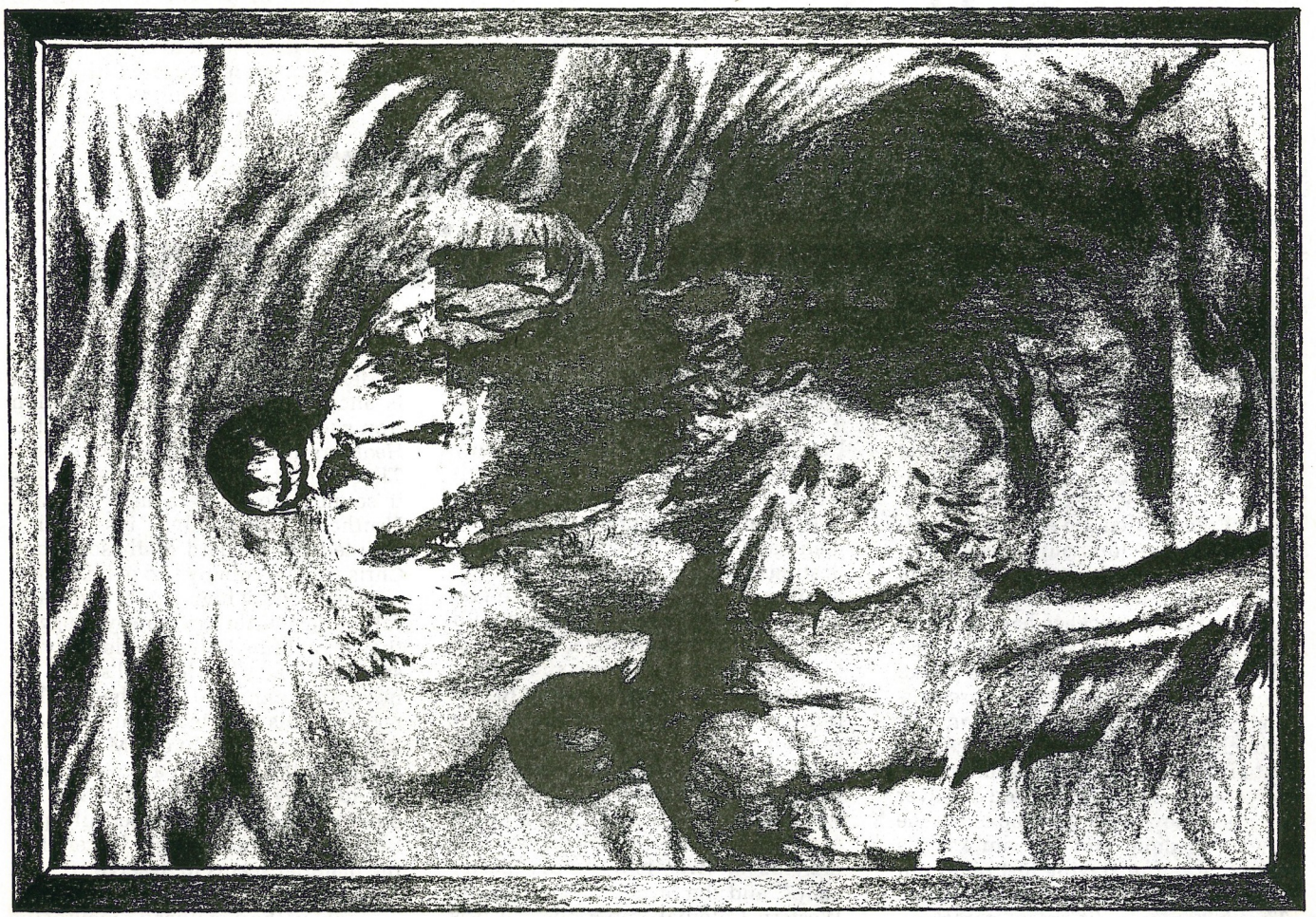
Later that night, in the house overlooking the harbour, Jocasta remarked to the man alongside her in bed,

"You're looking very pale, Seymour. Is it the moonlight? Was it nice out on the headland today? You were there a long time."

Receiving no reply, she fell asleep, assuming Seymour had already fallen.

Habakkuk lay next to Jocasta; but he felt alone. He hadn't got it quite right. This was not the feeling of freedom he had hoped for. To Habakkuk's surprise, Seymour had taken his Fate instantly by diving headlong from the cliffs once the transference was complete – a watery grave into which he had plunged almost with relief, late rather than early, when measured against his appointed time.

Habakkuk had come to revive his own life, then



discovered he didn't have one: he was only a part of Seymour's. Now he had taken Seymour's place, he discovered that little else but guilt remained; like a mackerel skeleton on a plate.

Habakkuk was a clone. He had lived an isolated life and was confused by the sudden proximity of human ways. In the small hours, unable to sleep, he was prey to orbiting "satellite thoughts" which swam in upon him. Habakkuk had come to meet his maker, Seymour had gone to meet his. It had simply been too much. The pangs of conscience had hounded him beyond endurance. Him?

Habakkuk looked across at Jocasta's silent sleeping face, then eased himself out of bed and walked down to the harbour. No-one noticed the small rowing boat slip its moorings, not even the satellites overhead. No-one stirred as he struck out beyond the harbour wall and out towards Satellite Point. Only the moonlight was disturbed for a few moments before settling again into shimmering silvery scales on the surface of the sea.

The next day, Emer and Victoria, standing on the rocky headland, saw the two bodies floating face down in the water.

"What are they doing?" asked Victoria, ever innocent.

"Looking for mackerel," said Emer, callously, turning away so that her sister could not see her face.

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Ian Lee wrote "Driving Through Korea" (*IZ* 27) and "Once Upon a Time in the Park" (*IZ* 30), two highly unusual stories which were well received by many of our readers. He is married with two children, lives in West London, and works as a civil servant. His first sale was to *New Worlds Quarterly*, circa 1976, but that anthology series ceased publication before it could print his debut story (which remains unpublished). He returned to writing about ten years later, and had a couple of small pieces in *Jennings Magazine* (one of them a competition winner) before his first appearance in *Interzone*.

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Mutant Popcorn
Film reviews by Nick Lowe

There's an insidious trend towards what I can only think of as a kind of metaphysical tourism. It's always been part of the magic of cinema that we can visit, in a strictly minimal-impact deal, those few remaining existential planes that are still largely off-limits to development: places like death, childhood, the past, the inside heads of animals or the opposite sex. And part of the package has traditionally been that the local sights get cleaned up and repainted to make them more picturesque, less threateningly different – more *familiar*. But something seems lately to be getting out of hand. You get to all these faraway trackless places, and you discover (a) gosh, they're just like the old home town all along and (b) shucks, it's really more fun staying just plain put and enjoying a doublethick milkshake. The ghost movies (it's okay, come out, this is a momentarily spook-free month) are only the iceberg's topknot. It's not just that you turn up on the other side and find *oh No*, John Goodman is *still* upstaging me off the screen. It's the rampant idea that here, now, this theatre is the centre of the moral and spiritual universe, and anywhere else is the same except that even the natives would all move here given half the chance.

Take history, and pluck an instance from the air. If *Mountains of the Moon*, say, had even been a British film, as opposed to a Hollywood film conveniently packaged in a superficially British coating, it would probably have found at least some interest in the idea that two moody macho blokes stuck in the armpit of nowhere for months of total misery would naturally get on one another's tit-end a trifle. Not so! it can now be revealed that Dickie and Jack were actually the best of lifelong chums, and history's vehement testimony to the reverse is all the legacy of a *tragic misunderstanding*. The buddy movie is the only permissible plot. If it can't be made positive and reassuringly mellow, nobody's going to sign up for the tour in the first place.

And seeing as there's enough of it about the place in certain overseas markets for history to be fun again, there's quite a lot of mischief to be had from this. We can't be far off now from Hungarofilm's sleeper hit *Sandor and Imre's Exemplary Adventure*, in which a pair of freewheeling, fun-loving Depeche Mode fans from Keszthely find themselves whisked off on a rollercoaster romp through history to help them pass their graduation assessment and fulfil their world-shaping desting as legendary ost-pop band New Synthesis. Pinballing from era to era, our lovable teen heroes kidnap a wild assortment of famous dialectical forces to parade back home in a show-stopping tableau of history brought to life. But fun starts to fly as the crazy crew run riot in the local civic complex! The Rise of the Urban Bourgeoisie gets hooked on skateboarding concrete, while Industrial Centralization of the Means of Production discovers the delights of twentieth-century pastry shops, and the Structural Collapse of Western Colonial Imperialism learns that topless sunbathing by Lake Balaton can be a whole lot more fun than participating in the crisis of international market capitalism. For Sandor and Imre, in whose hilarious hip patois everything is either "democratic" or "Muscovite," this is a "most unliberalized" development. Luckily our heroes' resourcefulness is matched only by their knowledge of old Joy Division riffs, and pop pogoes on after all to save the world.

In the meantime, of course, and for the western market, all this has to be subtly repackaged. There has been no history west of the Rhineland since 1945, and it's frankly unlikely there's ever been any at all in San Dimas, California. So **Bill and Ted's Excellent Adventure** is a strictly daytrip tour ("You have eighteen hours from... *now*"), through history as comprehended by highly-bonded white male teens hooked on unbelievably awful junk-metal pop. It's a theme-park, celebrity-centred view of history built entirely from high-profile personalities (aka "excellent dudes") – Socrates, Beethoven, Billy the Kid – all of whom share the inner sense that the modern mallrat lifestyle is the human spirit's most natural habitat. And, for that reason, it's a history that stops right here, because once you've invented rock and roll the future is basically safe.

Mercifully, it's a joke. *Bill and Ted* is another of these post-exploitation ironic teen fantasies, closer in spirit to *Heathers* and *Young Einstein* than the *Time Bandits* and *Back to the Future*s it sounds more like a hash of. Like *Heathers*, especially, it's lushly scripted (by Richard Matheson's boy Chris, and an equally tiro pal) in a fanciful pastiche of high school argot, and full of dark little throwaways suggestive of a *Blue Velvet* underbelly to smalltown family life. (Bill's dad, for no reason connected with the plot, has married this nineteen-year-old babe Bill has sweatingly to call Mom while she gives the old man a good sorting-out in Bill's own bedroom.) And the quality of the gags and, especially, performing is disorientingly better than the material seems to deserve.

Above all, it sneaks all these evil jokes about the metalhead's view of the cosmos. In *Bill and Ted*, the Californian high school male's perception of reality and value is treated stone-faced as the literal truth of existence. For one, rock and roll really *is* here to stay. Bill and Ted's band (they haven't learned to play yet, but they already know they're going to be "unprecedented") is still celebrated six hundred years in the future as the most significant event in human evolution. They call themselves Wyld Stallyns, which really says a lot. Meanwhile, historical dudes like Sigmund Freud and stuff are instinctively at home in the world of "the present day": Joan of Arc discovers her true métier as an aerobics instructor, as effortlessly as Napoleon finds what he really wants from life is ice cream and watersliding. Language is no problem: Socrates is the most triumphant dude of all, despite speaking nothing but classical Attic (with modern Greek stress and an English accent, but you've got to give them score for trying). Incredibly ludicrous plot gags and deadpans abound: "Want a Twinkie, Genghis Khan?" (Genghis follows hand offscreen; thud from soundtrack.) "Got him! Let's go!"

And so on, really. It would have been easy to let Bill and Ted discover from their jaunt that, gosh, history is more fun even than rock and roll. It would have been easier still to go with the *Back to the Future* line on teenage

aspiration, according to which the height of credibility and success really *is* making a go of it as a teen axe hero. Not so *Bill and Ted*, at the conclusion of which our lovable knobheads are told deadpan that Wyld Stallyns' music will bring about world peace and enable communication with ordinary household pets. It's only half of the tang of this film that it does for history what *Young Einstein* did for science. The other half is what it does to the walking-dead mythologies of rock, teen culture, and everything in the world being fine so long as you're white, male, and Californian. My only reservation is, I'm not sure we should be making jokes about this stuff.

Down on the flipside, they do the boy's-life thing a different way. **Encounter at Raven's Gate** is one of those brooding, humourless Antipodean suspensers about dourly-played lager-ad characters menaced in remote and dusty parts by the obligatory violent unknown event. In this case it's a loose assortment of rather elderly UFO movie symptoms (whence, presumably, "Encounter"): weird lights in the sky, inexplicable power cuts and surges, scorched circles in the bush, mysterious government agents on purposeful but ambivalent errands. Apart from a load of dead sheep thrown in for local colour, it all seems rather familiar stuff – a nostalgic throwback to the age before more contemporary stuff like crop circles and abduction scares updated the visitor mythos.

But the trick is, this is South Australia, and *Raven's Gate* is square in the mainstream of the great Australian chiller. It's important, for example, that you never find out what was really going on. (Apparently you did in the first draft, but it's wisely gone the way of the deleted final chapter of *Picnic at Hanging Rock*, where the schoolgirls turned out to have fallen obscurely up a kind of ringhole in spacetime.) By the end of *Raven's Gate* it becomes sensibly immaterial whether the nasty events are manmade or extry-trestry, the authorities having long since turned out to be no more human or intelligible than the unseen forces. No doubt this has a lot to do with the writers' obviously having bollock-all idea how to make even fractional sense of all the weakly-connected mystery effects. But I don't think it's going too far to say this is also a distinctively Downunder kind of ending, a passion for the unresolved that you seem to meet in a string of ANZ fantasies from *The Last Wave* to *The Navigator*, and which would be simply inconceivable in any Hollywood equivalent.

Better yet, it's full of these absolute total Australians. The steamy human triangle centres around Celine Griffiths' bored outback ranchwife, much given to shower scenes and mooching around

From 'Bill and Ted's Excellent Adventure' (Castle)

in clingy tropical dresses. Will she stick with her tyrannical scientist husband, more interested in his hydroponics and artesian drills than in giving her a decent seeing-to on the bathhouse tiles? Or will she succumb to the lure of his black-sheep kid brother, with his interesting sunglasses, rakish blonde looks, and dashingly spotty parole record? Can young Eddie keep his nose clean down the village bar, in the face of testosterone-sodden ragging from the local rough trade, when the deranged local officer of the law sees our hero as his only rival for stolen kisses down the Sydney opera with the blowsy barmaid? Which of these characters will be first to get brainfried and go on a stalk-slash rampage, and which will get spirited away into a baffingly disjunct murder subplot? Compared to all this, the question of what exactly *has* taken over sinister Raven's Gate farm, and done *such* a horrid thing to Mr and Mrs amiable old codger, can quite afford to kip out in the back seat for the duration. There's loads more exciting things going on at home.

All the same, it's nicely done on the thrill level too. Despite the uncertainties of plot, a certain amount of recognizably Australian acting, and a title that smacks more of Ian Livingstone than Mad Max, *Encounter at Raven's Gate* grips very well. Fussily shot, and directed by Rolf de Heer with febrile invention, it makes grand use of small communities on the frontier of emptiness – to say nothing of what must have been Adelaide's entire warehouse stock of dry ice. From a cough start, through some bumpy changes in the low gears, it revs by degrees to a seriously pulse-threatening peak. Unlike the immortal *Razorback*, which it recalls quite a lot, it hasn't much of an effective sense of humour. But this is so taut at the surface and daft in the middle that a smack of irony would probably have blown it apart. As it stands, it's a rich and eccentric gift to the grand tradition of Australian no-one-can-hear-you-screamers, from *The Cars that Ate Paris* all the way to *Dead Calm* (or *Dead Clam*, as my local

freesheet innocently redubbed it)... What a fabulous country. I'll take the two weeks, with shower.

(Nick Lowe)

Tube Corn
Wendy Bradley

Quantum Leap's basic premise is that of a piece of string. You imagine your life from birth to death as a linear progression, a line. You take the line, the string, and tie the beginning to the end and make a loop. Then you scrunch up the loop and any part of the loop can touch any other.

It's always a good start when the "science" part of a science-fiction plot is so simple even I can understand it. Sam Beckett is a quantum physicist who tries out his own time-travel machine and finds the experiment goes "ca-ca." He bounces around in time – but only within his own life-time, the mid-1950s onwards – taking over the bodies of various people and putting right the things that have gone wrong in their lives. Curiously enough, he never leaps outside of America and never winds up as a woman but he has found himself a test pilot, a boxer, a Mafia hit-man, a college professor, a zit-faced teenager and even an elderly black man in a Deep South small town at the start of the Civil Rights movement.

"*Back to the Future* and *Peggy Sue Got Married*!" I hear you cry and indeed there is a strong feeling of déja vu about many of the episodes. Why is his name Sam Beckett – is it some obscure tribute to the playwright or have the scriptwriters never read anything worth reading? I have been watching it since the first episode and I still can't decide whether I love it or hate it. The sexual politics are antediluvian and the general sentimental level is somewhere around *The Waltons*. There are only two special effects: the cute piece of editing when Dean Stockwell walks through walls, as the hologram of Beckett's associate relaying advice from the present-day computer trying to get back control of the leaps; and the dematerializing shimmer when this week's plot is wound up and Beckett bounces into the trailer for next week – unless of course you count the neon earrings of the girl hitchhiker in the first episode. A series that lets the hero go back in time and telephone his long-dead father, pretending to be a long-lost Australian cousin, and then look skywards and mouth the words "thank you" is going to bring a tear to your eye one way or another, either a surreptitious sniff into your hanky or a rip-roaring bite-the-carpet hysteria, depending on the state of your hormones. The series is still running in the States and the BBC have bought the first two seasons.

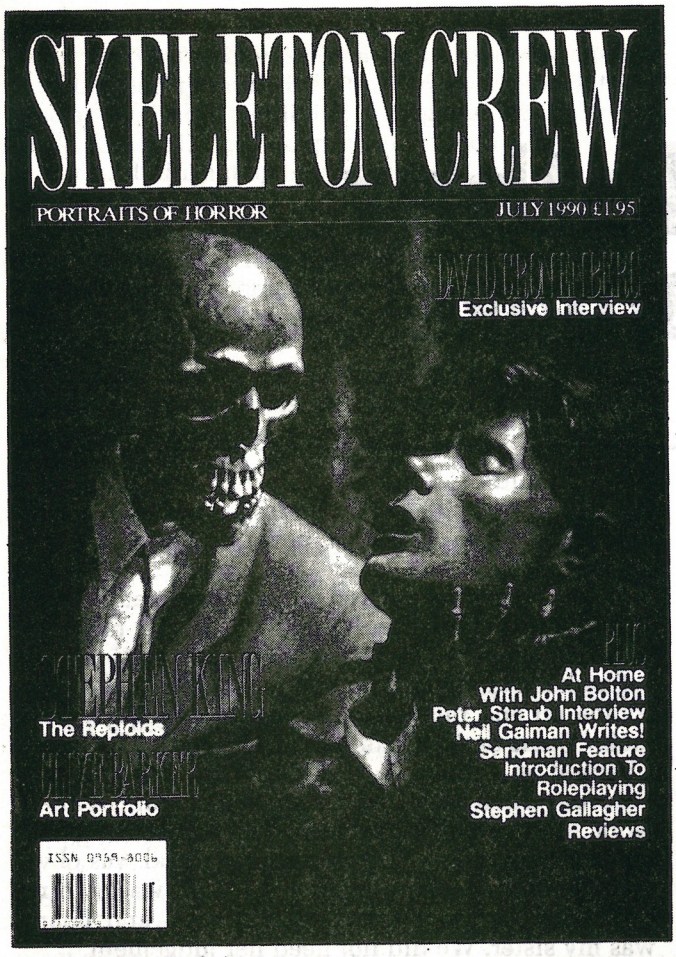
The stars of 'Quantum Leap' (MCA TV)

Seven episodes of a science-fiction sitcom began on March 25 with the first part of **Not With a Bang**, where an unfortunate accident on an episode of *Tomorrow's World* wipes out the entire population of the world except the four characters. An incredible cast including Josie Lawrence and Ronald Pickup is wasted on a plotline that derives its humour from four losers carrying on behaving like characters in a sitcom even when they are the only people left. Maybe it has a quirky surreal postmodernist humour I haven't tuned in to yet. Or maybe it just isn't funny.

The other stalwart sf series still running in this country are *Mork and Mindy* and *Land of the Giants*, for those of us reliving our infancy and catching up on the episodes we missed, but there is little good news for those who await the return of **Dr Who**. The BBC have so far not even made it to first base and decided whether to produce the next series themselves or to farm it out to an independent producer, and it will only be after that decision is made that the vital decisions on casting and writers will be taken.

There is a new series coming up on BSB called **Jupiter Moon** which is described (I think this is meant as a recommendation) as "a cross between *Star Trek* and *Neighbours*" and it apparently is a three-times-a-week half-hour soap about a polytechnic in orbit around Callisto. The BBC have bought the first three seasons of **Star Trek: The Next Generation** but so far they only plan to show the first, beginning in October, and then to "take a break," presumably to make us all kick up a fuss if we want to see the remainder. And that's about it, apart from the good news that *Blake's 7* is out on video and, if you can get a bookie to take your money, a fiver on *Star Trek IV* for an airing on the BBC at Christmas might be a reasonable investment.

(Wendy Bradley)



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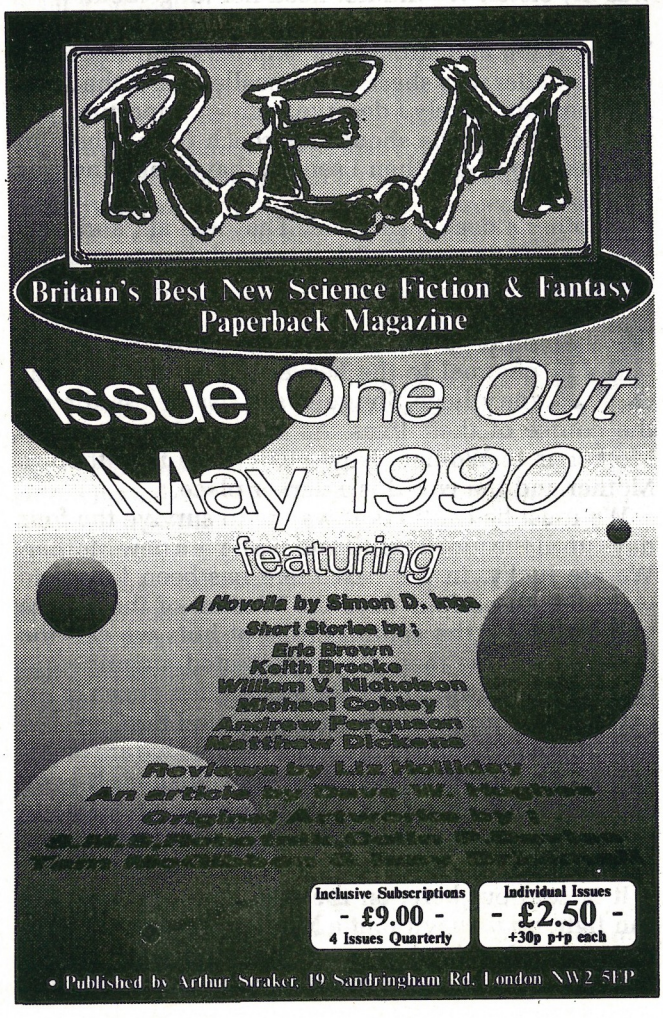

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The writers of the 21st century . . . caught while they're young.

The Mother

Keith Brooke

"Mother's dead." Tilana's voice was strong. Her words numbed me but deep within I felt the anticipation, the realization that change was due. I blocked it out.

When Tilana appeared, thorn and jent had been arguing. We were in a small clearing on the oakwood slopes, nearly two hours from the village; we had been digging combe-roots for most of the morning, hacking away at their tough skins to let the sweet juices solidify, then sacking them for transportation and storage.

I was waist-deep in the pit, tugging at a difficult corm, when I sensed the atmosphere getting tight. Over the buzz of the grade-flies I heard thorn say that he had been taken into the Core again. "What a chore," he said. "You'd think they'd give a man a break." He laughed. I knew the taunting tone in his voice: jent had probably provoked him but thorn was always too ready to retaliate.

The three of us are of much the same age but the Women of our village have clearly taken a special liking to thorn. They have called him six times, if his stories are the truth. I have no reason to doubt him. He is young, fast, healthy, he has a charm apparent to us all. But he also knows how to choose his targets. He can boast to me all he likes and I'll grin and take it, I don't resent his good fortune. I am bound to be called at some date or another: the Women know the value of diversity. But jent will never be called. He was born with his left forearm absent, the hand joined at a precarious angle to the elbow. Such deformity is a frequent occurrence, affecting many more Females than males. Poor jent will never receive his summons to the Core: no Woman would take such a risk.

"Hey, thorn, will you give me some help?" I am accustomed to breaking up the fights of my two friends. They are close, as the songs say we should be, but there has always been a tension between them. I smeared a muddy hand across my forehead and glared, my hands on my hips, a Woman's pose, when She is mediator. Thorn grinned nonchalantly and slid a cut combe-root into his sack but jent took a step towards him, spat at his feet.

That was when I spotted Tilana. Tilana is my blood sister: from womb to puberty we were closer than brothers but now she is Woman, now she is Nameless. Tilana is no more.

We are not supposed to distinguish between the Nameless – they are Woman – but Tilana has always retained her individuality for me. Self-consciously, I rubbed the mud from my forehead.

