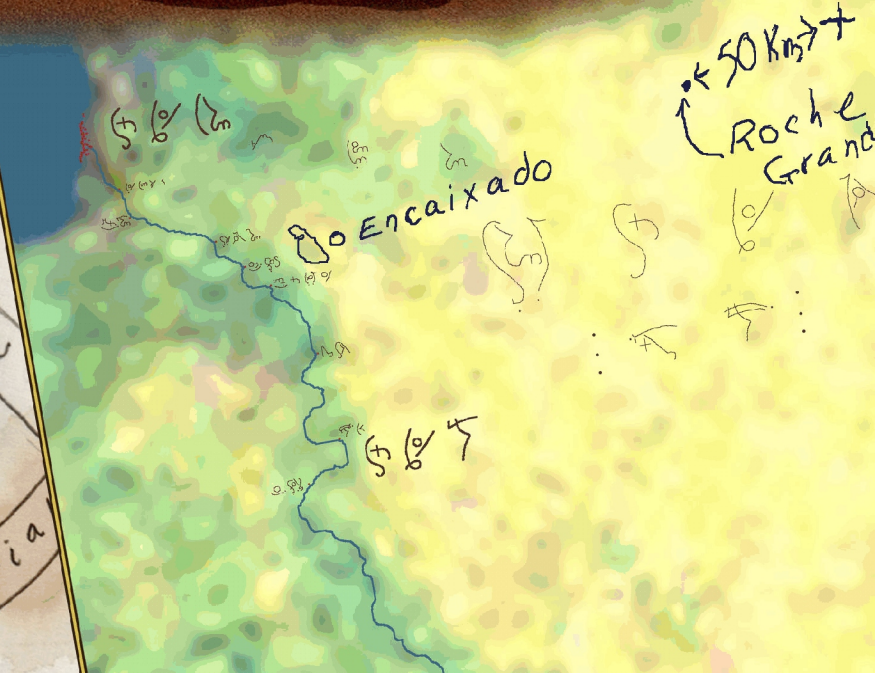
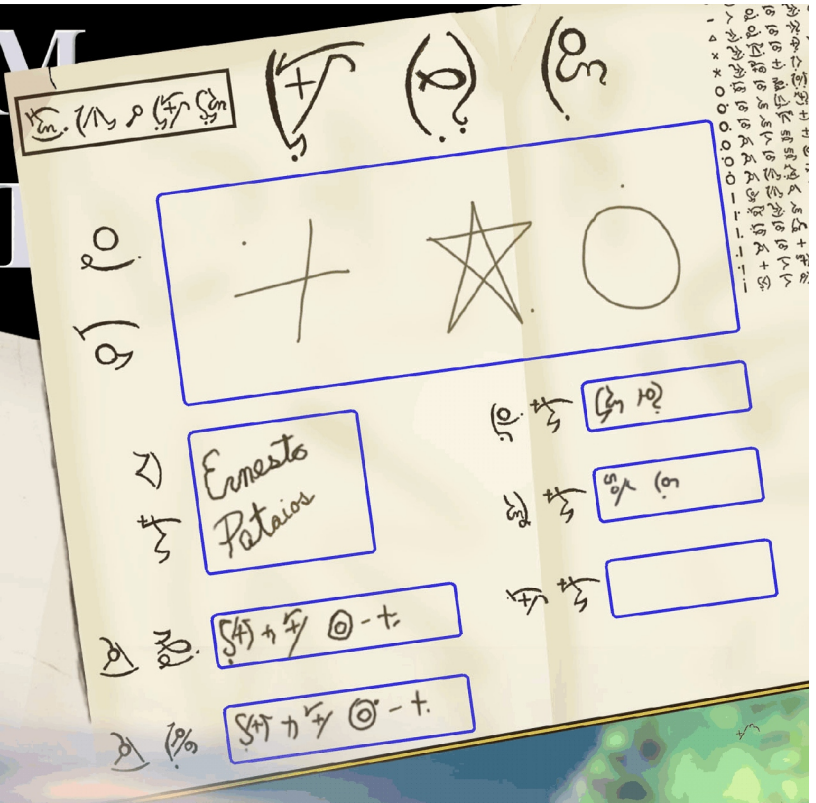
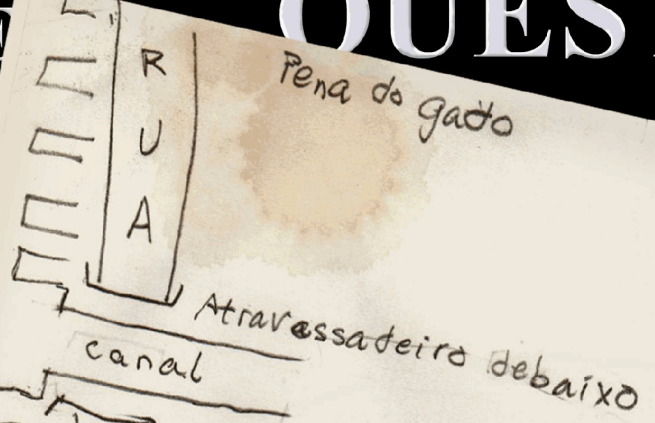


The ALUMINUM QUEST

LEE
WIL
LA
RI



The

Aluminum

Quest

Copyright 2010 Lee Willard. The fictional world of Kassidor at 61 Cygni and the premise that the 'hippy' culture of the 1960's originated there is a creation of Lee Willard. Any of the works alluded to within may be copyrighted by others.

The following is a work of fiction, any resemblance to any persons, places, things, religious organizations or governmental agencies, living or dead is purely coincidental. You can easily see that the pseudo-arabic is purposefully not arabic, it is a tumor of that language as the religious organization in this tale is a tumor on a real one. Please take them for what they are meant to signify, a malignancy infecting something holy.

This is dedicated to all the innocent Moslem women and children killed in acts of terrorism worldwide. I include among them victims of what governments might call acts of war or repression. May Allah treasure their souls and may evil men of all sides stop their blasphemous butchery.

The Aluminum Quest

On the planet Kassidor, metal is so rare that every bit is precious and most is used almost exclusively as a medium of exchange. One of the few things even more rare than metal is energy. A metal like aluminum that can only be extracted with large inputs of energy is the most precious of all, and people are likely to do anything and expend any amount of effort to possess it, even in the face of unimaginable danger.

Foreword	A few Notes on the Translation	1
Prolog.	A Visitor's Warning	3
Book I.	Tdeshi's Ghosts	5
Book II.	Four Tons	72
Book III.	Ava's Mission	151
Book IV.	The Ghosts of Narrulla's Tear	218
Book V.	Avenging Angel	284
Book VI.	For Presidente Lula	351
Book VII.	For Heavenly Mother	442
Book VIII.	Untanglements	528
Epilog.	A Battle in Deep Space	621

Foreword

A Few Notes on the Translation

As well as the standard Kassidorian translations, the following terms are part of the vocabulary of the simulated humans who know the truth of their existence.

- Cheron** Silicon configured to simulate a nerve cell in a cherub. These simulations do not derive from a former mortal soul and are controlled by simulated humans who are copied from a former mortal soul. They have lower protection levels and different accounting schemes.
- Veron** Circuitry configured to simulate a neuron in a soul captured from a mortal.
- Personification** The image a soul presents to the other souls it interacts with. In some simulated societies there are limitations placed on what a personification looks like. On formal occasions only certain looks are allowed in many societies. Personification code runs in both Veron and Cheron space.

Prolog - A Visitor's Warning

Near the pyramid's point, he was about to turn in. It was deep in the chill of Dawnsleep already and the business of a founder is never done. But in spite of all the ways he had augmented himself, he still needed sleep, and he still had eternity to get tomorrow's work done. It was too cold for him to go to his bed without a body stocking. Even though his wealth allowed him all the fuel he wanted, he would not be a drain on the world's resources. Any who had lived thru the Fall were extremely sensitive of that. As he dons the body stocking, one can see his white hair and beard are all that show of his thirty plus centuries. He was already in that stocking when a lovely maiden came in the room and whispered a message.

He was a little disappointed that her message meant she would leave and wouldn't be spending the sleep with him, but the person she announced was an important member of the staff and might be an interesting companion also. "Of course, send her right in," Keithying said. He was surprised that she was here, he hadn't thought she was in town.

He waits only seconds till a tall, dark-haired and elegant woman stands before him. She's dressed in a twill nightcoat and leggings, but her hair flows free. "Sorry about the hour sir," she said.

"Ava," he said, "It's good to see you any time. I heard you were North?" He wondered if she had borrowed a floater again.

"You know what they say about what you hear," she said with a mischievous smile, "but I have been taking some time off."

"Glad you're around, would you care to stay?"

"No I can't, I'm already committed."

"Somewhere in the neighborhood?" Keithying questioned. Decades ago, when she was first brought down from the Angels, she had stayed in Althart's quarters quite a bit.

"No, no, not at all. I just have a favor to ask,"

"If I may?" he said.

"That warning you got from Herndon," she paused. Perfect memory was only one of the myriad mental enhancements he carried, he saw a copy of the note in his mind as she spoke. "Please

take it seriously, but don't, and I mean this, don't rely on him because he loves that ship too much."

If anyone should know, she should. She and Herndon had been lovers for decades when the people in flesh first arrived from YingolNeerie. "But if what he says is true," Keithying asked, "what other hope do we have?"

"We have my sister," she said, "and our own wits and people."

He started to approach her, but she backed off. "You know more don't you?" he asked.

"I have to go," she said, obviously nervous. Her nightcoat swirled and she was gone, as if she had been but a flashback or was still a ghost. Even so, he was inclined to heed the warning, his operative with Herndon agreed.

Speaking of operatives, he should find out why he wasn't informed of Ava's return to the city. He tried to know the whereabouts of all the visitors from the war world at all times. Recalling that note and having it re-enforced in this way would keep him from sleep, but there was nothing he could do at this time of the week. With the dawn he would have to request a report from whoever was supposed to be tracking Ava. He'd have to find out what she knew and how.

Book I.

Tdeshi's Ghosts

1. The Bead in the Sandal

Jorma beheld a world of blue and orange-kissed white, the sweeping blue expanse of the lake and the gleaming white of the snow sticking to every branch, glowing orange in the dawn. It was week Kyebenwae and after six weeks, winter was finally starting to abate. Only a few inches of gentle snow had fallen this past Dawnsleep, leaving all the shaftwoods coated with white, looking like fingers of frost on the stained glass of the lake.

"How pretty," Venna said, pressing herself warmly to his back, "and how beautifully silent."

Just as she said that a large clump of snow fell from the noodle tree with a loud rumble on the leaves of the roof. In spite of the snow, Kortrax brought warmth and that tree was already pushing forth its leaves for the light. "So much for silent," he said.

She laughed, "Lets go in and get some breakfast. It's still too cold to be out here like this." She was still nude, something she truly loved.

