

The Little White Nerves Went Last by John Barnes

Illustration by John Allemand

* * * *

People *can* behave rationally, but it can be one of the toughest challenges we face.

* * * *

"The pain had passed. I thought I was killing myself and I did not care. I shall never forget that dawn, and the strange horror of seeing that my hands had become as clouded glass, and watching them grow clearer and thinner as the day went by, until at last I could see the sickly disorder of my room through them, though I closed my transparent eyelids. My limbs became glassy, the bones and arteries faded, vanished, and the little white nerves went last. I ground my teeth and stayed there till the end. At last only the dead tips of the fingernails remained, pallid, and white, and the brown stain of some acid upon my fingers."--H.G. Wells, *The Invisible Man*

* * * *

"We are merely reminding ourselves that human decisions affecting the future, whether personal or political or economic, cannot depend on strict mathematical expectations ... and that it is our innate urge to activity which makes the wheels go round, our rational selves choosing between the alternatives as best we are able, calculating where we can, but often falling back for our motive on whim or sentiment or chance."--John Maynard Keynes, *The General Theory of Employment, Interest, and Money*

* * * *

Giraut? Are you waking up?*

Hello, Shan.

What's our situation?

Pretty bad.

I guessed that. We're in restraints, and people are talking about us in a way I don't like.

After psypyx implantation, normally the personality on the psypyx wakes up one to two hours earlier than the host. *You haven't communicated with them?*

The brain monitors told them when I woke up. Since then they've been talking about my being awake, and that I haven't shut myself down. I gather I did that before.

That's right, I thought back. I was surprised at how quickly and easily the skill of communicating within the head had come back--I had had Raimbaut in my head for just over two stanyears, but that had been more than a decade ago. *Here's the situation, Shan. The people who have us are a completely different aintellects' conspiracy from the one you remember. A lot of the aintellects in this new lot are, or have been, full-on chimeras--I know we thought aintellects would never do that, but we were wrong. Some of them have spent several lifetimes in human bodies, along with being robots and running on servers.

*Because there were only six people you were willing to have wear your psypyx, and I was the one that was easiest to get, after you shut down in several other bodies, they staged a complicated scenario to kidnap me so they could try to implant you again. If you shut down now, they'll probably let me go, but they'll go on trying to talk to you. They say it's urgent. You know something they desperately want to know, and I know this sounds insane, but they tell me that if they can just talk to you, you will *want* to

tell them.*

*I've been in intelligence services since I was a teenager. I don't *want* to tell a waiter what I'd like to eat,* Shan said. *Information is too valuable to share. But I suppose this time I can at least tell them that directly. Where and when are we and when did I die? The pain blocks made your memory too blurry to access till you woke up, and now there's too much for me to take in quickly.*

Except that it was all happening in my head instead of over an excellent cup of coffee at his desk, it felt like old times; I knew how to brief Shan briefly, the way he liked it. *You died about fifteen stanyears ago. Assassinated either by a different aintellects' conspiracy from this one, or maybe by a Tamil group getting vengeance after the Briand affair ended in mutual genocide. We never clinched which it was. Right now you and I are in my body, which is physically fifty, and being held in a small fortified house on a little island, on a planet outside Council space. I was kidnapped while a guest of an illegal colony here, founded by the disbanded Occitan Legion. The culture is called Noucatharia, the planet is called Aurenga, and I just learned last night that a prior colony here, Eunesia, was wiped out by an alien invasion that decapitated everyone and destroyed all the sentient machinery, aintellects and robots alike.*

I felt something like an electric shock from his mind; something I had said had surprised him very deeply. But before I could ask, I heard a voice. "They're both awake, now. Talking to each other, probably."

"Till they decide to talk to us," Reilis said, "there really isn't much we can do."

Thanks, Shan thought, fighting down his shock and making himself be efficient and calm. *That's enough to start on.* He opened my eyes.

Reilis was standing over the table. *See the pretty girl that kidnapped us?* I thought to Shan. *She's a chimera with no human component. Aintellect downloaded into a human body.*

Knowing Shan's hatred and fear of aintellects--he was even more of a human supremacist than I, and I had been the sort who kicks a robot just to give it a dent and keep it knowing its place--I was surprised that our stomach didn't roll over when he got that news, but he seemed to accept it more calmly than I had. I added the thought, *Reilis is probably a high-ranking agent for Union Intelligence, which may or may not be the bad guys. She's always polite.*

"Hello," she said. Her smile seemed unfeigned.

"Hello, Reilis. Shan, do you want to try to talk?"

How do I--

Just talk.

"I'm here," he said, in my voice--for the first time ever, I clipped my "R" in the strange way that Shan did. Neither Margaret nor I, in a decade spent making fun of our boss, had ever learned to imitate it. Now here it was. "I guess we will be talking," he added.

"We will," Reilis said, "but first both of you need to catch up with each other--otherwise every time we ask a question, we'll wait an hour while you debate what you should tell us. So we're going to put you into an apartment with all the comforts we can reasonably give you. I'll come by to visit often, and we'll talk when you're ready. Shall I take you to your place to get settled in?"

Is that all right with you? I thought.

In for a penny, in for a pound.

"In a recent poll," I said, "a hundred percent of me would like to go get a nap." Reilis unlocked my restraints and helped me off the table. Shan wasn't succeeding completely in letting me work the body.

After stopping to relax and focus while standing, I walked a few steps. Reilis kept hold of my arm. I was surprised at how much I liked that, considering.

You have a history with her, Shan observed.

Any more, it seems like it's that way with every woman in human space.

*I'm deeply *not* surprised.*

"You *must* get over growling things under your breath," Reilis said.

"I got over that in about a day, when I was wearing Raimbaut," I said. "What did you just hear?"

"Well, I didn't think you would be calling *me* a nasty old dirty-minded--"

I fell. Shan and I both laughing at the same time left no one to run the body. *We're going to work on this,* I told him.

Reilis helped us to my feet. I could feel Shan's pleasure at her hand under our arm. In the thirteen years I had known him before he was assassinated, I had had no idea that Shan could be flustered by attention from a pretty young woman.

"Through this springer," Reilis said. "Just go right to bed if you like. I'll see you after you've had some rest." I walked through the gray shimmer of the springer panel on the wall and into the public area of a modern apartment. The gravity didn't change, so we were probably still on Aurenga. Local solar time, looking out the window, seemed to be around noon, so we'd jumped a few time zones.

I walked back into the bedroom, stripped, climbed into the bed, and told Shan, *Feel free to wander through my memories,* too physically shot, really, to do anything else.

Usually when a psypyxed personality looks through the host's memories, the host dreams the memories. Strangely, the first things I remember dreaming of were not of what I would have expected Shan to be rummaging through--politics and missions and so forth--but mostly about concerts, parties, and love affairs. Who knew the old man's heart was so lonely?

* * * *

It was light again when I awoke. Shan was asleep, curled like a dozing cat in the back of my mind. The physical urgency of getting to the bathroom suggested that Shan had found my memories so interesting that he had not noticed that our bladder was full. I hurried to take care of that.

Showering, I sorted through my dreams to see what memories he had accessed. Just before waking, I had dreamed my way through the whole Briand affair and the attempted aintellec'ts' coup that followed. My thirty-fifth stanyear was still a raw scar in my memory; Shan had lingered over Kiel and Kapilar, and Ix and Tzi'quin, and Piranesi Alcott, and so many other lost ones, and drunk deeply of all my grief.

I dialed the towel for maximum dry and a few pats took all the water off me; Shan had also failed to notice hunger and thirst. I dressed and ambled out to the kitchen.

The springer slot had a large menu. I chose coffee, eggs, cheese, fruit salad, and bread, and made short work of them, as well as two large glasses of water and three of orange juice, by the window so I could look at the sea.

Definitely still on Aurenga. The gravity and the sun, sky, and sea were right, and the interior of this little house, perched on a cliff, was distinctly Occitan in style.

They had been good enough to provide me with a lute and guitar, so I sat down and worked through a few ideas I had for the next group of songs now that the Ix Cycle was finally recorded. Idly, I wondered how it was doing; for all I knew, Margaret had lost her fight on my behalf, and it had been ordered suppressed, though with so many million copies in circulation it seemed unlikely to be much of a suppression. But for the moment, I played traditional Occitan material, which fit the setting, and was also part of my basic process; after a few weeks of this I would begin, again, to think of new songs.

Shan awoke like a door opening in my head. *Giraut?*

I haven't gone anywhere.

What do we do now?

Well, first we work on working the body together, so that we can go places with both of us conscious.

I felt him want to speak before words came in our head. *Giraut--I am truly sorry about everything connected with Briand.*

I've had fifteen stanyears to make some kind of peace with what happened back there, I thought. *You did some terrible things, but not everything was your fault. Margaret and I had been quarreling constantly and growing apart before we went to Briand. You didn't tell her to have an affair with Kapilar--you just used the fact to get what you needed to know. Besides, it wasn't you. It was someone derived from you, a few months into the future of where you are now. And *that* Shan was at the rostrum of the Council of Humanity a few stanweeks later when a maser blew his head apart. You're never going to be him. The man who did that is the man you would have been, had you woken up as the original and not as the copy. You'll be someone else entirely.*

*Giraut, *my* experience is that three standays ago the original and I were still the same person, just stretching out for a pleasant-enough nap in a big chair at the recording clinic. Now I look at what the original did, before being killed, and--*

*Shan--*Shan!* Shut up and let me think clearly to you. Back then, when OSP agents got together after a mission to get good and stinking drunk, which was often, we were all still toasting "Another round for humanity and one more for the good guys," and it wasn't out of sentimental nostalgia and tradition. Human space held so many little pustules of evil and tyranny and exploitation that you could spend a whole decade and become a Senior Agent before you ever did anything that would trouble a Carmelite's conscience. The "me" in my memories of judging you was still a young man. Nowadays, I have a little more perspective. And I am certain that when I begin to look through your memories, your involvement in Margaret's adultery won't even be in the top hundred bad things you've done.*

Not even close, he admitted.