Just then, the sight of Woman made me defensive. They shouldn't come out this far, not alone: the Women of our village are too few, we cannot afford to lose any to the dangers of the forest. She was breaking the codes.

When Tilana's eyes fixed on us I wondered if it was she who had called thorn into the Core. He probably wouldn't know: to him there are no distinctions.

She headed towards us and I scrambled out of my combe pit and pushed between jent and thorn for a sack. "Come on," I muttered, "you're getting behind." I hacked at a root and slid it into the bag and was relieved when thorn and then jent resumed their work. Most men do not object when one of the Nameless intervenes in a dispute, but my signal was obvious. Thorn and jent are my friends – there was nothing serious enough to warrant interference – and Tilana was my sister. We did not need her judgement.

But she was still approaching so I looked up again. Tilana is tall and strong, her skin dark and smooth. I often wonder why she has never called me to the Core. I am healthy, surely I deserve such an opportunity? I wondered why she should approach us out there in the oakwoods and then I sensed that something was wrong.

"Mother's dead," she said. That was all, and now she has left us again, with our combe-roots and our thoughts.

Mother is the voice of the gods. She is our channel to the heavens. Also She governs the village, She guides the Nameless, directs the course of their lives. As Woman is to man, so Mother is to Woman. Now our village is without a Mother and the world is a darker place.

We must be cautious if we are to survive the four days until the moon is full and we have a new Mother. We are lucky. In the past there has been longer to wait. For these four days the Women of the village will not leave the central circle of huts we call the Core; so we, the men, are unprotected, unguided in this hostile world. There are perhaps ten dozen of us, cowering in our huts that cluster around the Core, but without our seventeen precious Women we are emasculate. The order of our lives has vanished. It is an exciting time, a nervous time, tensions are close to the surface. Things will get better when we have a new Mother.

It is cold out here, on the edge of the village. We can light no fires without a Mother to shield us from the gods. Our food is uncooked and goes largely uneaten: our emotions interfere with the traditional

patterns. After a time, the sounds of argument merge into the background. It is three days since Mother died and, without mediation, our aggression is always ready to erupt. I have experienced such times twice in my adult life but on both occasions I was too young to understand. Now I can see it all about, I can feel it in my spleen. We fight because we are without guidance, we fight because the Woman in us all is hidden deep within; but more, we fight because we are scared. The continuity of our existence has been fractured, we are lost.

I breathe deeply. So far I have avoided the petty squabbles and conflicts. By tomorrow night we will have a new Mother – I shudder at the thought: the anticipation breaks all barriers – and then life will settle again.

Glancing towards the Core I spot something, a figure edging through the shadows. Curious, I follow. Quickly I recognize the confident movements of thorn, even as he clings to darkness.

I hurry after him. "Thorn," I whisper. It is the first time I have spoken since Tilana told us the news. I have kept my distance, these three days. Closeness merely breeds conflict at such times.

He is frightened. He jerks at the sound of my voice, turns sharply. I see his eyes narrow in the light of the nearly full moon. "You," he says dismissively, and in that instant I realize that my isolation has only been partly due to my own efforts: perhaps sensing my mood, my friends have been avoiding me. Then he shrugs and turns. "Come on," he says. "I want to see what's happening."

He is going to spy, he is going to break the codes in order to alleviate his own share of the tension we all feel. What can I do? I can leave him, pretend to myself that I have not seen him this night, fight alone with my conscience. I can raise the alarm and so prevent his transgression, but by so doing I might implicate myself and my current mood is one of tense caution. Or I can go with him, try to modify his actions, guide him with my own restraint.

I follow him through the moon-cast shadows of the huts. These inner huts in the men's cluster are used for storage, roots and juice and nuts and grains, tools and firewood and winter clothing. There is an open space between these huts and the Core, a space kept clear of vegetation. Thorn wants to cross this space but I catch his arm and lead him around to the south side where there is a rocky outcrop that extends halfway towards the Core. We reach the innermost boulder and I say, "No farther, thorn: the codes."

He shrugs, relieved, I think, that I am here to curb his impetuosity.

There is a convenient gap between the Women's huts, where the long bulk of the crèche disrupts the regular pattern. The children should be asleep now, but I know from experience that the tension reaches into the crèche too. From our uncomfortable viewpoint we can see right through the circle of huts and into the heart of our village.

The Women are gathered in their debating circle but my eyes are drawn first to Mother, nailed to Her cross, Her head tilted up, pale in the light of the moon. Stripped of Her robes, Her body is horribly thin and wasted. Her face is like a skull, Her ribs stand free, Her... I tear my eyes away. She has been our Mother for four years, a long time in the service of the gods. Tomorrow, the Women will heap wood around the cross and the new Mother will light the first fire of Her reign. It will be a wonderful event.

A safe distance from the cross is the joss-house and in it, the throne that Mother must only ever leave when the moon is full and the flow is to be praised.

Thorn is restless, his plans defused, only half-realized. From our outcrop we can see everything but the voices from the debating circle only reach us as a half-heard murmur, the words indistinct, susurrant.

"Who do you think will be chosen?" says thorn, breaking the codes again. Speculation is the seed of the night, something to which we are vulnerable when we are left unprotected, as now. I touch the rock. Contact with the Earth is always a comfort.

In the past it is said that Mother was always one who had bred, one who had proven Her fruitfulness. In my time She has always been chosen from the fresh, the unproven. The codes say our Mother must never bear children. It is the way.

I sit until the sky begins to lighten and then I leave, realizing that boredom must have taken thorn long before.

At some time in the night I recognized the figure that had been holding the circle rapt. One Woman distinct from the others. Tilana. It was then that this nervous anticipation took form in my mind. I looked for a long time at the animated figure of my sister, the shadows she cast, and then I felt the fear and, more than anything, the joy. As I return to the hut I share with jent and thorn I keep reminding myself that it is mere supposition, I have no way of knowing. Not until tonight.

The night is sharp like a blade. Alone, I can taste the frost on the still air. The stars burn more brightly than I have ever known. Atmosphere is a powerful drug.

We are already gathered by the firewood hut when the horn blows, drawn together by some subconscious magnetism. Here, the taste of frost is absent, the warm fug of bodies smothering all else. We are men together.

So I tell myself. It has a reassuring shape in my mind, such a thought. The tension is greater than ever but there is no arguing, no aggression. Tonight is the night of the full moon, the Bleeding Moon, as the Women call it and the men are not supposed to know.

The horn, the horn. A single, plaintive note, not loud but heard by us all. We stir, this crowd of men, and then we process solemnly past the storage huts, heading towards the Core.

It feels wrong to be walking openly across this space, the barrier of nothing between male and Female, but we proceed regardless. Most of the men are older than me; I guess that more than half – maybe as many as seventy – have made this journey alone, heading for a night of service to the tribe. Maybe that is why it feels wrong: copulation is a private thing, yet now we cross the boundary *en masse*, called by the horn and the full, Bleeding Moon.

During the day the Women formed a chain between firewood hut and Core, passing kindling, branches, logs, from hand to hand, Woman to Woman. The children helped, too, but now they will be locked inside their crèche. They will pay their respects to Mother tomorrow.

Our tight-nerved procession passes through the circle formed by the Women's huts, the outer perimeter of the Core. We stare at the ground, watch the placing of our feet, but in the periphery I can see the huge pyre they have built around our dead Mother. She is still staring at the moon.

The Women stand in a circle around the unlit fire, heads turned downwards. The scene is lit by the stars and the moon. I stare at the ground.

We spread ourselves out until we form a wide circle that encloses the Women and the waiting fire. We look up, finally, and I see that Mother's throne has been moved from the joss-house so that it now stands to one side of the huge pyre.

The Women start to hum and then they turn to face outwards and we join in. We have to sing to the elements, you see, we must follow the codes if our Mother is to be effective in protecting us from the world. Earth, Fire, Soul, Water, Air, Flesh.

The songs lift us. I can almost forget what is happening. Beside me, thorn, and on the other side, jent, sing our hymn, one strong and loud, the other weak and barely audible. As ever, I am between them, I sing with spirit but I do not have a voice like thorn's.

After a full song-cycle the Women stop singing but they are so few that the volume of our chorus barely drops. They go down to their knees, press their lips to the soil. One of them holds a bronze pot aloft and chants the secret Female names of the elements three times over. Then She tips the pot and pours its dark red contents into the soil. It is said that this is part of a monthly ceremony but a man cannot know for sure. I watch and sing as the blood pools on the soil and its steam rises. It will be soon now: we will have a Mother again. Thorn's voice comes to my mind: *Who do you think will be chosen?* Now is a legitimate time to think such thoughts. Now the moment is near.

I study the Women, each an individual, yet they are the Nameless, indistinguishable. Surely the time must be close!

Then one of the Women steps into a space, raises Her hands to the Bleeding Moon, tips Her head back. I recognize those rapt features and suddenly I am scared, no, ecstatic...I cannot keep up with the flickering state of my emotions and so I stop trying. All I can do is try to appear calm. I must not spoil things now.

I watch as Tilana – my sister, how I desperately want to think of her as such! – kneels and traces a finger through the pooled blood of the village's women. Then her entire hand, spreading the dark stain, seizing a fistful of the bloodied soil.

When she stands and turns I know it is true, I know that it is meant to be.

I appear to have lost some time because suddenly she is before me. She reaches out, smears the blood and soil over my forehead and along each of my cheekbones.

I feel alone and scared and overjoyed. The men around me have rearranged themselves, isolating me in their envy and their awe.

I am overcome, I lose more time, look around, recognize where I am. They have carried me across and placed me in the Mother throne; now I am truly at the Core.

Now it is the women who are singing alone, a low, apparently tuneless hymn, a secret anthem that I know I must have heard before and still cannot remember. The women are around me and I forget the men; that is all gone. Even my fear has gone by now.

I am serene as I stretch and look up at Tilana, at the blade she is holding. A faint, physical tug and one of the women has removed my cloth.

As the blade touches my skin and Tilana sets about parting me from my manhood I know that physical pain has become a constant part of my life – however long that may be, before the fevers or the Great Weakness take hold – and that the pain will peak each month as my wounds are reopened under the Bleeding Moon, but that no longer concerns me.

I look down. Tilana's task is done, let the red flow be praised. Our village has a new Mother. It is the way.

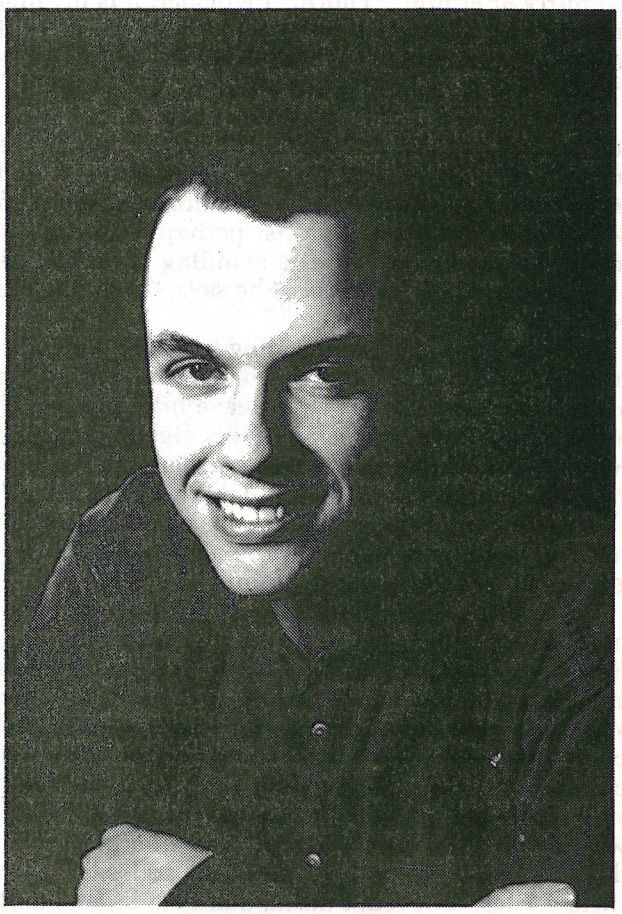
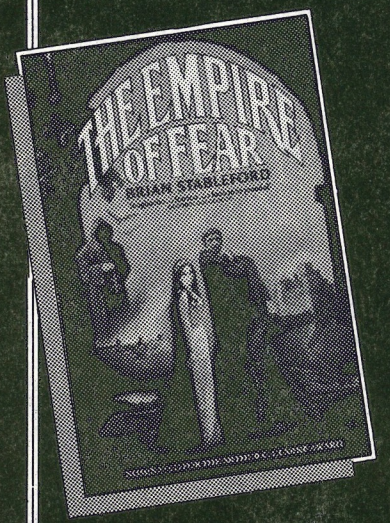
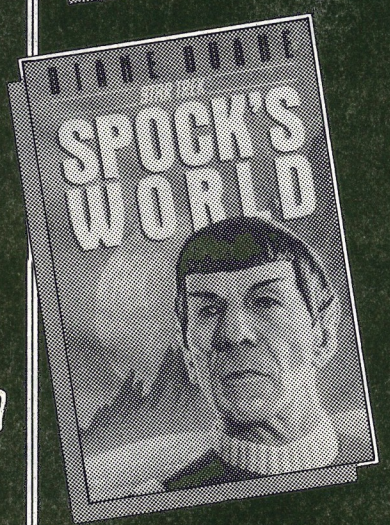


Photo of Keith Brooke by Howard Jones

Keith Brooke wrote "Adrenotropic Man" (*IZ* 30) and "The Greatest Game of All" (*IZ* 34). As we announced in last issue's editorial column, he has now sold three sf novels to Gollancz and Corgi Books. The first, *Keepers of the Peace*, is likely to be out this autumn. The second should be called *Expatria*, and the third, as yet unwritten, will be a sequel to the latter. We have another good short story by him coming up soon.





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Charles Stross

Sometimes you have to make speed, not haste. I made twenty kilos and moved it fast. Good old dex is an easy synthesis but the polizei had all the organochemical suppliers bugged; when a speed stash hit the street without any *blat* they'd be through the audit trail *fast*. They'd take a cut – my lungs, heart and ribosomes. Only idiots push psychoactives in Paraguay: only idiots or the truly desperate. I burned out via Brazilia and crashed into Ant City. Jet-lagged all the way across Australia, I considered my futures; it was time to move on to something bigger.

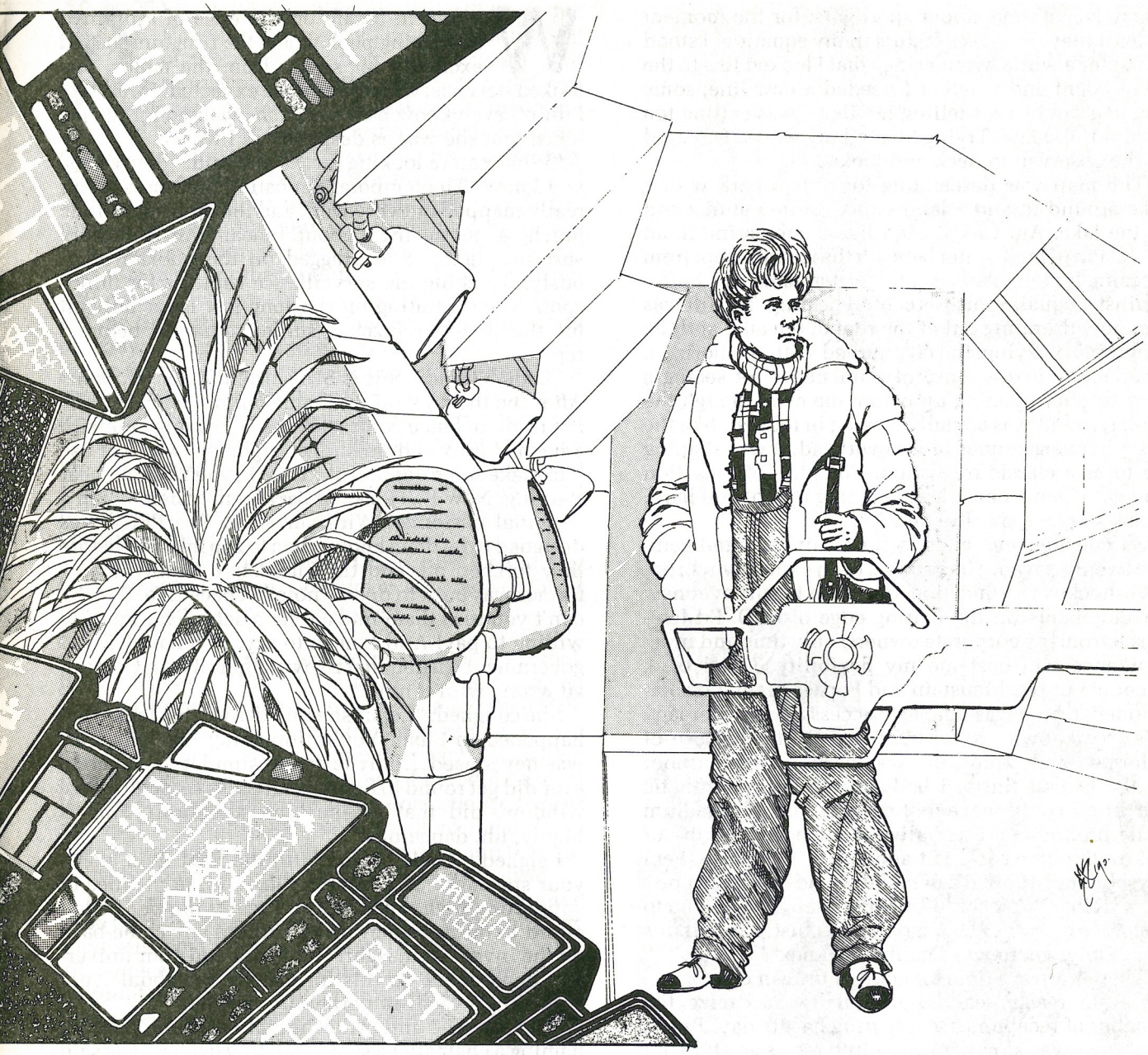
My first impression of Ant City was of being roasted, slowly. The blistering humidity was outflow from the huge heat exchangers run by the city reactors. Palm trees in the airport lounge, a rude, chattering spider-monkey loose among the branches. No power, no Ants, a simple equation: I was in Antarctica now, and wondering what the hell to do about it. It was another world out there: I could feel a grating closeness between my shoulder blades, the crush of humanity around me.

Alleyways of light lured me through the customs interface, briefing me on local lores. Digital fingers rifled my flesh with radiation but I was clean and mean – nobody with any sense takes bugs into the ant farm. It's a ticket to re-direction, and I need my inputs remoulding like I need a conscience. My scams are all cortex-ridden, locked in my mnemonics until I'm ready to bring them out like a card sharp. Sleight of memory. The security goon smiled sweetly, her eyes asking me if I was really alive, and waved me past the desk.

The shuttleport is half a klick above Ant City proper; I took the lift down. It was a medium sized lift, with only a medium-sized shopping mall. Shop, shop, expend, expend. A glaring incitement to –

I shut my eyes and as I was trying to pin down a plan this kid tried to lift the chips from out of my skull. Which was his bad luck: I didn't have any. I opened my eyes and shifted my grip on his wrists so he had to face me.

"Nice way to greet tourists," I said. He squirmed



Illustrations by SMS

fearfully, muscles like metallic glass beneath his warm brown skin. "You know what I should do with you?" He looked as if he didn't, and wasn't interested in finding out either. He'd forgotten to feed the cat or something else important. I looked at the inside of his wrist; the node was there.

"You eat shit," he said. I glared back at him.

"Yeah, every day just like you. I should bust your fingers. You want to tell me why not?"

"No," said the kid, looking like trouble warmed over the next morning; "you break my fingers then my friend come and break yours." He managed to ignore me and look contemptuous concurrently. He couldn't have been topside of twelve years without maturity-mods. Neomacho, cued-up by background video. For the first time I looked at his tribals. He wore a one-piece suit, ice camouflage militia-surplus. His wrist node was well-worn. Classic case of heroin from six years, riding the horse out from under the shadow of future shock; it's the kids who suffer most, these days.

"That would be kind of a bad idea," I said, "for your friend. I got no chips. My wallet's armed; tell your sister to put it back before she gets gluey fingers. You want me to give you some money?"

"You what?" said the kid. I felt butterfly fingers slip something that buzzed into my pocket; it stopped buzzing when it sniffed me again. I'm touchy about where my wallet goes without me.

"I repeat myself," I said; "you want to earn some money?" I leaned forward. More suspicion.

"You want I should go to bed with you?"

"No. I want some names, nothing else. Like who shifts your stuff."

His face cleared, magically. "You want some?" he asked, happily. "I sell you –"

"No," I said, "I just want a name."

"Oh." He looked disappointed. Then, "are you polizei?"

I weighed my chances. "Would you believe me if I said no?"

"No." His eyes narrowed.

"Then get lost." I gave him a push and he went. His sister had vanished into an open shopfront selling

gauzy somethings under spotlights; for the moment at least they were zero factors in my equation. I stood alone for a while, wondering what I looked like to the local talent and whether I needed a new line; some nagging doubt kept telling me that I was getting too old for this game. Trying to quell my worry, I crossed to the observation deck and looked out.

The mall was descending towards a park with a lake around it, and a landscaped garden at one end of the lake. Ant City floated like a submarine in an inclusion of melt-water beneath the ice cap. Kept from freezing by the tokamaks, the water acted as a buffer against icequakes; also as central heating. The lift was just now dropping out of the roof of the city, and the view was dizzying; the city curved with the horizon. Suddenly I had a sense of immanence, of seeing a new frontier opening up before me even though the underground was actually closing in for real, like the dizzying megatonnes of ice overhead: it was shaping up to be a classic revelation. The kind of sensation you get when a new idea is coming up hot and hard. I took stock of my situation –

So consider me: male, self-contained, intelligent, age twenty-seven. The product of an expensive corporate shockwave education, designed to surf over new developments on the cutting edge of R&D. I'd free-based from my corporate owners: only time and independence had cost me my flexibility. I had bank accounts in Liechtenstein and Forties Field, no commitments, but I was unable to access the big company AIs, my knowledge was going rusty in the face of informational explosion; I was staring career burnout in the face at thirty. I had pushed every synthetic narcotic I could make, but only in small-to-medium scale production: I had always managed to skip out before the blowback. Hit and run. I didn't use them myself, but supplied a demand; I made people happy for a living. What could be better than that? I liked to consider myself to be a moral anarchist, Kropotkin's heir. Only where was I going to go next?

There's always time for another drug or craze; time for it to reach peak saturation, to maximize the number of receptors... every drug has its day! But in this age I was slowly turning into a classicist; I sold old clean shit with none of your new hoodoo metabolic mania to retool the human genome for optimal thrust. That made me techo-obsolescent. Things were moving too fast for people like me to keep up; not every dealer wanted to turn their skull into a gene-machine for the recombinant receptor-affinity tuning that passed for heavy shit these days. Frankly, I was lousy at genetic programming; as likely to come up with a new disease as a saleable product. But there was a blindingly obvious solution staring me in the face, and I knew just *where* to find it; all I needed was a link.

I found a phone and used it to find a list of rented accomodation; I chose a flat, furnished, four rooms, monthly payments, good view of the park. If I hadn't been speeding a week ago it would have cost an arm and a leg, or at least a kidney. Now all I had to do was make the right contact; and that, for someone of my background, was easy.

We met in a cafe on the edge of a drained swimming pool, where the penguins jostled excitedly for scraps from the tables. She looked nervous, which was to be expected. I was, too. I didn't even know how much she wanted for the job – just that she was as desperate as I was.

"What you're looking for..." she said; "dangerous, you know? The temporal annealing processes aren't really mapped out very well, and the moles are kinda touchy about nosing it about. I mean, this is military surplus, right?" She dragged on the hookah nervously, watching the surveillance cameras for blind-spots. Concentrating on the long-lost lover bullshit for the digital polizei, I smiled tenderly before I replied.

"Look," I said, "this is SDI spin-off material, right? After the third world war came out biological all the Pentagon defence contracts lapsed, leaving you with a heap of junk and no budget, right? So why not use it to make some quick cash? Face it, you're damn near starving. Now *I* –" I leaned back in my chair – "I'm a potential customer. With *currency*. The PERV was designed to let them know when to zap missiles before they torched off, and the Interactive Reality Transformer was built to open a hole in spacetime. So why *can't* you turn them into a time machine for me? I'm willing to pay! And I mean to say, if the old Unistat government trusted that rig with their lives, what can go wrong with it now?"

She coughed. "Lots," she said drily. "Just look what happened to *them*. You're forgetting that this stuff was never used... only tested in simulation. Nobody ever did get round to firing smart rocks through a time window, did that escape your attention? This is highly, uh, dangerous."

I sighed. "Look," I said, "for the final time, that's your speciality. Not mine! I mean, I *like* the idea of supporting higher education, I really do, but I can't afford to throw money away without any come-back on the investment, right? But if you and your university department do this for me, I'll see about... uh, endowing a Chair in perpetuity, maybe?"

"The College authorities might be doubtful about naming a chair after a semilegal drug dealer," she said dubiously. It was the first sign of her fall from grace; so she *was* desperate! I pushed on.

"Yeah," I said, "but you can call it whatever you want. I paid for your flight here, didn't I? When was the last time your government gave you any money for anything? Look, just do this for me and I'll make an endowment you won't forget."

