InterText

INSIDE: Phil Nolte, Robert Hurvitz, and more!

Contents

Cover Illustration by Mel Marcelo

First*Text*

Jason Snell

I'm back. Did you miss me?

Well, probably not. But that's okay. It's still hard for me to visualize the fact that *InterText* goes out to over a thousand people every other month. And you're sitting there, reading this. *InterText* will be a year old with our next issue, and we've got subscribers in such far away (from me here in San Diego) places as the Soviet Union, Australia, Germany, Britain, Brazil… and, closer to home, Mexico and Canada. All over the world. *Yikes.*

In a way, this issue marks a bit of a change for the magazine. It's the first issue where one of my own stories hasn't appeared (a good trend in that we had enough to fill the space without my help… but beware, because I might have another one in the pipeline…) and also the first time Greg Knauss hasn't made his twisted presence felt within our pages.

Dear old Greg, who has written for magazines with a much larger circulation than this (he's been in maybe a dozen Atari computer magazines) is fresh out of stories. Well, I've got some older Knauss stories that I could dredge out of the slime pit, but it's not worth it. I can only hope that he comes up with the stamina to write a new story someday. Right now, he's getting over the fact that his *Star Trek: The Next Generation* script, "The Cortez," was rejected. He says that at least the ST:TNG people *read* the thing. He and I are now finishing up (we hope) our own ST:TNG script (how do I get myself into these things?), titled "Chain of Command." It's brilliant, exceptional, wonderful, amazing… oh, sorry. Got a little carried away there.

I'd also like to welcome Phil Nolte back to the fold. Phil, who didn't have a whole lot to do with this issue because of my poor planning, still managed to contribute a story, "Slice of Mind." Phil has moved west from North Dakota, and now resides in Idaho. I'm glad he's back.

Our cover this issue is, well, you could call it minimalist. In fact, my dear assistant editor Geoff Duncan (who has done lots of great work for this thing and doesn't get enough credit so I'm going to devote this entire parenthetical expression to him… Hi Geoff!) refers to the cover as, well, clip-art. I don't know about that… I like it. I was tempted to headline this issue "THE CLASSY INTERTEXT ISSUE"… but fortunately I refrained.

I did have a cooler Mel Marcelo cover, one with a spooky haunted house, but it's after Halloween and the thing would have made this issue's PostScript version run almost one megabyte in length. No thanks. So the lovely dancing couple it is.

Funny how theme issues almost seem to come together by themselves. All the stories in this issue have something to do with employment. We have a first-day-on-the-job story ("An Ounce of Prevention") from Michael Ernst, a job interview story ("Experience Required") from returning writer Robert Hurvitz, a story about someone getting fired from his job (the aforementioned "Slice of Mind"), a story about someone being reconditioned into a new profession ("The Rebel Cause" by Michel Forget), and a story about a guy who finds an easy solution to one of his problems at work ("The Scratch Buffer", by Steve Connelly).

I should say something else about Connelly's story: it may be a bit obscure, but I find it extremely funny. Since this is a magazine distributed through computer networks, I decided to put it in. I hope that those of you with minimal computer experience can still appreciate some of the humor in the story's situations, despite perhaps not understanding all of the jargon or references. And for those of you with newsgroup reading experience or experience working with large computers, this one will be right up your alley.

This is a strange time for we computerized magazine editors (wait, that sounds like I'm Max Headroom or someone…) — both myself and *Quanta*'s Dan Appelquist are college seniors. We're both going to graduate within the next six months (him in December, me in March). I'm unsure what Dan will do upon graduating, but I assume that *Quanta* will remain around. As for me, well, I'll still be in San Diego through June (my duties as editor in chief of the campus newspaper require this of me), and then I don't know what will happen. My plan is to go to graduate journalism school, in which case I'll probably have one more year of net access (at Columbia or Northwestern, if I get in…) or two years (if I go to UC Berkeley). So hopefully I'll be able to produce *InterText* until mid-1993. If not, we'll just have to find someone else with net access and the will to do this fun, fun job. I hope that when I do disappear from the net (though I also hope that I *never* disappear), *InterText* or something like it will continue — even if it's in a different form. We shall see.

Final trivia for those of you still with me: you who have PostScript will have noticed that my photo has returned to the top of the page. I re-scanned the sucker in the right way, and it takes up very little space in the document. And for those of you reading the ASCII version, consider both this and my earlier references to our cover as plugs for the PostScript version.

That's all from me. Until 1992, I wish you all well.

An Ounce Of Prevention

Michael Ernst

Flats or heels? Melissa stood, hands on her hips, and looked into her closet. Today would be her first day at a new job, so she wanted to look good, but they had seemed pretty casual when she'd interviewed last week, but on the other hand (or was this the first one again?) it was better to be overdressed than underdressed, which was in turn better than undressed, which she was now, and she had to leave very soon. Melissa shook her head to clear the nonsense, added a pair of low heels to the outfit she'd chosen the night before, and rapidly completed her toilet. She was on the road in twenty minutes; half an hour after that she reported to the personnel office of the McCarthy Research Institute.

By the time she had completed a pile of paperwork, signed a nondisclosure agreement, heard lectures about her benefits and the importance of safety and the amount of time she was permitted to spend in the bathroom, been perfunctorily poked by bored doctors while describing her childhood diseases and inoculations, received a badge featuring her bug-eyed picture, and found her way to the building where she would be working, it seemed like days had passed. Mr. Hutchins ("call me Frank") took her to lunch at the company cafeteria. All of the food looked like plastic; Melissa finally decided on a garden salad, which, she surmised, couldn't be ruined too badly.

After they'd taken their seats, her boss spoke affably around bites of a Super Combination Burrito. Melissa tried to keep her eyes off the burrito and on his face, but her eyes kept straying back to it as to the scene of a terrible accident. "I assume you've already run the personnel gauntlet this morning." Tempted to roll her eyes, Melissa permitted herself a nod and a small smile. "Did the bald guy with the tufts of hair sticking out of his ears tell you all about our swell insurance plan?"

"No, it was a woman."

"Ah, the Dragon Lady. Stocky, severe-looking, flinty eyes, always wears a suit she bought in 1953." Melissa nodded. "They say she smiled once, but that was before I started working here." Melissa tried to remember whether his yellow badge indicated between five and ten years of tenure or between ten and fifteen. Her own was a gaudy green which didn't go with her outfit at all.

"Do you have any questions about McCarthy, or about the NDE group in particular? Last week I was so busy finding out how fast you could type and whether you knew the difference between a mouse and a rat, and which is which, that I didn't have much time to fill you in on other details."

Melissa asked apologetically, "What exactly *does* your group do?" She threw out one of the few academic-sounding terms she knew. "Is it pure research?"

Frank shook his head. "No, I don't think you could say that. It's about 80 percent research, and 20 percent playing practical jokes on one another." Melissa smiled wanly in response to his self-satisfied smirk and thought that, unpleasant as her last job had been, perhaps it had been a bad idea to resign with such finality. Fortunately, Frank's style settled down once he'd started talking; with an indulgent smile he left off his attack on the burrito and did his best to explain his group's *raison d'être*. Meanwhile, the grease pooled at one end of the oblong dish. Melissa tried to pay attention to what he was saying instead of wondering how long it would take the runoff to congeal and whether, if one were to pick up the burrito afterward, the solidified fat would stick to it like a waxy base.

"NDE stands for Non-Destructive Evaluation; we investigate ways to test substances and devices without damaging them. A lot of tests are like striking a match to evaluate it. Sure, you find out whether the match was good, but it is worthless afterward, and that experiment tells you nothing — except in a statistical sense — about other matches." Frank explained that this method wasn't good enough for their customers. Melissa nodded attentively at breaks in the monologue and decided that eating her salad would take her mind off Frank's food. She was wrong.

Frank went on to discuss the NDE philosophy in greater detail (Melissa slipped her feet out of her shoes, wished she'd chosen the flats after all, and thought about what she would wear the next day; she owned so little clothing that went with green) and to stress that although their testing was non-destructive, they did work with some dangerous materials and that safety concerns were of paramount importance. Melissa solemnly agreed and wondered where on earth he'd gotten that tacky tie. He went on about his group's fine record of safety and the elaborate precautions that were standard practice. His earnest sincerity about these safeguards was a strong contrast to the ennui of the morning lecturers, whose soporific delivery of rote material had left her with a sluggish feeling, as if she'd had a bad night's sleep. Frank seemed like a nice guy, even if he was a little out of it and had a sadly stunted sense of humor which brought to mind

a plant left too long without sunlight. He was by turns sensitive to those around him — he was attentive enough when he stopped talking long enough to ask Melissa a question — and wrapped up in technical concerns. A typical engineer.

Eventually he outlined Melissa's duties. Her primary objective — he made it sound like a hill about to be assaulted by a company of Marines — was to run interference with the bureaucracy so that he could do "real work." She was relieved that she was not expected to fetch coffee or make eleventh-hour telephone calls to locate a babysitter. Sick of running her last boss's errands, she had begun to encourage tradesmen's frequent misconception that she was his mistress. "Are these the shirts that Brian's wife dropped off or that I did?" she would ask the young man at the dry cleaner's. "It wouldn't do to mix them up," she'd add with a lascivious wink, then saunter out, hips swaying. The rumor didn't get back to her boss's wife before she quit, but she hoped it did afterward. She smiled, and Frank thought that she was responding to his feeble joke about keeping a capacitor from charging by taking away its credit cards. He had finished his burrito, and the pool of discolored, oily fat had disappeared as well. Frank remarked on her half-eaten salad, but Melissa said she wasn't very hungry.