"Sure," he said, "That workout we just had is enough to give a guy major hunger."

She giggled again and rubbed her chest against his back once more before going inside. He had already donned a full length worker, but there was wet snow on the deck and his feet were starting to protest aggressively. He followed her trim body and billow of orange curls thru the door only a few steps behind. She slipped into the same thick-knit wrap she had on the day they met. That was back when he and Ava went down to the Yakhan to follow Tdeshi's trail, the trail that lead him to Venna.

Venna was all the adventure Tdeshi had ever been and then some. At least as enthusiastic, at least as sexy, with an even better figure and all the social skills but a more genuine manner. She had become instantly popular around town, especially here on north island. Finding Venna on the way to the Yakhan was at least as

good as finding Tdeshi in Ava would have been. He now knew that could never happen, that body would forever remain under Ava's control.

Venna had taken the lead in cooking in their partnership, leaving him with most of the garden chores. This garden was big enough that he had only been over to his own place enough to see that it wasn't vandalized and that the neighbors still knew he claimed it. He should start a cash crop that needed little care over there next week. It might net him a couple irons and make the place look occupied. There had been lean times in Sinbara before and everyone remembered when property had been abandoned as people left for the deeps. Two thousand miles to the east the former seabed was now a fertile prairie and was reclaiming many of those who had come up here during the 40's as that sea dried out.

Times were not that bad in Sinbara today if one had land. Between he and Venna they owned over four acres. Venna bought this home from Ava, the scientist from the Yakhan who had taken over Tdeshi's body after she OD'd on Shonggot.

"Can you get me a few onion shoots?" she asked, "I think I saw some up last week. They'll be frozen but fresher than these."

He went out to the garden, there were a few up above the snow that remained. They had already melted and slumped, but they were a nice bright green and didn't feel slimy yet so he brought them inside. "The plant won't be needing this anyway," he said.

"That's fine," she said, she had already matted some thesh for patter-mats.

He rolled up the night mats from the windows and cleared some paperwork off the table. Venna had been going over the paperwork Ava had left with this house. There was a property map and some soil studies. Ava wasn't a farmer by nature but she had pursued it with scientific zeal for the season she lived here.

There was a whole stack of folders, it looked like some of Ava's old notes, flow charts and stuff like that. Some of it was in Yingolian, Ava had studied that. He left the farming science that Venna was looking at on top and put the remainder back in the box, then put the lock box back up on one of the strap-up rafter shelves that made up the kitchen ceiling. He got out their plates. Jorma

never had to bring his over, Ava had left one here and Venna had bought one when she first got off the little packet that brought them up the point from Bhangyon.

Venna was thrilled by the beauty of north island and the rope footbridge that connected it to the other end of the waterfront. When Jorma informed her that the home she bought was on the country side of that island she jumped in the air and shrieked. When they passed Dolidites Glasswares and she saw the plate with that photograph in it, she had to have it, even though it was an iron and forty five. So she used that ever since and he used the plate Ava left with the house.

Ava bought the gas stove in this house but he installed it. With all the gnarlberry twig that fell of its own accord, he might go back to that if he had to do any expensive work on the methane digester. It had a thick maintenance manual that he would read when he needed to. But right now, it worked fine and enabled Venna to spin around with a couple patter-mats already toasted. "You got anything you haven't unpacked yet?" she asked.

"My summer shorts and sandals. They're on top of my cabinet upstairs. I might even be able to get those out this Afternoonday." They had bought this house from Ava when they were still in the Yakhan. They had reached Sinbara just as winter set in.

"It's about time," she said. "I thought this was the near north, not the far north."

"It is, it got above freezing every week. It got above sixty degrees for at least a few hours every Afternoonday but Kivundeer."

"Yeah, yeah, but it's more different from the winter in Zharvai than the winter in Zharvai is from the winter in the Yakhan."

Jorma knew that the point of the pyramid is just under two hundred miles from the equator, they had been in its shadow only a year and a half ago. "But Zharvai overlooks the deep and we are two hundred seventy miles over water but have only three miles of air above us. The lake is what draws winter down to us." When people spoke of 'miles of air', they meant air that could sustain human life. Jorma was not a scientist but he was self taught from centuries of reading and knew that there was thin air for at least

another hundred miles above the ground, but it would not sustain life.

"Those are some long miles that distance is made from," she said.

"These are really good by the way," he said, wishing she wasn't right because he was well aware that Sinbara was more seasonal than Egaiga, almost a thousand miles farther north but on the other side of the lake. He was embarrassed for his town's climate, this year more than most, and ready to change the subject.

"It's the thesh," she said with her mouth full, "And that griddle she left us. It's crystal you know, not just glass."

"I knew that from before. I did stay here with Ava the better part of a year." Almost as long as he stayed with Tdeshi.

Venna giggled, making her tangle of red curls shake and her thin dusting of freckles stretch. Ava was nowhere near interested in enough sex for Jorma, while he wasn't interested in quite enough for Venna. That was OK, they both liked to socialize and if she had to socialize twice as much as he did, oh well. "So you already know everything about this house?"

"I know it handles a mild winter better than a bad one," he said. "But you know you just might have got lucky when you were in Zharvai. Yeah it's a little warmer, but when we have a bad winter, they have one that's worse than when we have a good winter."

"What is a good winter like here?"

"This Dawnsleep was as bad as it gets all winter. The winter before we met was warm. You wind up getting annoyed when it doesn't get better but stays like this for week after week. A couple hours of high sixties, low seventies, maybe as many as seven. I also think there was a climate phase boundary the dusk we met." It had been a freakishly cold Dusksleep, at least as cold as the following Dawnsleep.

"Can it do that all year?" she asked.

"No, the good news is, we get a true summer, not like the Yakhan where it can snow any week of the year. I've never seen it snow from Iyosaign all the way thru Chezhervizhod. Well, once in my memory it snowed in Zawmathii."

"So we could be done?" she asked. "I'm looking forward to that."

"We could go deep, another mile down it doesn't snow at these latitudes."

"It's pretty here, I really should stop complaining."

"You wanted to come." She had just ended a relationship and wanted to get away. He worried that she would soon regret it, sell this cabin facing North Lake and sail back to the Yakhan. He worried that she was already getting bored with life here.

"I didn't think we were going to Kugenzglaw."

That was the big city fourteen hundred miles north, two thirds of the way to the far northern end of the lake, a New Nordic stronghold of almost eight million where it could snow every week and snow lay thru the week during winter in the hills just outside the city. People in that rugged land relish snow and slide downhill on long trails of it with sticks. The climate there was so much different than here that it was used only as a joke and he uttered the requisite polite chuckle.

He went on to talk about the things he thought he should get done in the garden this Afternoonday. She wanted to take a walk down to the beach so he talked her into doing it this Morningday in spite of the lingering snow.

By the time they were done with breakfast and clean-up, Kortrax was up and orange with the swirls on his face just coming into max this part of the decade, making him hope next winter would be milder. The snow was dripping from everything, sparkling and filling the air with the sound of drops. Their path thru the gnarl-berries was shaded in early Morningday however, and slippery. He couldn't imagine trying to get down here riding a stick or even two like some of those crazy Vikings up in Kugenzglaw. They had to hold the brush and each other in the slush as they climbed down the steep bluff to the lakeshore. Here there was a lagoon they had to skirt, its ice far too thin this week to take them, even if they had been here for mid Dawnsleep.

A knob of the bluff extended to the lakeshore and they were able to reach the beach from that. From here a long spit of beach cordoned off the lagoon from the open lake on one side, a narrow

channel separated them from a glorified sandbar of an island on the other. The whole lagoon had a sandy bottom with a few clumps of bluestar growing up thru it. It was home to some rainbow flying fish who were still trapped under the thin film of ice that remained. Their young were darting around their mouths in supplication but the parents could not yet get to the lake to feed.

Venna broke the ice, scattering them, but moments later the adults began to emerge from the water, flying quickly over the sandbar and out over the lake in search of plankton blooms. He could see the hangleaves unfolding, they had thrown off the snow long ago and their fronds were unrolling as they returned from the desiccation of the dark. In a matter of an hour the line of forest on the inland side of the lagoon had been turned from a gigantic thicket of hooked sticks to majestic trees with long deep-green fronds swaying in the breeze.

The snow was almost gone from the beach already. The snow must have fallen early in Dawnsleep because the tide was higher then. On this end of North Lake the tide is high just after high noon and mid-dark, just after dawn and dusk it is low. It was not yet building toward high, just barely beyond the dawn low at this time of the week. There was a three foot band of sand free of snow above the reach of the waves. They walked that corridor.

"You can use those sandals here this Afternoonday." she said.

"I need to get the garden started, it's Kyebenwae already."

"You're such a realist."

"If anything splits us, I think it will be that, my boring addiction to reality." They were still new to each other, and spoke of their future together often. Her personality was enough like Tdeshi's that he expected her to be as flighty.

"Oh you're not too addicted. I know what you mean and that's why we're here now." She reached out and touched the water of the next wave to come toward them, letting it pass around her boots as she did. "Does this get warm in the summer?" she asked. Winter boots had been one of her first purchases here.

"By late summer, Chezhervizhod or so, you can stand it, but the water in the lagoon will get warm by tomorrow. You can still swim in the lagoons as late as Imnotn."

"Not now. At least the lake isn't frozen."

"The open lake hasn't had a fleck of ice on it south of Eizigor since it was topped off." Eizigor was three hundred something miles south of Kugenzglaw down the west shore of North Lake.

They walked the length of the beach. Venna was new to the area so this was her first look at the shore of North Island, on Morningday of the first hope of spring. It's a mile and a half to the end of the spit and they ambled slowly. From the end of the spit it is less than a mile across to the West Harbor neighborhood of Sinbara, a gentle slope covered with town homes the first few blocks from the docks and small holdings just big enough to eat from after that. They could see the upper branches of his house from here, it was one of those small holdings.

"I'm thinking of selling it," he said, after showing her which one it was.

"Why? What would you do with the money?"

"I'd like to put up a little camp down by the lagoon for the summer. Nothing like Ava talked about, just a fireplace, a bed with screens and a little privy. I think it would be nice to hang out down there on Afternoondays. We could clear enough space for a party."

"I thought you wanted a boat?"

"Ah, I don't think my place is worth enough money to get much of a boat. Maybe a trampoline racer or something like that."

"That would be fun."

"Only if we had that camp. I'd be afraid to leave it all by itself down there."

"What's a freshwater privy cost around here?"

"A couple coppers," he said. "I'd want plank for the floors but I could go with a plastic roof. I'd rather plank that too so we wouldn't have to take it down in the winter."

"If you want to close it in, we could probably sell the house up there."

"I don't think I'd want to go thru a winter down on the lake with nothing but plank over me. I'm just talking about a two sleep summer camp. We might do a few Noonsleeps in the winter." I wasn't thinking of springing for wall mats."