"Um, right," she said, almost smacking her lips. Then she made her decision; the right one. "Okay. Fly up to Oxford in the first week of next month. I'll have one of our post-docs meet you in; we should be ready to test by then." A faint cloud crossed her face. "You've no idea how bad things have got up there," she added softly. "You were a good student, on that exchange programme. Try not to get shot before we're ready, right?"

"Sure, professor," I said, waving for the waiter. "That's, like, one of my life's ambitions."

She unwound a bit. "What's the other?"

I grinned widely. "To fuck Ronald Reagan."

While I was waiting for the call from the Hawking Laboratory I crashed out in front of the video, reading graphic novels and scanning reruns of twentieth-century docudramas. The condenser burbled in the makeshift fume cupboard I'd built in the bathroom and the gene-spinners clicked intermittently as I soaked up Ronald Reagan, Margaret Thatcher, Leonid Brezhnev. Creatures of another era, when the universe was just about beginning to fill up and society was teetering on the edge of a baroque tomorrow; fascinating cut-outs in a past that was truly another country. Twenty years earlier still, everything was so *naive*, so pre-technological; but the timezone I'd picked was already on the brink of today, unsophisticated bug-ridden systems powering up for the remorseless march into a post-modernist present. People were waking up to changes, beginning to notice the end of industrialism. Yeah, I figured I could hack it; gather protective colouration, not look *too* out of place, but be so far ahead of the pack that I could hit them with a dose of double-barrelled futurism and make my getaway clean-heeled and rich enough to retire...

"*Just say NO,*" I mimicked, and threw an empty beer can at the screen. Good jokes are made of this, I thought. Then the phone coughed.

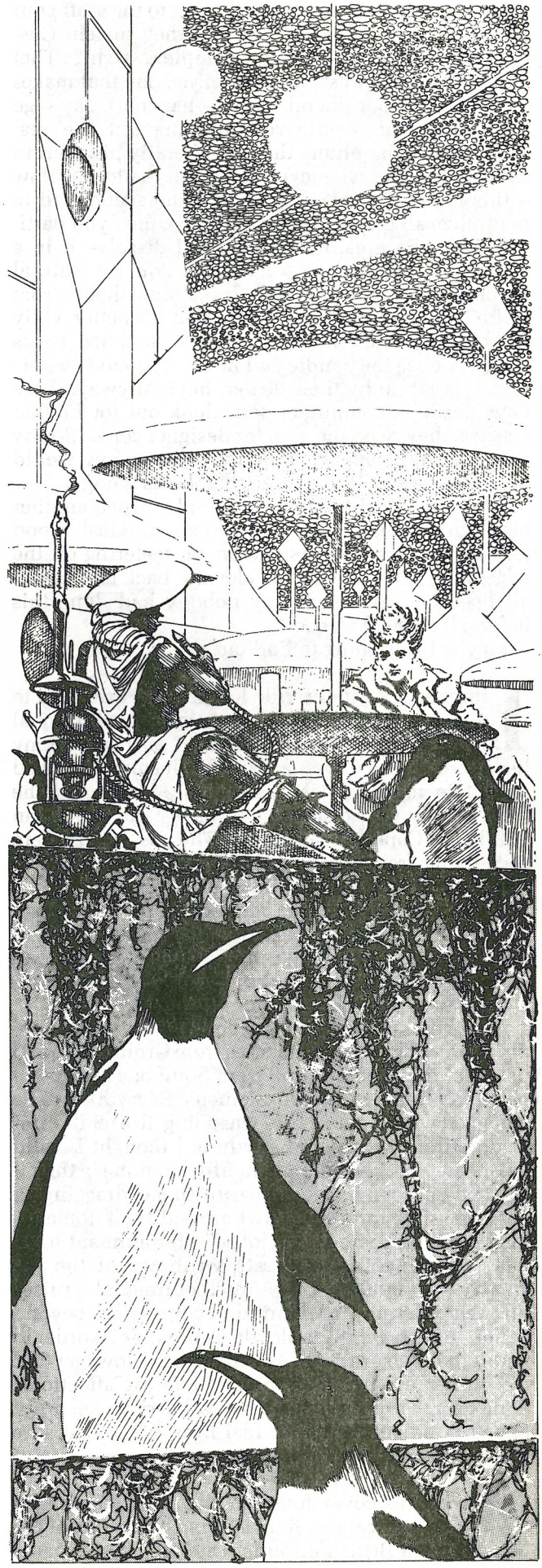
"Yeah?" I asked.

"It's for you," it said, extending the handset. I took it and listened. "Twenty mil? That's steep... okay, yeah, so it's never been done before... *how* much? Oh, right. I'll figure a way... day after tomorrow? Fine. See ya." The phone grabbed its handset back and wiped it furiously. I tried to stare it down, but it didn't seem to notice. In my experience when domestic appliances get uppity the only answer is to shoot them; but I didn't have a gun on me so I leaned back and thought irritably about the good professor's news instead.

The weight restriction on the time jump was going to be tight. It worked out at ten kilogrammes, plus my good self. That's not much, is it? Clothing, a portable kit, some raw materials – not much. Compute-power no problem; you can only cram so many mainframes into a false tooth, but back where I was going even one of them was going to give me an unfair edge. The real problem was going to be currency for investment. I frowned. Credit? Did they have credit in those days? Or did they have to carry metal coins around? What could I use instead?

Ah. *Good idea.* Why not do it right now? I sat up and grinned wildly, then staggered through to the bathroom. My gene-machine was sitting on the floor, humming to itself. I bent down and plugged myself in, figuring out the ideal stash. Something they'd *never* check for; something better than money, a dirt-cheap commodity to vector on the market. Like the goose that laid the golden eggs, I was going to make a one-man heroin fortune in the eighties! I was going to be so successful the market price was going to bomb! Yes, I'd seen the pot of gold at the end of the rainbow. The pot of yellow snow...

Yellow snow is a handle for a kind of cheap dealer shit; nobody falls for it these days. All it takes is a gene-machine and the nerve to use it on yourself. You engineer a retrovirus that makes a minor alteration to your enkephalin receptor's tertiary structure, thus changing its substrate affinity; then you engineer



another that adds a small peptide tag to the stuff your own receptors get off on, so that they match. Customize your pain/pleasure complex, right? That leaves you free to use *another* 'virus, one that makes some of your peripheral tissue – pancreas, say – go into endorphin overdrive, pumping out the real McCoy in such volume that you literally piss heroin analogues away whenever you go to the toilet. Now – this is the cool bit – you add some acetic acid to neutralize all that ammonia and urea, then you partition it out in organic solvents and dissolve it in a sugar solution and re-crystallize. You get natural heroin in your kitchen sink! Indistinguishable from Gold-Triangle authentic, except that it's better. Only trouble is, there's a certain stigma attached to its source, hence the handle *yellow snow*; nobody wants to be pissed on by their dealer, hey? Anyway, these days customs computers don't look out for hidden stashes; they're on the scan for designer genes. So any time after the naughty 'nineties yellow snow would be a non-starter. But where/when I was going...

"*Just say no*," I mimicked. Then I slurped another beer can. "I'm gonna piss on you all, junkies!" Good joke for an anarchist businessman, teetering on the edge of burnout, to ride the elevator back to where it all began. I wondered why nobody had done this before; it seemed so cool!

Maybe I was going to find out.

I hitched a Zeppelin ride for Ancient Britannia to give me time to assemble my time-travel survival kit; also time to take it slow and easy and get my head screwed on in preparation for the jump. I locked myself in my first-class stateroom and ignored the long, stately cruise across icy wastes and the ocean gulf to the Cape of Good Hope. The passengers were socializing frenetically, holding balls and orgies in the gas-cell auditoria; I didn't need it right then. I don't like to have people rammed down my throat, en masse: I need to retreat into my personal space, to maintain a distance between myself and the burning wilderness of raw nerve-endings that constitutes a global culture for ten billion naked apes.

As we crossed the Azanian coast I went on a shopping spree. The latest databases from Grolier; a repo'd personal dialysis machine from Squibb; a very compact mainframe from Bull-Siemens. Everything to be collected when I got where I was going. In a mail-order feeding-frenzy I ordered anything I thought I could use that weighed less than fifty grammes; then I crashed out for a relaxed sybaritic binge, dragging on designer silks for a bar-crawl around the kilometre-long airship. There was a lot of entertainment to be had, watching the desperate writhings of the jet-stream set on their slow intercontinental cruises through the new millennium; being rich beyond belief, they travelled as slowly as possible in order to flaunt their leisure time. As a handsome dowager told me on her way through my bed and my affections: "But dear, only the poor have to hurry to keep up! Speed is no substitute for real life." No, but it sure could enhance my credit status...

A week to cover fourteen thousand kilometres and we were on final approach into one of the main British airports. One which still had a runway. I shook my head, looking down through the transparent deck. I was going to get something unique out of *that*? Even the ruins looked dingy.

The arrival zone was dirty yellow; beggars displayed their wounds beside a kitchen selling curry from the pot. They had a scared-looking goat tethered nearby to show how fresh the meat was. I pulled on my shades and walked fast, kept walking until I came to a concourse. Somebody grabbed me; I looked round.

"Mister Agonistes?" I saw naked fear in his gaunt face. Polizei leaned on their guns outside, sniffing for the spoor-signs of money. I nodded. "I'm from the research centre; I was to take you to the laboratory..."

"That's good," I said. "Where's our chopper?"

"Our what? Oh...I'm sorry. We couldn't possibly afford one," he said lamely. Gaunt beneath threadbare tweed clothing: The public rice ration had gone downhill, I noted. "We could get a rickshaw...if you could pay..."

I paid.

The lab was a decrepit concrete cube, unpainted for decades, glass-faced windows nailed over with boards and a makeshift wind-turbine bolted to the roof. Only the satellite downlinks were clean, desperately polished to the shimmery finish of metal that was about to wear through. He led me inside, up a staircase in which trash had drifted deep. "We can only run the lift for two hours a day," he apologized; "the turbine is for the big stuff." He glanced over his shoulder furtively, as if trying to guess how much meat there was on my bones; I shivered. Maybe I'd grown too fat on the airship, and too slow.

"Here we are," he said, pushing open a fire door at the top of the stairs. "Here's where we stored the IRT modules. The PERV is hooked into our system next door; the stuff you ordered...it's all here."

"Where's Professor Illich?" I asked.

He shrugged uncomfortably. "She'll be here soon," he said. "I'd better go now..."

He retreated through another door and I took stock. Everything I'd ordered, plus a cheap nylon rucksack of dubious vintage. I searched through it, assembling and ordering, then opened my wallet. Three small glass vials lined up like so many menacing soldiers; diseases of the imagination. I hoped I'd debugged them properly. I sat down on the dusty floor beneath a hulking piece of machinery that resembled a half-melted fusion reactor and contemplated them. My future: the past. I sat for a long time before I pulled out my works and fired them up.

Professor Illich arrived half an hour later; she looked just the same as she had in Ant City, except that now the hungry eagerness underlying her veneer of professionalism was nakedly obvious. I imagined her rotting in these dank, wood-wormed buildings for decades, chances of the Nobel Prize slipping through fingers without the financial grasp to obtain that vital extra funding...I kicked aside the empty vials. They clattered off the concrete as I stood up.

"Does it work?" I asked.

She smiled tensely, and rested one hand on the smooth ceramic side of the malnourished reactor. "It works," she said. "One Probabilistic Eigenstate Reor-

ganization Viewer, in full working order." She looked over her shoulder; "Steve...go tell Anwar to power up the Cray, there's a good boy." She turned back to me. "The account," she said.

"Here. You tested it?" I kept my fingers on the folio as she paused.

"A cat. We sent it back six months then retrieved it. Alive."

"How long was the delay?" I asked.

She shrugged. "Six milliseconds."

"Six milliseconds!" Incredulous, I nearly grabbed the megadollar envelope back from her. She nearly exploded.

"Look, mister Agonistes, we've gone to all this trouble for you...! Don't you know *anything* about temporal annealing? There are limits to how far we can test it. Spacetime is a continuum, an interwoven fabric of superstrings; you can unravel it for a moment and see through to a new pattern...then it re-weaves itself, anneals into a new structural arrangement with minimal potential energy. The wave-function always collapses – you ever heard of Schrödinger's cat?"

"Yeah!" I said. "But six *milliseconds*?"

"You wanted a trip into the past. We wanted to prove that you could make it alive, not prove that you could make it and come back as well. That's what you asked for, right? We had to go on half-rations for a week to afford the power for the one trial! There was no second chance. As it is, you know you'll make it alive, but there's no guarantee that the past you come out in is our past – it might be another configuration, another local minimum in the energy diagram. We'll *try* to bring you back..." I held up a hand wearily.

"Okay." I turned and looked up at the IRT module, squatting on concrete blocks streaked with rust like some prehistoric lunar module with cancer. I was loaded; I felt light-headed, almost feverish, as the retroviruses went to work in my brain and pancreas. "I'll take it," I said. "Try to bring me back one year downstream and I'll double your money. *After* the event. You know why I'm trying to make this trip?"

She nodded mutely, trying to contain herself. What I'd just said – twenty million dollars more would keep her and her department running for ten years. Ethics could take a back seat for that kind of hope. I almost felt sorry for her for a minute.

"Okay," I said, "let's do it. Where do I go?"

She looked at me critically. "Here, in this circle." White spot on concrete, right underneath something that bore an unpleasant resemblance to the exhaust nozzle of a big rocket motor. "Remember...when the eigenstate collapses, there are no guarantees. You might wind up in our past...then again, if there's a local entropic minimum you might find yourself in a universe which has changed subtly. Less entropy; more information. That's the curve, you see, randomness verses order. We'll dragnet for you a year down the time-stream from your target – April first, 1984, wasn't it? – as long as you keep holding onto this tag –" she passed a gadget to me that looked a bit like a quaint digital watch" – and hope for the best. Jump in thirty seconds."

With that she retreated rapidly, leaving me standing in a dusty circle with a small pack on my back and a feeling that maybe I'd been tricked, when there was a low growling noise and the naked light bulb dim-

med, flickered and went out. Violet shadows seemed to flicker at the edges of my vision, dancing across the shadowy form of the IRT: then the PERV counted down to the launch window and, in a sudden burst of shocking blue, flashed out –

Darkness. Feeling giddy, I staggered, and kicked something that fell over with a terrifyingly loud clatter. Where was I? Fumbling in semi-panic, I felt cold walls beneath my fingertips, then the inside of a door –

Light. Leaving the broom-cupboard, I stumbled downstairs. The door: fresh green paint glared at me beneath recessed fluorescent lighting. AN ALARM WILL SOUND... I pushed through. Outside, the grass was neatly mown and the concrete apron was full of archaic-looking vehicles with squared-off edges and too much metal. Elation seized me; I'd made it! I headed for the street and reached a bus shelter – unvandalized – where I put my pack down. Fumbling, I pulled on my datashades and eyeballed a glittering cursor into the middle of my visual field. There were few people about, and nobody seemed to be staring at me; I looked round, correlating visual parameters. Everything seemed to be in order, there were no visible anachronisms; it felt as if time had healed all wounds, as if the clock had wound back to deposit me gently in the tail-end of the last century when civilization was a function of humanity rather than machines. I felt safe in my uniform of jeans and sweatshirt and backpack: camouflage for the urban fox. Safe and sly and hungry, ready to take on the forces of this sleepy little city... I began to walk, a spring in my step.

Street-corner shops bustled with grey people in archaic clothing: mass-production fashion victims filled the mall like so many mannequins of times gone by. Remember how everyone used to look the same? Vehicle traffic was thicker here/then, as I discovered when I crossed the road. Polizei... I tensed, then realized that there were no guns and I could actually see their eyes. There were no beggars, either. The skin on the back of my neck crawled. Without beggars, how do you know how rich you are? My shades were slowly caking over with graphics as their sensors correlated textual overspill, scanning ads for familiar campaigns. I hadn't expected it to be quite like this, quite so disorientating. Not only did everyone wear more or less the same stereotyped costumes, they also seemed to be on an economic par with one another; as if poverty didn't exist at all here.

I cancelled my video programme and took my glasses off. People seemed to focus around me, avoiding contact, eyes downcast. I felt sweaty, in the first bout of a low grade fever as my immune system targeted surplus viral vectors. Disseminating the news, data for the public... how did they do it? Oh, archaic paper form. Remember... I dug into one pocket for my precious supply of antique coinage. It was time to buy a newssheet.

The shop was wired, but the systems were so primitive as to be untouchable; no EPOS magic touch here, no files to tamper with for a bonus redirection of products. Anyway, I wasn't a black disc merchant to begin with; what was I thinking of? I looked at the racks and selected a fat-looking wedge of paper, then paid for it. The assistant – human – looked at me curiously, but was too busy with other customers to bother me; I nodded distractedly and strolled outside into the sunlight and shoppers.

Putting my datashades on, I began to read the headlines, leaving my machines to deduce the social context from the references. Argentina was protesting to the UN about something called the Malvinas; inflation was coming down. The computer pondered for a bit then reported a classic match. This was the past, okay. The incredible sense of elated freedom returned – it was true! I was going to make it! Burn-out reversed by the futurist acceleration; coming from a time when progress was incremented in microseconds, how could I fail in a time where product lifecycles came and went in *years*?

This was going to be good. Shark-hungry for profits, I glanced round, looking for nightlife stakeouts to make my pitch from; haunt a small market and connect with the local Yardie zone-boss. Show them the colour of profit; yellow snow. Flash out snowflakes of sugar-coated ecstasy on a captive market at ten eurodollars – pounds – a hit. Set up a still in a cheap rented flat; drink, eat, refine a hundred grammes of peptides a day. Then invest the profits for my triumphant return; computer-assisted share buying for artificially intelligent deals. I looked to the finance pages, seeking commodities in which I knew I could make a profit, and that's where I finally noticed the dissonance. Marijuana and opium futures were going down for the third successive year...

It's been six months now.

I spent my first night, exhausted and hungry, on a park bench. Junkies shot up around me, cheap shit and clean needles available in a brown bag from the off-license stores; I watched, envying them their high, until one of them staggered over to me glowering and shaking a wobbly fist as he mouthed inaudible curses at me.

I began to notice signs beyond the financial pages. There's less crime, less moralizing; less fear. Less wealth, too. All the narcotics have been legal since 'thirty-three, when prohibition crashed in America and the rest of the world followed suit. Suicide is legal, too, and abortion, and anything you want to do to yourself in private. These people are so *free*! I should have guessed: what Professor Illich said about local minima in the curve of entropy, incomplete annealing of the wave-function, a time when things haven't gone quite so far downhill as in my own day's past...

I remember pissing in the gutter; pissing yellow gold that sparkled in the cold sunlight. But what use is the Midas touch in a world of floating currencies? For a while my urine ran red, an unexpected side-effect of the infections; I had a terrible headache, and my teeth chattered continuously. But I'm better now. Much better. Got over my fear of brain damage; I'm not *that* incompetent.

Shit may be legal but there *is* a Problem with it. I heard the Prime Minister talking about it on the news yesterday. The Police want Something to be Done. I'll second that.

After a week, the Salvation Army took me in. They deal with a lot of junkies, try to rehabilitate them half-heartedly. I went overboard on the old "seen the light"

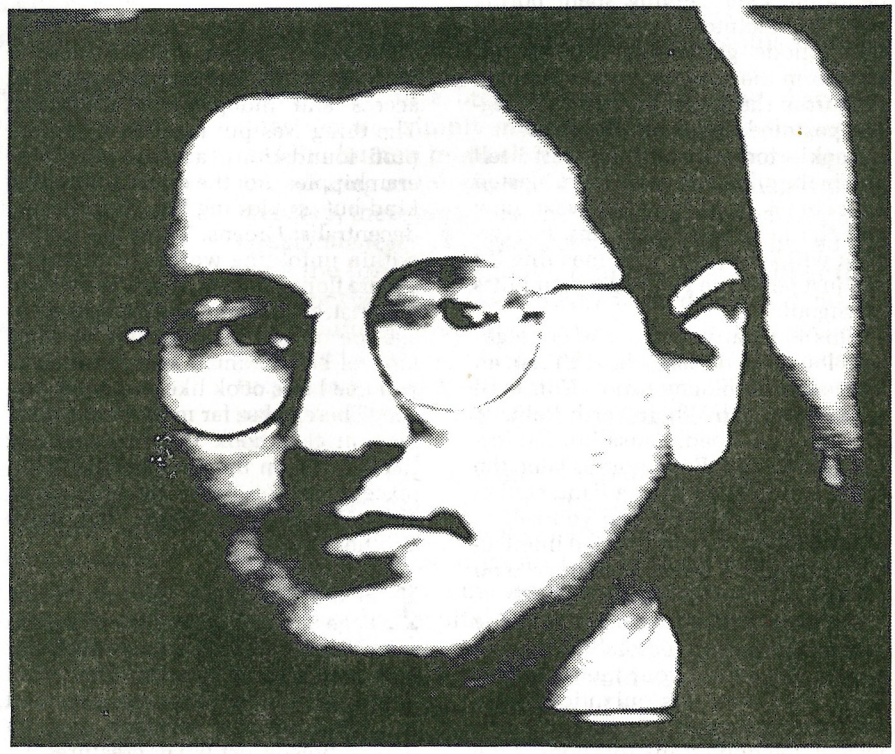
number, sang *Hallelujah!* to their choir and mopped the floor after supper. They seem to like it.

Anyway, I *have* seen the light. Now I sleep in the hostel, clean floors in the evening, and parade the streets with a sandwich board by day. *DRUGS ARE THE DEVIL'S TOOL*, it says in big letters. I made it myself. I sleep on a narrow, hard bunkbed and dream up scams, but it's so very hard to figure out how to turn a megadollar profit when you're as broke as I am now; with no ID, I can't even claim social-security benefits. Kind of embarrassing. Meanwhile, I keep on with the only scam I know, pissing in the wind. You never know, I might get lucky. They might re-criminalize drugs tomorrow...

Charles Stross's last story here was "Generation Gap" (*IZ* 31). He lives in Bradford. As more and more of us are becoming aware, he is rather good at self-promotion ("techno-goth," etc).

COMMENT

Signal
Bruce Sterling



Interzone, having gone monthly, gratifyingly moves from strength to strength. Galvanized with joy, I have rashly promised to emit six Comment columns in 1990. This is the first of the six, and I'm delighted to be doing them, but as I begin I find myself gnawed – nibbled, anyway – by a question. Is this the world's coolest science-fiction magazine, or what?

Well, there's not much doubt about the Anglophone scene. *Interzone*'s rival American zines may swagger 'mongst the bravos right now, but as soon as Deficit Perestroika hits, America's macho sf writers will all be flat broke and heating single cups of tea in cheap coldwater bedsits, whilst tapping out slim little stories ritually bemoaning their Loss of Empire. They'll probably be really well-written and all, but jeez. Trade in your US savings bonds and buy ecus, mon freres.

But here on my desk is a nifty harbinger of the '90s: *Hayakawa's SF Magazine* of Tokyo. In the midst of what appears to be the standard genre-mag dreck (computer-gaming, skiffy movie reviews, ads for Japanese translations of lame Yankee sf novels) is a page where the bassist for an ultracool Tokyo girl-group reviews King Sunny Ade's latest Nigerian juju-music LP. Favourably! What's more, Kiyoshi Imaoka, editor of *SF Magazine*, has a pierced earlobe and a synth keyboard in the boot of his car. Yow!

It could be that somewhere in the global welter of Babel, there exists an unknown sf magazine of a stellar brilliance to make even Pringle wince. In the USSR, say, where frenzied fans, in spanking-new possession of formerly outlawed photocopiers and dot-matrix printers, are planning, at this moment, the first truly international Soviet SF convention (Volga-Con, 8-14 September 1991), featuring "the Young Wave in Soviet SF – Cyberpunks on Volga!"

Okay – this "cyberpunk" stuff may be mere hype. It may be a shuck, a crude attempt by misguided Soviet youngsters to seize the literary limelight properly belonging to elderly Marxists. Anyone eager to investigate this matter can send their inquiries to VOLGA-CON, Boris A. Zavgorodny, Poste Restante, Central Post Office,

Volgograd-66, USSR 400066. (For the first time in years, I actually *look forward* to a con-report.)