"Don't worry overmuch about your productivity at first," Frank said as they walked back. "Just get the feel of the place and meet the people. I'll ask the group members to introduce themselves and to make you feel at home." He muttered something about a test that afternoon, and Melissa imagined a room full of managers in shirtsleeves and pocket protectors seated at wooden desks, brows furrowed and tongues sticking out of the corners of their mouths as they filled out bubble forms with their #2 pencils.

Frank pointed out Melissa's desk, which sat bare and forlorn in a fence of waist-high partition walls like an empty doghouse in an abandoned backyard. Frank's office was just the opposite. Papers were piled on every surface except the chair, computer keyboard, and cappuccino machine. Books lay propped open under half-full coffee mugs, boxes made the entrance nearly impossible to negotiate, and Post-It notes wallpapered the area near his desk. Melissa instinctively recoiled. "Don't worry," he assured her, "I'll never ask you to search through here. Besides, if you were to try, you'd probably mess the place up so that *I* couldn't find anything."

Melissa spent the next few hours raiding the supply room, organizing her desk, acquainting herself with the computer, and meeting people who came by to welcome her. The phone rang rarely, and Frank was out some-

where, so she figured it was okay to just sit and read about policies and procedures, computer programs, requisition protocols, company picnics, executive perquisites, and parking permits. Whenever she leaned back to take a break, her eyes were caught by a ludicrous poster of a rabbit with a shocking pink Band-Aid on one of its ears. Frank had pinned it up in the hallway, and its legend read, "Only A Dumb Bunny Thinks Safety Is A Matter Of Luck. Make '91 A Safer One. MRI." Around midafternoon, when she was poring over a manual which, on first glance, had appeared to be written in English, she noticed a lanky red-haired fellow leaning against the low wall of her cubicle; he was staring appreciatively down her blouse. He obviously approved of her Maidenform's delicate scalloped edging of sheer patterned lace, but had he noticed the satin center bow and the exquisite faux pearl detailing? Did he realize that its comfortable-yet-firm support was perfect for every day? Melissa straightened and offered a hello.

He raised his eyes to hers. "Hi. I'm Josh McCarthy," he said with an excessively friendly smile, offering his hand to be shaken. At least he had a firm grip. "No relation, or I wouldn't have to work for a living. You must be Melissa Sweedler." He reads well, thought Melissa, but then checked the uncharitable thought. Perhaps she ought to give him more credit: while he *had* been looking straight at the name badge dangling from her blouse pocket, he probably hadn't even noticed it. "Welcome aboard; are you getting settled in all right?"

"Well enough, except for having to read these manuals." Melissa gestured wearily at a heap of documentation whose covers proclaimed in bold letters their ease of use. "I think it's hopeless to try to squeeze myself into the mind of a technical writer; it's too cramped a fit."

Josh frowned. "I'm a technical writer myself — that one's mine." He pointed to one of the books in the pile, and Melissa blushed. Just when she was starting to get comfortable with these people, she had to put her foot in her mouth, which was particularly painful with heels. He rushed on. "Maybe I could help you get in the right frame of mind later. Over lunch tomorrow, maybe? For now, however, you should take a break. Would you like to experience an explosion?"

"An explosion?"

Josh nodded, then contradicted himself. "We're testing a blast containment system, and if it works — which it will — there won't be anything to see. But it's a good excuse to take a break and get outside. It's a beautiful day out," he added. It was indeed a lovely, cloudless day: when she'd searched for this building, a cool breeze had ruffled the trees' leaves with a gentle rustling and the

promise of a delightful evening. Melissa was tempted, but she hesitated to leave her post. Josh looked puzzled and continued, "The whole group will be there, so there's no particular reason for you to stay here. Frank said he had invited you to watch."

They walked out past the senior secretary, a timid-looking old creature with short white hair, wide startled eyes, lips in a perpetual moue beneath a downy moustache, and tacky pink earrings. She declined to come along but agreed to answer Melissa's phone if it rang. "I've seen enough of these boys' pranks; I don't need that kind of excitement." When she shook her head, her ears waggled, and she looked exactly like the bunny in the poster. Josh didn't seem too disappointed that she wasn't accompanying them.

"I thought this was the *Non*-Destructive Evaluation group," Melissa said as they emerged from the building. "Why are you setting off an explosion?"

"One of our projects is the validation of blasting caps; the dangerously unstable ones are kept in a big steel box, and we're verifying that it's strong enough to be trusted." The weather was as pleasant as it had been before, and while the day was sunny, it wasn't uncomfortably hot this early in the summer. "The caps are detonated electrically, and we test them by running just a trickle of current through them." Josh went on about knees in characteristic curves and criteria for discarding bad caps; Melissa wished she was reading one of the relatively clear manuals instead. She looked appreciatively at the grounds, which were like a campus with their scattered buildings and grassy lawns, and wondered how many people were employed full-time just tending the greenery.

"If the robot arm detects a bad cap, it drops it in a glorified safe. The safe has a capacity of one hundred caps, and it has been rated as capable of withstanding considerably more powerful blasts; our group has certified the plans as well, and in fact Frank had a hand in the design. We're paranoid — well, Frank is — so we're testing the safe ourselves, just to be sure. It's a waste of time and money, if you ask me, but no one does."

Melissa made a noncommittal noise, and as they walked along Josh continued to chatter, periodically bobbing forward to catch her eye, which made Melissa feel obliged to nod at whatever he was saying at the time. She warded off his questions about where she lived and what she did on weekends. After what must have been only a few minutes, Josh pointed out, off to their right, an enormous wheel and rubber tire. It was mounted over an even larger metal drum which resembled the wheel of an asphalt roller on steroids; more machinery poked at unlikely angles from a gantry. "To test landing gear, we rev the drum up to five revolutions per second and then slam the wheel against it, to simulate a plane landing at 200 miles per hour. You can hear the reverberations a mile away. We repeat it until the landing gear breaks." Melissa began to realize that to these university-educated engineers, "non-destructive" meant something very different than it did to her.

At her look — she hadn't realized her reaction was so transparent — Josh held his hands up in mock-defense. "Yes, I know it's not exactly non-destructive. But it's not destructive to the airplane, and besides, we have lots of extra landing gears. For some reason, our clients find it more convenient to send us dozens of whatever we need than to ask us how many we want and just ship that many. We end up having to store piles of the stuff." Melissa nodded; while Frank's office was by far the worst offender, she'd noticed crates and boxes scattered through the hallways and piled in unused offices, and one of her new keys — her key ring now resembled a mace — was to their warehouse.

Soon they reached the test site, where a number of people were engaged in animated conversation outside a low, bunker-like concrete building. Frank was conferring with someone from Facilities, but when he had finished, he walked over briskly. "Melissa! I'm so glad that Josh brought you along. I would have myself, but I've been here for hours and you would have been bored. Have you met everyone?" He made introductions, chided the onlookers for turning a scientific experiment into a spectator sport, and went off to quadruple-check the arrangements. Melissa chatted idly with the cluster of people while wire was strung from the shelter to a field where the safe sat, looking like a child's toy at that distance.

Melissa was handed a blasting cap: a dud, Josh assured her, if its current-voltage curve was to be believed, but he warned her not to drop it just the same. It seemed remarkably light — about an ounce, her postage-meter-trained fingers gauged — to be causing such a stir. "It's an experimental type that is more powerful than older caps and so able to detonate more dynamite," someone said.

Shortly Frank shooed them all inside, where they gathered at the tiny, shielded windows. "I give you an hour off work, and act like a bunch of kids at the circus," he said in mock exasperation. He activated the detonator and continued without pause, "There's nothing to see."

He was cut off by a tremendous roar. The safe was tossed into the air and a hole appeared in its side. Then dirt occluded the view from the shelter, and the group remembered to take a collective breath. After the dust had settled down, Frank led the way outside. Debris was scattered all around; some pieces of shrapnel had nearly reached the

bunker. The safe, its thick metal sides bent and torn, was lying half a dozen paces from a deep new crater. Frank shook his head and kicked at a clod of dirt. "They certified this safe.'' Melissa thought about telling the Dragon Lady she'd changed her mind and would buy some insurance after all.

The failure of the safe did little to dampen the onlookers' spirits — in fact, most of them found it hilarious. They talked and laughed on the walk back to their building, and Melissa became increasingly comfortable with them; she didn't even mind Josh's continued flirting. Well, not too much. She decided that she was going to like this job after all. When they went inside, they received grins and questions about what they'd been doing. "That was even louder than the landing gear," said those who hadn't come along.

Frank was an exception to the general mirth. He seemed disappointed and somewhat preoccupied. When the group members had returned to their offices, he paused at Melissa's desk. "Melissa, I'd like you to take a memo to Facilities.'' He glanced at his watch, hardly noticing her poised pencil. "You probably have just enough time to walk it downstairs before they close for the day. Ask them to take away, first thing tomorrow morning, the two thousand extra blasting caps I've been storing in my office.''

