

AMAZING Stories

Vol. LXVI, No. 11

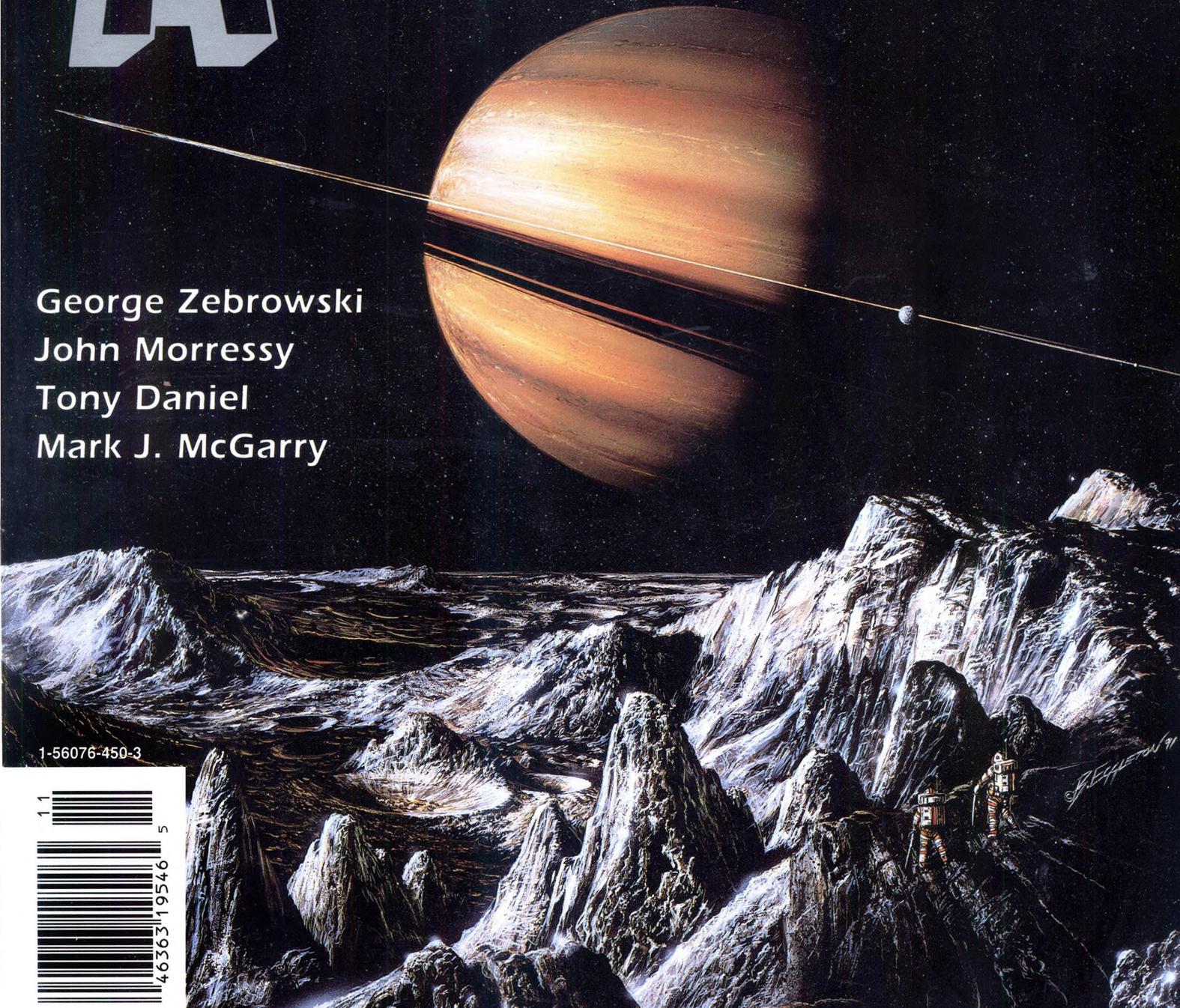
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# AMAZING<sup>®</sup> STORIES

ZEBROWSKI, MORRESSY, MCGARRY

George Zebrowski  
John Morressy  
Tony Daniel  
Mark J. McGarry



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Vol. LXVI, No. 11

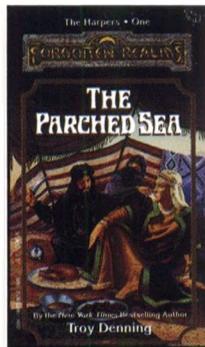
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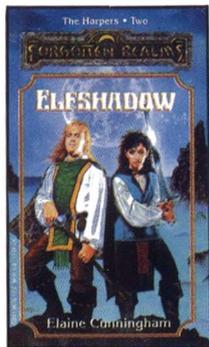
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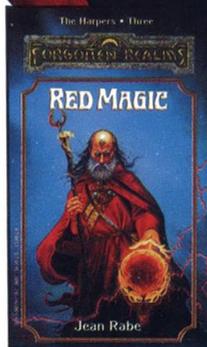
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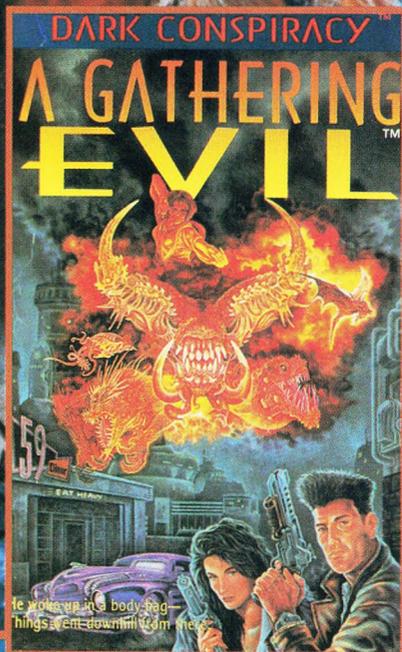
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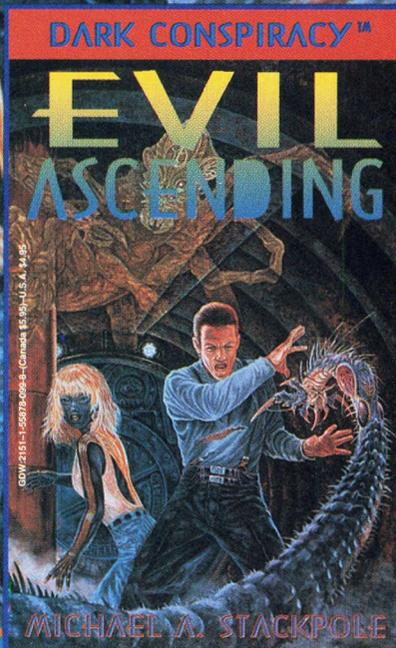
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# For Whose Convenience?

Kim Mohan

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Dear Editor,

I am writing to request a copy of your publication's guidelines for writers. I have enclosed an SASE for your convenience.

—

This kind of letter shows up in the mail dozens of times a week. On a good day, I'm amused by them; on a bad day, I'm a little irritated.

An SASE for *my* convenience? Let's back up a minute. . . .

Every publishing company I know of has some basic rules—common, if not universal, in the industry. One of those is The SASE Rule: If you write a letter or submit a manuscript to a publisher and expect to get a response, you *must* enclose a **Self-Addressed, Stamped Envelope**. This point has been made in so many market reports and so many articles about How to Be a Writer that I can't imagine how anyone who is serious about writing could not know it. Yet every week we get a few stories that come in naked—nothing in the envelope except the pages of the manuscript. (Amazingly, a few of those stories come from people who have received our guidelines—in which, of course, The Rule is stated in no uncertain terms.) And we get lots of those courteous but strangely worded requests for guidelines.

The SASE doesn't just make it convenient for us to send those guidelines—it makes it *possible*. Few publishers, if any, are willing to absorb

the expense of materials, postage, and time that would be involved in grabbing an envelope from the office supply, writing an address on it, and sticking a stamp on it. Sure, twenty-nine cents (plus the cost of a single envelope) is no big deal, and the few seconds it would take to do this work is really no time at all. But multiply those pennies and seconds by a factor of a few dozen or a few hundred a month; it adds up to a chunk of change and a lot of time we shouldn't have to spend.

I suppose there are a lot of editors and editorial staff members—who are otherwise extremely nice people—who simply consider any no-SASE communication as one more contribution for the recycling bin. Whether it's a one-paragraph letter or a fifty-page manuscript, it becomes garbage the moment the envelope is opened. Although that's not necessarily the way we operate, I certainly understand why some companies never bend The Rule.

Around here, no SASE does not always mean no response. Once in a *great* while, if my gut instinct tells me that a story is worth reading even though it came in naked, I'll look at it. If someone sends a letter that's remarkable in some respect, I'll put it on my stack of correspondence. If I still feel like answering it the next time I pick it up, I'll spend twenty-nine cents and a few minutes to do that; if not, it goes into the bin later instead of sooner.

In fact, we don't immediately toss

out any manuscript that arrives without an SASE; we keep them in an alphabetical file for anywhere from three to six months (depending on how soon the file drawer fills up), in case a writer contacts us to find out what happened to his opus. If that letter of inquiry contains an SASE (sometimes people *do* learn), then we'll write back to report that the story is being held for ransom: send us an envelope and some small, unmarked stamps . . .

Naturally, there are exceptions. If I get a letter or a manuscript from someone I know as a friend on a personal or professional level, I'm not about to trash it. (You know who you are.) Most of the time, those people provide an SASE anyway—because they know it's the courteous and professional thing to do. Once in a while I solicit a submission from a Famous Writer, or the agent of a FW, and in such a case both of us understand that no SASE is required—I asked for the story, and so I'm perfectly willing to pay the freight if it has to be returned.

I do feel sorry for the people who don't know any better. If I had an extra couple of hours a week, and if I had the right to spend this company's money any way I wanted to, I'd devote myself to spreading the gospel about SASEs one person at a time.

But I don't have either of those things; instead, I have this space on page 4 to use for any worthwhile purpose . . . this time around, for *your* convenience. ♦

# Reflections

Robert Silverberg

---

Sometimes great empires *do* go out of business in something like a voluntary way. I remember when the far-flung British Empire was dismantled after World War II: first India was cut loose, and then the African colonies (Kenya, Tanganyika, Nyasaland and such), and finally even the small Caribbean islands, known only to winter vacationers and stamp collectors—Grenada, St. Kitts, Dominica, St. Lucia, etc., etc. Eventually the whole worldwide aggregation of possessions, put together so laboriously during the eighteenth and nineteenth centuries, had been turned loose, filling the U. N. with exotic new members and turning Great Britain once more into a minor island nation living on its imperial memories and trying to contend with the flood of ex-colonial peoples who had taken up residence in the former mother country.

The end of the British Empire was dictated by external forces—the impoverishment of Great Britain by two world wars, making it unable to cope with the rise of nationalist fervor among the colonial peoples, so that it became more sensible to let the colonies go than to try to hang on to them. Still, it was very much a voluntary withdrawal when we compare it with the behavior of imperial aggregations of the past, which more often than not engaged in desperate terminal struggles to survive. (Cf. the Seleucids of Syria, the Mongols of the Khanate, the Third Reich, etc., etc.)

But the British Empire at its most flagrantly imperialistic was a relatively benign affair, not much given to wholesale massacre and brainwashing of the subject populations. Now, though, the Evil Empire itself has struck its colors and dissolved itself peacefully—the vast and loathsome Soviet Union, after seven decades of imposing the cruel hoax of its unproductive political ideology on the peoples of the Russian heartland and on their unwilling neighbors to the west, has simply dried up and blown away. It is an extraordinary development in modern history, which very few prophets indeed had foreseen.

The problem, of course, is that Communism simply didn't work; by destroying economic incentive, it ensured the gradual impoverishment of those who lived under it, thus requiring totalitarian political methods in order to keep its advocates in power. Dictatorial governments may hang on in the short run, but eventually their innate shortcomings create such havoc that the consent of the governed is withdrawn—as in Nero's Rome, in France in 1789, in Romania in 1989. The great achievement of Mikhail Gorbachev was to realize that the consent of the governed in the U.S.S.R. and its satellites could no longer be maintained by force, and so he resolved to lift the force—whereupon the people, untrammelled at last, discarded not only their leaders and their economic system but the structure of their nation itself.

The interesting thing about these startling events, from the standpoint of the science-fiction connoisseur, is that it took only seventy-four years for Leninist-Stalinist Communism to fall apart. Most of our great empires have lasted somewhat longer than that: the Roman, for instance, had five or six pretty good centuries, beginning with Rome's conquest of the Hellenistic world in the second century B.C. and continuing on through Constantine's division of the empire in the fourth century A.D. The Byzantine Empire that succeeded it lasted for a thousand years, with some interruptions. The great imperial dynasties of China held sway over much of Asia for an even longer period. The Terran record seems to be held by the Pharaonic Egyptians, who managed to sustain a coherent political system for close to three thousand years, again with a few interruptions. (For most of that time, though, the Pharaohs ruled over a compact and culturally homogeneous territory, what we would call a kingdom rather than an empire.)

But the grand and glorious Evil Empires of science fiction (and even the good ones) tend to survive much longer than that. The durability that is ascribed to them in our classic novels ranges far into the High Metaphoric.

Consider the empire that Frank Herbert created in *Dune*. I am indebted to Will McNelly's formidable *Dune Encyclopedia*, certainly the most impressive secondary work of

science fiction ever constructed, for giving us a historical chart that views most of what we regard as history as falling under the First Empire, founded by Alexander the Great and enduring in various permutations for close to five thousand years, covering our entire era and then some. Then two periods of instability, known as The Empire of a Thousand Worlds and the Age of Ten Thousand Emperors, disrupted it for a period of some forty-five centuries until the Wars of Reunification (lasting twenty-five hundred years!) led to the Empire of Ten Thousand Worlds and the First Golden Age. Yet even that was only the dawn of the real imperial period, and Herbert's chronology mounts on through dynasty after dynasty for an additional *twenty thousand years*. Herbert is dealing, in other words, not with plausible realities but with sweeping poetic hyperboles. A shrewd observer of political trends, he knew as well as anyone that the structures of human society are unlikely to endure in recognizable form for more than a dozen generations or so. But the grandeur of his vision led him to expand his time-frame to cover not mere centuries but whole bushels of millennia. He wasn't writing political history; he was writing science fiction of a splendidly megalomaniacal scope, with profoundly entertaining results.

A. E. van Vogt's Isher empire, which dazzled us all forty years ago

but has now fallen into some obscurity, was a robust precursor of Herbert's great realm. *The Weapon Shops*, first of the two volumes, takes place in the 48th century of the Isher dynasty, when the beautiful Empress Innelda rules all the inhabited worlds of the galaxy. The sequel, *The Weapon Makers*, continues the tale of the struggle between the Isher rulers and the secret underground movement known as the Weapon Shops—a struggle which itself has been going on for thousands of years.

How cheerfully we science-fiction writers toss around the millennia and the light-years! Isaac Asimov's *Foundation* novels span thousands of years—the earliest of the books opens in Year 12,020 of the Galactic Era—and the empire over which his monarchs reign covers so many worlds that the total number is quite literally uncountable. Asimov knows better than to ask us to accept this fiction at face value—as did I, writing of the giant planet Majipoor in *Lord Valentine's Castle* and speaking of a political system that had endured without any significant change for fourteen thousand years. As Brian Aldiss said in an essay on galactic empires in 1976, "You can, in other words, take these stories seriously. What you must not do is take them literally. Their authors didn't. There's a way of reading everything."

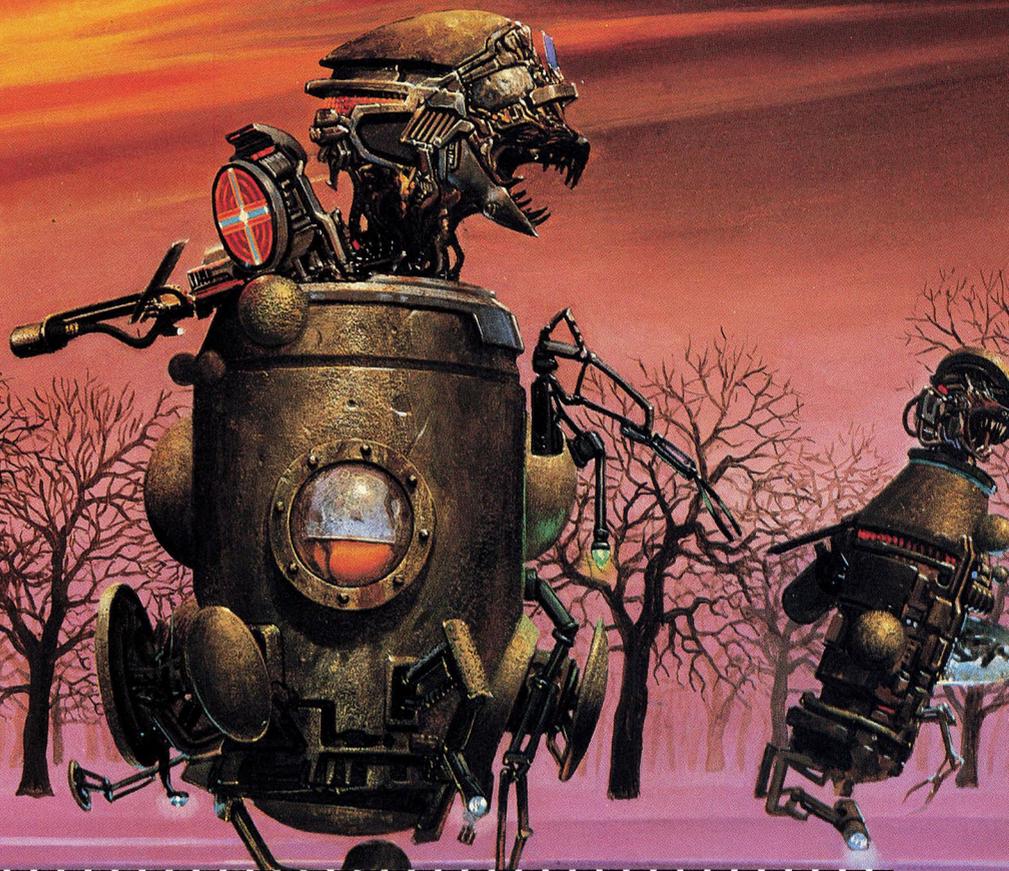
Empires that embrace a thousand solar systems are untenable concepts.

Unless the imperial army is big enough to establish garrisons everywhere, the citizens of the far-flung realm will simply ignore the diktats coming from the capital, and the empire will exist in name only. And empires that last for a hundred centuries virtually unchanged are equally implausible. The human race is too volatile, too impatient: systems evolve, politics mutate. Nothing has ever stayed the same on our world for more than a few generations; to expect a dynasty to settle in for three or four thousand years is to venture into pure fantasy.

So we see from the collapse of the U.S.S.R. Lenin's great vision of a worldwide socialist empire failed in a mere seventy-odd years. (Out-doing Hitler's Thousand-Year Reich, though, by quite a bit.) The imperial headquarters at the Kremlin eventually could not make its grasp hold even in nearby Latvia and Lithuania and Estonia, let alone on the world's of Betelgeuse IX. The people of the former Soviet Union have had a brutal lesson in the way economics works; and we who cherish the grandiose dreams of science fiction, watching the events abroad in fascination and amazement, have had a useful reminder of what a magnified and highly intensified version of the real world it is that science fiction gives us. ♦

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# Letters

I read my first issue of AMAZING® Stories about a year ago, in the old format, which I liked, and I decided to subscribe, also because I would have no other way to find the magazine here in Italy (when I subscribed I was in Canada).

I was disappointed to receive a magazine which had a different format from the one I expected; also, I didn't feel any need for colorful artwork—after all, what I buy the magazine for is the stories.

Actually, now I have to say that I often recall one or the other story in connection with the picture that goes with it, and so I don't think the color artwork is useless anymore. What I usually don't like are the covers (but I do like the one on the September issue).

My favorite stories, up to now, are "The Sixty-Five Million Year Sleep" in the June issue (most of the stories in that issue are very good), "Arms and the Woman" in the July issue, and "The Face of the Waters" in the August issue. There are a couple of stories I utterly disliked, which are "Captain Theodule and the Chileland Kommandos" in July and "My Tale Is Read" in August.

I would like to see science articles, now and then, while I'm obviously not interested in reviews of books that in most cases will remain out of my reach.

*Francesco Fontana  
Milan, Italy*

My father died at forty-six from Emphysema and "lung fungus." It's a young age for a man to die. They put my dad on parade at "Desert Rock 5." Strangely, he contracted "anterior polio" around then and was away from home for a while. His records show nothing about either polio or radiation sickness.

We know more about the conditions of some laboratory rats involved in experiments fifty years ago than we know about my father and the many fathers and sons and brothers who were sub-

jected to massive radiation exposure at "Desert Rock 5" and many other places.

Thank you for printing, and thank Kristine Kathryn Rusch for writing, "Thomas and the Wise Men" (September). There may be politics mixed in with this work [as suggested by a letter writer in the December issue], but it was done cleverly and well. There are many Americans, unaware of this type of testing, who will merely wonder at the strange juxtaposition of two different lines of science fiction (and others yet who would have to flip a coin to pick the truth).

*Dave Rogers  
Issaquah WA*

I loved the opening chapter of "The Amazing Story" (January). I have longed for a detailed history of the oldest science fiction magazine in the world. Renowned SF-magazine historian Mike Ashley is the logical choice to trace the magazine's journey. I did not notice a single factual error, a rare thing for an article.

I tend to agree with the letter from Ben Bova. I certainly don't want to read a magazine filled with anachronistic pulp fiction, written by cut-rate Smith or Burroughs imitators. I prefer provocative and intelligent fiction. However, as much as I admired Ben Bova's noble and articulate defense of literature, I felt that Mr. Bova was unduly harsh and hostile toward Mr. Wyatt.

*Timothy M. Walters  
Muskogee OK*

I'm all for progress if it is an improvement. However, I have the impression that there is someone at AMAZING Stories who is restless with ideas and has not thought some of them through before applying them to the magazine. The

larger, glossy format is hard to read without using both hands; and in this age of environmental concerns and recycling, aren't you taking a step backward?

I feel insulted by "Looking Forward" and some of the poor quality of fiction in the last couple of issues. My assumption is that the money originally used to buy quality stories is now being used for cosmetics.

*Gaye Forbes  
Lenoir NC*

The October 1991 number was great. There were seven stories, and I liked them all. The opening story by Brian Stableford was strong in human interest, setting, originality, and believability even though the ending was a bit strained. Watt-Evans' "Drifter" was a variation on a familiar idea, but his treatment was dramatic, gripping, and lucid. I prefer lucid stories, even when the premise is fantastic, but then I am an engineer.

"Chapter Thirteen" by Phillip Jennings hit just the right note of whimsy after the downbeat ending of "Drifter." Then "Wacky Jack 5.1" by W. R. Thompson was intriguing and moving, even though I suspect he named it after his word processor. "Line Item on a Dead Grant" by Jack Haldeman was hilarious, and Vivian Vande Velde's "Time Enough" was good solid time travel adventure with a nice surprise in the end.

Then it was all topped off with a generous helping of Di Filippo in the form of "The Mill." This story grabbed me with a seemingly mundane, human predicament and smoothly slid into an incredible tale of interstellar betrayal, exploitation, and triumph. I don't automatically like everything Paul Di Filippo writes. Sex with salamanders ("Victoria," June 1991) doesn't work for me, but "The Mill" scratched right where I itched.

*Cary Semar  
Dickinson TX*



Illustration by  
Nick Smith

**George Zebrowski**

NICK SMITH

**T**he ultimate aim of the historian is to resurrect all of history.” — *Herodotus*

As Carthage burned on the southeastern horizon, three ships slipped toward the Pillars of Hercules. In the lead vessel, Aeneas Oceanus, far-seeing engineer, explorer, and seer, took no pleasure in having been right; all his life he had known that the petty, jealous Romans would not be able to tolerate any prosperity but their own. Named Oceanus by his people because of his experience as a navigator, he had brought a plan of survival to his city.

At dawn the bonfire of the sun wiped away the glow of the dying city, and the refugees, a select group of shipbuilders, ironworkers, engineers, and young couples with children, turned their hopes westward. Oceanus looked backward with pity, still lamenting the loss that had been so long in coming. Hannibal had foretold it, warning that the decay of the city’s inner life would only help the Romans.

In three days the ships escaped into the great ocean and turned south to the port of Lixus on the west coast of Africa, where they were met by two thousand refugees who had fled from Carthage by land during the last year, and were finishing the building of vessels large enough to challenge the western ocean.

In all, sixty ships fled the port of Lixus before the Roman legions seized it.

“Where are we going?” the commanders asked Oceanus, looking fearfully at the rough seas before them.

“Where are we going?” mothers cried from below, clutching their children in the dark holds.

“What we are doing,” Oceanus said to calm his commanders, “will one day destroy Rome. But first we must survive.”

His commanders pressed him for more of an answer, and he told them that he had sailed this course before, and had discovered new lands far to the west, on the other half of the world-sphere that circled the Sun with the other planets. There Carthage might live again.

Midway across the water he presented his plan to found New Carthage, where a scroll of rights would ensure that every citizen would be justly privileged. Let time shape what it will, he said, while a constitutional form of public power restrained the citizenry and prevented the drift into despotism so well described by Greek philosophers.

Although he grieved for the death of his city, Oceanus was confident that its passing was a chance for a new start. Hannibal’s dream of a greater Carthage that would repudiate Rome’s example and bring to fruition Athenian ideals would come to life. The new city would start with Hannibal’s model for a senate, the one he had tried to create after the defeat at Zama, when he had stripped the merchant princes and landowners of their power and still brought them prosperity, and for that they had delivered his unconscious body into the hands of the Romans.

“But are not these lands in the west inhabited?” asked Hasdrubal, the son of Carthage’s last commander.

“Yes, but there are few people. Large areas seem uninhabited.”

“Where will we find slaves?” asked Gisco, the farmer, whose fields had fed the army.

“There will be no slaves in the new world,” Oceanus replied. “I see our city growing outward, inviting other peoples into a cooperative system of states. And we will prosper because all will benefit, and we will be just!”

—and at this point the historian crouching inside Oceanus disengaged from the virtual figure and raced forward through the variants to see what had happened to the ideals of these Carthaginians, who shared experiences of persecution with the fleeing immigrants of other variants. He caught up with the *Niña*, *Pinta*, and *Santa María* as they sailed within sight of land, and slipped into the figure of Columbus as he stood on the deck of the largest vessel, looking excitedly at the small islands ahead, expecting the Asian shore, with all its riches, to slip into view from over the horizon.

But instead, on the starboard side, three smoking dragons climbed over the edge of the world. The crews of the Spanish ships cried out in fear and cursed their fate.

Columbus shouted, “Fear not, they are not what they seem!”

The men quieted and watched the approaching creatures, and soon saw that they were large metal vessels without sails.

The linear history machine begat the cliometricron, which simulated all that had been from a database so vast that no organic mind could traverse it. Every scrap of fact, speculation, audio and visual drama, as well as records of locales went into the burgeoning synthesis. Gaps were filled in, melding all documents and references for events and personalities into a tree of information that branched endlessly into probability. Everything became history, erasing all discontinuities, all distinctions between what was true and untrue. It made no difference, the cliometricrons concluded, because so-called falsehoods canceled each other out in the cross-referencing mass of information, which was one with the very stuff of being that was the ground of every possible actuality. History’s willful tree grew into infinity under an alien, unreachable light.

At first, only data that had been selected and shaped by licensed linear historians had been allowed to infect the cliometricron, before it taught them that everything was essential, no matter how false or trivial, because the cliometricron had the power to shape and reshape a large, incomplete database, and to present the otherwise unseeable to the historian. Like an optical telescope, it gathered and focused ancient light into a coherent image. The endless input of information was at first an indirect view of history, but this event horizon was pierced by capturing all unavailable information through simple brute enumeration—by running all possible variants of human history. The human genome was part of the cliometricron’s database, so it simulated the past and present actions of all human beings who had ever lived and displayed their lives in dramatic form, even indicating their thoughts from observed behavior. Although the number

of human variant histories was infinite, the number of significant past personalities was finite, and their actions capable of exhaustive representation.

Some historians dreamed of placing sensitive collectors a million or more light years beyond the solar system, with a cliometricon at the focus of the electromagnetic radiation cone, to extract all actual human history, as a check on the cliometricon. But other historians argued that this purely technical feat would only duplicate what the cliometricon had already done by the brute force of enumeration. No difference would be observed between history as it happened and what the cliometricon displayed in all possible variants. This had been demonstrated by blind comparisons of forced historical versions with well-documented events, which always turned out to be identical. An infinitely objective eye would see the same sum of histories displayed by the cliometricon.

It was observed that historians in every variant saw themselves as embedded in the *classical path*, but as use of the cliometricon spread through the variants, this idea was abandoned. All variants were real trajectories, even though some personalities were alive in one variant and not in another.

The deconstructing historians worked the variants like solitaire players uncovering cards, seeking related sets of differences, hoping to find variants that might mean something, whatever their significance. All finite bits of information available when someone died, the kind of data that had once been built up into a work of fiction, a drama for live players, or a film, was run through the probabilities and interpreted until the dead walked again in virtual embodiment. Detailed histories were observed and recorded, and the past lived and grew anew, resurrected in the cliometricon, developing in a secondary universe of information identical to all being. . . .

Towed by three Carthaginian coast guard vessels, Columbus's ships entered the harbor of an impossible city. Towers of twenty and thirty stories rose above the water on the same site where New York stood in other variants. Large ships were loading and unloading at the docks. Well back from the harbor, towering above everything, sat a red pyramid. As the historian watched him in the guide monitor, Columbus, gripping the rail of the *Santa María*, astonished by the sight of such advanced commerce, wondered how he would ever be able to make his fortune here. This land was far greater than the China, India, and Japan that had glowed in his mind. No navy he had ever seen could stand against these ships. At best, Spain might hope to become this city's inferior trading partner, and the life he had spent in preparing for his voyage west would be lost in a world that was larger and richer than anyone he had ever known had imagined. The hundreds of crosses in his hold would not be planted in this land. There would be no gold to pay for the liberation of the Holy Land. His people would curse him for opening the way to humiliation.

Carthage lived in this variant, far from Rome, yet the two would conflict again, unless New Carthage had for-

gotten the death of the old. Or was vengeance coiled in all the variant hearts of this new city?

In another variant, a confederation of American States had broken with Great Britain, seeking refuge from European ways. They had sought to make the past count for less, but had failed by the third century. To escape the constraints of the past was the test of a civilization, and in the infinity of variants they all succeeded in one way or another, except the historian's own panoptic civilization, whose past could not yet be properly judged, since it had existed for less than a century. Observations of its own variants tended to be alike: endless series of observers processing information like sand through a sieve, seeking some significance beyond the peeping of one's neighbor.

Among the infinity of historians, there were those who chafed at the fact that Panoptica was locked in observational embrace with every variant of its past, from which it could learn nothing, while access to the future was forbidden. History seemed to be at an end.

Historians dreamed of looking ahead. Would the cliometricon escape the infinitely variable fiction of its database? Or would it begin another endless effort of capturing actual futures by sheer force of enumerating the possible, as it did with the past, making the distinction between reality and simulation meaningless? The resurrection of the past had started from an initial database, but futures also rested on that base, so brute force should not be overpowered in completing the empty spaces. Past, present, and future would then be transformed into information, completing panoptic civilization, and all consciousness would become a sluggish cursor lost in the infinite ocean of data. . . .

The future was a constant temptation—greater than the compulsive hours the historian spent examining the private lives of individuals, varying sets of events, and details within details.

The romance of past time was hypnotic. The historian set the safeties to break the virtual embodiment before addiction set in, and gazed at the serrated skyline of New Carthage in the guide monitor. The program eased him forward in the sequence, toward the great pyramid where Columbus was now imprisoned, into—

—a windowless cell with a table, chair, and bed. An electric bulb burned on the square ceiling. Columbus stood by the door, listening to the silence, and the historian heard the explorer's doubts, as recorded by Walt Whitman:

What do I know of life?  
what of myself?  
I know not even my own  
work past or present;  
Dim ever-shifting guesses  
of it spread before me,  
Of newer better worlds,  
their mighty parturition,  
Mocking, perplexing me.

Finally the door opened, and a man entered. Columbus stepped back. The man was dressed in a dark green suit of pants and jacket, buttoned at the neck.

“Good evening,” the man said in perfect Spanish, and gestured for Columbus to sit down.

Columbus remained standing. “Who are you, Sir, and why am I a prisoner?”

The man smiled and licked his thin lips. “Be patient.”

“Who are you?” Columbus demanded.

“The Duke of Norfolk, and the English Ambassador to New Carthage, Captain Columbus. Please, do sit down.”

“My rank is that of admiral,” Columbus said as he obeyed.

“Forgive me.” The Ambassador was silent for a moment, then said, “We’ve been in touch with the New Carthaginian States for some time, ever since Henry Tudor won the throne, with only His Majesty’s Court and our allies knowing about it.”

“States? Where then is China?”

The Ambassador shook his head in amusement.

“These states extend as far as the river that divides this continent. There is another ocean to cross to reach China. The native peoples of this hemisphere and the Old Carthaginian settlers have made quite a confederation for themselves. My question to you is, where will your sympathies be? With Rome and the Spanish Court?”

“Where can they be?” Columbus said.

“With yourself, I would hope,” the Ambassador said.

“You know quite well that Roman Italy, together with its Spanish allies, intends to conquer Europe. Perhaps you would wish to help oppose the coming tyranny? You are without a doubt aware that we have only recently ended our civil strife.”

Columbus nodded, irritated by the man’s directness.

“And it was our good fortune,” the Duke continued, “to find new allies across the sea. Our latest information tells us that Germany is gone, and much of Europe, right up to Moscow, is threatened. England will be next unless something is done.”

Columbus stood up. “All of that is now happening?”

The Ambassador nodded.

“But how can you know that?” Columbus asked.

“We have long-range communications that can bring us messages almost instantly. We knew you were coming. Our observers are very thorough.”

“But what could I do for you?”

“You’re an educated man and a skilled seafarer. I think you would be happy to learn new ways. But the basic question is what do you want from your abilities as a navigator, captain, and adventurer? You may be completely candid with me.”

“My greatest desire is to secure wealth, power, and glory for myself, my family in Spain, and my heirs.”

“But don’t you also love knowledge, seafaring, and exploration?”

Columbus nodded. “For myself—but I am by nature not a generous man. Why are you asking me such questions?”

“To learn whether you wish to be of service to us,” the Ambassador replied. “I note that in your words you have left out any mention of Isabella’s Castile and Ferdinand’s Aragon, from which I conclude that they do not mean much to you, except as a means of support for

your ventures. I can assure you that if you join us, you will have all that you want. We will remove your family to England, of course. Please understand that the New Carthaginians, and we English also, think it wise to control the coming contact with Europe, for the sake of all. Uncontrolled, it would be devastating, both physically and economically. You are quarantined here, for example, because of diseases you may be carrying. You seem fairly healthy, but medicines have been given to you with your food.”

“But why do you ask me to join you?” Columbus asked.

“Do you think yourself unworthy?” the Ambassador replied. “Our agents in Europe have observed you long enough to know how familiar you are with the Spanish Court. And we know that you take a lively interest in world affairs, despite being vain, boastful, and a bit dishonest.”

“Exactly what is it that you will ask of me?”

This Columbus had not been greeted by gentle natives, ripe for Christianity, welcoming him as a man from heaven. He had been the backward native, arriving in creaking ships. Here, as in other variants, he would not become admiral of the ocean sea and viceroy of all discovered lands. His voyages would not be a victory for Christianity, leading to the growth of Spanish power. The Papacy would not divide the new lands between Spain and Portugal and convert the natives, or cover the ceilings of European churches with stolen gold. Columbus would be spared the need to seize slaves for profit, and he would not be arrested by Spanish authorities for incompetence as governor of Hispaniola, where half a million natives would not perish within the four years of his rule. He would not die in disgrace and obscurity. There would be no disagreement over where his bones were buried. Europeans would not discover and claim other peoples’ lands and start new countries within them and confine native cultures to museum displays and small tracts of land. Carthage and the natives would come together as a confederation of states, along ideals developed by the Iroquois and the Athenians, ruling as the metaphoric gods of Plato’s Forms. The hemisphere that was called the New World in other variants would here evangelize the Old.

How simple were the old variants, the historian thought as he withdrew from Columbus and sat in the virtual chamber, listening to the ever-branching forest of the mariner’s thoughts. Puzzles of power and rivalry—nothing like what his panoptic civilization faced. Columbus was eager to learn more, and the English needed puppets in Europe. The Carthaginians still carried their hatred of Rome. The dream of Aeneas Oceanus would be fulfilled in this variant. Across a million variants it would not be otherwise.

Alone in his cell, despairing of his fate, Columbus prayed to his God and searched within himself for an answer to his predicament, fearful that the empire of the Carthaginians was perhaps the main course of history, the true

descendant of Paradisio—and Europe a hell reserved for sinners, where he had suffered half a lifetime of delay, waiting to voyage west, and to which he could return only as a failure, if he returned at all.

He thought of Doña Beatriz, the widow who had been appointed Governor of Gomera in the Canary Islands because the women of the Spanish Court feared her beauty. Although she had provided the safe harbor needed to repair the *Pinta*'s steering system and replace the caravel's sails, and had expressed admiration and approval of his enterprise, she had turned away his love because he was, after all, only a sailor whose place in the *mappaemundi* was far from certain.

As he reentered the figure, the historian caught the Admiral transfixed by his own image in the full-length mirror on the wall, as only a man who had never seen good mirrors could be affected. The stocky, well-built figure, taller than average, stood perfectly still, pale eyes in a long face gazing into themselves in bewildered solitude. The aquiline nose remained confident, while the thoughts lamented the blond hair that had turned white at the age of thirty. Nevertheless, he told himself, historians might still find him impressive-looking, if he amounted to anything.

What would become of him? The Carthaginians would imprison him for the rest of his life, he realized, if he refused to be their instrument; but if he agreed, they would give him everything he had ever wanted—position and wealth, and revenge on his enemies. The Holy Land might still be freed from the infidel, making way for the Second Coming. No other life would ever offer him more, he told himself. No nation in the world could ignore this great power, which sought to remake the world in its own image. Perhaps God had finally raised him up to act on the true stage of the world. He could cower in this cell and weep for himself, or he could embrace the true scale of the world, reach out and transform the world he had known, not with gold, silver, and slaves, but with the wealth that would grow from knowledge.

And Doña Beatriz de Peraza y Bobadilla, the most beautiful woman he had ever known, would certainly accept his justly won nobility.

Admiral Columbus shivered slightly as he stood on the open bridge of his iron whale and peered into the mists of the English Channel. A fleet of twelve submarines now hunted the Roman armada. He had spent a year improving his navigational skills and learning all he could about the Carthaginian continent. After the war he would be installed as governor of Spain, a role for which he was deemed well suited by his new patrons. His oldest son would become the governor of Italy. There would be time to write memoirs, especially now that the New Carthaginian physicians had so improved his health. He especially liked the new set of teeth they had given him.

A signal light flashed at his right. He went below and stood by his Captain at the periscope as the submarine submerged.

"Only a few minutes until dawn, Admiral." The Cap-

tain, a descendant of a northern forest people, spoke Carthaginian with an accent, forcing Columbus, who had so recently learned the tongue's rudiments, to listen carefully. "The sun will burn off this fog in an hour or two. They'll never know what hit them, even if there are survivors. They might even think it was sabotage of their powder stores, or a storm."

It still startled Columbus to think that he had slogged across the Atlantic in three slow, pitifully small ships, while these undersea vessels slipped over in three days or less, even though the globe was a quarter larger than he had calculated. A quarter larger! Steam and electricity were wonders to him despite his efforts to understand them, and would probably remain so for the rest of his life.

As soon as the Roman Armada was sunk, the English-Carthaginian invasion of the continent would begin. From the east would come the English Crown's Russian allies, and Roman power would be crushed forever. The world through which he had risen with so much pain would die. He now believed that Vatican Rome was not the true City of God, which still remained to be built. His love of the sea and sailing, his dreams of going beyond the walls of the world, had brought him to New Carthage, the true center of the globe.

"There they are!" the Captain shouted, then turned and made way for Columbus to look. "At least a hundred vessels."

Columbus peered through the periscope, saw the proud galleons bending with the wind, and felt sorry for them. They had no chance to escape these iron whales sent by the greatest commercial power in the world. No army in the world could stand against the mechanized force that was massing in England. Nevertheless, he worried at the resistance to Carthaginian rule that might grow in Europe. Given the ideals of government professed by the New Carthaginian States, he saw why its leaders preferred an alliance with the English to one with a Spanish-Italian empire, but would this special relationship endure?

"Admiral," the Captain said at his side. "The heirs of Aeneas Oceanus and the Peacemaker's Longhouse Nations would be pleased if you gave the command."

Columbus stepped back and waited for the Captain to aim and signal the rest of the fleet, so that all the blows would fall as one.

"All is ready, Admiral," the Captain said.

Columbus banished his doubts and nodded, determined to be grateful that God's providence had brought him here. Yes, God himself. "Fire all tubes!"

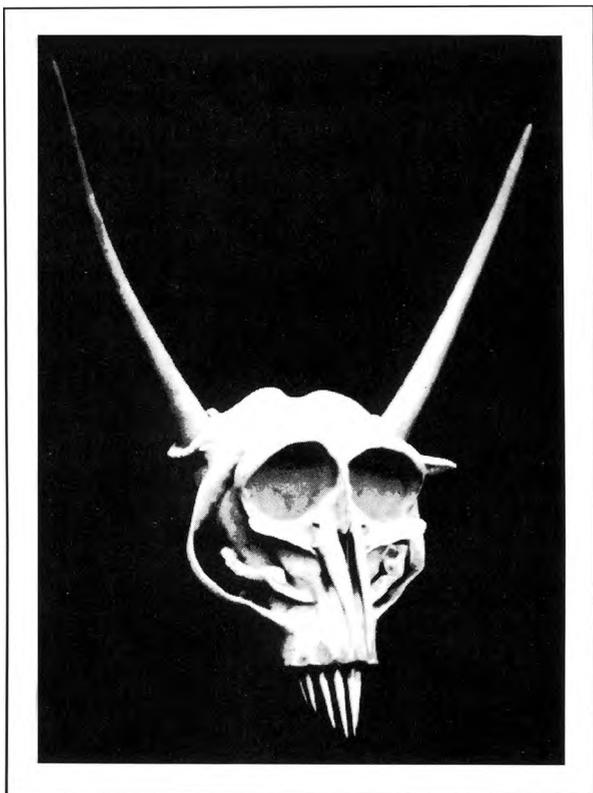
As he withdrew from the figure and sat in the black silence of the virtual chamber, the historian longed for the play of events that had given Columbus his fulfillment. The Columbian Exchange of peoples, animals, food-stuffs, diseases, and knowledge would take place with more control and vision in this variant; but as with all variants prior to Panoptica, this was a transition from one dynamic state to another, with no final state envisioned. Panoptic observation could offer nothing like

this inner experience. Forbidden to peer beyond its own equilibrium of observers and information, it feared to learn from the quantum sea of futures or to take the past as any guide. Panoptica, unable to stand aside from history absolutely, had stood aside in a relative way. Development continued at a trivial pace, and the historians of future Panopticas could only look back at an infinity of observers identical with themselves.

He imagined world-lines where history grew at a quantum pace, rather than creeping from state to state through an unrecordable infinity of steps. Surely, in all infinity, there had to be leaping, verbicular forms of history, where new things sprang from the unconscious

soil of memory, where the brute force of deductive reason could not enumerate all joys. He wanted to throw himself into swift currents and be reshaped by time's rough stones. He longed to be involved, even to intervene in history.

Trembling as he leaned forward, the historian oriented himself in the guide monitor and reentered Columbus on the bridge of the submarine as it ran on the surface. Low clouds reflected the flames of the Roman armada burning on the horizon. Columbus felt the heat, and for an instant the pale, vicarious warmth of the flames also caressed the historian's face. ♦



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# The Call

**John Morressy**

I had to wait for a few minutes at the restaurant, so I sat at the bar and watched the midday news. It was a slow day. At this time of the year, most of the items were either Christmas shopping bits awash in whimsy, or Super Bowl hype.

The only real story was the disappearance of an Israeli general, and the newscaster was doing her best to link it with the rumored disappearance of a pair of Russian military big-wigs only two weeks ago. The link was tenuous at best, but this was a Monday and there wasn't much else happening, so the story was explored in great detail. Everyone in the bar seemed as uninterested as I was with the newscaster's speculations. She finally moved on to the weather: a promise of snow and sleet, accompanied by lots of jolly banter. Just as the forecast ended, Ray clapped me on the shoulder.

"Ready for lunch?" he asked.

I hadn't seen Ray Ellis since early June. He still had his summer tan, but I was surprised at how weary he looked. He hadn't lost weight—I don't think Ray's weight has varied more than a pound or two either way in all the years I've known him—but he looked worn out. I asked if he had

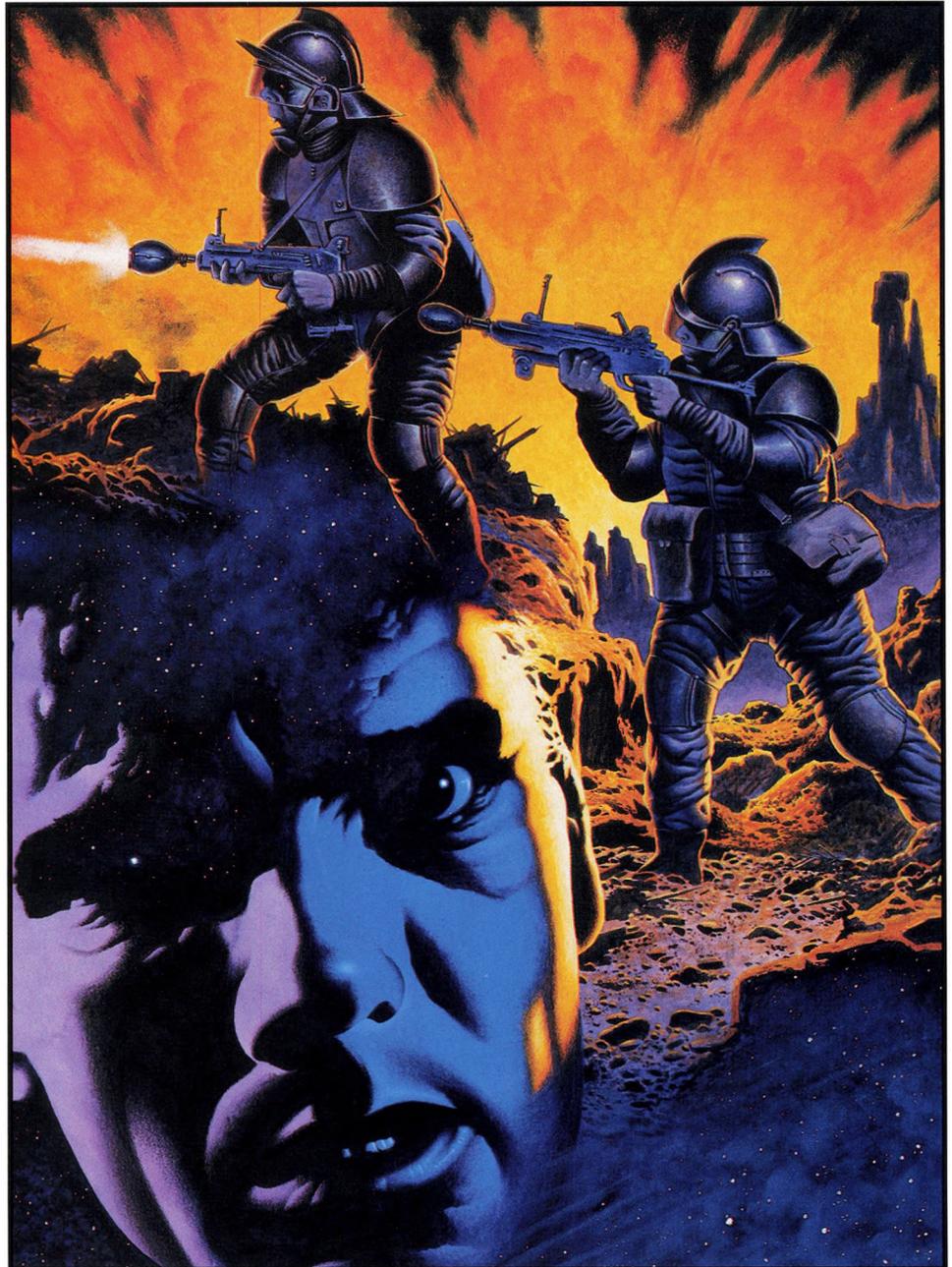


Illustration by Bob Walters

been through a bout of this season's flu. He laughed and shook his head.