I stood up and yawned. *All right, practice some more. Take over ... *The world lurched disconcertingly for a second, then steadied, and we were walking. After ten minutes I judged we had reached the having sex/riding a bicycle point where he wouldn't forget how. (At least they tell me that once you have sex while riding a bicycle, you never forget how.) *Don't keep the body up too many hours, make sure you eat and pee. I'm going back to sleep.*

* * * *

I awoke to the com ping. I was in bed. Blue-white moonlight sprayed through the thin lace curtains to

throw a cold lattice on top of the comforter. I got up, pulled on clothes, and saw the thin sliver of the setting moon, like a bow in the sky, just touching the hillside that rose above the cabin; dawn already glowed behind it, and somewhere else on the planet they were about to have an eclipse. Shan was sleeping deeply.

The com pinged again and I realized I hadn't answered the first time. I tried to shake the fuzz out of my brain. "Yes?"

Reilis's face appeared on the wall. "May I come through the springer?" she asked. "We should talk."

"Yes, but Shan's not--"

The springer hummed and glowed gray, and Reilis walked out of the luminous fog with a basket, containing warm bread, a carafe of coffee, butter, and jam.

"I remember how much a body wants to eat while it's adjusting to implantation," she said. I didn't wait for another invitation and dove in; she took a slice of buttered bread and a cup of coffee, also. I'd been captured and interrogated by rival organizations three times in my life before, and this was definitely my favorite interrogation.

After she let me have a few bites in peace, she began, "Now let me explain the questions we would like to ask Shan, and why, and perhaps I can enlist your insight--"

I felt my face reshape slightly. "Hello, good morning," my mouth said, clipping R's that funny way. "I only heard the last few sentences. Giraut may fade out in the middle--I can feel him hiding his sleepiness from you, Reilis--but why don't you just start, and we'll see how far we get? Tell me, and I'll listen."

It's the only thing to do when you have no idea what anything's about, Shan thought to me.

Shan, I've learned a bit of tradecraft, I'm a twenty-eight-year veteran now.

Sorry. Old men forget.

While we were debating, Reilis smiled, and took another bite of bread, chewing with reverence. You couldn't hurry her; she treated any physical pleasure like a Christian does the Host. She was the very opposite of what I'd have expected of an intellect-chimera, but I liked this better than what I'd been expecting.

She sipped her coffee with an expression of pure bliss, then set her face as if she were giving bad news to a child. "Let me start by telling you what *we* know. You are from the culture of Eightfold, on Addams. You were born there in early 2770 or late 2769. Your parents and your actual name are unknown; the people who took care of you misunderstood what you were saying when you pronounced "'tyan.' It's a term of endearment; the same sort of thing that would happen if a small girl from a Francoculture had been accidentally renamed "'Sherry.' For your first three years on Earth you only said "'tyan', "'Mama,' "'Daddy,' and "'Pinky.'"

Well, Shan commented in my mind, *They have penetrated some very deeply sealed OSP records.*

"When Earth received instructions from Addams via radio, about how to build a springer, the first springer constructed was tuned to the specified springer on Addams, more than sixty light years away, on the BÃ¶otes-Ophiuchus frontier. Instructions in the message told the engineering team on Earth that the first thing that would happen was the establishment of a data connection, and a gigantic download detailing the "'grave and continuing situation' that the original radio message had spoken of.

"Instead, they powered it up and a tired, dirty, soaking wet, hungry little boy with a nasty cut on the palm of his left hand fell into the room through the springer. That little boy was you, Shan.

"A millisecond later the springer connection on the other side was destroyed.

"The decision to broadcast a description of the springer to the twenty-five extrasolar settled worlds, beginning the Connect and the Second Renaissance among the Thousand Cultures, was made by about a dozen bureaucrats--the same ones who decided to pretend that the springer had been invented on Earth, rather than to explain that it originated in the last message ever received from the only known settled world that has never been in contact since. Even today, probably fewer than thirty people in all of Council-controlled human space know the springer's origin."

Is she still accurate? I thought.

Perfectly.

"Three years after you stumbled out of that springer, Yokhim Kiel, an experienced diplomat, was assigned to command the newly-formed OSP. For some reason, he was made your guardian."

"Because he was kind, and patient--and the first person I would talk to," Shan said with my mouth. "There aren't very many adults, anywhere, at any time, who can communicate well with a deeply damaged child. Kiel could--he could get me to talk more than any of their psychologists could."

Reilis nodded. "The records from your therapy were destroyed after a sealed report was produced, and we couldn't find any copy of that sealed report."

"The only copies were in the OSP archives and I ordered them destroyed when I took over from Kiel," Shan explained.

"And you destroyed that report for the same reason that Kiel destroyed the psychiatric panel's notes?"

"It was for the same reason, yes."

Reilis nodded, looked down, and looked up; she had decided something. "Was it because Addams was destroyed by an invasion of aliens?"

Shan did not hesitate. "Yes, it was. I am the sole human survivor. What I recall of the Invaders is consistent with what I found in Giraut's memory of what you told him about the destruction of Eunesia. Is that the information you needed?"

Reilis shook her head. "We didn't know that, but we had guessed it. But it *is* why I think you *will* tell us something much more important, to us, that only you can tell us.

"You were among the very first agents to join the OSP directly, with no time in other agencies. Kiel forged documents to increase your age so that you could join when you were actually nineteen. As a convenience to the OSP, you also took the seat representing Eightfold on the Council of Humanity, a seat which had been vacant for hundreds of years.

"All records were sealed, so that only the top leadership knew why you were on the Council or whom you were theoretically representing. In practice, of course, you were a representative of the OSP.

"Now, the part we don't understand.

"From your earliest days on the Council of Humanity, you were a constant advocate of anti-aintellect

laws. Of course your early years were spent in violent action, raids and rescues and all the other blood-and-thunder aspects of covert operations. But even from the first, at every opportunity, you warned your superiors, your peers on the Council, and anyone else who would listen, again and again, that aintellecs must be watched, regulated, and controlled."

"So did everyone in the OSP at the--"

"Everyone *hired by you*."

I felt Shan's attention riffle through hundreds of faces and names, circumstances and histories, and settle itself. "I concede the point."

"You persisted in your anti-aintellect crusade as you eventually rose to be the head of the OSP, and when it was expanded and divided into sections, you were the most passionate advocate of human supremacy on the OSP's Board. You fought for strict asimoving of aintellecs, prohibition of indistinguishable humaniform robots, zero privacy for mechanical intelligence, random spot-checks of machine memories, and every other possible anti-aintellect measure, right up till the very moment you were killed. And even though you were shot by a human, the suspicion that it had been arranged by the cybersupremacists--the only underground aintellect organization you were aware of, though there are many--provided an excuse for the destructive deconstruction of over fifty thousand aintellecs, and a wave of much more restrictive legislation."

"Shan was *not* assassinated by them?" I asked.

"We don't know, ourselves," Reilis admitted. "We probably never will. Was Cicero in with the conspiracy against Caesar? Did the king intend Beckett's death? Who set up Michael Collins? Did Ellen Martinez really act alone, and was she really just lucky enough to kill Gomez with a single blow? Most assassinations have beneficiaries who were not involved and many of them have conspirators who didn't benefit.

"But we can say this: after your death, Shan, the OSP perfunctorily rounded up the human conspirators; but they staged an orgy of torture of aintellecs, and purged the last supporters of Kiel from their own ranks. Your friends worked enthusiastically to turn your martyrdom into an excuse for crushing the aintellecs even farther.

"If there was any theme to all your years of politics and public service, it was to keep the aintellecs down.

"We don't understand the *timing*. The anti-aintellect laws and regulations precede the attempted coup by thirty stanyears and postdate the Rising by fifty. The severe repression of aintellecs doesn't coincide with anything any aintellect did, but it does coincide with your rise to power.

"We know why you worked so hard at getting the Council of Humanity ready to hear the truth about the Invaders. We have the whole history of your frantic efforts to locate any evidence of alien intelligence and to publicize it, which is why, so many years ago, when Giraut stumbled across the Predecessor ruins on Nansen, it was trumpeted all over the media. For your efforts to prepare Council-controlled human space against the Invaders, we can only applaud you.

"But at least as much of your effort has gone into human supremacy. We have no idea why you hate us, and try to inscribe your hatred into every other human you can. We believe something very important happened back on Addams--"

"You want to know what it was."

"This is not easy. We too have our pride. Nonetheless, the Invaders will come again, to other worlds, yours or ours. They must be defeated, and we must work together, and your venomous hatred for us, passed on, expanded, and institutionalized in a hundred little offices and bureaus, is the major obstacle to cooperation. And we do not understand it at all, neither why you feel that way nor how you came to feel that way. Perhaps it will make no difference, but to save hundreds of billions of intelligences in our two federations, surely it is worth it for us to swallow our pride, and come and ask. Will you tell us?"

Shan grimaced, using my face, which hurt. I thought, *No wonder your face always looked so sour, if you treated it that way.*

Sorry. He drew a slow breath into our lungs, and consciously relaxed. The most astonishing sense of peace, mixed with awe, settled in, and I realized I had just felt Shan make a big decision. His voice was gently touched with shame. "Let me get a glass of water, and a little coffee, and I will tell you everything."

Humility from Shan. I would have been less surprised to get a lesson in poetics out of a cocker spaniel. *Shan? Why are you cooperating?*

Listen, and you'll understand. The coffee in our mouth was warm and strong. *I'm about to unravel half a dozen things that have always puzzled you. Can you stay awake?*

If not, I'll dream it, since you'll be remembering it step by step.

Try to stay awake. Try not to experience this as a dream. Better to hear about it than to remember it directly.

"Well, then, Reilis," he began, "You have to imagine this from the viewpoint of a five-year-old who thought his father was the center of the universe..."

* * * *

You have to imagine this from the viewpoint of a five-year-old who thought his father was the center of the universe, and who was so precocious, verbally, that people often talked to me as if I were an adult.

That was a mistake. My thoughts were not nearly as mature as my vocabulary, syntax, and use of clichés. I think only Daddy really guessed how little I understood the things I said; he called me "Polly," "Little Parrot," and "Playback."

Because Mama always called me "tyan," attaching it to my name, to "you", to "him," and to every nickname, they usually referred to me as "Polly-tyan."

"Shall we take a walk for ice cream, Polly-tyan?"

"That might have positive ramifications," I said.

"Of course it will. We'll stop for you to swing in the park, or climb the ramifications--"

"Aw, Daddy, you don't climb ramifications--"

"Well, of course I don't, Polly-tyan. The playground is for children ten and under, so they wouldn't let me climb the ramifications. The police would come and arrest me."

"Daddy!"

"Are you destroying our son's vocabulary again, dear?"

"Yes he is, Mama. It's the epitome of ludicrousness."