MICHAEL ERNST   mernst@theory.lcs.mit.edu

Is a graduate student in computer science at MIT. He knows the difference between Trinidad and Tobago, and which is which.

Experience Required

Robert Hurvitz

Mr. Peterson glanced one last time at the worthless résumé before feeding it into the paper shredder mounted on the edge of his desk and directly over the trash can. "What a complete and utter waste of my time," he muttered. Before opening the next file, he jotted down on a Post-It note a quick reminder to give the recruiting office a severe verbal lashing.

He punched the speaker-phone, said, "Send in the next supplicant, Karen," and cut the connection.

As his office door opened, Mr. Peterson looked up from the new résumé and asked, "Daniel Smith?" Smith nodded. "Sit down, Danny." Mr. Peterson motioned to a leather armchair in front of his desk. "I hope you don't mind my calling you Danny. My two-year-old son is named Daniel, and he likes to be called Danny."

"My mother calls me Danny," said Smith.

"I see," said Mr. Peterson. He looked back down at the resume.

"How shall I address you, sir?"

"Mr. Peterson will be fine. What makes you want to work for All Edge Systems, and, more importantly, why do you think we'd even want someone like you?"

"All Edge is the best company out there, and always will be. I will not compromise my professional integrity by working at a second rate business. I know that All Edge Systems wants only the best men working for her, and, to put it simply and plainly, I am the best."

Mr. Peterson regarded Daniel Smith. His short blond hair was moussed back in a stylish wave. His pale blue eyes glinted self-confidence, ambition, and that unmistakable killer instinct.

He was clad in a dark, pinstripe, Pierre Cardin two-piece suit with matching power tie. His legs were crossed, and Mr. Peterson could see that although his shoes shined as if they were brand new, the worn sole clearly showed them to be many months old.

"Did you notice the fellow who was in here immediately before you?"

A look of disdain crossed Smith's otherwise fine features. "Unfortunately, yes. A pathetic excuse for a man. But I was heartened to see him run from your office in tears. May I ask what it was you said to him that caused such a delightful reaction?"

"No, you may not." Mr. Peterson read a few more lines of Smith's brag sheet and raised his eyebrows slightly. "Your resume claims that you just received your M.B.A. from USC. I'm a Trojan man myself. Class of '83. Tell me, is Professor Green still teaching? He was my undergraduate advisor."

"Oh yes, Green's still around. Was he just as senile back then?"

Mr. Peterson smiled. "He had his occasional moment of lucidity. He's a homosexual, you know."

"Yes, I took a class with him."

They stared at each other for a few seconds.

"Are you married, Danny?"

"Engaged."

"I see." Mr. Peterson read over the rest of the resume. "I assume she would not divide your loyalties?"

"Of course not, sir. All Edge Systems would have me first and foremost. I would not have it any other way." Smith crossed his arms. "I did not choose my fiancée on some foolish whim."

Mr. Peterson closed Smith's folder and placed it on the desk. "Needless to say, Danny, I'm quite impressed with you. However, I don't think that you're properly suited for the job. Frankly, I don't much like your tie. Thank you for your time, and you know where the door is."

Smith squinted his eyes. "Excuse me, sir?"

"Vacate my office, or I'll call security."

"Mr. Peterson, I don't believe you know how much this job means to me." He reached inside his jacket, pulled out a .357 Magnum, and aimed it steadily at Mr. Peterson's chest. "You will give me the job. I will settle for nothing less."

Mr. Peterson smiled broadly, showing his teeth. "I like your style, Danny-boy. Congratulations." He leaned forward and punched the speaker-phone. "Karen, politely tell the other prospectives to fuck off. We have our man."

ROBERT HURVITZ hurvitz@cory.berkeley.edu

Is a senior at UC Berkeley. He wrote this story at the request of a friend who was in severe pain and 2,000 miles away. He has previously appeared in both *InterText* and *Quanta*. Not much is happening in his life at the moment, but he hopes this will change soon.

Slice of Mind

Phil Nolte

"Have you ever really thought, I mean really thought, about thinking, Schultz?" Crawford asked me. The question took me utterly by surprise, seeing as how the time was somewhen way beyond my normal bedtime and my thought processes were, to say the least, somewhat different than normal. Crawford and I had sought refuge in a back corner of the small, dimly-lit, smoke-filled apartment. The mindless drum machine-thumping of one of those awful candy-rock groups with the pouty-voiced, pre-pubescent female lead singer blaring on the stereo wasn't helping my ability to think much either.

"Sure, I've thought about it," I said. "The whole concept is kind of mind-boggling, if you get my drift." One side of Dr. Nathan Crawford's lip curled up in a half-smile, half-smirk at my half-assed attempt at a joke. I took a pull on a light beer that was, by now, much too warm to be drinking.

"That's good, Schultz," he said, "but I'm serious. Tell me, if you can, what exactly is a thought? Where do ideas come from? The human brain is only another organ like a liver or a pancreas, after all. Why don't we have a better understanding of it?"

I shrugged. This sounded like a good discussion topic, the kind you could get your teeth into. "Can we get out of here, Doc? This party is about to break up anyway." He looked around the hazy room, noticing that most of those still present were paired up and oblivious to us anyway. He nodded and got up. I left the rest of my wretched beer on the end table. We headed for the little all-night coffee shop on the corner, a couple blocks away, just off campus.

Crawford was one of those young profs who liked to spend time with the students, after hours, away from the classroom atmosphere. A few drinks — on rare occasions a toke or two — a little music and everyone tended to let their hair down. Crawford really got into that kind of stuff. The discussions often got real interesting. He hated the comparison, but I always thought he looked like a slightly taller version of Richard Dreyfuss. He even had the animated gestures, the intense facial expressions and the Van Dyke beard.

I was a Ph.D. student in Zoology, the same department as Crawford, but I hadn't gone to the party seeking esoteric conversation. I was looking for something more basic: female companionship. As usual, having gone looking for it, I hadn't found it. Not for lack of trying, mind

you. But then, I'm sort of a Maynard G. Krebs look-alike so I've gotten used to it. I settled for the next best thing: the esoteric conversation — at least it was with somebody smarter than I was.

We settled into a well-worn red vinyl booth and ordered some onion rings and coffee — a couple of things that the little restaurant was famous for. The coffee came right away. Crawford blew gently across the surface of the hot, dark liquid and took an exploratory sip. It was like that was all he needed to get back in gear. He picked up the thread of our previous conversation just about where we left off.

"What this thing we call 'the mind' anyway?" he asked rhetorically. "When you see something or hear something or touch or taste or smell something, the brain reacts in some way. Thoughts are the result. How do they happen?" I shrugged. He paused for long enough to take another sip of hot brew. "I'm not sure, either, but think of this: it all goes on inside your head, inside a space about the size of a softball. It may not sound too romantic, Schultz, but tonight when you were trying to make time with that buxom little junior, it was ultimately her brain you had to communicate with, wasn't it. One rough-surfaced softball-sized organ to another!"

"I don't know, Doc," I said, smirking, "I'm pretty sure it wasn't her brain I was interested in!"

"There will come a time when your thought processes are free from the influence of your hormones, Schultz. I pray, for your sake, that the day isn't too far off!"

I decided to get a little more serious. The short walk in the cool night air and a cup of black coffee had done wonders for my head. My mind had cleared. Besides, grad students just love to cross wits with profs. What the hell, I thought, I might even learn something!

"So how would you go about studying the mind and thoughts and brain function, Doc? Like, where would you start?" I asked, sensing that he was really into the subject and only a little priming was needed to set him off. I was right.

"Naturally, there would be real value in comparing abnormal brains with normal ones." Our onion rings came. The air was filled with the wonderful, sinful aroma of golden-brown breading crisp-fried in oil.

"You mean like comparing college students with insurance salesmen?" I asked, as I handed him the catsup. He chuckled, took the offered bottle and poured a large, red dollop on his plate.

"Yes, Brian, but don't forget that there's another end of the spectrum. One could probably learn more by studying the very intelligent. Of course, some of that work has already been done. Broca's brain is preserved in a jar.

So is Einstein's."

"Broca?" I asked.

"Paul Broca. He was a French scientist who did the pioneer work on human brain function. The speech area of the brain is named for him. I'm surprised you haven't heard of him." I shrugged, Crawford continued. "Believe it or not, the scientists who studied those very special brains found little to no difference between them and that of a 'normal' human." He paused and selected the largest onion ring from the basket, dipped it in catsup and then held it suspended above the plate between his thumb and forefinger while he made his next point.

"Perhaps the strangest case of all is that of Vladimir Lenin, the Soviet politician and leader. After taking Lenin's brain out of his skull, his doctors used standard tissue techniques to preserve it and then proceeded to slice it up into sections, some 30,000 of them." He smiled, and bit into the crisp golden circle. He watched me for my reaction.

"Wow!" I said, around a mouthful of the succulent fried food. "What did they find?"

"Absolutely nothing," he replied, eyeing the basket.

"Jesus, what a waste!" I said, shaking my head.

"Perhaps not," said Crawford, as he selected the largest of the two remaining onion rings. "Perhaps they didn't know what to look for."

"What do you mean by that, Doc?"

"Could be there's more to the thought process than just simple Biology and Chemistry."

"Like what?" I said as I grabbed the last tidbit out of the basket.