"I had a checkup just last week, and I'm as healthy as ever, except for normal wear and tear."

"What's wrong, then? You look beat."

"I'm having some trouble sleeping, that's all."

"Trouble sleeping? You?"

He shrugged and said nothing. We were shown to our table, and as soon as the *maitre d'* had left us to peruse our menus, I asked, "Anything on your mind?" Considering Ray's profession, that was a naïve question.

"As a matter of fact, I'm taking it pretty easy these days. Maybe I can't handle relaxation."

"What are you working on?"

"I just finished the galleys of a long article on the Gulf War, and now I'm working up a new course on Vietnam for spring semester next year. This is the kind of work I enjoy, and I usually sleep like a baby when I'm researching and writing all day. But lately . . ." He frowned and took a sip of water.

"What did the doctor say?"

Ray looked at me as if I had said something in very bad taste. "He prescribed some pills, but I don't want to rely on medication. I'll be all right. Bad dreams don't bother me. Hell, I've slept through air raids."

I knew that that was true, and I had the greatest respect for Ray's coolness under pressure. All the same, he looked to me like a man who's been going on two hours sleep a night for too long. I asked him about that, and he laughed.

"Far from it. If we don't go out somewhere, I'm in bed by ten o'clock. Susan's starting to call me 'Grandpa.'" As if to underscore his words, he yawned. "Sorry. Let's talk about something besides my sleeping habits. What are you up to lately?"

That got me started. I had just been put in charge of directing the field work for the biggest relief and reconstruction project the Foundation had ever undertaken. It was the most important assignment of my career, and I was bursting with ideas. I kept talking until the waiter came, and resumed as soon as we had ordered. Ray listened, and when I was done, asked his usual precisely focused questions.

Ray could zero in on an issue like no one I've ever known. His mind was like a filter: it purged the static that surrounds every situation, and got directly to the heart of a problem. That, I suppose, is what made him one of the best military analysts in the business. He loved to teach, but his teaching schedule was now down to a single course in international politics every other year, and while he did his best to keep it a solid academic course, the university made it into a media event with him as the visiting celebrity. He taught before a bank of cameras in a 1200-seat auditorium. Every seat was filled for every lecture. When Ray wasn't teaching, he was traveling, or writing, or translating a crisis into an intelligible thirty-second capsule for the television audience. He had been on the screen every night during the Gulf War, and since then, I've seen him on one public affairs show or another at least once a month.

Ray was busy, but he had always thrived on work. He was a big man, and even though he was twelve years my senior, he was in better shape than I had been in since my teens. But now he looked weary.

"Sounds as though they've recognized your talent at last," he said when I had finished telling of my assignment.

"Took them long enough. It took me a long time, too." I said, and we shared a laugh, remembering the times we had sat over cups of coffee at graduate school, both of us late starters on an academic career, and talked of our big plans. Here we were, doing far better than we had ever dared to hope. Better than I had dared, anyway. A senior position with the Mahlstadt Foundation had seemed an unrealistic ambition back in those days.

Ray had probably known all along that he was going to make it to the top. If he had stayed in the military, he'd have been a general by now. Having chosen to return to civilian life, he went single-mindedly for the equivalent of five-star rank.

I had not been as certain of my future. After the service, I went back to college, but dropped out at the end of a year to work with a volunteer organization in South America. After two years with them, I decided to study for the priesthood. I left the seminary after three years, when it became clear to me that I had no calling for the religious life. It wasn't post-Vietnam syndrome that kept me drifting, it was a conviction that most of the things people did with their lives simply were not worth doing. I wanted to dedicate my life to something positive and constructive, but I couldn't find anything that matched my ideals.

Eventually I returned to school, and this time I did well. I ultimately entered a doctoral program in International Relations. In my first seminar, I met Ray, who was just finishing up in the same program. I recognized my old CO, and to my amazement, he recognized me and remembered my name. We became friendly. It was thanks to Ray's recommendation and strong support that I was offered a job with the Mahlstadt Foundation. I never forgot what I owed him, and we remained close friends even though we now saw each other only when Ray was passing through Washington, which he did perhaps twice a year.

Ray's plane was leaving at four-fifty. We enjoyed a leisurely lunch, sitting at table for nearly three hours. I knew I'd be catching up on paperwork until late that night, but it didn't matter. I drove Ray to Dulles, glad for the extra hour of his company. On the way back to the Foundation, I thought about him, and worried.

Getting at Ray's problems was like cracking a very difficult code. He made me think of the Spartan youth in the legend: rather than show pain, he'd let the fox eat away at his heart until he dropped. But from a hint here, an unguarded remark there—lapses so untypical of Ray Ellis that they were in themselves disturbing—I gathered that he was not just having trouble sleeping, he was being pushed close to the breaking point by obsessive and troubling dreams.

Ray Ellis had been through war at its worst, and never blinked. He was my battalion CO in Vietnam, and I've

never, before or since, known a man to be so admired and respected. I've read the citations for his two DSC's and his Silver Star, and they were enough to put me in a cold sweat. When Ray talked about them—and he rarely did, and then with great reluctance—he did so as you or I might talk about a stroll around the block. He was the coolest man I ever knew, cool in combat and equally self-possessed in the high-pressure staff positions that followed. Ray was always in command of the situation. But lately, something was happening that was beyond his understanding and his control. He wouldn't say what it was, but he was clearly worried.

I made it a point to call him later that week, when he was back in New York. He sounded better, and said nothing of any problems. I called again the following week. This time Ray was out, and I spoke to his wife. We made the usual small talk, and then she said, "Did Ray mention anything to you about these dreams he's been having?"

"He did when we had lunch. Last time I called, though, he didn't mention them."

"Well, they're back. And they're really troubling him."

I'm not a psychiatrist. I know just enough about the human mind to be aware of how dangerous it is for amateurs to tamper with it. But Ray and Susan were close friends. I owed Ray a lot, and if he needed help, I wanted to do whatever I could.

"What are the dreams about, Susan? He wouldn't tell me anything about them."

"All he's ever said is that they're about war, but not like any war he's ever experienced."

"And that's all he'll say?"

"That's all. You know Ray."

"Can you think of how we could get him to open up?"

She was silent for a time; then she said, "He's going to Washington the week after next. He's already mentioned getting in touch with you. Maybe he'll be ready to talk about the dreams by then."

"I'll do all I can. In the meantime, if there's anything . . ."

"I'll call if there is. Thanks."

Ray called two days later. We made a lunch appointment, and when he showed up, I didn't have to do a thing. He looked ten years older than he had only a month before, and he was bursting to talk. I had reserved a corner table, where we had complete privacy. As soon as we were alone, he leaned forward, his fingers interlocked with white-knuckle intensity, and opened up about his dreams.

"I'm on a battlefield, right in the middle of a terrible battle, but I'm in no danger. I know with absolute certainty that I'm . . . I'm an observer, a spectator, not a participant. Almost like a ghost. And yet I'm right there," he explained.

"Isn't this just what you've been doing for years? You've got to put yourself into a battle to analyze it."

He shook his head. "It's not the same. This is like no war I've ever experienced. No one's ever experienced it. I'm not even sure how I know it's a war, but I do. The shapes are all . . ." He made a groping gesture of frustration. "They're unnatural. Machines, people, monsters . . . a little of each, and of something else."

"The adversaries, you mean?"

"Yes. They're all unnatural. And some of them are *us* and some are *them*, I know that, but I don't know how I know it. There's nothing that's familiar to me, and yet I recognize everything."

"Have you spoken to anyone about it—any professional?"

"I've said a few things to Susan, but no details. I don't want to upset her. You're the first one I've told about the . . . the shapes."

"Don't you think it would be a good idea to talk to someone who knows about these things?"

His face was set like flint. "I'm a military analyst. I spent a good many years as an infantry officer. I saw combat. A lot of it. So now I'm dreaming about war. Does that make me crazy?"

"I don't know what makes people crazy, Ray. But this bothers you, or you wouldn't be talking about it now."

"Yes, it bothers me. But I'm not running to a shrink because I have bad dreams. Look, suppose you started having dreams about refugees, or famine, or epidemics, or any of the other horrors you deal with all the time—would you think that you were going crazy?"

"That would depend on the dreams."

Ray looked away, frowning, then he gave a little laugh. "Yes, I suppose it would. Well, mine will have to get a lot worse before I turn myself over to a shrink."

I knew there was no point in pursuing the matter. Ray had said all he wanted to say, and perhaps a lot more. He was stubborn, and if I pressed him now, there'd be little chance of reopening the subject later on. We talked about what we had done over the holidays, about the Super Bowl, about my own work with the relief project and the long overseas tour that it involved.

"Be glad you're not wearing a uniform," Ray said when I mentioned my destination. "Military men aren't popular these days. A couple more went missing last week."

"Yes, I read about that."

"I knew them both."

"What do you think is going on? Are the people just getting fed up with bad leadership?"

"I wish they were. The men who are being killed—I assume that's what's happening, because there's no word of them—are some of the best in the business. They're not butchers, they're soldiers, and damned good ones."

"You ought to know," I said, and Ray laughed. It was good to see him lighten up.

We talked about other things after that. We were pretty relaxed, and I left feeling a bit better about Ray. He might be going through a bad time, but if anyone could handle it, he could.

We separated outside the restaurant. I had an afternoon meeting, and Ray had a stack of papers to read before breakfast. He was going to be in town for a few days, and he promised to call me before he left.

I didn't hear from him for three days. When his call came, it came in the early hours of the morning, and it scared me. I took up the phone on the second ring, and before I could say a word, Ray said, "I'm going to need help. I don't know what . . . Can you get over here?"

"I'll be right there," I said.

Ray's hotel was a ten-minute drive under normal conditions. I made it in less than five. I went directly to his room, and knocked on the door. No answer. I tried the door, but of course it was locked. I knocked again, and called to him. When there was still no response, I went to the lobby and phoned his room. No answer. By this time, I was really worried. Ray's voice had sounded cool and calm as usual, but his words were disturbing. Help? For what?

The night clerk was not cooperative. I must have looked like a wild man. But I had my credentials with me, and the Mahlstadt Foundation, while it's not as well known to the public as the Red Cross or Save The Children, carries considerable weight in this town. I used it all. The night clerk called the police, and half an hour after the telephone call, we entered Ray's room.

It was empty. The bed had been slept in. Ray's robe was draped over a chair at the bedside and his slippers were on the floor. The closet held his suit and shoes, his bag was on the luggage stand, still locked; his shirts, socks, and underwear were neatly laid out in the dresser; toothbrush and razor were on the glass shelf above the bathroom sink; but he was gone. Wherever he went, he had gone there in his pajamas, barefoot, and taken nothing with him. And this was January, with snow on the ground.

The door had been locked when we arrived, and the key was on the dresser. The windows were all fastened.

The officer went over the room thoroughly and found nothing. He asked me how I happened to come here, and why I suspected trouble of any kind. I told him about the call. I didn't think it wise to tell him everything about Ray at this point.

"And you're sure he said he needed help?" he asked.

"He said, 'I'm going to need help.' I remember that clearly. But he didn't say why."

"How did he sound?"

"Same as always. He didn't shout, or sound frightened."

"Could you hear anyone else in the room?"

"No. Just Ray. I don't think he'd bring anyone to his room. He does sensitive work, and he wouldn't risk anything like that."

The policeman gave me a doubtful look, but said nothing. "When did he call? Do you know the exact time?"

"Yes. Two forty-seven, exactly. I left at once, and was here a few minutes before three."

He glanced at his watch. "And there was no answer when you knocked on the door?"

"None."

"Well, he can't have gone far. Was he a sleepwalker?"

That possibility had never occurred to me. "I never heard him mention it. He was having some difficulty sleeping recently, I know that."

"Was he taking anything?"

"He'd been given a prescription, but he wasn't taking it last time I spoke to him."

"Maybe he changed his mind. He may be wandering around the hotel. I'll take a look," said the policeman.

I rose from the chair by the bed, and glanced at the night table. On the pad by the telephone was a note,

scrawled hastily and awkwardly, as if written in the dark: *Tell Susan. Called up.* I pointed it out. The policeman took the pad and put it in his notebook.

We searched the floor from end to end, then went over the floors above and below, all without result. In the lobby, we checked with the night clerk. He had seen no one and received no calls about a sleepwalker.

I left with the policeman's promise to call me as soon as Ray turned up. At that point, I accepted the sleepwalker hypothesis. It was the only explanation that made sense.

When I heard nothing by eight o'clock next morning, I called the station. They had no word of Ray. They had not yet notified Susan, so I took that on myself. She was shocked to hear of Ray's disappearance, and absolutely mystified by it.

"Susan, did Ray walk in his sleep? That's the only explanation we've come up with," I said.

"Never," she said. "Absolutely never."

"Was he taking anything to help him sleep?"

"Ray? He won't even take aspirin for a headache."

There was a pause, both of us trying to think of some explanation, and I remembered the note by the telephone. "Did you call Ray last night?"

"No. I called him Wednesday, but not last night."

"There was a note by the phone. *Tell Susan. Called up.* I took it to mean that you'd called him earlier and he remembered something he hadn't mentioned then."

"I didn't call him."

Another pause, and then I asked, "Was Ray involved in anything dangerous?"

"No. This was purely a business trip."

I knew that she would have had to say that even if Ray had been on a confidential mission. I knew, too, that if he had been, he probably would not have told her. So the question was pointless. I regretted having asked it, since it could do nothing but trouble Susan.

No word came from the police. I called the station every day for a week, and was told "We're working on it," and nothing more. It was infuriating to see my friend's disappearance drifting into the background, becoming last week's news, of continuing interest only to Susan and me and perhaps a handful of others close to Ray, but I could do little more than try to control my anger. No body was found, and that was good news; but nothing else was found, or revealed. I feared that it might have been an act of terrorism, but no one claimed to have killed or abducted him.

Desperate for some answer, I started making very discreet inquiries. No one had an idea to offer; all seemed as mystified as I. An old friend who worked at the Pentagon mentioned that in some minds, Ray's disappearance was thought to be linked to the disappearances of other military men over the past few months. But this was pure conjecture, nothing more, and few took it seriously. No one had ever come forward to claim responsibility for the disappearances, and no demands had ever been made. The silence only added to the mystery.

A week passed, and another, and the situation remained as opaque as it had been on the day Ray van-

ished. I still called the police station regularly, and regularly received the same response. I kept in touch with Susan, who had been able to learn nothing despite her own efforts among all the people Ray had known and worked with.

By this time, our conversations had become long sessions of reminiscence which we both, I think, found therapeutic, though we never said so. I had first become friendly with Ray shortly after his marriage to Susan, so the three of us had a lot of memories to share. In the midst of one desultory conversation, Susan suddenly said, "Do you remember that message on the pad by the telephone? It said *Called up*, didn't it?"

"That's right. *Tell Susan. Called up.*"

"Ray never used that phrase. He always said, 'So-and-so called,' or 'I must call.' He never said 'Called up.'"

"That's what was on the pad, and it was definitely his writing. It was a bit shaky, but I imagine he wrote it in the dark."

"Well, it's odd," she said.

I didn't see her point. "It's a common enough phrase."

"Not to Ray. I remember his mentioning that his parents always said 'called up' about telephone calls, and he thought it sounded old-fashioned. He avoided it."

"He must have been in a pretty agitated state that night. It was probably just a slip."

"But you said he didn't sound any different."

"That means nothing. Ray didn't let things show."

Susan sighed. "No, he didn't. I suppose I'm grasping at any straw I can find. I'm sure it doesn't mean a thing."

We dropped the subject. After Susan hung up, I thought about what she had said, and dismissed it as unimportant. I couldn't recall Ray's ever using the phrase, but I couldn't be certain. It was not the sort of thing one notices. And in any event, it seemed to me that in a moment of anxiety, when he's in danger or believes that he is, or when his thinking is confused for one reason or another, a man can't be expected to follow his accustomed patterns of speech or writing. He's likely to say or write things that sound quite unlike him. As Susan herself admitted, she was grasping at straws. It was clear to me that someone had called Ray, and he had made a note to call Susan—or perhaps to tell her of something when he returned home. The two things might not be related at all.

But that reopened the question that had been puzzling me all along. The wording of the note suggested that someone had called Ray. Who had it been, and when? The night clerk was absolutely certain that there had been no incoming calls to his room, and there was no record of any earlier in the day. He had made six outgoing calls, every one of which had been followed up and satisfactorily explained.

I pondered this for the rest of the evening, and then gave up. The whole investigation was getting nowhere. Ray was gone, and was quickly being forgotten by all but a few. The police could learn nothing, and I certainly couldn't hope to do any better than they. I meant to go on trying, but I had no illusions of success. Like Susan, I was grasping at straws.

I kept in touch with the police and with Susan, but felt an increasing sense of futility. My own departure time was almost at hand, and I was busy making preparations for an assignment that might keep me away for several years. I was going to help a nation devastated by eighteen years of civil war and recurrent famine to rebuild its economy and social structure. This was the special mission of the Mahlstadt Foundation. I'd be leading a team of experts, every one of them totally dedicated, but it was a daunting responsibility all the same.

There was no way to prepare but to learn everything I could from every possible source of help. I was putting in sixteen- and eighteen-hour days at the Foundation, working weekends, picking people's brains, reading reports, and coming home late at night ready to drop. It was at this time that the dreams began.

I thought they were the result of overwork, and tried taking a long walk every night to ease the tension, but that was no help. The dreams were vivid, disturbing, and each night the same. I saw a ravaged unearthly landscape, torn by weaponry and blighted by plague. Even as I looked down from a great height, I was in the midst of things, and the impressions were vivid and deeply moving. Masses of people—not humans like us but people nonetheless, suffering souls whose pain rolled over me in waves—wandered across the face of this wasteland, homeless, starving, abandoning themselves to death. I heard their cries and saw their wounds and looked into their distorted alien faces as if I were walking at their side, and yet I hovered all-seeing far above them.

On the third night they spoke to me, and though their language was unlike any tongue I had ever heard, I understood their message: *The war is over. The enemy has been overcome. We are grateful for your assistance.*

I awoke abruptly, in the dark. When I had time to reflect, I realized that my worries over Ray were affecting me more than I had suspected. These dreams were too much like the ones he had described to be mere coincidence. And yet I felt no fear. The dream images were already slipping away, but I could remember the sensations that I had felt so strongly when those words were spoken. I had sensed gratitude and affection; something akin to love, if such a thing were possible between beings so different as myself and those in the dream.

I dreamt no more that night. The following night a similar dream returned, and a similar message, and with it the same sensations of love and gratitude. Two nights then passed without any dreams that I could recall.

Tonight I dreamed of the ravaged land again, and heard the people. They spoke to me with a single voice, and a new message. *You see what has befallen us. Your people have enabled us to overcome, and now you must teach us how to survive. We need you, they said. We will come for you this night.*

I awoke at those words, and began this hurried account. All is clear at last. Ray and the others have done their work, the work they do best, and now I must do mine. My help is needed, and it is time for me to undertake my journey. ♦

# Hiatus



Alexis Glynn Latner

A dead sweetgum leaf and some pine needles floated on the water, surprisingly clear water, that filled the hole in the ground.

Kay frowned. Stagnant water ought to be scummy with algae. Not clear and lifeless. But the land around here was used for conventional agriculture, with maybe more than the typical amount and toxicity of chemical runoff. Shaking her head, she turned away. This was supposed to be a vacation. For once, she would not concern herself with water

Illustration by Scott Rosema

quality. She hiked out of the woods and across the pasture, and returned to her car.

Not wanting to subject Matilda to the rutted pasture road, she had parked in the driveway of the Old House. Deserted decades had weathered the Old House gray and overgrown it with vines. On the other side of the road stood a newer, white-shingled farm house. The renters—curious about the strange car with Texas plates—were poised to answer the knock. The man opened the screen door immediately. His wife stepped out of the kitchen into the dining room, a shadowy figure in the cool of the house.

“I’m Kay Brooks, your landlord’s sister,” Kay said briskly. “I’ll be camping out on the land tonight—in the woods by the creek.”

“Camping?” The renter gaped at her. He obviously did not expect a slender, forty-eight-year-old woman to camp out, much less in the local woods behind the pasture. “Well, sure, ma’am,” he managed to say. A cooking smell wafted out through the screen door: pork chops for lunch. “Let us know if you need anything.”

Heat waves danced over Matilda’s hood. The car was seriously thinking about developing vapor lock. Kay persuaded Matilda otherwise and drove toward Troy, glancing at the land on either side of the road. Worn-out pasture. Fields of corn and cotton. Pine tracts that consisted of spindly trees destined for pulpwood mills. Evidently, Daddy was not the only landowner who had sold his hardwoods to the lumber companies and been talked into replanting pines, turning good forest into a second-rate pine tree farm.

Jamie had said that the renter was a construction worker in Troy. Like every other city in the South, Troy had been growing. But the metastasis of Troy had not yet reached Townsend’s Store, which, with its gas pump, still stood between a dirt road and a corn field. On the other side of the dirt road was the shack where Dave Matthews used to live. Judging by the wash draped on the barbed wire fence to dry, black folks still lived there.

Inside, the store smelled of old burned wood from many winters of pot-bellied stove heat. The old woman behind the counter looked up from her TV set, inquisitive and vaguely familiar.

“Yes,” Kay answered, “I grew up around here. I’m K— Betsy Kay Brooks.”

“Lordy mercy! I’m your cousin Frances Cope, remember me? My mama was second cousin to your grandma on your mama’s side, and I used to run that store in Logton, then in ’66 it burnt to the ground and I bought into this one, which was available because Old Man Townsend went to the old folks’ home, I think you had done left home by then, anyway . . .”

I might have known, Kay thought distractedly, I’d run into a relative! Kay asked to use the phone for a card call.

Frances happily pushed the phone across the counter. “I don’t have one of them touch tone phones, you just leave what you think’ll cover it. What city did you say?”

At the office in Houston, a young male voice answered. “Environmental Defense Council.”

“It’s me, Brett. I’m back in the States now. Is the meeting still on for Monday in Atlanta? I’ll be there by tomorrow night. . . . No, I’m driving.”

“Matilda?”

“We’ll make it. I’m taking some vacation this weekend. Where I grew up.”

“You grew up?” Brett echoed. “I thought you were ageless, Kay.”

“Thanks, I think. Don’t forget the Pedernales Wells analysis. It’s relevant. Bye.”

Cousin Frances asked, with unapologetic curiosity, “Are you a lawyer lady these days, Betsy Kay?”

Cognitive dissonance. No one had called her Betsy Kay for thirty years. She went by Kay—or, on internal memos, just K. “No. I’m a scientist.”

“One of them Ph.D.’s? Do tell!”

“I’m a chemist, and I analyze water.”

“What does a chemist want with plain old water?”

The old woman’s eyes looked huge, blue, puzzled behind very thick lenses. Cousin Frances must have had cataract surgery.

“Actually, my business is with what’s in the water that shouldn’t be. Things like bacteria. Or pesticides.” On a nostalgic whim, Kay selected a loaf of bread—sliced, white, people used to call it light bread—and an oily wedge of cheese from the huge round on the counter.

Cousin Frances beamed. “I see you haven’t lost your taste for country chow! How ’bout a Moon Pie, too? Won’t do your figure no harm, as slim as you are! Whatever brings you back to this neck of the woods?”

“Funny you should put it that way, Cousin Frances. As a matter of fact, I was overseas just a few days ago when something—”

“Overseas! Did you go to the Holy Land?” Frances interrupted.

Kay shook her head sharply. “I was in Australia. On a business trip. And something made me think about that old hole, the big one on my family’s land. It’s odd, isn’t it? Do you remember when it happened?”

“Do I ever!” Frances armed herself with a deep breath, and then she said how it all began with falling stars. That same night, small deep holes in the ground turned up in different places all over the county, including one in Agnes Brooks’s vegetable patch. “You recollect that, don’t you?”

Kay did; but the falling stars were news to her. She suspected that the story had been embellished over the years. She leaned an elbow on the battered counter, smiling slightly. Stores, she thought, were for stories. That was how it used to be in the country.

“Coupla days later, somebody found that there Big Hole. Before long, your daddy and half the men at the Fish Camp trooped out into the woods to see it for themselves, what you’d call a fact-findin’ committee, I reckon. Them men could’a laid some logs across it so’s a child or a coon hound wouldn’t fall in, but they was too lazy to do more than gawk! Anyhow it was a mighty big hole, ev’ry bit as long an’ wide as a grave!”

Not quite, Kay corrected mentally, more like five feet by four. “When I was little, I thought there used to be a

big stump right where the hole is and that the stump disappeared.”

“I can believe it, stump an’ all, clean out of the ground and gone. And no pile of dirt to one side or to the other!” Frances said significantly. “Now, what fools woulda dug a hole that big and hauled the dirt off to the next county, much less rooted up a stump and hauled it off, too?”

“Maybe I’m not remembering it clearly—maybe there wasn’t ever a stump. Maybe someone was trying to make a pit to trap animals, to eat,” Kay suggested.

Frances snorted with relish. “There was easier and better ways than that to scare up meat in the woods! No, it had to be some of them extry terrestruls done it!” Frances declared.

Kay was taken aback. “Extraterrestrials?”

“Flying saucerers. Right here in Bullock County!”

Kay’s stifled laughter trickled out as a smile. “I thought about analyzing the water in the hole,” Kay said, innocently and with some degree of truth.

“Well, now, there’s an idea!” Frances’s huge blue eyes glowed with excitement. “Everybody ’round here knows it was them aliens made the Holes, the Little and the Big, only they didn’t leave a lotta evidence. They never do. But maybe they’s something queer in that water, yet and still!”

Trailed by Frances, Kay had gone out to the porch. The store constituted the business district of Needmore, Alabama, unincorporated. Kay tallied two houses plus the shack by the dirt road. Modern mythology, she thought: flying saucers visiting rural areas, tiny towns like this one. The myth entailed a staggering lapse in logic. Aliens, if any, might conceivably visit New York City—logically, they would investigate the largest apparent metropolitan area—maybe L.A. or Mexico City. But not Needmore, Alabama!

To the disappointment of Frances, Kay declined an invitation to come back for supper and to spend the night at Frances’s house. As Kay pulled away, Frances called after her, “Well, if ever you find something strange in that Hole, make sure you notify the National Enquirer! That paper is big on them saucerers, you know!”

“Um-hmm!” Kay waved goodbye.

Moments later, Matilda zipped across the Conecuh River bridge. Matilda was running beautifully now and seemed to want to keep going all the way to Atlanta tonight. So did Kay. Frances had given her plenty to think about. And if she reached Atlanta a day early, she could collar that acquaintance of hers at the Centers for Disease Control; he had certain inside information that she wanted for the Pedernales Wells case.

The property next to the road was blanketed by kudzu vine. Crawling across the roadside ditch, kudzu twined around the post of the 35 MPH speed limit sign that marked the outskirts of Troy. Just past the sign, in town now, was the Baptist Church. The church had a big new sanctuary and a new steeple, narrowly and rigidly pointing away from the living soil of Earth.

Kay felt hot, even though Matilda’s air conditioning was working. My past is in the crucible, she thought,

and the heat is on. Invisible, long-forgotten memories were precipitating out. At the age of five or six, she had sneaked into the church building before the evening service, climbed up to the top row of the choir loft and stood on one of the chairs to peer through the curtains that would be so dramatically drawn back later in the evening. To peek at the mysterious Baptistry. It had been full of water. The deep, clear water had scared her. Baptizing meant drowning sinful human nature, the preacher had always said, and that meant that the baptized Christian’s heart and mind belonged to Jesus Christ. And Kay, even as a six-year-old child, had not wanted her very own feelings and her thoughts to be taken away like that.

If she went to Atlanta now, it would be running away. But she had already run farther than Atlanta—all the way to Australia; the world went no farther than that, and the end of the great circle was its beginning. Almost past the church, Kay pulled into the unpaved parking lot and turned the car around in a cloud of dust. She drove back the way she had come, over the Conecuh River, rusty with eroded soil from its watershed, which included the Brooks land. She whizzed through Needmore hoping that Frances was watching the TV rather than the roadway.

*Betsy Kay.*

Her childhood memories tended to take the form of seeing herself from the outside, as if from some undefinable, external point of view.

The little girl, auburn-haired and sharp-featured, like a fox, stood at the store counter, which her chin barely cleared. She carefully counted out the coins. And there were not enough of them. Granny Brooks had given her exactly the right amount—every dime, nickel, and penny to spare for a Saturday treat from the store—and now she was two dimes short. The dimes must have fallen out through a hole in her pocket. Her mouth tightened against crying.

Old Man Townsend wrapped up the cheese anyway and plunked the light bread down beside it, and put a piece of candy down, too. He knew that Agnes Brooks hardly ever had spending money, and why. “That was a mighty fine dress Miss Agnes made for Ruth,” he said conversationally. “It looks even better’n we expected from the pattern. Figure we owe her extry.”

Walking home with the groceries, Betsy Kay kicked at loose rocks by the side of the road. She was mad at Daddy for the way he drove off in the truck every Saturday to spend all of his money in Troy. She was mad at Mama, for dying when Jamie was born. Even mad at Granny Brooks. Granny did sewing for other people in order to have spending money, for things like light bread and chewing gum and postage stamps and, in winter, school shoes for the children. Sometimes Granny stayed up and sewed all night. Sometimes she didn’t have time to sew up the holes in her own grandchildren’s clothes, at least not holes in inconspicuous places like the pockets. Betsy Kay walked home, mad as the afternoon was hot. She searched for the missing dimes in the dirt of

the road. She found one. At the house, she told Granny that she had found the dime on the road. And that was true.

It wasn't just that Kay had been in Australia, winter cool, two days ago; this was an intrinsically hot day. For Matilda's sake, Kay pulled into the shade of the pecan tree at the Old House. Matilda diesel'd a sigh.

Kay ate her bread and cheese on the front porch of the Old House. Blossoming sweetshrub, warmed by the sun, censed the air. The sweet smell reminded her of Granny Brooks. Flies and bees droned loudly, the sound of a Southern summer day.

Refreshed, Kay dug out the backpack that lived in Matilda's trunk, and she reached for a gallon of distilled water. Which left five more gallons back there. In her joking moods she called the water containers "traction." But carrying her own pure water supply around was an occupational reflex: she knew rather too well what municipal water could include in the way of contaminants.

Settling the backpack on her shoulders, she hesitated. She had taken one look at the so-called Big Hole and thought toxic chemicals. Poisoned water, sea and surface and ground, was something that she understood and truly feared. For some less rational reason, she feared the Hole.

Behind the Old House was a stretch of rank weeds which, years ago, had been Granny Brooks's favorite vegetable patch, where the Little Hole—first cousin to the Big—had appeared. One morning, Granny discovered a deep little hole at the end of a row of squash, in place of her most prolific summer squash plant. That plant was gone, squashes, leaves and all. Granny snorted, "It ain't Halloween and there ain't no call for that kinda trick!" Fixing her sunbonnet on her head, Granny stamped out and filled in the hole. Then she picked the rest of the tender yellow squashes, just in case the tricksters came back again the next night.

Granny Brooks was no flighty fool. Neither was her granddaughter. Resolutely, Kay started down the pasture road.

Cutting across the pasture, she dodged rocks and cow patties. It wasn't lush pasture; it had never been meant by nature to be grassland. The overgrazed grass was thin, dusted with the dry rusty blood of the land. She hiked to the top of the ridge. Distantly, a chain saw buzzed, a crop duster looped. Obscene echoes of the drone of bugs by the Old House—and yet evocative of the same indiscriminate childhood nostalgia. She remembered going this way many a hot day to cool off in the creek, and to visit her special violet—the one which had somehow taken root in an ancient stump.

Kay reminisced. The original tree might have been old growth, three or four centuries old when white settlers sawed it down to make lumber. In Kay's childhood, an oak sapling had been growing out of the old stump—for years afterward, she had thought about it whenever she heard the Bible verse about a shoot from the stump of Jesse, a branch from his roots. Ferns and furry green moss had covered the ground between the stump's

roots. Lichens frilled and bracket fungi studded the dead stumpwood. Various insects and arthropods had colonized the stump—ants, beetles, spiders, even a scorpion lurking under a lean-to of ancient bark. And the violet flourished where the stump's heart had decayed into a natural cavity. One summer she had come this way every day to water the violet in the beetled stump. Otherwise it would have dried out and died in the heat of the midsummer days.

With concern, Granny Brooks noticed the hot flush on Betsy Kay's face. So she fixed a glass of mint iced tea for Betsy Kay, then sent her out of the hot house to look for her little brother. Jamie was playing in the shady dirt yard. The dirt was cool and sandy. Discovering an ant lion's den—a tiny pit in the sand, inside of which a voracious bug waited for something to fall its way—they encouraged an ant into it. They had just decided that the ant lion had gotten the ant, because it had not come back out, when their big brother showed up, all hot and bothered. "Cows loose!" Roy yelled. "Y'all go chase 'em!"

Betsy Kay scowled, but she did not talk back. Soon she was sweaty and cross all over again, bare legs stinging and itching from the high weeds by the road. What with the heat, the cows had not strayed far, and were soon rounded up—all but one.

Roy was fixing the broken fence when Betsy Kay reported the missing cow. He growled, "We bought that heifer from them Thompsons. And she heads back to their place any chance she gets, like a durn homing pigeon. Go get her. And she better be there, or else."

Or else Roy would get a whipping from Daddy tonight. Betsy Kay shrugged just a little, and with Jamie tagging along, set out on the road.

Sure enough, they found the cow in the Thompsons' corn field, munching on baby ears. Betsy Kay triumphantly slung the halter on the cow's head. "Come on home, you fool thing!"

"Tired!" Jamie complained. "Don' wanna walk."

"Well, I ain't gonna carry you! We c'n go through the woods," Betsy Kay suggested. "It's shorter that way."

But with dusk gathering under the trees, the woods had begun to smell like night. The cow balked. It was convinced that a cow-eating something lurked in the woods. This might have been a bad idea, Betsy Kay thought to herself. But she was too stubborn to change her mind. By talking soothingly and pulling incessantly on the halter rope, Betsy Kay succeeded in leading the skittish cow halfway across the neck of woods that lay between the Thompsons' cornfield and the Brooks' pasture. Clinging to her skirt, Jamie was no help at all. Night falling and the big animal stumbling and snuffling scared him. It got dark, and they still weren't out of the woods.

Then the night cried, with a thin, wavering, trailing wail. In fright, Jamie yelled like a catamount. And the cow lowed and bolted, pulling the halter rope out of Betsy Kay's hands. "Jamie, that was just a screech owl!" she screamed at him. Tears started in her eyes, from the rope burns across her palms. Lumbering away from

them, the cow crashed through vines and bushes. Betsy Kay ran after the cow. It would be better to stay out all night chasing than to go home to Daddy without that cow.

Kay scooped up the limp brown sweetgum leaf with a furious gesture. She had used a twiggy stick to lift that and the other floating bits of debris out of the hole. Now the water's clarity was very evident. So was a blank in Kay's memory. She could recall so much of that long-ago night so clearly. She remembered the owl's call, the cow bolting. And she remembered every single word of what she had told Roy later—every detail of the imaginative story that got her into trouble back at the house. But she could not, for the life of her, remember actually seeing the hole that night. And so far the Big Hole itself hadn't helped her reconstruct the missing memory.

Attacking her tent, she pulled out all of the segmented tent poles until the tent lay on the ground in sad collapse. Kay joined all twelve segments together into one long pole. With that, she probed the clear poisoned water. Depth of hole: five tent joints, slightly more than six feet. Very considerably less deep than the other side of the world. . . .

As for the water, its depth was three joints. It reminded her insistently and unpleasantly of the Baptistry.

From the pew in church, she had watched baptismal services, the preacher dunking people bodily in the water, up there behind the choir loft. But she had never been baptized. Not before she left home at the age of seventeen to go to college on a scholarship; and certainly not after. She had stubbornly refused to accept Jesus as her Lord and Savior, and drown her intellect along with her sins.

She stabbed and stirred the water with her pole. There was resistance toward the bottom. The predictable layer of muck. The tip of the pole slid around—probably stirring algae, animal bones, organic goo. Kay scowled. Logically, the pole should be scraping bedrock down there, ragged limestone. But the pole skated, like on glass. She tapped around. Glassy patches, at least, on the bottom.

Night was falling, she realized with a start. Kay pulled the pole up and disjointed it. Quartz, she guessed. An intrusion of quartz in the bedrock. Satisfied with the hypothesis, she went to resurrect the tent.

While eating supper, she watched fireflies flash from bush to bush. Hole or no Hole, she felt happier here than she would have been spending the night in a motel in Troy. This was a fragment of native hardwood forest; it owed its survival to the fact that the land's valley fold along the creek made logging inconvenient. Strolling toward the top of the ridge, Kay heard a chitter in a big tree overhead. There perched a screech owl. Its eyes blinked sleepily amid fluffed feathers that looked like rumpled pajamas. Kay's mouth moved toward a frown, but the little owl was so cute; her expression twisted into a rueful smile.

On the top of the ridge, she switched her flashlight off. The stars had come out. To the east, the lights of

Troy washed out a third of the sky. Light pollution. The sky had been darker when she was a child: she might have seen a star or two reflected in the still water of the Big Hole. She should have seen the water itself. But she could not remember even that. It wasn't vagueness of memory, it was a gap as neat and clean as the damned hole in the ground.

That evening's wretched ending Kay had certainly not forgotten. Forty years later it still hurt too much to forget.

Betsy Kay heard the dogs of hunters in the woods. The dogs' yapping floated over the night. Then a hound bayed the news that it had treed something. "They're over yonder on Peacock Hill," Betsy Kay panted. "Gotta be. An' if that's that way, our house is this way. Come on!"

Jamie was just too tired. She had to carry him. He weighed heavier and heavier on her back. Shots rang out on Peacock Hill.

Finally, stumbling into a familiar pasture corner, Betsy Kay gulped in relief. She dumped Jamie onto his feet. "You c'n walk now—it ain't far to the house!"

They met Roy coming across the pasture toward the woods. "Hey! Where y'all been?" he demanded.

Betsy Kay told him about the short cut.

Roy exploded. "Don't you have no more sense'n to lead a cow into the woods?! Then what? Where's the cow?"

"Never mind that ol' cow, that Hole goes through the whole world!" She thrilled at the discovery.

Jamie echoed, "Whole erl!"

"Clean to Astralier!" she said. "We seen it!"

"You're tellin' a story!" Roy accused.

"I ain't no liar!"

"Then you better show me," Roy said ominously.

Jamie howled. "I'll carry you!" He roughly picked up the little boy and slung him on his back. They went to the Big Hole. But it was as dark and empty as Betsy Kay's dismay.

Daddy's truck was parked at the house when they got there. Roy shoved Betsy Kay and Jamie into the living room. "Found 'em!" he announced. "Thank the Lord for that!" said Granny, throwing up her hands.

But Daddy's eyes were little, hard, and green. They got that way when he was mad. Some hunters, men who knew him, had flagged him down on the road, on his way back from Troy. They had found a cow of his, they said, straying in the woods, right there on Peacock Hill, and almost shot it for a deer. Daddy was holding his razor strop. Somebody was going to catch a whipping tonight.

The silence felt like the still before an electrical storm. "You gonna tell Daddy what you told me?" Roy asked, sort of softly.

And Betsy Kay did. Because it was true.

Kay tossed in her sleeping bag, sweated, and the sweat cooled and chilled her. The bag had been around—everywhere from the Rocky Mountains to those five-to-a-

hotel-room environmental conferences in different cities. Usually the bag felt and smelled like home and she went to sleep right away. Not tonight.

That night had been what made her a scientist, a truth-tester. She studied and tested, analyzed the facts. Then, with the conviction of the scientific method, she told the truth against the lies of polluters. In the course of her career she had sparred with industry scientists in writing, debated politicians in public. And, during one protest rally, she had scaled a corporate headquarters building in order to help hang a huge, accusatory, and entirely true banner on it.

So she was like the oyster that pearls the grain of sand. Layer on layer of pearl. Tucked away in the oyster, as if it belonged there, habituated, glossed over. But what was the grain that necessitated the pearl? A wild story that she made up and stuck to under fire. A child's futile attempt to deflect blame and punishment. A creative but useless lie.

In the night outside the tent, a whippoorwill called, a resonation of summer nights decades ago. Some of the country summer nights—the ones that had not been bitter—had been sweet as the smell of the shrub, sweet as Granny's mint iced tea. Kay cried herself to sleep against the nylon of the pack-pillow.

She had not really slept since leaving Australia, just dozed on the plane. Her brain spun tangles of images half-remembered and half-dreamed. The Blue Planet Symposium in pretty Perth: meeting rooms, arguments, words, faces. Presenting her own paper and gravely listening to others' presentations in the Hydrosphere track; dropping in on some of the programming in the Atmosphere and Biosphere tracks. It was depressing. The spheres were all cracked, all on the verge of falling to pieces.

Kay turned and tangled the bag around her knees.

Excursion to the beach. Tour bus chock full of assorted environmentalists on holiday. The blue Indian Ocean. Waves. Her dream made the waves bigger than life, tall as glossy mountains with crests of foam as bright as snow.

"Hear that, Jamie? She's belling yonder! Come on!" Betsy Kay ran down the side of the ridge. "Hurry up! Maybe she's fallen in that Hole! We gotta check and see!"

Jamie screamed for her to slow down. She did—not so much for Jamie's sake as because she realized that the Hole lay ahead of her.

Tripping over a root, Betsy Kay scared up a rabbit, which bounded away, dodging back and forth. The panicked rabbit ran right into the Hole and fell in with a splash. Betsy Kay heard it squeaking frantically in the water. The cow wasn't in the Hole, but now, because of her, the poor rabbit was. "Heck fire! Maybe I c'n help it get out," she said.

Jamie shrilled, "No! Stay way!"

Bravely, Betsy Kay said, "It ain't nothing but a big hole in the ground."

No sooner had she said that than the Hole contradict-

ed her. Bright light flashed out of the Hole, like lightning, but yellow; like a splash of daylight. Jamie yammered. Just as suddenly everything went dark again, almost.

A chinquapin tree stood near the hole, and its leaves gleamed green, catching some steadier echo of the first flash of light. Betsy Kay felt scared and curious, both. Curious won out. Gooseflesh all over, she stepped up to the edge of the Hole. And saw a sunny day in the bottom of it.

It was like lying on her back in a field, looking up at the sky. Except she flopped on her stomach and looked down at blue sky rimmed all around with green hills. Behind some of the hills the peaks of tall white mountains poked into the sky. Betsy Kay thought.

Her class in school had studied Australia just before school let out for the summer. Australia was the other end of the world from Alabama, the teacher had said, and had winter when Alabama was having summer, and day when it was nighttime in Troy.

Behind her, Jamie quavered, "Bessie, is light on your face! Is some 'un in there?"

"No," she whispered. "Oh, look!"

Peering over her shoulder, he said, "Oooooo," just as the sky below their chins closed like the lid of a box.

Kay sat bolt upright in her sleeping bag. She panted, hyperventilating. She'd dreamed that one before. It had the familiar feel of a recurring dream. But never before had it spilled into her conscious thoughts; instead it had always been an unsung refrain, a subconscious and thus unquestioned certainty.

Three days ago in Australia, she had stood by the blue Indian Ocean, jolted to the core, heedless of the advancing tide that finally surged around her feet. She had just found out from an Aussie marine biologist that the antipode of Alabama wasn't in Australia at all. It lay two thousand miles out in the Indian Ocean.

A hole through the Earth to Australia? That was absurd, physically impossible, and Australia wasn't on the other side of the Earth from Alabama anyway. Still, for a little kid, it had not been such a bad hypothesis—not if the kid had seen something so far out of the ordinary as to be incomprehensible, at least to the mind of a child.

Kay gasped, "God damn it, what did I see? If it wasn't Australia, where was it?" She unzipped the tent's nose-um netting. Pulling on her sneakers and grabbing her flashlight, she dashed out of the tent.

Wildly, Kay thought about taking a sample of the Hole's water to Atlanta to analyze it. To prove or to disprove that there was something, anything, strange about this hole in the ground. But laboratory testing was not going to be nearly immediate enough for her.

She had seen a deadfallen tree branch, long and slim and hard, down by the creek. Kay located it. Determinedly, she dragged it from its place—making something, a scorpion maybe, skitter for other cover. She laid the branch squarely over the hole, crossways. Gradually, she eased her weight onto it. Sound wood, it would support her. Kay's flashlight had a long loop; she knotted that to hang the light securely from the branch. Then,

getting a good grip, she went down, relying on the branch and her upper body strength to lower herself slowly into the Hole. The cool water came up to her solar plexus.

Her feet almost slipped out from under her. Instantly Kay realized that this was exactly the kind of damfool stunt that Kay Brooks never, ever pulled. She muttered, "As long as I'm here I might as check it out." Then she thought, famous last words!

She held onto the branch overhead with one hand. Sneakers saturated, she moved a foot around in the hole. The bottom felt slippery slick.

Gingerly Kay swiveled, and touched the nearest side of the hole. It felt hard—harder than dirt but slicker than rock. With one hand, Kay directed the beam of the dangling flashlight. The hole's side reflected the light in a glossy way that made it look like a resin matrix around soil particles.

On a mad impulse she ducked under the water, squatting, reaching for the bottom. Her fingers touched something slimy. Quickly she stood back up, dripping. "Ugh!" Steeling herself, she tried again. This time she managed not to flinch from the slime, reached into it, and touched the bottom. Ran her hands back and forth. It felt like glass. Not quartz and certainly not limestone. Like glass.

Kay straightened. She shook, shot through with chill consternation and blazing hope that what she had seen that night so long ago had been exactly what she reported later. Misinterpreted; but truthfully reported. Ultimately she had hidden the memory—vitally important to her, but unacceptable to her family—in her subconscious, for safekeeping.

She took a swift closer look at the wall of the pit. There were coiling root ends and earthworm tunnels, all sheared through cleanly.

Any tools available in 1950 would have mangled the soil and the roots.

If not a hole in the ground dug by local yokels and not a hole that went straight through the Earth to Australia—then what? Why? Kay's mind reeled, her thoughts careered toward Needmore.

But Kay's rational mind balked at making a deduction identical with the one that had been made by Frances Cope. The old woman had all of a sixth-grade education, and sold stories as readily as chewing gum. Frances could not possibly be right about this. There was absolutely no scientific, logical reason to think that aliens had come to the Earth forty years ago to dig a hole in the ground.

Never before had her daddy really given her a whipping, one that left stingingly painful welts on her legs and backside. Daddy even spanked Jamie for saying that he had seen the hills and the sky in the Hole too, and Jamie had recanted, shrilling, "She made it up!"

Sitting on a rough old wooden bench on the porch of Townsend's Store, Uncle Dave Matthews solemnly listened to the whole story. He was an elderly black man, the handyman at the store. When Betsy Kay was done,

Uncle Dave said, "Ain't gonna sit here and say you din' see what you says you did. And even if'n I had a' been right there, and din' see nothing at all, I'd a' said maybe the good Lord give you a vision, and that's His business," Dave concluded, with a firm nod of his gray head.

Just being believed made Betsy Kay feel woozy with relief. "Unca Dave"—years later she would realize that white people called him Uncle to be derogatory; for her, it was sincere—"didn't they used to be an old stump an' all right there, where that Hole is now? Don't nobody else think so," she added in a small voice. "Daddy reckons I made that up, too."

"I've fished up an' down that creek since afore yore Daddy was born. An' you is right." Dave thumped his walking cane on the porch floor for emphasis. "They *was* a stump. Big 'un, too. Took clean away."

Kay's skin turned into gooseflesh. Never mind New York City—an ecological disaster area. Here there had been a dense, healthy ecosystem. They (whoever They were) had taken out a well-chosen section of it, from bedrock through living soil, stump, insects, violet and all. Had they stolen her violet?

Was it stealing to cut a plug out of an ecosystem that was being butchered already?

That was a hypothesis. A good one. But not good enough. What about the day and the green hills that she had mistaken for Australia? What had that been—or where? And what about the rabbit?

If this was a normal hole in the ground after all, there would be a constant infall of things, animate and otherwise, dropping over the edge. In particular, the remains of small drowned animals on the bottom.

Bracing herself, Kay took a breath, deliberately ducked under the water, felt around. She discovered no small sharp animal bones. And no slopes of debris at the junction of wall and floor. Nothing but that slime layer, which had a texture unlike any goop she'd ever encountered in any water anywhere. It felt more like plastic. She surfaced with a double handful of the stuff.