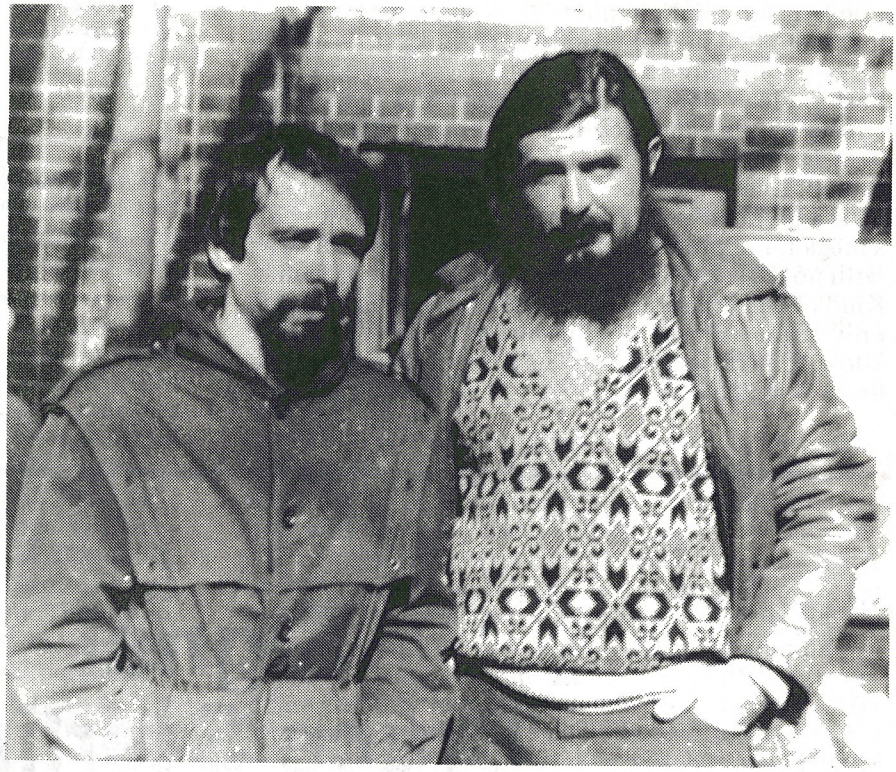
But the point of this – I swear I'm edging up to one, so just hold on for a minute – is that you can't depend on gigantic media conglomerates to feed you anything worth consuming. It's not that the world lacks great notions, keen art, cultural gems of all kinds – they're out there all right, but they're buried in mass-produced crap. You've got to get out there on your own and kick up some dust, you've got to heave your way through a mouldy global haystack in search of the occasional needle.

How on earth can you do this? Well, I have an answer. It's sitting right here on another corner of the desk, half-buried under the stapler, the floppy discs, and the modem. The thing is the size of a record-album (antique pre-compact disc vintage), and it must surely be the Coolest Book in the World bar none. It's called *Signal: Communication Tools for the Information Age*. Two hundred and thirty pages of blistering genius! Everything you should have learned in the 80s is snugly jammed into this masterly compendium. One evening spent poring over the Macintosh-generated print in this unique guidebook will swiftly transform the grottiest media-numbed hick from the sticks into an eight-legged postmodern groove-machine!

Look – forget any of the stuff I tell you in the other columns. If I'm blasted by a cometary fragment between now and the next instalment, my martyrdom will scintillate with meaning if I can just persuade you to get your mitts on *Signal*.

This is what you do. You get eighteen lousy US dollars, about £12, in an international money order. You mail it to *Signal*, c/o Whole Earth Review, 27 Gate Five Road, Sausalito, California 94965, USA. Four months later, the thing is unloaded from a Panamanian banana boat and you find yourself in possession of the freeze-dried intellectual genetics of the next century. You can get it by air for a mere $26.50!

I'm so confident that you'll enjoy this book that I'm tempted to offer to personally refund your money if you don't. But even this quixotic gesture isn't strong enough. Let me put it this way: if you don't think this book is the absolute cat's pyjamas, then you're brain-dead and your legal guardians should disconnect your life support. Just look at this table of contents! Symbols, Information Theory, Cybernetics, Whole Systems, Self-Organizing Systems, Cellular Automata, Chaos, Fractals, Artificial Life, Codes, Structure, Form, Design Strategies, Memes, Computer Viruses. And ladies and gentlemen that's all in the first fifteen pages!



Leonid Resnik and Alexandr Nikolaenko . . . coolest guys in SF? (Photo: B. Zavgorodny)

Signal is a fat, brilliant, well-organized catalogue. It offers access to tools and ideas, emphasizing personal access and independent education. The thing was put together by a non-profit foundation of armour-plated veteran hippies, not the crystal-clutching kind but no-kidding We Mean It Man decentralist Greens. There are worlds within unfolding worlds inside these square floppy covers. If you're a writer, an artist, a musician, or simply an average joe or jane who aspires to some kind of basic human awareness, then you need this book like you need oxygen. There is far, far more true-quill sf kick in this book than in anything likely to be on the next Nebula ballot (except maybe John Kessel's *Good News from Outer Space*, but that's another story).

Let's just sample a few tasty items. Page 8: half-page review of British scientist Richard Dawkins' evolutionary pop-science treatise, *The Blind Watchmaker*. The book, an excellent one, also offers a software program which breeds artificial creatures by asexual genesis on a Macintosh computer. "Biomorphs," Dawkins calls them. They look like starfish, insects, chalices, chandeliers. They demonstrate the principles of genetic drift, mutation, scaling, segmentation and branching in a way that's not merely painless but downright addictive.

Page 14. "The Cartoon Guide to Genetics." Makes this brutalizing arcanity into something hilariously simple!

Page 28 is devoted to the art craft and science of writing. "Writing a Novel, Some Hints for Beginners." "On Writing Well." The immortal Strunk and White's "Elements of Style." Word-processing programs, mail-order catalogues, page after page... "Linguists' Software" on page 34, word-processing programs for Spanish, German, Greek... and Japanese, Farsi, Arabic, Thai, Akkadian, Coptic and Egyptian Hieroglyphics.

Page 82, various guides to the arcane but potent phenomena of worldwide telecommunications. The map of a current global information net on page 83 is invaluable, as it shows America, Europe and Japan bristling with a swarm of cybernetic "node sites" and "exchange paths" – and none at all in Africa, not one.

Page 112 features the demented performance-art robots of Survival Research Laboratories, whose video-taped extravaganzas must be seen to be disbelieved. And here's the address for *Re-Search* magazine – a stunning, scarifying publication, whose ninth issue on J.G. Ballard was one of the best things I've ever read. Page 133, SETI, the Search of Extra-Terrestrial Intelligence. 148, computer-graphics in all their dazzling, trippy intensity. 152, modern comic books. 193, access to the Loompanics catalogue, a legendary anarchist publisher whose works range from "how to found your own

Concluded on page 67

Learning to Be Me

Greg Egan

I was six years old when my parents told me that there was a small, dark jewel inside my skull, learning to be me.

Microscopic spiders had woven a fine golden web through my brain, so that the jewel's teacher could listen to the whisper of my thoughts. The jewel itself eavesdropped on my senses, and read the chemical messages carried in my bloodstream; it saw, heard, smelt, tasted and felt the world exactly as I did, while the teacher monitored its thoughts and compared them with my own. Whenever the jewel's thoughts were *wrong*, the teacher – faster than thought – rebuilt the jewel slightly, altering it this way and that, seeking out the changes that would make its thoughts correct.

Why? So that when I could no longer be me, the jewel could do it for me.

I thought: if hearing that makes *me* feel strange and giddy, how must it make *the jewel* feel? Exactly the same, I reasoned; it doesn't know it's the jewel, and it too wonders how the jewel must feel, it too reasons: "Exactly the same; it doesn't know it's the jewel, and it too wonders how the jewel must feel..."

And it too wonders –

(I knew, because *I* wondered)

– it too wonders whether it's the real me, or whether in fact it's only the jewel that's learning to be me.

As a scornful twelve-year-old, I would have mocked such childish concerns. Everybody had the jewel, save the members of obscure religious sects, and dwelling upon the strangeness of it struck me as unbearably pretentious. The jewel was the jewel, a mundane fact of life, as ordinary as excrement. My friends and I told bad jokes about it, the same way we told bad jokes about sex, to prove to each other how blasé we were about the whole idea.

Yet we weren't quite as jaded and imperturbable as we pretended to be. One day when we were all loitering in the park, up to nothing in particular, one of the gang – whose name I've forgotten, but who has stuck in my mind as always being far too clever for his own good – asked each of us in turn: "Who *are* you? The jewel, or the real human?" We all replied, unthinkingly, indignantly – "The real human!" When the last of us had answered, he cackled and said, "Well, I'm not. *I'm* the jewel. So you can eat my shit, you losers, because *you'll* all get flushed down the cosmic toilet – but me, I'm gonna live forever."

We beat him until he bled.

By the time I was fourteen, despite – or perhaps because of – the fact that the jewel was scarcely mentioned in my teaching machine's dull curriculum, I'd given the question a great deal more thought. The pedantically correct answer when asked "Are you the jewel or the human?" had to be "The human" – because only the human brain was physically able to reply. The jewel received input from the senses, but had no control over the body, and its intended reply coincided with what was actually said only because the device was a perfect imitation of the brain. To tell the outside world "I am the jewel" – with speech, with writing, or with any other method involving the body – was patently false (although to *think it* to oneself was not ruled out by this line of reasoning).

However, in a broader sense, I decided that the question was simply misguided. So long as the jewel and the human brain shared the same sensory input, and so long as the teacher kept their thoughts in perfect step, there was only *one* person, *one* identity, *one* consciousness. This one person merely happened to have the (highly desirable) property that if *either* the jewel *or* the human brain were to be destroyed, he or she would survive unimpaired. People had always had two lungs and two kidneys, and for almost a century, many had lived with two hearts. This was the same: a matter of redundancy, a matter of robustness, no more.

That was the year that my parents decided I was mature enough to be told that they had both undergone the switch – three years before. I pretended to take the news calmly, but I hated them passionately for not having told me at the time. They had disguised their stay in hospital with lies about a business trip overseas. For three years I had been living with jewelheads, and they hadn't even told me. It was *exactly* what I would have expected of them.

"We didn't seem any different to you, did we?" asked my mother.

"No," I said – truthfully, but burning with resentment nonetheless.

"That's why we didn't tell you," said my father. "If you'd known we'd switched, at the time, you might have *imagined* that we'd changed in some way. By waiting until now to tell you, we've made it easier for you to convince yourself that we're still the same people we've always been." He put an arm around me and squeezed me. I almost screamed out, "Don't

touch me!", but I remembered in time that I'd convinced myself that the jewel was No Big Deal.

I should have guessed that they'd done it, long before they confessed; after all, I'd known for years that most people underwent the switch in their early thirties. By then, it's downhill for the organic brain, and it would be foolish to have the jewel mimic this decline. So, the nervous system is rewired; the reins of the body are handed over to the jewel, and the teacher is deactivated. For a week, the outward-bound impulses from the brain are compared with those from the jewel, but by this time the jewel is a perfect copy, and no differences are ever detected.

The brain is removed, discarded, and replaced with a spongy tissue-cultured object, brain-shaped down to the level of the finest capillaries, but no more capable of thought than a lung or a kidney. This mock-brain removes exactly as much oxygen and glucose from the blood as the real thing, and faithfully performs a number of crude, essential biochemical functions. In time, like all flesh, it will perish and need to be replaced.

The jewel, however, is immortal. Short of being dropped into a nuclear fireball, it will endure for a billion years.

My parents were machines. My parents were gods. It was nothing special. I hated them.

When I was sixteen, I fell in love, and became a child again.

Spending warm nights on the beach with Eva, I couldn't believe that a mere machine could ever feel the way I did. I knew full well that if my jewel had been given control of my body, it would have spoken the very same words as I had, and executed with equal tenderness and clumsiness my every awkward caress – but I couldn't accept that its inner life was as rich, as miraculous, as joyful as mine. Sex, however pleasant, I could accept as a purely mechanical function, but there was something between us (or so I believed) that had nothing to do with lust, nothing to do with words, nothing to do with *any* tangible action of our bodies that some spy in the sand dunes with parabolic microphone and infrared binoculars might have discerned. After we made love, we'd gaze up in silence at the handful of visible stars, our souls conjoined in a secret place that no crystalline computer could hope to reach in a billion years of striving. (If I'd said *that* to my sensible, smutty, twelve-year-old self, he would have laughed until he haemorrhaged.)

I knew by then that the jewel's "teacher" didn't monitor every single neuron in the brain. That would have been impractical, both in terms of handling the data, and because of the sheer physical intrusion into the tissue. Someone-or-other's theorem said that sampling certain critical neurons was almost as good as sampling the lot, and – given some very reasonable assumptions that nobody could disprove – bounds on the errors involved could be established with mathematical rigour.

At first, I declared that *within these errors*, however small, lay the difference between brain and jewel, between human and machine, between love and its imitation. Eva, however, soon pointed out that it was absurd to make a radical, qualitative distinction on the basis of the sampling density; if the next model teacher sampled more neurons and halved the error rate, would *its* jewel then be "half-way" between "human" and "machine"? In theory – and eventually, in practice – the error rate could be made smaller than any number I cared to name. Did I really believe that a discrepancy of one in a billion made any difference at all – when every human being was permanently losing thousands of neurons every day, by natural attrition?

She was right, of course, but I soon found another, more plausible, defence for my position. Living neurons, I argued, had far more internal structure than the crude optical switches that served the same function in the jewel's so-called "neural net." That neurons fired or did not fire reflected only one level of their behaviour; who knew what the subtleties of biochemistry – the quantum mechanics of the specific organic molecules involved – contributed to the nature of human consciousness? Copying the abstract neural topology wasn't enough. Sure, the jewel could pass the fatuous Turing test – no outside observer could tell it from a human – but that didn't prove that *being* a jewel felt the same as *being* human.

Eva asked, "Does that mean you'll never switch? You'll have your jewel removed? You'll let yourself *die* when your brain starts to rot?"

"Maybe," I said. "Better to die at ninety or a hundred than kill myself at thirty, and have some machine marching around, taking my place, pretending to be me."

"How do you know *I* haven't switched?" she asked, provocatively. "How do you know that I'm not just 'pretending to be me'?"

"I know you haven't switched," I said, smugly. "I just *know*."

"How? I'd look the same. I'd talk the same. I'd act the same in every way. People are switching younger, these days. *So how do you know I haven't?*"

I turned onto my side towards her, and gazed into her eyes. "Telepathy. Magic. The communion of souls."

My twelve-year-old self started snickering, but by then I knew exactly how to drive him away.

At nineteen, although I was studying finance, I took an undergraduate philosophy unit. The Philosophy Department, however, apparently had nothing to say about the Ndoli Device, more commonly known as "the jewel." (Ndoli had in fact called it "the *dual*," but the accidental, homophonic nick-name had stuck.) They talked about Plato and Descartes and Marx, they talked about St. Augustine and – when feeling particularly modern and adventurous – Sartre, but if they'd heard of Gödel, Turing, Hamsun or Kim, they refused to admit it. Out of sheer frustration, in an essay on Descartes I suggested that the notion of human consciousness as "software" that could be "implemented" equally well on an organic brain or an optical crystal was in fact a throwback to Cartesian dualism: for "software" read "soul." My tutor superimposed a neat, diagonal, luminous red line over each paragraph that dealt with this idea, and wrote in the margin (in vertical, boldface, 20-point Times, with a contemptuous 2 Hertz flash): **IRRELEVANT!**

I quit philosophy and enrolled in a unit of optical crystal engineering for non-specialists. I learnt a lot of solid-state quantum mechanics. I learnt a lot of fascinating mathematics. I learnt that a neural net is a device used only for solving problems that are far too hard to be *understood*. A sufficiently flexible neural net can be configured by feedback to mimic almost any system – to produce the same patterns of output from the same patterns of input – but achieving this sheds no light whatsoever on the nature of the system being emulated.

"Understanding," the lecturer told us, "is an overrated concept. Nobody really *understands* how a fertilized egg turns into a human. What should we do? Stop having children until ontogenesis can be described by a set of differential equations?"

I had to concede that she had a point there.

It was clear to me by then that nobody had the answers I craved – and I was hardly likely to come up with them myself; my intellectual skills were, at best, mediocre. It came down to a simple choice: I could waste time fretting about the mysteries of consciousness, or, like everybody else, I could stop worrying and get on with my life.

When I married Daphne, at twenty-three, Eva was a distant memory, and so was any thought of the communion of souls. Daphne was thirty-one, an executive in the merchant bank that had hired me during my PhD, and everyone agreed that the marriage would benefit my career. What she got out of it, I was never quite sure. Maybe she actually liked me. We had an agreeable sex life, and we comforted each other when we were down, the way any kind-hearted person would comfort an animal in distress.

Daphne hadn't switched. She put it off, month after month, inventing ever more ludicrous excuses, and I teased her as if I'd never had reservations of my own.

"I'm afraid," she confessed one night. "What if *I* die when it happens – what if all that's left is a robot, a puppet, a *thing*? I don't want to *die*."

Talk like that made me squirm, but I hid my feelings. "Suppose you had a stroke," I said glibly, "which destroyed a small part of your brain. Suppose the doctors implanted a machine to take over the functions which that damaged region had performed. Would you still be 'yourself'?"

"Of course."

"Then if they did it twice, or ten times, or a thousand times –"

"That doesn't necessarily follow."

"Oh? At what magic percentage, then, would you stop being 'you'?"

She glared at me. "All the old clichéd arguments –"

"Fault them, then, if they're so old and clichéd."

She started to cry. "I don't have to. Fuck you! I'm scared to death, and you don't give a shit!"

I took her in my arms. "Sssh. I'm sorry. But *everyone* does it sooner or later. You mustn't be afraid. I'm here. I love you." The words might have been a recording, triggered automatically by the sight of her tears.

"Will you do it? With me?"

I went cold. "What?"

"Have the operation, on the same day? Switch when I switch?"

Illustrations by Iain Byers

Lots of couples did that. Like my parents. Sometimes, no doubt, it was a matter of love, commitment, sharing. Other times, I'm sure, it was more a matter of neither partner wishing to be an unswitched person living with a jewel-head.

I was silent for a while, then I said, "Sure."

In the months that followed, all of Daphne's fears – which I'd mocked as "childish" and "superstitious" – rapidly began to make perfect sense, and my own "rational" arguments came to sound abstract and hollow. I backed out at the last minute; I refused the anaesthetic, and fled the hospital.

Daphne went ahead, not knowing I had abandoned her.

I never saw her again. I couldn't face her; I quit my job and left town for a year, sickened by my cowardice and betrayal – but at the same time euphoric that I had *escaped*.

She brought a suit against me, but then dropped it a few days later, and agreed, through her lawyers, to an uncomplicated divorce. Before the divorce came through, she sent me a brief letter:

There was nothing to fear, after all. I'm exactly the person I've always been. Putting it off was insane; now that I've taken the leap of faith, I couldn't be more at ease.

Your loving robot wife,

Daphne

By the time I was twenty-eight, almost everyone I knew had switched. All my friends from university had done it. Colleagues at my new job, as young as twenty-one, had done it. Eva, I heard through a friend of a friend, had done it six years before.

The longer I delayed, the harder the decision became. I could talk to a thousand people who had switched, I could grill my closest friends for hours about their childhood memories and their most private thoughts, but however compelling their words, I knew that the Ndoli Device had spent decades buried in their heads, learning to fake exactly this kind of behaviour.

Of course, I always acknowledged that it was equally impossible to be *certain* that even another *unswitched* person had an inner life in any way the same as my own – but it didn't seem unreasonable to be more inclined to give the benefit of the doubt to people whose skulls hadn't yet been scraped out with a curette.

I drifted apart from my friends, I stopped searching for a lover. I took to working at home (I put in longer hours and my productivity rose, so the company didn't mind at all). I couldn't bear to be with people whose humanity I doubted.

I wasn't by any means unique. Once I started looking, I found dozens of organizations exclusively for people who hadn't switched, ranging from a social club that might as easily have been for divorcées, to a paranoid, paramilitary "resistance front," who thought they were living out *Invasion of the Body Snatchers*. Even the members of the social club, though, struck me as extremely maladjusted; many of them shared my concerns, almost precisely, but my own ideas from other lips sounded obsessive and ill-conceived. I was briefly involved with an unswitched woman in her early forties, but all we ever talked about was our fear of switching. It was masochistic, it was suffocating, it was insane.

I decided to seek psychiatric help, but I couldn't bring myself to see a therapist who had switched. When I finally found one who hadn't, she tried to talk me into helping her blow up a power station, to let THEM know who was boss.

I'd lie awake for hours every night, trying to convince myself, one way or the other, but the longer I dwelt upon the issues, the more tenuous and elusive they became. Who was "I," anyway? What did it mean that "I" was "still alive," when my personality was utterly different from that of two decades before? My earlier selves were as good as dead – I remembered them no more clearly than I remembered contemporary acquaintances – yet this loss caused me only the slightest discomfort. Maybe the destruction of my organic brain would be the merest hiccup, compared to all the changes that I'd been through in my life so far.

Or maybe not. Maybe it would be exactly like dying.

Sometimes I'd end up weeping and trembling, terrified and desperately lonely, unable to comprehend – and yet unable to cease contemplating – the dizzying prospect of my own nonexistence. At other times, I'd simply grow "healthily" sick of the whole tedious subject. Sometimes I felt certain that the nature of the jewel's inner life was the most important question humanity could ever confront. At other times, my qualms seemed fey and laughable. Every day, hundreds of thousands of people switched, and the world apparently went on as always; surely that fact carried more weight than any abstruse philosophical argument?

Finally, I made an appointment for the operation. I thought, what is there to lose? Sixty more years of uncertainty and paranoia? If the human race *was* replacing itself with clockwork automata, I was better off dead; I lacked the blind conviction to join the psychotic underground – who, in any case, were tolerated by the authorities only so long as they remained ineffectual. On the other hand, if all my fears were unfounded – if my sense of identity could survive the switch as easily as it had already survived such traumas as sleeping and waking, the constant death of brain cells, growth, experience, learning and forgetting – then I would gain not only eternal life, but an end to my doubts and my alienation.

I was shopping for food one Sunday morning, two months before the operation was scheduled to take place, flicking through the images of an online grocery catalogue, when a mouth-watering shot of the latest variety of apple caught my fancy. I decided to order half a dozen. I didn't, though. Instead, I hit the key which displayed the next item. My mistake, I knew, was easily remedied; a single keystroke could take me back to the apples. The screen showed pears, oranges, grapefruit. I tried to look down to see what my clumsy fingers were up to, but my eyes remained fixed on the screen.

I panicked. I wanted to leap to my feet, but my legs would not obey me. I tried to cry out, but I couldn't make a sound. I didn't feel injured, I didn't feel weak. Was I paralyzed? Brain-damaged? I could still *feel* my

fingers on the keypad, the soles of my feet on the carpet, my back against the chair.

I watched myself order pineapples. I felt myself rise, stretch, and walk calmly from the room. In the kitchen, I drank a glass of water. I should have been trembling, choking, breathless; the cool liquid flowed smoothly down my throat, and I didn't spill a drop.

I could only think of one explanation: *I had switched.* Spontaneously. The jewel had taken over, while my brain was still alive; all my wildest paranoid fears had come true.

While my body went ahead with an ordinary Sunday morning, I was lost in a claustrophobic delirium of helplessness. The fact that everything I did was exactly what I had planned to do gave me no comfort. I caught a train to the beach, I swam for half an hour; I might as well have been running amok with an axe, or crawling naked down the street, painted with my own excrement and howling like a wolf. *I'd lost control.* My body had turned into a living strait-jacket, and I couldn't struggle, I couldn't scream, I couldn't even close my eyes. I saw my reflection, faintly, in a window on the train, and I couldn't begin to guess what the mind that ruled that bland, tranquil face was thinking.

Swimming was like some sense-enhanced, holographic nightmare; I was a volitionless object, and the perfect familiarity of the signals from my body only made the experience more horribly *wrong.* My arms had no right to the lazy rhythm of their strokes; I wanted to thrash about like a drowning man, I wanted to show the world my distress.

It was only when I lay down on the beach and closed my eyes that I began to think rationally about my situation.

The switch *couldn't* happen "spontaneously." The idea was absurd. Millions of nerve fibres had to be severed and spliced, by an army of tiny surgical robots which weren't even present in my brain – which weren't due to be injected for another two months. Without deliberate intervention, the Ndoli Device was utterly passive, unable to do anything but *eavesdrop.* No failure of the jewel or the teacher could possibly take control of my body away from my organic brain.

Clearly, there had been a malfunction – but my first guess had been wrong, absolutely wrong.

I wish I could have done *something,* when the understanding hit me. I should have curled up, moaning and screaming, ripping the hair from my scalp, raking my flesh with my fingernails. Instead, I lay flat on my back in the dazzling sunshine. There was an itch behind my right knee, but I was, apparently, far too lazy to scratch it.

Oh, I ought to have managed, at the very least, a good, solid bout of hysterical laughter, when I realized that *I* was the jewel.

The teacher had malfunctioned; it was no longer keeping me aligned with the organic brain. I hadn't suddenly become powerless; I had *always been* powerless. My will to act upon "my" body, upon the world, had *always* gone straight into a vacuum, and it was only because I had been ceaselessly manipulated, "corrected" by the teacher, that my desires had ever coincided with the actions that seemed to be mine.

There are a million questions I could ponder, a million ironies I could savour, but I *mustn't*. I need to focus all my energy in one direction. My time is running out.

When I enter hospital and the switch takes place, if the nerve impulses I transmit to the body are not exactly in agreement with those from the organic brain, the flaw in the teacher will be discovered. *And rectified*. The organic brain has nothing to fear; *his* continuity will be safeguarded, treated as precious, sacrosanct. There will be no question as to which of us will be allowed to prevail. *I* will be made to conform, once again. *I* will be "corrected." *I* will be murdered.

Perhaps it is absurd to be afraid. Looked at one way, I've been murdered every microsecond for the last twenty-eight years. Looked at another way, I've only existed for the seven weeks that have now passed since the teacher failed, and the notion of my separate identity came to mean anything at all – and in one more week this aberration, this nightmare, will be over. Two months of misery; why should I begrudge losing that, when I'm on the verge of inheriting eternity? Except that it won't be *I* who inherits it, since that two months of misery is all that defines me.

The permutations of intellectual interpretation are endless, but ultimately, I can only act upon my desperate will to survive. I don't *feel like* an aberration, a disposable glitch. How can I possibly hope to survive? I must conform – of my own free will. I must choose to make myself *appear* identical to that which they would force me to become.