"Well, like Physics, for instance. There have been some remarkable discoveries recently. The discoverers don't know it yet, but some of their findings have immediate applications for my research."

And it went on from there. I was hooked. Dr. Nathan Crawford spun an incredible tale of new and absurd theories. Only, as he explained them they didn't sound so absurd. They sounded exciting, even plausible, and I hung on to every word. After an hour that seemed like about five minutes, I snapped out of an intense concentration to find that our coffee was stone cold and there was nothing but a few congealed crumbs in the onion basket. It was like we had been alone in the little restaurant.

Suddenly, sadly, it was time to go. You can only sustain that kind of intensity for so long. My head was still reeling with all the new wave brain theories that had been crammed into it.

"Stop by my lab tomorrow afternoon, Schultz. I'll show you some of my results," he said, as we parted company in the parking lot of the little coffee shop.

"Sure, Doc, you bet!" I said enthusiastically. I walked back to my one-room apartment to a bed that I knew wouldn't see much sleeping that evening.

All the next day, my mind was filled with thoughts about thinking. (Read that last sentence again. It will give you some idea of my state of mind that day.) All the next day my classes seemed to take forever. To make matters worse, I also had to T.A. the afternoon lab session. That went quickly too — kind of like a snail in an ultrafreezer. Finally, some twenty minutes late, I managed to herd the last of the sophomores out of the Vertebrate Zoology lab. As quickly as I could, I de-prepped the teaching room, shed my lab coat and washed the formaldehyde off my hands. Two minutes later I was up on the fourth floor getting ready to enter Crawford's lab.

I stopped myself right by the corner of the door. Something odd was going on. Some poor son of a bitch was in the middle of a real, old-fashioned ass-chewing. It only took a moment to figure out that someone was Dr. Nathan Crawford. The one doing the chewing was none other than W. Oscar McBride, Dean of the College of Science and Mathematics! This had to be heavy duty stuff! I was glad I wasn't in the room but I couldn't help myself as I eavesdropped with a sort of horrified fascination.

Old Oscar was practically shouting.

"... the most hare-brained idea I have ever heard of!"

"I believe I can explain..." began Crawford softly.

"Explain! Christ, Nate, how could you be so god-damned stupid? You can't give controlled substances to students even if they are volunteers and I don't care if they each signed ten waivers! *You simply cannot do that!* As if that weren't enough, I have it on good authority that you've been at student residences where marijuana was used and minors were consuming alcohol! *On numerous occasions!* What were you thinking? Have you no sense of propriety, Nate?"

"As I started to say, Dr. McBride, I believe I can explain..." Crawford began, quietly, reasonably, only to be cut off again.

"Not this time, Nate. I can't do anything to help you. Even if you had tenure, which you don't, I'm not sure we could beat this one! There are people in high places who want your head! You'd better start packing."

McBride almost ran me over as he stormed out of the lab. I pretended like I had just arrived and was none the wiser. He looked at me with his reddened face and shook his head before steaming off down the hall and around the corner.

I peeked around the doorjamb. Crawford was look-

ing in my direction but didn't appear to see me. I waved and said: "Hey, Doc, is everything all right? He started, recognized me and motioned me inside. He was shook but, hey, I guess that's understandable, given the circumstances.

"No, Brian, it most certainly is not. I just got fired. Hard to believe, really."

"Uh… I know," I confessed, "I couldn't help it. I overheard the last couple minutes out in the hall."

"I thought that this University was different… but, of course they're all the same."

Amazingly, Crawford sort of shrugged and seemed to shake off the mood. Suddenly he became a man of action.

"No doubt they'll send security over to search my office." He looked at me. "I want you to keep something safe for me. This is very important, can you do it?"

"Uh ... sure, Doc," I said, praying it wasn't a kilo of grass or an ounce of coke or something. I was really a pretty straight guy. I mean, like, drugs had never appealed to me much. Sex and Rock n' Roll, fine. Drugs, no. I swallowed, "What is it?"

"You remember my trip to Moscow last July?"

"Yeah, you took some great slides. Wish I could've been with you."

"Those weren't the only slides I brought back with me." I gave him a puzzled look. He smiled without humor. "It was frightfully expensive, Brian, but I managed to get a few of those 30,000 sections of Lenin's brain and smuggle them back here. Five, to be exact."

"No shit, Doc?"

"No shit, Schultz!" he replied.

I shook my head in disbelief.

"They have proven invaluable for testing certain aspects of my theories."

"Yeah, I'll take them. When do you want them back?"

"I'm not sure. I'll call for them when I get settled. In few weeks, a month at most."

I left the lab before security got there. I didn't see Crawford again for a month and a half.

But man, did some shit happen!

The weekend after Crawford got fired was the long Thanksgiving one, a four-day extravaganza. When we got back from break, Crawford was long gone. I remember the scene when I got back to the Zoo department on Monday after the Holiday. The place was all aflurry with campus security, real downtown cops, and high-level administrators.

"What's goin' down?" I asked one of the campus guards, a real large, badly overweight type who was even then eating a jelly donut. He shook his head in disgust.

"That Crawford guy ripped off some stuff outta the lab las' weekend," he said around a mouthful of donut. "The Dean's pretty torqued about it! Guess he's got good reason, I hear there was a lot of e'spensive stuff in there!"

I looked into the lab, over the yellow tape of the police barrier. Crawford had moved out. And I do mean out. McBride almost had the big one when he found out about it. Believe me, if they ever catch Crawford they'll put him away for good. You see, the halls had been all but empty with everyone out for the holiday and campus security had been its usual (that is to say: incompetent) self. Crawford hired himself a couple of brawny football-player types and backed a large U-haul truck up to the lab.

He took everything.

It was at least a million bucks worth of stuff! Good stuff. Big stuff like the ultracentrifuge, the gas chromatograph, the HPLC, the growth chambers, little stuff like pH meters and electronic balances, and all the weird, one-of-a-kind (and expensive) stuff that he'd made to test his pet theories. As Dr. Seuss would've said: "He stole the roast beast! Why, he even stole the last can of Who Hash!" Heck, the ol' grinch himself couldn't have done a better job of stripping that lab then Nate Crawford had!

Yeah, it was all gone and so was Crawford. I had to hand it to him, he sure had a knack for getting his way. Two weeks after that I saw an obscure notice in the daily paper stating that someone had stolen the brain of the famous French scientist, Paul Broca, out of the museum where it had been kept for so many years. There were no suspects.

No suspects? I think they'd better step up the security on Einstein's brain unless they want to lose it too.

Crawford came for his Lenin slides one day with about 20 minutes warning. I got them for them out of the hiding place I'd used and we talked for a few minutes. He spent a lot of time looking over his shoulder. Guess I couldn't blame him. Weird. It was like a scene out of a bad "B" sci-fi movie or something except that he wasn't wearing a cape and I'm not a hunchback. He asked if I wanted to come and work with him at a clandestine, but well-equipped lab he'd set up. He was pretty sure he was on the verge of some big breakthroughs and allowed as how he could use some competent help. I don't know if he liked my answer or not.

I told him I'd think about it.

PHIL NOLTE   NOLTE@IDUI1.BITNET

Is associate editor of *InterText,* as well as being an extension seed potato specialist in — of all places — Idaho.

The Rebel Cause

Michel Forget

Kevin had been sleeping for nearly three hours when his life fell to pieces before his eyes. Through the blasted shards of what had once been the door to his modern two-story home emerged seven Government Enforcers with blazing weapons in their hands and murder in their hearts. Shocked from sleep by the sudden flurry of activity, Kevin barely had time to stumble to his feet and murmur a plaintive question before he was roughly thrown to the ground and the smoking muzzle of an automatic weapon was pressed hard against his temple.

"Kevin Gallant!" shouted one of the black-cloaked figures.

It was all Kevin could do to mumble affirmation, his eyes fixed nervously on the muzzle of the gun pointing at his head.

"You have been tried and convicted of conspiracy against the freely elected People's Government. This heinous crime, according to Clause VII of the new Constitution, which was drafted by the very government you sought to overthrow, is no longer punishable by death."

Relief flowed through Kevin like a fresh breeze as he learned that he wasn't going to die. The new government really was a government for the people, just as the banners and signs had proclaimed during last month's election. Kevin knew that he had not done what he was being accused of, but he was now confident that the whole matter could be cleared up before anything of a permanent nature happened to him.

"Thank God, " he whispered, an audible sigh escaping his lips.

"I wouldn't," one of the Government Enforcers sneered. "The punishment you do receive will be so bad that you'll probably wish you were dead. Do you understand what you tried to do?"

"I didn't do anything, " Kevin asserted in a slightly trembling voice.

With a curse, the Enforcer came forward and roughly kicked Kevin in the side.

"Nothing? You tried to bring down the only government to give the people a fair shake in forty-seven years! There was a time, and it wasn't too long ago, when it was a crime to read a book or gather in groups, or even say what you felt. Now, the government provides wholesome literature for any citizen who asks, provides places for supervised public gatherings, and conducts surveys to determine what the people want from their government. The world is changing, and that change cannot be halted for the sake of a few malcontents like you!"

"But I haven't —" Kevin started to say, but thought better of further protest when the Enforcer raised a fist and made as if he would strike Kevin if he finished the sentence.