"But the boat?"

"You had your heart set on a boat didn't you?" he asked.

"I thought you did? You're such a sailor, you need a boat."

"If you seriously want a boat, I mean something more than a couple kayaks lashed together with a trampoline, maybe we need to sell this place and live at mine. It's a bit more than half a mile to fourth avenue dock and I know Numie'd wink at the fee if you rode him a couple times."

"How rideable is he?"

"Normal," Jorma said, "Dark hair and a hint of paunch but nothing out of the ordinary."

"I like my house," she said.

He didn't press more about the house. It was his anyway and he consulted her only as a friend. He had to caution himself at taking her too much for granted. They had been together a season as fellow passengers on the way to the Yakhan, a year on the way back, and thru the winter here in Sinbara. They were still in the initial infatuation stage of their relationship and anything could happen. He'd barely been with her longer than he'd been with Tdeshi when she ran off. If they fell out, where would he be?

As they walked with their arms around each other, he noticed he was thinking of Tdeshi for the first time in a year. He and Tdeshi had once walked Sinbara Point Beach like this, in the young week in the early spring when there was melting snow on the sand. She felt so much like this, the life and energy. It had been awhile since he had thought of comparing Venna with Tdeshi. It was time he compared Tdeshi to Venna, she had now been his main partner longer and twenty one decades more recently.

By the time they took the path back up to the house, the snow was gone and the mud was dry in the sunny spots. They had meandered so slowly that they had been out over four hours and Kortrax was now well free of the horizon. It would be warm this week. Not just warm enough to go out during early Afternoonday, they could live outdoors till Dusksleep this week. He got a good start on the spring chores after lunch that Morningday.

It wasn't till near bedtime for Noonsleep when Jorma got out the summer things he hadn't unpacked since the trip, and would finally use tomorrow. It was warm enough now. There were the shorts, those were fairly old, three or four decades in fact, but he had used them in the Yakhan most Afternoondays. He tossed them in the sink to soak, they could dry while they slept.

The sandals were fairly new. Ava bought them for him in Zharvai actually, on their way down, but he had only used them a few times. The pavements in the Yakhan are so fine that footwear really isn't needed unless you're hiking deep into the plots or on industrial streets. Even so, he noticed a little pebble caught in the treads. It was silver-white and very round, stuck tight with a tiny bit of wear on it and hard to pry out. That made him get close and really pay attention to it, and when he did, he couldn't believe what he thought he saw.

"Venna!" he called.

She was down in the front room stretched out with a romance novel and no doubt sporting a wet finger. She'd undressed again but had a light knit throw over her. "What?"

"I think you should come see this."

"What?"

"Just come look."

"Oh all right, but if you're going to interrupt what I'm reading I have a good mind to make you re-enact it."

"Once you see this."

She came trudging up the five steps. He held up the sandal with the tenth-of-an-inch greyish-white sphere embedded in it. "I just found this in the treads of those sandals."

Her eyes went wide, then her hands went to her mouth.

"You think so too don't you?" he asked.

"How could it be?" she inhaled.

"We'll have to have it tested, but you know what this looks like?"

With eyes wide she said, "Aluminum!"

2. About the Camp

The camp at the beach and maybe even a modest little boat would now be possible. She was as excited as he was about it and after securing that aluminum carefully in that nice lockbox with Ava's old papers, they were barely able to sleep for Noonsleep. They were up early for Afternooday and blew thru opening the garden before they broke for lunch in that garden. They spent the other half of Afternooday measuring out for the camp. By the time the light of week Kyebenwae was dim they were already wading around measuring for the dock where she had cracked the ice for the flying fish the day before.

"You'll be using up most of that aluminum with all this lumber. How will you ever get it here?" she asked.

"Teams and carts to the docks, Balick's barge from there is who I would go with. I'll get the lumber from Belgin because I've always worked there and I've sailed with Balick back when the toasterfish were out of control."

"I've seen small towns before," Venna said, "I know how all that works. You always get to do business with someone you know. So someone you know can make change of that aluminum for you?"

"I think the planks are going to cost us less than twenty coppers, fifteen is my current guess without drawing it all out. I'll have to give him more for doing the special end cuts, but I think I can talk him out of his kit price. The raw lumber would be about eleven, maybe twelve coppers but getting the main cuts done saves a year with a hand saw. Shaving a notch here and there takes a day or two with some decent chisels, but cutting all of it would take weeks if I had someone for the other end of a two-man."

"I know it would slow you down, but I could hold the other end."

"Yeah you could, and not slow down that much either, you're a healthy woman and I'm no muscle freak, but as one who has done it, I say get the long cuts done at the mill with the slabwood making steam to run the saw. It's well worth it. If we had to get this all done with what I got from selling my place, I'd do the two man saw with

you on the other end. But with free aluminum in my pouch..."

"Sandal."

"Yeah, but it's in my pouch now," Jorma said. He had never held an aluminum in his hand before.

"It's actually in Ava's lockbox but anyway, do you think he would break it for you?"

"I could ask." He noticed a twinge when she said it. He would no longer own an aluminum would he? "That would just turn into a question of who's financier we would use."

"We don't have one that we know," she said. "I just know the neighbors that hang out at the Bridge Room, and a few in the next few houses. None of them are financiers or even have the need of one."

There were three public taps on North Island but two of them weren't that public after all, public to the users of that dock. Right at the end of the footbridge was a three floor place with doors and kegs on each level of the stairway down from the bridge to first North Island dock. Raltain, who ran that place, was genuinely open to all and had a different atmosphere on each floor. Down on the dock floor was the serious drinking, on the middle floor was the sex exchange with a bow-porch of rooms circling it overlooking west harbor; and at the level of the bridge and extending into ceiling space above was his music room where he favored down-home, kicking, party as a genre.

"I know a couple guys who've gone into finance," Jorma said. "I think I can get an honest assessment."

"I wish we could have someone else involved."

He had wound up the measuring string by now and waded ashore. The week would still be cold in the dark, now that Kortrax was gone, wet skin was uncomfortable. "Do you know something you aren't telling me about that aluminum?" he asked.

"No, I just know how crazy people get. I'd like someone we know involved, and don't take him for granted. When you have aluminum that no one thought you should have, things can get pretty insane."

"Has it happened to you before?"

"I've seen it from a distance," she said.

He wondered how much distance, but didn't say anything on that. As randy as she was, there was undoubtably more to her past than he wanted to really delve into, in spite of the fact that she was only twenty decades old. Sometimes people, especially women, do their wildest things before they're even fully adult. "Well I've got four centuries under me, and I'm not that worried about this. I'll have it tested and if they tell me it's fake, I'll make sure they give it back anyway."

"Watch the tests, they'll give back a fake one and keep the real one for themselves if they get it out of your sight and you don't know them."

"You can't prove that."

"You can't prove they didn't. You can take the one they give you back and have someone else prove that it's fake, because it is. The real one is in a vault with fourteen others, we won't even know which one it was."

"Sounds pretty paranoid to me."

"Get someone you trust in with you, I'm telling you, when it comes to aluminum, don't mess around."

"I'll do that, I'll go to Belgin to get the wood, tell him it depends on this aluminum being real. He'll want it to be real and take me to someone he trusts."

"Good," she said.

So it was settled that he would try to pass the aluminum at Belgin's.

During Nightday he drew out the camp, then the planks and beams he would need. He just did sketches, but he couldn't figure the numbers without the old arithmetic wheel he had back at his place. He grabbed a nightcoat to go get it.

Venna stopped him. "Where are you off to?"

"I need my arithmetic wheel, it's back at my place. It'll take me an hour to get there and back in the dark, but it'll save eight hours of trying to draw it all out to scale or scratch paper it."

"You going by the bridge? I'll walk with you."

"You were going to make jelly this week."

"I need some nectar of the vine, then maybe later I could

handle something like that. I really need to get down to CommonEye and do some mail or my friends in the city are going to think I've died in that winter."

"But what does that have to do with Nightday?" he asked, since the Eyes didn't work in the dark.

"That's why I'm going to Raltain's today."

"You were down there only four weeks ago," talking about the eyeroom. She could go thru an iron and half and spend all day in there. She didn't have much savings left, she'd broken her last copper on that plate.

"Five, it was week Garibivlast," she said.

She was obviously counting. She did type a lot of mail when she had the chance and wouldn't have come to live with him if Sinbara didn't have eye rooms. She was trying to get Raltain to put in a terminal in his place with a fifteen minute premium from your tenner. She used the toilet before they left. He didn't intend to go inside except at his house so he was delayed another few minutes waiting for her.

"Ava told me everyone at YingolNeerie has had a pocket-eye since the 54th," Venna said as soon as they were on the part of the path wide enough for carts or a couple arm-in-arm.

"Yes, but for many of them it is their bully-group-issued slave master," Jorma said. "Don't judge YingolNeerie by Yingolian crystals alone, not that their crystals don't have their side effects either." He still shuddered at what had happened to Tdeshi. He couldn't be as calm about it as Venna. Venna openly claims she is Tdeshi's soul reincarnated because she was coming to term in a home along the canal when Tdeshi's soul was erased by the shonggot.

"Oh I know," Venna said. "I was born when the starship got here."

"That was the second starship, Ava came on the one before it."

"Yeah, that's right, the ghost ship." She tended to want to forget that little detail about someone she seemed to admire. "There was an article in Angelwatch magazine that says the ghost of Narrulla's Tear sees another starship coming in, a damaged one."

"I think that rock stuck up there sends out random signals that

people mis-interpret," Jorma said. "It's a rock a few hundred feet long and a couple hundred feet thick at the thick point that the Brazilian ship is tied to. There's serious discussion about how many families the astronomers should warn if it falls. It could take out whole city blocks in heavily populated areas. It looks much bigger only because of its leaves."

"That thing has an engine that burns a small sun," Venna said about the Brazilian ship, "I read that also. It could make a crater all out of proportion to its size and take out a small city if it hit one, I don't mean like Sinbara, I mean like Bhangyon."

"Whatever. It appears stable now. If you ask me Narrulla's Tear is the built-up wrecks of old starships." There is one thing he remembered quite clearly, for most of his life there was no such thing as Narrulla's Tear, as the point of light off Narrulla's nose was commonly called.

"The astronomers agree with you," she said. She actually had more education than he did and had taken a few classes at the Kassikan, so she could converse in depth.

The path is not long to the bridge, but there were places where the next one thru here with a cart was going to have to do some snipping and they had to go single file.

Then they met Alhar and chatted with her a few sentences about the fate of second dock. (It was being sold.) She was someone they knew from the second floor at Raltain's. They dropped off Venna at the taps and he walked with Alhar across the bridge. They had the swaying span almost to themselves at the time.

"Where to on a Nightday?" she asked. She wound her arm around his waist as she said that.