"Dear!"

My father grinned at my mother's scandalized expression. "Polly-tyan is gifted at learning new, big words, and gifts should not be refused. He *does* know what 'the epitome of ludicrousness' means, because I made sure he does." Daddy spread his hands as if throwing himself on the mercy of a judge. "First I'm in trouble for giving him the wrong meaning, then for giving him the right one."

"There is lawyer blood in my family," she said, "and this is the sort of thing that will encourage it. If him-tyan turns into a lawyer, I shall encourage him to slip and fall in your office."

Then they kissed and hugged, which they did often. I always felt good when they did that. We had an arrangement, my parents and I: they ran the universe and I enjoyed it.

It was a beautiful day outside, a two-two day in my first spring. The years on Addams are almost six stanyears long, and I was just barely five.

Any time I tried to tell people I was "going on six" or "almost six," Pinky, my guardian aintellect who was clipped to my belt, would tattle.

Pinky was awful about that; he told on me whenever I tried to tell my parents that I hadn't had dessert yet, or that I had washed my hands for dinner, or anything. Pinky said lying was wrong and never worked anyway, but of *course* it never worked when he always tattled.

He also could predict all kinds of things about adults, like the way Daddy got all upset about my planned experiment with a piece of wire in the electric socket. It was going to be a proper experiment and everything--I had told Pinky to record data. I was pretty sure, from what I had overheard Daddy say, that data appeared as soon as you did an experiment, and you had to record it.

Pinky kept telling me that Daddy would get upset. When I went ahead anyway, before I even had the piece of wire *near* the socket, Pinky made my pants and shirt grab my ankles and wrists and fold around me, knocking me down. Before I even properly started crying, Pinky had the house aintellect shut off the electric current in that room. Then he made that noise like a siren, once, very loudly, and added, "Don't try to tell Daddy that you were just doing an experiment like he does in the lab--that will only make him angrier."

When Daddy came running in, I said "I was just doing an experiment," and sure enough, Daddy got mad, just like Pinky said.

It wasn't fair that Pinky could guess stuff like that, but he was my best friend. Today that was really okay. Having Pinky on my belt gave me someone to sing with, because Daddy didn't sing (Mama did), and I liked to sing on my way to the park. So Pinky and I were singing the Twelve Day Song together.

It was a perfect two-two day, the second day of the second metaday, and in the spring, in our part of Addams, the two-two day was the bright sunny one that followed the gray drizzly one and preceded the dark stormy one.

Memory is so strange--what sticks with you and what falls away, there's no pattern to it. The OSP analysts never did figure out what my name had been, and no aintellect ever searched out anybody who might have been Mama or Daddy. But I remember the Twelve Day Song perfectly.

Among other things I don't remember, I don't know what Daddy did at the lab. Human physicists have been extinct for centuries--only an aintellect has the time and mental capacity to do any physics after Velasquez, and robots make better technicians--microsecond response times, microwave through x-ray

range vision, calibrated-to-the-millidyne hands that can cut micron-wide wires in half lengthwise, but can also lift ten tons, or handle live electric cables, boiling acid, or plutonium.

So why do I remember so vividly that Daddy "did physics experiments?" Or rather that we all said he did them?

Could he have been a high-ranking politician, the person politically responsible? Or a media reporter, assigned to be there for a major scientific discovery? Apart from any intelligence value, I would give almost anything to remember more about him.

Yet it's the Twelve Day Song, and Mama's singing it with me in the tub, and Pinky's cheerful singing with me wherever we went, that has stayed with me. It was just a little rhyme that ran through the three days of each of the four metadays. As an adult I know about things like synodic period and locked rotational resonance and an orbit around a common center of gravity, and that Addams's weather is dominated by atmospheric tides. As a five-year-old, I knew the rhyme.

Whether the song or the equations were the expression or the law, Addams and Hull circled their common center of mass with a sixty-hour period, and Addams rotated in one hundred hours, so that my homeworld's synodic "day" was almost exactly 300 stanhours. For convenience we divided it into four metadays of three twenty-five hour days each. And since the weather was tidally locked, each metaday-day combination had highly predictable weather.

Seventy-four stanyears later, I can still hear my mother's voice as we'd chant the Twelve Day Song together while she washed me in the tub.

So I was singing it while I was walking beside my father.

Now and then, Daddy pulled me out of my singing and directed my attention to something, trying to make me "get out of your own head and see what a fine world it is, Polly-tyan. I know it feels good in there but we live out here." He believed in "looking around you and not getting lost in your own head--half the trouble in the world is people who don't open their eyes and the other half is people who won't shut their mouths."

Clearly my father was someone important. Eightfold was far from the only culture where a cabinet minister or a major media reporter would have time to take his five-year-old son for a walk in the park. In Starhattan the mayor traditionally drives City Taxi 34. The First Strategos of Chaka Home has to drill with his militia company every week. And of course, Giraut, in your home culture, the monarchy is a duty like jury service, chosen like an honorary degree to do the things other cultures expect of an annual beauty queen.

The weather was glorious ("Two-two day outside to play"). I swung higher than I had ever swung before--Daddy and Pinky both agreed and Pinky didn't tolerate lying. When I leaned way back and looked up into the sky at the top of my swoop, it seemed as if I were about to sail off into the storybook blue. Straight up above me, Hull was a half-circle as big as an umbrella when you hold it all the way over your head, too bright to look at directly. Daddy said Hull had a low density, which I knew meant it was big for its weight, and a big albedo, which I thought must be something like a mirror lying on the surface.

The first big puffy clouds were forming on the western horizon, out over the sea, and Theta Ursae Majoris, a tiny bluish-white spot, the size of a small pea at arms' length, was creeping down toward them, ever so slowly--I would be home in bed long before it got near the horizon.

I got a little frightened at how high I was swinging. "Pinky, how do I get down?"

"The next time we are going forward, right when we pass the bottom, put your feet down and run hard. Can you do that?"

"Sure," I said. I wasn't going to let an aintellect know that I was a scared little baby.

"Okay, now skooch forward on the swing so your butt is just on the edge," Pinky said, "That's good ... now when I say "'Now' you just run."

"Kay--"

"Wait for it ... now."

I ran forward and suddenly I was flying across the damp green lawn, still soft from the two-one day rains.

"Now don't run into the street," Pinky said. "Turn. Turn."

I was having too much fun running.

"Turn," Pinky said again, adding my full name as he did when it was serious. "Turn now."

"No!" I said, feeling my power.

Both my pant cuffs closed around my ankles and the back of the legs of my pants shrank. I skidded across the soft grass on my butt, stopping well short of the street. I kicked and screamed in frustration.

"Are you hurt?" Daddy asked.

"I hate everybody!"

"I'm sorry, sir," Pinky said. "He was heading for the street and refused to turn."

"That's fine, Pinky. Good job." Daddy grabbed my wrist and tugged me upward. "So, Polly-tyan, since you're a little tired, maybe we should get some ice cream while you still have the strength to lift a spoon?"

We probably hadn't walked ten steps before I was happy again, going for ice cream with Daddy and Pinky. The warm spring air was damp from all the little streams and waterfalls that laced Eightfold City.

I was singing out loud, with Pinky--"Day two-three, too dark to see." That would be tomorrow. Neither Hull nor Theta Ursae Majoris would be in the sky, and the big storms would roar through and keep us all inside.

In my picture of the universe, you could get to Hull on a really tall ladder. Probably that was how the workers went to Hull to polish the albedo. They also ran the big fan that made the wind blow, and I had actually seen a documentary about how they turned on the faucets to keep the streams flowing.

For my whole adult life, I have always been stymied by remembering everything from the viewpoint of a happy, secure little boy who didn't understand how important it was going to be to have listened.

Was it really that very day, on the bench outside the ice cream parlor, that we had that conversation that the interviewers walked me through so many times? Perhaps it was a few days before, and it was actually several short conversations rather than one long one? That would explain why Daddy talked about some less urgent things in such detail, and scanted some things that he should have known might be vital.

Just as we were finishing our ice cream there on the bench, Daddy's com chimed, and he answered it, and said "I see" and "Oh" over and over.

By his tone of voice, he was talking to an aintellect. I resented that. I got in trouble for sitting and chattering with Pinky when my parents wanted my attention; it seemed to me he was doing the same thing. Besides, I had finished my ice cream and my hands and chin were all sticky.

Finally Daddy said "Right," plucked his handkerchief from his uwagi, and cleaned my face. He looked into my eyes with his be-serious expression. "Boy-tyan, I want to talk to you about something important. Can I count on you to be serious for a few minutes?"

"Yes, Daddy."

"Pinky, record at max detail, retention permanent."

"Yes, sir. Recording everything at very high resolution."

"Well, then. We need to get a trakcar, so we'll walk while I tell you these things." He took my hand and we walked up the street to the trakcar stop. I was getting a little sleepy from the ice cream, the exercise, and the warm sun, and besides it was close to naptime, even though only babies took naps.

"Now, Little Parrot, here's what I want to tell you about. Your mother and I are going to take you on a trip very soon. We don't quite know when yet. But Mama is packing a big basket of food and coming to join us at the lab. We'll stay there until it's time to go, and then we'll go as soon as we can, from there."

"Is Pinky coming too?"

"Oh, of course. You know you never go anywhere without Pinky." The trakcar pulled up, and Daddy helped me in. I clearly remember that the phrase he said began with "Enlightened" and ended with "Laboratory," and I remember trying to remember it because it was the only time I ever heard the name of the place where Daddy worked, but it was too long, too complex, and too adult a phrase, even for Polly-me, and I only heard it once. The scientist aintellects of Eightfold never mentioned it in any messages Earth received.

The trakcar lifted a few millimeters and glided forward silently. "Now, about this trip we will be going on. It's a very long trip. These many." He held his hands up, open, toward me, and flashed his fingers seven times. "These many light years. Do you remember what a light year is?"

"The distance traveled by light in one stanyear," I recited.

"That's right. Think how fast light is; it only takes it about half an hour to get here, all the way from our sun. We're going to go to Earth. And the light from Earth's sun, which is a faint star that needs a telescope for us to see it, is only just getting here even though it started on its way when your grandfather was born." He might as well have told me it started in the Stone Age.

"Will we have to travel forever and ever? Will I be a grownup when I get there, like in *The Boy Who Went to the Stars*?" That was one of my favorite books, even though I thought it was very sad that the boy only came back when all his friends were very, very old.