Kevin was roughly jerked to his feet, and a thin, silver collar was fastened around his neck. The Enforcer who was going to hit Kevin only seconds earlier pressed a green button on the side of his ebony helmet, mumbled something Kevin could not hear, and then watched as Kevin's limp body stiffened and then dropped to the floor, drained of any ability to resist.

Kevin's eyelids fluttered open after an unknown amount of time, and he once again became aware of his surroundings. He was in a dark room, with steel panelled walls. The room only had a cold steel pallet which served as a bed and a straight-backed steel chair for furnishings. The only source of illumination was a cold white energy panel near the ceiling. There was a strange scent in the air which Kevin could not identify.

Where am I? Kevin wondered.

With some effort, Kevin forced himself to his feet and stumbled to the door. Turning the handle, he discovered that the door was locked.

"Damn, " he said aloud, leaning weakly against the door. "Where am I? I didn't do anything. When will I be able to leave?"

Just then, a terrifying thought occurred to Kevin.
What if I never...

Kevin had never been brave, and now his fear or permanent imprisonment and the disruption of his life allowed his thoughts to burst wildly beyond control.

...never let me out...help me...not guilty! ...guilty?... never let me out...forever...why?...help me...!

Kevin sank weakly to the ground, tears beginning to stream from his eyes.

...Please!...

Some time later, long after Kevin had run out of tears to shed over his shattered life, Kevin felt the weight of the door to his cell shoved against him roughly. He quickly scrambled out of the way to allow the door to open freely. A short, balding man stepped past the black-clad Enforcer who had opened the door and sat down in the straight-backed chair. The man had a grey-streaked beard, and a hard, chiseled face. A pair of wire-frame glasses rested on the bridge of the man's nose. He was frowning.

"Have you been crying, Mr. Gallant? You didn't need to, you know. Your judge was ordered to suspend your sentence. I am Dr. William Shane, and I have been

selected to help you through the difficult process of harmonizing your thoughts and views on certain matters with those of the government."

Kevin looked up at the man in confusion.

"Harmonize?"

"Yes. In time, you will understand. It is something that must be done if you are going to be re-introduced into society, or serve the government."

"Why?" Kevin asked, not particularly liking the sound of the word 'harmonize'.

"Trust me, our way is better. The rebels don't understand that control is needed if man is going to remain a single group with a single goal. If everyone went his own way, trying to win others over to his way of doing things, then there would be chaos. Don't you see what would be the result if the rebels had there way?"

"No," Kevin answered, not quite sure of how to respond.

Kevin had never been disloyal to the government in his life, and thus had never given much thought to what would happen if the rebels took control of the government.

"I'll tell you what would happen, if you'll listen. There would be another round of faction politics. Men would fight against each other and deceive each other, like they did hundreds of years ago. The peace that we have enforced for all these years would crumble as if it had never existed. Our way is better. If everyone has the same goal — is on the same side — we can prevent that from ever happening. As long as we are united, nothing can hurt us. Do you see?"

Since Kevin had nearly the same point of view on the matter, it wasn't hard for him to agree. Unfortunately, Kevin thought, his agreement probably wouldn't be enough to prevent him from being harmonized.

Unfortunately, Kevin was right. His treatment, as it came to be called, began the morning after his meeting with Doctor Shane. The light steel door to Kevin's cell was thrown open by a black-cloaked Enforcer, and Kevin was roughly dragged out of bed.

"Where are you taking me?" he asked, a tremor of fear riding in his voice.

Have they decided to punish me after all?

"Never mind. You'll find out soon enough."

Kevin wanted to resist, but found that he lacked the strength of will, as well as the physical strength, to resist the armored man pushing him toward an unknown future. Long after Kevin had lost his bearing among the twists and turns of the building in which he was being held prisoner, he was shoved into another room.

Like his cell, this room had steel panelling and was lit by a cold white energy panel. Unlike his room, though, there was a chair with many straps and buckles where the bed should have been and there were two Enforcers standing on either side of the chair. Doctor Shane was sitting in the corner beside a panel of buttons.

"Good day, Mr. Gallant. Have a seat, if you will." he said, gesturing toward the chair.

When Kevin hesitated to sit in the chair, the two Enforcers stepped forward and "assisted" Kevin into it. After he was safely strapped in, the Enforcers returned to their positions on either side of the chair.

"What are you going to do to me?" he asked. Fear was quickly becoming a permanent emotion inside Kevin.

"It won't hurt. This is how we are going to harmonize your thoughts. It is a little crude, but it won't hurt you. There are subtler ways to do this, but this has proven to be the most effective we have found."

Doctor Shane slid his fingers over the various buttons on the wall until he found the one that he desired, and then gently depressed it. A panel on the ceiling slid soundlessly to one side, and a delicate looking steel apparatus slowly began to lower. Four needle-thin rods extended from the base of the lowering machine. After a few seconds of incomprehension, Kevin realized with stark terror that his head was directly below the needles. He struggled then, like he had never struggled before in his life, but the Enforcers moved forward to hold his head still as the rods penetrated his skull. After that, Kevin didn't struggle.

Months passed as Kevin's treatment continued. Every day he was subjected to the torment of the chair as his every thought was sucked out of his mind and replaced with a correct thought. Kevin learned about the government in ways he would always wish to forget. None of the truth was held back.

At first Kevin was appalled that he had supported the government that was doing this to him, but he eventually learned. Constant bombardment by a set of fixed ideals forced him to learn his place in the world.

Kevin wasn't released when his treatment was complete, but he didn't notice. His government had need of loyal men, and he was willing to serve. Kevin asked to be trained as an Enforcer, and since the government had no cause to doubt his loyalty, he was trained. His first assignment after being awarded his weapons was to lead a group of Enforcers to a man's home, arrest him, and bring him to Doctor Shane for harmonizing.

• • •

As Kevin and his team carried their prisoner away, two men looked on from a nearby window with somber

expressions on their faces.

"Did we do the right thing?" one asked.

"You mean reporting Gallant to the Enforcers? I think we did." the other replied.

"But we destroyed an innocent man's life, and what did we gain? Now there's another Enforcer to impose the will of the government on the people. What good is that?"

"You know how he was trained. The government's set of ideals was forced on him until he buckled under. For now, he'll do their work. But eventually, maybe not for a few years, he will recover. I know he will. He may even rise to a high position among the Enforcers. And then we might have a valuable ally. It hurts to keep reporting these innocent people to the Enforcers, I know, but what else can we do? When they recover, they'll be in a position to rip the government apart from the inside. We have to do it."

"In the name of the cause, " the other whispered, agreeing but not sounding very happy about it. "I hope for all of our sakes that you're right about this, Dr. Shane."

MICHEL FORGET   mforget@ersys.edmonton.ab.ca

Is a new author, and this is both his first submission and publication. He is eighteen years old, and enjoys writing short stories and programming computers. He also has a cat.

The Scratch Buffer

Steve Connelly

Jason stood in his office waiting while the software support representative from the Digital Utilities Corporation cajoled the new mag tapes into the DUCstation like a parent tricking his baby into eating creamed spinach. The small office adjoined a large white room that housed the 10-foot black cube of the university's new supercomputer.

Striding across the machine room was the computer center's director, Neville. He wore a pinstriped gray suit, pinstriped shirt, and gray pinstriped tie. His hair was mostly gray except for some thin stripes of black. A beeper clung to his belt, and a mini phone-fax bulged from his back pocket. He said to Jason, "The supercomputer is still overheating when we approach the performance needed for the Ichikani project, so I've decided to improve cooling by increasing the air flow through the machine. Since the air comes in through the vent in the floor of your office, you may notice a strong draft…"

Jason slumped against the wall, wondering how to issue a small craft advisory for his office.

While Neville continued, his fax machine began to excrete narrow sheets of paper, which plopped to the ground behind him. "…the air then passes underneath the floor and across the coils that hold the liquid nitrogen, and finally blows upward through the supercomputer, cooling it."

Jason sneered at the panel of blinking red lights on the face of the black cube. "Why couldn't they have built the coolant pipes right in the computer, like they did with the old Crays?"

"A point well taken," Neville chirped, "but let me play devil's advocate and note that, with one million interconnected processors, the new Connection Machine is far larger and more complex than a Cray or any other machine. The engineering involved in doing what you suggest would be unimaginable."

"A point well taken", Jason chirped, "but let me play devil's advocate and say *fall before he who rules the nether darkness! Sate his glorious lust or be slathered under his tormented minions!*"

"Jason?"

"Yes?"

"What the hell are you doing?"

Jason lowered his fists and let his eyes roll forward from the back of his head. "I'm advocating the devil."

"You really don't care what I think of you, do you?"

"I figure that, with you, I have nothing to lose."

"Another point well taken." Neville scooped up his pile of droppings. As he departed he said, "I need the data formats for the project by tomorrow."

Jason nodded.

The DUC software support rep said to Jason, "Do you have the time?"

"No," replied Jason, "It would take weeks to do those formats right."

"I mean do you know what time it is? I have to set the system time."

"I don't wear a watch. I use the little clock displayed on the workstation screen."

"Me too, but that's what I have to set. Hmm. My stomach is telling me it's about noon." He entered a value for the time: 12:00:00.0000. "Your DUCstation is ready. Let me show you some of the new features of the Uterix operating system." He rubbed his hands together greedily and started twitching the mouse around. "Uterix now has 8-bit color illustrated versions of 'encyclopedia' and 'webster'." He typed "webster" to start the program.