He was glad to have her contact and wound his arm around her as he replied, "Pick up my arithmetic wheel over at my place. That'll help keep it occupied-looking on a Nightday."

"I'm going almost there, to Hempa's on Second Harbor Ave."

"Just two and a half blocks from my place when all is said and done."

"You've got land up there?" she asked.

"Almost an acre with a habitable little hut on it."

"I love to see it on the way by?"

So it wound up taking almost an hour longer getting that arithmetic wheel. He wondered if Hempa would notice he was getting seconds? He was up late finishing the drawings but Venna didn't get back to the house until well into what most people call Dawnsleep. She was not, however, what anyone would call used up.

3. Breaking Aluminum

Morningday came early, but at least he wasn't limp from a big buzz. Belgin's mill is on the hill above the center of town on the stream called Sinbara Splash that he still uses for almost half his power. He burned the bark and some of the slab wood in a boiler for most of the rest, a windtrap brought in a little more on days when there was a strong breeze over the lake. The building has some stone corner posts and piers, but is a lackadaisical shed tied up from the slabwood where there's any wall at all, only on the Hill Farm Road side. The sound told him only one saw was running, his nose told him they were burning bark only. At his front door there's a half flight of steps up to a platform that Belgin can see from his desk another half flight up.

"Still pretty slow up here Jorma my friend," Belgin said as he pushed his way thru the front curtain. "I don't even have one day's work I can give ya."

"That's not a problem," Jorma said, "I'm here as a customer today so it's nice to know you're slow."

"Not desperately slow, I've still got Baikie and T'theere slicing out an order for a dock in Zharvai. C'mon up, set, what ya need? I got some small stuff you can use for fence posts, if not I'll cut it up as furniture sticks someday when they really need something to do."

"I'm doing a ten by twenty foot plank floor and framing out a sixteen by twenty four foot roof over that, for thatch. A camp on the beach."

"When you say frame out..."

"I want some big timbers, I can put up a sign for some guys to

come out for an iron a day and help put them up. I can find some tackle."

"Who's this for?" Belgin asked.

"Me," he said. Belgin had questions on his face, since Jorma had never had money. Jorma pressed on however, he would get to that later. He had a scroll-tube with him and drew out the plans and unrolled them. "I've got the whole order drawn out. I know Baikie can cut this, and if he can't, I know I can on your saws."

Belgin was looking at the drawings, "Yeah, I know he can cut these, I can cut these. But you've been around here, you know there's a kitting charge for this. Each cut we put on is value added."

"And I've pegged planks around this town long enough to know how much value is added in the field by what cuts. But look at how I've done this. I know what cuts you make with a kit, there's less than half that here, No lintel notch, no mats relief. This is just a simple day camp. You even admit you're slow, charge me per cut, like your real cost is, and make a fair profit."

Belgin looked right up at him and blew out a big breath.

"Yeah, I don't have a problem with that, for you. In fact if you want," he said, getting up from the desk. "I've got enough steam to run Nezzie. If you're placing an order like that I might have a day's work here cutting that, I know I've got the logs. Let me ask the guys if they want a second day this week."

"There's one thing," Jorma had to say, not getting up.

"What's that?"

"I need to break an aluminum."

"What?" he stopped, "Take it to any financier."

"I found this aluminum."

"And no financier has seen it?" Belgin asked.

"No."

"How do you know it's good? Did you 'find' it in one of their vaults?"

"Of course not, I found it stuck in my sandal. I last wore them in the Yakhan. This spring I took them out and found an aluminum stuck in the treads."

"Take it to a financier, tell him the same thing."

"He'll tell me it's fake and keep it."

"Don't let him keep it. Let me see it," Belgin said.

"So look at it," Jorma said, pulling it from his pouch and holding it between his fingers.

"You don't trust me?" Belgin said.

"I believe this bead is aluminum, people get different around aluminum." He tried to quote Venna's sophistication. He rolled it between his fingers, he could see Belgin's eyes focus on it. So small yet so precious.

"There are several very good plastic fakes for aluminum," Belgin said, "but if a financier takes it, it's good. Try and be a little less paranoid about it, I've seen aluminum before. I once did a job that paid aluminum, but I brought it right to my financier. Maybe you know him, Ainsile? He fished with us back in the 55th but took his finance business over about the time the starship landed."

"I think I remember him, you knew him better than I did even then."

"Let's take it there," he said. "If he takes it, you've got yourself some lumber and some day work if my career-men don't want it."

"And if it's fake, I can't afford it."

"Yeah, I understand." He frowned like he might understand too much about this aluminum already.

Ainsile's office was back down the hill and a couple blocks in on Second Hillwynd. It was two or three floors of commercial here and five floors of residential above that. The commercial is cut stone but the residential is grown hangleaf, at least a century in age by now. Ainsile had the second and third floors of commercial and lived in the canopy above. They went up wide, polished steps to the second floor. There was a slender woman in a snug, subtly-patterned office jersey to greet them.

"I want to break this," Jorma said, and held up the aluminum.

"Ah," she said, "Such a denomination will have to be tested because it's not sealed with a certificate." Jorma had never heard of such a thing before. "Can you tell me where it came from?" she asked. "When and where it was last tested? A bead of high denomination really should have that paperwork with it. Aluminum, OK, but if you ever possess anything higher you

certainly should keep it sealed in plastic with its test and ownership history."

"Now I know," Jorma said.

"So where'd you get it?" she asked.

"I found it stuck in my sandal in the Yakhan."

Peals of delighted laughter poured from her delicate face. She fanned her fingers in front of her mouth as she rocked.

"I can vouch for him," Belgin said. "He needs to break this aluminum for me."

"If you think even in the Yakhan someone can casually let aluminum fall to the ground?"

"No doubt it wasn't casual," Jorma said, "but I have no idea when it became stuck in my sandal. I didn't find it till I was here this spring."

"But you know it's not yours?" she said.

"It is now," he said with a bit of defiance.

"It may not be real," she said, "I'll give you a tentative deposit form. Ainsile will have to come down to sign it," she said and pulled a string that went up thru the ceiling. She took a piece of paper from one of the racks behind her. He took the time to read it before he filled it out. Belgin and the girl chatted casually while he did. The form swore he possessed one suspected aluminum bead that they had in trust for analysis and he had an equivalent value in escrow until the bead was returned.

"Belgin, what brings you here today?" The tall and elegant figure of Ainsile strode regally down the grand staircase from the third floor. Jorma could picture him coming down the ladder from a cross deck on a big freighter, far removed from the lineboats they'd crewed in the 55th.

"A friend and business partner needs change of an aluminum. Palmire was razzing him about how he found it."

Ainsile signed the form, then reached out and picked up the aluminum bead. He bit it and scraped it on the marble wall, looked closely at the mark it left on the marble, then the mark the marble left on the bead. "It's good," he said, with mild surprise. He handed it back to Jorma, it had not been out of his sight. "I really need to

weigh it, so come on up to the lab," he said and began to lead them back up the stairs. "But it doesn't feel light. It looks pretty fresh. Found in the Yakhan?" he saw what Palmire wrote. "Are you trying to tell me it was just laying about?"

"When I unpacked my sandals this spring, it was stuck in the treads. The last place I used those sandals was in the Yakhan a year and a half ago."

Ainsile looked at Belgin. "I've known Jorma longer than I've known you," Belgin said. "If he's not talking about where this aluminum came from, he's not talking about it..."

"I swear by the life of my soul that's how I came to possess this aluminum," Jorma said. "I am talking about it. Venna was there when I found it."

"Who is Venna?" Belgin asked.

"She came back from the Yakhan with me. The one who bought Ava's place on North Island."

"Who's Ava?" Belgin asked.

"The Yingolian scientist that took over Tdeshi's body after she OD'd," Jorma said.

"Tdeshi? Leand's kid?" Belgin asked. "It's at least twenty decades ago she disappeared ain't it? Is that what happened to her, she OD'd?"

Jorma nodded once. Belgin skipped over the 'taken over by a Yingolian Scientist' part. Jorma realized that talking about that might make it a lot harder to get change of this aluminum.

"About the time the starship arrived," Ainsile noticed, "but none of this starship-age gossip is relevant to this bead is it?" He asked Jorma, who only shook his head. Then he realized Ava could have some part in that bead, she bought the sandals for him in the first place. But Ainsile continued, "We have an aluminum of questionable lineage. I don't know of any reported missing around here, but it's hard to know about the Yakhan, there are probably several missing every year in a city that size.

"I've known Jorma at least a century," Belgin said. "He didn't steal this aluminum. You've known Jorma."

He had brought them to the little lab off his office by now. It was a very formal place, precision instruments behind glass doors,

well finished cases for everything, slots for notebooks. Ainsile took a densitometer from its case and calibrated it, recorded the cal in the notebook, then dropped the aluminum in and put his eye to the eyepiece. "It's good, like I said, but just to be thorough..." he packed the densitometer back up and took down a galvanometer, clipped the aluminum into it and gave the crank a few turns. The indicator needle swung to the mark labeled 'aluminum'.

Ainsile put away the galvanometer and got up with a brief grin. They followed him to his main office where he prepared a copy of the paperwork, the test results, his and Jorma's thumb prints and signatures and sealed them in a clear plastic pouch with the bead. "How many coppers would you like broken to iron?" he asked Jorma as he lead them back deeper into the building where the safe was.

Now that he had it in iron and copper, he actually understood how much wealth it was. His pouch bulged with copper. He had never owned property this valuable. His little field and cabin was the most he'd owned in his own name since the burn-out and that was little more than half this, maybe thirty two coppers and some change for the tools and cart. He needed to be careful with this pouch, he would have to put most of the copper somewhere safe when he got home. That lock-box wasn't even safe enough was it?

Still, he treated Belgin to lunch, but nothing they wouldn't have had anyway, a bowl of bluerike diddle with pineberry dumplings on it at Bola's, paid for out of a ten Jorma still had on him. They were actually a bit early for lunch and Bola wasn't very busy yet and had time to talk about the camp. "Get some of those post-feet that Boogle cuts," Belgin was telling him. "They let you set em deep and they keep the post foot dry. You'll get thirteen, maybe even twenty decades out of that camp."

Bola scoffed, "Where he's building it, the first big norther that comes down the lake is turning that camp into another pile of driftwood in the trees on the far side of that lagoon."

"It's above high water," Jorma said.

"Use those post anchors and you won't have anything to worry about," Belgin said. "Maybe tie a couple good strong cables over

the roof."

Jorma had been in Sinbara well over a century now and could remember no storm that would have swept away the camp he was planning. The lake is big but it cannot brew ocean storms like the heroic sagas of old when the Salvador basin held two and a half million square miles of ocean. The waves were the only danger here, he had seen them reach eight feet coming down the lake. He figured these guys were just teasing.