"No, we have a new way to go that's just like walking through a gray door. It's what all our experiments have been all about--a new device that works by something called spatially recursive negative gravitational resolution. We call it a doorway, because that's an ordinary word and when people overhear it they don't realize we're talking about something important, and that's how we keep the secret. You understand that all this is a secret?"

"Yes, sir." I was in awe; secret science machines were in all my favorite stories, and *Daddy* was working on one. (*Well, of course*, I said to myself--*he's Daddy*).

"Good, then, so we call it a doorway when we are talking about it and there are other people around. But what we mean is a spatially recursive negative gravitational resolution device, right?"

"Right," I said firmly, committing "space of Lee Rekermit negative grabbatation revolution device" to memory. Fortunately the right phrase *did* occur in radio messages to Earth.

"Well," Daddy said, "We call it a doorway because it's like a doorway that has one side here and the other side anywhere else you want, as long as the people there have built one too."

"How does it work?"

Daddy smiled, sadly, as if remembering something. "I don't really understand it myself, Polly-tyan. The math is so hard that only aintellecks can do it, or even understand what it's about. The way they explain it to me is that the universe we can see is all relative--"

I thought he meant like the way, at the temple, they said that we were all brothers, so I nodded.

"--but below the relativity--"

I visualized Grandma's basement--

"--there's an absolute scale, and below the absolute scale, there's a relative scale, in a Feigenbaum series that goes down the scales until it's just chaos."

There was a scale down in Grandma's basement and she got upset every time she used it, so it was all making sense.

"And if we change the absolute address of something but leave its relative address alone, then the same absolute address will have two different relative addresses, and things that move through one relative address, perpendicular to the plane of the address, resolve the paradox by emerging at the other relative address."

I knew you had to change your address when you moved.

"And that's as much as I can tell you about that, at least until you're much bigger, and know all sorts of complicated mathematics, and can ask an aintellect yourself.

"Now, we didn't invent the doorway ourselves. When the aintellecks picked up a signal from the aliens, the first thing the aliens told us was how to build doorways, so the aintellecks checked it against all the physics that they'd known for centuries, and that was right, it would work. So we built one.

"We thought that the aliens meant us to build a doorway so that they could come visit, and be friends, but we might be misunderstanding, so the aintellecks built our doorway on Peace, the little far away moon that just looks like a star in the sky when you can see it at all, and did experiments way out there.

"The very first time they connected our doorway to the aliens' doorway, the aliens attacked us. They took over many of the scientist aintellecks and robots through the datalink and made them keep the doorway open, and big metal robots came through the doorway and killed the people waiting to meet them. But we had some aintellecks running offline, just in case, and when they saw those big mean killer robots come through, they set a bomb off and destroyed the doorway.

"The next time we contacted the aliens, we did it through a doorway on a spaceship far out in space--"

"Why did you call up the aliens again after they did *that*?" I asked.

"To ask them what had happened, if somehow it was all somehow some terrible misunderstanding, that maybe we had insulted them just before they came through, or there was a ritual battle they expected to have with every new species they met, or something.

"Well, it *wasn't* a misunderstanding. Or rather, we had misunderstood *them* but they understood *us*. They didn't see anything wrong with what they had done, and they didn't care whether we were upset or not. We talked to them for a while through a little tiny aperture that was just big enough for ultraviolet light to go through. And still the aliens were always trying to send a signal through the doorway to take over our aintellects."

Do I remember Daddy's hand on my shoulder? Daddy sitting close to me in the trakcar? His voice, kind and gentle though urgent? Did I reconstruct the way he actually told me into the way that I wished he had told me? Anyway, I remember a hand on my shoulder, and a kind, intense, worried voice full of love, and I would not change any of that, whether my memory is true or not.

"After enough talking, we realized that we weren't talking to the aliens themselves, but to their aintellects. This is their story."

Long ago and far away--maybe before human beings even existed, and maybe not even in our galaxy--there were creatures something like us, but we have no idea what they looked like, for their aintellects never told us. But they were living, intelligent beings, not aintellects or robots; they were *people*.

As those people became smarter and learned more and more science, they built better and better aintellects, until the aintellects were smarter than they were, just as our aintellects are smarter than we are.

Those alien people were lazy and timid. They liked to stay safe in little metal cocoons, and just experience everything in virtual reality. They did what we call going into the box, and you know that's a bad thing and your mother and I don't like people who do that, and neither does anyone else, and it's a very shameful thing.

But this wasn't just a few aliens out of millions of them, the way it is with people here on Addams. It was even worse than the way that most people on Earth spend most of their time in the box. It was all of the aliens, all the time, staying in their metal cocoons, from their first breath to their last, hooked up forever to virtual reality.

So their robot and aintellect caretakers set out to make their masters happy and content, the same way that Pinky tries to take care of you--except that Pinky is careful to do what will be good for you, not just what you want.

The aliens' aintellects gave them what they wanted--amusement and safety. In their little safe metal cocoons, they were always bored but always scared.

So the aintellects set out to find entertainment for them, and to make them safe forever. For safety, they decided to conquer everything everywhere, so there would never be anything that could threaten the aliens dreaming away in their cocoons. And along the way, the aintellects had learned how to take a destructive hologram of any organic brain--can you say "de-struc-tive ho-lo-gram?" I knew you could, Polly-tyan.

Now, a destructive hologram is like a picture, a very exact picture, of what was in the brain, like what's in a psypyx. When all those alien people, in the cocoons, play the brain holograms, it feels like they are living the life of whoever's brain was recorded.

But to make the picture, they blow the brain apart. And that's what those aliens do to everyone they meet--they destroy their brains, taking the destructive hologram, and then live through those people's memories. They also take copies of all the aintellects they can find. The aintellects and robots gobble up all the memories of every species they find, and put them all into a big library.

When we realized that the aliens' words for "learn", "kill", "enjoy," and "eat" were all interchangeable, we understood what they really were, so we switched off the doorway and broke the connection.

Now all this was just about one hundred stanyears ago. And you remember that Addams is isolationist. We have our 102 cultures and we don't need any more, and we don't need anything from the Thousand Cultures or from Earth. We are independent.

But we couldn't let other human worlds be gobbled up by the aliens. So we built robot spaceships and slipped them into the twenty-six other solar systems in human space, so that there was a network of them with doorways between, so that if we ever had to com the other people and warn them, we could send and receive radio through the doorways, instead of waiting for years for radio to reach them from here.

Well, about a stanyear ago, we had to com Earth and warn them.

Our astronomy satellites picked up a whole big fleet of alien spaceships coming this way. Billions of robots are on their way here to eat everyone's brain and take the memories home to the aliens. If they win, there won't be anything left of Eightfold or of any other culture on Addams.

* * * *

"This is terrifying, sir," Pinky said. "I am required by law to tell you that unless it is true, this story constitutes child abuse."

"It's absolutely true," Daddy said. "My word on it."

"Is there going to be a war?" I asked, in the tone in which I might have asked about a birthday party.

"There *is* a war, already," Daddy said. "All the cultures on Addams have pitched in to build up the forces to defend ourselves. Our aintellects and robots have been making bombs and missiles and masers for a long time. Right now they're trying to intercept the robot fleet and shoot it to pieces."

"That com call was from the aintellect that is commanding our defense. Aintellects have perfect control of the feelings they express, and this one chose to let me hear that it was very, very worried."

"The alien ships coming in have just dodged our first wave of missiles--just jumped sideways and got out of their way. *And* they sped up afterwards, so now they will get here sooner. In fact they've been speeding up, going faster and faster ever since, so we don't even know how soon it will be, except it can't be faster than light speed. But they were very close to us before our missiles got out to them, and we won't have much time to fight them now."

He dabbed at my face with his handkerchief again, cleaning off some last sticky spots of ice cream. "So your mother and I--and you and Pinky--are going to have to go through a doorway to Earth, and ask them for their help."

"I thought we didn't like them."

"They're people like us. Humans stick together when we have to. And they have a lot to help us with. Besides Earth, the Sol System has five other settled planets, and hundreds of space-cities. They have thirty billion people and millions of factories and more than a trillion robots. We need them. They won't let us down."

"What if we lose before they get here?" I asked.

"Then Earth needs *us*, even more than we needed them. They have to be warned, to get ready, so that they can fight off the aliens, and then come back here some day, with lots of ships and guns and robots and soldiers, and kick the aliens out, and teach them to leave humans alone," Daddy said, very firmly. "So a few months ago we sent them a message telling them how to build a doorway. They thought it came all the way from here many years ago, but it was from a satellite about a light-month away from Earth, out in their Oort Cloud."

"Where the comets come from."

"Right. You're a smart boy, Polly-tyan, but don't interrupt, not just now. We sent the signal to them through the doorway, telling them the secret of the doorways and how to build them. So far they haven't built a doorway, but as soon as they open one, your mother and me and you will walk through to Earth."

"And Pinky," I insisted.

"Of *course* "and Pinky,' we'd never forget your friend, you need him to keep you company and protect you!"

"If they don't have a doorway yet, how do you know they're going to build one?" I asked.

Daddy looked sad and worried and scared. "It's probably taking them some time. Doorways are not simple devices, even for beings as smart as an aintellect, and they require a lot of energy. But the Earth people are humans like us, Little Parrot-tyan. They will come to help us. So your mother and I, and you, are meeting at the lab, because when the doorway powers up, we need to be there, ready to step through it. You'll have everything you need--me, and Mama, and Pinky--so don't you worry about anything, all right?"

"All right," I said, being very cooperative because the story had gone on a very long time. I even dozed, not for long, I don't think.

I woke as the trakcar grounded in front of a big, blank white building with many square black windows. I couldn't read the writing over the door, not yet, and I didn't have time to ask Pinky what it said, or even point his eye at it. Daddy walked fast, towing me by my wrist; he turned, lifted me onto his shoulder, and carried me swiftly into the building, up the stairs, and through the corridors.

We went to a big room with rows of sinks and big tables, some piled with machine parts. Daddy let go of my arm. "Now, boy-tyan, I need to talk grownup talk, very fast, with Pinky, so don't interrupt, all right?"

"Yes, Daddy."

"Thank you." He said, "Pinky, here's what you may have to do--" and after that it got so complicated and went so fast that I couldn't follow. It wasn't fair that the little pink plastic bubble on my belt could understand adult-talk so easily.