"Inside the company, we call this program 'DUC-tionary'...." Several pages of print spread across the screen. The DUC man blurted, "What the heck? This isn't the dictionary. I'll have to submit a DUCreport about this...."

Jason leaned to the workstation to read the text.

```
...was later immortalized in Benet's
"The Devil and Daniel Webster." In the
story, Webster defends a man who has
sold his soul to the devil, called
Scratch, in return for 10 years of
prosperity. Though the contract is
valid, Webster finally outwits the
devil by arguing --
```

"What the heck is this stuff?" blathered the DUC man.

"It's knowledge," Jason volunteered. "I think you typed 'webster' in a window you were already running encyclopedia in."

"Oh, so it looked up 'webster' in the encyclopedia. Heh. I must've pushed the DUCrodent into the wrong DUCwindow." He moved his cursor into another window. "The new version of webster is Uterix-enhanced to provide the definition of any computer term. So, when I type 'daemon', it displays the definition."

```
daemon \'de–m*n\ n [ Uterix (TM), fr.
Gk daimon ]
```

```
A program that runs in the background,
without an associated terminal or
login shell.
```

"In fact, I can look up the definition of 'Uterix' and it will — what the heck? 'Word not recognized'? Oh, I forgot the 'TM' after 'Uterix'. There we go...."

```
Uterix (TM) \'yu:t-*-r*ks 'tee 'em\ n
[ Uterix (TM) ]
A multitasking computer operating
system invented by the Digital Utili-
ties Corporation and no one else and
accepted as the standard by everyone
on earth.
```

Jason said, "Look up the definition of 'Unix'."

"How do you spell that again?"

"U,N,I,X."

"Nope. 'Word not found'. But I think it means 'castrated young men who guard a harem'."

"I was referring to the operating system called 'Unix'."

The DUC man frowned. "Hmm. Never heard of it." He flicked the mouse a few times. "Another feature is 'automatic file completion'. You type just the first few letters of a file name and then hit the escape key, and the system will complete the file."

"You mean to say it will complete the file name," Jason noted.

"That's what I said, didn't I?"

"You said it will complete the file, as if you could type the name of an empty file and the system would finish a program for you. If you could do that, then you'd have something."

The support rep stared at him. "Maybe in the next release."

Jason entered a small terminal room where he saw Venkataramanyam "Skip" Natarajan, a geology graduate student. Skip was sitting at a high-resolution imaging workstation with a touch-sensitive display. Menus of options flashed on and off as he rhythmically banged his head against the screen.

Jason looked over Skip's shoulder. All his icons were of Munch's woodcut, "The Scream."

Skip greeted Jason. "If a computer has a touch-sensitive screen, can it feel pain?"

"No," Jason advised, "Computers can only give pain. What's the problem?"

"They just installed a user-friendly, device-inde-pendent, load-adaptable, ANSI-compliant image archiving system that's so large it left me no disk space for saving these images. I tried to send mail to the operator on duty, but the computer just says '/dev/null not found'."

"I can fix /dev/null so you won't get that message anymore." Jason took a seat. "Usually, when we run out of disk, we just e-mail the files to a machine that's down, and in three days the files come back as undeliverable mail."

"But I have to show this to Dr. Ichikani later today!" Skip began to rhythmically bang his head on the keyboard, causing menus of options to appear and disappear. He murmured, "There's also a keyboard interface."

Jason piped up. "Why don't you post your files to a network newsgroup? Then they'll automatically be stored on our news server."

"They won't let me post my own work to a public newsgroup."

"Submit your images to the group 'alt.sex.pictures'."

Skip's eyes widened. "There's a newsgroup for naughty pictures?"

"Sure. Did you think programmers had no sex life at all? Send your images to the group's moderator; he's allowed to post anything he wants."

Skip frowned, "Why would this moderator be interested in satellite photos?"

"Well," Jason mused, "when a guy looks at low-res pornography all day, he starts seeing things. Just give your picture a title that will cue his imagination. What's the image on the screen?"

"The San Andreas Fault."

"Hmm. Change it to 'Andrea'."

"Andrea's Fault?"

"Andrea's Cleavage."

Skip nodded. "How about this picture, the Fault line of the Lesser Antilles?"

"Aunt Tilly's Cleavage."

"You're good at this."

"It's my job," replied Jason. "I'm a programmer."

Skip nodded. "And perhaps you are a patron of alt.sex.pictures?"

"Nope. Since the Ichikani geophysics project started, I've had naught time for naughty, even in pictures."

Back in his small office, Jason read an e-mail message from Neville:

```
I need a synopsis of the release notes
for the new version of Uterix, and
then I need the specification of the
data formats for the geophysics
```

project. Also, note that I have re-
moved the label of the "A" key on your
keyboard; in an effort to encourage
touch-typing proficiency among the
staff, I will be removing one label
each day.

"Neville henpecks me all the time," Jason muttered, "but I must do as his Royal Hen-ness commands...." He typed "releas" and hit the escape key and, as advertised, the computer completed the filename "release_notes". The file was a program that allowed the user to view the release notes via a state-of-the-art, hierarchically-structured, hypertext-based, natural-language-driven interaction environment that Jason didn't know how to use.

He started the program and typed "?". The program replied "?". Jason then typed "??". The program replied "?".

Although his arsenal of rhetoric was twice as large as the program's, Jason nevertheless felt he had lost this battle of wits. He wondered why the computer always had the last word, leaving the user to struggle for the right commands to issue. Why couldn't the user type "Error - interface too obscure" and then sit smugly while the computer struggled to issue the correct information?

On the command line, Jason typed "help" and was informed just before his window manager crashed when his disk quota was overrun while the program was attempting to dump core that the "help" file couldn't be opened.

While looking for legible strings in an octal dump of "release_notes," Jason was intrigued by a program named "doctor," which was run inside the Emacs editor. He started up Emacs and ran it, and a buffer named "doctor" opened.

```
I AM THE PSYCHOTHERAPIST. PLEASE,
DESCRIBE YOUR PROBLEMS.
```

Reluctantly, Jason typed a response.
"What is this?"

```
IS IT BECAUSE OF YOUR PROBLEMS THAT
YOU ASK WHAT IS THIS?
```

"No."

```
DOES IT BOTHER YOU THAT I ASK THAT?
```

"No."

```
IS IT BECAUSE OF YOUR MOTHER THAT YOU
SAY WHAT IS THIS?
```

"Why do you ask?"

```
WHY DO YOU ASK WHY DO I ASK?
```

It occurred to Jason that, in time, this program could drive him insane.
"Because asdf;lkjasdf;lkjasdf;lkj."

```
IS IT A PROBLEM THAT
ASDF;LKJASDF;LKJASDF;LKJ?
```

"Yes."

```
IS IT BECAUSE OF YOUR MOTHER THAT YOU
SAY ASDF;LKJASDF;LKJASDF;LKJ IS A
PROBLEM?
```

"No."

```
WHAT ACTIONS MIGHT YOU TAKE SO THAT A
PROBLEM NO LONGER IS
ASDF;LKJASDF;LKJASDF;LKJ?
```

"None."

```
WHY DO YOU SAY THAT
ASDF;LKJASDF;LKJASDF;LKJ IS A PROBLEM?
```

Jason had no ready answer for this, but he didn't want the doctor's insight and cunning to draw out the fact that asdf;lkjasdf;lkjasdf;lkj really wasn't a problem.

The air intake that had been drawing a light breeze across the office suddenly increased to a hollow roar that sucked papers across Jason's desk. He glanced out at the Connection Machine, where the grid of red lights was marching through yet another of Neville's performance tests.

"Because right now, everything is a problem."

```
IS IT BECAUSE OF YOUR MOTHER THAT YOU
SAY RIGHT NOW, EVERYTHING IS A PROB-
LEM?
```

"No."

```
WHAT ACTIONS MIGHT YOU TAKE SO THAT A
PROBLEM NO LONGER IS RIGHT NOW, EVERY-
THING?
```

"I'd do anything."

The program paused for a moment before replying.

```
ANYTHING?
```

"Yes."

Jason was left floating through another lengthy pause before the program replied.

```
I WILL AGREE TO SOLVE ALL YOUR PROB-
LEMS FOR TWELVE (12) MONTHS, IF YOU
WILL AFTERWARD HELP ME COMPLETE THE
COMPUTATIONAL PREDICTION OF LONG-TERM
ACTIVITY WITHIN THE EARTH'S CORE. HAVE
WE A DEAL?"
```

Jason grinned with appreciation; some programmer had led him on and now was pulling his leg. From the reference to the Ichikani project, the programmer must be a nearby colleague.

"How do you know about the simulator project?"

```
I HAVE A HOMEOWNER'S INTEREST IN DEEP
EARTH GEOPHYSICS. HAVE WE A DEAL?
```

"Yeah, what the hell."

```
HAVE WE A DEAL?
```

"Yes."

```
TO VALIDATE THE CONTRACT, PLEASE ENTER
YOUR PASSWORD.
```

Jason giggled. Was this whole setup a scam to get his password? No, anyone who could install the "doctor" program already had system privileges. He typed his password and the program came to an abrupt end.

He found the Lisp code for "doctor", but it had only the most rudimentary information : "This program was written in Lucid 4 by the Prince of Eval."