After lunch of Afternooday, when he finally finished sawing his order, he went to see Balick about getting it barged over. Balick was out so he waited on his dock for hours. He noticed he was fingering his pouch more than he was wont and jerked his hand away. This was even though all but a few extra irons were now hidden away deeper in the house. Even so, he had never had seven irons together in his pouch before except when he was on his way to an important business deal.

He was still there talking with Balick about his schedule and the camp when Venna showed up. She was in a very supple jersey he hadn't seen before, its bright color's proclaiming it as new. Its supple texture meant it had cost more than an iron at Yendron's custom knits. Balick had never met her before so that prolonged the conversation a few more minutes. Venna appreciated his interest and Jorma could tell she wanted to slip that jersey off for him. Balick is a big blond Nordic and somewhat knobby and thick in spots, but manly all the same and Venna was ready at any excuse.

"So I was thinking about Duskmeal in town and then checking out that sex club again," she said to Jorma. "It's as hot as anything in the Yakhan," she said to Balick.

"Wild Catch?" he asked Jorma, knowing the clubs in Sinbara for a century or more.

"Yeah," Jorma told him, "The decor isn't like the Yakhan, but the games are."

Balick looked at her with a whole new eye. She smiled at him and said, "So why don't you meet us there?"

Once they had concluded their business with Balick and were

well away from there, back toward the hauler's yard, Venna told him, "I can tell you're not happy with my plan for the evening. I hope you don't have something against Balick?"

"I'm worried that we can get used to having money and won't know how to adapt when it runs out. We can buy a few things, but we can't let it change the way we live."

4. A Summer Under Construction

For the light of two weeks, he hired a crew to help him get the heavy timbers up. They were six guys he knew altogether, but never more than four at a time. Hingkif was there the whole time with his hoist and tackle and getting two irons a day because of it. Venna kept busy keeping everybody fed and quenched but Jorma was sure she was getting her reward. Blisteel went up to help her bring Noonmeal down on the second of those weeks, Kveshnat he thought, and they were gone quite a long time.

The framing was up already and there was a starter tarp over the roof. The guys who were staying over and working tomorrow also had hammocks for Noonsleep. Now that it was mid summer they could go in the lake after the meal, briefly.

Their little lagoon was now crowded with flying fish because swarms of several migratory species were gliding in over the sandbar. Jorma netted a dozen of them, Hingkif had elaborated the little firepit he made last week so it was now a convenient cooking height and started to look like the stones had been specially cut and fitted. He was lighting a little fire under the camp grill Venna wheeled in here this past Morningday all the way from halfway up First Water Street downtown.

Jorma passed Ennil just coming from the beach where he had picked up the small cask from the boat, as he was going to the beach with the pail and a net full of flying fish.

"Looks like we'll eat well again," Ennil said.

"If Blisteel ever lets Venna get down here."

"It's Venna man, you live with her, don't you notice there's always one more 'just a second' around her?"

Because they kept walking they would have had to shout at

each other over their shoulders to continue that conversation. He knew it was Venna, she would ask, 'can you be quick and quiet?' He would hear them talk of her this sleep. He felt good about it. He liked a hot woman and Venna was the hottest woman in his circle since... Well; since Tdeshi, wasn't she?

"This is quite the camp grill," Hingkif said.

"I hope it's safe to leave it here?" Jorma wondered.

"Take the shield and all the stones and cement them."

"I'd have to take it all down to do that."

"No you don't, pile sand around it to the top, then pour runny adhesive cement down the center till it's full. A week later, dig out the sand and then chip off the excess."

"I don't think I can get to that this year. I want to get the floor and the thatch on before winter."

"You've got that canvas on," Ennil said, "and there's real soil on the bedroom end of the place. I would plant lylda vine on the bed end of the camp, let this be a starter canvas like it was intended, don't even thatch it. This canvas might hold long enough to start a leaf roof on this frame with souped up lylda vine."

"If it's framed out enough for thatch, it will certainly work for leaf," Hingkif said.

Jorma knew a leaf roof was framed differently, the box beam was offset when framing for leaf. It would have to be re-pegged and he would need help with that, but tomorrow was tied up with framing the extension to the roof that covered the kitchen and setting in the digester can that was coming by barge around Afternoonday lunch. He didn't need to make that decision now and could do both, the lylda vine would grow over thatch just as well as canvas and the naked canvas might be torn in the storms of winter.

The grill was already hot enough to put the first batch of fish on, when they are done they will flake off the spine stubs that remain of their wings. Venna and Blisteel finally arrived with a big pot of chopped trap diddle. "You know the kind of chow we need after slinging these timbers around," Hingkin said, seeing two kinds of meat in the meal.

"She makes her own diddle sauce," Blisteel said with some

sort of awe. Jorma knew she only did it now and then to show off and knew that took less than half the time they were gone.

"Just so long as you didn't help make the sauce," Ennil said.

"If it's unnaturally creamy we'll know," Hingkif said while making enough room on the grill to get the diddle pot to balance. There was no one here who didn't know about and partake in the special overtime pay on this project.

"It's tell flower," Blisteel protested. They swung it up onto there.

"I don't know what we can use for bowls," Venna said. "I have mine," she said, "and Jorma's but we don't have any extra."

"We'll take turns," Ennil said, "I'm waiting on these fish."

"I see you got the cask set up," Venna said, "I'll go up and get our bowls and cups."

"My cup's already down here," Jorma said. "I've been using it for the water all day."

"Eew, right out of the lake?" Venna asked.

"By way of Hingkin's skin." She knew it had a bio-filter. She had waited for his answer, then went back to the path to the house.

"Nice girl," Blisteel said as Jorma put his cup to the cask, "she does have something of Tdeshi about her."

"She looks like Tdeshi should have," Hingkin said. "You never knew the fire in that girl from looking at her," he said about Tdeshi.

"Ava's personality does match Tdeshi's body better than her own did," Jorma admitted. "I've gotten used to the way things are now."

"So you brought her up from the Yakhan," Ennin said. "She does seem more like a city girl than someone from these parts."

"Tdeshi never would have stayed anyway," Hingkin said, "Leand never should have taken it so hard."

"She was his daughter," Jorma said with a grimace at how hard he had taken it. They had all known Leand for most of the 55th century but Jorma still liked to think he might have been closer because Leand had rescued him from a burn-out and he had tenanted from him for so many decades. All of them liked to consider Leand close however and Jorma would not claim he was

closer out loud.

Jorma had a cupful and took a swallow before he asked, "Has anyone heard from him?"

"While you were away in the city," Hingkin said, "Naarb'n got a message that he posted. He's restoring his ancestral home. He bought the site. It was considered a ruin on the property of a newer house that had grown up beside it. He's replanting the house he grew up in, on the old stones. He's living in the newer house for the next twenty decades or so till he can get it grown up enough to move in."

"Has anyone told him about Tdeshi?"

"He mentioned that the Kassikan had asked him about Tdeshi," Hingkin said.

"You just told us last week," Ennil said.

"You were the one who went down to investigate it," Hingkin said. "Since you stirred it up, I think it's more direct coming from you."

What wasn't said was that Tdeshi had left Sinbara from his home, and that there were some, including Leand, who thought his demands on her had something to do with that. He wondered why the Kassikan had contacted Leand, he wondered how they even found him. There was no way he could duck the responsibility he bore to Leand because of the part he'd had in it. It would take a long message, he would need to sit down and plan it out first or he would be forever at the keyboard saying things wrong and backing them out with the eye-meter running. "Should I tell him about Venna?" was all he could ask. She was a freakish typist.

"A girl who acts like her, or her re-incarnation?" Hingkin asked.

"That is the question, isn't it" Jorma said. They had talked at taps in town when he first got back from the Yakhan with her. They'd all heard the 'different candle, same flame' story.

"The truth," Ennil said.

"I'm not sure I know it," Jorma said.

"I am a realist," Hingkin said. "I don't see an answer to that one from the laws of physics. You must agree that the soul as a process can carry on and project without even the electrons of

reality aiding it." He was poking the fish on the grill, "This first one is done by the way, who's hungry?"

"Let's just scarf," Ennil said, and speared a piece of it with his pocket knife.

"That's my kind of table manners," Blisteel said, opening his knife and flaking a large piece of the fish off. So they all shared in it, picking bites out of it while waiting for the next one to be fully cooked.

"How long do you think she'll be able to stand being here?" Ennil asked him about Venna.

"I have no way to tell," Jorma replied. "We've only known each other two and a half years and we'll be together two years this fall. If she's as much like Tdeshi as she seems, another year, maybe two. She's more mature than Tdeshi was, but only because she's twenty, not three."

"How close do you want us getting?" Blisteel asked.

"I know she makes you promise not to tell," Jorma answered, looking straight at him.

Blisteel looked away, looked back, swallowed. "She's a sweet girl," he said, "and lively."

Jorma gripped his shoulder. "She's a cute kid who reminds me, hell, reminds us all, of Tdeshi. A girl you and I knew for a few years, twenty one decades ago. I've known her two and a half years, not the good piece of a century that you and I have been friends here. I'm sure she'd be glad to have fun with all of us and I don't have a problem with that. We never had a problem between us when it was Tdeshi did we?"

"Leand did have himself one bone-rider of a daughter," Ennil said.

"Venna is the same way," Jorma said. "She could eat her dinner while sliding up and down a shaft."

"Like I said," Blisteel said, "A hell of a nice girl. You done a good deed for us all, bringing her up here, even if she does only stay a summer or two."

"Her nest is getting pretty swank also," Henkin said.

"I liked seeing her in the water last week," Ennil admitted.

"She likes being naked," Jorma told them, "it's warm enough

in the sun for her even now and she'd probably be thrilled if you asked." The more you cheered her on the farther she went until she won 'most exhibitionist' at whatever event was going on.

"Now that you say that," Hingkin said, "We certainly will."

As Jorma thought, Venna was thrilled, and had them watch her strip before she even started her noonmeal. Afterwards she was thrilled that everyone was cool about it and eager to take them down the beach in turn. Jorma went last and by the time it was his turn Kortrax was so directly overhead he felt like a dropper hitting right in the center of his head where his hair spirals out. "You seem like you're having fun, but are you?" He was beginning to worry that she might feel he was pimping her out to get the camp built.

"Yeah, these guys are pretty naive actually, ask Blisteel how it was," she giggled.

"You didn't hurt him did you?" Jorma didn't change his tone of voice or walk but he did worry, because she was a strong girl and could be quite energetic.

"No more than a carnival ride hurts him," she giggled again.

"You do have a wicked side Venna. Sometimes you scare me."

"I shouldn't, you are the one who scares me."

"How?" he asked.

"The old timer that everyone knows, with me the outsider in town. I'm well aware that you could take this house from me if you wanted to."

"Venna! Why would I ever want to do such a thing, how would I ever excuse it when you're better known on this island than I am? On North Island I'm the guy from the mainland who lives with Venna."

"That is only shallow acquaintance, you go back farther with these guys than my life."