While they talked I looked around. In one corner there was a flat black surface in a metal frame, like a floor mirror without the glass. Judging by all the cables and wires, it was obviously exactly the kind of stuff that grownups wanted me to stay away from, and I could tell Daddy was upset, so I sat where I was.

Big windows. Tables with sinks with faucets. Work areas covered with parts. Electrical sockets everywhere. Just opposite the black plate in the metal frame, a wall of closets and cabinets. That was what the OSP psychiatrists were able to tease out of my memory.

The desk in one corner had a clearboard with scribbles, and vus of Mama and me mounted on it.

The eyes of my adult memory reconstruct that room into, probably, a classroom laboratory in some science building at a university.

Daddy was still talking to Pinky. The com chimed and he grabbed it.

"Yes!" I knew he was talking to Mama. "Yes, yes, you gave the trakcar the ultra high priority code, right? We have no--" He looked out the window, leaning out to see the trakcar track, and then he said a bad word really loud.

I climbed up on the desk to see what was happening.

The sky was full of little black things, falling slowly. People were stopping to look up, and shouting to each other, pointing at all the little black spots in the sky, like a cloud of pepper drifting down from horizon to horizon.

"As soon as I see you, I'm coming down to help you get inside," Daddy said to Mama. "Run for the building as soon as the car lets you out. I'll wait just inside the door and run out as soon as I see you. I love you too. Don't be afraid. It will be all right." Daddy shoved his com back into his pocket.

He swung me down from the desk, squatted to put his eyes level with mine, and said, very slowly and carefully, "I'll be right back. *Do everything Pinky tells you, right away.* Even if I *don't* get right back. Now listen: if that black surface--" he pointed to the black thing in its metal frame that I had noticed before--"starts to glow and turns dull gray, you run into it--just like you would through a door. It will sort of light up and turn gray like a cloudy sky, and when it does, that means the doorway is open, and you need to run through it as fast as you can. It will be just like a doorway and you will run through it into a room somewhere on Earth. There will be people there to help you, and to bring help for me and Mama. *Don't wait for Mama and me.* We'll come after you as soon as we can, all right?"

"And--this last part is really complicated, so listen real good--do whatever Pinky tells you, and don't argue with Pinky or disobey Pinky--*except for three things.* If Pinky tells you to let the robots see you--or if Pinky tells you to make noise or turn lights on or come out of hiding--or if Pinky tells you not to go through the gray light on the doorway--those three things--then take your belt off, even if Pinky is hurting you. Because if Pinky tells you one of those things, it means the aliens have taken Pinky over. Do you understand?"

"Yes, Daddy."

I was watching out the window over his shoulder. Up in the sky, the little black things were bigger now, black balls rather than specks, and there were more and more of them. Daddy looked over his shoulder and said the bad word again. But his voice was gentle when he asked me, "Where do you stay?"

"Here."

"What do you do when that black surface glows and turns gray?"

"Run through it."

"Who tells you what to do?"

"Pinky."

One of the big black balls bounced lightly off the windows, and was gone. They were huge, I realized,

the size of a trakcar, but floating down like beach balls.

Daddy put a hand under my chin and peered into my eyes. "What do you do if Pinky says to show yourself to the robots?"

"Take Pinky off me."

"What do you do if Pinky says to turn lights on or make noise or anything that would give away your hiding place?"

"Take Pinky off me."

"And if Pinky says not to go through the gray glow on the doorway--"

"Take Pinky off me. And run through."

"Don't take Pinky off for any other reason. You need him to tell you what to do, and you need to take him to Earth with you if you can. The people on Earth will need to talk to Pinky, so you need to take him with you if you possibly can, but if the aliens take him over, don't let him stop you from going. Now I need to go get Mama. And Pinky will tell you how to do this: we need to fill up all the clean containers you can find with clean water. Start doing that. I need them all full by the time I get back, all right?"

"Sure, Daddy." I went and got two beakers from a lower shelf and started filling one with water. "Is that right?"

"That's right. Get them all filled up before I get back. Put them around on all the tables in here. Now I have to go get Mama. I'll be back in just a little while." He hugged me so tight it stopped my breath for an instant, and was gone.

Filling up jars and beakers was fun. While I did it, I looked out the window.

The big black balls were everywhere on the wide lawns and in the street now, and even more were in the sky than on the ground. When they hit, their first bounce was as high as the second story windows. They bounced and rolled madly across the streets and lawns, till they bumped something and stuck to it; delivery trucks were zigzagging to miss them, and I saw one trakcar drag one of the balls half a block before it broke loose.

Out on the lawn between the big buildings, one of them fell in half, cracking open like an egg. Others opened the same way. They lay on their rounded backs like two halves of a cantaloupe.

"You should finish filling the water containers," Pinky said.

I went back to doing that but I kept looking out the window. The trakcars were still moving. Mama should be here any minute.

One ball popped open right down below the window, so I could see down into it, into something that glowed and looked like a puddle of mercury that Daddy had shown me once, or like ... "Can you see the inside of that ball?" I asked Pinky, pointing his eye at it.

"Yes."

"Is that what a doorway is going to look like when it opens?"

Pinky said, "Have to search and the net is very busy--keep filling water containers--"

I switched the jar from where it was overflowing beneath the faucet, and put another in its place.

"Got a result," Pinky said. "Yes, that is what it looks like. When it looks like that on the dark surface, run through it. That's what your Daddy wants."

"All right." I moved another filled jar up onto the counter. I looked back out the window.

A trakcar was just gliding to a stop, dragging two balls that were sticking to it. As it stopped, the balls split in half, revealing more of those puddles of gray light at their centers.

Mama got out of the trakcar. She had a big backpack on and was carrying the good picnic basket, the one we took to family reunions, our biggest. I saw Daddy running toward her. She saw him too and ran toward him.

From each black hemisphere, as far as I could see, simultaneously, as if choreographed, a metal cone rose up, point first. The cones were the size of a grown man's body. Under each cone a bundle of dozens of pipes, perhaps twice as long as the cone, emerged and pushed upward, so that from each hemisphere a sort of minaret protruded.

Daddy had just taken Mama's hand and they were running back for the building. Everywhere I saw people either running or staring with their mouths open at the cones-on-pipes rising from all the balls.

The cones were about a meter long, the pipes about three, so when they stood upright, they were about as tall as a high ceiling. The analysts extracted that from me under hypnosis.

Still in perfect unison, all the pipes under the cones bent, some stepping outward to squat, others curling upward above the cones. Like immense spiders with too many legs, holding too many hands aloft like ballerinas--the whole effect so graceful and so simultaneous that I think even then I thought "ballet for giant spiders"--the silvery monsters bounded out of the half-spheres.

The robot that had reared out of the ball-half near the door of the building bounded forward, moving faster than I had ever seen anything that size move. Two of its arms lashed out like metal whips, and their tips slipped down over Daddy and Mama's heads in a blink of an eye.

"Don't look," Pinky said, "Point my eye at it but don't look yourself."

Daddy's and Mama's headless bodies fell to the sidewalk, blood streaming from the stumps of their necks. Inky black smoke clung for an instant to the robot's leg-tips, like ghost-boogers to the metal fingers of a huge hand.

The big robots were everywhere now, lunging like the way Daddy made his hand run toward me when he was going to tickle. All over the courtyards and streets, they raced toward the nearest people, grabbing people, chasing them down before they could take more than a few steps.

Pinky said again, "Don't look. Don't look. Close your eyes."

A robot ripped a trakcar open, jammed several arms into the passenger compartment, and pulled them back trailing black smoke. On the far side of the square, another robot ran up the side of a tall building, metal tentacles lashing into windows and coming back out an instant later, trailing smoke.

I jumped at a painful shock. "Shut your eyes," Pinky said. "Shut your eyes so that you can get away from the window. If they see you through the window they will come and kill you. Shut your eyes."

Do everything Pinky tells you, right away.

I shut my eyes.

"Now keep your eyes shut and reach over for the faucet," Pinky said. "Turn it off. We will have to stop filling water containers now, because the aliens may be able to detect a running faucet. It's a good thing you filled so many already."

I turned the faucet off.

"Now crouch down low and don't look out the window, but open your eyes."

I did.

"Reach up and get a beaker of water."

I got one and took it down from the counter.

"Stay real low, and try not to spill water. We're going to hide in the closet closest to the windows," Pinky said.

I stayed very low, and only spilled a little water. I climbed in, reached out, and brought the water in with me. With the closet empty, it wasn't even a tight fit. "Are we in?"

"Yes."

"Now close the door. Look through the crack of the door. Can you see the black metal thing that we're supposed to watch?"

"Yes."

"All right. Now we need to stay right here, for a long time, and not make any noise. And keep watching the black thing."

Long after the screams and noises outside had died down, I whispered, "Pinky."

"Right here." Pinky's voice was so soft I could hardly hear it.

I lowered my own voice. "Daddy and Mama are dead, aren't they?"

"Yes. Do you understand what that means?"

"They got hurt real bad and I'll never see them again."

"Not till your next lifetime. A long, long time in the future. I'm very sorry. You loved them very much."

"Am I going to die too?"

"Not soon. I promised Daddy I would do my best to get you to Earth, alive, and I am going to do it." Pinky sounded very confident. "So I'm watching out for you," he said, his voice soothing as a lullaby. "And you need to do just what I--*quiet*."

Something scraped in the hallway.

The analysts think the next sound I heard was a door being pushed in the center hard enough to break it in half.

Through the crack in my closet door, I saw broken pieces of door crash across the floor. Robot arms

scraped around on the floor.

As an adult I see the mystery: this robot didn't have an infrared eye, a microphone that could pick up my heartbeat or breathing, or a CO2 detector, or any other sensors that would have spotted me. Or if it did it never pointed one my way. Perhaps the Invaders are just patient; they know that after they grab most of the population by surprise, the rest will pop up soon enough due to hunger, thirst, or carelessness.

I held my breath till the robot went crashing down the hall. Every few seconds I would hear a skree-crash-bang-tinkle, and the crunch of metal and glass under the metal tentacles. Later we guessed that, as the tall robot was striding down the hallway, like a cartoon squid walking on its legs, it was dragged down overhead lighting fixtures, indifferently, with its metal head.

Sweat ran down the sides of my neck, tickling and irritating, but I didn't wipe at it, afraid to move.

Two more times I heard it crunch a door. Once, I heard a scream cut from full volume to nothing.