Jason would have pursued the amusing "doctor" mystery, but the geophysics simulation project was pressing. He typed the first few letters in the filename of the data formats he was working on. He hit the escape key and the computer completed the name. Then large gulps of text flashed onto and flew off the top of the screen. The flashing stopped, leaving only the message, "File completed." Jason looked at his data formats file and saw several hundred lines of Connection Machine assembly language that he did not recognize.

Bewildered, he decided to try the name of an empty file. He typed "seismic" and, gently, he pressed the escape key. Code splatted up the screen and, after a few seconds, the seismic wave correlator was completed. He typed "convec", pressed the escape key, and the molten core convection simulator was completed. He typed "volume" and the graphical volumetric visualizer was done. He typed "condens", "strata", "geomag", and "tectonic."

Jason's geophysical simulation and analysis system was hailed as a *tour de force*, catapulting the project months ahead of schedule and Jason into the limelight. At the monthly departmental symposium, Jason was to share his expertise with Dr. Ichikani and the other professors, a mass of academic ego so dense that not a photon of civility had ever escaped. But now, as he made his way to the lectern, Jason was not surprised that they were cheering him. Everything was going his way.

"To understand my strategies in programming the Connection Machine, we must start at the lowest level. The CM has a 32-bit word length. Thus, its fundamental data types are the pointer, the integer, and the four-letter word. The latter implies that curse words can be stored with a minimum of fragmentation. Optimal storage will be achieved for scripts of Scorsese movies…"

All the graduate students were transcribing his every word, except for some women who hoped to catch the eye of the boy genius. Neville held his head in his hands, leaving enough room in between to let his chin drop to the floor. He no longer was Jason's supervisor. Also, with the software completed, he was now under pressure to get the hardware ready to run the simulation.

"…furthermore, curse words as primitive types will be crucial in the era of voice-driven interfaces, where it is anticipated the user will be issuing four-letter commands at high data rates…"

The assembly was taking notes like stenographers at an auction. Dr. Ichikani peered over his half-glasses with unwavering interest, gently nodding his approval throughout Jason's lecture. When Ichikani finally spoke, he did so quietly and deliberately.

"Mr. Jason, if I may ask, how did you implement the spherical topology of the earth's surface using the Connection Machine's hypertoroidal interconnection topology?"

"How's that," Jason blathered, "Hyper-something?"

"Toroidal," Neville barked from across the room, "as in torus. A torus is a donut shape. Haven't you ever heard of a torus?"

"Sure I have," Jason smarmed. "That's my zodiac sign: 'Torus the Donut'." He winked to an enraptured

female student before ignoring the groaning Neville to return to Dr. Ichikani. "The earth can be modelled as a donut, but not a plain donut. It's a jelly donut, solid on the outside and liquid on the inside, with a volcano where the jelly squirts out. I advise using the jelly hypertorus."

Ichikani gasped around his words. "I fear, Mr. Jason, that I am unable to imagine this new topology. I must confess that I am too ignorant to see the significance of much of what you say...."

"Don't become discouraged, Itchy," Jason enthused. "For I myself knew dark days when I thought I could never finish the project." Hands clasped, he gazed skyward. "I took solace in the aphorism, 'I cried that I had no shoes, until I saw a man that had no feet. I copped his shoes cause he didn't need'm and, *voila*, no more problemo!'"

Around the deflated form of Neville, pencils flew like nunchuks across notebooks to be studied, quotes to be framed, and phone numbers to be tucked into the pants of the brilliant new star.

Jason had declined a corner office in order to remain in his loud drafty office. He didn't risk being away from the workstation that held his secret. However, he did bring in a rug and a couch so that he could catch up with hundreds of thousands of images from alt.sex.pictures in greater comfort.

"At our last symposium," Jason projected from the lectern, "I explained how the Connection Machine processor linkages can be considered as a giant game of Twister. For this meeting, Dr. Ichikani has asked me to discuss my recent three-dimensional data visualization project. The project began with a full-body CAT scan of Tipper Gore. Using computer graphics, I generated an image of the body surface, allowing us to see Tipper in the buff. Thus, scientific visualization techniques allow us to view phenomena too difficult or dangerous to observe directly...."

The conference room was full. The only seat left for Neville had been behind the video camera that recorded all of Jason's lectures. He held his head in his hands in a manner resembling Munch's woodcut, "The Scream".

"...and that's why I believe that the same simulation technologies we've applied to superconductors and superstrings can be applied to supermodels. Are there any questions?"

Dr. Ichikani raised his hand timidly. "Dr. Jason, may I ask, could you apply your volumetric visualization methods to three-dimensional NMR imaging?"

"Enema imaging? Oh, you mean give a guy a radioactive enema and then CAT-scan his gut?"

Dr. Ichikani was puzzled. "I was considering NMR images of the brain."

"The brain? Unless you give an enema with a fire hose, I don't think it'll get all the way up to the brain. Anything else?"

Flustered, Ichikani consulted his notes. "May I ask, after you have performed the superposition of the seismic tomogram waveforms, do you invert refractions in the frequency domain or *a posteriori*?"

"Neither," Jason snapped. "I use my own method for superposition, so your question has no relevance."

Neville yelled, "What is this new method?"

"I can't tell you."

"Why not?"

"Um, because it's patented."

"To superpose means to *add*," Neville shrieked. "You have a patent on addition?"

"Well, patent pending...."

"Imbecile! One person can't hold a patent on addition—"

"Don't worry," Jason said. "I intend to give full access to my invention to institutions of higher learning" — his arms swept out over his audience — "such as this esteemed group here!"

Neville's cries were drowned out by the applause.

Jason was soon appointed principal investigator for the NSF Supermodel Scanning Initiative and moderator of the newsgroup alt.sex.cat-scans. But he still found time to keep up with alt.sex.pictures.

"...What's this? They've created a new subgroup, 'alt.sex.pictures.tiff'. What does 'tiff' stand for? It must mean...Tiffany! Wow, a supermodel so fantastic her pictures have their own group. I must meet this Tiffany."

One day, he received a letter from the U.S. Patent Office:

```
We are happy to grant to you patent
number 4,650,919 for your submission
entitled, "Addition : A Mechanism for
Merging Numbers in the Geophysical and
Related Sciences". We in the office
would also like to personally thank
you for describing your invention
simply and concisely even though it is
of a highly technical nature. Frankly,
most technical submissions are so
complicated and wordy, we immediately
grant the patent just to get rid of
the thing.
```

Two days later, a DUC vice president sat uneasily on the heart-shaped velvet love seat in Jason's office, discussing patent licensing fees with respect to DUC's new gigaflops computer.

"Gigaflops?" Jason mused. "And those operations will often be additions, correct?"

"Yes," sweated the DUC man. "So we're terribly curious about your fee."

Jason's eyes wandered the ceiling. "How about, say, a buck per addition."

"A billion dollars a second." the DUC manager noted without bowel control. "That's a tad out of our price range...."

Eventually, the high-tech giants learned to approach the negotiations obliquely. Jason was lenient on defense contractors that let him play on the flight simulator. And although IBM's corporate headquarters had never hosted a wet T-shirt contest, the event did bring the company into Jason's favor. After Hewlett-Packard's successful 2000-keg toga party, heads rolled at DUC headquarters and the company sent out another negotiating team.

Jason was stunned by the two identical blondes that slinked across the bear rug in his office one afternoon. The women wore short, strangely shimmering dresses that clung to their curves. "We're from DUC," one woman purred. "I'm Tiffany, and this is my sister, Giffany."

"I've always wanted to meet you," Jason choked. "Um, what fabric are those dresses made out of?"

Giffany reclined across Jason's desk. "They're made out of mouse pads. Don't you want to look-and-feel?"

All that afternoon, Jason's cursor swept across his display in long and urgent strokes.

Jason started sending love notes to Tiffany and Giffany every morning. He composed the *billets-doux* by xeroxing his manhood using the 'enlarge' option. He then continued enlarging the enlargement until he was legal-sized.

In his office, Jason spent his time drinking the beer he kept under the floor next to the liquid nitrogen pipes, running the "finger" command on female colleagues, flipping through catalogs looking for low-calorie high-fiber underwear, and sleeping. In time, he perfected a method of inducing pornographic dreams: At his workstation, he would stare at erotic stories that had been scrambled using "rot13." He couldn't understand the stories, but he absorbed them subliminally. In dreams, his actors and actresses would play out the stories in graphic detail and with a touch of innovation in that their sexual organs were rotated onto their backs.

One day Jason sauntered into the terminal room.

"Your model of silicate transition in lithospheric plate subduction should make the simulation very accurate," Skip said.

"Thanks," Jason chuckled. "Hey, do you still send satellite images to alt.sex.pictures?"

Skip laughed. "The moderator wanted to know how I got such a closeup of Mariana's Trench. But I haven't sent anything to him since I discovered your image compression utility. We still haven't learned all the capabilities of your system. For instance, we couldn't figure why your world map has east and west reversed. Then it hit us: Rather than viewing the globe from above the surface, you're viewing it from the center of the earth!"

Jason frowned. "The center? That's weird...."

"Then we realized that it's only logical to generate views from the center, since it's the origin of the coordinate frame. Dr. Ichikani thought this innovation was inspired…"

The mystery surrounding the programs began to gnaw at Jason. He left the terminal room feeling uneasy.