"You're still young. At twenty decades you first begin to feel how long forever might be. It's nothing like what you feel at a century," he continued, "but it is when you first begin to understand some of what a steady-state existence might mean. It takes that long to know you'll never remember a beginning, a youth, even the fact that such a phase of life exists."

"I am nowhere near my steady state," Venna told him.

"And that was one of the things we were talking about, our guesses about how long you will stay in sleepy little Sinbara where both the fish and the mills have seen better days."

"As long as there's an Eye room this is as good as the seventieth floor on Fourth Canal and the Canyonway." That was an address right in the commercial and media heart of the Yakhan. It was about four and a half miles almost due south of the Kassikan, in a neighborhood of gleaming crystal spires up to a hundred floors in height. Before she moved to this house in Sinbara she had last lived in an upscale city-edge home at least eleven miles and three Canals from there.

"Can you really see yourself rooted here?" he asked her.

"I'm getting to like it. I know it's because I'm with you, I don't think I'm yet to the point where I could build a life here if you and I had a falling out."

"I think you'll find it stifling here."

"I sure didn't feel stifled here this evening," she said with some vigor.

"I hope you didn't feel obliged."

"I've been looking forward to an evening like this, where we can let my nymphomania out of the closet and I can feast on your construction crew. Thank you, perhaps most of all, for allowing me this evening."

"I'm glad you really did enjoy it, but it's getting late." They were well into Noonsleep, he hoped Kortrax hadn't already begun coming down the sky. Balick was going to be here with that digester relatively early in Afternoonday, because he wanted to be back to his dock for lunch.

"Yeah, but we're here," Venna said. It was a soft spot in the sand that was piled into a lounge with an old camp-quilt spread over it."

"The mattress is coming next week," Jorma said. It was a nice one they couldn't have afforded without that aluminum, better than the one in the house, and designed for athletic use. "Pleweel has most of it sewed already," he told her, "He's only got the skin and sealer layers to go."

"That will be much nicer than this. Your hammock would be nicer than this."

"The guys would get a kick out of watching that."

"Would they?" she asked with wide-eyed enthusiasm. "Would you mind?" she asked wistfully.

"You want to put on a show for them?" He was embarrassed by the idea but tried to keep it out of his voice.

"Sure," she said, "You're better than any of them, remember that clothespin maneuver?"

"That was painful for me." He jumped on the excuse.

"Well not that then, but we could get that hammock snapping."

"And pull down the framework we just put up?"

"We have to test it," she said.

"We will," he said. He would get this out in the open if she wouldn't, "but not this sleep OK? I've never wanted to be a sex performer, if you do, you'll really need to find another partner."

"Just part of keeping the help entertained," she pouted.

"Stay naked tomorrow, that will keep everyone entertained."

"I'd love to." He had turned by now, so he looked back toward the construction site. "So you don't want me at all?" she asked.

"Aren't you sore yet?" he asked. These were hearty guys that liked getting it on with a woman.

"I could go again," she replied.

"There's no need. Dawnsleep was enough to keep me dry for another day."

"Then let me bring that quilt up," she sighed.

"What's wrong?"

"I just don't want it to end, the getting laid on the beach I mean."

"The charrasspas are deafening along here," he said. The quibreaks they climbed leaned over the edge of the sand here.

"You always did have a party-pooper side," she pouted.

She was just picking up the quilt when he picked her up and put her down on top of it. Caressing her body could always arouse him. When she turned over to straighten the quilt he came into her from under.

"But but," she said, and flipped over in a split move he

wouldn't have attempted, then wrapped her legs around him and pulled him down on top of her.

With so much construction going on, the garden suffered. He had to force himself to spend Mornings at it for the next few weeks. All thru the summer he spent Afternoons down at the camp, first planking the floor, then thatching the roof. Every week there was a delivery also, the toilet and digester, the mattress, the patio stone.

Venna was enthusiastic at first, but as the weeks wore on he could tell she was getting bored with it. He took her to the Wild Catch one Nightday, she had a great time there and even found a guy who would let people watch. Jorma had actually been trying to stay away from this scene and the drugs that went around it. Even so he met a couple girls he knew there, but took them to a cubby while Venna had her fun. Venna invited most of the people they were with that evening to their inaugural beach party, due to be held Afternoonday, Dusksleep and Nightday of Kadezak.

They had just finished breakfast on the last Afternoonday before that and he really wanted to get the dock done. It would be a long day, he had taken only a short Noonsleep and was up before Venna, and made himself some griddle cakes for breakfast.

She came down when he was cleaning up, "You look like you're going out?" she asked. This was the least likely time and place of the week to find clothes on Venna. She even had her crown of gleaming copper curls tied once at the top of her head.

"I've got to go up to Belgin's again for the lumber for the dock."

"Yeah, right, I wanted you to get that done before the party." She was not quite awake.

"We don't have a boat."

"Someone might come who has one. A few of your friends have boats."

"You're not going to get a trawler or even a lineboat in our tiny lagoon, especially as it gets toward dusk," when the tide was nearing it's lowest.

"Yeah, well; some of the people we met have trampolines,"

she said and ducked into the bathroom before him and delayed him further by using the shower in there instead of the one on the kitchen deck.

He hosed himself off on the kitchen deck, there was no one but the God of the North Pole who could see him from here. During the hottest part of the week, this shower was just as good. By the time he was done, she was dressed. "It looks like you're going out too?" he asked.

"Yeah, I want to type some mail again, then I want to buy a couple kegs for next week and arrange for a karga. We can roast a karga in that fireplace."

"We'll pay almost as much for the party as we did for the camp."

"Very funny," she said as they started down the path. "But you have to be generous with found money, and too many people know its found money."

'Thank's to you,' he thought, but said, "We're being very generous, I don't want to get used to being a big spender just in time for it to run out."

"I know, no need to harp on it. I think it will cost me a tenner or two for mail, I'll be brief. It'll probably be an iron and a half for the barrels and one of the guys we met last week has a nice fat karga he'll sell me for another iron. With what you'll pay for that dock, the delivery and lunch for the guy with the barge, and all the incidentals I'll get..."

"Like what?"

"We need a skewer for the karga, we need a couple torches for down there, a kitchen knife for down there..."

"We can..."

"I'm not carrying the one from the house back and forth all the time, we can break another iron and get another kitchen knife for the camp. Anyway, when all that's done, we won't use a copper today."

He was going to say use his fishing knife but they didn't need a two-iron knife when a half-iron one would do. He was being very generous with found money, he was letting her treat it almost as if it was her money. There was going to have to come a time when he

talked to her about it, but he elected not to do so before the party.

It was lunch time by the time he was back to the camp with the lumber unloaded. Bowry brought it in his lighter and only took thirty penny for it, even though he worked hard loading and unloading. "It's not even two hours," he said, and wouldn't even take lunch.

While he was having lunch of roast rinko up at the house, he decided to inventory what they had spent so far. He thought, with today, they had broken twenty four coppers, so there should be thirty two left. There were only thirty one. Where was the other one? His first guess was that Venna was helping herself to even more than what she told him about. He hid the pouch in a different place.

Thru the after-lunch he tore into the dock, pounding the stakes with a vengeance, cranking the drill till it smoked. At times he wondered why. He wondered what she was doing with the money. It had to be the times she said she had gone into town to do mail, she must be trying to impress the hoi poli. No doubt he was working himself to a lather so the boat of her new lover, the one who would do it for the public, could tie up here for the party.

But he kept at it and by the time Afternoonday was slowly sinking into dusk, he had convinced himself that as found money and he was living in her house, she deserved some of it. Actually he had treated it as theirs, he was spending a great deal of it improving her property after all. He had better get himself recognized on the deed hadn't he? Why was he always such a sucker for love?

He had only three more planks to lace on when he saw a nice lake sprite heading for their inlet. It had too much sail on and was moving too fast to thread the inlet into this lagoon with the tide so low. He could see the sailor's legs under the sail, they were those of a girl. He started that way since she was going to run aground and going to need help getting that lake sprite back into the water. It was a good sized one, a lot of boat for one girl to handle.

Suddenly the sail whipped around and she jammed the tiller over hard and with a whoosh, took the ninety-degree bend on one

pontoon and brought it down to follow the tiny channel that remains with the tide so low. As she swung around he could see it was Venna. "Hope you got that dock done," he heard her yell.

5. Visitors from YingolNeerie

Even though it was week Imnotn in the middle of fall, the dark's quarter inch of wet puffball snow had melted before breakfast was over and it really felt like Noonsleep would be warm enough to spend at the camp. The traps had been good to them thru the dark of last week and Jorma was gutting out the take, no doubt the party had scared a lot of vermin up toward the house and some of the traps hadn't been checked last week. They were done with the day's chores before Noonmeal, including cleaning up from the party, but they had done a lot of that as it wound down on Nightday because they knew they would be limp today. "Want to spend the noon at the beach?" he asked.

"I'm already starting this thesh," she said, she had just dumped a big double handful into water to soften.

"We could do flip-flats down there."

"You want to take the boat out?" she asked, maybe a bit nervously because the water was already starting to cool this time of year and a staying dry on a lake sprite is as hard as staying dry during sex.

In truth he would lay on it at the dock but that was all he felt like doing. "Not till Afternooday, if ever," he said. They only got the boat two weeks ago and had only played with it as a diving platform in the lagoon at the party the week before. It was probably a great deal because of the season, forty two irons was a steal for a lake sprite in good condition and Helgie only sold it to them that cheap because he knew he could still come over and use it often. Venna had probably arranged for further discounts by her own methods also. Jorma was so glad to have the camp up and the boat at the dock and still have thirty one coppers left out of that aluminum. His back might never be the same, he had worked two day weeks most of the summer getting it pegged in. He had even drilled floor planks by candlelight on Nightdays a few weeks in

mid summer when they weren't too cold.

"If it get's reasonably warm tomorrow and not blowing too hard, I'll go out," she said. "Once I get these matted why don't you take them down and get the fire started. I'll make a mix out of those," pointing at the meat he had ready to toast, "and fry them up a little first, then I'll be right down."

"We'll need the quilt," he said.

"If we stay down there I can run up and get it."

Venna had gotten pretty good with thesh in the last year. Several ethnic cuisines used matted thesh and Prvest-style flip-flats were easy on the open-fire griddle at the camp. By the time he was done chopping the meat nice and small for a trap-mix, she had a dozen mats stacked up. "What are we going to do with all these?" he asked, since it was way more than they could eat at a meal.

"Breakfast crisps."

He found a clean sack to carry them in and started down the path. At the top of the bluff he stopped. There was something pulling into their inlet that looked like a picture he had once seen. It was a picture of the starship that landed in the Yakhan decades ago, just a few years after Tdeshi went missing. It wasn't as big and didn't have the wings, but there was the same muscular streamlining, the same front-loaded look. It appeared to be floating on the water, so it was actually some kind of a boat. It was a power boat, there was not the least hint of a sail or anywhere to put one or anywhere to stand to tend it. There was only a small deck in the back where the wheel was. There were two people in it.