After twenty-eight years, surely I am still close enough to him to carry off the deception. If I study every clue that reaches me through our shared senses, surely I can put myself in his place, forget, temporarily, the revelation of my separateness, and force myself back into synch.

It won't be easy. He met a woman on the beach, the day I came into being. Her name is Cathy. They've slept together three times, and he thinks he loves her. Or at least, he's said it to her face, he's whispered it to her while she's slept, he's written it, true or false, into his diary.

I feel nothing for her. She's a nice enough person, I'm sure, but I hardly know her. Preoccupied with my plight, I've paid scant attention to her conversation, and the act of sex was, for me, little more than a distasteful piece of involuntary voyeurism. Since I realized what was at stake, I've *tried* to succumb to the same emotions as my alter ego, but how can I love her when communication between us is impossible, when she doesn't even know *I* exist?

If she rules his thoughts night and day, but is nothing but a dangerous obstacle to me, how can I hope to achieve the flawless imitation that will enable me to escape death?

He's sleeping now, so I must sleep. I listen to his heartbeat, his slow breathing, and try to achieve a tranquillity consonant with these rhythms. For a moment, I am discouraged. Even my *dreams* will be different; our divergence is ineradicable, my goal is laughable, ludicrous, pathetic. Every nerve impulse, for a week? My fear of detection and my attempts to conceal it will, unavoidably, distort my responses; this knot of lies and panic will be impossible to hide.

Yet as I drift towards sleep, I find myself believing that I *will* succeed. I *must*. I dream for a while – a confusion of images, both strange and mundane, ending with a grain of salt passing through the eye of a needle – then I tumble, without fear, into dreamless oblivion.

I stare up at the white ceiling, giddy and confused, trying to rid myself of the nagging conviction that there's something I *must not* think about.

Then I clench my fist gingerly, rejoice at this miracle, and remember.

Up until the last minute, I thought he was going to back out again – but he didn't. Cathy talked him through his fears. Cathy, after all, has switched, and he loves her more than he's ever loved anyone before.

So, our roles are reversed now. This body is *his* strait-jacket, now...

I am drenched in sweat. *This is hopeless, impossible*. I can't read his mind, I can't guess what he's trying to do. Should I move, lie still, call out, keep silent? Even if the computer monitoring us is programmed to ignore a few trivial discrepancies, as soon as *he* notices that his body won't carry out his will, he'll panic just as I did, and I'll have no chance at all of making the right guesses. Would *he* be sweating, now? Would *his* breathing be constricted, like this? *No*. I've been awake for just thirty seconds, and already I have betrayed myself. An optical-fibre cable trails from under my right ear to a panel on the wall. Somewhere, alarm bells must be sounding.

If I made a run for it, what would they do? Use force? I'm a citizen, aren't I? Jewel-heads have had full legal rights for decades; the surgeons and engineers can't do anything to me without my consent. I try to recall the clauses on the waiver he signed, but he hardly gave it a second glance. I tug at the cable that holds me prisoner, but it's firmly anchored, at both ends.

When the door swings open, for a moment I think I'm going to fall to pieces, but from somewhere I find the strength to compose myself. It's my neurologist, Dr Prem. He smiles and says, "How are you feeling? Not too bad?"

I nod dumbly.

"The biggest shock, for most people, is that they don't feel different at all! For a while you'll think, 'It can't be this simple! It can't be this easy! It can't be this *normal*!' But you'll soon come to accept that *it is*. And life will go on, unchanged." He beams, taps my shoulder paternally, then turns and departs.

Hours pass. *What are they waiting for?* The evidence must be conclusive by now. Perhaps there are procedures to go through, legal and technical experts to be consulted, ethics committees to be assembled to deliberate on my fate. I'm soaked in perspiration, trembling uncontrollably. I grab the cable several times and yank with all my strength, but it seems fixed in concrete at one end, and bolted to my skull at the other.

An orderly brings me a meal. "Cheer up," he says. "Visiting time soon."

Afterwards, he brings me a bedpan, but I'm too nervous even to piss.

Cathy frowns when she sees me. "What's wrong?"

I shrug and smile, shivering, wondering why I'm

even trying to go through with the charade. "Nothing. I just...feel a bit sick, that's all."

She takes my hand, then bends and kisses me on the lips. In spite of everything, I find myself instantly aroused. Still leaning over me, she smiles and says, "It's over now, okay? There's nothing left to be afraid of. You're a little shook up, but you know in your heart you're still who you've always been. And I love you."

I nod. We make small talk. She leaves. I whisper to myself, hysterically, "I'm still who I've always been. I'm still who I've always been."

Yesterday, they scraped my skull clean, and inserted my new, non-sentient, space-filling mock-brain.

I feel calmer now than I have for a long time, and I think at last I've pieced together an explanation for my survival.

Why do they deactivate the teacher, for the week between the switch and the destruction of the brain? Well, they can hardly keep it running while the brain is being trashed – but why an entire week? To reassure people that the jewel, unsupervised, can still stay in synch; to persuade them that the life the jewel is going to live will be exactly the life that the organic brain "would have lived" – whatever that could mean.

Why, then, only for a week? Why not a month, or a year? Because the jewel *cannot* stay in synch for that long – not because of any flaw, but for precisely the reason that makes it worth using in the first place. The jewel is immortal. The brain is decaying. The jewel's imitation of the brain leaves out – deliberately – the fact that *real* neurons *die*. Without the teacher working to contrive, in effect, an identical deterioration of the jewel, small discrepancies must eventually arise. A fraction of a second's difference in responding to a stimulus is enough to arouse suspicion, and – as I know too well – from that moment on, the process of divergence is irreversible.

No doubt, a team of pioneering neurologists sat huddled around a computer screen, fifty years ago, and contemplated a graph of the probability of this radical divergence, versus time. How would they have chosen *one week*? What probability would have been acceptable? A tenth of a percent? A hundredth? A thousandth? However safe they decided to be, it's hard to imagine them choosing a value low enough to make the phenomenon rare on a global scale, once a quarter of a million people were being switched every day.

In any given hospital, it might happen only once a decade, or once a century, but every institution would still need to have a policy for dealing with the eventuality.

What would their choices be?

They could honour their contractual obligations and turn the teacher on again, erasing their satisfied customer, and giving the traumatized organic brain the chance to rant about its ordeal to the media and the legal profession.

Or, they could quietly erase the computer records of the discrepancy, and calmly remove the only witness.

So, this is it. Eternity.

I'll need transplants in fifty or sixty years' time, and eventually a whole new body, but that prospect shouldn't worry me – *I* can't die on the operating table. In a thousand years or so, I'll need extra hardware tacked on to cope with my memory storage requirements, but I'm sure the process will be uneventful. On a time scale of millions of years, the structure of the jewel is subject to cosmic-ray damage, but error-free transcription to a fresh crystal at regular intervals will circumvent that problem.

In theory, at least, I'm now guaranteed either a seat at the Big Crunch, or participation in the heat death of the universe.

I ditched Cathy, of course. I might have learnt to like her, but she made me nervous, and I was thoroughly sick of feeling that I had to play a role.

As for the man who claimed that he loved her – the man who spent the last week of his life helpless, terrified, suffocated by the knowledge of his impending death – I can't yet decide how I feel. I ought to be able to empathize – considering that I once expected to suffer the very same fate myself – yet somehow he simply isn't *real* to me. I know my brain was modelled on his – giving him a kind of causal primacy – but in spite of that, I think of him now as a pale, insubstantial shadow.

After all, I have no way of knowing if his sense of himself, his deepest inner life, his experience of *being*, was in any way comparable to my own.

Greg Egan is rapidly developing into one of this magazine's very best writers. His stories include "The Cutie" (*IZ* 29) and "Eugene" (*IZ* 36). He is in his late twenties and lives in Australia. There will be more from him soon.

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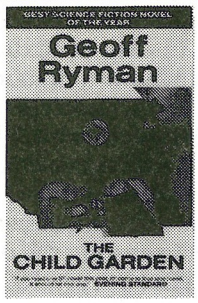

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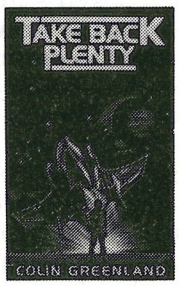

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Oh, Good

John Clute

Oh, good. It is the end of March, fevers fill the blood, afternoons lengthen into the boomerang of summer, three new Terry Pratchetts plop onto the desk like magic, here we are in England, here is the Spring. It must never cease. And how fitting to anticipate yet another Comedy set in the Discworld, which returns like the seasons, a sign of the wealth of Spring, brand-new each birthing, Ouroboros fresh from moult. Our only problem is that none of the Pratchetts on the desk is in fact a Comedy. One of them, **Good Omens: The Nice and Accurate Prophecies of Agnes Nutter, Witch** (Gollancz, £12.95), a collaboration with Neil Gaiman, is in fact a *novel*; and the other two are part of a series which differs radically from the Discworld comedies in that **Truckers** (Doubleday, £7.95) and **Diggers** (Doubleday, £8.95) are not only meant for children, they are meant to end. And although that may be a problem for any reader caught in the eternal Wimbledon of Spring fever, it is in fact good news that this is so.

In a recent essay and notice (they can be found in *Interzone* 33), this reviewer had suggested that it might be worthwhile to define the Discworld books as pure comedies (rather than comic novels); to treat them, in other words, as tales which took their shape, and passed on the exhilaration, of the original season-dance of classic Comedy, that version of the Myth of the Eternal Return which says: Let the Dead arise, let the Play continue. Regarding future books (I further suggested), it would be good to see Pratchett continue to quarantine his Discworld template from the lure of the novel, which took its driving shape from classic Tragedy, from that version of the Myth of the Eternal Return which says: Again again again again Winter. Tragedy was a different drum. And every novel in the world, whether or not comic in intention, marched to its beat. *Good Omens*, the forthcoming collaboration with Neil Gaiman, would almost certainly be a comic novel, a vaudeville descant on the underlying tune, and that would be well.

No words need to be eaten, quite. *Good Omens* is indeed comic, and it is indeed a model novel. It begins with the Beginning (according to Bishop Ussher), and ends with the End (according to *Revelations*). And the stink of Faust lies deep in its bones, though deodorized in the telling. It is not, in other words, a Comedy. But is it any good? Yes and no and yes. It is very funny indeed (yes), though bedevilled throughout by neurotic *nudzhings* of narrative focus and galumphing tonal shifts (no), and in the end it shines through (yes). It is a very strange book indeed; perhaps all genuine collaborations are. The storyline – a Boy Antichrist is born in England to grow up and start the Final Battle, but an angel and a demon collaborate (like two authors) to avert the approaching End – does display a Gaimanesque loucheness, a slight over-familiarity with Apocalypse, and the large cast – dorks and devils, witches and the Four Horsemen, children's-book children who live in an Ealing paradise, and an angel disguised as an antiquarian bookseller – does display something of the Pinocchio clarity of the citizens of Discworld; but who conceived or wrote what in this book it would be foolish to guess.

The funniest sequences of *Good Omens* sound like Pratchett with a shot of Gaiman for stiffeners; the foot-shuffling story-bites that over-fill the first half of the book make the authors sound like two Falstaffs trying to get through one small door together without coming to blows; and the long intricacies of comic story-telling that redeem the book in its second half sound like the fugue Falstaff conducts at the end (in Verdi's version) before going back into the hearsay of *Henry V* to die (in Shakespeare's). But who wrote what (on what disk) might be hard even for the authors to say. Of the Four Horsemen, Pollution (née Pestilence) *sounds* like a Gaiman inspiration, and Death (who speaks in caps) comes directly from Discworld; but to suggest a provenance is very far from identifying the main author of any one sequence.

Some lines – those, for instance, in which nuns are described as being the proper shape for staying quiet, "like those pointy things you got in those chambers Mr Young was vaguely aware your hi-fi got tested in" – are typical of Gaiman, whose writing typically sounds as though spoken, with gestures; and some entire scenes – for instance, an extraordinarily funny exchange, set in a Motorway Service Centre, between a human Hell's Angel and Death – are in turn typical of Pratchett, whose work always sounds *written*, and whose sense of timing is exquisite but completely non-gesticulatory (but what Death and the human Angel say to one another is surely what Gaiman would have them say: and maybe he did). Throughout there are hints of a surfacing rhetoric of violent warfare between opposing principles (Gaiman), but always the villains fade away, or turn into accomplices, or simply kerplop (Pratchett). And so on.

Good *omens* is an affair of masks, a congeries of blessings in disguise, and a synergy in the end. The two authors paired, and did not lay an egg, and parted. A good time was had. It's harder to know about **Truckers** and **Diggers**, perhaps because the story being told in these two volumes will not reach its climax for another volume (or two). Nor is it necessarily the case that the covers by Josh Kirby (who does the Discworld books as well) much help to gain focus on the tale. The Discworld comedies were written for (and are generally read by) adults, and we are generally able to laugh along with the crowded, joyful, comic and quite probably loving ironies of Kirby's cartoon approach. But the nomes of *Truckers* and its sequels will be understood by its young readers (and were almost certainly created by Pratchett) in a much straighter, more "serious" vein. What to an adult reader of Discworld might seem loving spoofery could well be felt by a ten- or twelve-year-old as condescension, certainly when applied to the frailties and modest heroics of the *Truckers* cast. Fittingly for an adult artist, Kirby draws his Discworld figures as though our ultimate disbelief in them were part of the game; but his covers for the new series (almost fatally for a children's book) seem *knowing*.

Pratchett himself does not make the mistake. His nomes, who are the unknowing four-inch-tall descendants of the crew of an interstellar ship whose landing craft crashed on Earth 15,000 years later, are not cute. In *Truckers* (published late last year), young Masklin leads his diminished clan from certain death in the countryside to a new life inside Arnold Bros (est 1905), a giant department store, where other clans of nomes have prospered for many generations (nomes live only about a decade). At the head of each chapter can be found an excerpt from *The Book of Nome* articulating in Biblical terms the resident nomes' sense of having found safe haven; these passages are as funny as anything Pratchett has ever written,

and touching as well, because the open-eyed Masklin soon begins to understand that Arnold Bros (est 1905) is about to close forever. *Truckers* tells of Masklin's reluctant assumption of leadership, the slow growth of his understanding of the foibles of his people as he persuades them they must leave, the beginning of the long search Outside for the real Home.

Rather disappointingly, we witness in *Diggers* the quest-split typical of second volumes of trilogies; while Masklin scuttles off-page with an ancient computer relic from long ago to find a way back to the orbiting mother-ship, we are stuck with his brave girl-friend and her efforts (topologically identical to Masklin's in volume one) to keep the nomes safely together. The department store of *Truckers* is replaced by a quarry in *Diggers*, and the only genuinely new character, a fundamentalist nome who briefly corrupts the Folk, soon kicks the bucket, one more victim of Pratchett's deep reluctance of imagination when evil gnaws the bone; as in most Volume Twos, all the climaxes are false. Volume Three will bring the nomes to space, and a view of their ancient Home (we hope), and the coda.

From Carol Emshwiller, after fifteen years, come two collections of stories at one time which must be read separately. **Verging on the Pertinent** (Coffee House Press, $9.95) and **The Start of the End of it All** (The Women's Press, £4.95) between them contain 35 word-perfect tales on the knife-edge of the art of telling, each of them succinct, polished, pared, apophthegmatic, translucent, angry, laughing, stone poised. Most of them are told in the first person; almost always the first person is a woman; more often than not the subtext (messages are rarely overt) is feminist. They are science fiction, fantasy, urban fable, parable, spoof, litany. They are like the best chamber music, every word bristling with the argument of the whole. If there is a triangulation of authors whose common nexus might hint at the steely funambular nudity of these stories, I'd suggest Jorge Luis Borges, Joanna Russ, Donald Barthelme. (But tomorrow it would be another three.) Because they balance so perfectly in the mind's eye, and exhaust their humours with such devastating quiet grace, no more than two or three stories should be read at any one time. Then two or three more.

And when we finish, we can start again.

And if we put **The Quiet Woman** (Bloomsbury, £13.99) down before we finish the last page, we will be demonstrating a certain dumb fortitude. It is by a very considerable extent the most cunningly readable book Christopher Priest has ever written, and although the final chapters may almost seem *sarcastic* in their sedulous tying up of loose narrative knots, the result is a tale to hold whole in the mind's eye, a code-book to decipher its predecessors with. We are not exactly in the world of *A Dream of Wessex* (1977), or *The Affirmation* (1981), with which the current volume shares (in some sense) a protagonist, or *The Glamour* (1984), but a dream/reality interface operates throughout *The Quiet Woman* just as varyingly it does in the previous books, and the central characters (once again) are makers (and victims of) worlds of the imagination.

There are three main figures. The eponymous Eleanor Hamilton, who is dead when the book begins, was in early life an author of children's books; her neighbour and friend, the slightly dogged Alice Stockton, caught by poverty and obsession in rural Wiltshire, is also a writer; and the third protagonist, who is Eleanor's son, and who calls himself either Gordon Sinclair or Peter Hamilton (the protagonist of *The Affirmation* goes by the name of Peter Sinclair), and who tells his portions of the tale in the first person, has from early childhood developed a dreamworld not unlike a drab Dream Archipelago, into which he dives to escape his mother's coercive story-telling; it is a technique he uses, in later life, as a kind of model to shape the "real" world with.

That world is ours, a few years hence. A nuclear power station in France has (in prophetic accordance with press predictions made long after Priest would have turned *The Quiet Woman* in to Bloomsbury) suffered meltdown, and much of southern England lies under an intersecting fog of radiation and censorship. As head of a firm which has obtained some prime government contracts in "statutory information management" after the privatizing of the security services, Peter is in a strong position to reshape the data of reality upon his computer screens (at one point he Deletes a secondary character who has been staying with Alice Stockton, an injunction which Priest, perhaps rather flirtatiously, seems to obey for several pages). His mother (whose last years seem to have been based on the life of the murdered nuclear campaigner, Hilda Murrell) has been murdered, while at the same time the Home Office has confiscated the manuscript of Alice's last book, a non-fiction study called *Six Women*. Priest's portrait of Alice and her fight to survive is surprisingly sympathetic from this author; but his rendering of Peter (who is just the latest in a series of creative monsters) is savage.

The Quiet Woman is astonishingly full of plot. The portrait it presents of tomorrow's England far exceeds in deftness and oppression the Thatcherite desert created by Ian McEwan in *A Child in Time*, and reads as almost seamlessly plausible; Alice Stockton's persecution (at Peter's hands) is similarly convincing. The plot-turns and devices which savage the "real" world have at first an air of flittering unreality familiar to readers of *The Quiet Woman*'s stablemates, but in the end the world proves to have more substance than earlier Priest-plays on the dream/reality organon have ever accorded to consensual reality – and mysteries are solved and Peter Gordon Sinclair Hamilton bites the bullet of the Real. And a good thing too. He is a creep, a vampire, and a spy. His ultimate defeat may just be a further dream – the excessive neatness of the final pages serves as an extremely broad hint that this may be so – but it is possible to close *The Quiet Woman* in a beam of light. Oh, good.

It is nice to pretend our dreams will boot.

Up the Down Escalator
Paul J. McAuley

If you could flange up some kind of mathematical expression to describe sf novels, you'd find it was virtually identical to that for mystery novels, except for reversal of the sign for time. In each, to be sure, a puzzle is solved, a Revelation occurs. But while sf plots gather up clues as they move to the heart of their particular signifier (which so often turns out to be a cross little man behind a shabby curtain, imploring you to ignore him *and look at the wizard*), mysteries work backwards from their signifier (a corpse, or, these days, many corpses) to the cause. The end of a mystery is a closure, a hermetic explanation; that of a (good) sf novel is both a closure and an opening onto unexpected vistas, a dizzy yet perfectly logical change of scale.

Reconciling these radically different plot vectors is perhaps the reason why there's so little successful mystery writing in sf, and yet the surface similarities again and again lead sf writers to attempt full-blown sf mysteries. There's Isaac Asimov's *Caves of Steel* – is it still? – trilogy, Larry Niven's Gil the Arm...The list (Kim Newman's *The Night Mayor*) grows and probably will never stop growing. Yet at the heart of all of these hybrids is a serious dislocation. Asimov has his characters behave like thirties stereotypes straight out of an Agatha Christie novel (the robot is a manservant in whom social stratification is explicitly coded) despite the claustrophobic sf

setting, giving rise to a curious schizophrenia. Niven, the eternal optimist, substitutes straightforward infodumps for clues, his grin so dazzling that the reader might not notice that it is she, and not Gil, who is solving the puzzle. Newman tries to get around it by explicitly separating his Thatcherland future from his drizzly 2 am pastiche/tribute-to-*film-noir* cyberspace (which is perhaps why his characters have no past: they do not plug into cyberspace, they are necessarily born into it).

No doubt there are honourable exceptions; but don't all write in at once, because all of this (as usual) is preamble to the matter at hand, and in particular to Kate Wilhelm's **The Dark Door** (Gollancz, £13.95), an attempt at fusing sf and mystery which unfortunately is more of a trainwreck. It begins with a prologue in which hazily visualized aliens send out a space probe which turns rogue and destroys life rather than surveying it, and will not be controlled. And jumps to an old hotel which a restaurateur and his wife, and an insurance agent and *his* son, are surveying. The son goes crazy and kills his father and the restaurateur's wife and disappears, and the restaurateur sets fire to the hotel and is badly injured as a result, although it doesn't stop him picking up the insurance agent's wallet, so that he can assume the dead agent's identity and after reconstructive plastic surgery take to setting *other* old, deserted hotels afire. And we jump again (are you still with me? we're on about page 26) to a husband and wife investigative team, Charlie Meiklejohn and Constance Leidl, who are asked to look into the spate of arson attacks on old hotels across the country (Charlie is a retired New York fire investigator) which are linked to outbreaks of madness and disappearances.

And it is at this time that we wonder what Wilhelm is up to. After all, we know the proximate cause of the arson (the loony cook) and the secret cause (the space probe, or why else were we set up with a prologue?). Which at this stage is more than Charlie and Constance do, kind of a fatal flaw in a mystery. All we don't know is why the probe chooses old hotels and where the people are disappearing to, but as soon as the two sleuths catch up with the arsonist a hypothesis forms out of nowhere: which is that the probe's scanning device damages most, but not all, human brains and it creates a portal to elsewhere (which is where the people go) which requires a wooden frame of a certain size – hence the old, flammable hotels, which in the USA are the only place with doors big enough.

All of which has so many holes you don't know which one to pick on first (why only *most* brains? why a wooden frame? kind of limiting for an interstellar probe, don't you think? and what about doors in public buildings, museums, say, or east-side New York apartments, or...the list is endless). Yet all of the above is true, and must be true, because no alternative is presented. So Charlie and Constance plan to get a bomb through the portal (he is affected, she isn't) to destroy the device, and a deus-ex-machina brain-damaged victim appropriates the bomb and staggers through the portal and so the probe is destroyed but the sleuths are not, the aliens reappear to mourn, and the book ends on a whiffle of exhaustion.

Well. Wilhelm has written two straight mysteries featuring the Meiklejohn and Leidl team, and they might be worth looking out, for she is at her most comfortable with their Tracy/Hepburn bickering and sassing and teasing. The collision between their cosy domestic milieu and the sf/horror element could have been invigorating, but the problem is that, constrained by the mystery form to work from signifier to cause, Wilhelm simply dumps all the sf revelations at the beginning. The rest has the uncomfortable feel of post-hoc rationalization, as Wilhelm strains to fit the probe into the mysterious old haunted house format. And, unfortunately, fails.

Peter Straub's **Mystery** (Grafton, £13.95), on the other hand, is more successful in blending the supernatural into a private eye format, by hinting (and never more than hinting) that the ability to solve crimes may be a paranormal gift, as much a mystery as the mysteries to which it applies. Long and carefully (though sometimes laboriously) detailed, *Mystery* is set on the fictional yet painstakingly realized Caribbean island of Mill Walk, where rich whites lord it over the native underclass. Tom Pasmore, who may have died and returned from heaven after a traffic accident, is a scion of one of Mill Walk's high society families, gifted but isolated from his classmates after his accident. Fascinated by murders committed on the island, Tom soon finds himself out of his depth in a tangle of corruption and deceit that may reach deep into his own family.

He enlists the help of Lamont von Heilitz, a retired amateur sleuth who made his name by solving a murder at Eagle Lake, the American lakeside community where Mill Walk's elite holiday each summer. But was von Heilitz's solution correct? When Tom is sent on holiday to Eagle Lake by his powerful grandfather, he makes enemies through his love affair with the girl earmarked for marriage to the oafish son of Mill Walk's most powerful family, and learns that his own family's history is inextricably linked in a web of murder and corruption that underpins Mill Walk's society.

The only overtly supernatural element is Tom's near-death experience after his accident, but there is a continual unsettling undercurrent beneath its surface dazzle: nothing is quite what it seems, and only those specially gifted, like Tom Pasmore or Lamont von Heilitz, can extract causal patterns from the seemingly random welter of events and facts. Straub is scrupulously fair with the reader, for everything necessary to solve the book's tangled puzzle is planted amongst the detailed rendering of Mill Walk's grand houses and teeming slums, and Eagle Lake's rural claustrophobia: each revelation brings to the reader the pleasurable shock of recognition. Yet he ensures, with elegantly tantalizing misdirection, that Tom Pasmore, growing from adolescence to adulthood, solving the mystery of his own self as much as the mysteries of deceit, is always the necessary inch ahead of the reader. In the end, Tom solves not only the murder but also his own secret history, and may have grown into something beyond the comprehension of the gutsy girl with whom he has had his first love affair, a satisfactory ending as much opening as closure. Recommended, despite its daunting length.