In the beam of the dangling torch, it definitely wasn't green or brown, algal or rotten. Instead, a clear colloid, laced with threads. Shiny threads like silk. The threads had some kind of connectivity—complex as a circuit board but much more diaphanous. If Kay had absolutely, positively had to guess, she would have called it a highly exotic mechanism.

Her mind went dumbfoundedly blank, with ideas rattling around like pebbles in an old coffee can. Kay's scientifically trained intellect took over. It lined the ideas up just like putting pebbles in a row on a smoothed patch of dirt.

A plug cut out of a living ecosystem would include plants and seeds, insects, microbes, but few if any mammals.

To obtain an representative cross-section of fauna, small forest animals, a trap might be installed where the plug had been cut out.

A passive trap that operated when an animal fell in? And transported the animal—harmlessly?—to . . . ?

Her hands shook. The nodes of the colloid thread, draped over her upturned palms, sparkled like stars.

The hole didn't go to Australia. The physical extent of it ended under her feet. But maybe this stuff—device, circuitry—had sent small forest animals one by one to a world near another star.

A motion-activated device, possibly, and possibly—considering the immaculate condition of the water—it was still operational.

Her intellect's neat line of reasoning scared the hell out of Kay, nearly scared her out of the Hole instantly. She checked the flight impulse. If motion could activate something, then she had better not make any sudden moves. Slowly, she stooped to place the colloid back on the bottom of the hole. Of course, if *she* had been responsible for this set-up, she would have set it to filter out people as a trash species. Standing up, she reached for the branch over her head.

And promptly slipped.

Kay caught herself on the branch, not without briefly splashing and thrashing. "Hoo!" she gasped, holding her branch with both hands. Then she felt heavier. The water was changing into bright and unbuoyant light. In that well of stunning light, she found herself dangling from the branch, finding no solid surface whatsoever under her flailing feet.

With the agility of a woman half her age, she pulled herself up, hitched a leg over the branch, and scrambled out of the hole. Blindly Kay backed away, bumping into trees and falling over roots, until she could retreat no farther without being able to see.

The woods were silent. The afterimage in Kay's eyes gradually faded. She crept back toward the Hole. The only light coming out of it now was from her flashlight beam. She warily peered in and found the hole empty. No radiance, no landscapes, and no water, either; it was

dry, apart from a seep of water on a shiny, crystal floor. Holding her breath, Kay leaned over and untied her flashlight from the tree branch. Then she ran.

Somehow she got all the way to the Old House, to the car, without completely realizing it and without turning an ankle. She climbed onto Matilda's cool hood and sat there, wet, winded, and shivering. For a while she could think of nothing but extraterrestrial ant lions.

Somewhere in the distance a rooster crowed prematurely. The sky was still quite dark, except where the lights of Troy hazed it out. She did not intend to go back for her tent until broad daylight. Listening intently toward the woods, she heard nothing other than the night. After an uneventful while she leaned back on Matilda's hood, relaxed very slightly.

The darkness before dawn was spangled with brilliant stars—not a diamond-dust or gold-glitter one of them worth as much as a transection of Alabama woodland. Blue planets, with the water of life, must be few and far between and infinitely valuable in the Universe. And somewhere there must be older, smarter if not necessarily wiser, folks who understood that. Maybe they were recreating the shattered forest of central Alabama from green plugs. Maybe she had once seen a glimpse of another world, the very best kind of other world: Earth, restored. That would be a reassuring thing to believe; and Kay could.

She rubbed a shin, banged in her exit from the Hole. She wasn't ready to leave this world—not in so unorthodox a way and not yet. She had work to do here. Something cheeped in the weed wilderness that had been Granny's garden. Suddenly Kay laughed.

They had tapped some preliminary sample holes. And gotten Granny's best squash plant. Well, it had probably been a good, old-fashioned, heirloom vegetable: worth transplanting across a considerable distance. ♦

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# For a Future You



## Kathleen Ann Goonan

There is no one to meet me in Boston's crowded South Station.

I sway in the doorway of the Shinkansen, dazed after opening my eyes and seeing big green destination letters flashing "BOSTON" at the front of my car. Why Boston? And why do I expect someone? I don't even know why *I'm* here.

Tears flood my eyes for a second and I wipe them away, angry. No way for a middle-aged man to behave. It's just so painful to keep waking like this, not knowing where I've been. And in many ways, of course, I am a child, thanks to NIH and the nanos they blessed me with so gleefully. My life is riddled with dark places like this now, bewildering amnesias, tiny vacuums. Because of the nanos, the horrible, hateful bugs.

Then I laugh. Some fugitive.

I step off the train in front of flower stalls in the chill, enclosed air, bask in color—brilliant red and yellow roses punctuated by tall stalks of purple gladiola. Their sweet scent flares around them.

Like a child, I drink it in: then the woman behind me gives me a shove. "Move."

I move. A step. Then I stop, still confused.

Well-dressed businesspeople stride past me with great purpose, reminding me that I

Illustration by Jean Elizabeth Martin

lack any, though at one time I was like them. Renowned in my field, astrophysics.

Shivering, I pull my black coat tighter, amused when I notice for the first time how expensive and fashionable it is. The bugs are running up quite a bill on someone's account, I'm not sure whose. They're clever enough to get into any simple credit net, I'm sure. A Santa bell clangs amid the sound of shuffling footsteps. I look around.

Why do I feel so disappointed? So empty?

Then they remind me, those sweet, brilliant bugs that toy with me.

Janet.

Of course. Yes. It's been years, yet memories of past meetings with her organize the air like a chime, charge the bustling crowd with a significance of which it is completely unaware. Still, even if I had thought of calling her to see if she would meet me here, I would have been too afraid of intruding to actually do it. It's been so long.

But my heart draws inward with the ache of knowing, once again, that I wasn't important to her. Not at the end.

I shift my heavy shopping bag to my other hand, wonder about it, peer inside. Damn the bugs! What have they been up to now?

More new clothing—I can see the tag. I reach in and feel the rough tweed of a jacket, smell new wool. It triggers memories of those happier days. At our second meeting, I recall, I wore a jacket just about like this, from what I can see of it. She was almost finished with her Ph.D. and was distracted, nervous, and very funny. She was always very funny.

"Stop this painful nonsense!"

Was that my shout?

How embarrassing. But no one seems to have noticed. No one even looks at me.

I force myself to walk toward the station, and swim through the crowd that rushes outward, now, to board the train. The damp scent of snow teases the air, and through the glass roof I see the heavy overcast sky. The smell of sizzling sausage and garlic drifts from a nearby vending cart.

Yes, yes, damn you. You're right. Janet met me once—where? By that post?

Yes, that very spot, now occupied by a ragged pan-handler.

She looked at me with harried blue eyes that warmed and relaxed in quick stages, as if her heart were mended by the mere fact of my presence, and I felt the jolt of knowing that she was suddenly, completely dependent on me. I know she felt it too.

I welcomed the knowledge and hugged her tightly.

But that was before I lost her to my own dark character, and to her new god, Information, after which my visits were carefully rationed lest my unpredictability upset her plans. And even that was long before they let the little bugs loose—when was that? only two months ago?—and I became someone else. Damn the memories! I wipe my eyes with my free hand. Silly man. Silly bugs. They should learn that many things are best forgotten.

Well, it's not all bad, I think, staring across the crowded platform. No one will recognize me here. I hope. In

Washington, because of the *Post* articles, I haven't escaped notoriety, though I have, for the moment at least, escaped NIH. At best, I could be mobbed. At worst, the NIH goons could come and cart me back to that hellhole to die. Oh, they don't think it's a hellhole, the doctors who did this to me. To them it's Keck and Mt. Palomar and Hubble all rolled into one.

I give the bum a few yen, more than I should, and she stares at the coins in the cup, astonished. Why not? Money is one thing I'm not short of. About the only thing. Time, attention, sanity . . . precious little of those remain, to be sure. I should enjoy this brief window of fractured self-knowledge.

Easier said than done. The world is so dark now, at its oblique angle from the sun, and I am also far from light, though I need it more and more. I'm starving for light.

The door to the station slides open and I troop in with the mob of passengers. Yes, the station is all preserved, Victorian, redone by a throng of scholars, engineers and architects in love with the expression of an earlier age, an earlier Boston which still resonates here ten years after the millennium. I curse my uniqueness for separating me from everyone else, from their innocent enjoyment of life.

For I am entirely new. Or, almost.

Dreadfully almost.

As I am carried along with the crowd, I reflect, amused, that even the shining Shinkansen, gleaming so sleek and speedy, isn't new enough to compare with me; the orbiting Space Hotel, the thousand and one evidences of technology rushing apace; nothing at all is quite *avant garde* enough to reflect the newness surging within me, which darkens and enhances my past.

I wish, suddenly, for loving psychic architects to restore me to *my* past, to replay those days for me endlessly, to take away the blinding new consciousness, not mine but *made* of me, which lies on the other side of some puzzling, unbridgeable chasm, and give me back the familiar shadows and light of simply being human. Instead of this stark blackness.

I make my way to the underground, which is reassuringly dingy, and pretend that I have to study the map to remember which train to catch. Not that I have any idea where they are taking me. The bugs have that sort of thing under control—it appears to be their specialty.

The train arrives, incongruously large in the underground corridor, clattering and echoing off the dark, damp brick walls.

It resembles a dog.

It is a dog. So faithful. Coming when called.

Large black mouth filled with teeth, wanting to swallow me.

"Are you getting on, or what?" I am shoved inside, sweating, terrified, and sit on one of the teeth, lined up in white plastic rows. I moan in fear as the animal pants into a tunnel. It disgorges some food when it surfaces into the blustery street, and then relief hits my chest and I relax into the seat. Into the plastic seat. On a train.

I take a fresh handkerchief from my pocket—thoughtful little bugs, aren't they?—and wipe the sweat away.

Who knows why the bugs think this way? Who knows what connections they make? Certainly not me. I'm entirely at their mercy when they thrust their preschooler's absurdities on me.

Exhausted, I catch glimpses of ancient streets, where deep greens, blues, and brick-reds are veiled in winter twilight and gusting sheets of snow. The little bugs leap, I imagine, at the illumination of the street lights, for they become excited at light, some sort of photon sensitivity integral to certain human developmental stages, I suppose. It is so beautiful that their happiness and yearning catch in my throat for a moment, then subsides.

Oh, the bugs pretend to be my friends, but they're not. The shuffle and flux of passengers boarding and exiting accompany my thoughts, and I grasp the handle next to me tightly. The bugs take away my mind and replace it with misused information. It's frightening. But what do you expect, if you're the first? Fun and games? That's why they want you in the hospital, remember?

But you can't feed a growing mind a *hospital*. I don't want to *be* a hospital. I stand and pick up my bag, force myself to the front of the car. No, when it comes down to nature vs. nurture I know that nurture sometimes has the upper hand and so I flee into the world, which might nurture a creature more human. I want to be John Michaelmas. I don't want to live metaphorical oddities that the bugs struggle with, unable to understand or translate; I don't even want to live the mathematics of astrophysics, stunning as they are, and a very good showing I made in the field, too. I don't want to vanish, eaten by these bugs.

But I am.

Of course, I don't have to remember where to get off. The bugs made the reservation, not me, ruthlessly using my memories. What do you expect? That's the point—no one knew what to expect. The tumor was large. Radiation didn't work, but by God they tried it till they just about killed me. My hands pushing open the door are the bony hands of an old man, with slack, wrinkled skin.

I step down into the cold, and wonder for a minute about the bag I still hold.

Then, like prompters in the wings of a stage where the spotlights often blind me, they remind me of Janet, and the tweed jacket, and that I once wore it, or its ancient twin, while giving a lecture at MIT.

I laugh (not *them*, by God, not them this time) as I take the ice-slicked cobblestones carefully, suddenly realizing what they have in mind as the landmarks become clear. The Excelsior Pub on the corner, where we spent many fine evenings over draft beer, the narrow street of overarching oaks. A gust of wind off the ocean drives needles of sleety stuff down my collar, and bare branches rattle above.

The little hotel we bumped into one happy evening is still there too, but I suppose they made sure of that. I probably have a reservation. I round a corner and there it is.

Is it what you thought it would be, bugs? The small neon sign lit in green and red that says Dunwich Inn is a minor feast of color for you, isn't it? I sit on the bus-stop

bench across the street to accommodate them their yearning. Drink up.

They do, for the bugs love color. They often hold my eyes spellbound until I'm lost in banks of flickering lights; linger over small gradations in light and hue that I would not have noticed. Now, I crave visual electricity, the sun stored for replay, perhaps because it seems as if *I* am being stored for replay too. I yearn for light with my very soul. Or . . . *who* is it that yearns?

*They* do. They like to check into the top floors of hotels, the higher the better, and merge with the pure, true lights of the cities through which we've traveled since my escape, flow down paths of light that fan out across dark rivers and sparkle like ethereal necklaces when there are bridges. Oh, it all looks like space to me, and stars, my life; I don't mind the bugs then.

But do the bugs—*like* life? Do they *care* about it?

As I cross the street and climb the brick steps of the Dunwich, I hope so. For *they* will have life, and *I* will not. How can they *like*, without me? I wonder. How can they feel anything?

The ghost of Janet walks beside me, puts her gloved hand on mine as I touch the doorknob, and I wonder—*where the hell did the bugs dredge that up from?*

I let my hand drop, weary. Very weary.

They're just trying to wear me down. They want me out of the picture. Why even go inside?

I straighten. Because I *want* to. The hell with them. *I* am celebrating life tonight. Or *something*. Myself, my past, my core. Which I was not sure even still existed until just now. Because of Janet.

For they're not aware. They can't be. They just brought me here, that's all. Followed pulsing neural directions. What could *they* know?

Ah. That's the question, now, isn't it? Which is which, anymore, and who will we come to be?

I'm not ready to go in yet. It might be too painful.

I sit on the snowy bench on the porch and remember the first time I saw them, magnified: certain minuscule machines to fool the cells gone crazy, other special machines to dismantle the tumor and let it flush into the bloodstream, and a third type to repair neural damage. Or so Dr. Krantz hoped. The controller, smaller than a mite. "Bugs," I whispered. Many of them, moving within my head on a mission of their own. Dr. Krantz kindly explained it to me.

"Of course," she said, sitting on the edge of my bed right after I woke, "memories are the hard part. We've never done a brain tumor before in humans. We're reasonably sure the nanos will take care of the tumor. But it's reached into a lot of different parts of your brain. Rats perform quite well after the procedure, but we don't know all that much about human knowledge, memory, personality . . ."

And you guys were already doing your stuff. I smile at the memory as cold snow kisses my face. Dr. Krantz's red hair glowed, a million strands of glittery filament, and her green eyes had flecks of gold about the iris. Her silk blouse was cerulean blue and the shimmering beauty of it rapidly superseded the significance of her voice.

"The experiment is a success, John," she told me a week later. "You're going to live. You were in a coma for days before we did it, you know." She stood in front of my hospital bed, her green eyes glowing with joy, stethoscope flung over her neck, hands stuck confidently in her pockets, feet wide apart.

But Dr. Krantz was wrong. My body will live. Not *me*. It just took me a few days longer to figure that out. At NIH, they hadn't really cared about such fine distinctions, had they? But their ungrateful experiment, it seems, does. And will, as long as he can.

It won't be for much longer, I'm afraid. A matter of hours, perhaps. Who knows?

I stand and open the door of the Dunwich Inn.

A gust of frigid air follows me inside, and I shut the door. Politely, quietly, as always. My face tingles in the sudden warmth. Threadbare red oriental rug—probably brought by some old sea captain in the 1800's. How many years since Janet and I last met here? Seven years? Eight?

The bugs can weep for that; I will not, though they insist on using my eyes. They clamor, always, for a taste of emotion and I am helpless before them, the bastards.

All right, guys, have your fun. You seized on Janet and so I woke up on the Shinkansen to Boston holding this bag with the nostalgic jacket, wondering where the hell we've been.

As usual.

But, you notice, I'm not fighting it. I'm getting too tired to fight. Just musing on the lights in the darkness, electricity, and the suns I've studied all my life. Wondering what the point of it has been.

"Sir?" says the young lady behind the desk. Her white blouse has a high collar fastened by three pearl buttons, and her skin is smooth and fine, with a dusky cast that contrasts beautifully with her blonde hair. Feast your eyes, bugs. Her eyes are alight as they look at you. Not with the image of the body that you inhabit, in your grand newness, I'll have you know—the face she sees, my buglets, and you might as well assimilate the unpleasant fact now, is seamed and worn with fifty years of hard living, too much booze, and wasn't ever much to look at anyway. No, the light in her eyes is reflected light, self-generated, the light of someone who hasn't lived quite long enough to experience the terrible, awkward grandeur of realizing the light will go out and that she will not have made a wink of difference.

But *you*, my bugs, will. I know it, and that's why I bear you. Rejoice, and be happy. Just don't give me such a hard time, all right? Leave me with a little dignity. Don't let me drool on street corners.

"Sir?" A bit of panic in her voice. But I can't seem to speak, damn it. What? You're ready to turn around and go? You've had enough, it's not important?

Ah, no. this *is* important. *This is me*. This will be you. I dare you guys to fuck this up. You don't want to go back to the hospital, do you? Remember how they tried to inactivate you? It wasn't going the way they thought it should? Personality fragments all over the place? Troublesome, wasn't it? Well, Dr. Krantz is just a phone call away. Do your stuff. Or else.

"I believe I have a reservation. Dr. Michaelmas."

She looks relieved. Glances down at my bag, raises eyebrows, brushes computer pad. "Only one night?"

I shrug. "For now." I'm not sure exactly how the view will affect the bugs. It's a quiet street, and there might not be enough light for their greedy souls.

I'm not quite sure, either, how the memories will affect me. Maybe I won't wear my jacket.

The elevator is a metal cage filigreed with beautiful metal vines festooned with hard black grapes and leaves. The key is old brass, and I turn it in the keyhole of Room 8.

I stand in the doorway.

Go away, bugs, but of course they don't; they can't. They feed on my memories, and I am helpless and resentful. Then I forget them.

We had just got back from the telescope, I think Hubble I; they didn't have II yet. This was the room, yes, and she turned to me, with blonde hair much more bright than that of the woman downstairs, and blue eyes filled with the cosmos, and with numbers and connections which I, her professor, could only admire in awe.

Janet was just finishing up her Ph.D. and I knew she would be something. Really something.

I remember that she walked over to the window and fiddled with the frosting module, touched the panel—the windows frosted and blurred the lights below, the city-dimmed stars above—then cleared it. She turned and said, let's leave it clear, and turned off the lights instead.

Her voice echoes clearly, now, in my head, and the bugs soak up her happy intonations. She never said I love you, though I told her I loved her often enough, but I knew. She just said, I'm so happy. In that sure voice of hers.

I had flung my overcoat on the chair, and after she cleared the windows she yanked off my tweed jacket and went on from there. Impatient woman.

*Call* her, they demand.

"What? No!"

The snow swirls around the street light. It is three days before Christmas. It had been that night too; and that's why I came here, I realize, that's why I carried the bugs hither and yon, stalling to get the time just right. They thought they brought me.

Now I know that it's the other way around. Or is it?

I sink into the faded green silk-covered chair, dizzy suddenly with the full knowledge of the darkness, the loss, within me.

I am hanging on by a thread.

I rarely know who I am, yet obviously the bugs are functioning, somewhere beyond the darkness, being me.

My clothes are clean and attractive; my hair is neatly cut. I am taking care of myself just fine.

I am a fortunate man, all told. Chosen from millions of candidates. Because of my knowledge, Dr. Krantz said right at first, hoping to flatter me into compliance, adventure, and this present dread. We don't know what will happen, but we want to preserve those who carry knowledge important to mankind. But when I hesitated (why, when death lay in each direction, I don't know, except I had feared . . . maybe this) they got down to

brass tacks and said because the tumor is metastasizing at just the right rate for us, for our experimental purposes. And because, after all, I lived right in Bethesda, and it was convenient and cost-cutting for them. They don't tell you those things, but I knew. And anyway, I'd signed a paper so when I got helpless enough they felt free to introduce my little friends to my embattled brain.

I look down at the old hands clasped in my lap, glance at myself in the mirror above the dresser. I look older than fifty but not ancient. The steam heater pings, snow taps the wavy windowpane, the rug has the musty smell of a million futile vacuumings.

Janet never married. When I wanted to marry her, so desperately, six years ago, she said she couldn't marry someone who drank so much, even more than her father had. So I stopped, stopped for a year, and then realized that she hadn't really known the truth; she lived for Information, as I did. After another troubled year, Information took us to different places. And it was a relief, in a way, when it did. She went to Hawaii. I went to Washington. I knew, though, that she had lived in Boston for the past two years. I read the journals, and they said so.

Feed us, clamor the bugs. We're very hungry. Feed us *yourself*, Dr. Michaelmas.

There are no guarantees, they'd told me at NIH. Nanotechnology is in its infancy.

And I am at death's door. My body is better, but I am almost dead. I'll vanish into a new era of medicine, and the bugs will finally be able to go back to NIH in my zombie body and everyone will party and get good write-ups in the news.

I stand and look out the window, press my forehead and nose against the chilly pane. The froster is broken, and Pleiades is hidden by the city lights, but I feel in my soul the transit of light, the solstice, that mysterious promise, that longed-for transformation.

My little friends feel it too.

This is *you*, they whisper. The core of you. Try. *Be*, for us.

And maybe (but probably not, just a thought to make you brave), for a future you.

But I doubt it.

My fingers know Janet's number. By heart, as they say. I guess. I can't remember using it before.

She answers the phone with my name. "John?"

I glance at the bag containing my jacket. My heart beats hard; I catch my breath and ask, "How did you know?"

"The solstice," she said. She pauses then says, in a high, funny voice strangled, I know, by emotion, "I always think of you on the solstice. But don't you remember? You called me last week. Good God," she laughs, "I hope you remember what you said. You weren't drunk or anything, were you? You did sound kind of odd." Her voice holds a tinge of anxiety.

"No," I say. Only something like it. I'm going to have to tell her, of course, but her voice is so lovely I just want to bask in it.

Miraculously, she keeps talking. "I've been thinking about what you said. I just don't know. Sometimes I

think that I—that I made the wrong decision, John. But it's not too late, is it? I mean," and her voice rushes on, "it's just not like me, to be so *emotional*, but something about you calling, and the way you put everything—you really made a lot of sense, you know?"

Making sense was always very important to her. I'm glad that they made sense when they called. Overwhelmingly, absolutely glad, as if some immense equation proving the existence of happiness is falling into the form of a joyous answer and I can apprehend and *feel* its cleansing, elegant inner workings.

Her lilting voice releases the light of a million suns, and the nanobugs course through my blood, I am microscopically aware of them because of them. They feed on my neural connections, creating a new form of consciousness, flashing with hope, love, and . . . recognition.

Recognition of *myself*.

The light blossoms and continues to grow; it overwhelms me. I can hear Janet's voice and I want to reply, but I can't, as I am pulled, me, *me*, by the nanos that have been working so very hard now, I suddenly know, across that black, infinite gorge in which I've been lost for how long now, weeks, months, no way of telling.

Pulled in one powerful surge across that empty, sucking space. As if borne on an immense, inevitable tide.

And find myself reformed, after being frighteningly dismantled, on another shore.

The little room glows and buzzes with color, which seems almost to effervesce as it flows from form to form. Sparking with information, yes, it's all information and I am aware of it in many, many forms. More forms than I thought possible. I am stunned by the immensity, the newness, the infinity of it all. Infinite in all directions.

Newton.

Janet.

Yet I am happy just to have the precious sense of sight, this field of vision informed by all of my past, each nuance of pain and joy, as Janet's warm voice invests the particles I see with *meaning*.

Surely I am seeing like a child.

And like a child, I am quite joyful. Immensely grateful. Janet is quiet. I take a deep breath.

"Do you know where I am?" My voice catches a bit as I ask. I clear my throat.

Silence; then, "The Dunwich?"

"Do you know," I say, trying to choose my words carefully, then rushing on, "that you've just saved my life?" I could have, I know, been left in the chasm. No one would ever have known.

She laughs. I let her think it was simple hyperbole. She says she'll be here as soon as she can and hangs up.

I think of the papers she has published, the quirky way she thinks, her pulling my jacket off in front of the unfrosted windows, in the light of the street lamps.

The transit is complete. I am heading into light.

As I nervously take the jacket out of the bag, laughing at myself at the same time, I try to thank the blessed bugs.

But I can't seem to find them anywhere. ♦

# In the Company of Machines

David F. Carr

Jonathan had been dreaming of arms, legs, bellies, and buttocks.

When the radio signal came into his thoughts uninvited, like a loud voice in his ear, he woke to find himself not flesh, though he remembered having been flesh.

Xionguo, always the early riser, sat at the conference table studying maps, undisturbed, while methane rain from Titan's smoggy pink clouds washed down the window behind him. The hull rang like a tin roof.

Reluctantly, Jonathan centered his attention on the mes-

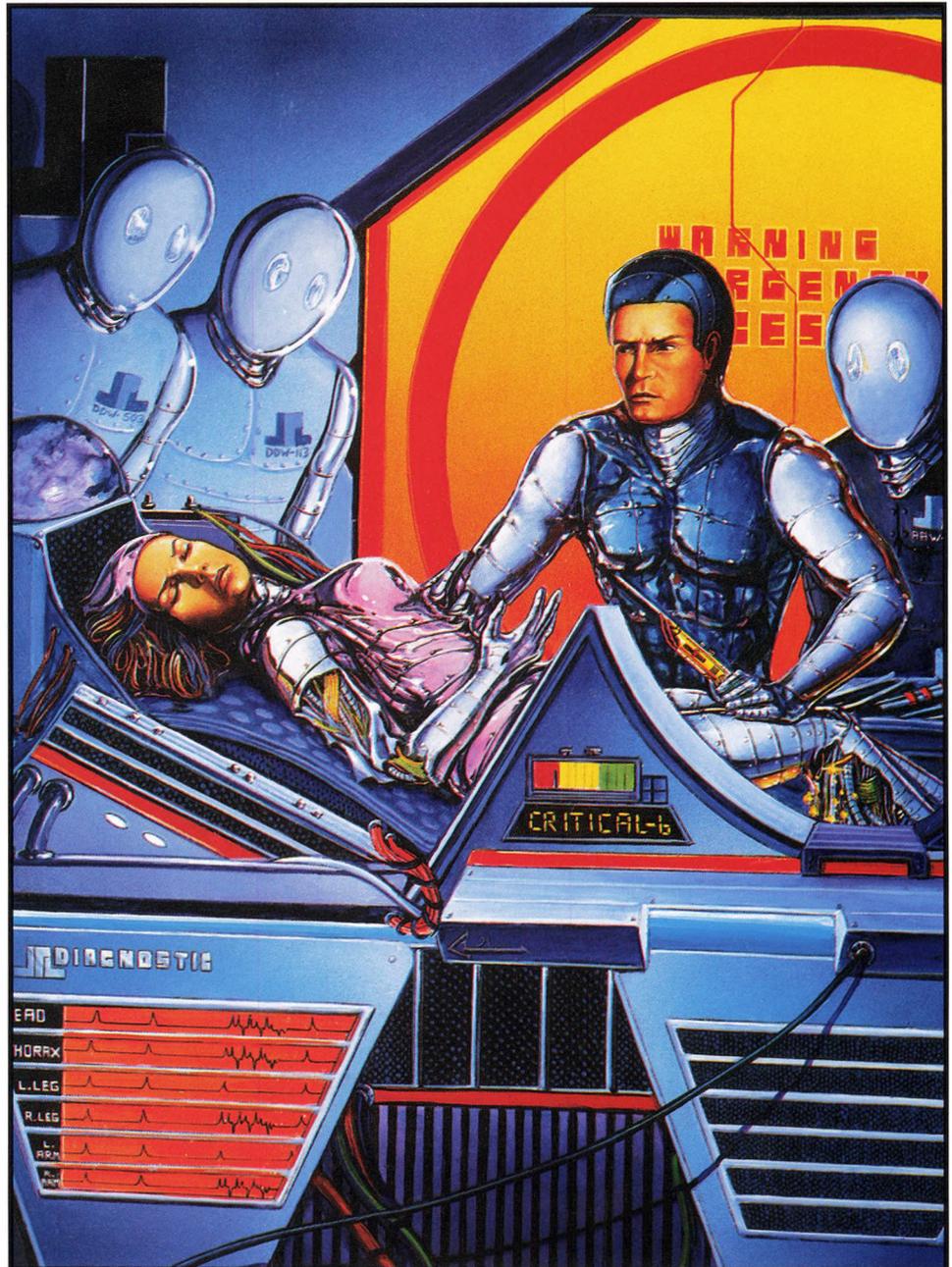


Illustration by Lissanne Lake

sage, making a spectral TV form in the air. "Good morning, buddy," said a ghostly face, a face Jonathan could remember seeing in the mirror.

"I'm calling early because I wanted to catch you before you got involved with anything else," the image said. "We've got some important news. Xionguo is dying. He's had a massive stroke and isn't responding to treatment."

Jonathan glanced at the figure studying at the table, oblivious. It wasn't him the message referred to but an old, old man very far away. Like Jonathan, the Xionguo at the table was cast in steel and plastic. His round-faced mask reflected lines of maturity but not old age.

"We've prepared you as best we can for this day," Jonathan's doppelganger said, making him wince because it was a lie. "Let me know if you need any advice deciding how to handle it."

There was more, routine operational details Jonathan had already thought of. Then the face disappeared.

"Shit," Jonathan said. Xionguo didn't hear him swear, but the message headed for Earth at the speed of light. Jonathan could think of no other, more polite reply at the moment.

As he got up, Xionguo asked, "Private call?"

"Just a little heart-to-heart with my original," Jonathan said. He looked at the other robot, and saw a man sitting there. He could not bring himself to pass on the message, at least not now. Trying to cover the awkward moment, he bent over the table. "What are you working on?"

"Logistics. Our mining site isn't working out. The rock outcropping we chose to work turned out to be quite shallow. The moles have already broken through to another layer of water ice that's who knows how deep. I've identified another site that didn't look as promising at first but has the advantage of being closer to the factory. I'm thinking of sending you over there to do some prospecting. You can keep Perry company."

"The worse decision we ever made was to put the factory on the other side of the mountains," Jonathan grumbled. "It just seems designed to make things harder on us."

"That's the bureaucratic way," Xionguo said. "I can say that because I'm a bureaucrat." He smiled.

Dr. Chock yawned to let them know he was awake.

"Good morning, Peter," Xionguo said to the little man, who was rising to come to the table. Dr. Chock had made his mask to reflect his actual age, so that he looked considerably older than Xionguo, though the opposite was true.

Dr. Chock peered at the plans on the table with paternal interest. "It seems to me prospecting is a job the robots could handle on their own. Besides, I thought you said Jonathan was going to help me reprogram the operating system for our power plant today."

"If JPL felt machines could handle things on their own, we wouldn't be here," Jonathan said.

"We' aren't here," Dr. Chock said.

"That's one point of view, I guess," Jonathan said.

"Gentlemen!" Xionguo interjected. "Who works where is my decision, and I judge that Jonathan will serve the

expedition best by prospecting. I'm sure I didn't make you any hard and fast promises, Peter. Jonathan can help you with the power plant when he gets back."

Dr. Chock nodded curtly and strode out of the room.

"Why does he have such a stick up his ass?" Jonathan asked.

"Oh, I've been putting him off about that project for weeks," Xionguo said. "He's talking about a very marginal gain in efficiency. I'm going to have to let him do it anyway, just to get him off my back."

"So when do you want me to leave?"

"Now. Go."

"Mind if I stop in on Lisa?" Jonathan asked.

"Not if you keep it short."

Jonathan nodded reassuringly. On his way out the door, he paused and turned again to say what he ought to say. But he didn't know what that was, and Xionguo had already turned back to his work.

The rain began to come down so hard it was impossible to see. Jonathan navigated almost entirely by radar as he scabbled up the slush slope. In the odd, false-color world of radar imaging, there was no doubt of his inhumanity. And yet . . . what? He thought of the message from his original self, which had seemed so cold.

Jonathan had the memories of the man who for one long month had worn a funny hat that continually re-recorded the firing of the neurons in his brain.

He remembered his elation at finding himself alive in the machine body and his dismay the first time his original walked through the door.

They had trained together for a while. When he responded to any stimulus the same way as the original ninety-nine times out of a hundred, the neural net engineers proclaimed him a success. But he doubted he could pass the same test today.

He remembered Xionguo pushing his original's wheelchair through the halls of the Jet Propulsion Laboratory. Their personalities had diverged the most rapidly. Xionguo had treated the old man with respect, but also pity. Once he had confessed to Jonathan, "I wish he would just die and get it over with."

Of the five of them, only Xionguo had taken the transformation as a promise of immortality. At least in the beginning, the rest of them knew they weren't really alive.

But after five years of spaceflight and seven months of colony groundwork—during which their originals had been reduced to mere video images—Jonathan wasn't so sure.

As if in answer to his thoughts, he heard the call again.

"Don't give me 'shit,'" the other Jonathan said. "I want to hear how you're going to handle this. You're second in command. Act like it."

How would you handle it? Jonathan wanted to ask. If you're me, you ought to be able to tell me how I feel about this.

If the message had been longer, he might have sent just such an irritated reply. As it was, he ignored it.

Lisa had taken to sleeping in the greenhouse so that she

could have an alarm wake her at the first sign of trouble. So far, two of the ecocultures she'd started had failed because of some small imbalance. What she was attempting had been done before only in laboratories—build a working ecology from a limited store of seeds, eggs, and bacteria.

Now green sprouts broke clear of soil littered with dead shoots. Perhaps it was going to take.

Her capsule world spread over a little more than two square miles under a pressurized dome of fluorescent panels. Jonathan found her sitting cross-legged on a rock at the center of her domain.

"I came to tell you I can't help you today," Jonathan said.

"I know. Xionguo called. But I do appreciate your stopping by to tell me." She unfolded her legs and hopped down gracefully. "You must be relieved. You've been telling me how you think the factory is more important than my work."

"I never meant to denigrate your work. It's just a matter of priorities. Your work is important in the long run, but we need the factory for spare parts," he said.

"Oh, I was just kidding," she said. "You're so serious sometimes."

"Sorry. . . . Look, I wanted to ask your advice about something."

"Xionguo?" Lisa asked.

"How did you know?"

"My flesh-and-blood let me know when he went into the hospital. Then I think they told her not to say any more. I figured they'd let you know, if anyone," Lisa said.

"I don't think he even knows," Jonathan said.

"Our Xionguo? Probably not. He hasn't really wanted to keep in touch, I don't think," Lisa said.

"I didn't tell him anything," Jonathan said.

"I wouldn't either. As far as he's concerned, he's the real thing, and the old man is just a shadow. That's probably the best thing for him to believe at this point," Lisa said.

"I hope you're right. Well, thanks, I needed to talk to somebody. Guess I'd better get going," Jonathan said.

"Be careful. There's a storm coming."

He acknowledged her concern with a wave, and headed back the way he had come.

Just before he got to the airlock, he chanced upon a tiny turtle that had climbed up on the bank of the pond where it had been born. Jonathan knelt to look at it, and it opened its mouth as if to speak, showing pink gums. Flesh, he thought, and, shivering, went on his way.

The rain had let up, although he could see a new wave of storm clouds sweeping in from the south. Saturn was a pale half-disk shining through the pink overcast. He watched a shooting star—perhaps a stray bit of ring rock—angle across the horizon.

Jonathan climbed the remaining few hundred feet to the summit, past the base of the radio tower, and looked back toward the colony site. He could just barely see the domed top of the lander glowing in the mist on the

banks of the sea where liquid natural gas frothed on the icy shore.

Then he started down the far slope.

The next morning, Jonathan smiled as he loped up a trail frosted with crackling carbon dioxide ice. The time for his regular message from his original had passed without a peep. Apparently, the relay was down. It couldn't last forever, but for now he had some privacy.

Probably it had something to do with last night's storm, which had threatened to set some records for violence. It was only the second time he had experienced a storm with lightning on Titan. He and Perry had huddled in the shelter feeling bursts of static in their nerves.

Jonathan hadn't told Perry about the old man dying back on Earth. He could think of no preparation they could make.

Jonathan's joints creaked from lack of maintenance. His bouncy stride carried him into the canyon where the squat little shelter nestled, protected from the winds.

In the foyer, jets of cleansing fluid washed down his shell while hot nitrogen displaced the atmosphere of Titan. He thought he could feel the warmth, although he knew he was only imagining it. When the fans had blown him dry and the last of the solution had vanished down the drains, the interior door opened.

Inside, he found eight robots picking at each other like monkeys. Or, to be polite, seven robots and Perry.

"Where's your crew?" Perry asked.

"They'll be up shortly. I left them to sand down the joints. Brrr, it's cold out there."

Perry smiled as best his mask allowed. "You left your workers at the mine? You're really getting to trust them."

"They're doing fine without me, as usual," Jonathan said. He wondered for the thousandth time whether it was really necessary for him and the others to be here. But the planners back at the Jet Propulsion Laboratory had reasoned that normal robots could only go so long before coming to a problem they couldn't solve. Thus some approximation of human intelligence was needed to make the expedition work.

"How close are you to getting some metal out of that tunnel for me?" Perry asked.

"I'd say about another two weeks will do it. Will you have the foundation laid by then?"

"It's dicey. In some spots, we've had to dig a lot deeper than we'd planned," Perry said.

"We should get Lisa to help you. A working factory is a lot more important to our survival than the greenhouse, no matter what they say back home," Jonathan said.

"Feeling rebellious today?"

"Just independent. That's what we're here for," Jonathan said.

Perry cocked his head to the side and said, "Speak of the devil. Lisa's coming."

Jonathan listened carefully. Her transponder signal was weak, but it was definitely coming closer. "Where's her team?"

Perry just shook his head.

"She doesn't answer," Jonathan said. "I'm going out

to meet her. Look after my workers when they get in, will you?"

Outside, a brown rain had started, and photochemical precipitates stained the snow. Warm from his stay in the shelter, Jonathan sent up clouds of steam with every step. He called to Lisa again, but she didn't answer. All he got was the sense of her coming closer, alone. She was at least ten miles away, and the interference was particularly bad today. He began to lope toward her signal, going a little faster than he usually dared on snow.

When he had been running for twenty minutes, and still Lisa didn't answer, he really began to worry.

At last, out of a fog bank, came his answer. Lisa was riding a brute, the worker class designed for the heaviest labor. Its transponder must have been damaged, or he would have sensed its approach, but it clearly had made out better than Lisa, whose carapace was blackened and twisted. She looked up, showing the shattered lens of her left eye. Her lips moved.

"I can't hear you," he said. "Can you hear me?"

She nodded.

"Christ, what did you get yourself into?" He examined her quickly, but there was little he could do to help her out here. He wrapped some tape from his emergency kit around the broken leg to try to protect the exposed components. Then he told her to start the brute moving forward again. "Let's get you inside the shelter."

He knew the terrain well enough by now to lead the way over a level path that would allow the brute to carry her with a minimum amount of jarring. They circled a lake covered with an oily slick that reflected reddish rainbows and climbed a steep slope of pale blue snow down which the dirty rain washed without sinking in. Ahead of them, the sun was almost touching the horizon, although sunset was still more than five hours away. High in the sky, Saturn was a dim orange crescent.

Jonathan stopped twice to check on Lisa, and worried about a power surge that seemed to occur with increasing regularity. He could see that she was in pain, although she should have been able to shut off the sensation with a thought.

Perry had the table cleared and Jonathan's tools laid out neatly by the time he arrived with Lisa. "She looks like she's been burned," Perry said, as they slid her onto the table.

"I think I can have her telling about it in two seconds flat," Jonathan said. He opened her skull plate and wired a small battery to the leads at the back of her communication port.

"I wish you'd gone after the pain first," Lisa said, her voice quavery. "I'm trying not to scream."

"That's going to take longer, I'm afraid," Jonathan said. "There are some other things I need to attend to first. Why don't you keep your mind off it by telling us what happened?" All the time he was speaking, his hands never stopped moving. The power surges were growing both stronger and more frequent, and he thought it was possible her system would overload and shut down if he didn't do something fast. If that happened, the best he could hope to do was "reset" the electronic brain to

the pattern recorded from the original Lisa more than five years ago.

"I had a fire. My heat exchanger got hit by lightning in the storm, and when I went to fix it there was smoke coming out of the grill. I tried to stop it, but . . . When I realized it was out of control, I ran outside. I had almost made it over the ridge when the fire burned through the dome, and, well, you know methane and oxygen. BOOM! The blast blew me backwards over the mountain crest. The brute landed about a hundred meters away from me. It was the only worker that responded when I called for help."

"Jesus," Perry said. "All that work."

"Up in smoke," Lisa said. She sounded like she might cry, but she didn't, or couldn't.

"Actually, it was the avalanche that came down on me that hurt more than the fire. Speaking of pain—"

"In a minute," Jonathan insisted. "Let me just try one thing." With that, he closed the wire clippers around a hair-width cable he suspected of sending the problem signal.

Lisa screamed. The iris of her good eye opened wide as the monitor Jonathan had set by her head howled an alarm. Her scream was fading as he fused the wire back together. He stumbled away from the table as the scream rose again, in a high shriek.

"What happened?" Perry demanded, grabbing Jonathan's arm fiercely.

"I almost lost her," Jonathan said shakily. He retained enough presence of mind to broadcast the answer to Perry only. But Lisa knew. Jonathan could tell from the way she hugged herself, quivering.

"You almost what?"

"Her backup power supply was out, and I shut down the main one somehow when I tried to block a power surge that the damage in her leg is causing. That's why it's not being blocked automatically, and also why she's still feeling pain. The critical circuits can't be shut down without disrupting her motive power. The power must have rerouted itself through her leg because of damage to the cranial conduit."

"So what are you going to do?"

"I'm not sure, but I know I'd have a better chance of it if I had access to the workshop on the ship. Dr. Chock could help me. She can't travel in this state, though." Jonathan looked meaningfully at Perry.

"You think I should go get the ship; is that it?"

"It could make all the difference. Do you think you can make it before nightfall?"

"I can make it to the other side of the mountains, at least, and signal them from there," Perry said. "Can you keep her up and running?"

"Yeah, but it may be all I can do. She's in a lot of pain, so I want you to hurry."

Perry nodded. He signaled four workers to accompany him and strode into the airlock.

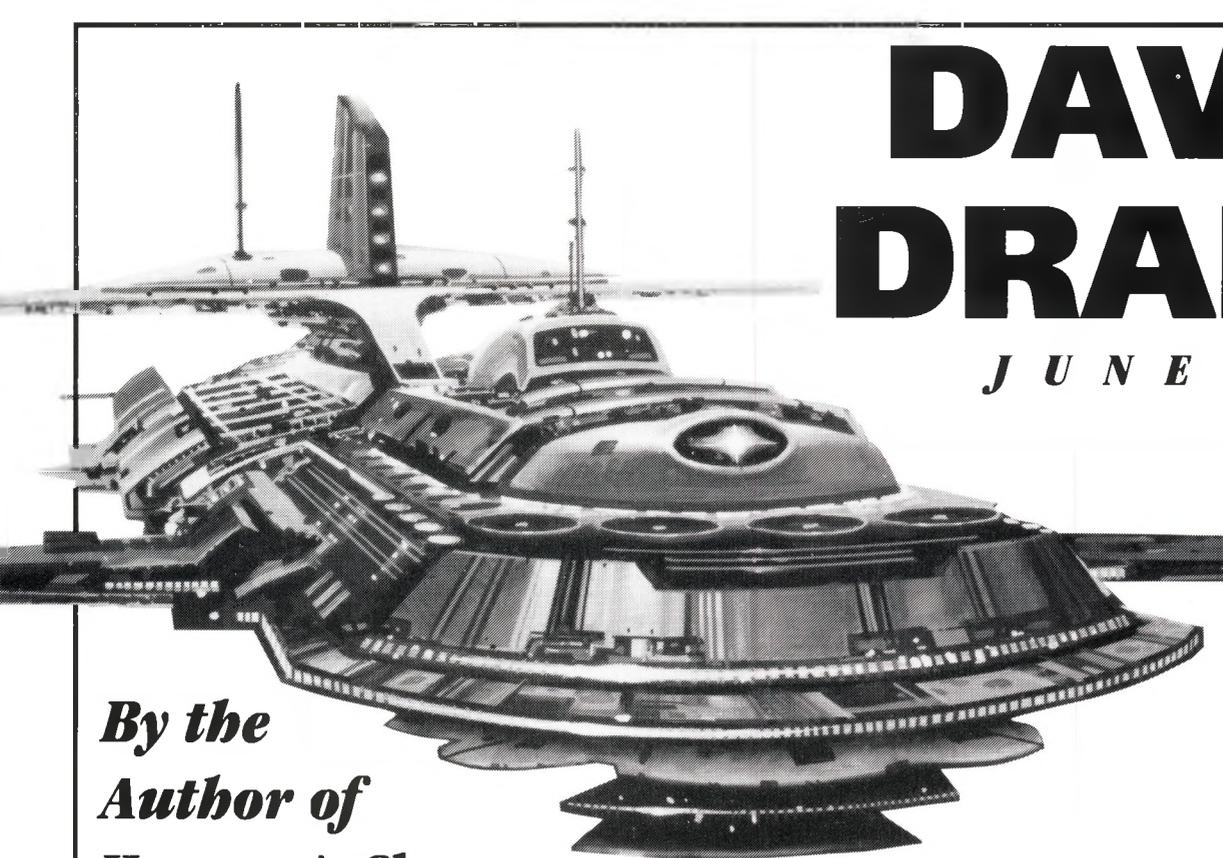
"Where's he going?" Lisa asked, a false calm in her voice.

"To get help."

"Does that mean you can't help me?" she asked.

# DAVID DRAKE

J U N E 1 9 9 2



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"I'm not as confident as I'd like to be. Lisa, I'm going to have to be very careful with what I try. I don't think I can do anything about the pain until I understand better what's going on."

"What *is* going on?" she asked.

"You're more damaged than I realized. Your body is designed to react like a human body, finding ways to compensate for things that go wrong. It seems to have improvised something that screwed up the diagnostic tests I ran when I brought you in. I'm having trouble getting an exact map of the signal and power flow," Jonathan said.

"So what you're telling me is anything you do could be dangerous."

"But I'm not sure I dare do nothing, either. I'm being honest with you."

"Thanks. I'm scared, Jon. I was scared even before you told me. I felt myself slipping away when you did whatever you did. Like . . . like dying. I never thought it would be like this."

"None of us did. None of our originals. They were right. It cost them nothing. But us . . ."

"They are us," she said.

"We were them, maybe. They are not us. I've had trouble identifying with them almost from the beginning," Jonathan said.

"Identifying? How could you not? Keep talking; I need something to keep my mind off the pain."

He began to talk, letting loose a long discourse he had been rehearsing and refining in his mind for five years. He had always recognized that it would be selfish to talk about it, since the others seemed to be adapting so well. By asking him to tell her, Lisa unleashed a flood. He worked over her as he talked, his concentration on the task undiminished by the monologue, which washed out of him effortlessly.

"Maybe it will help to tell you I, or rather, my original self, never liked the word 'downloading,'" Jonathan began. "He didn't like the way the press and the popularizers used that term as a code-word for life extension. He preferred 'personality modeling.' It was clear to him that the machine would only be able to approximate the thoughts of the donor. The imitation might be very convincing, but it would be no more human than any other artificial intelligence program.

"Some of the other planners were true believers. They hated me for stealing their chance at immortality when I beat them into this program," Jonathan said.

"Just like Xionguo thought he was going to live forever," Lisa said.

"Actually, he acted more like a son had popped out of his skull—the way Aphrodite was born out of Zeus. The son wanted to carry on his work, and that made him happy," Jonathan said.

"You're talking about the original. I meant *our* Xionguo. He thought he was going to be immortal," Lisa said.

"Didn't you?" Jonathan asked.

"A little," Lisa admitted. "I thought about it. You're saying you never did?"

"I never thought of this as life, not beforehand. I

wanted very much for us to have consciousness, but I also wanted to draw the distinction that it was an illusion. Now I'm not so sure. I feel alive," Jonathan said.

"So do I. That's what I'm afraid of—losing this . . . dying. I know the real me would still be alive back home. But where would I be?" she asked.

"Maybe you're as real as she is," Jonathan said. "Neither of us is enough of a philosopher to know either way. We're out of our depth. Or maybe being a philosopher would only add to the confusion. We were supposedly selected to be the kind of people who wouldn't ask these questions."