Even from this distance he could tell the woman was Ava, as Tdeshi must be called, now that her body is animated by the Yingolian ghost. He was still tense about that. He didn't think he could ever make love to her again, but could welcome her for Noonmeal. He had lived with her a year at this house, before she sold it to Venna.

He turned back to the house and yelled, "Guess what, Ava's here in what looks like a Yingolian boat. She's got someone with her, I bet he's one of the Yingolians." He had never met one of the flesh Yingolians before and knew he wouldn't be offended by that,

in fact he found himself looking forward to it, they had been celebrities decades ago. Venna mentioned knowing one in the past, so he presumed she would be interested also. No doubt he wouldn't be here if it wasn't for Ava. Jorma understood that most of the Yingolians had moved south to the Gengee when they left the Yakhan.

"I'll make extra and bring some gnarns down," he heard her yell back.

"Great, see you down there."

He hurried down the path till he was within shouting distance of Ava, "Is that a boat or a starship?" he yelled.

He could barely hear her answer, "Boat" and "Starship" were both in it.

"What bring's you here?" he asked.

"Wait till you get down here," was what he heard in return.

Ava and the Yingolian conferred with each other and busied themselves tying that strange powerboat to the dock beside the lake sprite while he made his way down the path. As he approached the dock he said, "We were going to have noonmeal down here at the camp, Venna's making a trap mix up at the house, she'll be right down. I'm going to get the fire going for flip flats."

"Anyway, to answer your question," Ava said, "this is Herndon, one of the Brazilians."

"That is at YingolNeerie right?" Jorma asked.

"Yes it is," he answered. He was a big guy but not too strong when they gripped. He was obviously human, the arrival of their starship had confirmed the 'brought here' theory of human origin. In fact he looked like he was half Nordic, half Mountain Troll. One would never suspect he grew up under a different sun by looking at him.

"So are you just out touring?" he asked Ava, "This must be the farthest north you've ever been?" he asked the Yingolian.

"No, not simply touring," Ava answered. "He left some notes with me that he needs, and I must have left them here."

"Yeah, we found all kinds of old notes in your lockbox. Venna went thru it all looking for all your garden research," Herndon choked when he heard that, "although it was me that actually did

the digging involved."

"How like Tdeshi," Ava said with some sarcasm.

Jorma and Ava had sparred about what was Tdeshi and what was a new personality before Jorma learned that Tdeshi's body was possessed by a Yingolian ghost. He had been lovers with that ghost in Tdsehi almost as long as he had with been with Tdeshi, before Jorma knew what she was of course. He should really say, before he was forced to admit what she was. "Did I ever tell you that theory Venna has," Jorma told her, "that Tdeshi's soul jumped to her embryo as the shonggot took her."

"Doesn't fit in my physics," Ava said.

Herndon laughed at that, Jorma tried to. Jorma had lived with Venna almost two years now, one while she learned to sail, well; on their way up from the Yakhan, and another here on North Island of Sinbara. After two years he wasn't so sure she didn't have a point. The physics Ava spoke of never explained the connections of what should be random odds in strange ways that favor one person over another. "It may not fit into physics, but she is so much like Tdeshi in so many baffling ways."

Ava was walking toward the camp and looking around, "Jorma, you used to say that about me. But let me interrupt, this is so cute, what you've done here. I wished it didn't have to face north but this is like a tiny scale model of my dream house. I talked to you about this when we swam at that beach on the West Island."

He remembered that day "You are the architect of this camp, I fully agree. I remember that day, that was the day we decided to follow Tdeshi to the Yakhan."

They walked up the stepping stone path that had taken him the whole Morningday before the camp unveiling party. The stones that paved the 'kitchen' floor had taken another week with two guys helping and a delivery barge. Because the outer netting would extend to the overhang, the benches could add to the size of the indoor room. He would get those in next year, for now he bought some cabin chests and put bright-patterned pillows on them for seating.

The plank-up was right at the peak of the sand, lagoon on one side, lake on the other. The kitchen was on the lagoon side, three

steps down from the plank floor and under an extension of the roof. Ava walked up onto the porch, saw the steps leading down to the sand. "I really like this," she said. "And you did this all in one summer out of plank-up?"

"I got a couple guys to help me now and then."

"Did you sell your place?"

"No, I rented out the cabin and have a cash crop in the field that I've got to get in next week."

"No offense, but where did you get the money for all this?" Ava asked.

"No offense taken, I know the guy you knew didn't have money for this."

"Does Venna? I was afraid she might be a mooch."

"Eh. I might have spent it a little more slowly without her, but you know those sandals you bought me in Zharvai?"

"Actually, I can't picture them, I just remember yours were as frayed as those of some mercenary of legend, so I picked up some that looked tough enough to survive a life under your feet."

It was true, several layers of tough tape had already worn thru on his old ones. The new ones had saved him a couple irons, the ones she bought him weren't cheap. "When I unwrapped them this spring I found an aluminum stuck in the treads."

"What?" Ava and Herndon both said at once. Herndon had looked almost bored till then but snapped to attention with that revelation. He looked too stunned to speak, it was Ava who said, "But you wore those sandals, I couldn't have lost an aluminum there, even if I had been carrying one around, and I don't think I've ever carried an aluminum on my person," Ava said.

"I wore those a long time after Kulai's office," he said, and to shadier places, he didn't say.

"So where'd the aluminum come from?" Herndon asked. Jorma thought he might have asked with a shade of accusation, though his look was friendly when Jorma turned to him. Jorma thought the Brazilian was more excited about that aluminum than he should be, but then he had heard that most of the people of YingolNeerie were very interested in money. "It was rolling on the ground somewhere I walked," Jorma said. "I can't think of when I

could have possibly been in a place where aluminum could have been rolling around loose."

"Somewhere a Brazilian had been," Ava said. The Brazilian immediately looked like he wanted to shoosh her but refrained. "One particularly intimate Dawnsleep Kulai confessed to me where his original wealth came from, the detents on the rail pins of two hospital carts."

"We've learned a lot since then," Herndon said, looking hurt and frustrated.

Ava had some trouble suppressing laughter. She didn't say anything more, but looked around the camp, noticed the planks providing privacy around the digester and seemed to approve.

"There have been years it would be possible to stay here for Dusksleep up until Garibivlast," he said. They didn't need to ask about Dawnsleep. There was always a fire on the hearth in the main house for Dawnsleep, every week of the year. It would be rare to have darkmeal down here.

Ava had now gone down the wide front steps to the lake side and walked the beach a few steps in each direction. "I like it," she said, "it does have the flavor of my dream house."

He hadn't left the porch. Herndon hadn't actually entered the structure because you can see the whole thing from the steps. "The one in your silicon electric dream?" Jorma asked. He had to voice that complaint, she only made a face at him. Those memories of the day he learned she had been an electric ghost were still painful for both of them. If it hadn't been for that, their relationship was becoming rewarding. Now, it still gave him the creeps. Herndon was still on the opposite step and used the opportunity to go use the digester can. That left him and Ava in awkward silence. "She really should have been down by now," Jorma said about Venna. "Let me run up and see what's taking her so long."

"Do you mind if we bring some things up to the house?" Ava asked.

"No, of course not."

He waited while she went to the boat. There must have actually been a cabin in that forward compartment. It was built to look like that was all motor, an eight burner boiler he would have

guessed. She was soon out with a travel duffle and a wide note bag. "So you're both living here?" Ava asked as they began the climb.

"Yeah," he said, "we're still in the initial lust phase of our relationship, as endocrine-driven as we are."

"Oh stop," Ava said. It was only good-natured teasing this time. He was at ease with that. Even when they got along, she was never as willing as he would have liked and they could now tease about that without rancor. "Have you kept all my old paperwork together?" she asked.

"All but the garden stuff is still in the lock-box on a rafters shelf above the table."

"Eeew, that's not very secure."

"It's where you left it," Jorma told her.

"Oh yeah, well; I didn't know Herndon left valuable paperwork with me at the time."

"What is it?" he asked.

"It's just an old claim ticket for some lost cargo, but it's worth more than aluminum I understand."

"It might be in there, but I might have burned something like that when we went thru it."

She sucked in breath sharply. "Don't even think that."

"If I did, I'm truly sorry. It was decades old and at least two years away, down in the Gengee somewhere. There was some hand drawn street map in a foreign language in with it, and a faded old map of Gengee with some of that language on it."

"I hope you're just putting me on. He came all the way up here to get that. It's his cargo," she said, "he burned three copper's worth of fuel coming up here, that's just since the Yakhan."

They heard the spring-slap door of the stall back at the camp. Almost the same time they saw Venna stepping carefully down the path, carrying the big chopping plank with a steaming crock of spiced trap and gnarl-berry filling balanced on it. "Hi Ava, it's great to see you again," she said to her before turning, "and how's the fire?" she asked Jorma.

He hadn't started it, and started back down past Ava, "I gotta do that, you know the house." he said as he darted by her.

Venna and Ava stopped to chat while Herndon watched him start the fire. Soon Ava continued on up to the house and Venna came quickly down the remaining path. She dropped her burdens on the way by, then jumped into Herndon's arms with a shout. Jorma was somewhat taken aback to find that Venna and Herndon were former lovers. There were only fifty million males in the whole urban universe of the Yakahn, and practically all of them that he had ever met, knew Venna intimately. They hugged sensuously and his hands lingered on her chest and ass while she played them over him and straddled his leg. She giggled and whispered to him the whole time.

By the time he had the fire to cooking size and the griddle heating they were done with their greetings and re-acquaintance conversation. He could already guess he was getting stuck with Ava this Noonsleep. He didn't think he could do it, he'd give her the bed and hike back to his place to sleep. Now that he knew Tdeshi's body was animated by an electric ghost from a slave world at the star YingolNeerie, he didn't think he could join with that body again. He'd gotten over it enough to interact socially with her, but to join with her would be like having sex with the dead. They were both dead, Tdeshi's mind was dead by shonggot, Ava's flesh was dead a century ago at YingolNeerie.

Venna got busy immediately with breakfast and did not offer him any explanation. She just started frying and asking each of them 'how thick?' She kept them pretty slow and flipped them often to get them hot in the middle.

Ava was back down by the time the last one was cool enough to hold. "I always think of these as like a square quesadilla without the cheese," she told Herndon.

"Don't need it," Herndon said, "these berries melt just as well and taste close enough to it."

"OK you Yingolians," Venna asked. "What's 'the cheese'?"

"Fermented cows milk," Ava answered, "it's like a cheeseapple in taste."

"Ah," Venna said, "Not so much different from these."

"I'm sure it's a related plant," Ava said.

"They're both from the minibreak family," Jorma volunteered.

Working in the forest for many decades allowed him to come across random tidbits like that.