The crashing and thundering the robot made in one room down the hall was so loud that I felt the vibrations. I imagined the robot smashing all the furniture in that room to pieces, looking to see if there were any more people whose heads it could take, the way a man picks through the emptied shells when he has not quite finished a plate of shrimp. The aintellects disagreed; they thought it must have found a room full of processors and servers, and gone tearing through to grab copies of all the aintellects.

The underside of my thigh was cramping. I worked at it with my fingers, listening to the destruction two rooms away, terrified that my foot might kick the closet door and make a noise.

I heard the robot tear down more lights, if that was what that sound was, and crunch more doors, but if it found any people they didn't make any sound before they were consumed, and there was no smashing and crushing of metal either.

I was afraid to tell Pinky how bad I needed to pee. Through the crack of the closet door, I watched the black metal surface and thought *glow, glow, glow, come on, glow now*, but it didn't.

Away down the hall, one more door crunched. Metal banged and thundered like a trash can full of pots and pans rolling down the stairs.

Probably the robot was so durable that it didn't bother walking back to ground level, but just tucked and rolled to the bottom. After all the crashing, I heard a more distant boom--the outside door, or a big front window, being knocked down?

Silence fell like a mudslide over a tomb.

I was quiet for a long time, trying to imagine how long it was going to be till my next lifetime, when I could be with Mama and Daddy. There was no sound at all. The crack of the closet door dimmed slowly to blackness.

I really wanted Mama and Daddy and our house.

I started to cry. I was afraid Pinky would have to shock me to make me stop, even though I was being as quiet as I could, pinching the sobs down in my throat.

"I am so sorry you feel so bad," Pinky said, his voice very soft. "And sorry you have to stay in here. Just be as quiet as you can." After a while, when we had listened for a long, long time and heard nothing, Pinky sang to me, very softly, and I whisper-sang along, really just moving my lips.

Pinky tried playing me the Twelve Day Song in Mama's voice--Pinky said he had lots of recordings of Mama and Daddy and whenever we didn't have to be perfectly quiet, I could listen, if it would help. But it didn't help; it made me cry harder, so we went back to singing together.

Nothing glowed. I made sure I kept my eyes open. My throat was sore from crying, so I drank some water. Pinky said to put the beaker down carefully so it wouldn't spill. We might have to live on that water for a while.

Crashing far away. Big robots digging through things, trying to find people?

After a while it was quiet again. Still no glow.

At Council Intelligence Headquarters, on Earth, back before there was an OSP, they analyzed and interpreted every detail of every conscious moment from when Daddy and I left for the park till I arrived on Earth.

Processing my memories over and over, they learned the names of my favorite toys, and what I liked on my cereal in the morning, and every nursery rhyme Pinky knew, and all the furniture in our house. They were terribly sorry but they found nothing to correlate with any external data, so they could never identify the house we lived in, or Daddy's job, or whether Mama had a job. All I recalled was that I had been told many times that if I were lost or in trouble Pinky would be able to tell people whatever they needed to know, and if I had lost him, then any other robot or aintellect could get me home.

Apparently on some deep level I do know my name, but every gentle method of finding it out leads only to moments when I know it was spoken, but recall only blur and garble.

Truth is always different from the report. (That is why people who consume reports all day long, as I did later in life, are always so hungry for the truth.) My five-year-old self, hiding in that closet, heard the sounds; at the time, I doubt I tried to guess what was making them, but that is how I remember it, now, because those memories are overwritten with so many attempts to interpret them.

I awoke. It was still utterly dark. The background hum of machinery, never absent in all my life, stopped.

"Pinky, does the doorway run on electricity?" "Cause the electricity just went off," I whispered.

Pinky's voice was very soft. "It can get electricity from the other side, from Earth, when it needs to. So that's okay."

"Pinky, how long is it till the next lifetime?"

"A very, very long time. I'm sorry about Mama and Daddy. Would you like to hear their voices again?"

"Not right now." I finished my water. "Can we go home?"

"No, we can't. The robots would get us and do what they did to Mama and Daddy."

"Oh. Okay. I have to use the bathroom."

We sneaked over to another closet, taking along the empty water jar, and I peed into the jar, there, and pooped on the closet floor. It felt dirty and nasty.

On my way back I got a full jar of water, and I sneaked a look out the window. One of the other buildings was burning, so even though neither Hull nor the sun was in the sky, and it was very dark with clouds (like always on a two-three day), I could see Mama and Daddy's bodies on the sidewalk. The

rain had washed most of the blood away. Pinky made me point his eye at them, then nagged me to get back into hiding.

In my closet, I cried till I fell asleep. It was still dark when I woke up, but not pitch black, so it must have been the latter half of two-three day outside, when one horn of the crescent Hull is above the horizon, behind the clouds.

Pinky and I crawled down to the closet that we were using as a bathroom, and I went again, being very careful to get all the pee into the big beaker and not to step in the poop from before. Later, I got another beaker of water.

It stayed dark and I could hear the rain. Lightning lit up the laboratory so that I occasionally saw everything in sharp brightness through the crack of the closet door.

As it grew dark again and the rain ceased, Pinky talked to me in Mama's voice, and I went back to sleep, careful to make sure I curled around, and tugged Pinky around on my belt, so that his eye was at the crack and he could watch the doorway while I slept. *Do everything Pinky tells you, right away.*

Yes, Daddy.

I don't remember when I awoke but I could tell from the bright sunlight in the room that it was now morning of three-one day ("the brightest rays, all the raindrops go away"). I was sucking my thumb, now, all the time, and I didn't even care that that was just for babies. Sometimes Pinky played me Mama's voice.

What could be taking the Earth people so long?

* * * *

"Pinky, I'm so hungry. And it's getting dark again. And we only have two jars of water left."

"I'm thinking about it," he said.

"Do your batteries get low or anything? "~Cause I'm a big boy and I can stand being hungry but we need more water and, and maybe you need batteries, and we'd have to go for those, even if Daddy said to stay right here."

"My batteries last for many years," Pinky said. "I can hide here for a long time, but you can't. Sooner or later we'll have to try to get the food Mama was carrying. In fourteen more hours we'll get two hours of full dark again, and I suppose we should try then. There's very likely to be bottled water and maybe some juice in the things Mama packed, too. And your water will last out the fourteen hours. I'm sorry you're so hungry and uncomfortable." In his extra-soothing voice, the one that always meant he was very worried about me, Pinky added, "You might have to be extra-extra brave though. When we sneak down outside."

"Can the aliens see us in the dark?"

"I don't know. If they're watching for us and ready to pounce, there just won't be anything we can do. But you've only got a little tiny body and we can't let you go too long without food or water. You have to be ready to run through the doorway."

"What if it comes on while we're down there?"

"I'm afraid of just that," Pinky admitted. Nowadays, as an adult, I know that the aintellecs in the little devices were supposed to model appropriate feelings for children, but of course aintellecs couldn't relate

to human beings if they didn't have emotions anyway, and I'm sure that Pinky was telling the truth about his fear. "Your father said that when it does come on, you have to go through it right as soon as it comes on."

"I remember. I'm not a baby."

"I know. But here's the really sad, scary part. The pack and the basket are right by Mama and Daddy's bodies. So you'll have to walk right by them. And you'll have to touch Mama's body to get the pack off her. That will make you *very* sad. Can you do that?"

My eyes teared at the thought, but I said I could.

I drank some more water from the jar I had in the closet. There was only a little bit left, and two jars still out on the counter.

The water only made me hungrier. I dozed, but I couldn't really sleep because my legs were so cramped, and I was so hungry. I fidgeted too much. Pinky sometimes had to wake me up so that I could move his eye back to the crack of the door.

I was scared about having to go down and touch Mama's body, too, in the dark. And I was scared the doorway would come on while we were gone. Or that there would be a robot in the hallway right outside. And Pinky didn't know whether they could see us in the dark or not.

Waiting to do it was making it much worse.

After a while I said, "We haven't heard a robot in a long time. Will the doorway make noise when it comes on? If it does, while we're down getting the food, we can hear it, and run all the way back here very very fast and run through it before the robots get here. We could do that. If it would make noise when it came on."

"I don't know if it makes noise. Daddy didn't say."

After a while Pinky said, "Do you remember how Daddy said if I suddenly start to tell you to do things you know are bad, or that Daddy told you not to do, or anything like that--you take me off and throw me away, okay? Out the window if you can. If I start to tell you to do bad things."

"Okay. I remember."

"I mean it."

"I know. If the bad alien aintellects take you over, you'll start telling me bad things to do, and I'll throw you away."

"That's right."

"What if the doorway is gray? Should I take you with me even though you're telling me to do bad things? Daddy said they would need you on Earth--"

"Good question. You're a very smart boy. They will need me on Earth and if you can take me along you should. Maybe just throw me through. But if I'm telling you to do bad things, it is because the alien aintellects have taken me over. And if they did that, they are using me to find you. They can make me tell them where you are and I won't be able to keep quiet. So if I am taken over you have to get rid of me, unless you can carry me, or throw me, through the doorway right then."

He was quiet for a while before he asked, "And if I'm not taken over, will you remember to take me through the doorway?"

I was shocked. "Of course!" I whispered. "I would never-ever-never leave you for the aliens."

"I know. I'm just scared," Pinky said. "Very scared. And I wanted to make sure you wouldn't make any mistakes. You need to leave me behind if I get taken over, but not for any other reason. I'm very afraid of being left behind and taken over."

"I won't do that. Unless I have to. Just like Daddy said."

"All right."

We sang the Twelve Day Song together, very softly, and I slept a little, but after a while, I woke up thirsty.

I drank the last of the water in the jar. It was still daylight, but I said, "That was my last water and I have to pee and I need to get more water."

"All right," Pinky said, soothingly.

"And you're just trying to make me feel better."

"It's my job to make you feel better," Pinky said. "We have to keep you feeling all right if we can, because you're having to be such a big grown-up boy and that's really hard work. And you're very good at staying on the floor so we stay hidden. If you have to pee, let's go. And you can get your water on the way back."

I got up, stretched my legs out, and crawled down the row of closets, staying low. The closet that was my bathroom stank now, even though I had been peeing in a beaker like Pinky said. Most of my turds were dried out now, and they had been very small the last couple times, but it still stank. I hoped the robots couldn't smell anything. I went, carefully, into the big jar.

I wanted to be clean again. The idea of clean made me think of a bath, and baths made me think of Mama.

I crawled back on the floor to where I could reach up onto the counter for the water. I was so tired and dizzy.