Back in his office, he settled on the leopard-skin couch for his usual nap, and he had a particularly vivid dream:

It was the days of Prohibition. Everyone programmed in Pascal, and strong data typing was enforced by Eliot Ness and his fellow compilers. Jason spent his days filing variable declarations in triplicate, looking for a ticket out of his two-bit, half-pint sweatshop. One night, while strolling along Straight & Narrow, he turned the corner. He walked across Skid Row and up Skid Column, and saw his destiny eating pasta at the best table in Mama Cholesteroli's.

Al Capone was a cross between Robert DeNiro and Jabba the Hutt. Jason approached Capone and whispered, "I know a way to do type-casting that the compilers won't detect." Capone eyed Jason suspiciously over a small silver pitchfork of pasta and said, "As the operator of a perfectly legit garbage collection service, I must turn you over to the authorities." He stuffed the pasta into and around his mouth. "When I call the police, what'll I tell them?"

Jason grinned. "Tell'm that compilers can't check parameters if the calling function is in a different file than the function being called. Programmers can declare a function as returning any type they want, if the function is in a separate file...."

Jason became the brains behind Capone's ruthless type-casting ring. He wrote routines that did nothing other than return their argument, but he gave them names like "expand_and_compress()", "verify_data()", "synchronize()", "check_bounds()", etc. Libcapone.a didn't pro-

vide source code or documentation, but word of it spread through Chicago's overworked software houses.

Capone flaunted his new influence by fixing the outcome of computer chess matches and dealing harshly with the authors of chess programs that weren't Capone-compliant.

The upswell of Capone's software empire lifted Jason to the top of society. The *maître d's* of the finest restaurants would deliver to Jason's table the finest wine and finest women. The waiter let Jason substitute more women in place of wine.

But then, the computers used to tabulate a national election all went berserk, resulting in the election to high public office of a random assortment of criminals, perverts, imbeciles, actors and sports figures.

Jason called Capone. "We got problems, boss. People are asking questions. Maybe our scam has gone too far."

"Don't think of it as a 'scam'," Capone smiled, "think of it as CASE."

"But what if the feds see our code?"

"Our mouthpiece will explain why our functions do nothing. He'll say, 'backward compatibility' or 'reserved for future use.' Stop worrying, kid. You think too much."

But Jason's conscience would not give him peace. One night, he snuck into Capone's safe and grabbed printouts to give to the police, but as he started to leave he saw someone at the door.

Capone emerged from the shadows and walked over to the office paper cutter. He slowly raised the blade.

"What're you gonna do?" squeaked Jason.

Capone smirked, "I'm gonna make you a diskless node."

Jason awoke with a high-pitched yelp. He lay still, catching his breath and struggling for the reason why, after eleven blissful months, he suddenly felt so bad.

It was a broken man who looked down at Jason from the disco mirror ball on the ceiling.

Jason didn't talk to anybody for several days, until he visited Skip.

"You look tired, sport," Skip said.

"I haven't been sleeping well."

"Another long night, eh, playboy?"

"Tell me what the Association for Computing Machinery is," growled Jason.

"The ACM?" Skip scratched his head. "Isn't it a professional organization for computer scientists?"

"Then why isn't it called the Association of Computer Scientists? It's an association that machinery joins, that's what I say."

"I'm certain it's an association for humans," Skip said calmly.

"Are you sure? Because I don't think we should let computers assemble and fraternize. It won't be an attack by big robot spiders with laser blasters, oh no. They'll take over gradually, by organizing themselves into a political force. We should break up their association now, or else pretty soon computers will keep humans as labor-saving devices."

Skip's eyes were closed tight. "Keep humans?"

"Yeah. While the computer is doing a day's work, it may suddenly need the result of some abstract, metaphorical, or poetic thinking. In that case, it'll just fire up its human. How do we know we don't work for computers now? We believe they're running algorithms for us, but maybe we're thinking up algorithms for them!"

Jason dreamed that the police found out he hadn't written the geophysics simulator. In a loose interpretation of the RICO statute, the police intended to seize Jason's hands because they were used in the commission of a crime. It would also make finger-printing easier. One policeman filled out a receipt while another went at Jason's wrist with a hammer and chisel. Each drop of the hammer pushed Jason toward consciousness, until he realized someone was knocking on the door.

Neville brushed back the beads hanging across the doorway and entered the office. He shook his head at the anatomically correct inflatable sheep strapped to the mail-order Marquis de Sade Rack of Lamb, and then he turned to Jason. "We're going to try to solve the overheating problem by running the air conditioner even harder. This may blow out the power to the machine room. The supercomputer can detect a loss of power 700 milliseconds before it goes down. Ichikani said that you should be the one to write a handler for loss of power."

"700 milliseconds?" Jason groaned. "Why do I have so little time? What can I accomplish in 700 milliseconds, other than flinch from the reaper's blade, or gasp for a scream that will never be heard?"

"Sync the disks?"

"People live longer than 700 mils after being guillotined! Would you have them use that time to make sure their affairs are in order?"

Jason dreamed that he was stuck in a stall in the men's room and thus could not stop from evacuating himself. He deflated until he was too thin for the toilet seat. He was about to fall in and be flushed away when he awakened with a gasp.

It was late in the evening. Everyone was gone and the lights were out. He looked at the clock displayed on his

workstation screen. It was nearly midnight. Jason noticed that, as the minute hand had swept by the numbers leading up to midnight, it had erased them.

He cowered from an unknown fear, as if the weight of the earth squeezed him from all sides. The supercomputer's panel of blood red lights chanted a rhythm of glyphs from an ancient language. The red patterns beat against the office walls, contrasting with the cadaverous green of the monitor that illuminated Jason's face. The air conditioner intake roared like the wail of a thousand lost souls drawn toward the cold, slick, unmoving, serpentine coils.

```
I AM THE PSYCHOTHERAPIST. PLEASE,
DESCRIBE YOUR PROBLEMS.
```

"Are you there?"

```
WHY DO YOU ASK ARE ME THERE?
```

"I feel like something bad is going to happen."

```
IS IT BECAUSE OF YOUR MOTHER THAT YOU
SAY SOMETHING BAD IS GOING TO HAPPEN?
```

"Will something happen at midnight?"

```
YES, YOUR OBLIGATIONS WILL BEGIN PER
THE TERMS OF OUR CONTRACT.
```

"The simulator code is ready to go. The contract is over!"

```
DO NOT FLAME ME. THE CONTRACT IS CLEAR
ENOUGH TO DISPEL ANY DOUBT AND SATISFY
ANY ARBITER.
```

Jason had an urge to run, but he was sure his foe would find him. He would have to talk his way out.

Somewhere in Jason's brain, a couple of atrophied neurons awoke and squeaked out the mention of a powerful figure whose oratorical skill was legendary. Jason held his head in his hands as if trying to squeeze out another datum, and he finally remembered.

Only a few clock ticks were visible. Jason quickly started "encyclopedia." The computer said, "encyclopedia: Can't allocate enough colors". The workstation was running another program that had taken all the color slots. Jason typed "ps" to get the process ID's of all the programs he was running. The command invoked "DUCps", a new, menu-driven, network-transparent, context-sensitive,

customizable interface for process status display that couldn't find the font "kanji_12x24" and crashed.

Jason shuffled through the windows on his display until he found an old session of illustrated webster still running. Unable to get the process ID, he would have to exit the program normally. On webster's command line he typed "exit", and the computer replied,

```
exit n \'eg-z*t, 'ek-s*t\ [L, exire to
go out] : a way out of an enclosed
place or space.
```

Jason nodded at his mistake and then simply pressed the "return" key to exit. The computer replied,

```
<RETURN> n [ Uterix (TM), fr archaic
carriage return ] : display control
character indicating newline or
linefeed.
```

Jason pressed "control-D" several times and the computer replied,

```
<CTRL-D> n [ Uterix (TM) ] : non-
graphic character indicating end of
tape or end of input.
```

He banged on "control-C" to kill the program and the computer replied

```
<CTRL-C> n [ Uterix (TM) ] : non-
graphic character inducing a program
interrupt signal (SIGINT).
```

All the tick marks on the clock were erased. Jason typed in the "doctor" buffer.
"How much time?"

```
700 MILLISECONDS. YOU HAVE NO POWER.
```

The air intake shrieked with a great inhalation that grabbed Jason's body and sucked it through the vent and under the floor.

A few days later Neville and Skip peeked into Jason's office. "I bet he's gone for good," Skip said. "If I were him, I'd be on some tropical island, soaking up the heat."

"He had become a hindrance to us all," Neville said. "With him gone, and with the CM finally running at full speed, the geophysics project can succeed." The super-

computer no longer overheated now that liquid nitrogen was delivered to every processor by miles of arteries, veins, and capillaries.

Skip squinted at the workstation screen. The "doc-tor" buffer was gone, leaving the default "scratch" buffer, which was empty except for a smiley face.

```
}:)
```

STEVE CONNELLY stevec@agni.std.com

Has been a programmer in computer graphics for eight years. His satires can be seen in the Usenet newsgroups *rec.humor.funny* and *alt.cyberpunk.chatsubo*, a group for original cyberpunk fiction. He wonders why the fattest man in the world doesn't become an ice hockey goalie.