Orson Scott Card publishes books as fast as I can write review columns. I turned down the opportunity to review his novelization of *The Abyss*, but his latest short-story collection, **The Folk of the Fringe** (Legend, £11.95, hb; £5.95 pb) is a more interesting prospect, if only for the intentionally wry and (perhaps) intentionally revealing afterword, in which Card details the genesis of these five tales. Card, it seems, has several chips on his shoulder, the largest being that as a Mormon – and these stories deal overtly with the Church of the Latter Day Saints – he feels that he is an outsider. All Mormons are outsiders, it seems: like the Indians, memory of their persecution is an unhealed wound. Though funnily enough, Card's reaction to this is to become more American-than-thou, determinedly middle-to-low brow. While the other participants in the writers' workshop where these tales surfaced slope off to watch an old Hitchcock movie, Card takes in *Johnny Dangerously* and binges on burgers and Diet Coke, and in an epiphany which hilariously echoes Hemingway's working methods, practically writes the first chapter of *Speaker to the Dead* in the fast-food joint. (Always did think there was something odd about that novel.)

Well, but what about the stories? They are all set in a future in which a brief nuclear exchange and biological warfare have drastically reduced the population of the USA and changed its climate so that the deserts have begun

to bloom. America has become the Promised Land – but for whom? For the Mormons, is one of the answers, a neat and no doubt (to Card) satisfying twist in history's tale; and Card does make believable the close-knit communal responsibility that would be required for the Folk of the Fringe to make the desert over into farmland.

A couple of the stories would work with the sf elements taken out; another is not much more than a fragment with a deus-ex-machina ending; another (as Card admits) is structured like a stage play, so that all the main characters have Dramatic Confrontational Scenes and Big Speeches. And a couple of the stories have the same, to me, unsatisfactory plot twist, in which a loner suddenly sees the light and throws himself into the bosom of a family he's fallen into helping (and in one story becomes an instant convert to Mormonism as well). How likely this is depends on how sentimental you feel about families, I guess. But two of the stories do work wonderfully well: "Salvage," which works because of its overt Mormon content, not despite it; and "America," most overtly elegiac of all, the story of the American father of the eventual Mexican conqueror of the new green lands, with a stunning closing paragraph which both encapsulates Card's theme and widens the focus of the stories from the narrowly personal to the wide screen of history. These two stories are worth the price of admission alone.

Which leaves us with another fixup book, Kim Stanley Robinson's wonderfully unclassifiable **Escape from Kathmandu** (Unwin Hyman, £12.95). Four novellas set in the weird, beautiful and savagely primitive kingdom of Nepal, concerning the various adventures of Freds Fredericks, climber, one-time Buddhist monk and all-round kamikaze artist, and his reluctant sidekick (and narrator of three of the tales; Freds handles the other) George Fergusson. It's notoriously difficult for prose to prise a laugh out of a reader, but the first, eponymous, story, which concerns, among other things, a laid-back Yeti, Jimmy Carter and a bunch of absolutely believable scientists, got me twice in a row, which has to be some kind of recommendation. Then there's "Mother Goddess to the World," the one about the Brits and the manic documentary-maker and the discovery of Mallory's body on the high slopes of Everest – which only got me once, but I'd read it before so it's still pretty good going.

But things get a bit heavier after that, excursions into the true nature of Shangri-La, baroque Nepalese bureaucracy and (literally) underground politics. Unlike certain modern Boys' Own Stories, Robinson's Nepalese tales have a steely moral core, which sometimes leads to a bit of overt preaching and right-on politics (as in the Ugly American abroad trap). But what the heck. Robinson writes wonderfully gonzo prose, is terrific at evoking from firsthand knowledge the Technorama scenery and exotic sleaze of Nepal, and the lowrent lives of expat trekkers and climbing freaks. What more could you want?

A Book of Wonders
John Brunner

To start with, this is not a review of **Foucault's Pendulum** by Umberto Eco (Secker & Warburg, £14.95). It's a plug. Okay?

Years ago, when I still lived in London, they broadcast a TV version of *The Duchess of Malfi*, a play I had read (with, I may say, considerable bafflement) but never seen. Out of a sense of duty I composed myself to watch it – and realized with delighted incredulity that I could understand what the characters were talking about.

It so happened that I'd recently been hired to script a film based on the Golem legend – never, of course, produced – and I'd been studying Jung's writings on alchemy. *The Duchess* is stuffed with references to what were then smart subjects for conversation among the intellectual élite, and by sheer chance I'd obtained a key to comprehending them.

This episode, which I hadn't thought about for ages, came vividly back to mind while I was enjoying *Foucault's Pendulum*. I'd seen several reviews, most of which struck me as peevish in tone, as though the critics had expected a different book, or resented the successful incursion of an academic outsider into the charmed circle of "literature." But I'd been so impressed by Eco's earlier novel *The Name of the Rose* that I refused to be put off.

Almost from the outset it became apparent why so many of the notices had been disparaging, even perhaps envious. The reviewers, clearly, were in the same position I'd been in when I first tackled *The Duchess*, plus one further disadvantage: called on to evaluate Eco's new work in public, they found they lacked the background knowledge to decide what was to be taken at face value and what was intended as a spoof. (This is not a handicap under which an averagely well-informed reader of sf is likely to labour.) What is more, they seemed annoyed that anyone should be so much better informed than themselves, albeit in areas they would most likely regard with disdain if not contempt.

Worst of all, to a person they neglected to point out that the book is *funny*. I mean with a capital F and neon lights. It's the first novel I can recall since *Ulysses* that made me laugh so much I had to put it down every now and then to get my breath back.

Not long before she died, my wife Marjorie – as a result of reading David Yallop's *In God's Name* – started delving into conspiracy theories. Knight's *The Brotherhood*, I think it might have been, and Arkon Daraul's *Secret Societies* I know for a fact, led her to the Templars, and when *The Holy Blood and the Holy Grail* came out she insisted I read it and tell her what I thought. I complied – though I see I filled its margins with queries and screamers – and concluded that what was interesting was not whether there are bodily descendants of Jesus alive today, but the fact that many people, some in positions of great power and influence, believe it's so.

Conceivably it was from some such take-off point that Eco launched into his astonishing fictionalized survey of cults and cranks. It gives away nothing of the ingenious plot to say that his protagonist works for an Italian publisher with a lucrative sideline in vanity-press books; that sensing the commercial opportunity in a sudden upsurge of interest in the occult (the "Hermetic tradition") the firm decides to launch an appropriate new series; and that the narrator and two intimate friends become so bored and disgusted with the nonsensical and repetitious material they are compelled to deal with that they set out to create an all-embracing schema designed to incorporate every single one of these mad ideas into a coherent frame – a task in which they succeed only too well: so well, in the upshot, as to convince occult believers that they have access to "forbidden knowledge" and must be prevented from broadcasting it any further...

I simplify. But, in essence, this is a book-length – 640-page – treatment of the same subject as one of Asimov's articles in *F&SF* a few years ago, in which he took a group of randomly-chosen numbers and demonstrated how numerology could reveal all sorts of hidden correlations. Aptly, one of the chapter-headings comes from Piazzi Smyth's *Our Inheritance in the Great Pyramid*. Speaking of which, the epigraphs in themselves constitute a fund for speculation. I must find out whether my guess about the one for chapter 80 ("When White arrives in the matter of the Great Work...") is correct. I suspect magnesium oxide. I can't imagine alchemists smelting titanium, and MgO_2 would likewise have defeated them. And the detailed history of the origins of *The Protocols of the Elders of Zion*, arguably among the most successful forgeries of all time

(still deluding new readers, for example in Romania since the downfall of Ceausescu!), is in itself worth the price of the book.

All of which helps to demonstrate why, in my submission, it can and should be read as science fiction – a genre in which there isn't nearly as much humour as there ought to be.

Granted, the "science" involved is scarcely that of *New Scientist* or *Nature*. Yet it should not be overlooked that scant centuries ago the sharp edge of research was to be found in exactly the fields Eco's characters set off to explore – and there are millions who still believe implicitly in gematria, astrology, the hollow earth, theosophy... (The late husband of my best friend was a devout Rosicrucian. I've never quite figured out whether it was this or something else that persuaded him to bring to the dinner-table grass cut in Regent's Park.)

Foucault's Pendulum is what the "Illuminatus" books set out to be, and failed. Eco is so enormously well informed – I would say, indeed, so learned – that every now and then one is brought to a grinding halt by some apparent inaccuracy (for instance: Mohammed "got the inspiration for the Black Stone of Mecca," though it's known to be pre-Islamic – it was the shrine of a god called Hubal; or a seal is the "Pentacle" of Solomon; or Asian swastikas are said to turn "in the direction of the sun, not the Nazi kind, which went clockwise" – an odd clock, that, given that the opposite of widdershins is sungates – or Marie Curie is credited with "inventing X-rays")... and then one realizes that the statement is being attributed to one of the characters, whom the author can make as ignorant and blundering as he chooses – or, come to that, as arrogantly knowledgable.

This is not to say that the book as you receive it into your hands is flawless. Regrettably. There are places where Eco is imperfectly served by his (American) translator: some are trivial, as "fake" beard where we say false, or "keys" on a bombardon (which has valves), but many are jarring, like "Great" Lodge (in the Masonic sense) where it should be Grand, "distributor caps" in a car engine which admit fuel from the carburettor (!), and even the aliens "from Ophiulco," which any sf fan would gloss as Ophiuchus – though one can never be sure whether Eco wasn't playing another verbal trick; and too many where the editor has betrayed him: the "father of spiritualism" is called indifferently Kardek and Kardec, "Big Pete" who tortured Micky Mouse should of course be Peg-Leg Pete...

And some of the Latin quotations appear in questionable form – yet, as with the surprising *Monarchy* for *Monarchie* in a German book title (which for all I can tell may in 1623 have represented the Dutch usage: ij – and wouldn't it be just like Eco to know that it did?) one has to wonder.

Which is precisely what I'm driving at.

Here is a book compact of wonder and of wonders. Here is what can be achieved by an author who puts the wild, the weird, beneath his microscope and asks, not how to make mock of the fantasies therein, but where the logic is, the seeming sanity, the sense.

That is, the sense of wonder.

Therefore, I beg you, wonder at the sense!

Go buy this book. It shows what science fiction can and ought to be about. In ten years' time not to have read it will be what they used to smear as square.

A Role Written for Him
Wendy Bradley

Tek War (Bantam, £12.95) is a difficult book to review, mainly because it is by William Shatner and we all know who William Shatner is – Captain Kirk and T.J. Hooker. Trek War, Star Tek... it is virtually impossible to read it without Shatner's face inserting itself in the hero's place. The said hero is called Jake Cardigan and is a middle-aged cop wrongly accused of dealing the illegal substance Tek, and yes the book does read very much as if T.J. Hooker found himself time-warped into the *Star Trek* universe. Cardigan has many of Hooker's traits; a curious irresistibility to women, a younger partner who has a tendency to break his leg at moments of crisis and take no further part in the action, and of course a panoramic background knowledge of every character who is going to appear in the plot. The world in which he moves has a very *Star Trek* feel to it; everything seems to be made of "plas" and there are humanoid robots and an orbiting "freezer" in which prisoners serve out their sentences in suspended animation.

However, although the book contains no great conceptual leaps that are going to change your perception of the world forever, there are a couple of cute scenes – a hologram house that turns back into a shack if you don't keep up the payments, a bullring with artificial fire-breathing bulls – and the plot is feisty enough to keep you turning the pages. The character of Cardigan is interesting too; how often these days do you get a hero who *soliloquizes*? "'This could be a setup,' Jake reflected. 'But I better make sure.'" What a movie it will make. Shatner should play Cardigan – the role could have been written for him!

Impertinent though it may be to offer career advice to cultural icons, I would further advise Shatner to avoid like the plague any attempt to film **Star Trek: The Lost Years** by J.M. Dillard (Simon & Schuster, £12.95), an attempt to fill the gap between the end of the Enterprise's five-year mission to boldly go and the first *Star Trek* movie. All the formula elements are there: Kirk, Spock and McCoy come to terms or otherwise with the Enterprise's mission coming to an end and get kidnapped by various hostile aliens in time to bump into each other on out-of-the-way planets at moments of crisis, but the slightly camp wit that has informed the *Trek* movies directed by Nimoy and Shatner themselves in recent years is entirely absent. And why does Uhuru never get a decent scene?

Esther Friesner's **Here Be Demons** (Orbit, £3.50) is a great disappointment. Her previous books have been well-plotted and, incidentally along the way, very funny. This one has failed demons sitting in a desert and failing to get to grips with a temptable party of American teenagers on an adventure holiday. It tries very hard to be funny, has a badly constructed plot and is altogether as humourless as its Pratchett-lookalike cover.

And finally **Buffalo Gals (and Other Animal Presences)** by Ursula Le Guin (Gollancz, £13.95). No, I'm sorry, but it won't do. One new story plus reprints of lots of other animal stories is not enough to make a book. All the stories are worth reading but all bar very new readers will have seen them before. And to write an introduction to "The Wife's Story" and "Mazes" that gives away both plots is plain stupidity. A collection of new or even previously uncollected Le Guin would be worth £13.95, but keep your hands in your pockets on this one. Oh, and it has *poems* in it, too!

Nasty Things in Basingstoke

AdventureLand (Headline, £12.95) is the debut novel of British writer Steve Harris. Set in contemporary Basingstoke, it tells of the misadventures of a group of teenagers who become drawn into "a struggle between the big forces: Positive and Negative, Good and Bad, Heaven and Hell." Most of us thought global warming was responsible for last summer's drought, but apparently it was all about the balance of power between the Good Side and the Bad Side. Other indications of millenarian changes include the disappearance of little Tommy Cousins at the eponymous AdventureLand funfair, the emergence of a slimy clawed hand from the

plumbing with unexplained but malevolent intent... and getting seated in a restaurant without a reservation.

Bespectacled hero Dave's usual activities are lying on his bed, playing computer games, and watching the traffic go by; so he is easily seduced by the rival attractions of fighting off the claw (sorry, The Claw) with a toilet brush, being beaten up during attempts to measure the dimensions of the sinister Ghost Train at AdventureLand, and working all night on his Amstrad to solve a simple mathematics problem. (At this point, his girlfriend Sally unsurprisingly falls into a light coma).

Steve Harris has considerable gifts of visualization and handles the relationships among a large cast of characters with confidence, particularly a perilous alliance between Dave and local psychopath Roddy. He injects real pace into his action scenes, but these are allowed to go on far too long (a confrontation in a pub, for example, lasts fourteen pages). By the closing chapters there is a strong sense that Harris is simply throwing in everything nasty he has imagined for the last several years. He can imagine some quite stomach-churningly unpleasant things, but any newspaper can supply those, and more cheaply.

This is not a book which is about to challenge received opinions on social relations and sexual politics. Conventional notions of feminine intuition, for instance, are used to bolster an appeal to lynch mobbery: "She... had to fight off an overwhelming urge to take the knife... and sink it into the fat man's neck... He deserved that. She felt this intuitively. Even if she didn't know what he'd done or what he was, she knew that he deserved to be stuck through the throat." Indeed intuition, in a "feel the force" way, is the key to all dilemmas. If we only have faith, we can walk through the walls of our prison. (Why *did* it take Nelson Mandela so long?)

The female characters mostly know their place. Anne, mother of the lost Tommy, is horribly punished for allowing her attention to stray from him for a few seconds at a fairground stall. Only, Harris argues, by ruthlessly renouncing her own mother, only by braving ordeals that include being burnt alive – "She increased her speed even more when her shoes caught fire" – can she regain her self-respect. Sally, interestingly, is the one that got away. Bright and tough, she nevertheless readily adopts a flatteringly childish manner in her relations with dull Dave until her unexpected metamorphosis into a Superwoman who escapes imprisonment by a cannibal, slaughters a giant under Basingstoke shopping centre, and smashes the window of the local Wimpy's. Belatedly, the author tries to restore normality. "I'm only a girl, for God's sake," Sally reminds herself, and reassures Dave, "...you are the one. Not me, not Roddy. We're only along for the ride. To help... You were the one who got picked. And you were picked because you're the right man for the job." But it's all much too late. Sally has stolen the show. Sam has usurped Frodo's throne.

I'm sure this novel is fun to read if you know Basingstoke, and certainly I now feel I could find my way around without a map. Would I care to, though? On an average night at the recommended Dragon pub a party of six can apparently expect to wind up with two thirds of its members in hospital. Rather more alarmingly, the building regulations have been systematically flouted. As Dave explains to Sally, after she causes the multi-storey car park to fall down, "Things collapse every day Sal... Forget it."

AdventureLand shows freshness and energy, but the use of an ordinary English town for the setting results in an undigested mixture of personal observation and experience with the ideas and language of American popular culture. Basingstoke cannot simply be substituted for Stephen King's Maine. Steve Harris is already at work on his second novel – let's hope for better things next time.

(Chris Hampshire)

Arthur Quest

The Road to Avalon by Joan Wolf (Grafton, £3.99) is a competent but not outstanding version of the Arthurian legend, from an author whose work has been praised by *Romantic Times*. Its fantasy element is slight, but is set in a fifth century whose realism lacks depth. Even if it moves along, the characters are too nice for the inevitable final catastrophe to carry much conviction.

A more substantial work of Dark Age romance is Anne Thackery's **Ragnarok** (Bantam, £4.99). The background, a post-Arthurian Britain in terminal decline, is more realistic, as is the characters' response to their often grim situation. Having ploughed through a depressing first third, whose only fantasy element consisted of prophesies of doom, I found the conclusion both moving and satisfactory. Yet a dubious theme infects the book: the heroine, raised in an isolated civilized enclave, pluckily agrees to a diplomatic marriage with a barbarian chieftain she initially dislikes. Soon her bodice is ripped, and we get lines like: "Elric's final possession of her was both brutal and an ecstasy beyond description." At one level we have a bold attempt to present as human and almost decent a character whose society's rules, though definite, are more brutal than our own; yet any treatment of rape must deal with how seldom its victims are actually reconciled to their abusers, and Thackery fails here.

Neither author has done much research on geography. Wolf describes the Wiltshire Downs as though they were the Rockies or Sierras, with narrow passes resembling that in which the Lone Ranger was first rescued from ambush by Tonto, while Thackery's sub-Roman city appears, from the direction of the characters' movements, to be situated in the middle of the Mersey.

Now for something with Arthurian connections which is completely different. **Any Old Iron** by Anthony Burgess (Arrow, £3.99) is a sprawling, literary, modern-scene novel in which diverse themes are loosely connected by the supposed discovery of Arthur's sword, Excalibur. It's fascinating for someone like myself, with wide exposure to genre work on a theme, to see how this is handled by a leading mainstream writer who comes with lavish press notices. It is certainly not a bad read, with vivid description, well-realized characters and good rough humour. However, it takes a long time to get going, involving innumerable marginally relevant characters in the early stages, and it take quite a while to work out what the novel is supposed to be about. It doesn't help that the narrator is one of the least important characters, one of the hero's sister's lovers (and my interests are basic enough that I resent it being left unclear whether he gets the girl or not). There are lots of obscure references, OK if you get some of them as I did, but I rather object to the patronizing habit of inserting passages which require several readings to make sense of while the characters get them at once. The novel as a whole is less than the sum of its parts: while a very worthwhile read, it is inferior to the best Arthurian novels written for genres ignored by the critics who lionize Burgess.

(Peter T. Garratt)

Fantasy, Etc

The Rainbow Gate by Freda Warrington (New English Library, £13.95) is one of those novels where the fantasy world impinges closely on the "real" world. Through her friend, Rhianna, Helen finds herself in the country of the Chalcenians and the Domendrans. One group is life-assertive, the other life-denying, and the tension between the two brings danger not just to Helen but to our world as well. In crossing the borders of the two realities Helen and Rhianna are disturbing some very important metaphysics, but should the barrier be broken down or erected more strongly?

A satisfying novel, anchored in a specific locality in Leicestershire, with a credible resolution of its ambiguities.

In both **The Reluctant Swordsman** by Dave Duncan (Legend, £3.50) and **Nul's Quest** by Brad Strickland (Headline, £3.50) a man is taken from our own world, never to return. Here is no way for the fantasy to endanger our own lives but there is a central character with whom the reader can identify. The "Reluctant Swordsman" is Wallie Smith who dies and finds himself in a strange tropical world and in a stranger's body. He has a task to perform for the Goddess, but how can he believe in this world, or this Goddess, and how can he carry out this task? Wallie Smith is entirely credible, both in his reactions and in his mistakes, and his new world is full of colour, smells and textures.

In *Nul's Quest* the transported hero, Jeremy, makes magic by chanting advertising slogans (logical in a world where magic is in words) and plagiarizing Shakespeare. He, with a magic-less wizard and two argumentative living stone gargoyles (delightful creations), tries to help Nul to find his lost people. Unfortunately the world rarely seems quite real, and Nul (a cross between a dwarf and a badger?) remains quaint rather than epic in stature.

In **The Last Guardian** by David Gemmell (Legend, £5.95 and £3.99) we return to the far future and complete the story of the Jerusalem Man. Ancient ruins, a wild-west culture, men who are part lion and invaders from the prehistoric past are the elements in this story. Here again are the powerful Sipistrassi stones, and many of the questions raised by the other novels in this sequence are explained.

In **The Paladin** by C.J. Cherryh (Mandarin, £3.99) we have a far-eastern fantasy. An exiled warlord (a samurai?) is forced by a young peasant girl to teach her to fight. Against his better judgment he becomes involved in her revenge. What is satisfying is the account of the long physical training and of the real difficulties it takes to make a woman as good a swordsman as a man. At times the text is heavy going but I have rarely been so aware of the physical reality and cost of the characters' achievements.

Whereas *The Paladin* is set in a country which could be anywhere in the Far East, **The Fairy of Ku-She** by M. Lucie Chin (Fontana, £2.99) is quite specifically set in ancient China. Ku-She is a snow fairy, exiled from the lower ranks of heaven until she can recover her stolen golden chopsticks (without which the snow cannot fall). She finds love, forgets duty, and the effects are catastrophic on both earth and heaven. In the end she pays dearly to resolve the situation. This is a story with both charm and harsh realism. In drawing upon a mythology with which few European readers are familiar it is refreshingly different.

(Phyllis McDonald)

Anthologies

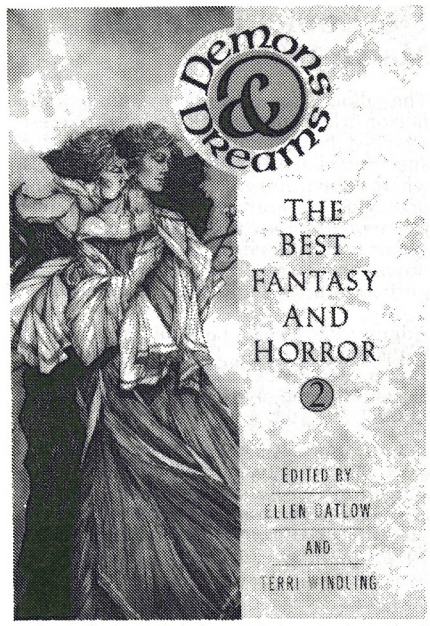
The sf/fantasy/horror fields have grown so dramatically that it is almost impossible to keep track of everything that's published, let alone *read* it. One way of keeping up is to read one (or more) of the "Best of" anthologies. There are the Dozois, the Wollheim and the Garnett *Yearbook* for sf, the Wagner for horror, the Saha for fantasy – and for both fantasy *and* horror, the one under review here, **Demons and Dreams: The Best Fantasy and Horror 2** edited by Terri Windling and Ellen Datlow (Legend, £13.95 hc, £7.99 pb).

It's a hefty volume, weighing in at a massive 579 pages and includes 46 stories/poems, all first published during 1988. You also get detailed summations of the year in both the fantasy and horror fields and a recommended reading list – the stories that didn't quite make the book. Still, questions do come to mind: how reliable are our editors? Have they really succeeded in finding the best from the year?

As a rough guide to Datlow and Windling's editorial tastes, we looked at their selection from a single source well known to us, namely *Interzone* issues 23 to 26. Only two *IZ* stories are actually included – "Scatter My Ashes" by Greg Egan and "Lost Bodies" by Ian Watson. A further five stories get onto the recommended reading list: "Face Lift" by Susan Beetlestone, Peter T. Garratt's "Our Lady of Springtime," "Dark Night in Toyland" by Bob Shaw, "Salvage" by Julio Buck Abrera and "The Growth of the House of Usher" by Brian Stableford. Surprisingly to us, there is no mention at all of "Artefacts" by Chris Evans and "Babel" by Christopher Burns. From the above we'd have relegated the Watson – and put Bob Shaw's story into the best-of class.

Two stories reprinted here from another well known source, *Other Edens 2*, "Roman Games" by Anne Gay and "Laiken Langstrand" by Gwyneth Jones, are both rather tedious reading – while Scott Bradfield's "Dazzle," the stand-out story of that anthology (for us) gets no mention at all.