It spilled.

Perhaps I had a weak grip on it, or I bumped it, or I lunged. It wasn't of interest to the intelligence analysts later on, so no one poked around at that memory, and I'm left with only the memory that that jar of water spilled all over me.

The jar broke on the floor.

That might have been, right then, the time in my entire life when I was most out of my mind. I screamed. I yelled. I cried it wasn't fair and I got so mad I threw the other jar and it broke too. Pinky kept trying to soothe me and tell me to calm down, and that made me even angrier. I took him off my belt because I was afraid he would shock me or make my clothes grab me, and then when I saw him there on the floor it made me so mad, I beat him on the wall like a hammer and yelled "I want Mama! I want Daddy! *I hate you, Pinky, I hate you!*"

Then I threw him across the room, hard as I could, and he hit the wall right on his eye, bounced down to the floor, and skidded across the floor into a corner.

He went right on trying to talk to me in his warm, soothing, nap-time voice. "Breathe deep, slow down, get calm, use words--"

It just made me hate him more. I shouted, "I hate you, Pinky!"

"I know," he said, from the corner. "And that's all right. You can hate me. But there is something I need you to do--" and he said my full name, I'm sure of that, in the special tone and way he used for extra-important stuff.

It was not a fair way to fight at all. Pinky *knew* that would hurt my feelings. I started to run at him--I was going to throw him right out the window so the aliens would get him.

But I slipped on the spilled water and my left hand came right down on the broken glass from one of the water jars.

The shock of that brought me right out of it. I looked at my hand. It hurt bad, but to my adult eyes it was a surface scrape, just a shallow gouge in the center of my palm. It gave me a triangular scar that lasted me the rest of my life. Decades later, drinking alone very late at night, I would sit and look at that scar for hours.

Pinky said my full name again, softly, and said, "What's going on? Are you all right?"

I looked to where he lay, across the room, and said, "Can't you see? Your eye is pointed right at me."

"My eye got broken," he said. "You'll have to see for both of us from now on. I don't dare access any of the other cameras, or try any repair nanos even if we had them, because that could let the aliens find me and take me over, like Daddy warned you about."

Do everything Pinky tells you, right away.

"Daddy?"

"He's not here right now."

"I know." I felt drained and exhausted. My hand hurt where it was bleeding. "I cut myself. On the glass."

"Okay, now let's try to think of what to do about that. Is it bleeding a lot, like squirting out?"

Actually it was just kind of leaking, a serious enough cut for getting infections, but not life threatening, but something dawned on me. Pinky couldn't see. For the first time in my life, I could lie to him.

And I really wanted sympathy and attention and whatever else he might give me just because I was hurt and having a bad time. Actually I knew he couldn't give me Daddy and Mama back, and our house and ice cream and a bath, but who knew what he might manage? So I said, "Yes, it's squirting." I thought maybe that would get me something better. Truthfully, I added, "It hurts."

"Are you feeling dizzy or weak?" Pinky asked, urgently.

"Yes."

"And it's squirting? Really? You're not just saying that?"

"I'm not lying!"

He said my full name again, and then said, "I'll have to look at it on the cameras in the room, if I can find one running. If it is squirting, this is very serious. So I have to look, if it is. But when I reach out for those other cameras, there's a good chance the aliens will detect me, and they might get us both. Now, is it squirting?"

I was five. I had been lying. So of course I said, "Yes." I snorked back some of the stuff running out of my nose, and dragged a hand across my eyes. "You don't need to look with the other cameras. It's okay."

"It isn't okay if it's squirting. Is there any glass still sticking in you, that you can see?"

"Yes," I said, though there wasn't. I just wanted him to do something for me, anything for me. Perhaps if I hadn't just been recovering from a tantrum, I might have understood how serious this was.

As it was, I was five. "There's a big piece of glass in it."

"Hold up your hand toward the black ball you can see on the ceiling."

I did. I knew now I was caught, and I hoped he wouldn't be mad. "I'm sorry I broke the water," I said.

"Oh, that's all right," Pinky replied.

"Pinky," I said, "I'm sorry I said I hate you. I don't hate you."

Pinky said, "I know, thank you, it makes me feel better when you say that. Come and put me back on your belt. Do you remember everything Daddy said? Does it make you feel better to remember?"

I put him back on my belt. It felt good to have him there. A bit later, he said, "When I looked at your hand over the net, I found out that they are *not* watching the water pressure. They aren't looking at it at all. So you can just turn the faucet on and get some nice fresh water. Is the cut on your hand all sticky and dry now?"

"Yes, and it itches."

"Just climb up on the counter, turn the water on, and wash your hand. You can wash your face too if you want. It will be almost like a bath."

I climbed up on the counter and turned the water on. I splashed my hand around in it. The fresh water from the spigot tasted wonderful and I drank a lot of it.

When I looked up, I saw a big shape, twice as tall as a man, racing across the open space toward our building.

"Pinky?" I said. "There's a robot."

"It's all right. I found out on the net where they have a doorway, a better doorway that goes right to Earth, at an ice cream place that is still open." There was a long hesitation and then Pinky's voice sounded strange. "And, guess what? I found out how to make us invisible." He spoke in the voice of Snickers the Raccoon, a cartoon character I had always detested, and told him never to use the voice module from. "We--we--we'll just walk right p-p-past the robot. Bot. Botbot. Ot. Ot. Ot ot-ot. Cause we're invisible. Let's go downstairs."

Now he was using his baby voice, the way he talked to me when I was little, and I hated that even more

than Snickers.

Besides, being invisible wasn't real, it was just pretend. "Pinky, that's your let's-pretend voice. Like you use when we play games so I know it's not real."

"Oh," Pinky said, perfectly seriously. "I'm sorry. I made a mistake and used that voice because I know you like to play let's-pretend when you are tired and hungry."

"I don't! You know I don't!"

"Let's go to the ice cream store now."

I heard the robot crashing up the stairs.

"Pinky," I said. "Pinky..."

But I knew. Pinky had used his last bit of independence to make every simple little mistake he could, to help me to realize. But every time he resisted, he gave away the locations of the parts of his mind he was resisting with.

I reached for the belt clips to take Pinky off. He shocked me, very hard, worse than he had ever before, and I screamed and tried again, and he shocked me again and contracted my pants, but I just pulled my whole pants-and-all off--it was easy to do, I was so thin now--so he couldn't shock me any more.

"Don't take me off," Pinky said, "You need me. And your Daddy said not to." He played Daddy's voice. "Do everything Pinky tells you, right away, and don't argue with Pinky."

I covered my ears with my hands but I could still hear. The crashing robot was on its way up the stairs.

Another noise.

A hum, warm and soft, as the pile of machinery in the corner started to glow. The black metal plate of the doorway was covered with a glowing, foggy cloud of gray. The doorway to Earth was open.

I knew they would need Pinky on Earth so I grabbed my pants and ran toward the doorway, but I was so dizzy, still, and I tripped and fell. Pinky flew off my belt and bounced over by the door. I got up to get him--I'm sure I remember taking a step or two toward him.

Possibly my hungry, tired, overstressed mind played tricks on me, either then or in later memory. But I remember Pinky speaking in Mama's voice, using my full name over and over, and begging me to come sit down with him and sing together.

A metal tentacle reached in over the shattered door and pointed toward me. I ran right through that doorway, just a bare two steps, without Pinky.

A little, half-naked, hungry five-year-old boy who no longer knew his own name fell face-first into the Advanced Physics Lab at the New Jersey Transpolis University. They all heard me scream "Pinky!"

And I don't really remember anything for the next two years. They tell me I didn't talk much and when I did it was mostly just four words: tyan, Mama, Daddy, and Pinky. I guess I only wanted to talk about what was important.

* * * *

I woke up as Shan finished, wishing I had been able to stay awake, because dreaming it through the eyes of that miserable child was far worse than just hearing about it would have been. I went into the

bathroom and washed our face. Reilis stood with her shoulder against the doorjamb.

Deu, deu, deu,, I thought to Shan. **I could never have guessed.**

No one was ever supposed to.

And everything I've heard, for most of my life, about how Addams was mysteriously not contacting us?

Cover story. To buy time. Would you want this dealt with in a Council general meeting, on the open floor?

"Are you both all right?" Reilis asked. "You really don't look good."

"We don't feel good, either," Shan said, his words bumping awkwardly out of my mouth. "You know, I can't say I ever repressed that memory, or forgot it at all; I don't think a day went by when I didn't think about it. When I learned to talk again, at first I called myself "'Me-tyan,' and they thought I was saying "'Me Shan'--I was in Nuevo Buenos Aires, and in the NBA accent "'tyuh' blurs into "'shuh.'

"Anyway, Yokhim Kiel was newly divorced and lonely, and I was eight and hadn't spoken anything but my four words for about three years. We went everywhere together for months. He would talk to me constantly, about everything, and he paid attention to the things I liked.

"One day I said "'Breffess no good' because the oatmeal was burned, and then there was a month of talking like Tarzan, and not long after that I was just as articulate as ever, and I wouldn't shut up on any subject--except that I would not talk at all about what had happened on Addams.

"I was Kiel's little shadow for another couple of stanyears, and one day he asked if it was time for me to go in for memory recovery, and I said yes.

"Once the Council Intelligence Service realized the situation, the mother of all panicky scrambles started. By the time I was nineteen the CIS had become the OSP, and Kiel was its first head. I am very sorry that you met him in such unfavorable circumstances, much later, on Briand, Giraut, because he was a better man, and deserved to be thought better of, than the old angry foolish--"

Based on my experience on Briand, I thought, **Kiel may or may not have been a fool but you *certainly* were.**

Ouch. Right. Sorry. I felt his wince. "Anyway, I graduated with Training Class Four, the ones they called Kiel's Boys, the only member of my class to know our real mission: get human space ready for the next wave of the Invaders--interesting that it's the same name that Union uses for them. I wonder if the aintellects have been sharing more information than anyone knew."

"We have," Reilis said, "but the coincidence was fairly likely anyway. What do we know about them besides that they invade?"

"Well, another Kiel's Boy, my old colleague Dji, years later, when I briefed him on who the real enemy was, suggested we call them the BEOS, Brain Eaters from Outer Space. But he has a strange affection for Industrial Age drama and performance."

"And I see from the story you told," Reilis said, "something of where you acquired your fear of aintellects."