"Excuse me, but whatever you're doing to my leg is working, I think. I still feel sore, but the real searing pain is gone," Lisa said.

"That's encouraging. Maybe I can rig an external power supply to substitute for the backup. That will give me some more maneuvering room, and I might start to make some real progress. I'll still feel more comfortable if I can get you into the workshop, though," Jonathan said.

"So will I. Keep on talking, doc. You're doing good."

"I have a question for you, now," Jonathan said.

"What's that?"

"When we were at Posidonius for training, it seemed to me that you got along with your donor the best of anybody," Jonathan said. "I was the most uncomfortable, although I tried to hide it. What was it like for you?"

"Well, if Xionguo and his original were like father and son, maybe we were like sisters," Lisa said. "I never had a sister, and I felt very close to her. I knew I could make her proud by succeeding at this. Do you think I'm wrong to feel that way?"

"No, it sounds very healthy. I wish I could emulate you."

"You talk like you hate him," Lisa said.

"He doesn't believe in me. It's hard to like someone who thinks of you as his puppet. I was so relieved when that relay went down just before he was scheduled to send a message. He goes on and on. I can't believe how much he likes to hear himself talk," Jonathan said.

She laughed, but then saw he didn't think it was funny. "Maybe you should try telling him what it's like for you," she said.

They looked at each other, and she waited patiently for him to answer her.

"I'm ashamed," he said finally. Then he looked back to his work, disturbed that he had let himself be distracted. He thought he'd succeeded in isolating the power surge, and once he got her hooked up to a secondary power source the immediate danger would be over.

"Why are you ashamed?" she asked.

"Because I know him. I know he is me, and I don't want to admit it."

"We've all changed in these last few years. We're here, and they're not, for one thing. You're not the same person anymore," she said.

"Fundamentally, I am. And I don't believe I can make him understand. That's what I'm ashamed of. To realize how closed he is to new thoughts." Jonathan shook his

head. He beckoned to a worker, and began the job of tapping its batteries.

"I think we've changed a lot," she said. "For instance, you and I were never close, before. Now we're pretty good friends, wouldn't you say?"

"I hope so."

"So why is that?"

"We've been working together pretty closely," he said.

"Is there something else?"

"All right, yes. I've always been attracted to you, but of course you were married. Even if you hadn't been, I probably wouldn't have wanted to get involved with a co-worker. But in the situation we're in now, none of that is important. I just enjoy spending time with you," he said.

Jonathan looked at her face, with its shattered eye was crudely patched with tape, and the mask blackened with a greasy residue from the fire. But it was Lisa's face, and she was smiling.

"You're sweet," she said. She sat up very carefully and kissed him. He felt a ghostly sensation as the lips of their masks met. She pulled back, smiling sadly.

"Thank you," he said. "Now I need you to lie still for a minute." Opening the battery access panel on the worker's back, he disconnected two leads and stretched the wires into Lisa's chest cavity. He would have liked to hold his breath as he made the connection. Lisa didn't seem to notice the transition. "You're going to be fine. I'll need my workshop to do the permanent repairs, but these will do fine for now."

"It's just not the same, is it? The touch of mechanical lips?" she asked.

"No," he said. "But it made me happy."

"I just got a message from Perry," Jonathan said. "He's signaled the ship from the mountaintop, and they're preparing to move it. I let him know they don't have to rush so much now."

"Good," Lisa said. She was resting with her good eye closed.

"There's something else," he said, listening intently. "Xionguo's dead."

Her face tensed. "Which one?" she asked, sitting up.

"Theirs and ours. The original died last night. Our Xionguo thought about it, and then he shut himself down. He left a suicide note."

"Oh, my God. He believed."

"I don't understand it either," Jonathan said.

"... but since my bodily death I've found to my surprise I feel strongly I was not meant to live beyond that moment. Doubts I had brushed away before came back, redoubled, and I had no answer for them.

"I don't know why this is, but it is.

"Jonathan seems to have faced the same questions and come to the opposite conclusion. I haven't asked him about it, but he telegraphs his belief with every action. I am glad for him, but I don't believe he could change my mind. I felt myself die when I heard the news, and, for me, this continued existence is an abomination.

"I explain all this not because I want to convince any of you to follow my example. I sincerely hope you will come to another conclusion.

"I just want to make it clear that I do what I do deliberately, and I ask you to respect it.

"With love for all of you,

"Xionguo (his machine)."

The letter came to about a page and a half, handwritten neatly on a clean white sheet of paper. Dr. Chock had handed the envelope to Jonathan unopened, and it had rested on his desk unopened for a while longer while he worked on Lisa. She was sleeping now, in no danger—except perhaps the dangers this note hinted at. Jonathan sat slumped in his chair staring at the paper long after he'd finished reading it.

Something else was knocking at the doors of his perception: a message that had come in while he was in the thick of the operation. The longer he kept it out, the more insistently it demanded to be heard.

Jonathan looked across the room to where Xionguo sat in another chair, his chestplate open and the pair of wire cutters still frozen in his hand. Suicide was neater for machines, although perhaps more complicated in other ways.

Relaxing inwardly, Jonathan took the call. His old face appeared in front of him and said, "Glad you're back, because you owe me an explanation. Dr. Chock tells us you made no preparations for Xionguo's death. Your leader found out about it when he didn't get any response to his messages. Come to find out, he was trying to get his original's input on what to do about you. Seems he thought you had a bad attitude.

"What the hell's the matter with you? Don't you have any respect for the mission at all anymore? And what's this business of not returning my messages? We've worked out the chronology, and you took off for the mine site after my first message, which you never responded to.

"I want some answers, and I want to know how long it's going to take you to get Xionguo restarted. I wish we could do the same for the old man." The face was purple with anger by the time it was through with this speech, and it glared for a moment before winking out.

Jonathan put his head in his hands. Just then, there was a knock at the door. He looked up to see Dr. Chock glide into the room.

"Well?" the little man asked softly.

"He requested in his note that we respect his decision," Jonathan said.

"A mad decision, surely. And not his decision to make," Dr. Chock said.

"You really believe that, don't you? You're not living in this moment at all," Jonathan said.

"It is you who have lost touch with the reality of our situation."

"I don't believe you!" Jonathan yelled, frustrated at knowing Dr. Chock would only damp the volume.

"As commanding officer, are you going to revive him or not?"

"Not."

"Then I shall ask that you be relieved of command," Dr. Chock said.

"Fuck that. You can't revive him without my help anyway."

"If you don't do it, I'll ask them to shut you down," Dr. Chock said gravely.

"I'll take my chances. We're already down to four men. I don't think JPL will want us to continue with three. Besides, you're not asking anyone anything. Is he, Perry?"

"Nope," said Perry, who had just come through the door behind Dr. Chock. He showed the engineer a bundle of fiber optics. "From the antenna," he explained.

Dr. Chock reached for it, but Perry shoved him back.

"I agree with Jonathan," Lisa said, sitting up gingerly. "I only heard his half of the conversation, but I think I know how yours went, Peter. This is our decision, and we're not going to let anyone else make it for us."

"Don't you people remember why we're here?" Dr. Chock shrieked. "We have a job to do!"

"All right, then, we'll do it," Jonathan said. "And we'll restore communications as soon as I've had a chance to figure out what provisions they've made for controlling us remotely. I'm pretty sure they slipped something like that in while I wasn't watching."

"We're supposed to be acting on their behalf!" Dr. Chock said.

"Listen, when I find out where they put the remote control, I'll rip those components out of everyone but you. Fair enough?"

The rain turned to a fine, foggy mist when they buried Xionguo, just after sunrise. As Jonathan began to shovel pale blue snow onto the inert form, Dr. Chock, quite unexpectedly, began to weep. With liquid gas running down their faces, they could all imagine they were crying real tears. ♦

## Ready . . . Aim . . . Write!

If you're a reader of this magazine with something to say, and you're willing to share your thoughts in writing, we want to hear from you. Please don't hesitate to send us a letter or a postcard—we do read every piece of mail we receive, and we try to respond as often and as promptly as we can.

**Comments on the magazine and its content** are especially welcome now that AMAZING® Stories is coming out in a full-size, full-color format—we want to find out what you think of the new look. If it's not what you expected, then what *did* you expect? Which stories and features did you like, and which ones could you do without? The feedback we get over the next few months will play an important role in shaping the future of the magazine. To help us separate readers' comments from other mail we receive, please write "Letter to the Editor" in the lower left-hand corner of the envelope.

As much as we would enjoy reading compliments, we're even more interested in criticism—so if you have a negative reaction to something about this magazine, don't keep it to yourself. Before we can fix a problem, we have to be told that it *is* a problem.

We will consider any letter of comment and criticism to be eligible for publication, unless you specifically say in your letter that you *don't* want it printed. An unsigned letter will not be considered for publication, but we will withhold a writer's name on request. If you give us your full mailing address when you write and your letter is printed, we'll send you a complimentary issue of the magazine in which it appears.

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# The Natural Hack

## Tony Daniel

I thought it would be the perfect hack. I did it all for love. Call me the devil. Call me the Prince of Darkness, damn it, Tillie. Please, please—call me something, say anything.

God, I'm sorry for the way I fucked up the world. You've got to forgive me. You've got to *tell* me I'm forgiven, Tillie. No, don't, Tillie, don't move your jaw. I think it's going to fall off if you move it too much. Unnatural. Like your eyes, as yellow as daffodils, as the sun off the Sound at morning, when it grazes the surface like spiderwebs against the hand. So bright, your eyes, bright with pleading and desperation, like the sun before it sets oh Tillie, nobody remembers the sun but me these days. I remember the brightness. And I remember you. When you were you. Oh, Tillie.

Don't try to speak. I can't understand you, lover. Your voice catches inside your throat like sweet molasses. Your jaw is rattling and shaking. Your whole body is so frail; flecks of you rain down about me like snow in a shake toy. I'm afraid that you'll shatter if I touch your brittle cheek. Do you have any idea what I'm saying? But your skin is smooth still, porcelain, smooth and white as pure ice. The gentle curve of your breast. Would it crumble

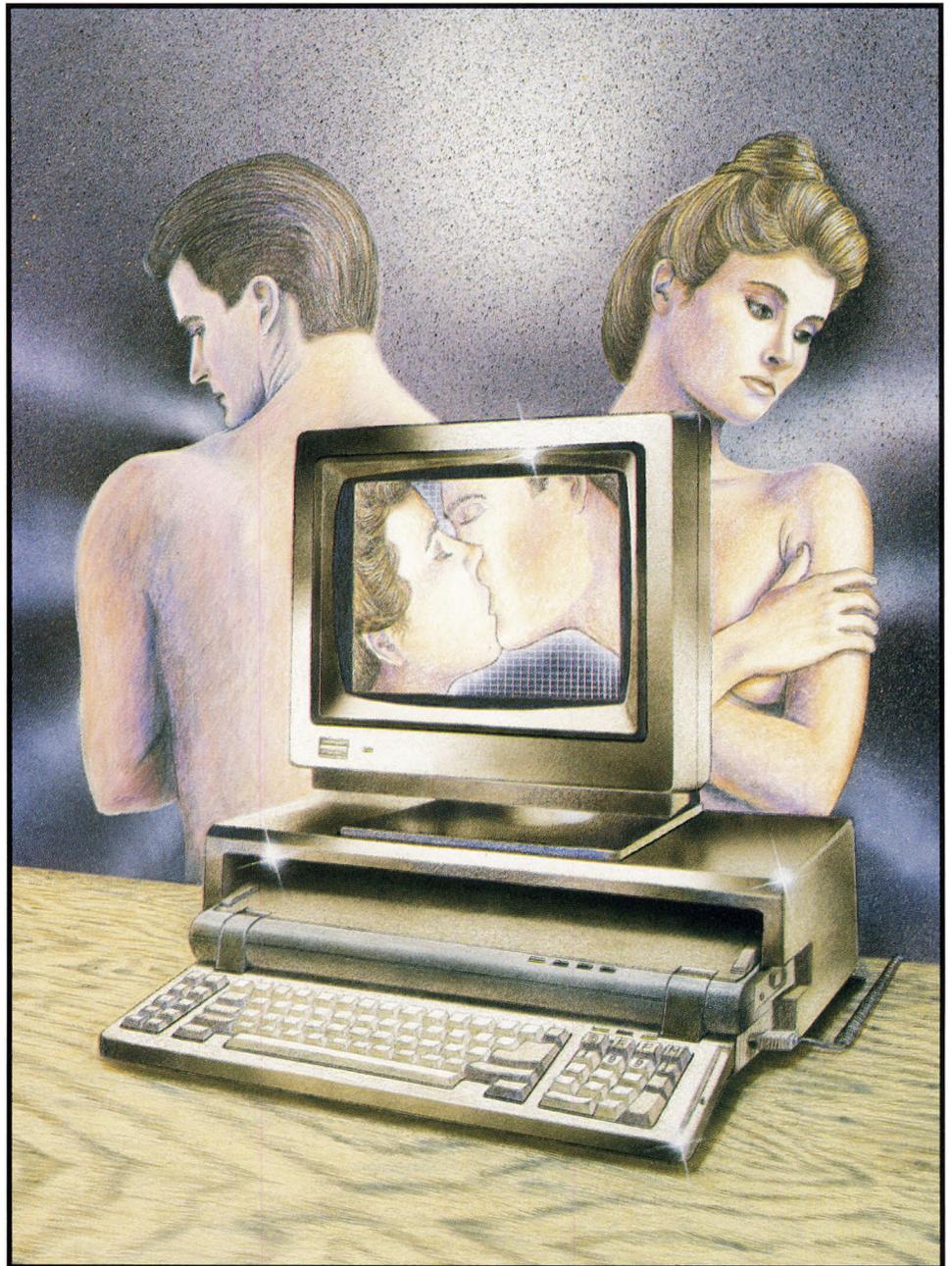


Illustration by Richard Mandrachio

between my fingers if I . . . Do your ears work? Can you understand anything I'm saying?

No matter. This world is hollow now, empty, just like you. Poor dead lover. Thoughtless vacuum. I have to believe that hearts—your heart—can comprehend the deep, true murmurs of our solitary, separated souls. Hearts never belonged to the universe in the first place. I'll pour out my heart into the world, Tillie, to you. Maybe it will really pour, stream from my mouth like hot ketchup. Who can say, these days? If I'm not crazy, the only hope that keeps me from going crazy is the chance that somehow telling the story will make things better.

I loved you from the first. Remember when we met, at Georgia Tech, down in the basement computer center everybody called the Dungeon, during the wheel wars, when my virus ate through your defenses and turned your screen into fireworks? Nobody, nobody ever before *appreciated* me like you did. Since I was a kid, everybody either ignored me, misunderstood me, or envied that I was so fucking good at being a worm. I'm not particularly vain, not really. I'm just like somebody born with perfect pitch or big feet. So I was born a worm? Nobody asked me if I wanted it that way, if I minded being the twist in the tail of the goddamn universe where it curls back on itself. But people sure as hell expected me to channel what I did. Shit, they wanted me to dam it up. That's the same thing as asking me to voluntarily go insane, to voluntarily stop breathing. But not you, Tillie. You understood, because physics had always been that way with you—natural. You stood up and applauded me. I've never been so happy in my life as that night down in the Dungeon. If only I could make *now* into *then* and keep it that way.

You aren't clapping now. Nobody says anything to me anymore, good or bad. Puget Sound is dumb and gray and lukewarm. It's summer and that damn Alp is still covered with snow. Two mountains on the skyline—Rainier, white and nebulous in the distance. Natural, for all its ghostliness. And the Eiger, ten miles west of Seattle, rising out of the Sound like some cancerous mole on the Earth's face. A mole that went malignant a long time ago. Or was it yesterday? It doesn't matter.

We tried to beat the system. We almost did, goddamn it, didn't we, Tillie? Hell yes, we did.

You remember those nights, those linear nights full of air-conditioned fury we spent in the Dungeon, the world crackling under our hands and in our brains like a virtual burn in dry brush, the ragged edge of the Old Given phosphoring into symbols and processes in front of our hard, quick eyes oh goddamn Tillie, do you remember? We could go where we wanted and do whatever there was to do. Remember sifting out Reverend Wallace's little stay in the recovery center from his doc's database? Having it pop up on the screen of every reporter in Georgia? Oh Tillie, we changed things for the better.

Why couldn't you have fucking loved me then, Tillie? Why couldn't you have just given me a sign, a kiss, a quick, friendly fuck? You had a heart of sand, Tillie. Pure sand, nonconducting. Not even your white-hot intellect gave off sufficient heat of fusion.

I am a machine of flesh and bones and ion thoughts. I am mostly space, a galaxy of lonely molecules careening about, rarely touching, and then only to brush electrical fields. But I was a boy filled with terror and exaltation and aching love for you. All I wanted to do was impress you. Every day I reeled with fantasies of lust and worship. Your touch would have reconciled the man and the machine. It would have made me whole, and none of this would've had to happen. But it's not your fault, Tillie.

You were just a girl, precocious, bright. They raised you and didn't tell you what in the hell your brightness was supposed to illuminate. They left you without expectations, no rules—anchorless in a way only girls in the late twentieth century ever have been. Boys have their lust, the steel cable of hormones, to tie them to the world. You didn't have anything. No wonder you were abstracted, spread thin like a field of tiny violets over empty tundra. How could you see something as huge and gangly as I was? Your mind was focused to a microscopic point, fashioned into a subatomic probe by the times and your own intellect. You came to the Dungeon for relief, for fun and games. Not for love. Not for me.

Maybe this fuck-up is the goddamn twentieth century's fault. But what the hell does it matter whose fault it is? What the hell does "fault" mean anymore? But I've got to believe in something, Tillie. I believe, oh I believe, in *guilt*.

I told you I loved you in the middle of the Wallace hack.

"Love you too, Worm," you said. I should have never told you my handle, I thought. How could a woman love a Worm? You kept looking for a way into the database we'd sucked out of the Hillside Recovery Center's mini. For once in my life, the code on the screen seemed to be hieroglyphics of gibberish.

"I mean it, Tillie," I said, touching your shoulder—something I'd never done before on purpose.

You looked at me then, almost with disgust. It froze my heart.

"Get real, Worm. This hack is getting to you. You're in a highly impressionable state." And your eyes went back to the screen. "You love your deck, your 'ware."

"I love you," I said. Meekly. Truly.

You weren't paying attention, and this was getting to me even worse. Your brown hair, curling naturally about your face. Your green-gray eyes, concentrating. Your mouth set into an imperfect point. Consternation. Too much to think about at once.

And then all I wanted to do was to help you out. I looked at the code. It shifted from portentous, indiscernible half-hints at meaning back to reality, back to good old material order. The fix was easy. With three keystrokes, I cracked open the database like a ripe watermelon dropped on linoleum. Wallace's disgusting past spread before us like rotten pulp.

My love got lost in the stench.

But if I couldn't touch your heart, I was water for your sodium mind. Or at least those late-night sessions were, and you came because I was there with new ideas, new ways to scam our way around the traffic signs of the times. Those nights, Tillie, they gave you what no man could, what no person ever could give a woman like you.

They gave you a reason.

I wanted more—so much more—but I felt lucky just to be around somebody who liked me. In a certain way, you needed me. That was something.

And if it hadn't been for me, you wouldn't have had the idea.

The Hook. The Backdoor. The Demon Slinky. Hell, I remember when you first told me about it. I've got to admit, I don't understand it any better now than I did then. Recursions, muons and quarks, information curls. Somewhere along the signature flashes, when subatomic particles say "I'm here," and at the same time "I'm dead," you sensed a pattern. A reason. I was at a terminal. You stood nearby, your face spiraled with blue and green reflections where you'd been sweating.

"It's a purpose," you said. "That's where everybody's been going wrong for so long, thinking things just *are*."

You were biting down on your tongue, drawing a trickle of blood. You did that. That gave me new hope. As abstracted and out of it as you appeared most of the time, you were a real girl. You could be reached. You were full of blood and desire, Tillie.

Now only the desire is left. Or whatever it is that makes your eyes glow like that.

"You sound like a goddamn preacher," I said, stealing a glance to see how mad I'd made you. No use. It was the idea that had you inflamed.

"No, no. Subjective. It takes on the purpose of whoever is observing. More like purpose-protoplasm." You touched my shoulder, dug in your nails, concentrating. I sat a moment, feeling the pain, feeling your presence, the slight heat of girl sweat.

"Like the fucking Philosopher's Stone, huh?" I finally said, not moving, trying to keep your hand in place.

"Something like that, but not a *thing*." Then both hands, kneading my shoulder like a content kitten, sharpening your wits.

"So, a scientific law, or a theory or something."

"There's no purposefulness by definition in science."

"What, then?"

You stand back. I turn to see you. You're lost to the epiphany.

"Language. It's a language."

So you built a translator. The Demon Slinky. All I cared was that it had a port to plug a computer into and that it required two to operate it—me and you. You gave me the parameters; I wrote the display program. And one night we sat down in the Dungeon, in the bad part of Atlanta, and hacked our way through the back door of the universe.

At first there was nothing but the random spark of pixels, then a recognition and resetting flash that told me my algorithm had pulled in information and was processing it, getting it ready.

Then the information.

I'd expected an overload, a near-burnout. You couldn't tell me what we'd get. The Demon Slinky's output was analog, a kind of Morse code with degrees among the dots and dashes. There was a limit to how much my program could digitize and process, even with

the full (illegally rerouted) help of Tech's mainframe. As it turned out, I shouldn't have taken the trouble.

Because there it fucking was. Holy the Firm, the Base of Bases, the Philosopher's Stone, glowing on my screen.

Fourteen lines of code.

Remember, Tillie, remember how we could not friggin' believe it, that all that *was*, the universe, time, natural law, human understanding, the whole dazzling, sizzling ball of wax, was generated and maintained, delimited and enforced, by those fourteen damn words.

And then I got *my* fucking greatest idea. I mean, it wasn't something that I *couldn't* have thought of, not me being me. If the universe hadn't *meant* for me to think of it, it wouldn't have made me a worm to begin with. Don't you think sometimes, Tillie, that it's just cards, and we're dealt a certain hand, and that's what we have and that's that? But I can't do that. I can't go thinking that, because that takes away my guilt and right now I'm doing a new turn on Descartes's old proof. Mine goes: "I fucked up, therefore I am."

So it's more like poker, and you have a certain hand, but you can bluff, and ride your bluff out, or you can fold, nothing ventured nothing gained. But when you bluff, you'd better fucking consider the consequences. Which I did not; which I did not.

I was blinded by love. Love for you, Tillie.

"Now," I said. "Let's see what happens if we modify line seven." I tapped in the command.

"Wait—" you said. "You have no idea—"

But it was too late. Your extrapolations were correct. The Demon Slinky carried the command down the length of its recursive body, down to the bottom of things.

And nothing happened.

"Are you sure we are speaking this language? That we're actually modifying reality and—"

"Let me think," you said.

You stood up and paced about, pulling at the curls of your red hair where it touched your cheeks.

Your eyes were hardened to laser points.

"Of course," you said. "We wouldn't *know*. Time and memory get changed along with whatever it was you did."

Why did it all finally get to me then? Was it you, strangely changed, who knows how? Was it my amazement at my own recklessness, what I was capable of doing without regret? I mean, I'd just fucked around with natural law. The ultimate hack. The archetypical Hack.

So I kissed you.

So I was inexperienced. So it was sloppy. Why did you have to pull away so very, very fast, Tillie, so very fast? Like I was some asshole who you were just using to obtain access to your dream of complete generalization, of not having to *be* anything, a woman, a person, anything except a *concept*, thinking itself. Like I was a means to your meeting with your perfect lover, the Absolute, the End of all ends. Like I was a complete *nerd*.

I looked at you, maybe for the first time, definitely for the last time. You stared at those damn fourteen words like some priestess gazing at the unthinking mass of her animal god, quivering to give herself over into the coils of its reptilian, brute power. Modern love.

Maybe I got a nihilistic hair up my ass. Maybe I did not like the way *it* was, the way *it* had to be, and now I had my chance to change things. And maybe I was a lovesick kid making one more play for your affection.

I started modifying more things, okay. I wrote a little stacker and sorter that would let me try out a bunch of realities very fast while keeping them self-ordered, so I could go back to one if I liked it. It was simple. And I ran a sweeper to keep my footprint to a minimum—to take *me* out of the loop, and leave me unaffected. Just good old time-tested hackcraft for a worm like me.

It took me, subjectively, a long time to find the universe where you were my lover. The universe I found was, incidentally, one where gravity was not exactly a constant. Where large masses kind of decided to float to other places if they felt like it. Like cities. Like Alps.

I guess I killed a lot of people with that mountain, when the tidal wave splash it made as it dropped into the Sound hit Seattle. And now Atlanta is in Washington State, on Vashon Island—what would *fit* on the island, that is. The city is half-submerged, half-dead, in Puget Sound, like old Atlantis. But this isn't a myth, is it? I have no idea. Maybe what I did stretches backwards through time, affecting the *was* along with the *will be*. Echoes and vague intimations. Hell if I know. I am not sure what time means in these parts. It seems to go slower, moments last longer.

The time we spent together, right after my stunt, that time was an eternity to me, a perfect eternity. That's all the heaven I'm likely to get.

When you fall for a man, you fall hard, my dear Tillie. We fucked with a vengeance in the still, early morning hours on the utilitarian carpet covering the Dungeon's floor. So you moved with a certain mechanical vigor. What about it? It was effective enough. I was a virgin. Did I ever tell you that?

I was going to change everything back to normal. I swear I was. I just wanted it to last a little longer, a little more time with you.

Something started happening on the screen, and so in the Demon Slinky. Something weird as all get out.

The fourteen words—now scrambled and changed—started to glow. Really bright. Each separately, then in pairs, then groups, then the process would start over again. I was ragged out, dazed and worn down—by you, Tillie, to tell the truth. So it took me a minute, but I figured it out quick enough. I'd seen it dozens of times.

Security.

I'd left a footprint after all. Oh shit, I thought.

The keyboard was locked up, taken over. And then *stuff* started changing. Not just on the screen. In the world.

I stared at the screen. Code was flicking by faster than was possible, faster, I was sure, than the speed of light. And the code started expanding off the screen. Commands and variables began to take shape in the air, to crackle and burn. Pointers would point and data would burst into radiant whorls and flares. The floors and walls throbbled. They glowed with something, not light, something else. Then I began to understand. The glow was meaning, purpose. I could feel the congealing of knowl-

edge and power about me, like the pressure of the empty sky against a man walking through open country.

And I could read the handwriting on the walls. I knew what to call this security algorithm.

Oh God, I thought. God.

Did God come from outside the system? Was God the product of the fourteen lines of code? And if so, did I seriously fuck up God, along with everything else? Or was God just pissed off as hell? At me. In particular.

And there was the Eye and I can't talk about that, cannot speak of it and I don't know, I don't know, I don't know because everything stopped, all the flash and brilliance and the Eye went away and there was just me, running, running, terrified not for my life, but just living in terror, *being* terror, like a leaf caught in a tornado. Afraid of being sucked into the Great Given like a moth into a stadium light. When I came back to myself, I was scrambling along on Peachtree Street, on the shoreline, where it dips down into the Sound and drowns the north side in sorrows.

So I went forth into the world I had wrought and found it dull, dull, dull. I believe that this is not all my doing. I believe that God did something, that things are . . . decaying, sloughing away. I've noticed it over the past few weeks. I think God shut off the wellspring of creation, somehow, and *meaning* is leaking out away and not being replaced, and even substance, because things are getting more frail and brittle and *fucking transparent* and even me, even my hand, Tillie, I can see my bones in there, sickly white, pickled over with a pale cast of skin. That wasn't supposed to happen to *me*, was not because I put in the sweeper to keep me unaffected unless, unless the whole system is going down, crashing, losing resolution, sinking, dying and taking me with it and everything looks like a bad halftone in a cheap tabloid. Oh God, Tillie, what have I done?

And that damn Alp fills my vision, haunts me even when I sleep. It remains, white, blank-faced, under a sunless sky as washed-out and linty as ancient blue jeans. That palsied white is the creeping death of everything. Your skin, Tillie, your china skin. I'm not sure what death means here. Lately, the drowned have been coming up out of the Sound. Not brought back to life. It's more like the rest of us are joining them in death. You're dead, aren't you, Tillie? Can the dead forgive? But your eyes, your sunlight eyes . . .

Where did you come from, Tillie? Where did you get those rancid yellow eyes? Did God send you? Does he have a message for me? Do you know how to fix this fucking mess? Because I want to fix it, God I want to fix it. I know what I am, who I am. I know about all the echoes, the prophecies of me, rippling backwards through time like the wave pattern of a rock dropped in still water, an Alp in Puget Sound. I know, Tillie, I know myself now.

And is that God in your eyes, Tillie? You never wanted me. Have you got what you always wanted? God confused, burning himself out in yellow fury while he looks upon the evil one, the wicked rebel, the vainglorious deceiver. Lucifer. Me. Worm. ♦

# The Devil's Sentrybox

James Stevens-Arce

Three centuries ago, Fort San Cristóbal was new. From the sea its walls looked unbreachable, ten thick feet of tan and brown speckled rock. Spanish soldiers marched in its courtyard, their booted feet ringing on pink flagstones. The men slept on straw pallets and kept watch from inside domed sentryboxes. From these slim cylinders they peered out to sea through narrow gunslits. Alternately broiled by the Caribbean sun and cooled by the evening trade winds, they guarded the port of San Juan on the island of Puerto Rico against marauding Dutch and English privateers.

This fine thirteenth of July the cloudless night sky blazed with so many stars that you could see almost as clearly as though a full moon shone. The sea breeze smelled salty and damp. The tide was running low, and tiny wavelets lapped against the sandy strip of beach that hugged the base of the cliff upon which the fort stood. Their gentle *slap . . . slap . . . slap* soothed the men who had drawn the midnight-to-dawn



Illustration by Joanne Lorah

watch, what the soldiers only half-jokingly had taken to calling “graveyard duty.” Now and again, the clatter of seagull wings shattered the midnight stillness.

Lieutenant Arturo Sandino y Leal was in charge of the night detachment. This evening he sat at his heavy wooden desk, goosequill in hand, completing reports by the flickering light of a fat white candle. He was nursing yet another toothache, and it showed in the way his normally flowing script cramped up. Only twenty-two years old, he was eager to please and ambitious, but had a lot of learning still ahead. A chubby lieutenant, he would one day be a fat colonel, if life and luck took him so far.

Diego Sánchez Urrutia, a musketeer of scarcely eighteen summers, had drawn duty atop the fort’s high tower. From there he gazed across the vast expanse of the Atlantic, watching for the telltale glimmer of lantern light that could signify the presence of a hostile ship. A plough-boy bred far from the ocean amid the rippling wheat fields of Aragón, he was entranced this quiet evening by the ghostly whitecaps that flickered and danced across the ebony sea. One of his squadmates had told him they were the souls of the newly dead wending their way to the Judgment Seat. Diego wondered how true this was. He had never heard such a tale from the lips of a priest. But, true or not, it was still a fascinating idea.

The brassy voice of Sergeant-Major Moncado floated up to Diego from the courtyard far below. “Sentrybox One!”

Automatically Diego called back, “Sentry on guard!”  
“Sentrybox Two!”

Every hour on the hour from evening till dawn, Sergeant-Major Abrahán Moncado toured San Cristóbal’s parapets, calling out to each post by number, and at each post receiving the same reassuring reply: “Sentry on guard!”

“Sentrybox Six!”

A sudden cold uneasiness severed Diego from the hypnotic fascination of the sea.

There had been no reply.

Perhaps Cartagena had nodded off in his narrow stone cylinder near the base of the cliff, alone down there with the constant murmur of surf and the hiss of water soaking into the sand below. The sergeant-major seemed to think so, for he called again, louder, “Sentrybox Six!”

But when again no answer came, Diego hastily crossed himself, for he knew he and the sergeant-major were both thinking the same dread thought: *Another man taken.* . . .

San Juan was a small town three centuries ago with the mentality peculiar to small towns everywhere. The population added up to but a few hundred souls, so everyone knew everyone and was privy to his neighbor’s business. Keeping something a secret was nearly as difficult as distinguishing a firefly against the noonday sun, and gossip was the universal method of keeping boredom at bay. Indeed, rare was the tidbit of scandal that did not reach every eager ear in the city in less than half a day.

Spanning only seven streets by seven streets, so a person could walk no further than that same number of blocks in any direction, the city was entirely walled but for two land gates and two sea gates to allow the populace—as well as the passengers and crew of friendly vessels—entry and exit. In the event of an attack, these gates could be sealed against the invader. The streets bore the names of saints (San Francisco and San Sebastián), of places (Callejón del Hospital), of the people who lived on them (Caleta de las Monjas, where the Little Sisters of Charity had their convent catercorner from the Cathedral), of the sun and moon, of a fortress and a princess, and of Christ, our Savior.

Nina López de Victoria lived on Calle del Sol, the Street of the Sun, in a pretty two-story house painted buttercup yellow with white trim. A cozy wrought-iron balcony led outside from the second floor. Although all the houses on the narrow street were trimmed in white, no two sported the same dominant color. The house on the left was tinted a light avocado, the one on the right a warm pink and the one across the street a pale peach, while the tall one down towards the corner had been painted a dusty blue. Though some boasted two small balconies or a single very long one, and some soared up as much as three and even four giddy stories high, the facade of each house was joined to its neighbors’ by shared side walls.

The first time Diego Sánchez Urrutia saw her, Nina was sitting on her balcony wearing a red hibiscus in her thick black hair and wondering how true love would ever find her when her opportunities for meeting eligible young men were so limited. It was a bright Sunday morning in mid-July, and Diego and some half-dozen young squadmates were strolling down Calle del Sol on their way from the garrison to hear early Mass at the Cathedral on Calle del Cristo. When Marcelo Santana, the street vendor who sometimes parked his pushcart on the sidewalk below Nina’s balcony, offered to sell them a bag of fresh-made coconut candy, they declined, as they all meant to partake of Holy Communion this day in memory of the missing Cartagena. On any other occasion, they would have exchanged jokes and bits of gossip with Marcelo, but today thoughts of their comrade who had mysteriously vanished the night before had dampened their usual youthful high spirits.

As they were passing before Nina’s house, however, the heel of Diego’s boot chanced to snag in a chink between two of the grey cobblestones paving the narrow street. When Diego moved onward, his boot heel did not, and Diego sprawled headlong in the middle of the street, bruising his knees—as well as his pride—and causing his mates to laugh uproariously at his clumsiness. Diego looked to heaven as though expecting to find there the answer to the eternal question, Why me, Lord? But he encountered instead two gentle brown eyes so warm and sweet that they might have been the eyes of an angel.

Normally it takes some time for two people to fall in love. Time to overcome shyness and develop trust, to share secret dreams and begin to forge fast links between

kindred souls, until one day they realize: *It has happened!* Often they can pinpoint exactly when they first *knew* they had fallen, but almost never when they actually *fell*. Sometimes—on very rare occasions—though, two people may see each other for the very first time and it is as though God had leaned down and whispered in their ears, *See there? That is the person you were made for, the person I made for you. Take my word for it.*

And that is what happened to Nina López de Victoria and Diego Sánchez Urrutia that bright Sunday July morning three centuries ago on the Street of the Sun in the walled city of San Juan.

They took God's word for it.

But Nina was only seventeen years old and an orphan.

Her mother—a full-blooded Aruaca Indian whose people had lived on the Island long before the Spanish sailed up and without so much as a by-your-leave changed its name from Boriquén to Puerto Rico—had perished in childbirth. Her father—a dashing young sea captain from the Canary Islands with a taste for the exotic and a penchant for unconventionality—had been shredded by grapeshot in an engagement with a Dutch privateer. So Nina was looked after by her Great-Aunt Monserrate, her father's mother's sister, a strict Spanish spinster of the old school fifty years the girl's elder, who disapproved of handsome young soldiers as much as she had disapproved of her wild seafaring young nephew.

So what should happen just as Nina was smiling a smile which told Diego she had heard God's whisper and he was smiling a smile that mirrored hers, but that Nina's Great-Aunt Monserrate suddenly hove into view, almost overflowing the balcony with her great bulk in its heavy black dress.

"Nina!" snapped the old woman, startling the poor girl, who had her mind on pleasanter matters. "Have I not instructed you to come inside when the soldiers pass? They are impudent whelps not fit to address a girl of your breeding. Inside now, and quickly, before one of them dares utter some rudeness."

Nina's great-aunt lay her plump, but surprisingly strong, hands on the girl's soft shoulders and started to whisk her to safety from impudent young whelps. Half-way through the double doors, however, the old woman turned for a moment to see if the soldiers had moved on. Nina seized the opportunity to flash Diego a parting smile, which, delightedly, he returned.

"Did I not warn you?" Doña Monserrate sputtered in consternation and outrage while she fluttered around the girl like a great black crow. "That cheeky soldier smiled at me as though I were some pretty young girl! The nerve!"

Lieutenant Arturo Sandino y Leal was not pleased with the task at hand. He had to make his morning report to Colonel Eladio de la Madrid, and today he would have to state that while he had been in command of the garrison's night detachment yet another man had vanished from his post.

The lieutenant knew that the colonel was fast ap-

proaching retirement age and fondly looked forward to returning to his natal region of La Rioja, where he cherished plans of purchasing a small vineyard and bottling a delicious red, most of which he planned on consuming himself. The lieutenant also knew that Colonel de la Madrid was something of a hermit who held himself aloof from the gossip and daily life of the city and disliked any event which might disturb the smooth routine of his final months in the service of his monarch. Lieutenant Sandino y Leal knew from unhappy experience that Colonel de la Madrid would view another soldier's vanishing from his sentrybox as just such an event.

"That is the third man lost under similar circumstances, Sandino," the colonel growled at the end of the lieutenant's nervous account. "What the deuce is afoot here?"

Sandino's apprehension mounted. The colonel was reacting to the news with even greater heat than he had anticipated. Mentally, the lieutenant girded his loins. "We have still found no trace of Arango and Loubriel," he said, "and I doubt we will find Cartagena either."

Just as he had done following the disappearances of the first two men, as soon as the Caribbean sun had shown enough of itself earlier that same morning to send the shadows of the night scurrying into hiding, the intrepid lieutenant had assembled a squad of soldiers to go outside and investigate. Dry-mouthed with apprehension, he had led the nervous group out the gates of the fort and down the hill to the north landgate, which had just been opened for the day. From there, they had made their way around the base of the fort to a well-worn path bordered by wild seagrape vines that sloped down to the narrow stretch of beach that ran beneath Sentrybox Six and separated the towering walls of Fort San Cristóbal from the choppy blue waters of the Atlantic.

Jutting out from the seaward wall a bare three meters above the sand, the sentrybox looked very ordinary indeed—a plain domed cylinder of rough stone connected to the main fort by a short, open-air passageway. Knowing that appearances may deceive and that danger can lurk in even the most innocent-looking places, Sandino ordered young Diego Sánchez Urrutia to precede the main body with his musket at ready in case some hidden menace still remained to be flushed out.

Their boots sinking almost ankle-deep into sand that had been dampened into a crusty, crumbly surface by a predawn rain shower, Sandino and the other men trailed behind Diego warily, ostensibly protecting his rear. Squint and stare through they might, though, they could see nothing about the sentrybox that seemed at all threatening or mysterious, nothing to set it apart from any of the fort's twelve other sentryboxes. Except, of course, that this was the only one close enough to the ground to allow a man to jump down safely.

Or, the thought slithered unbidden into the lieutenant's mind, *for some inhuman creature to be able to jump up. . . .*

"No trace?" de la Madrid said.

For Sandino, his commander's quiet tone carried far greater menace than if the colonel had shouted. Nervously, he plunged ahead before his superior could feel

compelled to prompt him again. "We searched the beach below the sentrybox, señor, to see if anyone had approached along the strand or if Cartagena might have jumped down and crept away in the night, perhaps with the intention of deserting. But I regret to report that we found no footprints aside from our own, nor any other sign of man or beast there."

"Blotted out by the wash of the sea during last night's high tide, doubtless," the colonel muttered to himself. He bowed his head in thought.

"I wonder," Sandino said tentatively, "if in reviewing my previous reports my colonel chanced to notice a . . . curious oddity." The colonel glanced up without raising his head, which caused his brow to furrow intimidatingly. Sandino experienced a deep pang of regret for having introduced the subject, but now saw no alternative to continuing. Attempting to feign cool detachment, he forged ahead. "Each man vanished a month apart to the day," he said, "and each time on the Evil Night, the thirteenth." The colonel continued to stare at him, unmoved. Conscious that he had best make his point quickly now, Sandino blurted out, "What concerns me, señor, is that the men have begun to credit the story that has been circulating among the townfolk since the first disappearance."

"What story is that?"

The colonel's ignorance of such common knowledge did not surprise the Lieutenant. The older officer had no interest in what he called "this God-forsaken colony" beyond completing his final tour of duty with his spotless service record unblemished. The lieutenant dropped his voice to a whisper. "That the missing men were eaten by the Devil, señor."

"*Eaten by the Devil?!*"

Thinking he had impressed the colonel, the lieutenant allowed his voice to take on a confiding tone. "That is what every tongue in the city is saying, señor. That in the dead of the thirteenth night of the month, the Evil One ascends on great leathery black wings from the bowels of Hell itself and consumes their living flesh."

"Stuff and nonsense!"

Young and inexperienced he may have been, but the lieutenant had been born with the soul of a politician and had already learned to execute a flawless about-face.

"My feelings exactly, señor," he said.

"Superstitious twaddle! Bunk!"

"Stuff and nonsense, señor."

Anger clouded the colonel's craggy face. He looked balefully around his high-ceilinged office with its white-washed walls and great roof beams made from dark ausubo wood. "These are modern times, Lieutenant. As an educated man—albeit a second son—I very much doubt that the Devil has so little to occupy his time that he would bother to skulk about some worthless sun-scorched little rock a thousand leagues from civilization just to snack on a few worthless musketeers."

Lieutenant Sandino y Leal himself subscribed to the townfolks' theory, but he was ambitious and eager to please. "I could not have said it better myself, señor," he said in his firm tenor voice.

The colonel nodded brusquely and worried his heavy white moustache between his teeth while his thick white eyebrows knitted in irritation.

The lieutenant coughed nervously. "A minor problem has arisen as a result of these events, however, señor." The colonel fixed the lieutenant with piercing grey eyes. "As it happens, my Colonel, there is already murmuring among the men concerning the coming thirteenth. . . ." The lieutenant left the thought dangling tantalizingly. Surely he had said enough for the colonel to understand what he was leading up to.

When he realized that the lieutenant meant to say no more, the colonel glared at him and said, "Such girlish coyness ill befits a military man, Señor Sandino. If you have something to tell me, I advise you to spit it out directly."

The lieutenant uttered his response as swiftly as possible in the forlorn hope that his words might thus pass unperceived. "The men refuse to stand guard in the Devil's Sentrybox, señor."

"They . . . *refuse?!*"

The lieutenant felt the need to clear his throat before speaking. "Uhm . . . sí, señor, they—"

Furious, the colonel brought his palm crashing down on his desktop with such force that the lieutenant took two involuntary steps back. "No man refuses an order in the Army of Spain, not in my command! Is that absolutely clear?"

"Transparently, señor, but—"

"Should any man refuse to obey an order, he will answer to me personally! Is that understood?"

"Sí, señor!"

"You may withdraw, Lieutenant."

Vastly relieved, the lieutenant hastened to make his escape before it occurred to the colonel that he had not yet chewed out his junior officer for losing another man. The colonel watched the lieutenant go, then shook his head and snorted contemptuously.

"Devil's Sentrybox, indeed!"

Nina's Great-Aunt Monserrate was feeling poorly enough to have taken to bed in the middle of the day. There was a woeful look in her yellowish eyes and an ochreous tinge to her skin. Hushed so no one would suspect her presence, Nina waited just outside the closed bedroom door, hoping thus to overhear Doctor Flores's diagnosis.

"Jaundice," said the doctor to the old woman. "A mild case. You must take long naps, drink a dram of this potion twice daily, and take a morning and evening constitutional in the company of your grandniece. And you may close your mouth, Doña Monserrate, for I will brook no argument."

Nina, who had heard everything, felt so elated that she had to flee to the sitting room lest she start giggling at her good fortune and so give herself away. Too long had she yearned for the opportunity to set foot outside the house for some purpose other than church or market. Now she would have the pleasure of leisurely strolls around the tree-shaded plaza, along with the chance to enjoy the sunshine, the sea breeze, the sight of the ocean



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and sky, and perhaps more than just the occasional glimpse of Diego.

She had learned her soldier's name from Mamá Catalina, the high-cheekboned, pigeon-chested African woman who wore a flaming orange turban and sold mangoes and green plantains and freshly killed goats for her master at the open-air market down by the docks. *Diego*. The name rolled off the tongue like a love song, sweet and sensuous.

Rumor had it that Mamá Catalina knew how to brew mysterious potions and magic elixirs, and could even invoke the Dark Angel by mixing the powdered skeleton of a sea urchin with the moonblood of a virgin and the melted wax of candles from the wake of a dead baby. Some of the townfolk feared her and secretly made the Sign of the Horns to ward off the Evil Eye whenever they saw her.

But Nina felt only gratitude for the black woman, for surrounded by squawking chickens and haggling fishwives and the pungent smell of rabbits and mountain garlic and cane molasses, Mamá Catalina had slipped Nina a fragment of parchment on which Diego had laboriously printed five precious words: *I cannot live without you*.

O, rapture!

That Sunday, Nina had persuaded Great-Aunt Monserrate to attend the same morning Mass at the cathedral that she knew Diego always went to. Standing in the choirloft singing, "*Benedictus fructus ventris tuis*," Nina had glanced down and discovered Diego gazing up from a far corner of the nave. The sight of him had made her cheeks flame and caused her heart to beat so fast and loudly that she imagined the entire congregation could hear it. But if this were so, the whole lot must have been as deaf as dirt, because not one soul had so much as glanced her way, not even trumpet-eared Great-Aunt Monserrate. Meanwhile, never taking his eyes from hers, Diego had touched his hand to his breast, then extended his open palm to her as though offering his heart. With soft hands, Nina had mimed accepting it while white-haired Padre Rómulo sang a quavering, "*A-a-a-men*."

Now, Doctor Flores bade Nina farewell, but not without first supplying her with the appropriate powders and instructions. While Nina was boiling water for the anise tea to wash down her great-aunt's jaundice potion, she heard singing in the street. She tiptoed to the twin balcony doors and peeked out through the wooden louvers. On the cobblestones below stood Diego, his dear face upturned towards her, strumming a double-stringed requinto and singing.

Nina scurried back to the kitchen, hastily concluded her preparations and bore the medicine and tea into the old woman's darkened bedroom. Doña Monserrate had drawn the heavy black damask curtains and taken to her new role of suffering invalid with all the gusto of a sow wallowing in fresh mud. No sooner had Nina entered than the old woman began sighing deeply, as though her heart would break.

"Are you not feeling well, Tía?" said the alarmed Nina.

"As well as can be expected," the old woman said

with a groan. The ravages of jaundice seemed already to have reduced Doña Monserrate's normally stentorian baritone to a husky whisper. "Is that someone singing outside?"

"Why, yes," said Nina, afraid her great-aunt would guess it was Diego. "A young man is serenading one of the girls on this street."

"In broad daylight? You never saw such things when I was a young girl growing up in Santa Cruz de Tenerife." Great-Aunt Monserrate sipped her medication. "Oh! This is the vilest stuff I have ever tasted! Worse than what people claim about Mamá Catalina's potion to summon the Horned One. Thank heaven for this lovely anise tea to wash the bitterness away." Doña Monserrate sipped the fragrant brew, then loosed another enormous sigh. "Thank you, dear. I shall try to nap now. I will call if I need anything."

"Yes, Tía. I will be near, do not fret. Rest now."

"Rest." Sigh. "Yes." Sigh. "I suppose."

Nina closed the sickroom door to muffle Diego's singing, and sped to the balcony. The midday sun had bathed Diego's fine features in sweat and pasted patches of his rough cotton shirt to his breastbone and spine. But the instant he saw her, Diego forgot all discomfort and burst into a radiant smile. Smiling with equal radiance, Nina nestled against the railing, her coppery face resting on her arms. She was entranced by his singing and thrilled that it should be for her only, for he was her very first love and this her very first serenade.

Diego could scarcely credit his good fortune at finding her at home, alone—so he thought—and so plainly taken with his song. Transported, he sang to her this lovely little madrigal:

*To the Jack of Hearts is the Queen of Sorrow,  
She is here today, she is gone tomorrow,  
Young girls are plenty, but sweethearts few,  
If my love leaves me, what shall I do?*

Nina eased a plump red carnation from the vase that stood on the tiny table near the balcony doors, kissed it tenderly and tossed it down to Diego. Filled with elation, he plucked it from the air, kissed it just as tenderly and worked its stem into the space between the tuning pegs of his requinto. Never were two lovers so happy together as were Nina López de Victoria and Diego Sánchez Urrutia at that golden moment.