However, making allowances for differences in personal taste, the editors have collected a lot of good fiction here. There are no less than *five* stories from *Omni*, but while it's true that Datlow is that magazine's fiction editor, the stories chosen clearly deserve their place on quality alone. In fact, the variety of Windling and Datlow's sources is impressive, and



even includes the small-press publications. Among the writers represented are Tanith Lee, Thomas M. Disch, Lucius Shepard, Lewis Shiner, Gene Wolfe (who has *three* stories here) and that new colossus on the sf and horror scenes, Dan Simmons. Of particular interest for regular *Interzone* readers are stories by such writers as Scott Bradfield, Michael Blumlein, Ian McDonald, M. John Harrison, Ramsey Campbell and Lisa Goldstein. All in all, considering its comprehensive coverage, if you want to keep in touch with the fantasy and horror fields, we'd recommend you give this book a try.

(Neil Jones & Neil McIntosh)

Comment

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country" to treatises on lock-picking and safe-cracking for the home-brewed ninja. 203, Artificial Intelligence. 207, nanotechnology. It just goes on and on ...art supply houses, music theory, theatre, dance, even (yuck) mime.

And of course science fiction. *Applied* science fiction, page 181, alertly assembled by sometime *Interzone* contributors Richard Kadrey and Pat Murphy.

Signal is a masterpiece, a must-have item. It's the coolest book in the world – but there's a problem with that. Since the *Signal* catalogue is utterly with-it and has absolute specificity as to prices, addresses, and so forth, it is necessarily rooted in a moment in time. Late 1988, to be precise. This book is the consummation of the 80s and sets seeds for the 90s and beyond – but the bloom is slowly, gently fading off the rose. Get it and get it now!

(Bruce Sterling)

UK Books Received March 1990

The following is a list of all sf, fantasy and horror titles, and books of related interest, received by Interzone *during the month specified above. Official publication dates, where known, are given in italics at the end of each entry. Descriptive phrases in quotes following titles are taken from book covers rather than title pages. A listing here does not preclude a separate review in this issue (or in a future issue) of the magazine.*

Adkins, Patrick H. **Lord of the Crooked Paths**. Futura/Orbit, ISBN 0-7088-8322-2, 216pp, paperback, £3.50. (Fantasy novel, based on Greek mythology; first published in the USA, 1987.) *22nd March.*

Asimov, Isaac. **Asimov's Chronology of Science and Discovery**. "How science has shaped the world and how the world has affected science from 4,000,000 B.C. to the present." Grafton, ISBN 0-246-13669-3, 707pp, hardcover, £18.95. (Popular science text, first published in the USA, 1989.) *8th March.*

Ballard, J. G. **The Drought**. Grafton/Paladin, ISBN 0-586-08996-9, 188pp, paperback, £3.99. (Sf novel, first published in 1965 [though previously published in different form in the USA as *The Burning World*]; third Granada/Grafton [first Paladin] printing.) *29th March.*

Ballard, J. G. **The Unlimited Dream Company**. Grafton/Paladin, ISBN 0-586-08995-0, 220pp, paperback, £3.99. (Fantasy novel, first published in 1979; third Granada/Grafton [first Paladin] printing.) *29th March.*

Bova, Ben. **Cyberbooks**. Mandarin, ISBN 0-7493-0131-7, 283pp, paperback, £3.50. (Sf novel, first published in the USA, 1989; jokey stuff: there's a character called "Agatha Marple" on the very first page.) *5th April.*

Campbell, Ramsey. **The Face That Must Die**. Futura, ISBN 0-7088-4394-8, 238pp, paperback, £3.50. (Horror novel, first published in 1979; it appears to be the first UK edition of the revised text of this early Campbell novel, with a long introduction [from 1983] and a short afterword [1989] by the author.) *22nd March.*

Chetwin, Grace. **The Atheling: The Last Legacy Tetralogy, Volume One**. Corgi, ISBN 0-552-13420-1, 416pp, paperback, £3.99. (Sf novel, first published in the USA, 1987.) *6th April.*

Clarke, Arthur C. **Astounding Days: A Science Fictional Autobiography**. Gollancz, ISBN 0-575-04774-7, 224pp, paperback, £4.99. (Reminiscences of a leading sf writer, first published in 1989.) *5th April.*

Craig, Brian. **Plague Daemon**. "Warhammer." Illustrated by Les Edwards, Fangorn and others. GW Books, ISBN 1-872372-05-8, 235pp, paperback, £4.99. (Fantasy novel, first edition; sequel to *Zaragoz*; "Brian Craig" is a pseudonym of Brian Stableford.) *March.*

Daley, Brian. **Fall of the White Ship Avatar: A Hobart Floyt-Alacrity Fitzhugh Adventure**. Grafton, ISBN 0-586-20679-5, 368pp, paperback, £3.99. (Sf novel, first published in the USA, 1986; third in the series which began with *Requiem for a Ruler of Worlds*.) *29th March.*

De Lint, Charles. **Moonheart**. Pan, ISBN 0-330-31110-7, . 485pp, trade paperback, £7.99. (Fantasy novel, first published in the USA, 1984; proof copy received; there will also be a simultaneous hardcover edition [not seen].) *July.*

Dick, Philip K. **The Days of Perky Pat: The Collected Stories of Philip K. Dick, Volume Four**. Introduction by James Tiptree, Jr. Gollancz, ISBN 0-575-04756-9, 380pp, hardcover, £14.95. (Sf collection, first published in the USA, 1987; contains 18 stories, ranging from "Autofac" [1955] to "Oh, to Be a Blobel!" [1964].) *5th April.*

Edwards, Les. **Blood & Iron**. Introduction by Kim Newman. GW Books, ISBN 1-85515-000X, 98pp, hardcover, £12.99. (Sf and fantasy art book, with a text by the artist and many full-colour reproductions of his work; first edition.) *March (though it says "Copyright 1989" inside).*

Emshwiller, Carol. **The Start of the End of it All and Other Stories**. Women's Press, ISBN 0-7043-4219-7, 163pp, paperback, £4.95. (Sf/fantasy collection, first edition; contains 18 pieces which date from 1958 to the present, reprinted from such sources as *Dangerous Visions*, *F&SF* and *Omni*.) *12th April.*

Farris, John. **Scare Tactics**. Hodder/NEL, ISBN 0-450-52254-7, 365pp, paperback, £3.50. (Horror collection, first published in the USA, 1988; this paperback reprint is described as "expanded," and appears to contain at least one more story than the hardcover.) *March?*

Fulton, Roger. **The Encyclopedia of TV Science Fiction**. Boxtree/TV Times, ISBN 1-85283-277-0, 596pp, trade paperback, £17.95. (Reference book, first edition; an expensive but impressive tome which gives full details of all sf plays and series shown on British television since the early 1950s.) *March.*

Gardner, Craig Shaw. **Bride of the Slime Monster: The Cineverse Cycle**. Headline, ISBN 0-7472-3392-6, 248pp, paperback, £3.50. (Humorous fantasy novel, first edition [?]; sequel to *Slaves of the Volcano God*.) *26th April.*

Gemmell, David A. **Quest for Lost Heroes**. "The Drenai Saga continues..." Century/Legend, ISBN 0-7126-2512-7, 316pp, hardcover, £12.95. (Fantasy novel, first edition; there is a simultaneous trade paperback edition [not seen].) *12th April.*

Gordon, Stuart. **The Mask: The Third Book of the Watchers**. Futura/Orbit, ISBN 0-7088-8324-9, 368pp, paperback, £3.50. (Sf/fantasy novel, first edition; sequel to *Archon* and *The Hidden World*; it says "copyright 1988" inside, which suggests publication has been badly delayed; "Stuart Gordon" is the pen-name of Scottish author Richard A. Gordon.) *22nd March.*

Gronmark, Scott. **Steel Gods**. Corgi, ISBN 0-552-13455-4, 287pp, paperback, £2.99. (Horror novel, first edition [?]; the author [possibly two people] has also written horror books as "Nick Sharman.") *23rd March.*

Harris, Stephen. **Adventureland**. Headline, ISBN 0-7472-0263-X, 376pp, hardcover, £14.95. (Horror novel, first edition; proof copy received; it's a debut book by a new British author; his first name is given as "Steve" on the jacket, but it's "Stephen" on the title page.) *19th July.*

Harris, Thomas. **The Silence of the Lambs**. Mandarin, ISBN 0-7493-0054-X, 352pp, paperback, £3.99. (Psychological horror/crime novel, first published in the USA, 1988; fifth Mandarin printing; there are no supernatural elements, but this is the genuinely scary stuff: Harris's fiction is more nerve-racking than that of any other contemporary writer, making Stephen King *et al* look like pussy-cats.) *5th April.*

Harrison, Harry. **Bill, the Galactic Hero**. Gollancz/VGSF, ISBN 0-575-04701-1, 160pp, paperback, £3.50. (Humorous sf novel, first published in 1965; a minor classic, it has now spawned a belated series of sequels.) *22nd March.*

Hodgson, William Hope. **The House on the Borderland**. Afterword by Ian Sinclair. Grafton, ISBN 0-586-20863-1, 188pp, paperback, £2.99. (Fantasy novel, first published in 1908; a minor classic, and the second UK paperback reprint in less than two years [Robinson Books did one in 1988]; the afterword by Sinclair, author of *White Chappell, Scarlet Tracings*, appears to be original to this edition.) *12th April.*

Hoyle, Trevor. **The Last Gasp**. "The mesmerizing novel of ultimate ecodisaster." Grafton, ISBN 0-586-20712-0, 528pp, paperback, £4.99. (Sf novel, first published in 1983; this edition appears to be revised and updated, to cash in on the current eco-boom.) *Late entry: February publication, received in March.*

Hughart, Barry. **Bridge of Birds: A Novel of an Ancient China That Never Was**. Corgi, ISBN 0-552-12646-2, 271pp, paperback, £2.99. (Fantasy novel, first published in the USA, 1984; second Corgi printing; joint-winner [with Robert Holdstock's *Mythago Wood*] of the 1985 World Fantasy Award.) *23rd March.*

Hughart, Barry. **The Story of the Stone**. Corgi, ISBN 0-552-13400-7, 272pp, paperback, £2.99. (Fantasy novel, first published in the USA, 1988; sequel to *Bridge of Birds*.) *23rd March.*

Jefferies, Mike. **Glitterspike Hall: Book One of The Heirs to Gnarlsmyre**. Fontana, ISBN 0-00-617893-6, 413pp, paperback, £3.99. (Fantasy novel, first published in 1989.) *12th April.*

Jeschke, Wolfgang. **Midas**. "A future-thriller of replicants, conspiracy and techno-pursuit." Hodder/NEL, ISBN 0-450-50937-0, 222pp, paperback, £2.99. (Sf novel, first published in West Germany, 1987.) *Late entry: February publication, received in March.*

Jones, John G. **The Supernatural**. Sphere, ISBN 0-7221-5221-3, 374pp, paperback, £3.99. (Horror novel, first published in the USA, 1988.) *15th March.*

Kilworth, Garry. **Hunter's Moon: A Story of Foxes**. Unwin, ISBN 0-04-440615-0, 330pp, paperback, £3.99. (Fantasy novel, first published in 1989.) *5th April.*

Knight, Harry Adam. **The Fungus**. Gollancz, ISBN 0-575-04801-8, 220pp, paperback, £3.99. (Horror novel, first published in 1985; the author's initials read "HAK"; it is in fact a pseudonymous novel by John Brosnan and Leroy Kettle, and quite a fun one too.) *22nd March.*

Leiber, Fritz. **The Knight and Knave of Swords**. "The climax of the Fafhrd and Grey Mouser Epic." Grafton, ISBN 0-246-13578-6, 304pp, hardcover, £13.95. (Fantasy collection, first published in the USA, 1988; probably one of the very few sequel volumes which merits the blurb-writer's epithet "eagerly awaited"; its author will be 80 this year.) *12th April.*

Lumley, Brian. **Mad Moon of Dreams**. "Journey into nightmare in the world of Cthulhu!" Headline, ISBN 0-7472-3352-7, 248pp, paperback, £3.50. (Fantasy novel, first published in the USA, 1987; sequel to *Ship of Dreams*.) *19th April.*

MacAvoy, R. A. **The Third Eagle: Lessons Along a Minor String**. Bantam, ISBN 0-553-40175-0, 261pp, paperback, £3.50. (Sf novel, first published in the USA, 1989; this is the first sf book by the writer best known for her *Tea with the Black Dragon* and other fantasies.) *6th April.*

McCammon, Robert R. **Blue World and Other Stories**. Grafton, ISBN 0-586-20584-5,

464pp, paperback, £4.50. (Horror collection, first published in the USA, 1989.) *29th March.*

McGirt, Dan. **Jason Cosmo**. Pan, ISBN 0-330-31243-X, 220pp, paperback, £3.99. (Humorous fantasy novel, first published in the USA, 1989; people are saying good things about this one; if the birth-date given inside is correct, the [American] author is just 22 years old; our lad Tom Holt was also disgustingly young [and was also a law student] when he began writing his funny novels a few years ago.) *12th April.*

Masello, Robert. **Black Horizon**. Hodder/NEL, ISBN 0-450-51110-3, 292pp, paperback, £3.50. (Horror novel, first published in the USA, 1989.) *March?.*

Moorcock, Michael. **The Eternal Champion: Being the first story in the history of John Daker, the Eternal Champion**. Grafton, ISBN 0-586-20813-5, 203pp, paperback, £2.99. (Fantasy novel, first published in 1970; ninth Granada/Grafton printing.) *29th March.*

Morris, Janet, and Chris Morris. **Outpassage**. "Revolution, redemption and resurrection beyond the stars." Hodder/NEL, ISBN 0-450-51614-8, 368pp, paperback, £3.99. (Sf novel, first published in the USA, 1988.) *29th March.*

Newark, T. P. **The Land of Eternal Fire**. "Volume 1 of *The Falling Empires Cycle*." Muller, ISBN 0-09-174403-2, 232pp, hardcover, £11.95. (Historical fantasy [?] novel, first edition; interestingly, this seems to be yet another case of a genuine historical novel masquerading as fantasy [perhaps it's more accurately described as historical sf]; the setting is Byzantium, Armenia and Azerbaijan in the 5th century AD; it's a first novel, but the writer is appears to be a precocious expert on military history, author of several non-fiction books: he uses some exotic ancient technology here.) *5th April.*

Niven, Larry, and Steven Barnes. **The Barsoom Project**. Pan, ISBN 0-330-31445-9, 340pp, trade paperback, £7.99. (Sf novel, first published in the USA, 1989; sequel to *Dream Park*; there is a simultaneous hardcover edition [not seen]; we listed it in an earlier column, when the publishers sent us a copy of the US edition plus a UK dustjacket; we now note that they have corrected the error on the cover: it's by the "bestselling authors of *Legacy of Heorot*" [not *Footfall*].) *12th April.*

Paxson, Diana L. **Lady of Light, Lady of Darkness**. "Book One of the Chronicles of Westria." Hodder/NEL, ISBN 0-450-50938-9, 594pp, paperback, £4.99. (Fantasy novel, first published in the USA, 1982.) *Late entry: February publication, received in March.*

Pohl, Frederik. **Narabedla Ltd**. Gollancz, ISBN 0-575-04738-0, 375pp, hardcover, £13.95. (Sf novel, first published in the USA, 1988.) *22nd March.*

Pringle, David, ed. **Red Thirst**. "Warhammer." Illustrated by John Sibbick, Dave Gallagher and others. GW Books, ISBN 1-872372-07-4, 256pp, paperback, £4.99. (Fantasy anthology, first edition; contains new stories by Jack Yeovil [Kim Newman], William King, Brian Craig [Brian Stableford], Nicola Griffith, etc.) *March.*

Rawn, Melanie. **Dragon Prince, Book One**. Pan, ISBN 0-330-31274-X, 574pp, paperback, £4.50. (Fantasy novel, first published in the USA, 1988.) *12th April.*

Rawn, Melanie. **The Star Scroll: Dragon Prince, Book Two**. Pan, ISBN 0-330-31567-6, 591pp, trade paperback, £7.99. (Fantasy novel, first published in the USA, 1989; there is a simutaneous hardcover edition [not seen].) *12th April.*

Rhodes, Daniel. **Adversary**. Hodder/NEL, ISBN 0-450-51613-X, 354pp, paperback, £4.50. (Horror novel, first published in the USA, 1988; sequel to *Next, After Lucifer*; "Daniel Rhodes" is a pseudonym of Neil McMahon.) *29th March.*

Roberson, Jennifer. **Daughter of the Lion: Chronicles of the Cheysuli, Book Six**. Corgi, ISBN 0-552-13123-7, 372pp, paperback, £3.99. (Fantasy novel, first published in the USA, 1989.) *6th April.*

[Saberhagen, Fred.] Poul Anderson, Edward Bryant, Stephen R. Donaldson, Larry Niven, Fred Saberhagen, Connie Willis and Roger Zelazny. **Berserker Base**. "A collaborative novel by seven of the greatest stars..." Gollancz/VGSF, ISBN 0-575-04453-5, 316pp, paperback, £3.99. (Sf "shared-universe" anthology, first published in the USA, 1985; on the front cover and spine Stephen Donaldson is given top billing; on the title page, it's Poul Anderson; on the reviewer's compliment slip, it's Fred Saberhagen; the conscientious bibliographer almost gives up in despair; but Saberhagen invented the "Berserker" fighting-machines, and he seems to own the copyright in this volume.) *22nd March.*

Shea, Michael. **Nifft the Lean**. Grafton, ISBN 0-586-06499-0, 363pp, paperback, £3.99. (Fantasy novel, first published in the USA, 1982; second Panther/Grafton printing; winner of the 1983 World Fantasy Award.) *Late entry: February publication, received in March.*

Silverberg, Robert. **To the Land of the Living**. Gollancz/VGSF, ISBN 0-575-04496-9, 308pp, paperback, £3.99. (Fantasy novel, first published in 1989; last year's Gollancz hardcover was in fact the world first edition, which we didn't realize at the time.) *22nd March.*

Smith, Guy N. **Phobia**. Grafton, ISBN 0-586-20502-0, 252pp, paperback, £3.50. (Horror novel, first edition [?].) *12th April.*

Stephensen-Payne, Phil. **[John Christopher] Christopher Samuel Youd: Master of All Genres – A Working Bibliography**. 2nd edition. "Galactic Central Bibliographies for the Avid Reader Volume 25." Galactic Central Publications [25A Copgrove Rd., Leeds LS8 2SP], ISBN 1-871133-17-3, 9+33pp, paperbound, £1.75. (Author bibliography; the first edition appeared in 1987; the cover gives the title as *John Christopher*, but the title page says *Christopher Samuel Youd* [the subject's true name].) *Late entry: January publication, received in March.*

Stephensen-Payne, Phil, and Gordon Benson, Jr. **Gordon R. Dickson: First Dorsai – A Working Bibliography**. 4th edition. "Galactic Central Bibliographies for the Avid Reader Volume 2." Galactic Central Publications [25A Copgrove Rd., Leeds LS8 2SP], ISBN 1-871133-19-X, 9+62pp, paperbound, £2.75. (Author bibliography; the first edition appeared in 1982.) *Late entry: January publication, received in March.*

Stephensen-Payne, Phil, and Gordon Benson, Jr. **John Brunner: Shockwave Writer – A Working Bibliography**. 3rd edition. "Galactic Central Bibliographies for the Avid Reader Volume 11." Galactic Central Publications [25A Copgrove Rd., Leeds LS8 2SP], ISBN 1-871133-18-1, 9+79pp, paperbound, £3. (Author bibliography; the first edition appeared in 1983.) *Late entry: November publication, received in March.*

Stephensen-Payne, Phil, and Gordon Benson, Jr. **Philip Kindred Dick: Metaphysical Conjuror – A Working Bibliography**. 3rd edition. "Galactic Central Bibliographies for the Avid Reader Volume 18." Galactic Central Publications [25A Copgrove Rd., Leeds LS8 2SP], ISBN 1-871133-20-3, 9+102pp, paperbound, £4. (Author bibliography; the first edition appeared in 1986.) *Late entry: February publication, received in March.*

Tarr, Judith. **A Wind in Cairo**. Bantam, ISBN 0-553-17596-3, 261pp, paperback, £2.99. (Fantasy novel, first published in the USA, 1989.) *23rd March.*

Tolkien, J. R. R. **The Letters of J. R. R. Tolkien: A Selection**. Edited by Humphrey Carpenter with Christopher Tolkien. Unwin, ISBN 0-04-440664-9, 463pp, paperback, £6.99. (Letter collection, first published in 1981.) *29th March.*

Tuttle, Lisa, ed. **Skin of the Soul: New Horror Stories by Women**. Women's Press, ISBN 0-7043-4220-0, 231pp, paperback, £5.95. (Horror anthology, first edition; there is a simultaneous "collectors' hardback edition" [not seen]; this is a mainly original anthology [the Joan Aiken, Suzy McKee Charnas and Joyce Carol Oates stories appear to be reprints], with work by Karen Joy Fowler, Josephine Saxton, Lisa Tuttle, Cherry Wilder and many lesser-knowns.) *19th April.*

Vonarburg, Elisabeth. **The Silent City**. Translated by Jane Brierley. Women's Press, ISBN 0-7043-4218-9, 247pp, paperback, £4.95. (Sf novel, first published in France as *Le Silence de la cite*, 1981; the author now resides in Canada, where this translation first appeared in 1988; William Gibson extols it on the cover.) *19th April.*

Weis, Margaret, and Tracy Hickman. **The Rose of the Prophet, Volume One: The Will of the Wanderer**. Bantam, ISBN 0-553-17684-6, 444pp, paperback, £3.99. (Fantasy novel, first published in the USA, 1988.) *23rd March.*

Wurts, Janny. **Shadowfane**. "Book Three of *The Cycle of Fire*." Grafton, ISBN 0-246-13597-2, 318pp, trade paperback, £7.99. (Fantasy novel, first published in the USA, 1988; there is a simultaneous hardcover edition [not seen].) *8th March.*

Also Received

Anthony, Piers, and Robert E. Margroff. **Chimaera's Copper**. TOR, ISBN 0-312-93213-8, 311pp, hardcover, $17.95. (Fantasy novel, first edition; sequel to *Dragon's Gold* and *Serpent's Silver*; proof copy received.) *April.*

Rucker, Rudy, Peter Lamborn Wilson and Robert Anton Wilson, eds. **Semiotext(e) SF**. Autonomedia/Semiotext(e) [55 South 11th St., Brooklyn, NY 11211-0568, USA], ISBN 0-936756-43-8, 384pp, trade paperback, $10. (Sf anthology, first edition; contains original short pieces by J. G. Ballard, Barrington Bayley, Michael Blumlein, William Burroughs, Philip José Farmer, William Gibson, Richard Kadrey, Rachel Pollack, Robert Sheckley, John Shirley, Bruce Sterling, Ian Watson, Colin Wilson, etc.; a number of *Interzone* rejects have ended up in this much-delayed anthology, as its editors are happy to point out.) *Late entry: it says "copyright 1989" inside, but was received by us in March.*

Schweitzer, Darrell. **The White Isle**. "Weird Tales Library." Illustrated by Stephen Fabian. Owlswick Press [Box 8243, Philadelphia, PA 19101, USA], ISBN 0-913896-26-8, 139pp, hardcover, $18.95. (Fantasy novel, first edition; a revised version of a tale originally serialized in *Fantastic Stories*, 1980; there is a simultaneous signed limited edition [not seen].) *Late entry: it says "copyright 1989" inside, but was received by us in March.*

Sladek, John. **The Muller-Fokker Effect**. Carroll & Graf, ISBN 0-88184-548-5, 224pp,

paperback, $3.95. (Sf novel, first published in 1970; this was Sladek's second satirical novel, and it's a most welcome reprint: when will some UK paperback publisher also give us a new edition?) *17th March.*

Weiner, Andrew. **Distant Signals and Other Stories**. Porcepic/Tesseract [4252 Commerce Circle, Victoria, BC V8Z 4M2, Canada], ISBN 0-88878-284-5, 236pp, trade paperback, no price shown. (Sf collection, first edition; contains a dozen stories, reprinted from such sources as *Asimov's, F&SF* and *Again, Dangerous Visions*; unfortunately, it doesn't include the one story Weiner has contributed to *Interzone* ["The Third Test," issue 2].) *Late entry: it says "copyright 1989" inside, but was received by us in March.*

Note: *foreign publishers of English-language books, please send us your sf and fantasy titles, as we shall be running an "Overseas Books Received" column from now on.*

Magazines Received
March 1990

The following is a list of all English-language sf- and fantasy-related journals, magazines and fanzines received by Interzone *during the month specified above. It includes overseas publications as well as UK periodicals. (Some foreign titles reach us late if they have been posted seamail.)*

Australian Science Fiction Review (Second Series) Vol. 4, no. 5, "Summer" 1989 (i.e. winter 1989-90, from a down-under perspective). ISSN 0818-0180. 40pp. Eds. Jenny Blackford *et al*, c/o Ebony Books, GPO Box 1294L, Melbourne, Victoria 3001, Australia. Quarterly critical journal of high quality. A4 size, sans illustrations. Contributors: Gregory Benford, Damien Broderick, Peter Nicholls, Franz Rottensteiner, Ian Watson, etc. $15 Australian for six issues; £10, UK (the latter payable to Joseph Nicholas, 5A Frinton Rd., Stamford Hill, London N15 6NH; this magazine is looking better and better; we recommend you give it a try.)