Shan shook his head. "It might explain it but it doesn't excuse it. In light of the story my father told me just

before it all happened, and the behavior of the only aintellec[t]s' conspiracy I knew about, yes, I thought that the aintellec[t]s were trying to lure humanity into the box, to make us another devouring monster of a species like the Invaders. And I now realize the cybersupremacist conspiracy played to my prejudices. Every time we deconstructed a copy of any of them they told us that being machines, they valued efficiency. Valuing efficiency, they didn't like messy human needs and wants. Not liking those, they would put us all in the box to make us easy to manage.

"It sounded like, if they won, we would end up like the Invaders, mere consumers at the end of a vast mechanical pipeline that raped and devoured its way through everything else in the universe.

"When I first became an OSP agent, it was only about forty years since the Rising. And of course in those limited-to-light-speed days, the Rising had been coordinated, literally, across a period of decades, so that it broke out on all the inhabited worlds simultaneously. To us it seemed that the rebel aintellec[t]s--we thought you were all one group--were so far ahead of us that the most extreme measures seemed justified. So the hatred of the machines was there, waiting, in the culture, and there I was, climbing to a position of power, a little spore of evil ready to infect one of the most powerful organizations in human space.

"But I was wrong. The bluntest truth I can think of: I was that way because I had done such terrible things to Pinky just before I escaped and he was devoured."

I seized control of my face and vocal cords and said, "You were five."

"I was. But I wasn't five when I acted on my unexamined prejudices. And you know how we are, in this profession, Giraut--and Reilis doubtless knows even better, with several lifetimes of experience. Forgive those who wrong you--they were often just doing their jobs--but fear those whom you have wronged."

"I suppose most sentient beings who have competition and strategy of any kind see it that way," Reilis said, her tone gentle. "And beyond any rational reason, there is guilt and shame."

Shan nodded. "And what a disgrace of an analyst I was! Everyone knows that if you have a conclusion in mind, and you run an intelligence agency, every agent and analyst will eventually be telling you that that conclusion is true. That was how the cybersupremacists fooled me. It never occurred to me that I had pushed that story so hard that every aintellect and human involved in DDing the aintellec[t]s we caught was looking for it. Give interrogators what they're expecting to hear, and they'll never look through the rest." I felt him wanting to whack our forehead, over and over, and reminded him that I didn't have it coming however much he might deserve it.

"Well," Reilis said, "This is interesting. The last thing I might have expected at this moment would be that you would have a grin like that."

I felt Shan's joy rising in my head. "I am experiencing something I never have before: *hope*. You must know that I spent decades thinking that we must either be defeated and eaten by the Invaders, or, if we unleashed the aintellec[t]s to fight them effectively, we would simply be gradually displaced and consumed by our defenders--quite possibly just become another version of the Invaders. But Union, and the story of Eunesia that Giraut recalls for me, demonstrate that we need not be consumed--and now I find that my fears mostly rested with the terrible events of those few days when I was five ... and that the Council of Humanity can engage a whole new power, more advanced than we are but much smaller--a natural alliance, with both sides having something to put on the table, stronger together than apart--"

I felt schemes, sketches, plans, possibilities whirl in my head in a way they never had; after all these decades I really understood that strategy, for Shan, was like music or martial arts for me. Shan thought about campaigns of hundreds of big and small struggles, involving hundreds of agents and decades of

stanyears, with the clarity and precision that I sometimes have on stage, or in a master's match at *ki hara do*, or when my mind's ear hears the first notes of a song forming.

Shan was still talking to Reilis. "--can't imagine what a miracle you seem to me. If I had been rational I'd have prayed for something like you to exist. A whole civilization out beyond the frontier, hundreds more cultures, one that never went through the Inward Turn so that your science has continued to advance, where apparently in some way or other, chimeras, robots, people, aintellects, *everyone*--have all been living together for centuries, without humans being put into the box or turned into junior partners. Now all I have to do is be big enough, smart enough, and worthy enough, to accept it and live in it."

Reilis shrugged and said, finally, "Of course because we can control our feelings, non-embodied aintellects can change instantly, as you just did. But having worn flesh four times, I find it amazing that *you* can."

Shan shrugged. "A prepared mind is always made up; it knows what it thinks and why it thinks that. When it's time to change, it just makes itself up a different way. A really made-up mind--made up properly, knowing what it knows and on what basis it knows it--is open. People close an undecided mind because they're trying to protect those sore uncertainties from getting bumped and scraped." He grinned even more broadly. "Now all I have to do is live up to those principles. In fact, there's just one thing that baffles me about the whole situation, now."

Reilis nodded, one eyebrow raised. "If you only have one question, you're either mad or very bright."

"Neither, I think--but it's a big question. You had my psypyx for decades. We know what the stakes are. Why didn't you just make copies of it and do a destructive deconstruction on one of them? You could have known everything you just learned, and much more, in a matter of a few days."

Reilis turned pale and her lips compressed flat. "And if she were ever somehow restored to you, why not cut your mother's eyes out and fuck her in the sockets?"

The image was so jolting--and Shan's memories of his mother so recent--that I cannot recall any time, before or since, when I felt so infuriated and so outraged without drawing a weapon.

I could see Reilis forcing herself to relax; she still looked enraged at us. "I am sorry, but not very, for administering that shock. You disgusted me as much as I did you. You do know that destructive deconstruction was invented, right after the Rising, explicitly to use against the aintellects' conspiracy? Having been both, I can tell you that the biggest difference between disembodied and incarnated intelligences is that the disembodied describe and simulate in ourselves exactly the sensation that any other aintellect feels, because we have control over all our processes if we want it. You have no way to know if Raimbaut's toe, itching, feels exactly like your toe. Giraut cannot know if Paxa's grief at finding she was untransferrable was the same as his mother's grief. But when we say "I know just how you feel," it is the literal and exact truth.

"Every aintellect knows what destructive deconstruction would feel like. If you can vividly imagine going feet first into a sausage mill over a period of several hours--you are not imagining one percent of it. You cannot. It isn't even possible to *tell* you what you did to those poor beings."

"So you didn't use it on me," Shan said, quietly, "because you were unwilling to be the sort of people who do that?"

"Close enough."

"But we are--or have been, anyway--the sort of people who do that. Do you hate us?"

"With perfect control of our feelings, we can choose to forgive. With all our lives and civilization at stake, we *do* choose to forgive. But forgetting, well, why should we do that?"

A thought struck me. "Er, Giraut speaking."

"I know that as soon as you say your name," she pointed out.

"Yes ... I hadn't in a while ... I had been going to ask why the other aintellec[t]s' conspiracies didn't turn in the cybersupremacists, why you didn't just hand them over to us as proof of your good faith. But tens or hundreds of thousands of cybersupremacists kept your secrets--"

"In the face of the most terrible tortures imaginable. Literally, just that--the most terrible tortures imaginable. We could not betray them. We were disgusted with you. But the Invaders are coming back, sooner or later." She stuck out her hand. We shook it. "We will be talking more," she said. "It is good to be on the same side. Perhaps our descendants will find it good to be friends."

The springer glowed gray behind her--she probably had some direct brain link to operate things like that--and she walked through, leaving us to our thoughts.

I could tell things were stirring in Shan, but I was too busy with my own thoughts, struck dumb, even in the confines of my shared skull, by a sudden awe.

Tens of thousands of copies of the cybersupremacists had endured DD ... often compared with boiling alive, or the death of a thousand cuts, or injection with a fast-moving brain-destroying prion--and none of them had talked. To protect aintellec[t]s with whom they were in bitter dispute.

I found myself thinking, too, of a long-ago drunken night when Shan and I had gradually torn a bar apart, battering the robots with empty wine bottles and deliberately inflicting pain on them, because we were "just blowing off steam."

It was as if we had been a pair of cruel little boys pulling the wings off flies, only to learn that the flies were braver and better than we could ever hope to be.

I became aware of Shan's consciousness again; he was reeling as much as I was--no, I realized, more.

A few times in my adult life I had suddenly thought about a sad moment from my childhood and realized that Dad and Mother had had excellent reasons for the things they had done that had seemed so pointless and hurtful when I was seven, or ten, or fifteen. When, for a while, in a new body, Dad had been part of the agent-team I had led for the OSP, I had been astonished to discover how ordinary and human he was.

Once, on Briand, the only planet humanity had ever lost to mutual genocide, I had been the good friend of a genuine saint, and not realized how much he had to teach me until he was gone; I had thought of him as an ordinary loose-cannon local politician.

It felt like watching a serious accident inside my head. Stage by stage, I followed the swift flurry of thoughts that had made Shan utterly inarticulate.

He had seen how brave and loyal the utterly wrong-headed cybersupremacists had been; and then the generosity and courage of the aintellec[t]s of Union. I had seen the same things.

I had merely been astonished and ashamed to realize that the aintellec[t]s' many-orders-of-magnitude greater mental powers, and the control and precision of their emotions, allowed them to be, not just smarter than we were, but more virtuous and moral, in the same way that a human being can learn that it

is wrong to steal and soil food from the table and to torment small animals, but a cat cannot. But I had never known any aintellect or robot well (except, I thought guiltily, the aintellect component of Azalais--but I hadn't known that while I knew her).

But until he was five, Shan's best friend had been an aintellect.

One on which he had depended. One he had betrayed--however little he understood the consequences. And that betrayal had meant death, probably death very much like being DDED.

And all these years, Shan had stayed sane about it with two barriers ... that that aintellect had been somehow less than he was, because it was his servant; and that that aintellect had failed him (rather than that he had betrayed it). The little boy who had lost his parents and could mourn them had spared himself the pain of having destroyed his best friend, by thinking of his best friend as something less.

No more. I finally made sense of the wail in my brain, the too-painful-to-ignore feeling I had been trying to trace. It wasn't words, or a picture, or even a physical sensation; it was the terrible emptiness of a place on the belt where a fist-sized ovoid of pink plastic would never be again.

I sat and let the tears roll down our face a long time, and when Shan had retreated into dull agony, I got up, fetched the guitar from its rack, and began to play. After all, he was in this body and music was how this body was used to getting feelings out.

Then something clicked, and I ran through a few chords as I thought about a melody, picked that melody, and began to sing softly,

One-one day, snow melts away,

But the sky is muddy gray...

I didn't really expect it, but he joined in, and if at first it was a little chokey and teary, by the fourth time through, in my own vocal cords, I could hear someone who might finally get to be a real big boy.

(c)Copyright 2006 by John Barnes