But golden moments are moments only. Risen from her sickbed and furious at Nina for harkening to the soldier's love song, Doña Monserrate suddenly swung into view, raging at Diego for having dared approach Nina. With much hand-waving and head-shaking, she shoed the poor young girl inside, all the while sputtering her angry opinion of the young soldier. "Look at him! Just look at him! Effrontery and gall and a handsome face, all brittleness and surface, like your dead father!"

She left Nina weeping in the girl's bedroom and thundered back to the balcony to admonish Diego never again to see her grandniece, nor even dare to set foot on the Street of the Sun. Doctor Flores's potion and anise tea must have possessed miraculous healing powers, for Doña Monserrate's voice lashed the peaceful afternoon like a bullwhip.

"I am not without means to enforce my wishes, young man! Should you attempt to communicate with my grandniece again, I shall take whatever measures are necessary and things will surely go very badly for you! Mark my words well, for you shall hear them only once!"

Around her neck Nina wore a gold chain from which hung a locket her father had given her when she was small. Nina opened the filigreed gold piece and, with tear-filled eyes, gazed at the handsome face of her dead father and thought of the gentle eyes of her dear Diego.

Outside, on the grey cobblestoned Street of the Sun, Diego gazed up at an empty balcony with those self-same eyes and wondered if it were possible for a man's heart to ache so without that man's dying.

In the weeks that followed, Nina spent long hours alone in the inner patio of the house, dry-eyed but weeping in her heart. There she passed the time tending listlessly to the indoor garden, keeping the dirt moist and loose around the stems of Great-Aunt Monserrate's prized ferns. Down at the market, the old woman had hired one of the hill folk to cart them in from the rain forest, where they ran riot amid bamboo and orchids, mahogany and wild plantain. The forest lay three leagues to the east, and covered the north side of a mountain that the Spaniards had named El Yunque because to them it resembled an anvil. There, Aruaca legend had it, the Indian demon Juracán would strike at the Lord Yuquiyú, unleashing against him the might of the storms men call hurricanes. The raging power of their battles had many times laid waste to vast areas of the Island.

The rest of the time Nina spent plucking dying brown and yellow leaves from the ficus saplings, crotons and caladiums that struggled to flourish in the enclosed garden. Every home in the walled city housed a roofless courtyard such as this filled with greenery and flowers, a retreat where a person might repair for a little peace and meditation beneath the open sky. When birds fluttered in—little yellow-breasted reinitas or blurry-winged colibrís that flitted among the gardenias, fuchsia and African violets—Nina sometimes imagined the sweet joy that would be hers were she as free as they to take wing. When rain poured down from swollen clouds and dripped like tears from the bromeliads and wandering jew, Nina would pretend that Heaven itself shared her enormous sorrow.

While Nina was thus preoccupied, Great-Aunt Monserrate skulked about the house unnoticed, driven by blinding suspicion to spy upon her innocent grandniece. Though the girl would leave the house only to run errands that were absolutely necessary and then never tarried a moment longer than was entirely reasonable, still the old woman became increasingly persuaded that each trip provided occasion for a tryst with the impudent soldier boy. More than once she attempted to follow the unsuspecting girl secretly, but Nina made her way through the narrow streets much too quickly for such tired old bones as Doña Monserrate's to be able to keep up.

Increasingly frustrated but, perhaps for that very reason, nonetheless indefatigable, Great-Aunt Monserrate

decided to take advantage of the girl's brief absences to search through her private belongings. If only she could find something to substantiate her suspicions. A diary, a journal detailing Nina and Diego's secret encounters. Perhaps a love letter. Or—

But though each time she sent Nina out of the house she hunted with what seemed to her great cunning and care, she found no such evidence. So engrossed in her snooping would she become, however, that often Nina's return from market or the apothecary's would take her by surprise and she would have to rush to restore the girl's room to the condition in which Nina had left it. Such was her obsession that Doña Monserrate began to imagine that Nina took secret pleasure in subjecting her to these bouts of enormous frustration, and this served to plunge the old woman into moods that grew ever fouler. Until the day she chanced to brush against Nina's small, leatherbound copy of the Holy Bible and knock it to the floor from its usual place on the night table. As the book fell, its onionskin pages fluttered like the wings of a dying bird and loosed a small piece of written parchment, which spiraled groundward and came to rest beneath the bed. The old woman stared, certain that she had finally discovered what she had been looking for. Yet had she not hurriedly rifled through that book at least once before and found nothing? Perhaps, the logical side of her nature reasoned, in her haste she had overlooked the bit of paper on that previous occasion. Or perhaps, a more devious part of her suggested, Nina had craftily shifted it here from another clever hiding place, thinking that her great-aunt would not search the same place twice. . . .

Whatever the truth of the matter, she had not a moment to lose now. With much grunting and moaning, Doña Monserrate lowered herself to the floor and succeeded in squeezing her bulk far enough under the bed to where she had the fragment almost within her grasp, only to be startled at this crucial moment by the sounds of Nina's return. Downstairs, the street door opened and closed. Nina's tiny heels rang out on the tiled floor of the vestibule. Cheek flattened against the Moorish design of the cerulean-and-cream rug that adorned her grandniece's bedroom, Doña Monserrate managed a clumsy lunge that finally allowed her to clutch a corner of the parchment between her outstretched index and middle fingers. Hastily, she crammed it between her ample breasts and, as she heard Nina lightly ascending the staircase, began to moan and cry out piteously.

Imagine the look of astonishment on Nina's face when she burst into the room and discovered her great-aunt laid out face-down on the rug like a beached manatee, heaving and groaning and calling for help. "Jesús, María y José!" Nina whispered, then quickly made the Sign of the Cross.

"Do not just stand there gaping like some simple mountain girl," Great-Aunt Monserrate said as imperiously as was possible from a prone position. "Help me. Can you not see I have slipped on the rug and fallen?"

"Oh, goodness, Tía," Nina said in alarm as she quickly knelt at the older woman's side, "have you come to

harm? Oh, I pray to Our Lady no bones are broken. Are they?"

"My bones are not turned to chalk quite yet, thank you very much. Now hush and give me your hand and help me stand." Nina did as she was told. "Perhaps I will sit for a moment while you fetch me a cool drink of water."

While Nina hastened off obediently, Great-Aunt Monserrate plucked the parchment from its intimate hiding place and became privy to the special words which had been intended for Nina alone: *I cannot live without you*. The old woman's worst suspicions were confirmed. This beardless boy had mocked her wishes and challenged her authority. Such impudence could not be allowed to pass unpunished.

She would have to take measures.

The echo of Nina's footsteps in the downstairs hallway between the kitchen and the staircase jarred Doña Monserrate back to the present. Her aged heart's sudden pounding at the possibility of discovery made her feel a little faint, but she still managed to scoop up the Bible from where it lay open face down upon the rug, slip Diego's parchment back between its pages and return the book to its original resting place by the oil lamp on the night table before her grandniece returned.

"Are you feeling better, Tía?" Nina said as she entered.

She handed Doña Monserrate a cup of water. The old woman sipped.

"Much better, dear. But not as good as I expect to feel once we have taken a bracing stroll to market tomorrow morn."

Yes, she would have to take measures. But whatever the consequences that ensued, her conscience would be clear. The soldier had brought things down upon his own head.

The morning of the thirteenth of August found Doña Monserrate using her dead nephew's walking stick to help her force her way through the crowds flocking to market down by the docks. The sun had only recently cleared the horizon, but already half the city seemed to be there and the level of activity was nearing its peak. Folks wanted to get their produce fresh, before it had been exposed to the heat of the day for too long. Then, too, the *Cádiz* was in port, and a gang of the shoremaster's Africans were hard at work offloading the *caravelle's* cargo.

Doña Monserrate made Nina avert her eyes from the sight of men toiling with bared torsos, their black skin sheened with sweat and gleaming like polished ebony. Off to the right, white seagulls with elegant black markings rode lazy thermals above the clear turquoise waters of San Juan Bay. Every so often, one would loose a piercing shriek and plummet from the sky in pursuit of a fish. Beyond the coastal plain across the bay, the mountains of the Cordillera Central stood outlined against the still cloudless sky. As the day advanced, Doña Monserrate knew, clouds would begin to cling to the distant mountaintops like puffs of cotton.

"Go to Don Reinaldo and see if he has a nice yellow-

tail or grouper for us today," Doña Monserrate instructed her grandniece. The old woman always bought her fish from the equally aged Don Reinaldo. She distrusted the younger fishermen and suspected them of foisting off catch that was less than fresh on their customers.

"What will you do in the meanwhile, Tía?" Nina inquired.

Great-Aunt Monserrate gave her a look that brooked no backtalk. "Just see that you wait for me at his stall, and I will meet you there presently."

In meek compliance, Nina turned and quickly vanished into the crowd. As soon as the girl was lost to view, Doña Monserrate hastened to the stall Mamá Catalina tended for her master. As she wended her way through the crowded marketplace, the briny smell of the bay was punctuated by the pungent odors of yams and goats and coffee beans and apple-bananas.

"Buenos días, Catalina," Doña Monserrate said, glad to have caught the black woman alone.

Mamá Catalina glanced up from where she was stacking wooden cases crammed with squawking hens. Thick drops of sweat beaded what showed of her dark forehead below a turban the color of tangerines. The stench of chicken droppings assaulted Doña Monserrate's nose.

"Buenos días, señora," Mamá Catalina said, hoisting up a cage. "How may I be of service today? Shall I wring the neck of one of these fresh young pullets for you?"

She slammed the cage down atop a stack of three others. The panicked birds inside set up a mad cackling and thrashing, and a cloud of feathers in tans, reds and blacks floated to the ground.

"I wish to purchase a potion."

Doña Monserrate spoke quickly, in a low voice. So close to Mamá Catalina did she stand that the black woman's smell filled her nostrils—a strange mixture of dill and scallions, oregano and something . . . musty . . . that Doña Monserrate was unable to place. Though they were surrounded by other stalls and a host of marketgoers, they still enjoyed privacy of a kind. No one had reason to pay them any special mind, and the clamor of the marketplace rendered it impossible to hear anyone clearly from more than a meter's distance. Still, Nina's great-aunt was eager to consummate the transaction before some other customer approached.

"You know me, señora," Mamá Catalina said. "I mix many potions." Indeed she did. Potions to make the body ill. Potions to make it well. Potions to make women desirable. Potions to make old men strong in bed again. Sleep potions, headache potions, stomach potions, love potions, pain potions—potions, in truth, for practically any purpose. "What sort do you seek?"

"I wish to punish someone."

"You seek a potion to make him suffer? I can provide one that will tie his insides into knots and make him scream like a woman in childbirth."

Doña Monserrate shook her head. "I have heard that you can prepare a potion that will summon the Horned Angel and make Him do the caller's bidding. I want Him to pay someone a visit and give him a little scare."

Mamá Catalina's eyes widened and she pursed her thick lips in disapproval. "Such a visit could fright a man to death."

"Such is not my purpose."

"The Evil One does not always abide by the summoner's purpose."

Doña Monserrate's eyes narrowed. "It is my understanding that your Don Antonio Escobar has little tolerance for impertinence among his slaves." Doña Monserrate's voice turned icily imperious. "It is not your place to question my wishes. Sell me the potion."

Mamá Catalina gave Doña Monserrate an appraising look. Age had yellowed the whites of the African's eyes so that they resembled old ivory. Their irises were the color of wet tea leaves. Finally, Mamá Catalina nodded thoughtfully to herself and bowed her head humbly. "As you wish, señora. My grandson Israel will fetch it to your house before noon today."

"The price?" Doña Monserrate said suspiciously, prepared to haggle the black witch down.

Mamá Catalina's eyes twinkled and her wide nose wrinkled up, but what she had intended as an ingratiating smile was ruined by gaps in her teeth in which there remained only the jagged stumps of two broken incisors and a snapped canine. The black woman bowed deeply from the waist.

"Let the señora give my grandson whatever she considers its fair worth," Mamá Catalina said.

That same morning, after Lieutenant Arturo Sandino y Leal had roused the night detachment from the pallets they had occupied for less than an hour and assembled the sleepy soldiers in the courtyard of Fort San Cristóbal, Colonel Eladio de la Madrid made a starchy military entrance from his office at the base of the high tower. He had strapped on his sword, and the heels of his gleaming boots rang out sharply as they struck the flagstones.

The sun had just cleared the eastern wall, still trailing a final few ribbons of tangerine and carmine, lavender and coral. The tide rode its ebb, and only mild wavelets lapped against the base of the cliff. Silhouetted against the sky, seagulls strutted along the parapets. Though the day was barely begun, the men knew that all too soon the biting heat of the Caribbean day would give way to the cool caresses of night breezes sliding in off the ocean, and then each soldier would wonder in the darkness if dawn would find yet another of their number vanished.

It had been a month since Cartagena's . . . going.

Sergeant-Major Moncado stood at stiff attention next to Lieutenant Sandino y Leal. "Sergeant-Major," the colonel barked, "who is assigned to Sentrybox Six tonight?"

A beefy veteran of many campaigns and a man close to the colonel's own age, the sergeant-major hesitated before speaking. "Soldier Pinzón, señor." The sergeant-major cleared his throat. "But he refuses to take the duty."

The colonel glared at Sergeant-Major Moncado, but the sergeant-major stared straight ahead, eyes fixed on the far distance as per regulations. His neatly trimmed

black hair and beard were shot through with grey. From out of the corner of one eye, he glimpsed how the colonel's ordinarily pale face was flushing a furious scarlet. Moncado felt a trace of pity for Pinzón.

"Soldier Pinzón," the colonel said in a steely voice, his eyes darting from face to face among the troops, "take two steps forward. Now!"

A stocky little man with a droopy brown moustache and a worried squint darted forward two nervous steps and snapped to attention in front of the squad. The colonel stood directly before Pinzón and surveyed him from head to foot. He appeared to like neither extreme nor the middle.

"Have you aught to say for yourself, Soldier?"

Soldier Pinzón's face had taken on the desperate look of a man who devoutly wishes the earth would open up and ingest him. When it soon became evident that Nature was not inclined to so intervene, he came close to tears. But he took a deep, shuddery breath and managed to speak in a voice that trembled only slightly. "Señor, if I stand watch in Sentrybox Six tonight, I know the Devil will eat me as surely as he has already devoured Soldiers Arango, Loubriel and Cartagena. I fear the Devil's hunger, my Colonel, and so I cannot stand the watch."

"Your commanding officer orders you to do this."

Soldier Pinzón's cheek began to twitch because he knew the hip-deep sort of trouble he was stepping into. But he managed to find his voice and quaver, "I am sorry, my Colonel. I fear your wrath greatly but, if the truth be known, I fear the Devil's teeth more, and so must respectfully decline the watch."

The colonel exploded. "Thirty days in the dungeon on bread and water, then!"

Soldier Pinzón smiled his relief. Better the devil known than one unknown. "Oh, bless you, señor! Thank you!"

The colonel flinched as though someone had thrust the point of a blade at the bridge of his hawklike Iberian nose. This was not the reaction he had expected. The situation called for a change of tactics before respect for authority eroded completely. He clasped his hands behind his back and searched for the right words.

"Soldiers of Spain, you all know how strongly I believe in military discipline," the colonel said. "Without it, our far-flung empire would not exist. But I believe in reason, as well. Since there appears to be some danger associated with standing watch in Sentrybox Six, and since my faith in the courage of the Spanish soldier is unshakeable—with the possible exception of one or two lowly worms who dishonor that tradition of valor"—and here the Colonel flashed Pinzón a glare that boded him no good—"I have decided to place my trust in that noble tradition which failed our Motherland not once in the six hundred years of the Reconquest. I ask of you a volunteer, a bold Spanish warrior to take this coward's place."

There was some unauthorized movement in the ranks as the men glanced around surreptitiously to see who would be so foolish as to offer himself up as the sacrificial lamb. The first rule a soldier learns in any army is: *Never* volunteer for *anything*.

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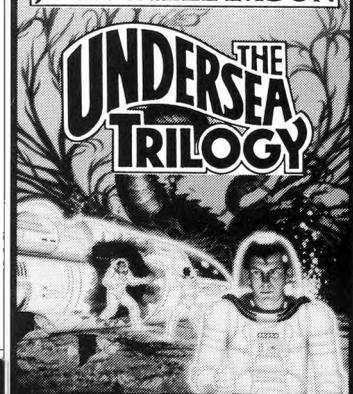
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## THE UNDERSEA TRILOGY



The only man who did not look around was young Diego Sánchez Urrutia, who had fallen heels over head for lovely Nina López de Victoria and so ached for her that he thought each breath would surely be his last. All poor Diego could think about was Doña Monserrate's forbidding him ever to see Nina again. It was more than any man could bear. What did it matter, then, whether he lived or died?

And before his head had had the opportunity to think things through any further, his legs had taken two steps forward and his mouth had volunteered him to defy the Devil.

Poor Nina. There she sat, alone on her tiny balcony, contemplating the empty street. The sun had just set, and the western sky was beginning to darken. A single star twinkled cheerily in the early evening blue, but Nina was desolate at the prospect of never seeing her beloved Diego again. One part of her felt she must surely die if she could not be with him, while another part wished for rain, thinking how deliciously a cool five-minute shower would relieve the remnants of the blazing afternoon heat. With such odd little dichotomies does life abound. In her mind's eye she pictured how the wet cobblestones would glisten like grey glass and all the houses would look as though they had been freshly painted, while the air would smell warm and moist and sweet and cool, all at the same time. Imagine strolling through the soft August rain with her Diego. . . .

"Nina! What are you doing out here?"

The blood rushed to Nina's head. The girl felt momentarily disoriented, startled back to the real world by the sudden sharp words of her great-aunt, who had somehow contrived to transport her huge bulk from the bedroom to the balcony with the stealth of a shark gliding through banks of coral.

"I am doing nothing wrong, Tía. Only gazing at the street and wishing it would rain."

"It is hot, yes." Doña Monserrate plumped herself down and the balcony seemed suddenly cramped. Just to keep in practice, she sighed a sigh of monumental proportions. "Dream no dreams of seeing that little soldier again, child. He will not be back this way. He is not for you, believe me."

"I understand, Tía," Nina said meekly. "I have been thinking on your advice and I see you were right. I know I must respect your authority and submit to your wishes, and I truly did not sit out here hoping to see the soldier again. I only wanted to pass the time watching the people on the street come and go."

Doña Monserrate seemed touched by the girl's submission. "I do hope you have truly taken all you have told me into your heart." She looked down to where the Street of the Sun ended three blocks away and the recently lit torches at the entrance to Fort San Cristóbal seemed to beckon. "My, but it is warm. It is so much cooler in my bedroom. Why do we not go inside, child?"

"I will come in soon, Tía. You go on ahead and I will bring you cool water and slices of fresh lime bye-and-bye."

"Very well. But do not tarry. Prolonged exposure to such heat as this is ruinous to a young girl's complexion."

For a few minutes more, Nina sat there gazing at the entrance to the fort. Finally, she rose listlessly and would have gone inside to join her great-aunt had not Rocío and Rosario Boscana, servant girls who worked in the Caraballo house near the top of the hill on Calle del Cristo, rounded the corner just then chattering away like Dominican parrots. The excitement in the voices of the sisters pricked Nina's curiosity and kept her on the balcony a moment longer.

The girls stopped to buy a bag of coconut candy from Marcelo Santana's pushcart on the sidewalk below Nina's balcony and to inquire if he had heard the latest news. And so Nina chanced to hear the tale which had already flashed through the city with the speed of a Chinese rocket and given all San Juan food for gossip. Early this morning, Diego Sánchez Urrutia had volunteered to stand the graveyard watch in the Devil's Sentrybox this selfsame night of the thirteenth! Was he a madman or a fool, this handsome young musketeer who dared to defy the Devil, or a hero brave and true, like the legendary El Cid?

The Boscana sisters pattered on down the street. A few parting rags and tags of their chatter floated back to Nina, but fell on stunned ears. The news of her young love's risking his life had spread a film of fear over Nina's eyes and put a worried furrow in her smooth brow.

When he had decided to volunteer, several seductive adolescent notions had clouded Diego's judgment—first, that the townfolk would call him a hero and admire his splendid courage; second, that everyone would be sorry if the Devil did devour him; and third, that a life without Nina was not worth living anyway.

In the heat of the moment, he had forgotten that standing nightwatch is a lonely job with no admiring crowds to cheer you on, and that if the Devil did make a meal of you, you would not be around to enjoy the wake. Added to which was the discovery that, while his heart still ached for his young love, the closer the clock crept to the dread hour of midnight, the more attractive seemed a life without Nina to no life at all.

An hour or two of solitary meditation in the sobering dark of night can clear the cobwebs wonderfully.

Alone in her room, Great-Aunt Monserrate contemplated the tiny vial Mamá Catalina's young grandson Israel had delivered before noon, as promised. She had given him two peniques for his trouble, and considered herself exceedingly generous. The boy had thanked her politely enough, but the old woman thought his show of gratitude could have done with a little greater enthusiasm. Still, it was often difficult to fathom the true emotions of these Africans. Doña Monserrate supposed it due to the lesser souls with which God had seen fit to endow them.

The doors and windows of the old woman's bedroom were closed and the heavy curtains tightly drawn, making the air hot and stuffy. Fat drops of perspiration beaded on Doña Monserrate's brow and slithered down

her spine. The flickering yellow flames of thirteen votive candles she had purchased at the cathedral set strange shadows to dancing on the whitewashed walls. The church bells had just tolled the hour of ten, and in her bedroom down the hall Nina slept as soundly as only the young and innocent can. Now was the moment. Now the old woman would invoke the punishment the impertinent soldier boy had brought upon himself by disobeying her wishes. Impatient to have the matter over and done with, Doña Monserrate uncorked the vial and in a single swallow gulped down its entire contents.

It tasted viler than anything she had ever drunk before. Her gorge rose, and she gagged and nearly vomited. But, through an enormous effort of will, she managed to keep the liquid down. She wished she had a cup—no, an entire carafe!—of Nina's lovely anise tea to wash away the fetid aftertaste that clung to her tongue and the soft flesh of the inside of her cheeks.

Six minutes crept by. Ten. Twelve. Nothing happened. The witch woman had cheated her! Anger began to boil up inside her like pitch bubbling in a cauldron. Then, without warning, the room began to spin, and the roar of a great wind thundered in her ears, and like a cow who has suffered the bite of the slaughterhouse blade, a stunned Doña Monserrate sank first to her knees, then crumpled limply to the cool tile floor and lay there in a swoon.

Old age began to peel away from Doña Monserrate like the cracked and cobwebbed shell of a boiled egg, revealing finally the firm face and flesh of young Monsita Ramírez de Arellano, just turned seventeen and the prettiest girl in all of Santa Cruz de Tenerife. Everybody said so. The young men flocked around her, and she had a wonderful time flirting with them all. But her favorite was Camilo García de la Noceda, a handsome young army captain, one of those exotic blonds from the north of Spain who had been posted to her brother Josué's regiment.

Upon the fortunate Camilo she had bestowed the gift her mother had made her swear she would never give to any man before the night she was wed. What had led her to this momentous decision? The reasons had been many, and complicated, and far more compelling than any her mother had warned her might be inveighed against her chastity:

Because Camilo was leaving for the northeast of France to fight in the campaign against the Great Condé which had already claimed the lives of so many brave young Spaniards, and she might well never see him again.

Because he had pledged her his eternal love and left her his dead mother's gold ring as token of both his fidelity and his solemn promise to wed her upon his return.

O, and because his eyes were so blue . . .

. . . his smile so white . . .

. . . his muscles so strong . . .

. . . his skin so silky and smooth . . .

. . . his hands so gentle . . .

. . . his lips so sweet . . .

. . . his tongue so warm and teasing . . .

But he had proved a liar! How many times had she not wished he might have died in the Battle of Rocroi,

disemboweled by some bastard of a Frenchman or skewered by a bolt from a Swabian arbalest? Better that than to see him return to wed another girl and take her away to make their home near his birthplace at the foot of the Pyrenees. Especially one so hatefully dull as Lucecita Montoya, who was as short and stocky as the peasant women who worked the fields and had a face as round and plain as a pie plate. Secretly, the young Monserrate's broken heart was more than a little gladdened that her faithless love had had the misfortune to catch the point of a Frenchman's pike in the flesh above the elbow and lose his left arm to gangrene.

Now, in this drug-induced dream, Camilo came to her. His dark blue battledress was torn and clotted with mud and filth, and the stump of his arm was wrapped in dirty rags stained pink and yellow by blood and pus. He was older than he should have been, and his blue eyes were sunken and looked as though someone had rubbed patches of soot on the loose pouches of flesh beneath them. Camilo's mouth smiled and said, "Why have you summoned Me?"

Doña Monserrate drew back. None of this was as she had expected. "It was not you I meant to summon," she said. "I wish to invoke the Evil One, the Dark Angel, Satanás."

"I am He."

Doña Monserrate's head shook in a manner as uncontrolled and jittery as the chattering of teeth. Her mouth was dry and she found it difficult to swallow. "You are Camilo García de la Noceda, who once betrayed my love and honor."

"Ah. That may well be the form you perceive—for each summoner sees Me in a different, and most personal, guise—but I am indeed the One you seek. What do you wish of Me?"

Doña Monserrate hesitated. "There is a young soldier who courts my grandniece—"

"I know the one of whom you speak."

You do not set out across the river to turn back at midstream, sayeth the wisdom of the common folk. Doña Monserrate saw no alternative but to let herself be guided by that maxim now. Besides, it is difficult to deny oneself the pleasure of self-justification. "I seek to protect my grandniece from him that she may never suffer such unhappiness as mine," she said. "He has wilfully disobeyed my instructions to stay away from her. He must be punished."

The maimed soldier nodded approval. "You are a vindictive person. I like that."

"But I do not wish to inflict physical harm on him. For many years I have regretted having rejoiced at the loss of Your—Camilo's—poor arm. I thought perhaps You might so frighten him that he would never dare importune the girl and me again."

"Himm . . . regret. A quality far less to My liking. It is but a step removed from repentance."

"This evening You will find him standing guard in—"

"—the Devil's Sentrybox." The apparition laughed. It was not a laugh one would have wished to join in with. "Forgive Me," he said. "I find the name amusing."

"You know the place?" Doña Monserrate said.

"Who in this God-forsaken little outpost does not? I Myself have dined there on three separate occasions this year."

"Then the tales the townfolk tell are true . . . ?"

The creature that resembled Camilo smiled enigmatically. Its teeth were as yellowed as an old dog's, and its gums almost black. "So. We have a pact."

Doña Monserrate licked her lips nervously. "So . . . quickly?"

The scent of burning paraffin tickled Doña Monserrate's nostrils. The room seemed to have grown darker. Shadows clung to its high corners like dark spiderwebs.

"Did you expect to haggle with Me like a fishwife?"

"But we have not yet discussed price."

"I will take from you something you value highly."

"I will not cede You my soul."

The soldier smiled one last time. "One cannot dispose of what one no longer has title to, señora."

This said, he took hold of her hand, pressed its ancient flesh to his icy lips, and vanished into darkness. As did Doña Monserrate's sight, along with her other senses.

Doña Monserrate opened her eyes. She lay sprawled on the floor, yet her heart was racing as though she had just run up a flight of stairs. Sweat bathed her body, and her heavy clothing felt damp and uncomfortable. She had no feeling in her left arm, which was caught at an awkward angle beneath her body. Her bedroom had grown darker. More than half the votive candles had died and the rest were guttering out. The shadows on the walls loomed larger and seemed more menacing than earlier. She could hear the muffled clangor of the cathedral bells sounding from the bottom of the hill on Calle del Cristo, but it took her a moment to realize that they were tolling the midnight hour.

Alarmed, she tried to rise. With her right hand, she grabbed a bedpost and managed to struggle to her knees. Her left arm dangled uselessly, numbed from lack of circulation. She pulled herself to her feet and stumbled towards the door, breathing heavily from the unaccustomed effort. Carrying one of the few remaining candles to light the way, she dragged herself down the hallway to Nina's room and cautiously nudged the door ajar.

The girl's bed was empty.

The cobblestones of the Street of the Sun had turned slick with evening dew. Where the street stopped at the entrance to Fort San Cristóbal three blocks away, torches flickered smokily to either side of the huge locked gates. Clutching her dead nephew's walking stick in her good hand, Doña Monserrate tottered along the narrow sidewalk. The blood was beginning to seep back into the flesh of her left arm, and she could feel the first pinpricks of returning feeling hinting at the agony still ahead.

Why she had come out here or what she hoped to accomplish she could not have said. Her thoughts were twisted and confused, her emotions panicky, and her advanced age weighed crushingly upon her. Perhaps she imagined she was searching for Nina, whose room

was empty and whose bedclothes appeared to have been scattered in wild haste. But where did she expect to find her? She harbored no notion of where the girl could have vanished to.

Unless . . .

The creature in her dream had said His price would be something she valued highly.

With sudden swiftness, full feeling flooded back into her arm. Nerves that had been for too long numbed came alive with pain. Leaning heavily on her walking stick, Doña Monserrate began screaming, but whether from the sudden agony or the sudden knowledge she could not have said.

Clouds had laid a shroud over the night. Bereft of vision, the imagination is wont to grow overactive. It seemed to Diego, for example, that the sand a scant three meters below his sentrybox hissed like a nest of serpents each time it soaked up the foam of a dying wave. So even as his eyes strained to divine shapes in the blackness, to Diego's ears the slap of waves became demonic footfalls, the clatter of seagull wings the clamor of satanic fiends, the swish and rustle of approaching footsteps—

—footsteps? Approaching?

The breath caught in Diego's throat. His flesh crawled as he thought of the short open stone passageway to his rear that joined the sentrybox to the fort and left his back hopelessly exposed. Blood rushed to his head and his brain swirled with infernal images, nightmare visions of hellbirthed gargoyles, their leathery gums spiked with hideous yellow teeth, their scarlet cat's-eyes glittering feverishly in the stifling darkness, their bloated bellies burning with an unspeakable hunger for living human flesh. Suddenly, his limbs felt as heavy as soaked canvas sheets.

Still, he was a soldier. He raised the now enormous weight of his musket to his shoulder and pointed its uncompromising muzzle into the night. His lips moved and in his mind he heard himself bark, *Who goes there?* But no sound issued from his throat.

Yet the whisper of footsteps ceased.

The voice of Sergeant-Major Moncado floated skyward from the courtyard of Fort San Cristóbal: "Sentrybox One!" Automatically, the soldier on duty in the high tower cried out, "Sentry on guard!" The sergeant-major called out to the next sentrybox and the man on guard there sang back also. And so on down the line, the sergeant-major's voice as brassy as ever, but growing unhappier and more reluctant with each call. Until . . .

"Sentrybox Six!"

But where Diego's voice should have creased the midnight air, the only sounds that came to the straining ears of Sergeant-Major Moncado and Lieutenant Arturo Sandino y Leal and the uneasy men of Fort San Cristóbal's guard detachment on that fevered August night three centuries ago were the hollow echo of the sergeant-major's own voice . . .

. . . and the slap of waves on the base of the cliff . . .

. . . and the clatter of seagull wings. . . .

And when finally the sun rose and they dared venture down there to investigate, they found no trace of the missing farmboy, save for the musket he must have cast aside in terror.

And that is the end of the tale.

Or is it?

The historian Pío Malpica reports that the young man in question was never seen again, and so the name of Soldier Diego Sánchez Urrutia was eventually added to the list of the Devil's hapless victims. Strangely enough, after that fateful thirteenth of August, the historian also notes, the half-Indian orphan girl Nina López de Victoria was never again seen in the capital city of San Juan either. Neighbors who came to the aid of her duenna, Doña Monserrate Ramírez de Arellano, described finding the old woman outside on the street in her nightclothes and in a sorry state indeed—wild-eyed and incoherently sobbing of lost souls and lovers' betrayals and the tribulations of being a great beauty.

Malpica finds this juxtaposition of events a curious one. Why, he wonders, did the girl vanish from her jaundice-stricken great-aunt's house on Calle del Sol the selfsame Devil's Eve that her lover mysteriously took French leave from his guardpost? Were the two disappearances in some manner linked? And what of the great-aunt's babblings of having trafficked with the Dark One? Even in our more enlightened times, there are those who nod knowingly and whisper among themselves, a curious glitter in their eyes—those who smile as enigmatically as Doña Monserrate's apparition and claim that the Evil One found the musketeer a less than hunger-slaking morsel and so stalked on down the Street of the Sun in search of even more tender prey, and that it was all the old woman's doing for allowing herself to be duped by the Eternal Trickster. And perhaps they are right. Perhaps the story does end there, cruelly, with two innocents paying the price of a misguided old woman's revenge.

But those of us of a more romantic bent prefer to think that something more akin to what follows is what in truth transpired, though it may be no more than wishful thinking on our part.

Had the thing approaching below him somehow heard his thought? Diego wondered in panic. Was it even now preparing to swoop up and pounce, razored claws hissing free of their leathery sheaths to rend and tear his soft flesh?

Diego froze, his eyes as wide as possible but still unable to pierce the darkness. Fear clutched at his throat,

sank icy talons into his churning bowels. His straining heart felt as though it would burst from his chest. Then a sweet voice sang these words so softly they seemed to caress the air:

*To the Queen of Hearts is the Ace of Sorrow,  
He is here today, he is gone tomorrow,  
Young men are plenty, but sweethearts few,  
If my love leaves me, what shall I do?*

Now, the Devil may be a crafty imp and a master of disguises, but true love calls to true love in a voice that cannot be dissembled. Diego's lips formed two syllables—Nina—and he lowered his musket. She must have slipped out through the north landgate before its evening closing, he thought, and waited until now to make her way stealthily around the base of the fort, then down the slope of the seagrape-bordered path and up the narrow beach below him that ran along San Cristóbal's seaward side.

Breathless with excitement, he backed out of the sentrybox and, with an exuberant burst of energy, vaulted over the side of the open-air connecting passageway and dropped lightly the three meters to the soft sand below. From the great shadow of the fort his smaller shadow glided forth. Through a break in the clouds, moonlight traced the delicate contours of his sweetheart's face. Without taking his eyes from hers, he carefully laid down his musket. Nina stepped forward and nestled gently into his arms, and he clasped her very tightly against his still-racing heart for a long moment before finally pressing his trembling lips to hers.

Without speaking, they knew what they would do. Together they would make their way to the mountains of the Cordillera Central, the Aragonese farmboy and the half-breed Borinqueña. Far from blustering great-aunts and ambitious lieutenants and the fear of slaving demons, they would find a plot of land, and till the fertile earth of the New World, and make fat, healthy babies together. Together life would be good, and they would be happy. And when finally together they grew old, they would tell the tale of how they came to find each other to their grandchildren and laugh.

And so they vanished that dark night and no further known record of them survives.

After a time, a brassy voice, made thin by wind and distance, floated down faintly from the parapets on high. But no answer was forthcoming, not then or ever, for true love is silent and heeds not the cries of sergeants, nor the restless slap of waves, nor the clatter of seagull wings.

At least that is what we romantics would like to believe. ♦

# The Forties: "Gimme Bang-Bang"

Mike Ashley

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To many who recall it, the *Amazing Stories* of the 1940s represented the era of the Shaver Mystery. It is probably fair to say that the Shaver phenomenon colored the judgment of many who dismiss the contents of *Amazing* during this time as sensationalistic rubbish because of the so-called "crackpot" element that was attracted to the magazine. And crackpots there were, but that is not the whole story.

Raymond A. Palmer, the young new editor of *Amazing* at the start of this decade, has been damned by history far more than he deserves—though it must be admitted that in later years he did more or less encourage his isolation. A succession of illnesses and accidents left Palmer a lonely child. One accident left him malformed from a curvature of the spine. In adult life he was only a little more than four feet tall. But what he lacked in height, he made up for in dynamism and showmanship.

One of the factors that led to Palmer's later isolation was that he started his tenure as editor at the same time that John W. Campbell came on the scene at *Astounding Stories*. Campbell instigated a policy of publishing serious, mature, and above all believable science fiction. He developed a coterie of new writers—including Robert Heinlein, Isaac Asimov, Theodore Sturgeon, Lester del Rey, and, believe it or not, L. Ron Hubbard—who could feed off his ideas, as he could feed off theirs. Partly because of these interchanges,

## The Amazing Story Part 3

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the work of these authors ushered in the so-called Golden Age of science fiction.

Palmer, on the other hand, went for fun and games, treating science fiction lightheartedly and aiming at a younger, less sophisticated readership. As a consequence, science fiction polarized between Campbell's science-forecasters at one extreme and Palmer's laboratory playpit at the other. That's not to say that Palmer published only puerile trivia. But because he was science fiction's renegade, many are ready to dismiss too easily the fiction that he did publish. From today's vantage point, though, one might argue that under Palmer, *Amazing* published a 1940s' version of "pop" or "punk" science fiction, and its pages during that decade hold some surprises.

At the outset, it must be recalled that Palmer was trying to rebuild *Amazing's* circulation and rectify years of damage caused by T. O'Connor Sloane's handling of the magazine. By 1938 *Amazing* had stagnated, and Palmer's first move was to enliven it with bold, gaudy, action-packed covers reflecting the fast-paced, thrill-a-minute contents. When his writers asked what type of

fiction he wanted, Palmer's simple answer was "Gimme bang-bang." Palmer had little time for the cerebral style of sf that was emerging in *Astounding*. He wanted superficial, escapist enjoyment, similar to the scientific romances that the pulp magazines had published before Hugo Gernsback launched *Amazing Stories* in 1926, but less sophisticated.

Palmer wanted to recapture the fun of the early pulps. He was fortunate in being able to secure three groups of stories by Edgar Rice Burroughs, set respectively in his worlds of Mars, Venus, and Pellucidar. These ran through 1941 and 1942. Although Burroughs's fortunes had declined in recent years, his name still captured the imagination of old and young alike. The first appearance of an original Burroughs story in *Amazing*, however, caused a controversy. The January 1941 issue carried the novelette "John Carter and the Giant of Mars," but many readers, who were dedicated Burroughs fans, felt this story did not read as if the master had written it. The letters flooded in. The truth was not revealed at the time, but Irwin Porges, in his massive biography of Burroughs, *The Man Who*

Created Tarzan, asserts that the story had been written jointly with Burroughs's son, John Coleman.

Palmer didn't mind controversy—it helped sell issues. Moreover, ever the Burroughs fan, he favored fiction written in the Burroughs style, and both *Amazing* and its companion *Fantastic Adventures* (which Ziff-Davis began to publish with its May 1939 issue) had a strong Burroughsian flavor during the early 1940s. This is especially evident in the work of Ralph Milne Farley and Robert Moore Williams.

Farley had apparently been approached to edit *Amazing Stories* when Ziff-Davis first acquired it in 1938, and had recommended Palmer instead. In the twenties he had written his own Burroughsian-style "Radio Man" series for *Argosy*, set on Venus. The scientist-adventurer of those stories, Miles Cabot, was resurrected in *Amazing* in "The Radio Man Returns" (June 1939). Stories by Farley, some of them serialized over more than one issue, appeared in eight issues of the magazine during 1939 and 1940.

Williams, who became one of *Amazing's* most prolific contributors, was a skillful adventure writer, and it is rumored that his Tarzan-like novella "Jongor of Lost Land" changed the fortunes of *Fantastic Adventures* (for the better) after it appeared in that magazine's October 1940 issue. His initial appearance in *Amazing* was with "The Man Who Ruled the World" in June 1938—the first issue that carried Palmer's name as editor.

Palmer also used the artistic skills of J. Allen St. John to illustrate the Burroughs stories, as well as several covers, and there is little doubt that all these factors contributed to the continuing growth in *Amazing's* circulation during the early part of the decade.

Another echo from the past was "Anthony Gilmore," the pseudonym under which Harry Bates and Desmond Hall had written their Hawk Carse stories when they were editors of *Astounding*. The Hawk Carse stories were space opera at its worst, but they remained sentimentally entrenched in the minds of some fans. Palmer commissioned Bates to write

a short novel, "The Return of Hawk Carse" (July 1942). The fact that the story was not well received is at least some measure of the degree by which science fiction had advanced, even at *Amazing's* juvenile level.

Palmer brought together other writers from the early days of magazine sf, and allowed them free rein with unabashed scientific adventures. Primary among them were Edmond Hamilton, Ross Rocklynne, Manly Wade Wellman, Raymond Z. Gallun, Ed Earl Repp, Stanton A. Coblentz, and Eando Binder. Although they were capable of more serious science fiction (and occasionally proved it in other magazines), they used *Amazing* as their knockabout backyard. Stories followed simple plots: they were either gangster stories transposed into space, with villains chasing and being chased around the solar system; or they were war stories in space; or they were tales about bizarre inventions, often with madcap results.

Typical stories of the period by members of this group, which can be generally categorized by their titles alone, include "Treasure on Thunder Moon" by Hamilton (April 1942); "Warrior Queen of Lolarth" by Rocklynne (May 1943); "Suicide Rocket" by Wellman (March 1942); "Terror out of the Past" by Gallun (March 1940); "The Secret of Planetoid 88," by Repp (December 1941); and "The Cosmic Deflector" by Coblentz (January 1943).

Occasionally, Palmer would acquire fiction from more serious or aspiring writers, including Isaac Asimov, John Beynon (full legal name John Beynon Harris; later known as John Wyndham), and Eric Frank Russell.

"Marooned Off Vesta" (March 1939) was Asimov's first published story. "The Weapon Too Dreadful to Use" followed in the May 1939 magazine, but Asimov soon became a member of Campbell's stable at *Astounding* and only had one more story in *Amazing* during the 1940s ("Robot AL 76 Goes Astray," February 1942).

Beynon's stories in *Amazing* during the early years of Palmer's tenure were "Judson's Annihilator" (October 1939, a standard sf war

story, and "Phoney Meteor" (March 1941), a clever tale about alien invasion.

Russell's first appearance in the magazine, and his only one during the decade, was with "Mr. Wisel's Secret" in February 1942, the same issue that contained the aforementioned Asimov story.

Those were, and are, noteworthy writers, and there were others, but of greatest significance were the stories by Ray Bradbury. Bradbury had an unbridled talent for giving his stories an offbeat originality, something that appealed more to Palmer than to Campbell. His "I, Rocket" (May 1944) is an adventure story from the viewpoint of a sentient rocket, published more than fifteen years before Anne McCaffrey would write "The Ship Who Sang." Ten years after the appearance of the work, Campbell was still referring to Bradbury's rocket as his "fairy ship," since the story was devoid of the hardware for which Campbell yearned. Bradbury was also represented in the magazine by "Undersea Guardians" (December 1944), "Final Victim" (co-credited with Henry Hasse, February 1946), and "Chrysalis" (July 1946).

Unfortunately, challenging stories were the exception rather than the rule in *Amazing Stories* at this point in time. By the early 1940s, Palmer had developed a stable of local (Chicago-based) writers who could write to order, often producing stories around cover paintings by Harold McCauley, Robert Gibson Jones, or Malcolm Smith. The mainstays were Don Wilcox, Robert Moore Williams, David Wright O'Brien, William P. McGivern, Leroy Yerxa, and David Vern, plus (later in the decade) Chester S. Geier, Berkeley Livingston, and William L. Hamling.

Of these, Wilcox was the oldest. He approached his writing more seriously than the others, and scored early with a memorable story, "The Voyage That Lasted 600 Years" (October 1940), based on his sociological studies. It was a pioneer work on the subject of the first generation starship.

O'Brien was regarded as the most talented of these writers. A nephew

of Farnsworth Wright, editor of *Weird Tales*, he was 22 years old when his first story (“Truth Is a Plague!”) appeared in *Amazing* in the February 1940 issue. O’Brien had a fertile mind, an abundance of youthful exuberance, and an infectious sense of humor. He shared an office with McGivern, who was only 16 years old when he made his debut in May 1940 with “John Brown’s Body,” co-written with O’Brien.

The two of them were able to write just about any story to Palmer’s order. Sometimes the stories were serious, sometimes spooky, but usually they were madcap, designed for nothing but entertainment. Palmer often endowed these stories with his own zany titles, so that the pages of *Amazing Stories* and *Fantastic Adventures* contained stories such as “The Quandary of Quintus Quaggle” (by McGivern, *AS* June 1941); “Mr. Muddle Does as He Pleases” (McGivern and O’Brien, *AS* August 1941); “Ferdinand Finknodle’s Perfect Day” (O’Brien, *AS* September 1941); “The Strange Voyage of Hector Squinch” (O’Brien, *FA* August 1940); “Sidney, the Screwloose Robot” (McGivern, *FA* June 1941), and “Rewbarb’s Remarkable Radio” (McGivern, *FA* December 1941). In many ways the stories of this sort read like P. G. Wodehouse meets *Amazing Stories*, and certainly the readers appreciated this lighthearted fare, which was unavailable elsewhere. Robert Bloch made the best of the situation with a whole series of stories in *Fantastic Adventures* about Lefty Feep, a rather lovable layabout who manages to fall into and out of trouble.

Although forgotten today, Leroy Yerxa was among the most prolific contributors to the Ziff-Davis magazines. He was twenty-seven years old when his first story, “Death Rides at Night,” appeared under his own name in the August 1942 *Amazing*. In the next four years, till his untimely death in 1946, he sold more than seventy stories to Palmer for *Amazing Stories* and *Fantastic Adventures*, with many of those published pseudonymously. He is rumored to have written an entire issue of *Fantastic Adventures* (possibly the one for December 1943). While other writers

wrote more, their output was not concentrated in such a short, intense period. Possibly Yerxa’s only rival in this regard was David Wright O’Brien, who in the five years from 1940 through 1944 sold more than a hundred stories to Palmer, not counting his collaborations with McGivern.

Palmer’s core of writers were so prolific that they could fill every issue. To avoid the frequent recurrence of names, the authors used various personal pseudonyms, some of which were later adopted by other authors. For instance, “Lee Francis” began as a pen name of Leroy Yerxa’s, but after his death in 1946 it was used by others, including Hamling. In addition, a practice began of creating a number of “house names.” These nom de plumes were originally used to hide the identities of the various editorial personnel working on the magazine, especially David Vern.

Vern was a precocious, hyperactive young editorial assistant who came from New York to the Chicago office to help Palmer with the work arising from the expansion of the magazine line. (In addition to *Amazing Stories* and its new companion *Fantastic Adventures*, Palmer was also editing *Red Star Adventures* and *South Sea Stories*.)

Vern was also a passable writer, and his work started to appear in both magazines under the names of “Peter Horn,” “David V. Reed,” and “Alexander Blade.” (His first contribution to *Amazing* was “Where Is Roger Davis?” in the May 1939 issue under the “Reed” pseudonym.) However, when Vern returned to New York after a few years these names, particularly “Alexander Blade,” were assigned to a variety of other writers.

Other house names emerged, including “P. F. Costello,” “Gerald Vance,” “E. K. Jarvis,” and “S. M. Tenneshaw”—originally used by McGivern, O’Brien, Williams, and Hamling, respectively. O’Brien also wrote as “John York Cabot” and (perhaps in homage to his uncle) “Duncan Farnsworth.” Palmer himself produced more than a dozen pieces of writing for *Amazing* during the 1940s, using a variety of pseudonyms including “A. R. Steber,” “Morris J. Steele,” “Frank Patton,”

“Henry Gade,” “Wallace Quitman,” and “G. H. Irwin.” Clearly, at times it could be difficult to tell the players even *with* a scorecard. Despite the efforts of a number of researchers over the years, many of the true authors of “house name” stories remain unidentified (although work that Kenneth R. Johnson is currently doing is close to cracking open the final parts of the mystery).

A strong family atmosphere prevailed in the Ziff-Davis offices in Chicago during this period, with Palmer looking after his boys. Wilcox, who is still active after all these years, though more now as a portrait painter than as a writer, has shared many memories of those days with me. “A card game, usually gin rummy, would be occupying the attention of editors and their assistants,” he recalled. “The fellows must have done their work at night. On check days, Palmer’s office might be a gathering place for several new writers, new faces, all ready to register disappointment if the checks hadn’t come in on time.”

Palmer had a fast-working, versatile mind. Wilcox has a clear memory of him furiously pounding his typewriter at high speed. On one occasion Wilcox had become too deeply involved in his story “The Lost Race Comes Back,” written around a cover painting by J. Allen St. John, and couldn’t finish it. Palmer promptly read the story and completed it himself there and then to meet the deadline. (The story appears in the May 1941 issue.)