Black Hole no. 29, February 1990. ISSN 0140-0274. 56pp. Ed. Ian Creasey, Leeds University Union, PO Box 157, Leeds LS1 1UH. Irregular fanzine of LU SF Soc. A5 size, with a few black-and-white illustrations. Contributors: D. F. Lewis, Mike Scott Rohan, etc. No price given (though the last issue, more than six months ago, was cited at £1 a copy, payable to "L.U.U Black Hole Periodical Society.")

The Edge no. 2, March-April 1990. ISSN 0955-2316. 32pp. Ed. Graham Evans, 56 Writtle Rd., Chelmsford, Essex CM1 3BU. Irregular semi-professional fiction and non-fiction magazine. A4 size, with black-and-white cover and illustrations. Contributors: S. M. Baxter, Andy Darlington, t. Winter-Damon, etc. £4.50 for three issues, UK; $10, USA. (It kicks off with an opinion column, by Patrick Whittaker, which says of *Interzone*, "safe and boring...it also (so we're told) aspires to experiment. On that count, it fails miserably...It's that lack of experiment which makes *Interzone* such a sure-fire soporiphic [sic]." These young turks do have to have something to kick against, we suppose, and *IZ* is the only game in town.)

Fantasy & Science Fiction no. 467, April 1990. ISSN 0024-984X. 164pp. Ed. Edward L. Ferman, Box 56, Cornwall, Conn. 06753, USA. Monthly fiction magazine of high repute. Digest size, with colour cover but no internal illustrations other than adverts and a couple of cartoons. Contributors: Bradley Denton, Thomas Ligotti, Wayne Wightman, etc., plus non-fiction columns by Isaac Asimov, Algis Budrys and Orson Scott Card. $21 per annum, USA; $26, overseas. (Too cheap! It's time they raised their subscription rates.)

Fear no. 16, April 1990. ISSN 0954-8017. 84pp. Ed. John Gilbert, Newsfield, Ludlow, Shropshire SY8 1JW. Monthly horror-movie-cum-fiction magazine (five stories this time). A4 size, with some colour illustrations. Contributors: Thomas Ligotti, Darrell Schweitzer, etc., plus interviews with Anne Rice, Peter Straub and others. £16 per annum, UK; £23, Europe; £36, airmail outside Europe.

FTL: The Magazine of the Irish Science Fiction Association no. 4, Spring 1990. No ISSN shown. 40pp. Ed. David Egan, 30 Beverly Downs, Knocklyon Rd., Templeogue, Dublin 16, Ireland. Quarterly fanzine. A5 size, with black-and-white cover and illustrations. Contributors: Nicholas Emmett, Brian Harvey, etc. £6 per annum, Ireland & UK; £7, overseas. (In an accompanying note, assistant editor Brendan Ryder says that they're seeking submissions, fiction and articles, but that they do not presently pay for material.)

Friends of Foundation Newsletter no. 1, March 1990. No ISSN shown. 8pp. Ed. Paul Kincaid, 60 Bournemouth Rd., Folkestone, Kent CT19 5AZ. Thrice-yearly newsletter for supporters of the Science Fiction Foundation, Polytechnic of East London. A5 size, sans illustrations. Contributors: George Hay, Rob Meades, etc. Membership of FoF: £12.50 per annum, UK (which includes a subscription to the journal *Foundation*; but for those who already so subscribe, it's £4 per annum); £17.50, overseas. (Contact: Rob Meades, 75 Hecham Close, Walthamstow, London E17 5QT.)

Locus: The Newspaper of the SF Field no. 350, March 1990. ISSN 0047-4959. 84pp. Ed. Charles N. Brown, PO Box 13305, Oakland, CA 94661, USA. Monthly news magazine. US quarto size, with colour cover and mainly black-and-white interior illustrations. Contributors: Richard Curtis, Fritz Leiber, Edward Bryant, etc, plus Dan Simmons interview. $28 per annum, USA; $32 seamail or $50 airmail, Europe. (UK agent: Fantast [Medway] Ltd., PO Box 23, Upwell, Wisbech, Cambs. PE14 9BU.)

Locus: The Newspaper of the SF Field no. 351, April 1990. ISSN 0047-4959. 56pp (smaller than usual, though bulked out by copious bound-in advertising inserts). Ed. Charles N. Brown, PO Box 13305, Oakland, CA 94661, USA. Monthly news magazine. US quarto size. Contributors: Carolyn Cushman, Faren Miller, Mark R. Kelly, Tom Whitmore, etc, plus Peter Straub interview. *Note new subscription rates*: $32 per annum, USA; $37 seamail or $60 airmail, Europe. (UK agent: Fantast [Medway] Ltd., PO Box 23, Upwell, Wisbech, Cambs. PE14 9BU.)

New York Review of Science Fiction no. 19, March 1990. No ISSN shown. 24pp. Eds. Kathryn Cramer, David G. Hartwell *et al*, c/o Dragon Press, PO Box 78, Pleasantville, NY 10570, USA. Monthly critical journal of high standards. US quarto size, sans illustrations. Contributors: Richard A. Lupoff, Paul Preuss, Gene Wolfe, etc. $24 per annum, USA; $36, overseas (payable to "Dragon Press").

Nocturne no. 2 ("Secundus"), undated (late 1989). No ISSN shown. 56pp. Eds. Michael J. Lotus and Vincent L. Michael, PO Box 1715, Chicago, IL 60690, USA. Irregular semi-professional magazine devoted to dark fantasy, prose, verse, illustration, etc. US quarto size, black-and-white throughout but very handsomely produced. Contributors: numerous, and many of them appropriately deceased, ranging from Charles Baudelaire to H. P. Lovecraft. No subscription rates shown – it's such a classy product, they apparently don't sully themselves with money matters. (UK agent: Mark Valentine, 109 Oak Tree Rd., Bitterne Park, Southampton SO2 4PJ; he'll send you one for £3.)

Nova Express no. 9, Fall 1989. No ISSN shown. 26pp. Ed. Michael Sumbera, PO Box 27231, Austin, TX 78755-2231, USA. Quarterly sf fanzine of good quality. US quarto size, with black-and-white illustrations. Contributors: Brad Linaweaver, etc., plus an interview with Pat Cadigan. $10 per annum, USA; $20, overseas.

Nova SF no. 1, Spring 1990. ISSN 0958-7756. 38pp. Ed. Adrian Hodges, 3 Ashfield Close, Bishops Cleeve, Cheltenham, Glos. GL52 4LG. Quarterly (?) fiction fanzine. A5 size, with black-and-white cover and illustrations. Contributors: Andrew Darlington, Matthew Dickens, etc. £4.50 for four issues, UK (payable to "A. Hodges"); enquire with two IRCs for overseas rates. (This is a replacement for the same editor's *New Visions*, which seems to have lasted just one issue; it's a member of the New SF Alliance – write to the address for *Back Brain Recluse* [see our Small Ads] for further details of this small-press clearing-house.)

Science Fiction Chronicle no. 126, March 1990. ISSN 0195-536540pp. Ed. Andrew I. Porter, PO Box 2730, Brooklyn, NY 11202-0056, USA. Monthly news magazine. US quarto size, with colour cover and black-and-white interior illustrations. Contributors: Don D'Ammassa, Steve Jones & Jo Fletcher, Ed Naha, etc. $27 per annum, USA; £21, UK (the latter payable to "Algol Press," c/o Ethel Lindsay, 69 Barry Rd., Carnoustie, Angus DD7 7QQ).

Science-Fiction Studies no. 50, March 1990. ISSN 0091-7729. 128pp. Eds. Robert M. Philmus and Charles Elkins, English Dept., Concordia University, 7141 Sherbrooke St. W., Montreal, Quebec H4B 1R6, Canada. Thrice-yearly critical journal of rigorous academic standards. Book-shaped and perfect-bound, sans illustrations. Contributors: Roger Bozzetto, Glenn Grant, Patrick Parrinder, etc. $14 per annum, USA; $16.50, overseas. (Contains articles with titles such as "Reducing the Dystopian Distance: Pseudo-Documentary Framing in Near-Future Fiction" – this is the journal to buy in order to impress people.)

SF Commentary no. 68, March 1990. No ISSN shown. 40pp. Ed. Bruce Gillespie, GPO Box 5195AA, Melbourne, Victoria 3001, Australia. Irregular critical fanzine of an intelligent but engagingly chatty nature. A4 size, sans illustrations. Contributors: David Langford (reprints of his columns from *GM*), Colin Steele, Michael Tolley, etc. $25 Australian for six issues; £15 for five issues, UK.

White Dwarf no. 124, April 1990. ISSN 0265-8712. 84pp. Ed. Simon Forrest, Games Workshop Design Studio, Enfield Chambers, 14-16 Low Pavement, Nottingham NG1 7DL. Monthly games magazine. US quarto size (approx.), with some full-colour illustrations. Contributors: various. £18 per annum, UK; £36, overseas.

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Interaction

Dear Editors:
I've been a subscriber to *Interzone* for a year now, plus I've picked up several back issues. First, I'm delighted you're going monthly since it means more *IZ*. I think *IZ* is the best sf magazine, period. I say this even though the fiction is sometimes uneven – from great stories to mediocre. But so are all the other magazines, and anthologies.

Second, you are doing a real service with your "All New Star" issues, and I hope you continue these regularly. Say, now that you're monthly, twice a year? It gives new, relatively unknown writers a showcase of their own, which most fledglings may need to show their stuff.

Third, the non-fiction, which was one of my reasons for subscribing. The only feature I don't care for is your "Big Sellers" series. That's because I haven't read much of these writers, and don't care for what I have read. When you get round to Aldiss, Ballard, Moorcock, Le Guin, I may read the pieces (I know, I know – these aren't "bestsellers" like Adams, Donaldson, McCaffrey). I *do* enjoy the interviews with lesser-selling writers. Nick Lowe is always interesting, Charles Platt is wonderfully contentious, John Clute is one of the true sf genre *critics*; McAuley and the other reviewers are also good – better than the stuff in US sf magazines.

Fourth, cover illustrations. I don't like "narrative covers," so ubiquitous on American genre mags and books. They're a leftover from the pulps. Of the issues of *IZ* I've seen, the best cover by far is on number 34, with second place for number 21, both by Ian Miller. What works best is something "abstract/surreal." I notice from the UK books I've picked up (through the amazing Mark Ziesing and other mail-order services) that there are a lot more of these good covers, such as the ones for Carroll's *A Child Across the Sky*, Ryman's *The Child Garden*, Jones's *Kairos* and anything from Morrigan Books. It's really refreshing after the pulpish crap we get on US book covers (with a few exceptions such as the work of Leo and Diane Dillon).

Fifth, interior illustrations. A few (very few) are first rate, most are not. On the whole, I'd rather have that space used for *wordage*. Maybe you could get in another story. *F&SF*, as you know, has never had illustrations, and its readership doesn't seem to mind. Why not try an issue without interior illustrations and see what response you get? After all, *IZ* is progressive, still growing, experimenting – mutating.

Another general observation, not related directly to *IZ*. It seems to me British sf publishers are far more adventurous and a lot less locked into safe pseudo-medieval fantasy series crap, or clone-trilogies, or even the "bottom line." (US business, including conglomerate-dominated publishing, has decided the product of business – even publishing – is neither goods nor services. It's profit. Money. Period.) I'm overjoyed to see Jonathan Carroll, Ryman, Jones (Gwyneth), Banks and others given hardcover publication. As well as Aldiss (whose *Life in the West* and *Last Orders* have *finally* just been published here – FINALLY). Stableford's *The Empire of Fear* still hasn't been published here, to my knowledge, despite the vampire boom. And I understand Misha Chocholak's first novel, *Red Spider, White Web*, was not even offered to any US publisher, but went straight to Morrigan (what a truly marvellous publisher) and is probably out by now.

It looks as if, judging from from lists of books published in Britain, US writers dominate by sheer numbers. But at least UK publishers also publish UK writers, even new ones (for example, Kim Newman, whose *The Night Mayor* is the best first novel in a couple of years). That British writers have difficulty in getting published here – when they do – is the shame of American publishing philosophy. You Brits have a lot to show US writers, more than all-but-a-few American writers have to show you. It seems to me British sf at its best is simply more *innovative*.

I've gone on way too long. I wish you a long and successful future, growing (as I believe you will) better and better.
Stanley Aspittle
Santa Barbara, California

Editor: *Phew! Thanks for the encouragement. Just to answer a few of your points, I concur with your praise of the cover artwork on certain UK-published books, such as* The Child Garden *(Unwin Hyman; artist Dave McKean) and* A Child Across the Sky *(Century Hutchinson; artist Janet Woolley). And I'm glad you appreciate Ian Miller, who has contributed so much to* Interzone *(by the way, he has been commissioned by Gollancz to do the cover for Gibson and Sterling's* The Difference Engine, *which may prove to be this year's most sought-after first edition). But some of Britain's more straightforwardly "narrative" cover artists are also eminently skilled – for example, the marvellous Jim Burns, whose cover painting for the forthcoming reprint of Karen Joy Fowler's* Artificial Things *(Bantam) is one of the most stunning pictures I've ever seen on a paperback book.*

As to your suggestion that we do away altogether with interior illustrations: I'm afraid I don't think the British newstrade would appreciate such a move at all. I've often been amused by the reactions of people in the magazine business when they first see Interzone. *(I'm talking about people who are quite unfamiliar with sf magazines.) They usually say: "All these words! These columns and columns of text! How do your readers put up with it? Why aren't there more illustrations? Why aren't there more adverts? You've got to get rid of all that wordage!" I try to explain that the solid text is precisely what our readers buy the magazine for, and that American sf magazines (on the whole) contain even more words and even fewer illustrations. But they're invariably amazed and unconvinced. I suppose we sf folk are just plain old-fashioned in our dedication to the printed word.*

Dear Editors:
Ian Watson's "The Eye of the Ayatollah" (*IZ* 33) was so good that I literally shouted with delight. (That sounds like sycophantic drivel from a paperback cover, but it's *true*.) A fable, by nature, is contrived and didactic, but the central idea here was so simple, and yet so devastatingly precise, that it carried the story effortlessly. I only hope that neither *Interzone* nor the author suffer any Rushdie-style persecution.

I also thought MacLeod's "Well-Loved" was brilliant, easily the best thing in *IZ* 34, and one of the best stories for a long time. I usually hate near-future stories with inexplicably advanced technology that really might as well be magic, but everything else was so well done that I had no choice but to suspend disbelief. I hope Ian MacLeod is sending you truckloads.
Greg Egan
Perth, Australia

Dear Editors:
Issue 34 of *IZ* was one of the best sf publications I've seen in months, anywhere. You've got some real discoveries in Beetlestone and Calder, and MacLeod, Dickens and Glenn Grant show a lot of promise. I'm really delighted that things seem to be moving in British sf, with new, young and combatively ambitious writers appearing right and left, some fraction of them actually good, and all of them too naive and energetic to realize how hopeless it's all supposed to be.

This rosy European dawn, too, after so many years of chill disappointment and decline! I suspect that in the early 90s American sf will be looking slack-jawed to Britain, since our country is, as Lucius Shepard aptly points out in *IZ* 34, "run by third-rate stupid fucks who deserve to be slaughtered," while your third-rate stupid **** has apparently tripped headlong over her Poll Tax and may get the Ceausescu treatment in short order. Oh joyous prospect.
Bruce Sterling
Austin, Texas

Dear Editors:
Just received my latest *Interzone*. Monthly, brilliant! Count on me as a regular subscriber. I may not be as qualified as some to comment, but having joined the New SF Alliance (another brilliant idea) and read through sample copies of other magazines, I have to say *IZ* stands out as the best by a mile (only *Works* came close with the quality of content, and such a cute size too). Some were just too way-out to be taken seriously, a couple had a really cheapo look which doesn't encourage anyone to open their blotchy pages, and one I found completely incomprehensible and would have needed a dictionary to understand the stories – not my idea of fun. Keep up the good / fantastic / awe-inspiring work. (Loved David Langford's piece in number 35.)
Deborah Beard
Birmingham

Dear Editors:
In her letter in *IZ* 36 Sherry Coldsmith takes us to task for our review of Nicola Griffith's story "Mirrors and Burnstone" (anthology reviews, *IZ* 33). Ms Coldsmith makes the mistake of equating writing about a just cause with writing *well* about it. The purpose of our review was to evaluate the quality of the stories in the *Interzone: The 4th Anthology*, not the quality of the ideals that the stories espouse. We'd be quite happy to accept the notion that the characters in "Mirrors and Burnstone" resolve their problem as women relating to other women, but we'd rather see this achieved in a convincingly rationalized sf story, not delivered as a bald statement of fact. *IZ* exists to publish fiction; not, we hope, lectures.

Had Ms Coldsmith made a more careful study of our two reviews in that issue, she would have noticed that we single out Nicola Griffith's *Ignorant Armies* story for praise. "The Other" is also a feminist story. It also has female characters solving problems by relating to each other as women. It's also a better *story* than "Mirrors and Burnstone," a benchmark of maturity for a fast-improving new writer.
Neil Jones & Neil McIntosh
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Interface

Continued from page 4

of award winners in the science-fiction field – best novel, best novella, best novelette, best short story, and so on – and there are many different awards (the Philip K. Dick Award and the Arthur C. Clarke Award are two comparatively recent ones to rank alongside the Hugo and Nebula). I report the winners in this column each year as they are announced, and I have done so for the past four or five years. Nevertheless, people want a handy, collated list. There isn't space for me to give a complete one, but here are all the winners of the Hugo and Nebula Awards in the category of "Best Novel" for the decade of the 1980s:

1980: *The Snow Queen* by Joan D. Vinge (Hugo)
Timescape by Gregory Benford (Nebula)
1981: *Downbelow Station* by C. J. Cherryh (H)
The Claw of the Conciliator by Gene Wolfe (N)
1982: *Foundation's Edge* by Isaac Asimov (H)
No Enemy but Time by Michael Bishop (N)
1983: *Startide Rising* by David Brin (H)
Startide Rising by David Brin (N)
1984: *Neuromancer* by William Gibson (H)
Neuromancer by William Gibson (N)
1985: *Ender's Game* by Orson Scott Card (H)
Ender's Game by Orson Scott Card (N)
1986: *Speaker for the Dead* by Orson Scott Card (H)
Speaker for the Dead by Orson Scott Card (N)
1987: *The Uplift War* by David Brin (H)
The Falling Woman by Pat Murphy (N)
1988: *Cyteen* by C. J. Cherryh (H)
Falling Free by Lois McMaster Bujold (N)

The winners for **1989** have still to be announced at this time of writing (I'll be reporting them in future columns), but the nominees in the novel category are as follows. **Hugo:** *The Boat of a Million Years* by Poul Anderson, *Prentice Alvin* by Orson Scott Card, *A Fire in the Sun* by George Alec Effinger, *Hyperion* by Dan Simmons and *Grass* by Sheri S. Tepper. **Nebula:** *The Boat of a Million Years* by Poul Anderson, *Prentice Alvin* by Orson Scott Card, *Good News from Outer Space* by John Kessel, *Ivory* by Mike Resnick, *The Healer's War* by Elizabeth Ann Scarborough and *Sister Light, Sister Dark* by Jane Yolen.

The Hugo winners will of course be announced at the **World SF Convention** in the Hague, Netherlands, this August. *Interzone* itself has been shortlisted yet again for one of the awards – in the "best semi-professional magazine" category. It will almost certainly be the last time we are eligible for this award, since our print run is now too high for us to be considered semi-pro (although in 1989, which is the year in question, it averaged out at just under 10,000 copies per issue, the crucial cut-off point according to the Hugo rules). Oddly enough, there is no Hugo category for "best *professional* magazine," so there go our chances of ever gaining an award in the future. Ah, well.

ODDS AND ENDS

The American small-press magazine **New Pathways** has announced that it's moving from a quarterly to a bimonthly schedule. Publisher Michael Adkisson writes: "you'll see we're following in your footsteps. Don't worry – I still think *Interzone* is the greatest!" It's kind of him to say so, and I wish him the best of luck with his own magazine.

Editor **John Jarrold**, of Macdonald/Futura ("Orbit"), has been promoted to Publishing Director. Among his recent acquisitions are two new sf novels by **Iain Banks**, the first of which, *The Use of Weapons*, should be out in September. The deal was £150,000 for two books, which must make Banks the current moneyspinner among younger British sf authors. Jarrold has also acquired a major new horror fantasy, *The Fetch*, by **Robert Holdstock** (another author to bolt the Gollancz stable?). John kindly goes on to inform us that he's reprinting **Robert Heinlein**'s "controversial 1964 novel" *Farnham's Freehold*, though I'm not quite sure why he wants to tell us this underwhelming piece of news.

Terry Pratchett and **Neil Gaiman** are contemplating a follow-up to their very funny novel *Good Omens* (recently published by Gollancz, and reviewed by John Clute in this issue). The provisional title is *664: The Neighbour of the Beast...*

Trumpet-blowing time: yours truly has delivered a big new non-fiction book, immodestly called **The Ultimate Guide to Science Fiction**, to Grafton Books. It's scheduled for November 1990 publication, in hardcover and trade paperback. A sort of *Halliwell's Film Guide* for the sf genre, it was written with the assistance of trusty *IZ* reviewer **Ken Brown**. I would have preferred to call it *Science Fiction: The Works*, a much more descriptive title, but the publishers insisted on *The Ultimate Guide...*, and Ken and I are just going to have to live with that.

(David Pringle)

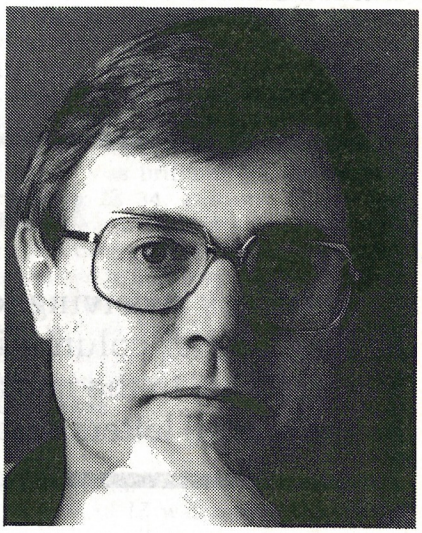

Photo of David Pringle by Ian Sanderson

COMING NEXT MONTH

Our special Brian Aldiss birthday issue, with a new long story, "A Life of Matter and Death," and extracts from his forthcoming novel, *Dracula Unbound*, and memoir, *Bury My Heart at W. H. Smith's* – and more. Also, there's the powerful conclusion of Greg Bear's short novel, "Heads," and new stories by Susan Beetlestone and Brian Stableford. Plus Charles Platt's column and all our usual non-fiction. So don't miss the August 1990 issue, out in July.

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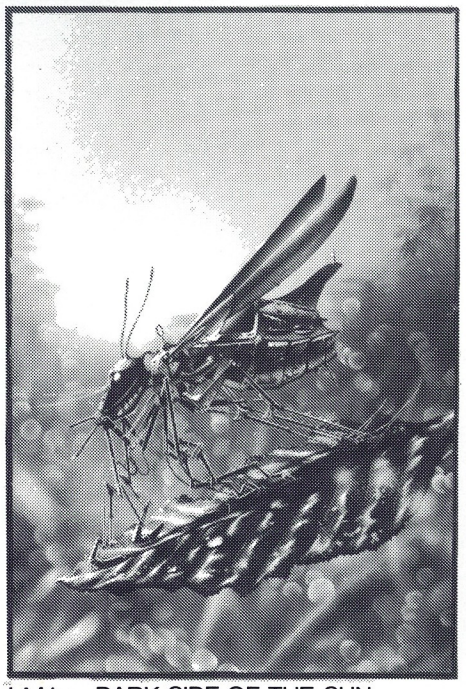

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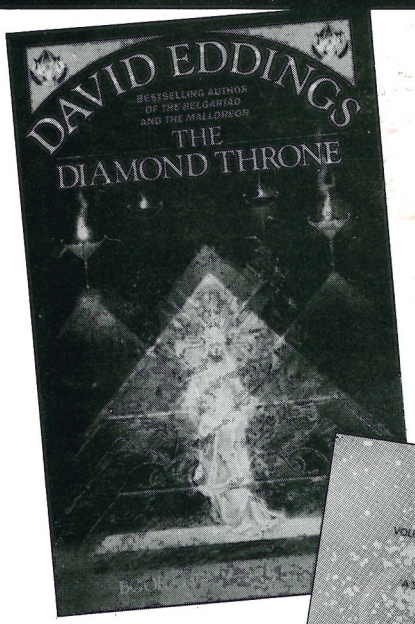

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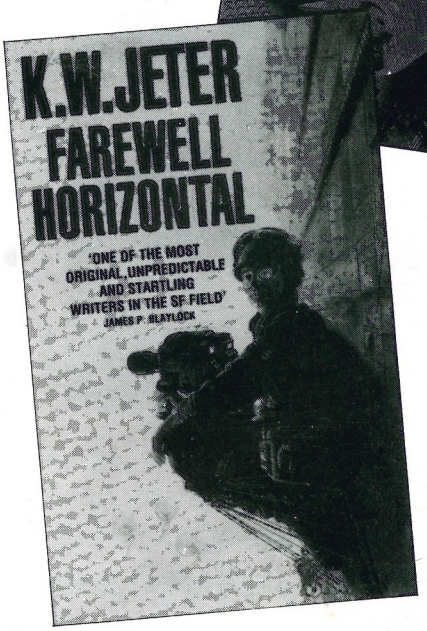

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