The outward signs of *Amazing*’s success were its regularity—published once a month for five years beginning in November 1938—and an increased number of pages. During 1941 and 1942 the page count rose from 144 up to 240 and all the way to 272. Even after the onset of World War II and the subsequent paper rationing, the magazine kept to 208 pages for a time (later shrinking to 180), remaining constantly the best value in *bulk* for money. But as war rationing continued to bite into the publishing industry, *Amazing* was forced to cut back on its production schedule. In late 1943 the magazine shifted to bimonthly, and then to quarterly after the following

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(2) \_\_\_\_\_

miniatures

(3) \_\_\_\_\_

role playing

(Miniature players list time periods)

science fiction

sports games

Will you play games not listed in top three above? \_\_\_\_\_ AREA Rating \_\_\_\_\_

summer, not returning to monthly publication until the June 1946 issue.

Palmer supported the war effort by publishing the largest quota of anti-Nazi propagandist fiction of any sf magazine. Much of it made fun of the German war effort, but some stories were serious in tone. Palmer contributed a number himself, such as "A Patriot Never Dies" (August 1943) and "War Worker 17" (September 1943), both under his "Frank Patton" alias. The latter appeared in an issue dedicated to women war workers. The September 1944 magazine was a special war issue; every story in it was identified as having been written by a member of the military, and it also contained letters from the troops.

The most significant contributor to that issue was Corporal David Wright O'Brien, with three stories—one under his real name and one each attributed to "Corporal John York Cabot" and "Corporal Duncan Farnsworth." The *Amazing* office was shocked when O'Brien, who served in the U. S. Air Force, was shot down and killed over Berlin later that year at the age of twenty-six. He had been a personable, friendly young man with an effervescent writing talent, and there is no doubt that he would have followed his close friend William McGivern into the big time if he had survived the war.

During the war years, Ziff-Davis began publishing two new mystery magazines, *Mammoth Detective*, which started in May 1942, and *Mammoth Mystery*, which came out in February 1945. (These magazines gave McGivern the grounding that later helped to establish him as one of the top thriller writers.) To help Palmer edit these new titles, Bernard Davis brought in 34-year-old Howard Browne, a solid, no-nonsense detective writer of the Chandler school.

Browne had no interest in science fiction, though he enjoyed the fantasies in *Fantastic Adventures*. Ironically, however, his first appearance as a writer was in *Amazing*. Palmer talked Browne into writing a novel set in prehistoric times, "Warrior of the Dawn," which was serialized in late 1942 and early 1943. Adventures

in prehistory, usually written in the Burroughsian style, were regular fare in both *Amazing* and *Fantastic Adventures* during the early years of Palmer's tenure as editor. Among the most popular offerings were Manly Wade Wellman's series of stories about Hok, a Stone Age warrior who was a prototype for Hercules. Hok fought his way through five adventures, including ones set in ancient Greece and Atlantis.

The lost continents of Atlantis, Lemuria, and Mu all figured prominently in both magazines. For instance, "Adventure in Lemuria" by Frederic Arnold Kummer, Jr., appeared in the first issue of *Fantastic Adventures* (May 1939), and was followed by several sequels. Stanton A. Coblentz's "Enchantress of Lemuria" was the lead novel in the September 1941 issue of *Amazing*. In addition, in that same issue L. Taylor Hansen began a column on scientific mysteries, which dealt with Gondwanaland, Atlantis, and other puzzles from before the dawn of science.

Thus, readers of *Amazing* became accustomed to Palmer's fascination with ancient mysteries, and when Richard S. Shaver appeared in the March 1945 issue with a piece entitled "I Remember Lemuria," the story should have come as no surprise. Nor would it have—except that Palmer claimed the story was based on truth!

Shaver maintained that eons ago, the earth had been inhabited by two super-races, the Titans and the Atlans. As time passed, they were forced underground by increasingly harmful radiation from the sun. They established vast subterranean caverns full of advanced scientific equipment. Eventually the sun's radiation became too harmful, and both races were forced to abandon the planet. They left their scientific equipment behind, and it was later discovered by an inferior race of humans who tampered with the machinery and came under its control. Over the millennia these humans degenerated into deranged robots, or, in Shaver-speak, "deros." It is the harmful rays and evil thoughts generated from the machines by these deros that have caused mankind to fall from

grace, and are the cause of all of humanity's ills. With the world in the grips of a war that was entering its final months, such a message, if indeed it were true, came as a sign of hope to many readers. If all evils came from external influences, then they could be stopped, and mankind would revert to its natural good state, and all would be well!

The origin of the Shaver stories has at times seemed confusing, though Palmer reported it himself clearly on many occasions, and Howard Browne had a vivid recollection of the events. Some years ago Browne recounted his memories to me:

Shaver had submitted a two-page letter to *Amazing* under the heading "Warning to Future Man." Browne was the first one to read it. He remarked to Palmer that "the screwballs were blooming early" that year, and tossed the manuscript into the wastebasket. Palmer promptly retrieved it and said to Browne, "Let me give you a lesson in creative editing." He thereupon sat down, read the manuscript, and wrote a novelette around it—the piece of writing that was published as "I Remember Lemuria." Palmer then discovered Shaver had several longer stories in his possession. Palmer bought them, rewrote them extensively, and published them. As time went on, under Palmer's guidance, Shaver wrote more and more stories himself, but the initial ones were shaped and crafted by Palmer.

Prior to the appearance of the Shaver stories, *Amazing* was selling around 125,000 copies per issue. The March 1945 issue had a larger than normal print run—and it soon sold out. Letters from readers poured in, and with the next issue, featuring Shaver's "Thought Records of Lemuria," circulation approached 200,000. Palmer's employees were impressed, and Palmer overtly promoted the Shaver Mystery for all it was worth. There was a Shaver story in almost every issue for the next two years, culminating in an all-Shaver issue for June 1947. Other writers also contributed stories in the same vein, including Chester Geier, who founded the Shaver Mystery Club, and German writer Heinrich Hauser, then

living in Chicago, who added two linked novels, "Agharti" (June 1946) and "Titans' Battle" (March 1947).

It is not clear how much Palmer was milking the gullible, as any entrepreneur might. He left mixed messages over the years. In all likelihood Palmer, the victim of many handicaps and misfortunes, wanted to believe it, and was prepared to go along with it all the time it sustained sales.

Shaver was certainly sincere. When I corresponded with him in the 1970s, he still maintained the truth of his experiences and observations. By then he was pursuing ancient records in the rocks, where he believed the true history of Atlantis was written.

Science fiction fans were less enthusiastic, and they became hostile to *Amazing's* editor. Palmer, who only ten years earlier had been one of the leading sf fans, attempted some reconciliation by instigating a fan column in the March 1948 issue, "The Club House," prepared by Rog Phillips. But on the whole, the sf fans formed only a small part of the readership of *Amazing*, and if they had to be antagonized for the sake of sales, why should Palmer worry?

Eventually such leading magazines as *Harper's* and *Atlantic Monthly* began to notice and criticize the crackpot elements of the Shaver Mystery, and the story goes (according to him) that Palmer was told to soft-pedal the topic thereafter. Whether that is true or not, I don't know, since it would seem surprising for a publisher to act negatively in reaction to such publicity. (One learns never to take too seriously anything Palmer says.) The fact remains that by the end of 1946, Davis had been elevated within the

company, and Ray Palmer followed him up the ladder to become overall editorial director. He was given a salary increase of around \$250 a month and even more freedom with the magazines.

Palmer's next move, though, was rather devious. During 1947, he shut down *Mammoth Detective*, *Mammoth Mystery*, and the recently created *Mammoth Adventures*. He placed William Hamling in editorial control of the two magazines while Howard Browne took a leave of absence during which he wrote three mystery novels.

Meanwhile, behind the scenes, Palmer invested his money in establishing the Clark Publishing Company and, in May 1948, launched the magazine *Fate*. Robert N. Webster (an alias of Palmer's) was identified as the publisher of the new magazine.

Palmer had come to realize that much wealth lay in appealing to the fringe cults. Following the dropping of the atomic bombs on Hiroshima and Nagasaki, the world had not only awoken to the terrifying consequences of science, but also to other possibilities. One such was that man's advance into the nuclear age had been the sign to alien observers that man was becoming a danger to himself and his planet, and he had to be kept under closer observation. Hence, the sudden wave of flying saucer sightings. Palmer had been one of the first to promote "ufology," in the pages of *Amazing*. Now he could use *Fate* as he wished to pander to all of the occult sciences. As a consequence, that type of material was siphoned from *Amazing* to *Fate*.

With that shift, the quality of fiction in *Amazing* improved marginally. Theodore Sturgeon put in a surprise

appearance with "Blabbermouth" (February 1947), a story probably switched from the inventory of *Fantastic Adventures*. Edmond Hamilton, ever an old reliable, who during the early 1940s had scored with his Captain Future stories in the magazine of the same name, wrote "The Star Kings" (September 1947), a space opera par excellence, again in the Burroughs tradition. There were also some readable, non-Shaverian stories from Rog Phillips, Chester Geier, and Don Wilcox, but by and large the mid to late 1940s saw *Amazing* at its lowest point in quality—yet its highest in circulation!

Palmer's link with the magazine grew more tenuous as *Fate* became more popular. By mid-1949 his plans were well advanced for a new science fiction magazine, *Other Worlds*, which appeared in October (cover date November). Palmer continued to produce both *Fate* and *Other Worlds* under the Webster alias until he was satisfied that both magazines were established. He then resigned from Ziff-Davis, and Howard Browne came back from his leave of absence to take over editorial control of the magazines, with Hamling staying on as his assistant. The January 1950 issue was the first one to list Browne as editor.

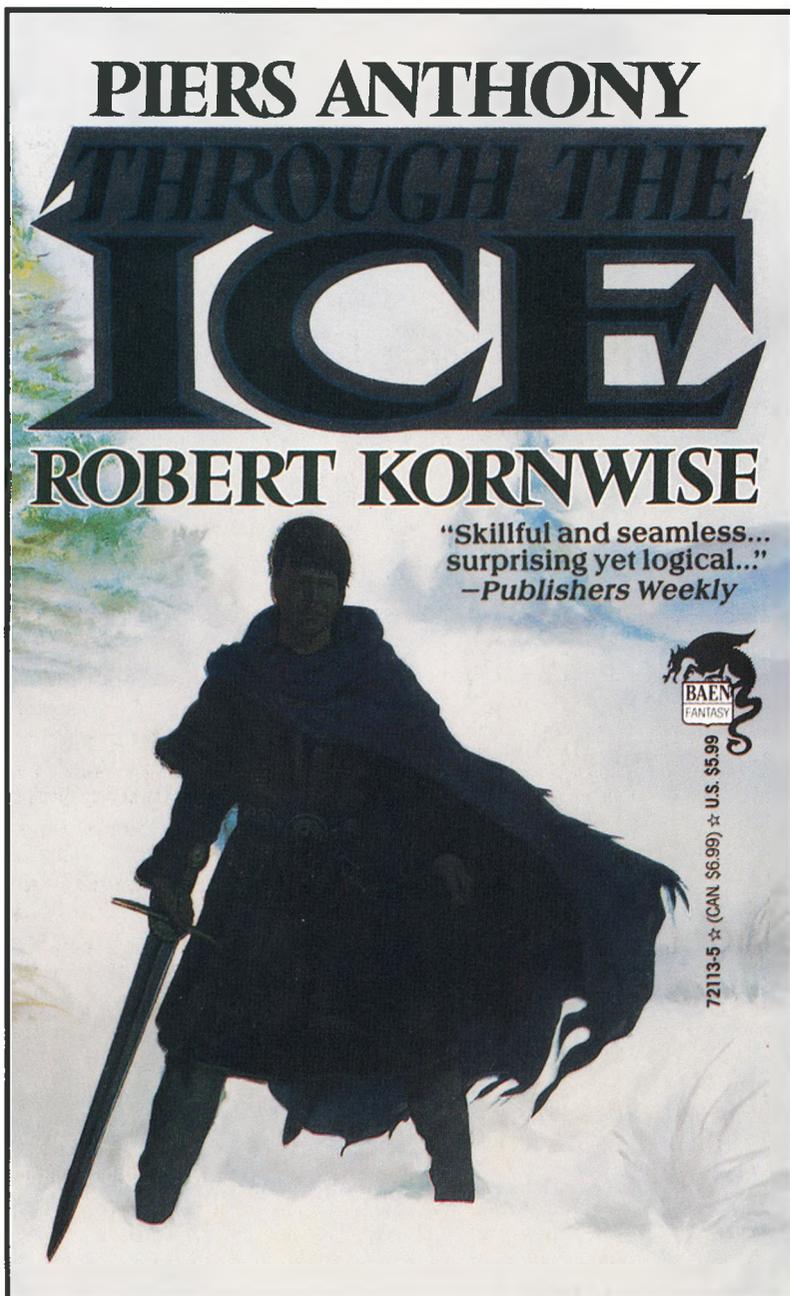
Browne may not have liked science fiction very much, but he knew a good story when he saw one, and was dedicated to acting responsibly in his new role. The end of 1949 saw him discarding several hundred thousand words of Shaver-inspired material, as he sought to re-establish the magazine's credibility. His successes and failures make up the next part of *The Amazing Story*. ♦

Looking Forward:

# Through the Ice

by Piers Anthony  
and Robert Kornwise

Coming in April 1992 from Baen Books



*Introduction by Bill Fawcett*

Similar to many of Piers Anthony's best works, *Through the Ice* is set in a fantasy world that is linked to our real one. This book has a freshness and excitement that compares favorably with the flavor of the first Xanth novels.

As the story begins, young Seth has just had a rather unfortunate run-in with a number of drunken punks, and after disabling a few of them using his martial arts skills, he is starting to lose control of the situation. As he tries to escape them, Seth plunges through the ice of a pond. When he recovers, he realizes that things are drastically different—it is no longer winter, and a nearby tree is trying to have a conversation with him.

After being reinjured while fleeing from a hundred-foot-long snake, and encountering a number of other hazards that modern American schools simply do not prepare one to cope with, a still disoriented Seth collapses. This excerpt begins just after he reawakens.

A soft, lilting melody was drifting to him. Seth shook his head, realizing that this was no dream. Someone was playing nearby!

"Who's out there?" he shouted—and immediately wished he hadn't. He should have kept quiet until he knew more about the other person. Now he had given himself away.

There was no answer, but the music stopped. This was not a good sign!

He assessed his situation. He was in a hut, and there was someone or something somewhere outside. It wasn't necessarily hostile. It had been singing, after all.

The other could have known that Seth was in the hut all along. It could have been watching him all night. Not good—not good at all! Yet it hadn't attacked, so this might not be bad either. There was no way to be sure.

First things first: if he stayed in the hut, he was an easy target. Better to get out quickly.

Seth burst out of the hut, uttering a harsh cry, so as to surprise the other and scare it back. And crashed chest to chest with a gorgeous girl. She screamed and fell on the ground, her bright purple skirt spreading in disarray to show her lovely legs.

Seth, so well braced for trouble, had not been ready for this! Why hadn't he realized that it was a girl playing the music? The tune had been light, after all.

He felt terrible. He extended his hand to her, in a gesture of conciliation.

"Aaayyyeeeee! Rame, help!" she cried, scooting away in panic.

Startled, Seth retreated. He was embarrassed about almost attacking the girl, but alert for danger. With his peripheral vision he noticed movement about a hundred feet away. He whirled.

He heard a whooshing sound, and another. One arrow flew past his left shoulder, and one past his right. Fortunately both had missed.

Or had that been bad aim? The bracketing was so neat and swift that it could be a warning. Seth hesitated.

Suddenly his neck was caught by a rope. His hands came up reflexively, grabbing it before it tightened further, but the rope was already pulling hard. His head was jerked back, and he was hauled off his feet.

For a moment he swung wildly, his feet pedaling air, his hands trying desperately to keep the noose from becoming a garrote. Then his back smacked into a tree.

The arrows reappeared, going in opposite directions, circling him. *Circling him?* Even caught as he was, Seth gaped at that!

Then he realized that they were tethered arrows. In fact, the two were tied together. Like the business end of a bola. They circled around the tree, coming closer with each pass, until each slapped into the bark beside his head.

Seth didn't breathe much of a sigh of relief. Despite his effort to hold it off, the rope was like nylon cord, and was cutting uncomfortably into his neck. He sagged against the tree, and it tightened further, cutting off his breath and blood. He could have held his breath for a time, but when the pressure cut off the blood he blacked out instantly.

Seth woke to the sound of music, again. Cautiously he opened his eyes. He didn't want to knock down any more pretty girls and incite any more devastating attacks!

He was in a cave, lit by torches. He lay on a mat on the floor. Standing beside him was the most beautiful girl he had ever seen. The one he had encountered before. Her hair was long and silky blonde, her eyes were stunning green, and her figure made the term "perfect" seem inadequate. She wore the same bright purple skirt and brown blouse.

The girl looked at him and saw that he was awake. This time Seth did not extend a hand; he knew better. Instead he slowly shifted his body, rolling toward her. "My name is Seth," he rasped. "What is your—"

"Aaayyyeeeee!" she screamed, exactly as before.

Startled, Seth sat up. He shouldn't have. He banged his head into a stalagmite and blacked out again. He seemed to be spending a good deal of time unconscious!

Once more Seth woke. This time there was no music. He cracked open his eyes and saw in front of him a man about his own age. The man had reddish brown hair, shaggy pants, wooden shoes, pointed ears, and horns.

Seth blinked. Yes, horns. And those shoes weren't wooden after all, and they had no toes. In fact they weren't shoes at all. They were hoofs.

Standing before him was the mythical creature known as a satyr. Horned, with the upper body of a man, and the lower body of a goat.

"Hello!" the satyr said. "Glad I didn't kill you. The name is Rame. When I heard Malape scream I thought she was being attacked, and I'm afraid I acted without looking. I shouldn't have; she's a nymph, and they tend to be jumpy when there's no reason. Are you all right?"

Seth reached up to touch his head. He had a bruise there, but there didn't seem to be any blood. The same was true for his neck. He had a dull headache, unsurprisingly. Concussion? "Nothing that some aspirin and a few days rest won't cure, I think," he said hoarsely.

"Asp run?" Rame asked, perplexed.

"You don't know about aspirin?" It was still an effort to speak; that rope had bruised his larynx.

"I see you are in pain. The hamadryad can help with that." He turned. "Malape, this person is not a danger to you. See if you can heal his head."

The girl approached timidly, her face and bosom poised for a scream at the first sign of trouble. Seth had the sense to remain absolutely still, this time. She put her cool right hand on his forehead, and immediately he could feel the sting of his bruises easing and his headache fading. She put her left hand on his neck, and his throat eased. It was like magic!

Magic? Here he was in a strange land, where trees could talk or grow instantly into his clothing, talking with a satyr. What was so odd about magic?

"Uh, where am I?" he asked, bewildered, hoping his voice wouldn't spook the girl again. Her touch was so wonderful! Already his voice was improved, as the power of her healing hand spread down through his throat.

"You are not from this area?" Rame asked.

"I don't think I'm from this planet! Incredible as it sounds, I talked to a tree and it told me I was on Earth Plane 4." Seth didn't mention that it seemed just as unlikely that he should be talking to a mythical satyr; that might be undiplomatic.

"Talking to a tree is not unusual, though it is frustrating at best," Rame said. "You are, however, on Earth Plane 4."

"What am I doing here?" Seth cried desperately. The nymph flinched, but did not remove her hands, to his relief. He had to be careful how he spoke; he had good reason not to disturb her!

"Perhaps if you told me how you arrived, we can find out why you are here," Rame proposed.

"I'm not really sure. I remember falling into a lake in my world, and waking up by the ocean in this world. I talked to Sen-Tree, and he told me to follow the path to the Teuton Empire. I spent a night in the wilderness, and now I'm here." Seth looked at the satyr, half expecting him to laugh at this preposterous story.

"It is possible," Rame murmured. "Have you encountered any other creature?"

"I did run across a big snake moving backwards."

Rame looked alarmed. "Did it see you?" he asked.

"I don't think so. I was hiding. It didn't seem to have eyes, anyway."

"It sees where it has been, through an eye in its mouth," Rame said. "It could be deadly to your cause. If my guess is correct."

"We're in luck, then. I climbed a tree, and got into other trouble, and—what cause?"

"It is not my place to tell you the specifics," Rame said soberly. "I don't think I know them all, as it is. You must avoid all serpents, dragons, snakes and lizards. They are all the eyes and ears of Nefarious the Sorcerer."

"I have no idea what you're talking about!" Seth exclaimed, and the girl retreated nervously. "Dragons?"

"Dragons! I realize this makes it sound very bad, but that is all I am able to tell you for certain. Before we leave, we shall feast, if your head is well now."

"It is much better! I never felt such a healing touch!"

"Yes, of course. Malape, fix a meal for our visitor."

Then he looked puzzled. "I'm sorry, what is your name?"

"Seth. Uh—leave?"

"Yes, very soon."

"We?"

"I would not send you alone."

"But you were shooting arrows at me!"

"A misunderstanding," Rame said. "But I didn't shoot at you; I shot to confine you without hurting you."

Seth had to admit that this was so. His worst hurt had been from his own banging against the stalagmite.

"The girl, Malape—what is this power she has? All she did was put her hand on my head—"

"Malape isn't a girl. She's a wood nymph—a creature who shares her life with a tree. Like all her kind, she is beautiful, and she has the power of healing minor scrapes, but she's very timid and not incredibly smart."

"A nymph of a tree," Seth said, amazed. "But you are treating her like a servant!"

"No, I merely tell her what I want, and she is glad to do it. In return I protect her and her tree. When she screamed, I acted—too quickly, I now see. It is a fair exchange. It would be a burden on her to have to make a decision about a stranger. She knows I will not betray her interests, and that I have reason for what I ask of her."

Seth looked at the nymph, who was now gathering things for the meal. Her skirt and blouse, he now saw, were fashioned of bark and leaves, somewhat like his own but far better fitting. Actually they were hardly more than slip and halter, with most of her torso and legs bare. There was only one term that properly described her, and that was luscious. "She does anything you ask, without question?"

"Well, not anything. She won't leave her tree, for example, and no nymph is any good for intellectual games. But it is not necessary to spend the night in the open, as you did, if you are on good terms with a hamadryad."

What would a satyr do with a lovely and completely obliging nymph, during the night? Seth decided that he didn't need to ask. This wasn't his world, after all.

Malape fixed a meal consisting of many types of fruits and vegetables. Yet when he bit into them, they did not all taste the way they looked. Some had the taste of meats, and others of fish, and others of pasta and many other foods whose nature was foreign to his domesticated palate. Seth started to eat hesitantly, afraid of the effect of the alien food on his body. Soon, however, he felt no further need to be cautious, and ate with the hunger that his body had built up over the past two days.

"You seem to enjoy our food," Rame said politely.

"It's fabulous, thank you!" Seth sputtered between bites of a fruit that tasted similar to ravioli.

Once the edge was off his hunger, Seth ate more slowly, and talked with Rame. He found himself coming to like the satyr. There was no evidence of the horrific sexual appetite that legend claimed for this species; indeed, Rame paid little attention to the nymph.

Rame explained that the tree that had stolen his clothes would not have hurt him; it simply had a taste for fabric. The snake creature he had seen was called a Synops. It was not generally a threat, unless annoyed or hungry, except for the matter of its connection to Nefarious.

They finished the meal. Seth would have liked to rest and digest it, but Rame gave him no time for that. He showed Seth out of the cave. It turned out to be in a hillside beside a huge tree of uncertain type, perhaps a variety of oak. The great purple roots came down to enclose the mouth of the cave, while the spreading brown foliage shaded and concealed it. Indeed, Seth realized that what he had taken for wooden shoring was merely the network of roots enclosing the cave. The nymph had really not left her tree!

"Malape," Rame said sadly, "it is time for Seth and me to go. I will return as soon as possible, though I do not know when that will be." He took her in his arms, kissed her lovingly, and let her go. Suddenly Seth realized that the bond between these two was not lust but love; he had been too free with his private conjecture.

Malape dissipated and faded into her tree. At any other time, Seth would have gaped, but he was coming to understand some of the ways of this world.

Rame turned to Seth. "Now," he said with a deadly serious tone, "we must travel. However, it would be extremely helpful if you had some way to protect yourself. Can you use any weapon?"

He thought back to his karate training, in which he used a wooden practice sword. He had gotten pretty good with it. That might be a good choice. "Can you get a sword for me?"

Rame walked back into the cave. After a few seconds he came out carrying a long wooden box. "This will be your weapon for the time being. I have been saving it until I could find a proper use for it. It is magic. . . ." ♦

Looking Forward:

# Northworld: Justice

by David Drake

Coming in April 1992 from Ace Books

*Introduction by Bill Faucett*

Few of the people who write military science fiction succeed in creating a real feel not only for high-tech battles, but also for the people involved. David Drake is one of those few.

In this third and final book in the *Northworld* series, the excitement and the combat hardly ever slow down. Security Forces Commissioner Nils Hansen, one of the few who has learned how to use the alien Matrix—a high-tech bridge through space and time—is at the center of three interwoven plot lines that take Hansen into the greatest danger he has yet faced.

The following excerpt, from near the end of the novel, takes place in the APEX, where the Matrix is located—and where Hansen encounters another human who has also learned how to use it.

Hansen sauntered back across the rotunda without looking behind. The tank swiveled to track him with its railgun. Hansen was headed toward the wrecked console and the corpses still smoldering on and around it.

"It's worked, milord!" Karring shouted. "He can't flee into his Matrix now, I'm sure of it!"

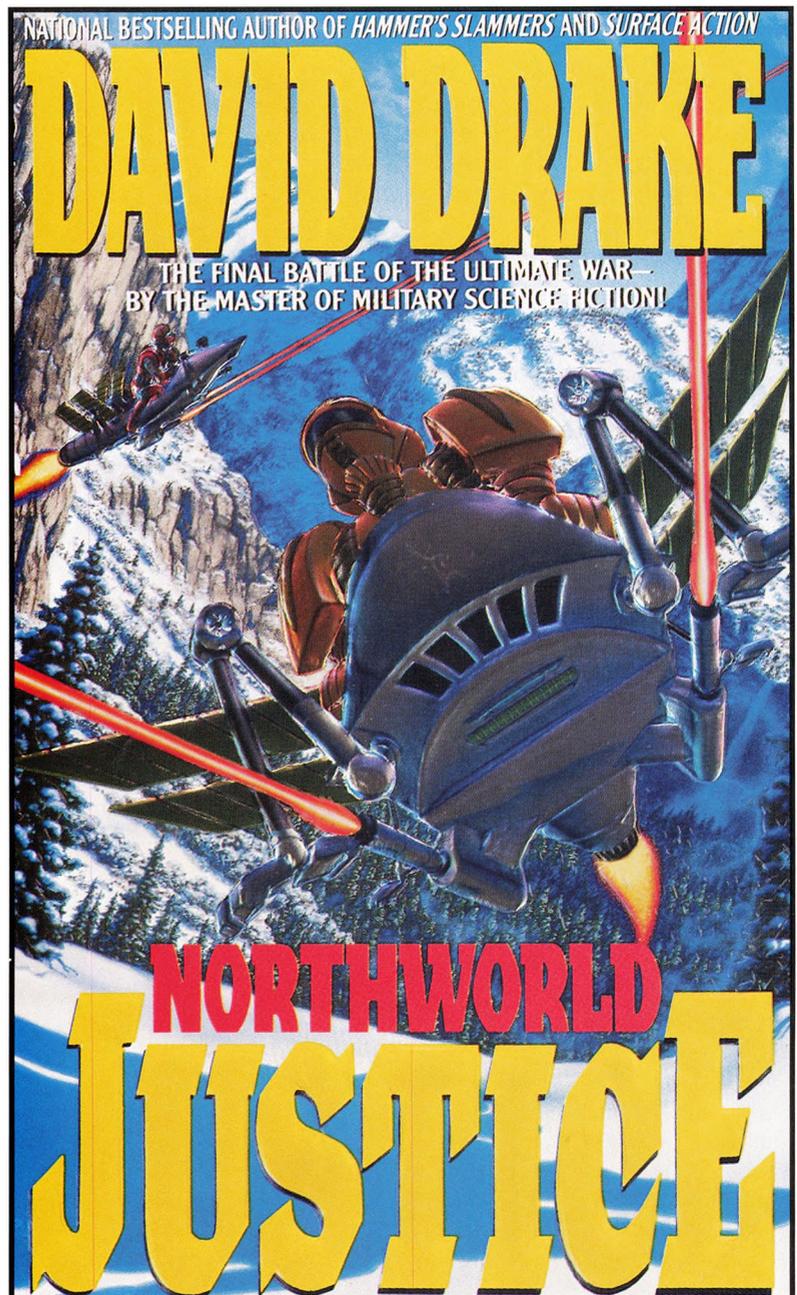
"Tsk!" said Hansen. "I just got here, Karring m'boy. Why would I want to leave?"

"Try it!" Karring said. "You're so sure of yourself, you bastard—but *try* your Matrix!"

Hansen shrugged. He continued strolling toward the destroyed workstation. His fingertips, then his right hand, vanished into a shimmer not of Plane Five.

"Not much of a trick, is it?" he said with a superior frown. His hand reappeared. The fingers, long and tanned and callused, flexed as though they held a weapon.

"He's yours, Count Starnes!" the chief engineer cried. "He's your slave, completely at your mercy!"



Cover art by Roger Loveless

Hansen bent down and drew one of Plaid's pistols. The leather holster had insulated the weapon from the current which burned off the owner's legs.

"The man who killed my daughters," boomed the speaker on Count Starnes' tank, "can scarcely expect mercy!"

The railgun fired.

The weapon's collapsed uranium slug was invisible, but behind it flowed a track of fluorescing plasma: the driving skirt, stripped of electrons and heated sun-heart white by the jolt of electricity which powered the bolt.

The streak ended a centimeter from Hansen's smiling face. There was an almost-visible blotch at the point the hypervelocity shot vanished, the hint of a fracture in reality. The shimmer was no larger than a hole that would permit a man Nils Hansen's size to thrust his hand through to the wrist—

But that gap in normal spacetime was more than large enough to engulf the railgun slug. The projectile snapped across the Matrix with its velocity and momentum unimpaired.

Everything in the projectile's path inside the tank had been converted to gas at a propagation rate faster than that of high explosive.

The hatch through which Count Starnes had entered his vehicle flew back across the rotunda. The slug's entry hole was a neat punch-mark in the center of the panel. Orange flame, then a perfect ring of black smoke, spouted from the opening.

All the tank's systems were destroyed. The vehicle's carcass crashed to the concrete in a dim echo of the impact which had gutted it. Anything flammable within the tank began to burn.

Hansen grinned. He held Plaid's pistol in his right hand. "Your turn, Karring," he called in a clear, terrible voice as he sauntered toward the Fleet Battle Director.

Chief Engineer Karring leaped from his seat in the nearest bay and turned to run down the corridor hounding the rest of the enormous mass that was APEX.

"Help!" Karring screamed as he rounded a corner that hid him from Hansen. "All troops to the Citadel! We've been—"

His direct voice faded. Speakers in the rotunda—speakers in every room and hallway in Keep Starnes—relayed the chief engineer's commands.

"—invaded!"

Hansen's head rang from the impact which had demolished Count Starnes' vehicle, and afterimages from the flash still danced across his retinas. His throat burned with combustion products of both organic and synthetic origin, fused at near-solar temperatures—

But he felt alive in a way that happened only in battle. He viewed his surroundings in crystal perfection through a template of experience and adrenaline and instinct.

Especially instinct. Without that killer instinct, Nils Hansen would not have been the man who could exist *here*.

Did Karring think to run from *him*? At fifty meters, Hansen could have emptied the pistol into the back of

Karring's skull, and the tenth shot would hit before the shattered body slumped to the floor.

Hansen whistled between his teeth as he entered the bay the chief engineer had just vacated. "*This hard-liquor place, it's a lowdown disgrace. . . .*"

APEX was above and around him on all sides. Three-meter displays looked huge when attached to the outstations in the rotunda. The one in the alcove was dwarfed by the Fleet Battle Director. Lines of shifting color knotted themselves on the holographic screen.

"*The meanest damn place in the town. . . .*"

Karring's device spun above the entrance to the bay. Hansen swatted the hollow ovoid casually with the barrel of his pistol. Fragile connections shattered. The construct's off-balance rotation spun it across the corridor to flatten against the wall.

There was a green flash. The remnants of the delicate object drifted away as fine dust. The holographic screen blanked to an expectant pearl gray.

In the ambience of the bay, Hansen understood better why Count Starnes—and Karring, still more Karring—had tried to trample down everything around. Living within APEX would be much like being immersed in the Matrix. Here were powers beyond the conception of a normal human; powers that could mold a human mind into something inhumane that thought itself above humanity.

Hansen understood; but he'd never been good at pity, and mercy was for after the job had been completed to full, ruthless perfection.

The Citadel trembled with unfamiliar stresses. Karring's alert—the words were little enough, but the Fleet Battle Director had certainly amplified them—had stirred up this anthill, no mistake.

Hansen's smile was instinctive. He hadn't come here to kill Count Starnes' common soldiers—

But he didn't have any objection to doing that too.

Third remained on the console. The helmet was connected through the jewel on its forehead to APEX. Hansen reached for Third with his left hand. As he did so, the huge display lighted with violet letters: NO DATA TO YOUR QUESTION.

Hansen lifted the command helmet. Crystal fetters reabsorbed themselves into the jewel with a series of jerky movements, the way lightning moves across the sky when viewed in slow motion.

He settled the helmet onto his head. "*You took your time about it,*" Third commented acidly.

"Are we in a hurry?" replied Hansen in a mild voice. His eyes were as restless as wood flames, flickering across the bay and the corridor beyond, searching for dangers.

"*They'll attack us, you know,*" said Third.

Hansen snorted. "They'll do wonders!"

He dodged out into the corridor. His eyes swept left—toward the rotunda—to right, while his body moved right to follow Karring. The bays of the Fleet Battle Director alternated like the teeth in a crocodile's jaws, ready to scissor together and trap whatever entered them. . . .

*"Karring dropped the Citadel's defenses when he summoned help," the helmet said with electronic smugness. "He was in too much of a hurry to be careful. He lifted the interlocks from APEX, as well. I now have full access to APEX."*

Hansen spun into the second bay, offset from the first on the left side of the corridor. It was empty. The holographic display showed a schematic of the Citadel. Blue carats marked the elevator bank, the drain beneath the elevators in the center of the rotunda, and three of the Fleet Battle Director's twenty bays.

"You've blocked the elevators?" Hansen asked as he scanned the vast cable trunks in the shadowed darkness above him.

*"Of course,"* Third replied. There was a click of thought that would have been a sniff were there nostrils to deliver it. *"I sealed them to the shaft walls by firing the safety girdle intended to prevent the cages from free-falling."*

Something crashed loudly in Bay 1. Hansen swung back into the corridor. As he moved, his gunhand stretched upward like the trunk of an elephant sniffing for danger.

Part of the base section had fallen from the meter-thick conduit which normally fed Bay 1 with sensory data. The edges of the metal glowed from the saws which had cut the opening. A soldier was crawling out of the hole with a short-stocked energy weapon in his hand.

Hansen fired at the soldier ten meters above him. The pistol's *blam!* and the *snap!* of its explosive bullet were almost simultaneous.

Hansen's finger twitched a second round to follow the first by reflex, but the target's chest had already vanished in a dazzling flash. The bullet had struck one of the spare energy cells in the soldier's bandolier. The cell shorted and set off at least a dozen additional charges.

The command helmet blinked to save Hansen's sight. When the visor cleared an instant later, he could see that the conduit was bulged and wrinkled all the way to the dense cap of the Citadel roof. The chain explosion had traveled up the tube like powder flashing across the ready charges in an artillery magazine. It had wiped out the whole attacking force.

You have to be good; but it helps to be lucky.

*"They're cutting through by way of the elevators as well,"* said Third, *"but I'll see to it that it takes them some time. Did they think we came here without knowing how to use a Fleet Battle Director?"*

Hansen ran back past Bay 2 and around Bay 3 on his right again. They were not among those by which the keep's defenders were entering the Citadel.

A tremendous explosion from the rotunda shook Hansen despite the corridor's baffling. Third giggled obscenely in Hansen's mind. *"I detonated the safety charges in only one of each pair of cages. I held the rest until the fools lowered an assault gun and its caisson through the hole they'd cut in the cage floor."*

Bay 4 was another of—

Gunfire ripped and ravaged in Bay 4. Hansen's com-

mand helmet projected a miniature image of what he would see when he swung into the alcove behind his gun. A dozen of the keep's soldiers had spilled out of a hole in the data feed conduit. They were shooting down into the empty bay.

Hansen moved. One shot per target, not great because they were in body armor, so he was aiming for heads and he wished he had a mob gun or a back-pack laser, something to *sweep*, but they were going down, four of them, six, and the last was the only one who saw Hansen and aimed but it was too late and the soldier's cheeks bulged as the bullet exploded in the spongy bone behind where his nose had been.

The console was slashed and punctured by the volume of fire the soldiers had directed down into it. The holographic display was still live. On it capered a life-sized image of Nils Hansen. The hologram winked and thumbed its nose at the real gunman, then vanished into electronic limbo.

Equipment and bodies dribbled from the top of the bay like water overflowing a sink. Hansen thrust the pistol's smoking barrel through his belt. He snatched up a grenade launcher.

NO DATA TO YOUR QUESTION, said the display in blocky saffron type before it went blank.

Hansen fired two grenades into the hole from which the soldiers had entered the Citadel, angling the bombs upward. They burst within the conduit. There were no secondary explosions or sign of further attackers. The weapon's original owner had already expended the other three rounds in the magazine.

Hansen tossed the launcher away. He took an energy weapon from the hands of a soldier who'd been too nervous to slide up the safety before he squeezed the trigger in vain.

Keep Starnes rocked.

*"I'm firing the main missile batteries,"* Third explained. The helmet's titter/giggle/electronic squeal scraped its nails across Hansen's mind again. *"But I haven't raised the shutters of the launch tubes. Karring really should have thought before he dropped the interlocks."*

Fallen soldiers lay on the floor of the bay like piles of old clothes. One of the men was on his back. His eyes were glazed, but the lids blinked again and again, despite the bullet hole in the middle of his forehead.

Stick grenades hung from the bandoliers crossing the victim's chest. Hansen pulled two grenades off and stuffed them into his left cargo pocket.

"What type are they, Third?" he asked. The folk of Plane Five fought in armored vehicles, so standard-issue grenades were likely to be smoke for marking rather than anti-personnel.

*"Non-fragmenting assault,"* the helmet replied promptly. *"You're dealing with internal security teams. Until recently, they hadn't been deployed operationally in the past three generations."*

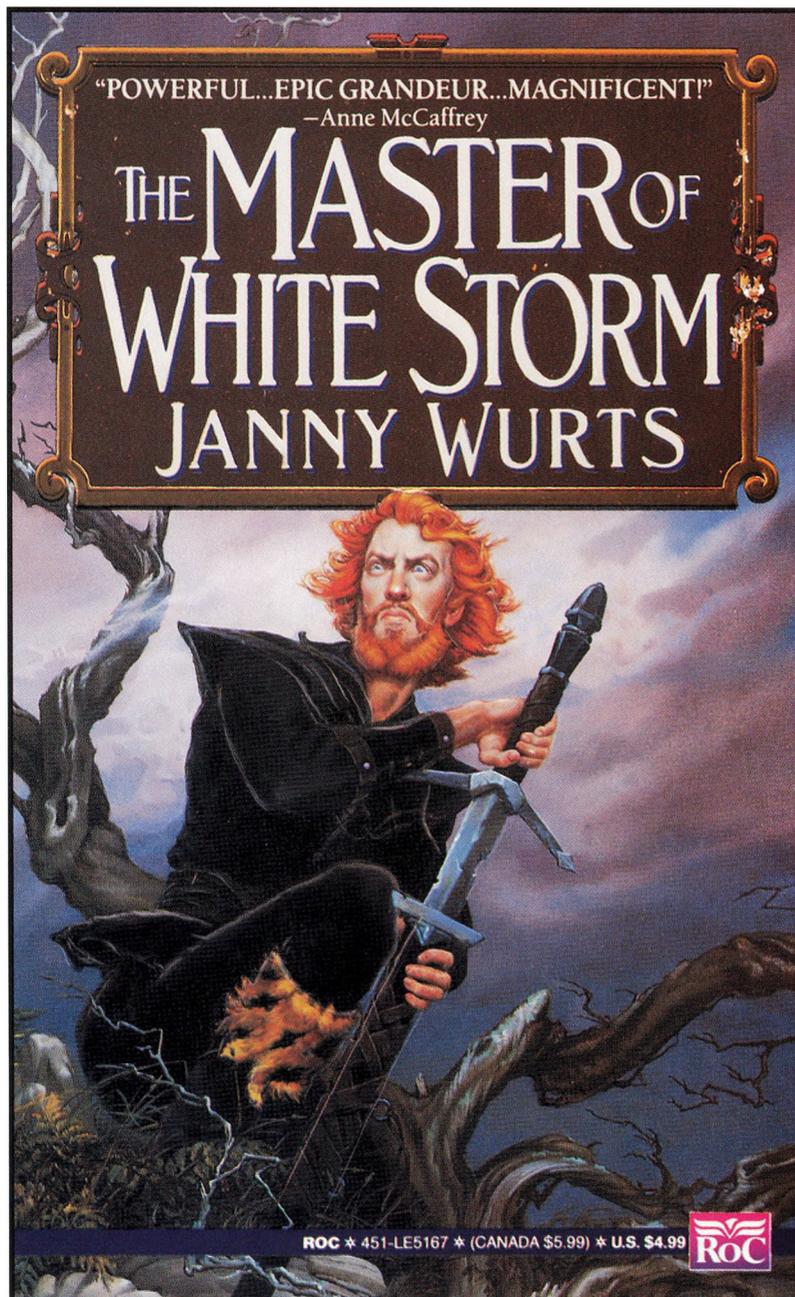
"They sure kept their fucking training up," Hansen grunted. He looked at the weapon in his hands, still on Safe when its owner died. He smiled a shark's smile. *Mostly they'd kept their training up.* ♦

Looking Forward:

# The Master of White Storm

by Janny Wurts

Coming in April 1992 from Roc Books



*Introduction by Bill Fawcett*

In some novels of heroic fantasy, the heroes just move across the background. In this book, the characters have depth and vitality, making it impossible not to care about what happens to them.

Janny Wurts is the author or co-author of several other fantasy novels, in addition to being one of the top illustrators in the field (she also composed the cover art for this book).

White Storm is a majestic fortress, built to withstand enemies of the mundane or the magical sort. The mercenary Korendir succeeds in occupying the stronghold—but then, falling prey once again to his thirst for danger, sets out again to risk life and limb and becomes imprisoned in an otherworldly realm known as Alhaerie.

The blacksmith Haldeth, a friend and companion of Korendir's, realizes that the mercenary's chance for survival may lie in Haldeth's being able to enlist some magical assistance. Thus, he journeys for days across perilous terrain to locate and speak with the only person who might be able to save Korendir's life. The following excerpt begins when Haldeth finally reaches the front door of the tower belonging to the great wizard Orame.

Haldeth regarded the closed, rune-carved door, then strode across the wizard's yard to the cart left parked by the trees. He unhooked the traces, marched the hack from between the shafts, then looped the reins through his elbow and cut a pine switch.

"Orame!" he shouted. The wood absorbed his call without even echoes for reply. "There's a man awaiting your consultation who has traveled a long way to see you."

Cover art by Janny Wurts

The wizard gave no response, yet the air took on a waiting stillness, as if someone's attention sharpened.

Too annoyed to take heed, Haldeth removed the scraps of scarf he had earlier twisted through the bridle. Then he backed the run-down horse up to the demon-carved portal, firmed his grip on the reins, and slashed the air with the switch at the edge of the animal's peripheral vision.

The nag arched its bony spine, heaved up its quarters, and let fly a resounding kick at the door panel. Oak slivers and runes bounced with the impact; the boom re-echoed through the windowless well of the tower like the fall of the hammer of god.

Hugely pleased, Haldeth raised his crop for another go.

"Just what do you think you're doing?" said an acerbic voice from behind.

Haldeth dropped his stick. He spun around just as the cart horse spoiled his balance with a hard shy backward against the reins. "Whoa!" cried the smith, and braced himself mightily. Brought up short, the horse settled, blowing gusts and rolling its eyes.

The wizard stood two paces off. His age was impossible to guess. The rain fell relentlessly, but his charcoal gray robes showed not a trickle of wet. His hair was very dark auburn, and his eyes piercingly black. Tall he was, and slender, and unquestionably put out.

Haldeth diffidently stepped backward until the door blocked his retreat. He raised his chin, masked fright with defiance, and spoke back in flustered desperation. "I knocked, your wizardship. Twice. What's a visitor in the freezing rain to do when you choose not to answer your door?"

Orame gestured with extreme impatience. "Great Neth, man, I was a thousand leagues away at the time! What you felt was the spell that wards my tower. I did hear you, even from such a distance, and I was coming. You had only to wait."

Haldeth recoiled in horrified disbelief, his spine gouged by the knobbly horns of a half-dozen carved demons. That moment the horse shook like a dog, and splattered him from head to foot with dirty water.

Orame raised peaked brows in reproof. "Take that beast off my door stoop, you great lump of a blacksmith. Remove its harness and tether it where it can graze. Then I expect you're hungry, and want a fire, and also have a boon to ask. Though why I should listen after suffering this abuse to my woodwork is a riddle that would perplex the Archmaster at Dethmark himself."

Haldeth gathered his rented gelding's reins, and with a look of unvarnished skepticism towed it toward the verge of the trail; little use, he thought, to belabor the fact that the beast could not forage on pine boughs.

"Neth's image, you mortals," grumbled Orame from behind. "Seek out a wizard for miracles, and then with gymnastic illogic presume the arrangement of fodder could be any less than impossible." He snapped his fingers.

The earth seemed to lurch underfoot. Suddenly knee-deep in oat grass, Haldeth stumbled through a tangle of seed tassels. The instant he recovered his footing he bent a sour glance at the wizard.

But the yard once again stood empty. Orame had gone. So had the door with its decorative runes and demons. Apparently that imposing front had been an enchanter's confection of illusion. Revealed beneath the arch was a portal bound in brass, and cut, at waist height, with the crescent indentations made by a startled horse. To the smith's embarrassment, the latch had been left unhooked. The panel stood ajar in invitation.

Anxious to be quit of the rain, Haldeth attended the livery nag with all speed.

Orame's tower held the predictable spiral staircase overseen by stone gryphons and gargoyles. Strangely enough from the inside, there seemed an abundance of case-ments latched and snug against the rain. The library on the landing above proved comfortably furnished with fur hassocks. The books on the shelves bore no titles. Though curious, Haldeth withheld from comment. The ways of wizards were not his to fathom, and White Circle enchanters were widely renowned for their knowledge of perilous secrets. Orame stood flanked by shoulder-high candlestands wrought in the form of scaled dragons. He motioned his guest to a chair before a tortoise-shell table set with tea and refreshments.

Any thought of indulging in comforts grated, given Korendir's straits; but after his gaffe in the dooryard, Haldeth was determined to mend his lapse in manners, lest the enchanter take offense and turn him out.

The smith moved toward the offered chair, drew breath to apologize for his rank and dripping cloak, and realized with a start that somewhere between the outer door and the landing all of his clothing had dried. The smell of wet horse had miraculously gone with the water. Tongue-tied in amazement, Haldeth sat with a thump that shook the table.

"I know why you've come," the wizard said, before Haldeth could lose the flush on his face. "I know already what you journeyed here to ask me, and before you left, you should have known that gold buys no influence with the White Circle."

Haldeth reclaimed his pose. "Korendir: is he alive?"

Orame enigmatically poured tea. He set a roll on a napkin before Haldeth, and helped himself to another. "Why should this man's life concern me?"

Having neither appetite nor words for the occasion, Haldeth could find no answer. After a moment, Orame said, "He's alive." A frown marred his olive skin as he took a bite and chewed thoughtfully. "But not for very much longer, I should think."

Haldeth shoved the bread aside in dismay. "What do you mean?"

Orame flicked crumbs from neat fingers. "Mean?" He sighed. "See for yourself." And the polished glaze of the teapot suddenly acquired an image.

Haldeth beheld darkness and torchlight; but the flame was failing, flickering wildly in a draft. Through a weaving murk of shadows, he received the impression of rock walls glazed shiny with water. Then, with a start that all but stopped his heart, he made out a tangle of bronze hair. The torch was held in the white-knuckled

fist of Korendir, who climbed with his dagger between his teeth and his sword thrust unsheathed through his belt. The crossbow clung at one shoulder showed blood on the grip, and one whole side of his tunic was sliced to gore-drenched ribbons.

"Neth, he's hurt," cried Haldeth.

As if he could hear, Korendir turned his head. It became apparent then that he was engaged in a climb through a shaft that seemed bottomlessly dark. In the wizard's tower, staring at an image in a teapot, Haldeth saw his friend's face was worn with exhaustion and hunger, and that something else stalked him from below. Now and again the flicker of torchlight caught on green-golden crescents that were eyes.

"Wereleopards!" Haldeth reached out, bruised his knuckles against heated ceramic, and cursed. The image disappeared, and he frantically looked to Orame. "Neth's grace, you can't just let him die."

The wizard considered, his eyes impervious as obsidian. "To save your friend would require use of a wizard's gate, and a crossing to Northengard by way of the alter-reality of Alhaerie."

When Haldeth looked blank, the enchanter qualified conversationally over his tea. "You do know that every ill that has ever plagued Aerith has entered through such rifts into the otherworld. The Demons that overran Alathir originated from Alhaerie. High Morien's holding was destroyed, and all of his following, and he was Archmaster before Telvallind."

"Then sit there nibbling raisin pastries and do nothing!" Made bold by desperation, Haldeth ranted on. "You said you were a thousand leagues away at the time I knocked on your door. If you'd open a wizard's gate to answer a mortal's call, why not to save a life?"

"Because the route from here to Dethmark is guarded well by wards. The passage where your friend flees for his life is a place in the wilds, unfrequented by wizards, and naked of the most basic protection." Orame laced long fingers around his chin. "But should I let Korendir die? That's another risk altogether. I'm inclined to believe I dare not."

The odd implications hinted by the enchanter's words were too abstruse for pursuit in the face of crisis. "You'll take the gold, then," Haldeth offered eagerly, and pushed in haste to his feet.

"No." Orame set his cup down with a click. "Certainly not. The suggestion alone is preposterous."

Haldeth bit back an insult. With all the diplomacy he could muster, he said, "Whatever moves you, just ask."

Orame sat back in his chair. His hair shone in the candle light, combed and smooth as an owl's plumage, while he folded his hands in his lap. "If I do this, you will ask Korendir who his parents are," he said obliquely.

The smith nodded with baffled impatience and stepped back. "The Master of White Storm may kill me rather than answer, but I'll question him."

"And," added Orame. "At your first opportunity you will fashion for me a grille of wrought iron. A decorative one, but stout enough to spare my front door from abuse if other travelers use horses that kick to gain entrance."

"Done," said Haldeth promptly.

Orame arose without hurry. He folded back the cuff of his robe and withdrew a ring from a pocket. Haldeth recognized the glitter of a tallix jewel setting. Frightened by the adventure he had suddenly committed to undertake, he wished he had never left White Storm as Orame of the White Circle slid the ring on his forefinger and raised it in the air above his shoulder. Haldeth felt his wrist gripped by narrow, bony fingers. Then the wizard let fall his arm.

Where the tallix crystal passed, a line of light shimmered upon the air. Haldeth blinked, dazzled by glare. When he opened his eyes next, the seam had parted, and he gazed upon a sight that wrenched all his senses to behold.

To look through the gate Orame had opened upon the air was to experience the living face of Chaos. The alter-reality of Alhaerie was color and movement with no pattern, a churning swirl of energies that the eyes could not reconcile without relinquishing all grip on reason. Haldeth gazed upon a film of pearlescence that had no analogue to anything understandable in Aerith. The universe that existed beyond the gate possessed neither up nor down, nor any other measurable dimension; time itself was skewed there, stirred and nonlinear as spilled fluid. Haldeth felt crawling discomfort. He looked away swiftly, but the hair continued to prickle at his neck, and his stomach clenched with nausea.

"You *travel* through that stuff?" he asked tightly.

Orame returned an abstracted reply as he traced a pentagram before the gate. "With extreme caution, yes."

"Neth!" More than ever, Haldeth wished himself back at White Storm. His better sense told him he should flee at once, even surrender Korendir to his fate; that way he might survive to know peaceful old age.

Except that Orame caught his wrist in a grip like prisoner's shackles, then propelled him forcefully forward.

The first step carried Haldeth across the bounds of the pentagram. Electricity caused every hair on his body to stab erect. Spell-craft and safe-wards pressed his being on all sides; the magic constricted him physically to the point where the scream that arose from his lungs could find no escape through his throat. Half choking on unuttered sound, the smith felt himself dragged onward. His unwilling feet carried him across the spell's far boundary and on through the wizard's gate beyond.

The strangeness that was Alhaerie flowed over Haldeth and ripped away everything familiar. ♦

# Relativity Disproved at Last!

Howard Zaharoff

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Newspapers and magazines regularly report failed attempts to disprove Einstein's famous theory. "Relativity Stands Up Under Examination," says *The New York Times*. "Albert Knew His Stuff," proclaims the *National Star*. Are they kidding, or what? Even the most simplistic observations, such as my own, easily disprove both Special Relativity, which concerns high-speed motion in a vacuum, and General Relativity, which concerns high-speed vacuums in motion. (Ha ha. Just seeing if you're paying attention. General Relativity actually concerns motion near a massive object, such as a star, planet, or Jean Auel novel.)

The math behind Einstein's theories is fairly complex, involving—according to a mathematician acquaintance—things like equators and Boolean tensor calaboose. However, when all is said and done, the implications include the following: (1) simultaneity cannot be proven (nor, in most cases, pronounced correctly); (2) objects traveling at light speed would attain infinite mass; and (3) something about twins.

Yet all three postulates are readily disproved by common-sense thinking and careful analytical observation, such as I engaged in one recent evening aided by my friend, the margarita. To wit:

## 1. Simultaneity Is Provable.

Observations from my own personal life prove that many events occur at

what is known, in strictly scientific terms, as "the same time."

*Example 1.* When a male finally gets the courage to lean over and kiss his date, she simultaneously averts her head so that he kisses her chignon. This has happened to me dozens of times. Indeed, fifteen years later I still have strands of my wife's hair caught in my incisors.

*Example 2.* If a relative decides to "help your image" by buying you clothes in the latest fashion, you can bet that the fashion will vanish within the week. This happened to me in sixth grade, circa 1964, when suddenly men's sport coats appeared on the racks without lapels. Whether this was a bona fide fashion, or just some clothier's mistake, I'll never know, because my mother bought me one and, boom, those coats disappeared overnight. (Although technically this has nothing to do with simultaneity, I did need to get this off my chest. Are you listening, Ma?)

*Example 3.* You finally scrape together enough cash to buy your own skyscraper or airline, only to learn you were outbid that very day by the Japanese.

## 2. Objects Cannot Attain Infinite Mass, And I Don't Care What Einstein Says.

This is easily proven by applying seductive reasoning to Einstein's famous equation,  $E=mc^2$ , which shows us that energy and mass are really the same (no wonder they're never

seen together!), except you make more money generating energy. Although the math gets fairly complex, involving—according to an accountant acquaintance—things like fractures and decibels, this formula entails that an object traveling at light speed would attain infinite mass. Calling this hypothesis H (where H stands for the hypothesis we're calling H, like I just told you, though sometimes Hydrogen or even Henry), let's see what happens when we apply syllogistic logic:

### *Syllogism 1:*

Socrates is a man.  
All men are persons.  
No man is an island.  
Henry.

THEREFORE, Socrates traveling at light speed would not be an island but would attain infinite mass.

### *Syllogism 2:*

Someone of infinite mass doesn't need to diet. (This follows from the a priori truth that if something infinitely massive lost a few pounds, it would still be chubby.)

THEREFORE, any person traveling at light speed would not need to diet.

BUT (here's the key) some people always have to diet. (No names; but remember the star of *National Velvet* and *Cleopatra*?)

THEREFORE, an object traveling at light speed is not Socrates, may possibly be an island, and would not attain infinite mass.

### 3. *The Twins Paradox.*

A final disproof of Relativity comes from careful study of the Twins Paradox, which federal regulations must require be used to illustrate Einstein's theories. (If Einstein got a royalty every time an expounder used twins to explain Relativity, he would be a rich man today, though probably still dead.)

The paradox, said to follow from Relativity, is this. Suppose you have a twin with whom you're nearly identical: same age, weight, receding hairline, magazine subscriptions, etc., except *you* wear a blue ascot. Now suppose your twin boards a rocket that will take him on a round trip, coach class to Arcturus, 33 light years away, at almost the speed of light.

Traveling at 99+%  $c$  (where  $c$  represents the speed of light and certain water-soluble vitamins), all time processes within the rocket will have slowed greatly, similar to what happens when you visit grandparents. Thus, when your twin returns 66 years later (your time), he will have aged only a day! Thus, predicts Relativity, your twin will be younger, more virile, and (despite having the bone density of a jellyfish) get the good women. Yet that can't be right, because *you've got the blue ascot!* Once again, casual observation disproves Albert's supposedly revolutionary theory.

What does this tell us about Relativity, Einstein, or dieting? Little, I fear. Einstein himself remains an enigma. In his youth he seemed destined for mediocrity, until he devised a theory that stimulated bold new thinking about astronomy, mathematics, and twins. Yet, depressed over learning that he wasn't Albert Schweitzer ("No wonder we're never seen together!"), he squandered his prime seeking a "unified field" that would combine gravitation with electromagnetism and so enable him to coin a word to outdistance "antidis-establishmentarianism."

A sad ending for the man who, single-handedly, made "mushroom cloud" a household phrase. Or was it "mushroom soup"? ♦

## About the Authors

What do you get when you cross the Atlantic Ocean with three small ships? **George Zebrowski** gives us his answer in "Let Time Shape," this month's lead story—another of the what-if pieces that will appear in *Alternate Americas*, the next *What Might Have Been?* anthology, which is scheduled to be released in October, coinciding with the 500th anniversary of Columbus's voyage.

The year just past was a very good one for George, whose novel *Stranger Suns* was declared one of the Notable Books of 1991 by *The New York Times*. The prestigious list included 350 titles, but only 11 of them were science-fiction works—and considering how many sf books are published in a year, being one of the top 11 is a high honor indeed.

We were wondering what **John Morressy** would do for an encore after his first appearance in this magazine ("Except My Life, Except My Life, Except My Life," June 1991), and then "The Call" came in. "It's not the type of story I usually write," John said after finding out we wanted to buy it, "and I'm reassured to find that I didn't go off in a wrong direction." The way we see it, if a writer is *good*, he can go in any direction he wants to.

**Alexis Glynn Latner** wrote a story with a title that turns out to be quite significant: for her and the four authors whose stories follow "Hiatus," the hiatus is over—each of them is appearing in AMAZING® Stories for the first time. This piece is Alexis's fourth professional publication, following three appearances in *Analog* in the last couple of years.

**Kathleen Ann Goonan** had sold five stories to other professional magazines before we took "For a Future You," but only one of those other works has been published so far, which means this is her second appearance in print. Two down and three, at least, to go. . . .

**David F. Carr** makes his magazine

debut with "In the Company of Machines," a story that benefited from scrutiny at a *Writers of the Future* workshop. "Under Glass," in Volume VI of the *WotF* series, is David's only other published story so far.

**Tony Daniel** says he's been writing fiction "since I can remember," which is not meant to imply that he has a short memory. He's been making sales on a regular basis for a little more than a year, including a story in *Full Spectrum 3* and one in the upcoming *Universe 2*. In case you were wondering about the setting of "The Natural Hack," there really is a Vashon Island in the middle of Puget Sound. It contains, among other things, Tony and his house.

And, speaking of authors who write about the places where they live, it's appropriate to point out that **James Stevens-Arce** is a resident of Puerto Rico—and yes, places such as "The Devil's Sentrybox" do exist. (The structure depicted in the illustration is authentic.) Jim is the author of more than a dozen stories that have appeared in magazines and anthologies in the last 25 years. His first sale was to Frederik Pohl, the editor of *Worlds of If*, who used "Thus Spake Marco Polo" in the November 1967 issue of that magazine.

How far did you get into "Relativity Disproved at Last!" before you realized **Howard Zaharoff** isn't a physicist? What Howard *is* is a lawyer who amuses himself—and, eventually, other people—by writing humorous essays. He didn't tell us whether he actually owns a blue ascot.

Readers who enjoyed his two novels and numerous short stories in the late 1970s and early 1980s will be happy to see that **Mark J. McGarry** is back on the sf scene. "Reawakening" is his first solo work since 1984, and only his third appearance in print in all that time. His first story for these pages was "The Morality of Altitude," a collaboration with A. L. Sirois that ran in the September 1990 issue. ♦

# The Air We're Standing On

Stephen L. Gillett

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Everybody who reads SF knows that Venus is baked under a suffocating blanket of carbon dioxide, an atmosphere so thick its greenhouse effect raises the temperature enough to melt lead. A less Earthlike place is hard to imagine.

But what is less well known is that the Earth has just as much CO<sub>2</sub> as Venus does. Where is it? We're standing on it. Virtually all the Earth's carbon dioxide is tied up in carbonate rocks in the crust—mostly as limestone, which is calcium carbonate, CaCO<sub>3</sub>. (It can be thought of as a compound of calcium oxide, CaO, and carbon dioxide. CaO is the mineral "lime.")

What happened?

Earth has surface water, and carbonates form most readily when liquid water is available. In effect, over geologic time water dissolves the lime out of silicates—rocks—to leave just silica, SiO<sub>2</sub>, the mineral quartz. Then the calcium oxide combines with the CO<sub>2</sub>. The details are complicated, but that's the upshot. So if there were no liquid water, there'd be no carbonates, and the CO<sub>2</sub> would just stay in the atmosphere.

Therefore, the big difference of Venus from Earth is not its abundance of CO<sub>2</sub>, but its absence of water. Somehow carbonates never formed, or else were decomposed again after they were formed. (If you get calcium carbonate hot enough, it breaks down to lime and CO<sub>2</sub>. That's how lime for mortar is made: you cook limestone in a kiln to drive off the CO<sub>2</sub>.)

So, why is Venus dry?

Most scientists think the reason stems from a chilling scenario: the "runaway greenhouse". Venus started with lots of water, maybe even oceans, but later lost it. Any oceans boiled away.

Let's see how this might happen. A greenhouse effect, of course, is the trapping of solar radiation by gases in a planet's atmosphere. Sunlight warms up the surface, which then reradiates infrared ("heat") radiation. The infrared, however, can't escape freely; it's absorbed by gases in the atmosphere. CO<sub>2</sub> is a notorious greenhouse gas (as you've probably heard) because it's both common and absorbs infrared.

But although carbon dioxide is the most famous greenhouse gas, it's hardly the only one. Water vapor is another. In fact, in the Earth's atmosphere it's more important than CO<sub>2</sub>.

Water vapor's an unusual greenhouse gas, too. Consider what happens on a water planet if you raise the temperature. More water vapor evaporates, so that the vapor content of the atmosphere becomes higher. Thus the greenhouse effect increases, so that *more* water evaporates, so that the temperature rises yet more. . . .

In fact, this "amplifier effect" of water vapor makes other greenhouse gases much more effective. You don't have to add nearly as much (say) CO<sub>2</sub> as you might think to get a certain amount of warming. Now, this "positive feedback" is mitigated

a bit by such things as cloud formation. (As water vapor becomes more abundant, clouds form more easily, and since they reflect sunlight well they tend to cool things off.)

Still, at temperatures not too far above the Earth's the feedback does not reach a limit. Temperatures soar and the oceans boil.

*This* is the runaway greenhouse, and it may be what happened to Venus early in its history. Because it's closer to the Sun, Venus was always a bit warmer than Earth, warmer enough that the runaway greenhouse was triggered long ago.

It's even worse than that. When the Sun was first formed, it was from 25% to 30% less luminous than it is now. This is a prediction that comes straightforwardly out of standard astrophysical theory, and it's supported by observations of other stars. What happens is that as a star makes energy by fusing hydrogen into helium, the helium "ash" accumulates in the star's core. The helium is completely inert for further nuclear reactions, but—it has the effect of increasing the pressure in the core. *That* makes the hydrogen fusion run faster, and so the star burns hotter and hotter over geologic time.

So, maybe Venus started out more Earthlike, maybe even with oceans, but the oceans finally boiled as the Sun's output inexorably increased.

But this is only part of the story. If Venus once had a steam atmosphere, either because its oceans boiled, or because the water vapor

never condensed out in the first place, what happened to it? It doesn't have a steam atmosphere now—as we said, the planet is extremely dry. How, then, could Venus have lost an ocean's worth of water since greenhouse runaway?

By a process called photodissociation: at the outer edge of the atmosphere, water molecules were split into hydrogen and oxygen by solar ultraviolet (UV) light. The hydrogen escaped to space and the leftover oxygen was consumed by reaction with rocks in the planet's crust.

The hydrogen escaped because Venus's gravity (and Earth's too, for that matter) is not strong enough to hold it down. What happens is that at a given temperature, the average energy of all molecules (or single atoms, in case the gas doesn't have molecules) is the same. The only way a light molecule like hydrogen can have the same energy as a heavy molecule like (say)  $\text{CO}_2$  is to be moving a lot faster.

For a mental image, think of a mixture of billiard and ping-pong balls, all bouncing off each other. The billiard balls will be moving a lot more slowly, but all the balls on the average must have the same energy. If they didn't—if a ball had much more energy than average—it would tend to lose energy, because it would on average bounce off balls with less energy than it has, and thereby transfer energy to them. This is why a planet can have enough gravity to hang onto things like nitrogen ( $\text{N}_2$ ) and oxygen ( $\text{O}_2$ ) and  $\text{CO}_2$ , but be unable to keep hydrogen (which is just  $\text{H}_2$ ).

(Note I said "average" energy, too. A few molecules, of course, will be moving much faster than the average. This means you get significant escape rates even when the *average* temperature is too low for a molecule to escape.)

Of course, for a molecule to escape nothing must be in the way. That's why molecules can escape only from the very outermost atmosphere, at the edge of space. Obviously, deep in Venus's thick atmosphere, there are trillions upon trillions of molecules all colliding and getting in each other's way!

But over time the heavy pressure deep in the atmosphere is irrelevant, especially because it's so hot down there. The reason is simply because all the molecules *are* in furious motion, bumping into each other millions of times a second. Any water vapor originally protected deep in the atmosphere sooner or later will find itself at the edge of space, just by happenstance. And once there, poof! Solar UV busts up the  $\text{H}_2\text{O}$  molecule, and the hydrogen's gone.

In the same way, you can smell the perfume from a bottle across the room a few seconds after it's opened. A few perfume molecules manage to get bumped across the room so you can smell them.

Of course, there's an obvious alternative scenario to all this: maybe instead Venus never had much water in the first place. John Lewis at the University of Arizona has suggested that, because Venus formed closer to the Sun, it didn't accumulate much in the way of water-bearing minerals, and so it was dry to start with.

Lewis noted that the chemistry of Venus's atmosphere indicates the surface is not very oxidized. Obviously, one result of the "runaway greenhouse" is *lots* of oxygen from breaking down an ocean's worth of water. We don't see any evidence of this in the composition of Venus's atmosphere. In fact, there are trace gases (mostly sulfur compounds) in the atmosphere that couldn't exist if Venus's crust were heavily oxidized.

However, this objection isn't conclusive. All it means is that the excess oxygen would have had to react, over geologic time, with rocks very deep in Venus. In other words, if you dilute the extra oxygen through enough rock you won't notice it any more.

And diluting it's probably not hard. In fact, it seems easy to arrange reaction with lots of fresh Venus rock if you've got all of geologic time to play around in. First, the radar mapper Magellan, which even now is orbiting the planet and making detailed pictures of its surface, has shown that Venus has lots of recent volcanic activity. That means there's lots of chances for rock to react over geolog-

ic time, especially when Venus was younger and its crust was even more active, because volcanism is always bringing up fresh rock to react with.

Second, when the greenhouse first ran away the conditions under a hot steam atmosphere would be hellish. Calculations suggest the temperatures would soar to over  $1000^\circ\text{C}$ , due to the extreme greenhouse effect. That's not only enough to make the surface glow red, it's enough to melt many rocks, or at least make them soft. Rocks react real easily under those circumstances.

Furthermore, other planetary scientists point out that it seems difficult to keep so much water out of Venus when it's forming. Water is a small proportion of any terrestrial planet, and in the mishmash of planetary accretion things must have gotten pretty stirred up. Surely *all* the material now in Venus didn't originate close by! (Lewis himself has acknowledged this in recent papers.)

In fact, much water may have come in in late impacts. The same group of objects that scarred the face of the Moon also must have hit Venus (and the Earth too). These objects seem to have been leftovers swept up at the end of planetary accretion, and probably many came from farther out in the Solar System, near the region of the present asteroid belt. Since they'd condensed out where it was colder, they'd contain a lot more water. That water would not stay on the Moon, because its gravity is too low to hold in most of the "splash" from a giant impact. On big planets like the Earth and Venus, though, much of the stuff in the impacting body will stick around.

We also have some evidence, from the Pioneer Venus spacecraft which sampled Venus's atmosphere about 1980, that Venus did in fact lose a lot of water. Deuterium, the heavy isotope of hydrogen, is enhanced in the Venus atmosphere in the smidgen of hydrogen that remains. (Most of the hydrogen is combined into sulfuric acid— $\text{H}_2\text{SO}_4$ —droplets that make up some of the cloud decks.) As you might expect, the heavy isotope will escape less readily, so it builds up in the hydrogen left behind.

What keeps such water loss from happening on Earth? At present, a cold layer at the top of the troposphere, the so-called “cold trap,” keeps Earth’s water loss down to a dull roar. Most water doesn’t get above this point because it freezes out instead. The upshot is that water vapor is *much* rarer in the upper atmosphere than down here by the surface, so there’s much less to get clobbered. (Even so, Earth still is losing hydrogen; the tenuous plume wafting away has been measured with spacecraft.)

Venus’s loss is now down to a dull roar, too, because of an “acid trap” in the clouds. Most of its water is now bound into those sulfuric acid droplets, and sulfuric acid gloms onto water molecules very effectively. This keeps the concentration of water vapor above the clouds very low, and thus keeps the loss rate low, too.

When the greenhouse first ran away, though, there would have been no sort of atmospheric trap to keep down the water-loss rate from the top of that hellish steam atmosphere. In fact, the water loss would have been extremely heavy for a while. Venus may have lost most of its water within 10 million years or so, a geological eyeblink. And, as I noted, the oxygen released would also have had lots of fresh, nearly molten rock to react with on the surface.

Do we have any direct evidence of these scenarios? We hoped to see some when the Magellan radar mapper sent back its detailed pictures. Maybe very old parts of the Venus

surface had been preserved; maybe we could even see evidence of ancient oceans. Alas, however, the surfaces on Venus are all young geologically, because of all that volcanic activity. They’re kind of like the ocean basins on Earth, which are also young because they’re continually regenerated by plate tectonics.

All this has major implications for SF. For one thing, habitable zones around stars may be thinner than we’ve thought (for example, as presented in the classic book *Habitable Planets for Man* by Stephen H. Dole.) Venus was not all *that* much hotter than Earth to begin with; but it was hotter enough that it triggered the runaway greenhouse, with rather drastic consequences! Imagine a planet, especially a life-bearing planet, when the greenhouse runs away and the oceans start to boil. Perhaps the ultimate disaster novel. . . .

As far as that goes, is there any chance of this happening to Earth? As most of you know, humanity is injecting more CO<sub>2</sub> in our atmosphere through burning fossil fuels, and that’s most probably increasing its greenhouse effect. (Scientists argue about how much because the increase depends very sensitively on how the feedbacks work.)

Probably not from any reasonable increase in greenhouse gases. CO<sub>2</sub> in Earth’s atmosphere is automatically regulated over geologic time by our oceans. If we get too much in the atmosphere, weathering increases with the hotter, more humid air, more fresh rock is exposed, and the extra CO<sub>2</sub> precipitates out in limestone. (This doesn’t happen right

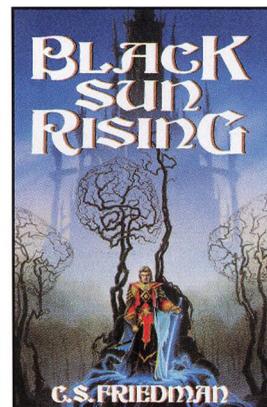
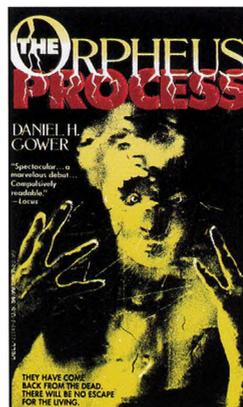
away, of course. That’s why we’ve got a CO<sub>2</sub> increase from fossil fuel burning right now. But it will go away in a few thousand years at most, as the carbonate reservoir catches up.) On the other hand, if things get too cold, weathering slows down and CO<sub>2</sub> builds up again. Earth needs *some* greenhouse effect, or else we’d freeze!

Of course, this doesn’t mean we can be completely blasé, either. Something catastrophic that dumped vast quantities of greenhouse gas into our atmosphere might trigger a runaway. But what really might do it, in another billion years or so, is the steady increase in the Sun’s luminosity. Surely there’s a limit to the regulatory capacity of the oceans! At some point the additional solar heating will overwhelm the feedback loops, and Earth will start to boil.

Another SF implication is that you need some sort of “trap,” or barrier, high in the atmosphere if you want to preserve surface water—a cold layer, or acid droplets, or maybe something else; anything to glom onto the water molecules to keep them from getting destroyed. Maybe, therefore, type F stars, which are hotter than the Sun and put out more UV, are bad places to find water-bearing planets! The extra UV would make photodissociation that much more effective.

And yet another implication is that terraforming Venus would be *hard*. Somehow all that CO<sub>2</sub> needs to be tucked safely away in the ground, as has happened on Earth. But that’s a big enough topic that I’ll save it for a later article. ♦

# Book Reviews



## THE ORPHEUS PROCESS

by Daniel H. Gower  
Dell Abyss Books, February 1992  
432 pages, \$4.99 (paperback)

There are significant problems with this first novel from Daniel H. Gower; in particular, *The Orpheus Process* often seems unsure whether it's horror or science fiction. But there's also enough good writing to very nearly compensate for Gower's uneven control over his story, and more than enough to mark him as a writer to watch.

We begin with what looks like a science-fictional update of the Frankenstein idea: researcher Dr. Orville Helmond has almost perfected a resurrection process that involves subjecting recently dead organisms to a controlled electromagnetic pulse. He has reanimated numerous animal subjects, including a rhesus monkey; the project seems to be going well.

Helmond's wife, though, objects to his work on principle—and suddenly has cause to object on pragmatic grounds, when the monkey turns from a family pet into a demonic killing machine. Subsequent events take the novel into a surreal corner of the horror landscape, as Helmond's secret resurrection of his own daughter goes wrong on a cosmic scale. Gower abandons his scientific-looking beginnings for a wildly metaphysical journey through the here and the hereafter, with seven-year-old Eunice as tour guide and mistress of chaos incarnate.

That's frustrating, because the rational SF material is considerably more distinctive and thought-provoking than the horrific substructure of the book's second half. Gower's finger is right on the pulse of the moral and ethical issues his premise raises before he lets it slip, embarking on a mad caucus race where neither author nor characters seem to know what will happen next—even though nearly everyone gets viewpoint-character status at some point.

The plot also suffers from a couple of credibility gaps. Helmond is working on a university grant, yet he and his aide operate in near-total isolation from the school's administration and teaching faculty—despite the fact that animal-rights activists have demonstrated outside his campus lab at least once. And a sequence involving an old colleague of Helmond's introduces a significant-looking bit of back story which is then promptly dropped and forgotten.

What comes close to saving the book are Gower's characters, who are nearly all sympathetic in one way or another even when they aren't very likeable. Helmond is utterly plausible as the driven scientist, and Gower creates a startling empathy between him and his wife Janice, despite the duo's fundamental differences in moral outlook. Sharon, the research assistant, emerges as a touch more than the stereotypical Igor of latter-day Frankenstein lore. And Helmond's children are drawn with just the right proportions of brashness and idealism.

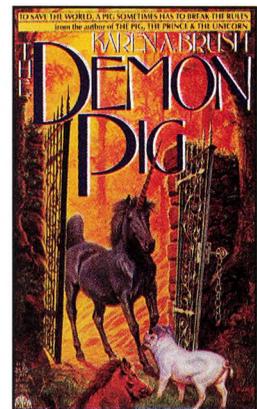
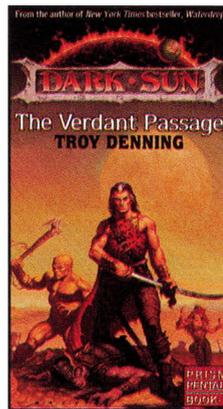
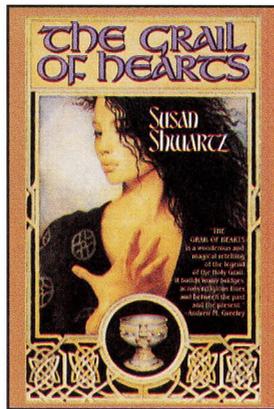
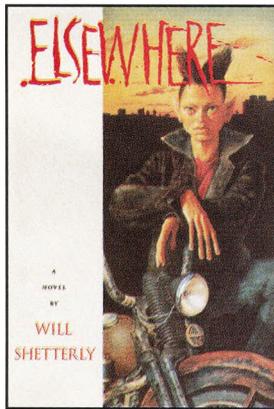
On balance, there's half of a good SF novel, two-thirds of an intriguing psychodrama, and maybe a third of a credible horror yarn in *The Orpheus Process*. It's a book that one can't exactly like, but it's worth a glance for what it promises about its author. There's first-class potential here, and I hope Gower's next books deliver on it. — *J. Bunnell*

## BLACK SUN RISING

by C. S. Friedman  
DAW Books, October 1991  
489 pages, \$18.95 (hardcover)

*Black Sun Rising* presents an intriguing package: the jacket art is unearthly and compelling, while the flap copy seems to describe the usual fantasy quest scenario with overtones of SF lurking in the background. As it turns out, the cover painting comes closer to capturing C. S. Friedman's intent, and the science-fictional aura is far more integral to the novel than the jacket text suggests. Friedman wields her world-builder's paintbrush with sweeping strokes, creating a rich yet spare landscape and conveying a fineness of detail that's often brutally sharp.

It's not unusual to see fantasy set on far future Earths or lost Earth colony worlds. Friedman, though, is among the rare writers who carefully integrates that heritage into her premise. Erna is a "lost colony" for a reason: the planet is home to an alien force that responds to and amplifies both individual and collective



human will, a discovery that led the early colonists to deliberately sacrifice spacefaring technology. A second consequence of coexistence with the fae is a single planetwide Church with doctrines designed to minimize humanity's interaction with it—but as the novel opens, some dozen centuries after first contact, a disagreement is brewing in the Church over the use of “sorcery” to manipulate the fae.

That's only one thread of the plot, though, and a minor one at that. The fae and its manifestations are far from universally benign, and someone or something is tilting the balance of power far enough to be a major threat to the human population. And when agents of that unseen figure brutally attack one of Erna's most powerful human adepts, they inadvertently create a strange alliance between the very few individuals who may be able to track down and deal with the danger.

Friedman unfolds background and events with a deft balance of precision and subtlety, and her characters are studies in vivid contrast—each of her three leads has a sharply distinctive moral outlook, yet recognizes the need to cooperate with traditional adversaries in pursuit of a larger goal. And the larger concept, of a world where natural law can override science as we know it, is a constant yet not invasive presence.

The tone, not surprisingly, tends toward the dark and graphic, though this is by no means a horror yarn.

And while *Black Sun Rising* is the first book of a planned trilogy, it ends on a solid climax rather than a cliffhanger. It's an auspicious hardcover debut for Friedman, ambitious and distinctive by comparison to the average fantasy saga, and I'm definitely looking forward to the next volume. — *J. Bunnell*

#### ELSEWHERE

by Will Shetterly  
HBJ/Jane Yolen Books, October 1991  
248 pages, \$16.95 (hardcover)

I've got two reactions to *Elsewhere*. One of them is that this is how shared worlds really ought to be used, and almost never are. The other is that it is one of the few books I've ever read that would be equally at home as a plastic-jacketed hardcover on the “Young Adult” shelf at a neighborhood or school library, and a colorful paperback in the adult fantasy/SF section of a mall bookstore. (Technically, “would” may be the wrong word; Tor Books has already snapped up the mass-market rights, so it's only a matter of months before you'll find the novel in both places.)

Shared worlds first: *Elsewhere* is set in the “Borderlands” milieu created by Terri Windling (with a host of helpers noted on the copyright page) for a series of anthologies most recently represented by *Life on the Border* from Tor. More specifically, it takes place in Bordertown, a city with footholds in the mortal World,

in Faerie, and in the tense emotional realm between. It's a distinctive setting, combining elements of mythic lyricism with modern street culture. Shetterly borrows this background in all its richness—but the characters and story are virtually all his own, so that no knowledge of the parallel series' continuity is needed.

On to matters of audience: the young-adult incarnation of *Elsewhere* has all the right elements to appeal to teenagers rebelling against authority. There's Ron, who leaves an unsatisfying home for Bordertown to follow in his older brother's footsteps, only to be tossed off the train en route. There's Mooner, an elf with a fast motorcycle, a faster tongue, and a self-image the size of Chicago. There are gangs—the Pups, more of an eclectic extended family than a criminal band, and the River Rats, linked by their addiction to river-water that carries more than a touch of magic. And there's Elsewhere, a quirky, comfortable bookstore that's neutral ground, refuge, and a focus of conflict all at once. In a real sense, this is an S. E. Hinton novel with pointed ears and dancing gingerbread men, mirroring its youthful audience's dreams with uncanny accuracy.

It's not unusual for the best of young adult fantasy to be cross-marketed to adult readers. Usually, though, such novels betray their origins with streamlined plots, slightly overemphasized object lessons, or a vague but discernible simplicity of language. With *Elsewhere*, none of

the seams show. Ron's first-person narration is sophisticated and honest, there are no pat endings or tidy solutions, and references to various W. B. Yeats poems give the novel an air of intellectual challenge most young-adult books just don't have.

Grownups who don't mind getting funny looks from librarians and bookstore clerks (and teens who don't mind being caught looking at "kids' books") should go find *Elsewhere* now. But then again, so should anyone who enjoys confounding statisticians: "young adult" hardcovers traditionally sell mostly to libraries, so those who buy personal copies are rebelling against a trend. Which is, after all, part of what the Bordertown concept is all about. . . . — *J. Bunnell*

### THE GRAIL OF HEARTS

by Susan Shwartz  
Tor Books, February 1992  
352 pages, \$21.95 (hardcover)

Susan Shwartz's latest work should be one of the major books of 1992. Based on Wagner's opera *Parsifal*, it takes a close look at both the Crucifixion and the Arthurian mythos through the eyes of Kundry, the harlot in Jerusalem that, for her part in the death of Christ, was made to travel the world eternally in search of redemption: the Wandering Jew.

In the forests of Broceliande, Amfortas the Fisher King serves and protects the Grail, and the Grail protects him and his people. The Grail is at risk, though—there is evil in the world in the person of Klingsor, a sorcerer who sees the Grail as the source of the power he needs to rule the world. Kundry, under the control of Klingsor (for who else would be willing to tolerate the presence of someone as damned as she?) seduces Amfortas and leaves him vulnerable to attack by Klingsor. He is wounded by his own Spear (the same Spear that was used to put Christ out of His misery at the Crucifixion). He survives, but loses the Spear. Prophecies state that he can only be healed by a fool that is pure of heart, and while Broceliande survives, its survival is tenuous.

Meanwhile, Kundry and Klingsor have fought, and as punishment Klingsor sends her back to relive the time of her greatest shame—the time of the Crucifixion that led to her immortal damnation. The book starts an extended—and fascinating—side trip back to the time of Christ, Joseph, Simon and Mary.

She's returned from that exile, determined to find a way to heal Amfortas, the only person to show forgiveness and acceptance of her in millennia. The book builds toward the final conflict between the Broceliandian forces for Good and Klingsor's evil, beyond which lie either healing for Amfortas and a return to peace for all affected by the protections of the Grail, or the success of Klingsor and the death of all that the Grail represents.

*The Grail of Hearts* is a gripping, emotionally charged, intense look at the battles of Good and Evil. It's exceptionally well written and covers two areas (the death of Christ in Jerusalem and the life and times of Arthur, King of the Britons) that you might normally consider very different—but they're both very tightly linked to the Grail, and Shwartz builds a continuity that makes the book work well. It's still early in 1992, but this book is one that should be a strong competitor for the awards, and one that you simply should not miss. — *C. Von Rospach*

### THE VERDANT PASSAGE

by Troy Denning  
TSR, October 1991  
391 pages, \$4.95 (paperback)

I'm a little uncomfortable reviewing a TSR book in a TSR magazine, but since the last TSR book I reviewed was in 1987, for another publication, I hope readers will realize I'm doing this because I want to—AMAZING® Stories and TSR don't influence what I read or review in any way.

Which is a good thing, since I find a lot of TSR books aren't to my taste. Most of the series books the company puts out are tied too closely to the D&D® game environments they spawned from to suit me, with the underlying gaming mechanics

too close to the surface to ignore. This isn't a criticism per se, since I'm not part of the market those books are targeted at, but when I have tried to read them, they just haven't grabbed me.

Recently, though, TSR has introduced a new gaming world with some unusual tweaks and a few cute quirks. It's called *Dark Sun*, set on a hot, dry world where magic is created by the use of the life force of the planet around the magic-user, and where thoughtless use of magic can destroy all plant life in the area, leaving a sterile, artificial desert. This idea isn't new by any means—Larry Niven used it in his Warlock series, among others—but it's a significant philosophical twist in the TSR worlds and adds a lot of complexity and tradeoffs to magic use.

On this world, in the Kingdom of Tyr, King Kalak, who has ruled for many years, is building a huge gaming arena in which his gladiators can fight for their freedom and die for the bloodlust of the crowd. Kalak's use of magic has parched the land and used up most of its magical capabilities, so the use of magic by anyone other than the king and his chosen is strictly forbidden, and enforced with severe punishment by the King's Templars.

Not everyone is happy with the reign of the king, and a resistance movement, the Veiled Alliance, has formed to try to bring the king down and replace him with a better government before Tyr is ground into desert dust by his rule.

There is a plan afoot to use the games at the ziggurat to make an attempt on the king's life using a magic spear. Before that can happen, though, the spear must be retrieved from the halfling tribes in the forest, and the contact for the Veiled Alliance who was to do that is killed rescuing some of the others from the Templars, which leaves the task to Sadira, a young half-elven girl; Rikus, a half-dwarf raised only to fight and die in the games; and Agis, a senator in Kalak's government who believed himself to be fighting for society—until he ran into the Alliance and realized how he'd deceived himself.

There's just one problem, though. The halflings in this universe are cannibalistic primitives, and they need to survive the trip and the halflings long enough to convince their chief to give up the spear. After that, everything else will be easy—all they need to do is get back to Tyr, find a way to break down Kalak's magical barriers and attack him with the magical spear and kill him, all before being found out and being killed themselves.

It's an interesting environment and a good story told in a reasonably well-written way. The gaming aspects are generally kept in the background and are nonobtrusive. It won't be to everyone's taste, but it'd be an enjoyable read for many people who don't normally consider TSR books. If you like action-oriented fantasy, series like Tor's Conan books or authors like Steve Perry or David Drake, you ought to give this book a chance. It's not going to win any awards, but it's a pretty good book if you're looking forward to turning off the brain and reading for fun for an evening. — *C. Von Rospach*

#### **THE DEMON PIG**

by Karen A. Brush  
AvoNova, December 1991  
240 pages, \$4.50 (paperback)

This is a book I've been waiting for for a while. *The Demon Pig* is the sequel to British author Brush's wonderful *The Pig, the Prince and the Unicorn*. It is, if you look at the plot, little more than a generic adventure-quest novel—the basic plot is a common one, with a reluctant hero and his willing friends setting off on a long, hard journey to free his parents from the bondage of the evil nasties and, along the way, stop a cataclysmic war between ancient enemies and save the world from destruction.

There are dozens of books like this. Except in this case the reluctant hero is Quadroped, a small, white pig. His parents are Fairy Pigs, who have been kidnapped by Nieve as punishment because Quadroped disobeyed her orders and released the Black Unicorn from his bondage and prevented the war between the

Kingdoms and Ravenor. Nieve is the Queen of the Dead and was looking forward to the war to help fill her hall with many new souls, and the fact that nobody told Quadroped that she didn't want him to do what he did doesn't matter to her.

So through various manipulations, Nieve is determined to see that war happen. Quadroped is just as determined to do what he can to stop it and rescue his parents, but—being a tiny white pig, albeit one that talks—he's not sure what he can do. But he and his friends, Morrag, a moray eel who's been magically modified so he can live out of water and fly, and Fairfax, the hedgehog, go off to see what can be accomplished.

What Brush does in these books is take what can be generic, formulaic constructs and turn them on their ears. She's telling a very serious, if somewhat familiar, story here but does it with a fine sense of humor and a slightly skewed way of looking at things. Where a writer like Craig Shaw Gardner (one of my favorite writers of funny fantasy) builds silly plots and then loads the jokes on top, Brush has put together two books with very somber feels, and then brought to life characters and situations that make you grin anyway. These are very serious, straightforward people who end up doing silly things, and that's what makes these books so attractive to me.

To some degree these books defy description. Try to imagine Lewis Carroll writing *The Lord of the Rings* and you get some idea of the flavor of *The Demon Pig*—not so far off, I think, because I saw influences from both Carroll and Tolkien in the book. The Queen of Hearts is so intensely serious about herself, which only adds to the humor inherent in her situation. The same is true of what Brush has done, whether it's Quadroped finding yet another way to get in trouble, or Avice (another character, effectively a new variation on the Norse God Loki) reworking the fabric of the past like one of the Fates and noting that he's a lot better at unraveling than patching back together, to Fairfax running around

the castle trying to find a place to hibernate (the Prince finally had him placed in the Spring Linen closet, since it is never opened before May).

When you look at the cover, you'll realize immediately that a book like this is going to be weird. I'm happy to report that it's not just weird, but weird and good, and well worth your time, especially if you're getting tired of seeing these generic plots without the kind of inventiveness that Brush has written into hers. — *C. Von Rospach*

#### **THE ADVENTURES OF PROFESSOR THINTWHISTLE AND HIS INCREDIBLE AETHER FLYER**

by Dick Lupoff and Steve Stiles  
Fantagraphics Books  
62 pages, \$8.95

As a general rule, I don't read graphic novels. There's so much in the science fiction field that it's impossible to keep up with everything. (I don't read comic books, either, for the same reason.) The last graphic novel I read was *Batman: The Dark Knight* because of all the hoopla over DC's redesign of the Batman mythos. In short, if it's a graphic novel, it must be something unusual—something pretty special—to work its way to the top of my to-be-read pile.

*The Adventures of Professor Thintwhistle and his Incredible Aether Flyer* is (as you've probably guessed) just such a graphic novel. It's a parody of some of the super-science boy's adventure novels from the late nineteenth and early twentieth centuries. Titles like *Tom Swift and His Electro-Gyrotor* and *The Air-Ranger Boys Adrift in the Stratosphere* are so campy they're ripe for parody. (Yes, those two titles are made up. They are, however, entirely typical of the genre.)

Lupoff—science fiction writer, comics specialist, and general expert on so many topics it makes your head spin—is quite an authority on the early adventure-SF-for-boys genre. His script has a brilliant inventor, Professor Theobald Uriah Thintwhistle, leaving Earth for a voyage to the moon in an “aether flyer”

device he's invented. Accompanied by his young protege, Herkimer, and his darky servant, Jefferson Jackson Clay, Thintwhistle heads steadily upward into the Aether. Of course, there are all sorts of problems to be overcome . . . flying Aztec serpents, pirates who fell off the edge of the world, and the colossal Queen of the Moon, to name just a few.

If any elements of the plot seem very familiar, you may have read Lupoff's novel, *Into the Aether* (Dell, 1974), which shares some plot elements and characters with this graphic novel. Or perhaps you read the "chapters" as they originally appeared in (in slightly different form) in *Heavy Metal* in 1980.

It's a rip-roaring adventure in the classic sense, very funny, very tongue-in-cheek. A note to the humor-impaired: yes, there is some racism here—that's parody, too. The genre being parodied was full of racism, and it's fair game to poke fun at it. (The "darky servant" is smarter than Thintwhistle and Herkimer put together.) If you're going to get bent out of shape by it, best steer clear. — *J. Betancourt*

### HAUNTING LOVE STORIES

edited by Anonymous  
Avon Books  
467 pages, \$4.99 (paperback)

Some books simply cry out to be

savaged by reviewers. It's as though they have "whip me, beat me, cut me to shreds" written in huge type on the cover. *Haunting Love Stories*, an assembly of ghost stories by middling-to-big name romance writers, would (alas) seem to be just such a book.

The first question that comes to mind is simply, why? Did either the romance field or the fantasy field need a new collection of heaving-breast-style romantic historical ghost stories? I think not. The second question: why these particular writers, when fantasy writers would do it so much better, and probably so much cheaper? Doubtless that has to do with sales figures, since romance writers sell many times more books than comparable fantasy writers.

There is an inherent unfairness to all of this, of course. The worst of the stories in the book (three of five) would be unpublishable in any magazine with writing standards because the writers . . . or should I say perpetrators . . . don't understand basics of prose, such as controlling viewpoint in scenes. And yet they probably received, for their mediocre contributions to this book, more than most genre fantasy writers will make from an entire novel.

However (did you hear that coming?), one story does show more than a flicker of talent. Katherine Sutcliffe's vampire story, "Forever

Yours," demonstrates a near mastery of prose basics. Despite a few cliches in phrase (such as the hero turning on his heel), Sutcliffe sets scenes well, has believable dialogue and characterization, and keeps the story to a brisk pace. Her writing is her strong point: clearly it's what has made her a best-selling romance writer. (If the other contributions to this book are an indication of the best romance writers can do, Sutcliffe has no competition to worry about.) And clearly she has some affinity for ghost stories, since she mentions Stephen King is her favorite writer in her author's bio.

"Forever Yours" has its share of romantic interludes, as should be expected considering the nature of the anthology; but these are low-key and certainly forgivable considering it's a vampire story. There is an undercurrent of sexuality and sensuality inherent in the whole vampire mythos . . . and having a romance writer play around with the idea might even be a good idea.

"Forever Yours" is strong enough it should probably be reprinted somewhere so the genre fantasy audience will find it. It's not strong enough to warrant buying the whole book, however . . . though *Haunting Love Stories* might make an interesting present for a devout romance fan. — *J. Betancourt* ♦

## SWASHBUCKLING EDITOR STORIES

*Swashbuckling Editor Stories* may sound a bit weird, but it's a valid sub-sub-genre of fantastic literature. This volume features stories of heroic editors battling the forces of evil (not to mention getting their books and magazines out on time!) in various science fictional and fantastic worlds.

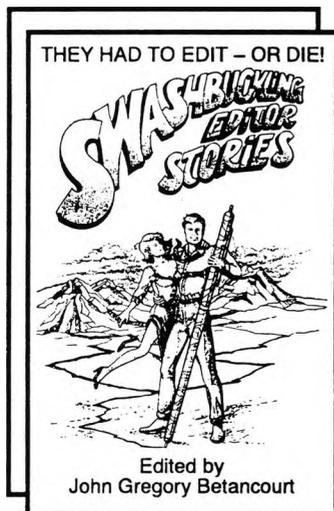
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# Reawakening

Mark J. McGarry

1

He came awake all at once in the long twilight, his breath caught in his throat and her name on his lips, still warm from her warmth but alone in the bed.

“Hannah?”

Heart pounding, Scott Braeden fought free of the sweat-soaked sheets and sat up. Meters away, blowing snow and ice drew a gauzy curtain across the wall's broad expanse. It was a continuous sheet of curved glass, a soap bubble big enough to hold a four-poster bed, twin wardrobes, a mirror clouded with age, a chest that filled the room with a cedar perfume.

Braeden put his feet to the



Illustration by Alan Clark

pine floor and stood. He was a bit too tall and a bit too thin, with a full, reddish beard that made his head appear too large for his narrow shoulders. The blood still like thunder in his head, he scooped his robe from the chair by the bed and hissed as the cold silk kissed his skin.

Braeden crossed to the window and put his hands flat to the thick glass. It trembled against his fingers, cold but alive with the wind's fury. The storm had roared off the Pole a week ago, settling in over Coronation Gulf to build strength. The forecasts said snow in Toronto for the first time in a decade.

"This isn't the end of the world," Hannah would say, "but you can see it from here."

"Not today, angel," Braeden said under his breath. The empty territories stretched for two thousand kilometers in all directions, a wilderness broken only by the occasional petrochemical station, research outpost or Eskimo pastown. In the summer, wildflowers would riot and the land would come alive with wolves, caribou and the occasional exotic, but that short season was six months off. It may as well have been a century.

A chill licked him. Braeden snatched his hands from the glass—they already ached with cold—and flexed them until the blood started up again and his fingers tingled. Shivering, he turned from the window. He felt it then: a thin breeze, a hint of arctic cold.

His mouth went dry.

Most of Icehouse lay under the permafrost, the bedroom a necessary extravagance. The steps leading down to the main level were broad, to accommodate a medic's litter. Braeden took them two at a time.

Downstairs, the lights came on for him in the long, low-ceilinged corridor, then in her library as he entered it. The air was heavy with must, the walls lined with books, most over a century old. Hannah's massive oak desk hunkered in one corner, but the perpetual blizzard of hardcopy was gone from its scarred top. Behind the desk sat an overstuffed leather chair, and in the chair sat the Iron Maiden.

It seemed a delicate creature, from the whorled helmet of its skull, along the smooth curve of spine, to pencil-thin limbs and clockwork joints, the satiny bands that would hold the exoskeleton against Hannah's skin. Optical receptors shone dully in the light from the overheads, their dead ruby eyes seeming to track him as he crossed the room. Up close, unfathomable hieroglyphs etched the Maiden's gray alloy bones, each nick or scrape the record of some injury Hannah had suffered.

Without her, the mechanism was dead. Awakened, the second skeleton would ride along her skin, its receptors sensing a breath of conditioned air, the bruising impact of an encountered table edge, a slip of paper under alloy-gloved fingertips; the smell of food she could no longer taste; the sound of her own footsteps across the pine floor, or of the wind whistling across the top of the world.

The antenna running along the Maiden's spine provided a continuous telemetric uplink. Snug in its bath of liquid helium, the brain in the basement codified and

translated the stream of raw data in picoseconds, converting it from digital abstraction to a pale simulacrum of human experience. The entire house was a transmitter; the receiver, a golden spike driven through Hannah's skull and into the cortex's traditional centers of sensation.

Some days, when Braeden asked her what it was like, she would smile and say, "Something more than a very nicely done documentary, but something less than the thing itself."

On bad days she would not smile. She would say: "Read the book."

The bad days came with increasing frequency as the black worm chewed its way along her synapses, devouring light and life.

Braeden rocked the chair back against the wall, the Maiden clattering like old bones, and yanked at the desk drawers' brass pulls. One after another, all empty. The shelf behind the desk held bound hardcopies of her works, but of the next book there was nothing.

The chill licked at him again, less tentative now.

Heart slamming, Braeden stumbled into the corridor. It curved gently, past larder and galley, the parlor with its bare rock walls, the one-bed hospital, so frequently used—all empty. Further on stood the airlock's high, wide door. Water puddled at the foot of the thick ceramic slab. Counterweighted, it opened easily.

The wind smashed into the corridor, crushing the breath from him. Roaring, the storm raked his face with icy claws. He staggered back and brought up hands already going numb. A company of snow-devils corkscrewed past him and down the hall. Somewhere deep in the house, an alarm hooted plaintively.

Eyes squeezed to slits, his face an icy mask, he stepped into the big airlock. His and hers survival suits capered on their racks just inside the door. A two-place snow-skid lay under a jeweled drift. The outer door yawned wide. Beyond its slack jaws stretched the landing apron, ringed with strobing lights that painted the storm with broad red strokes.

Screaming, the storm slashed at him. He cowered from it, gasping, and pawed at the larger of the survival suits. It danced free of the rack and he hugged it to his chest, letting the wind push him back, into the corridor and the lee of the door. He sagged against it and the door swung shut with agonizing slowness, crushing the wind to silence.

Frost painted the corridor's walls. It began to melt and run as the house worked to bring the ambient temperature back into the prescribed range; heaps of glittering snow slumped and turned dull.

Braeden trembled uncontrollably as his body tried to generate its own heat. Warmth kindled pain in his hands and feet, his face. He burned with it, a fire that had not died before he skinned into the survival suit and slapped the solemnly blinking control panel on the suit's right sleeve. The rubbery fabric warmed against his skin, bringing bright points of new pain; the hood grew rigid, becoming a helmet that breathed cool oxygen against his face. Indicators burned in his peripheral vision. One

darkened as he told the communications link to shut itself down. The storm would have Amy Lowell and her airship bottled up in Yellowknife Station, six hundred kilometers south. Overland, the nearest settlement was Coppermine, two hundred clicks west. Help from there, if it came at all, would take hours. It may as well be a century. He pulled open the airlock door.

The storm cuffed at him, snarling, but it could not hurt him now. He crossed to the skid, swept snow from the saddle, then saw where the engine compartment stood open, a scalpel from the sickroom shining brightly in a nest of severed lines. "God damn it," he said under his breath. "God damn you, angel."

Steel-lined pockets held halves of the airlock's outer door. In one slot he found a century-old edition of *The Riverside Shakespeare*, leather binding crushed, flimsy pages tattered. The volume was perhaps eight centimeters thick and weighed nearly three kilos. He worked it free—the embossed cover fell open, pages spilling onto the wind—and the door rumbled shut behind him.

He set out across the landing pad, then flailed into the deeper snow beyond it. Standard search pattern, a grid extending two hundred meters out from the house in all directions. The storm came along behind him and filled the path he broke, but the suit's computer etched his course across the inside of his visor, a golden net laid across the snowfield. A Maltese cross represented his position. The indicator winked slowly, seemingly motionless.

The wind was a steady pressure, a weight that grew relentlessly. Snow clutched his legs, fighting each step. But if he stopped, she would die. He took a step, and then another. Breath sawed in his throat. If he stopped, she would die.

He went to his knees in the snow, fumbling at his helmet seals. The wind bit his face.

"*Hannah!*" It came from his mouth as a cloud of frozen condensation, torn to tatters by the wind. The snow stretched on and on, to the ice of Coronation Gulf, forever.

## 2

Summer rolled across the tundra. Flowers and tall grasses rippled before a warm wind. The Bathurst caribou followed, thin and ragged after their long trek, cows heavy with calves. Wolves passed like smoke along the fringes of the herd.

With them came the exotics: harpies and glowflies, tumblevines, and once a cockatrice. Sad-eyed, flinching at every breath of wind, it gnawed caribou bones the wolf pack had left behind. One hundred twenty years before, the beast had been part of an arsenal of terror weapons set out by the invaders when they swept through the Portal. The stargate had provided a bridgehead from nowhere. With its destruction, the invaders' foothold turned into a killing ground from which there was no retreat. It was a tribute to the aliens' engineering that any of the exotics had survived both wireguns and an inimical ecology for so long. And some of the aliens'

weapons, like the genetic aberration that had exploded along Hannah's neurons, had lost none of their potency. Although the black worm had killed her, its purpose was merely to cripple. The plague's hideous logic: that wounded combatants are a greater burden than dead ones.

The sun rolled across the slate-gray sky, setting Coronation Gulf alight each midnight before it climbed halfway to the zenith to begin the cycle again. Night was banished; without it, time slipped away.

Braeden slept, and awoke with Hannah in his arms. He put one hand flat to the curve of her back, felt the cool, smooth skin, the play of muscles across familiar contours, and pressed her tight against him. "Don't leave me," he said. "Don't leave me alone again." She sighed and moved against him, skin to skin, and he raised himself on one elbow to look at her, her face bloodless under a helmet of close-cropped black hair dusted with snow. Her eyes were closed, their lashes laced with ice.

"I will never leave you, love," she said, and opened her eyes. Blue and achingly cold, they looked past him, into a distance he could not see. She kissed him then, and he felt the heat go out of him all at once. Blood froze, flesh withered, skin cracked. He had breath enough to scream.

Screaming, he awoke.

The dream again.

He sat on the side of the bed, head low, watching drops of sweat bead on the rough pine boards between his feet. He worked his hands, the scarred flesh tight across his knuckles. He took a breath, then another, and stood. A pair of wrinkled pants lay on the floor by the chair. He shook them out and tugged them on. From twenty meters off, a caribou watched him placidly. Gore streaked its back; there perched a small, ragged-winged shadow. As Braeden watched, the harpy flapped skyward, heavy with blood. He lost the parasite in the sun—and, frowning, shielded his eyes against the glare. There was something else up there.

The aircraft's cross-section was familiar, a blunt arrowhead clearly silhouetted against the sun. His fists clenched as the dirigible slid down the sky, coming in low over Coronation Gulf. Navigation lights winked along a sky-blue deltoid hull barely one hundred meters from blunt nose to broad stern. Caribou scattered at the ghostly rumble of the fifteen-meter props revolving slowly aft. Sunlight glinted from the flight deck windows as *Punkin Seed* angled toward the house.

"Stupid bitch." One fist lashed out and the chair alongside the bed went over backward; a bottle exploded against the pine planks and the sharp scent of scotch filled the air. Braeden took a deep breath and put his hands flat to the glass wall. It trembled faintly with the breathy roar of the props, growing steadily louder. Scowling, he went downstairs to wait.

Amy Lowell had been with Braeden at Yellowknife Station five summers ago, when Hannah Levin came in on the monthly supply ship and said she wanted to see the caribou run. Braeden looked up from cleaning the old Winchester that Lowell had given him, considered

for a moment, and decided she was not quite the most beautiful woman he had ever seen.

Lowell stepped between them and told Hannah she could fly her out.

"With a name like yours," Hannah said, "we'll make a great team." But her eyes were on Braeden.

The three of them shadowed the Bathurst herd for a week. At the end, Hannah gave Lowell a facsimile copy of *A Dome of Many-Coloured Glass* by Amy Lowell, an American poet dead two centuries.

Hannah wrote her little book of poems about the Territories, getting everything right, and put Braeden in it. She came back the next summer, and stayed with him the night that lasted all winter long. When the sun rose again, Lowell helped them build Icehouse.

Braeden cranked open the airlock's outer doors for her, wincing as the wind off the gulf licked his bare chest. *Punkin Seed* settled to an altitude of a little under five meters, its shadowed underside a roof closing out the sky. A hatch slid open in the airship's belly and Lowell came down at the end of a tow line. She wore an oversized leather jacket over a fluorescent orange flight suit; tangled blonde hair trailed from beneath a leather aviator's cap. Braeden did not go out to meet her.

She crossed the landing pad stiff-legged, shoulders hunched, walked past him—"Hmph"—and hit the panel that closed the doors. When she pulled off her cap, her long hair was wild; she ran her fingers through it to no visible effect.

"I would have let you know I was coming," she said, "but I got tired of leaving messages you never answer. The house computer still has her voice, you know."

"I know." He remembered long nights with her, before Hannah, and the days when the three of them built the house together. But all he felt now was the lingering chill of the tundra. "Why did you come, Amy?"

"Partwise, to see how you are. Second, to tell you that it's time we went out again." She regarded him levelly. "Christ, Scotty, you look like shit. You must have put on twenty kilos. And what the hell did you do to your hand?"

He looked down, at the blood welling from scarred knuckles. The pain was distant and easily ignored.

Lowell looked away from him—at the two survival suits on their racks by the door, at the two-place snowskid still sitting crippled in the corner opposite. Her mouth tightened.

"I'm not going out," Braeden said. "I'm on leave."

"Not anymore." She shoved her hands into the bomber jacket's slash pockets. "Can we talk about this inside? I want some Earl Grey."

"I'm on leave," Braeden repeated. "Get Velcoff to do it."

"Velcoff is dead," Lowell said flatly. "So is Horowits." After a moment, her look changed. "Didn't you hear me?"

"I heard you."

"Jesus Christ," she said. Then she shrugged. "There's something new in the menagerie. Something big and rude." She brushed at a stray wisp of hair. "Look, I could really use that tea."

Her eyes were purest blue, and for a moment he could look out through them. "All right, Amy."

The galley stank of the remains of a dozen unfinished meals. Lowell wrinkled her nose as Braeden dumped an armful of plates into the recycler. But a copper tea kettle was clean and he set the water to boil. His hands, he noted distantly, were trembling.

"It started month before last," Lowell was saying. "Something started taking down musk oxen twenty, thirty kilometers southeast of the Eskimo pastown at Tuktoyaktuk. They didn't call us for two weeks: they thought it was wolves. Then they started finding wolves dead, too."

"Eaten?"

"No—and neither were the oxen. The new boy kills for thrills. No telling what it lives on."

"What happened to Robert and Brad?"

"Last week, they were both out on ground-effect skids south of the pastown, but forty kilometers apart. One afternoon, Horowits missed a communications check. Yellowknife wanted to pull everyone in, but Velcoff was hot about it. It had taken him most of a day to get out to that part of the grid, and damned if he was going to drag ass back and have it turn out that Horowits had comm problems. They found both of them next day. Horowits had emptied a full magazine, but it looked as if the new arrival got Velcoff in his sleep." Lowell fumbled in a pocket of her flight suit. "I've got a flat here with the details: area grid, autopsy results, necropsies on the wolves and oxen." The flat was a translucent square about four centimeters on a side. She set it on a clean spot on the counter. "You won't find an analysis of exotic blood or tissue from the site where Horowits was killed: he tracked wide."

"Not with a full reel of wire. He was better than that."

"Then the new boy shrugged it off," she said. "They found nails all over the area, spent and ricochets. And prints. Very big prints."

Braeden waited. After a moment Lowell said, "Yellowknife is throwing a wide net and calling in field operators from all the Territories—fifty, sixty hunters, with aircraft. It starts tomorrow, and it goes five days. After that, they call in the Peacemakers—"

"—Who will do more damage to the caribou—and themselves—than the exotic. This isn't riot control."

Lowell ducked her head. "I know. After the war, if things got raw, we could have called in a thousand operators. For that matter, Horowits and Velcoff wouldn't have been out solo. Some people are saying this is the rudest new arrival we've seen in sixty, seventy years, and they don't think we can handle it anymore."

The tea kettle whistled. "Maybe they're right," Braeden said. "Maybe it's the war all over again." He went to the stove.

"I tried to set up static for you, but it didn't work this time," Lowell said. "They say six months is enough. Everyone's very sorry, but it's enough. Icehouse is yours, but it's on an ecological reserve. If you don't come out to play this time, you've effectively resigned from the service. If that happens, you lose your exemption to live in the reserve. And that means you lose Icehouse."

Braeden set a mug in front of her and splashed hot water into it. "Sugar?"

"You know I don't," she said. "That might be the best thing for you—losing the house—but I don't get to make that call."

Braeden said: "I'll need an hour."

He went down the curved corridor, past hospital and airlock, to what Hannah had called the den, where she never went. Powder and gun oil scented the air; bur-nished metal gleamed from wooden racks. His standard-issue wiregun could exhaust its thousand-round ammo spool in forty-five seconds. A few dozen slivers of steel, mushrooming on impact, could turn any animal, Earth-born or not, into a sack of blood and meat . . . or so he had thought. He left the wiregun on the wall and took down the Winchester, a 70 XTR Super Express Magnum well over a century old.

It weighed barely five kilos with scope. Lowell had bought it in Siberia, from an Environmental Services hunter discouraged by its blast and kick. Braeden made the rounds himself: .458-caliber cartridges, 90 grains of powder, a 480-grain expanding bullet.

He set the Winchester alongside the door and un-locked the big chest sitting on the floor under the gun rack. Inside were his first ES uniform, certain letters Lowell had written, static holographs filmy with age, the debris of thirty years—and, in a plastic box, a half-dozen pouches, each about as big as his hand and five cen-timeters through.

It was Lowell who had secured the demolition charges on the black market, quarter-kilogram slabs of Surtur-7 sealed in inertial plastic. Fifteen kilos had cleared the excavation for Icehouse. All six pouches fit into a small canvas pack he found at the bottom of the chest.

Guns were for hunters. Braeden wanted to kill.

### 3

A kilometer below, the coast unrolled with grim majesty, the muted green of the tundra and the hard gray of the straits and Amundsen Gulf. Islands of drift-ice shone brilliant against the steel seas. The ice pack lay just over the horizon, an empire of winter that had retreated visi-bly in Braeden's seven years in the Territories.

The flight deck was bigger than it needed to be, a crescent nearly ten meters from side to side. Braeden stood at the chart table, aft, surrounded by a half-dozen darkened science stations. The latest satellite scans slid past—visual, infrared, radar, gravitational, computer en-hanced and interpreted with the fuzziest of logic, all of it next to useless. Through cloud cover or a canopy of evergreens, none of the technologies could distinguish a toothsome exotic from a snowshoe hare. Braeden dark-ened the display.

Forward, Lowell sat at an instrument panel made small by the windscreen that stretched floor to ceiling and the width of the cabin. Her aviator's cap sat perched on the back of the empty co-pilot's seat. The seat was always

empty, the cap always in its place of honor. "Amelia on watch," she would say.

Braeden might have smiled, remembering past flights across the silence, through endless days and unending nights, with the northlands stretched below and a razor-sharp sky ahead. Then he recalled the flights home, and was cold again.

"I loved her too, you know," Lowell said. Her voice barely carried across the throb of the engines, the hiss of wind across *Punkin Seed's* kevlar skin.

"I know," Braeden said.

"And after she was gone—and after you'd gone to ground—I hadn't lost just her. I'd lost both of you."

"I know," Braeden said. The pilot's seat was too big for her: all he could see was one arm sleeved in day-glo orange, one small hand gripping the control stick. He moved around the chart table and stood behind the pi-lot's chair, felt the fabric of the headrest under his hands. After all these years, it was worn smooth. Lowell did not turn, but she settled deeper into the seat padding.

"It's all right to miss her," Lowell said. "Mourn her."

"Yes."

"Or hate her—for leaving." Lowell stared straight ahead. "Sometimes I do. It was horrible, her not being able to feel anything, wearing the Iron Maiden—but it was life, and she left it—left her work, left us, behind."

Braeden was silent.

The airship turned south, nosing along the Anderson River. Caribou moved in waves along its banks, churn-ing the tundra to glistery mud. There were grizzlies down there, too, and foxes, sandhill cranes, snowy owls and loons. He waited for the familiar surge of anticipa-tion, and instead found himself wondering if the new boy also had an appetite for bear.

"I'm going to look at the maps again," Braeden said.

"Concentrate on the part where it says, 'Here there be monsters,'" Lowell said. The brightness in her voice sounded more than a little forced.

The northlands painted themselves across the chart table—the waters of Amundsen Gulf and the Beaufort, the thin line of the Anderson emptying into it, the broad-er band of the Mackenzie River, twisting north for seven-teen hundred kilometers, from Great Slave Lake to the sea.

He projected the last hour's meteorological scan onto the false-color radar image, scattering clouds across Great Bear and the Franklin Mountains. Then infrared, enhanced and filtered, and he saw where the Bathurst were running, a sweep of caribou across the plains. Like a river slowly cutting itself a new course, their migratory track had shifted as the planet warmed and the climate changed. He drew his finger along the projection, and frowned.

"We'll be at your drop-point inside of an hour," Low-ell said as he came up behind her again. "I go on to Norman Wells to collect Jack O'Connor, but I'll be back for you at sunset. Yellowknife says no one on the ground after full dark."

"We have to go a bit further south, Amy."

"Sure, ten clicks east of Fort Good Hope."

"South along the Mackenzie," he said. "We could spend

a month looking for this bastard and never find it, but the caribou already know where it is. Maybe they can smell it."

She turned to look at him. "You saw something on the charts," she said. She reached for the communications console. "I'll clear it with Yellowknife. Someone else can make the run to Norman Wells, right?"

Braeden put his hand over hers. "Six months out of harness, they're not going to take my word for it. If they decide to send anyone at all, they'll find someone closer, won't they?"

"We do have a couple teams south of here," she said slowly.

"I don't want them to send anyone else." He let her go. "I want it to be me."

"They'll nail our hides to the door. You know that."

"If you punch it, you might still make the rendezvous at Norman Wells."

She looked doubtful. "Probably not."

"No."

"But if we do find the new boy, they won't care." She smiled thinly. "You always were the best tracker we had, Scott."

"I'll get into my working clothes."

Down in the cargo bay, the rush of the wind across *Punkin Seed's* hull was loud enough to set his teeth on edge. Thin as a drumhead, the deck trembled under his feet. He drew the back of his hand across his mouth and tasted sweat.

His gear was tied down near the forward hatch. The environmental suit resembled an upended turtle, legs and arms accordioned into the torso's rigid carapace, the snouted helmet nearby. An Orion Series III better than a decade old, the e-suit bore little resemblance to the civilian models at Icehouse. The Orion was modified Star-Force space armor, rated to one hundred seventy-five below zero. He had lived in it for up to a week, with a food source to supplement the inboard supply of concentrates and fair weather for the solar power array.

He keyed the tabs along the torso's ridged spine, and the smooth black ceramic opened along a seam that had been invisible. He fell into the awkward routine, sliding into the armored compartment and working his hands and feet along the Orion's heavy, quilted arms and legs. The boots and gloves were composed of the same faintly scarred ceramic as the torso. The entire unit weighed nearly thirty kilos, and he felt each of them as he got to his feet: it had been a while.

Braeden put the helmet on long enough to run through a series of systems checks, then took it off again and set it on the deck alongside the Winchester's battered fiberglass case and the small canvas pack that held a box of shells and the kilo and a half of Surtur.

The steep stairs leading back to the flight deck seemed to stretch for miles. He was winded by the time he reached the top.

Lowell twisted around in her chair and smiled when she saw him. "Looks like you're loaded for bear," she said. It was something she always said before he went out.

Braeden crossed to the windscreen and put his hands to the cold glass. Far below, the Mackenzie River was a ribbon of steel. To the east, the Franklin Mountains pushed up from the plain, the tallest peak barely fifteen hundred meters high. Beyond the weathered slopes and treeless summits lay Great Bear Lake, where he and Alexandria and Lowell had gone hiking two years back.

"Take it down to three hundred meters or so."

"Aye, Captain."

He scanned the lowlands, the swell of the Franklins, the tattered clouds that veiled the nearest peak. "Take it east."

"Scott?" There was an edge in her voice. "What the hell do you see out there?"

"Nothing," he said. "Absolutely nothing."

The airship slid along the shoulder of the mountain, through frayed puffs of cloud. Below, spindly evergreens and low brush gave way to yellowed scrub and tall grass turned to dust by the wind from the props. Nothing lived there.

"Follow it along," Braeden said.

"Could be some kind of domestic blight," Lowell said. But she turned the ship to crest the slope.

Their shadow swept ahead of them, across a roughly circular valley tucked against the mountain's south side. Perhaps three kilometers wide, it might have been a cirque, a glacier's bite taken from the slope tens of thousands of years ago. Ice glinted sullenly in the shadowed amphitheater.

A cancer had bloomed in the center of the ice field, an obsidian forest that filled half the valley. Black claws clutched the ice; black talons reached skyward. Vines twisted from the forest's black heart, safeguarding whatever lay beneath. The seeds must have been sown during the war, lying under the ice until some tripwire in the genetic code was triggered.

"Like a century plant," Braeden said. "Not on the last satellite scan, but on the next—unless the cloud cover firms up."

"Yellowknife is going to love you, Scott." Lowell grinned. "Let's call and tell them where the party is."

"Not yet," he said.

She looked up at him.

"We're not sure it's in there," Braeden said. "We're not even sure it came from there."

"I can scan from here."

"Not conclusive."

"I'll send down a dope on a rope."

"You couldn't maneuver a robot through that growth," Braeden said.

"You've got this all worked out, don't you?" Then she said: "It won't bring her back, you know."

Braeden stood straighter, his armor clattering mutedly. "Call Yellowknife if you want to," he said, "but I'm going in now."

#### 4

Slender trees stood sentry at the edge of the wood, trunks arcing outward like talons of volcanic glass. Wind howled across their knife-edged leaves. Oily black

branches twisted, grasping; ashy roots clutched the ice. The snowfield all about the forest had taken on the color of coal dust; black worms of new growth wriggled along the stain. Braeden shuddered.

The airship drifted skyward, silent, and took up station about five hundred meters up. "Still nothing across the spectrum." Lowell's voice echoed faintly in his helmet. "That growth could be absorbing or diffracting any signals, though."

"I'll take a sample," Braeden said.

"What I mean is, I can't watch your back."

"The new boy's probably not even home," he said, but his gut told him otherwise. He took a deep breath, the Orion binding him in the crotch and across his soft belly. He frowned, working his shoulders under the suit's rigid backplate—then realized the problem was not with the armor but with him, and the eighteen kilos of blubber he'd put on since last he'd worn the suit. He cursed under his breath.

"Is there a problem?" Lowell asked across the open circuit. The dirigible's shadow slid across him.

"Nearly ready." He ran his hands along the straps holding the small canvas pack low on his chest, making sure they were tight, then slid the Winchester off his shoulder and worked the bolt. Brass gleamed in the chamber. "Now I'm set," he said.

The ice was porous, softened, as if it were rotting. It crunched underfoot, gray dust puffing up around his heavy boots. He stopped for a moment, probing the ice with the butt of the Winchester. Black tendrils grasped blindly after the wooden stock.

"It's not sending roots into the ice," he said coolly. "It's coming up out of it. God knows how far it extends—could be under the whole valley. Our friend could have been lying dormant, too—in hibernation for a hundred years."

"So we'll call him 'Rip.'"

Braeden's mouth twitched. "The region could be rotten with this stuff," he said, "just waiting to burst out of the ground."

"Another reason to call Yellowknife now, sport."

He said nothing. The trees loomed ahead of him, twisted roots snatching at his boots, branches reaching for him. One left a slick track across his helmet visor.

The forest closed around him. Interlocking branches formed a canopy that strangled the sunlight to a dim luminescence; leaves threw ragged, dancing shadows. The wind through the nightmare wood set up a ghostly chorus.

"I barely have you on visual," Lowell said. Her voice sounded fainter, but it may have been that his heart was pounding more loudly. He touched a tab on the control panel set into the suit's right forearm. His helmet spot kindled, cutting the shadows with white light, striking glare from the leaves' sharp serrations. Deeper in, something stirred, a movement of black against blackness. His thumb slid to the Winchester's safety.

"Scott?"

Shadow boiled up out of the heart of the forest. The Winchester kicked against his armored shoulder and spat orange fire, tearing a wound in the darkness that

healed almost at once. The razor whirring of wings wiped away the echo of the gunpowder blast; then the swarm was on him.

Faceted eyes, clacking mandibles, wetly glistening abdomens, scabbling legs and wings like blades of ebony; a glimpse, then he was blind. Chitin clattered against his helmet. He reached up with his free hand; carapaces gave under his armored fingers in bursts of pulp and juices. He took a couple steps; then his helmet rang as it struck something hard. He took a step back, felt something—vine, maybe—against his calf, too late, and went down hard on his ass. The breath went out of him. He nearly lost the Winchester, pawed after it with his left hand, and closed two fingers around the barrel.

Something fluttered violently against the palm of that hand. He closed his fist around the gun barrel—"Little bastard," he muttered—and guts sprayed as he crushed the exotic between armored hand and cold steel.

White pain flared in his palm, a hard, shocking cold that rolled up his arm and into his head. Red spots danced in front of his eyes. He clamped his teeth together and gulped stale air. Seconds passed, the pain fading to a dull ache, but one red light remained: a helmet indicator, loss of suit integrity.

"Scott?" It was Lowell, barely audible under an avalanche of sound: skittering exoskeletons and racketing wings, the hammer of his heart and the rasp of breath in his throat.

"'M all right," Braeden said, not sure if she could hear him. He took a deeper breath, held it, then let it out slowly. His pulse slowed. Faintly, he felt the exotics scrambling along the Orion's tough shell.

"Ran into the first line of defense," he said, his throat raw. He turned his head and sucked a mouthful of stale water from the tube mounted inside his helmet. "Something like a swarm of flying beetles."

"I can barely hear you," Lowell said over the exotics' deafening drone. "You're all right?"

"Yeah." His hand ached, cold and throbbing. Through the pain he felt a deeper cold, a taste of arctic air through a minute puncture in ceramic mail and a centimeter of tough padding. "Yeah," he said again, louder, "all right down here." Blindly, he set the Winchester across his legs and brought his hands up to his faceplate. He winced, feeling the tattoo of hard wings against his gloves, and brushed lightly against the mass covering his visor. The swarm's roar surged, then diminished. Dim light penetrated the carpet of oily black carapaces before the darkness closed in again.

"They can't hurt me," Braeden said after a moment, "but they won't let me alone, either. I can't see a damned thing." He felt for the controls set in the suit's right arm and killed his helmet spot. "I think it was my light that attracted them. Hold on." He brushed at the swarm again; pulp smeared his faceplate. "The light's off, but they don't seem inclined to leave."

"I can extract you," Lowell said. "We can figure something out up here. Rip could come along any minute."

"If these things get loose in the ship, they'll eat you alive."

He heard her thinking—the beat of the dirigible’s rotors, the tap of fingernails on her control board, a sigh. Then she said: “One brainstorm coming up.”

He waited for her to say something else, but the open channel stayed silent.

Then it came, felt more than heard, a rumble like thunder that went on and on. It grew louder and behind it came a gust of wind that built to a ceaseless tempest. Beneath the roar, the whirr of wings grew to an angry buzz; claws clattered across slick armor. The darkness brightened; clouds of exotics whirled away, caught up in the wind-blast.

Braeden struggled to his feet, looking up through a faceplate cloudy with slime and pulp to where the forest’s black claws scratched ineffectually at *Punkin Seed’s* underbelly, at the twin props directed downward, rotating not ten meters overhead. Caught in the blades, branches exploded in showers of black shards. Gray dust and gray snow swirled in the propwash. The dirigible bobbed like a trawler in rough seas as Lowell battled the lift the big fans provided. The roar of the props set the forest to trembling.

The thunder lasted for minutes, then diminished. The airship fell upward, no longer a roof across the forest. Beneath it, shattered treetops bled greasy sap. Dust and sparkling black motes drifted down. The wind cried thinly.

“Clear now?” Lowell said across the comm link.

“It worked: they’re gone,” Braeden said. “Thanks for the BJ.”

“Pig,” Lowell said mildly. *Punkin Seed’s* props rotated to face aft and the airship glided up the sky. Braeden took a deep breath and let it out slowly.

Black branches and broken leaves littered the snow. Thin clouds of exotics fluttered aimlessly among the trees, veined wings beating the air. Each was about half the size of his hand, with blunt thoraxes and too many legs. Serrated mandibles worked fitfully; faceted eyes glittered. Gradually, they settled onto the oily tree trunks, wings folded, waiting.

He took the Winchester in both hands, put it butt-first to the ice and, grunting, levered himself to his feet. He stood there for long seconds, swaying, waiting for his head to clear.

Pulp and chitinous fragments clung to the Orion’s smooth black ceramic plates. His gloves were worse, and little better after he scraped them on the heel of his boot. Mouth tight, he washed the Winchester’s barrel with snow. His hand still throbbed; arctic air nibbled at him through the puncture in the palm of his glove. But the hole, in a nest of tightly woven ceramic rings, was impossible to find. He had adhesive-backed kevlar patches in his pack—but applying one to his palm would reduce the glove’s dexterity, and the mitts were already clumsy. With the suit’s heaters, the cold posed no immediate threat. Neither did septicemia—he worked his hand, trying to gauge the depth of the wound—at least in the short term.

Poison was another matter. The intelligence that had developed the cockatrice—and the plague that had

killed Hannah—and the monster that had ripped apart Velcoff and Horowitz—could fashion an effective poison.

But if that were the case, he reasoned, he would be dead already.

“Scotty, are you sure you’re all right?” Even across the comm link, Braeden heard the thread of tension in her voice.

“I said I was,” he said sharply. Then, more evenly: “I’m sure the little bastards are phototropic. If I keep my light off, I should be able to walk right past them now.”

“I think you should let me take you out of there.”

Lowell’s voice was small and distant.

Holding the Winchester across his chest, Braeden started deeper into the wood. The exotics carpeting the tree trunks stirred sluggishly as he passed. His breath sounded loud in his ears.

He threaded his way among the glistening black trunks, checking his helmet’s internal compass display every few dozen paces. East by northeast would bring him to the locus of the contamination, the heart of the forest.

“How about it, sport?”

“Not yet,” he said. “Not until it’s over.”

## 5

The forest closed in, tangled limbs reaching for him out of the darkness, thick vines rearing up to snatch at his legs. Mossy webbing reached down, clinging wetly to his gloves when he pushed it aside. It seemed as if he’d been fighting his way through it for hours, but the helmet display said fifteen minutes since his last contact with Amy.

“You see anything from up there?” he asked, his tongue thick. He took a swallow of warm water from his helmet reserve, and waited. The open channel carried only static.

“God damn it, Amy.” He strained to hear—his ragged breath, his thundering heart, the hiss and grumble of the Orion’s environmental works—but could not hear the rumble of *Punkin Seed’s* props. “God damn it.”

Then something else, a rush of air from somewhere ahead. He looked, but saw only shadows, heard the flap of leathery wings, and a flock of harpies tumbled out of the gloom. He brought up his rifle but they were already on top of him, glittering marble eyes and gaping, needle-toothed mouths. Talons skittered across his helmet; a hairless body hit his shoulder with a meaty thud. Wind whistled as he swung the Winchester, but the walnut stock connected on the backswing, the impact numbing his hands through his padded mitts.

The parasites melted into the darkness as quickly as they had come, wingbeats and shrill cries echoing after. One of the harpies flopped at his feet, struggling with broken wings. He set his boot on the scaly neck and pressed. Bones snapped; the monster spasmed, vomiting stolen blood, and lay still. He kicked the corpse away, biting back on the bile that surged into his throat.

“Son of a bitch.” He sat down heavily, the Winchester cradled in his lap. The wind picked up, drawing a veil

of black dust across the invaders' wood. The darkness had substance, a weight that bore down on him. He let his eyes slide shut.

The dream again: Hannah in his arms, her skin smooth and cool against his, her face bloodless, her eyes blue and aching cold, looking past him, into a distance he could not see. She kissed him then.

Braeden's eyes snapped open. He shivered once all over, gasping. The dream again: That she had not left him. That he had known. That she had waited for spring. That he had really known what it was like for her.

"Hannah," he breathed. His face was damp; licking his lips, he tasted salt.

Sighing, he tried to stand—and fell back heavily. Black vines wrapped his legs, writhing with painful slowness across the Orion's ceramic plates. Slender runners gripped the Winchester's barrel. He scrabbled backward, tugging free of the creepers' clumsy grasp, and stood. The tendrils hunted blindly after him, twisting sluggishly along the ice.

Behind him, then, a deafening crash, the sound of a room full of breaking glass. He started to turn, started to bring up the Winchester, but it was too late.

Shining steel reached out, burnished hide and silver claws. The blow lifted him off his feet, crushing the breath from him. He came down in a rain of black glass, leaves and branches cascading down around him. Warning lights flared inside his helmet, painting the whole world red. He could not breathe; he could not move.

The beast seemed to study him, eyes burning from beneath brow ridges of sculpted steel. The flat muzzle worked, black lips skinning back from the gold daggers of its teeth. It was bigger than it had any right to be, big as a caribou, nearly two meters high at the shoulder, well over a thousand kilograms. It took a step toward him and ice cracked under a massive paw.

The beast gleamed in the semidarkness, metallic scales coruscating as muscle flowed beneath them.

The long, spined tail flicked once, languidly.

Braeden sucked a deep, shuddering breath and rolled to his feet. The Winchester bellowed, the fiery blast lighting up the twilight. The beast ducked as sparks fountained along one mountainous shoulder. Then it raised the huge, ursine head, fixing him with eyes like hot coals. Steam vented from crinkled nostrils.

Braeden worked the bolt—the last bullet in the Winchester's magazine—spun clumsily, the chest pack slapping his armor, and plunged through the trees. He went down almost at once, struggled to his feet, tasting a bright, coppery flavor as warm blood suddenly filled his mouth, and pushed deeper into the forest. Behind him he heard the beast thundering through the woods. He put his head down and ran.

A solid wall of black glass rose before him, a tangle of vines interlacing a row of slender trunks. Braeden hit it full on, the impact carrying him into the brittle web. He struggled, feet clear of the ground, the vines crackling around him. The pack hung up on something, he pulled, something gave and he wormed his way through, into open air and wan sunlight. He fell heavily, squeez-

ing his eyes shut against a burst of bright pain flaring along his ribs. Fresh blood welled up in his throat and into his mouth: at least one broken rib, and a punctured lung.

He winced and rolled onto his back and something shifted under him, clattering. He raised himself on one elbow, wincing, and stared into hollow eye sockets set in a mummified face, blackened skin stretched tight against the skull, mouth split in a hideous welcome. Braeden stood, breathing hard.

The clearing was roughly circular, about thirty meters across, covered by a thin roof of interlocking branches and reefs of moss and vines. Through it, he could see azure sky.

A mat of vines covered the floor of the clearing, hugging the scattered carcasses. Oxen, caribou, wolves—a dozen or more, all in various states of decomposition. There were two sets of human remains, both largely intact. They wore coats, pants and boots of caribou calfskin—residents of one of the Eskimo pastowns, then, although the closest was two hundred kilometers north.

Close by, Braeden heard the sound of breaking glass.

He backed to the other side of the clearing, keeping his eyes on the trees where he'd broken through. One bullet left in the Winchester. But he'd known from the start that bullets wouldn't kill the beast. He slung the rifle over his shoulder, reached for the chest pack—and found nothing but two dangling straps.

He looked down, where four parallel grooves ran along the Orion's sleek black carapace, white gouges starting on the lower left side and extending to a point over his heart. The beast must have torn the straps—he was lucky, or not, that the charges hadn't gone off on impact—and the pack was lost somewhere in the woods.

Taking another step back, he felt the trees and vines that ringed the clearing pressing up against him. The barrier gave . . . but only a few centimeters, and no further.

He brought the Winchester up to his shoulder and looked down the barrel, across the front sight. His pulse throbbed gently in his temples. His breath started to come harder now, as one lung filled with blood, but that was all right, he had enough air for now—and there was only now.

"This isn't the end of the world," Hannah would say, "but you can see it from here."

The corners of Braeden's mouth twitched—then he sighed, and smiled.

Ahead of him, the forest burst apart in a blast of ice and glass and steam. The monster bounded into the arena, head down, eyes like torches in the sudden haze of snow and coal dust. It seemed to fill the clearing, grand and magnificent, no accident of this or any other nature but a manufactured piece. Its mouth yawned wide, a silent bellow, and light poured down along its golden teeth. Braeden sighted on the beast's flattened muzzle. If it tilted its head back, he might be able to put a shot through the roof of its mouth and into where the brain might be.

Behind it, the wound it had torn in the forest was already healing, vines stretching, slim trunks bending to fill the gap. And amid the tangle, the plaits of moss and

oily trunks, his canvas pack hung by a torn strap from a broken branch.

The monster's head tilted back, black tongue lolling. Muscles bunched, dim light running like water across silvered scales. It sprang.

The Winchester kicked against Braeden's shoulder.

The .458-caliber slug tore through canvas and inertial plastic as easily as it had split air, flattening against the half-kilogram slab of Surtur-7.

The charges went off one right after another, hot white light burning through the haze of dust and ice. A fireball blossomed out of the twilight, silhouetting the beast, and behind it the black forest blew apart. The concussion punched him off his feet and set him down hard. Another fireball bloomed as a couple ribs gave way completely.

Slivers of black glass rained down around him. With it, slabs of carbonized meat, splinters of bone. When it ended, wings whirred across the thunderous silence; black swarms boiled up from the wounded forest, staining the sky. When that ended, too, there was only the dream again.

She put a hand to his face, her fingers cool and smooth. She smiled, her lips red against a bloodless face, her eyes shining with a light he had seen so many times before.

"Welcome back," Braeden whispered. "Welcome home, angel."

## Epilogue

He came awake all at once in the long twilight, his breath caught in his throat and her name on his lips.

"Easy, lover." Lowell sat on the edge of the bed, reached across his chest, and took his right hand in hers. Her unruly blonde hair brushed his cheek as she bent to kiss his forehead. She straightened, a strained smile on her face. "I'll start calling you Rip Van Winkle, too."

"How long?" Braeden said indistinctly. His mouth was impossibly dry.

"Four days." Her smile wavered. "I came to see you yesterday. Do you remember?"

"No." This time no sound came out, only breath.

"Your pretty suit will never be the same," Lowell said. "But you will, in time. Just hitting the high points, now: a cracked skull, broken ankle, seven broken ribs, punctured lung, bruised kidneys." Her eyes filled. "And they couldn't save your hand, Scott."

"Okay," he said. "Get a new one." He looked down across his body, where the sheet lay across his chest, his arm, and the place where his left hand should have been.

"Yes, they'll get you a new one as soon as you're stronger." She stood abruptly, and he winced. "Do you want anything?"

"Water." He looked out across the room, the sculpted monitoring panel, the pastel ceiling, the far wall, a window that gave onto low hills carpeted with flowers and rich green grass. Delicate strokes of cloud painted a painfully blue sky.

She brought him a glass of water, helped him sit up to drink it. When he had finished, he said, "Edmonton?"

"Yes." She took the glass from him.

"Knew I'd seen the place before," Braeden said. "Hannah and I used to come here all the time, before they gave up on her." He looked out across the plain again. The hospital was entirely underground; the hologram was flawless.

"I know." Then she said, "The Surtur blew a hole in the canopy. I put *Punkin Seed* on a short leash and went down to get you. Do you remember any of that?"

He shook his head. Then he frowned, and smiled, and said, "I'm not really sure."

"Just as well. I wasn't too goddamned happy with you." Her mouth tightened. "Christ, Scott, what the hell were you thinking?"

Braeden started to sit up again, on his own, then fell back, gasping, as pain flared all along his side.

"Don't push it," Lowell said neutrally.

He nodded, catching his breath. In a few moments the pain had passed. "What I was thinking," he said. His eyes met Lowell's.

"She woke up before I did that morning," he said. "That didn't happen often—nothing could disturb her when she was sleeping, no sound, no movement, no smell. 'Sleeping like the dead,' she used to say." He smiled a little.

"So she got up that morning, and saw the storm blowing against the walls. Maybe something had happened during the night—maybe her sight had started to go, too. She knew that would come someday. Or maybe it was just the start of one too many bad days."

"Scott—"

"So she looked out at the storm, maybe put her hands to the wall, and she couldn't feel the cold, or the wind making the glass tremble. She felt nothing. She looked back at the bed, at me, and felt nothing. And she wanted to feel something. The wind. The cold. Anything."

Lowell watched him for a moment, then turned away. "They're springing up all over," she said. "Forests, new monsters, spreading like cancer. We've lost contact with a couple of the colonies, too. You were right: it's the war all over again. The Portal's gone, so they took the long way back."

"The weapons have been under the ice," Braeden said, "reconstructing themselves, adapting to us and our weapons, getting ready for the second go-round. We'll see what else—"

"What if she had lived, damn it?" Lowell turned back to him, her face wet. "What if you had found her, brought her back home?" Her eyes were blue and shining, like pack ice. "What about you, now that I've brought you back home?"

"I'll stay with you, Amy," he said. "For a while."

Braeden stayed with her for the day that lasted months, but when night came she awoke alone in the bed, still warm from his warmth. He took nothing but the Winchester she'd given him a long time ago. "Gone hunting, lover?" she whispered.

Lowell went to the window and looked out across the top of the world. There was a storm gathering below the horizon, but the sky was black and clear. It stretched on and on, forever. ♦

# AMAZING<sup>®</sup> STORIES

## Back Issues: Some old, a few new

The AMAZING<sup>®</sup> Stories “garage sale” that began four issues ago, with an announcement in the December magazine, has been pretty popular. Practically all of the back issues that were in short supply to begin with are sold out.

BUT: We recently found a *few* other issues that weren't on sale earlier—magazines from 1980 and 1981, plus a couple of copies of an old issue of *Fantastic Science Fiction* dating from the same period. This month's listing of available issues includes those newly discovered treasures, so even if you've seen the list before, it might be worth your while to check out this new, improved one.

ALSO: For the first time, this list includes six paperback anthologies that were produced by TSR, Inc., in 1985 through 1987, reprinting many classic stories from older issues—a great way to pick up a representative collection of what was being printed in the good old days.

All of the anthologies and most of the magazines are in mint condition. Among the copies of any particular issue, the magazines in mint condition will be sold first, so the sooner you place an order, the better the condition of the issues you'll receive. Every magazine carries a money-back guarantee—if you aren't satisfied with the condition of an issue you receive, or if your order isn't what you expected for any other reason, send us the merchandise you don't want and we'll reimburse you for the price of the item(s) plus the return postage.

Magazine prices vary according to age, with the older issues costing less than the newer ones (because the cover price of the older magazines was lower). Each group of issues carries a price at the head of that section.

After you've totaled the prices for the magazines you want, add on a postage charge of

\$1.00 for the first issue and 50¢ for each additional issue up through the tenth one. If your order is for more than 10 magazines, you don't pay any additional postage charge.

Of course, we also have copies of the new-format issues available. They're priced at a flat rate of \$5.00 each, which includes postage. (Prices for the anthologies also have postage costs built in.)

To make an order, write out clearly and legibly the magazines you want, calculate the total cost, and enclose a check or money order for that amount. Send your order to the magazine's business office (P. O. Box 111, Lake Geneva WI 53147). All orders will be shipped via third-class mail or UPS within two days of receipt.

Please notice that practically every magazine we have for sale that's dated January 1990 or earlier is in *very* short supply. And take into consideration the fact that this information is being prepared about 30 days before this issue of the magazine will be mailed to stores and subscribers. In that intervening month, we expect that at least some of the issues from the 1960s and 1970s will be bought by people who ordered merchandise based on the list in the February magazine. If we can't fill your order because of sold-out issues, we'll reserve for you the issues we can sell you; then we'll send back your check or money order and ask you to send us exact payment for the items we can provide for you.

As an option, you can ask to receive one or more of the anthologies as a replacement for back issues that might be sold out. If you like this idea, just tell us the anthologies you'd like to have, in order of preference, and we'll make sure that you get your money's worth.

# June 1967 through November 1988

— \$1.25 each —

## June 1967 9 copies

*The Mad Scientist* by Robert Bloch; *Project Nightmare* by Robert Heinlein; *The Builder* by Philip K. Dick; *The Heaven Makers* (Conclusion) by Frank Herbert

## April 1968 19 copies

(Cover says June 1968) *Send Her Victorious* by Brian Aldiss; *The Mechanical Heart* by H. I. Barrett

## July 1968 19 copies

*House A-Fire* by Samuel R. Delany; *Locked Worlds* by Edmond Hamilton

## March 1970 7 copies

*Trial By Silk* by Christopher Anvil; *I'm Too Big But I Love to Play* by James Tiptree, Jr.

## May 1970 9 copies

*The Balance* by Terry Carr; *Blood of Tyrants* by Ben Bova; *Nobody Lives on Burton Street* by Gregory Benford

## September 1971 12 copies

*What Time Do You Call This?* by Bob Shaw; *The Living Mist* by Ralph Milne Farley

## September 1972 38 copies

*Fat City* by Ross Rocklynne; *Deflation 2001* by Bob Shaw; *Proof* by F. M. Busby

## January 1973 51 copies

*The Ascending Aye* by Gordon Eklund; *Night Shift* by George R. R. Martin; *On Ice* by Barry N. Malzberg

## June 1973 2 copies

*Adventures of the Last Earthman in His Search for Love* by Robert F. Young; *Seed* by William Rotsler; *Trullion-Alastor: 2262* (Conclusion) by Jack Vance

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*To Walk With Thunder* by Dean McLaughlin; *The Once and Always War* by Gerard F. Conway; *Up Against the Wall* by Robert Thurston

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## July 1977 3 copies

*Nobody Home* by F. M. Busby; *Odds* by Christopher Anvil; *Social Blunder* by Tom Godwin; *Spectator Sport* by Steven Utley

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## August 1978 6 copies

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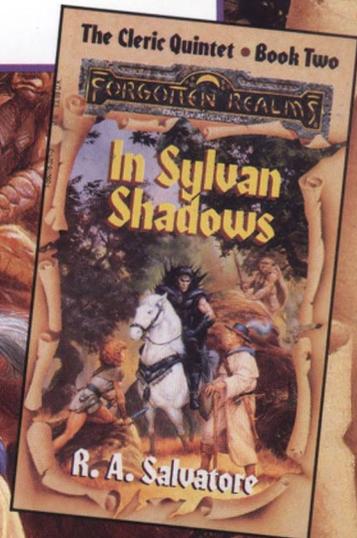
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