"They were actually genetically modified from gnarl berries with genes from the cheeseapple. This way they can grow on this hillside."

The banter went on as the noon took hold. No one brought up the aluminum again, like they didn't want to talk about it in front of Venna.

It worked out that Ava and Herndon volunteered to leave them with the camp. As Ava and Herndon walked up the hill, Jorma got the impression that they might be eager to rekindle old flames. Ava was living with Kulai, a guy Jorma did not believe was a sexual dynamo, while the Yingolian looked like a testosterone freak. Meanwhile Venna slipped her jersey over her head and ran down the steps toward the blue lake. "Come on," she said, "The water's warm enough for a quick one."

"Are there any men in Ava's past that you don't know?" Jorma asked as he trotted after her. She had never even mentioned knowing Herndon, just like she had never mentioned Tahlmute.

"I do seem to have a talent for falling in Ava's wake."

"Why were you on the Brother's Formidable?" he asked about meeting her on that ship.

"I thought I bored you with my stories of Zharvai." She dropped to a walk and took his hand.

In a way she did, it was a grimy old industrial city where there was nothing to do but drink and fuck and has-been old music still pneumatically amplified. It was fun to visit but boring to live in. It should be the Yakhan of the north but Entisonggas was going to be. "Why'd you pick Zharvai anyway?" he asked. They walked out into the lake almost knee deep, that would be enough, the water was already turning cold. It was the current from the north that brought winter, more than the path of Kortrax. When cold water did not come down, there was almost no winter at all.

"A guy," she replied, "Why else would I ever stay anywhere?" She had a point. "Did he know Ava?" Jorma asked.

"No, it might not seem like it, but the reason I know so many

guys that Ava knows is that I know just about all the guys in my area, and I happened to be in the same area with Ava, the Kassikan, and she knows so few guys, that I was bound to know most of them. About ten percent of the guys I've shared a home bed with have known Ava, that's still a lot, but I never hit it off with that guy in the Kassikan's boatyard that Ava did for instance. I never knew Ava was in Zharvai the whole time we were there."

"I thought you met Ava for the first time on the Brother's Formidable?"

"That was the first time we actually met, but I've been in her wake for decades it seems, ever since Herndon. If I knew we were both in Zharvai I would have tried to find her just to say 'hi.'"

"You were with Tahlmute a long time."

"But I was hardly 'with' him for most of that time." Venna said. "We were apart sometimes for years at a time, sometimes seeing each other only a few years in a decade. He had three homes at the time, I often took the country home and lived out there for years when I needed to slow down. I do love getting my hands into the soil."

"I'm surprised you're not with Herndon this sleep." She was wrapping herself in his arm and pressing his palm to her nib.

"He's Yingolian. I noticed they can be a lot more monogamous than we are."

"So I noticed."

"Although they are both away from their principal partner," she pointed out. "But I'm for the beach, not the water," she said and began backing out. She noticed a fisherman about a thousand yards out had turned his glass on her so she waved and posed.

"You know, I don't want him watching me. I think that's Ongar, he's enough of a jerk to talk about it at the Seaside." That was the inn and public room at the mainland end of the bridge.

"Let him talk, any time someone watches I feel like I'm getting what they only wish they were."

"This is going to be what splits us isn't it? You really need public sex."

"I get that in that club. I'll invite some of the guys I've met there out to point beach sometime." She turned and bent over to

pick up the quilt, making sure the guy in the boat could see her spreading.

"What do you think the cargo is that Herndon's papers are about?" Jorma asked as they walked back toward the camp.

"I bet it's metal," Venna said. "They had so much stuff made of metal they didn't even think about at first. I used to nag him about it when I knew him. I bet they gathered it all together and packed it up somewhere."

"That would make it a huge fortune," Jorma said. "Don't go getting any ideas."

She laughed. "Whatever papers there are in that lock box, I've looked at them a dozen times and never noticed. If there was something in there labeled 'treasure map,' I might have had to face that temptation."

6. The Ghoul on the Beach

Afternoonday began delightfully warm, as warm as any week in mid summer. Jorma leaned on his elbow and looked over Venna's curls toward the dock, looking at the boats and listening to the charraspas buzzing in the noontime hangleaves. She looked set to sleep late. To the best of his knowledge she had not slept at all the Noonsleep before the party nor the Dusksleep during. To the best of his knowledge she had sex with all the males and a few of the females at that party. Vureer found her to be more interested in her attentions than Tdeshi had ever been. Venna claimed Tdeshi would have come around by the time she was twenty decades. He was surprised she had been interested this sleep, on Dawnsleep she had still been sore.

He got up and soon found himself on the dock looking at the Yingolian water craft. The first thing he noticed was something he only knew about from theory before this. This was a planing hull. A planing hull on a motor boat! He shuddered to think what the fuel consumption must be on such a craft. It was a hull that was also meant for big water. This was meant to cruise the open lake in any weather on a plane, blasted thru by brute force.

The hull was completely fabricated, there was not even a base

pod to build on. It looked to be made of fiber and plastic. The finish was smooth but hard, there was no ripple skin on it at all. Again, forced thru the water with unlimited amounts of fuel. The only mast was to support a Yingolian navigational device, the kind many deeplake captains were using now because it made sailing thru the dark so much safer, if one has a lantern to illuminate it. There was only a tiny bit of deck space with a helm on the starboard side and a hatchway in the middle. There was a pedestal stool at the helm and a bench behind it that was wide enough for a few people to sit.

He was pulled up sideways to the dock beside their lake sprite which was still tied on the end of the dock for the party. The cockpit had a post-bulge over two feet wide, shiny, and sloped. One had to climb in and out over the sides. He would have to move this boat well before dusk if he didn't want it to sit on the bottom while the tide was out. He had pulled up as the tide stopped its flow, in a few hours it would start its ebb from this inlet.

Jorma peered thru one of the tiny windows into the low cabin that was ahead of the deck. There was a little sit-down kitchen and table inside, he guessed there was a low-ceilinged sleeping compartment ahead of that. Everything about the interior was crafted also, there were no grown-ins at all.

"Want to come in and look around?"

He almost fell in the water when he heard the accented voice behind him and heard footsteps on the dock. "Oh hi," Jorma said. "This is quite a boat. Did you bring it on the starship?"

Herndon laughed, "Not hardly. Some of my friends bought a fabrication shop down in the Gengee, this is the best imitation of an antique ocean racer from our country that we can build." He had jumped down to the deck. "Come on aboard, it's as safe as any moderately tested engineering prototype."

Jorma didn't mean to appear that nervous, "It's just a bit lavish," he said.

"Nah," he said, "it's a bare-bones missile with just enough life support to get you there. Here, check inside."

He followed Herndon down the tiny ladder. He had to stoop over inside. One could sit up when seated on the low benches. Herndon slid into the seats on the side with the sink. Everything in

here was tiny and compact, even a little Eye and keyboard. There was a head that made the booth around the camp's digester can seem really spacious. The sleeping compartment was as he suspected, triangular and not even high enough to sit. His nose confirmed that Herndon was not afraid to couple with a body haunted by an electric ghost, but then he was Yingolian also. Because of that he didn't go into the bedroom. He saw that there were speakers for music in there, and in the kitchen area.

In a cabinet behind the table, under the binnacle, he found an enormous boiler, the size of the one Belkin had at his mill, but with a pancake alcohol burner rather than a wood firebox. The boiler looked like it was made of a very good imitation of aluminum. Herndon tried to tell him something but he had a toothbrush in his mouth and it came out unintelligible. Jorma quickly shut the door. Herndon took the toothbrush out and said. "Is very compact for the power," Herndon said. "It's from an industrial supply."

"It looks like it. What do you have for motors?"

"Uu woopah puh," Jorma thought he must have been speaking Yingolian, but looked and saw that he was finishing his teeth. "Two waterpark pumps," he repeated with the toothbrush out. "They're under the bench at the stern." Jorma knew that Herndon was pretty excited about his boat because he popped back out the hatch and lifted one of the seat cushions to show him.

All Jorma gathered from that was that a waterpark used a steam-driven industrial irrigation pump. Jorma was much more familiar with sail than power boats, but had wrestled these pumps into position on more than one big plantation down on Sinbara Point Flats. He'd rented a needleboat when they were in the Yakhan and had examined the motor out of curiosity. These were much bigger devices, but similar in function. "So you've had breakfast already?" Jorma asked.

"Ava still remembers that kitchen," Herndon said. "But we made for you also, I invite you to come up."

"I think Venna needs to catch up on some sleep. We had a big party here last week.

"If not for footprints, I would not have known."

They were out of the boat now, Herndon took a quick look at

the lake sprite. "I had a boat so much like this when I was young, a bit smaller though. We called it a hobie-cat. They are lot's of fun."

"You had a boat like this?" Jorma asked, "At YingolNeerie?"

"Yes, with net floor but no benches. I would sail Bahia San Marcos and up the river between the old warehouses. The rusting cranes and conveyor belts in the water made a challenging obstacle course. That whole area's redeveloped now, its luxury mid-rises along the river now, well, then, 2148 is when we left."

"It must be hard," Jorma said, "being so far from home." He didn't have the faintest clew what that Yingolian number meant in a real date.

"There is no home, in 2381 it was obliterated by enormous meteorites sent by our enemies. That's what is hard, not so much being here. It is beautiful in its own way here, and there is more gentleness if not as much grandeur. Though this lake is a grander work than mankind of Sol ever attempted until the terraforming of Mars and Centorin."

"You must pass thru the tunnel of Cys Ungor on the way to the Gengee, is there anything grander on YingolNeerie?" It was three hundred feet high, thirty feet deep, two hundred feet wide and twenty seven miles long and done with an artistry seldom seen since Gondor was great. Jorma had seen pictures in travelogs, it was weeks beyond the Dromedian Arm and the Yakhan.

"No tunnel, that's for sure," Herndon said. "Nor fjords to put it in, come to think of that."

"What do you find to be the most fundamental difference here?" Jorma asked him.

"The pace of change. While I was here this world underwent a revolution in communication, and it seemed to make little difference, it was a fashion fad for a few years, decades I mean, and everything is the same. The same merchants are selling the same goods before and after the fad."

"Well; the things didn't last," Jorma said, "The pocket-eyes you mean. Don't take it personally but that's the problem with all the Yingolian crystals." He could hardly believe he was actually discussing this with a Yingolian. Somehow it seemed much more real, knowing this body had actually been born under a different

sun and he wasn't some dubious translation from dead flesh to electricity and then back to the flesh of a good friend's hot-box daughter. It never felt like Ava came from YingolNeerie in a way, it just felt like she came from a ghost. This man came here honestly from YingolNeerie, in the flesh, on a big flaming starship like Jorma had seen in sci-fi movies all his life, and pictures in the news twenty one decades ago. Not a ghost from YingolNeerie sneaking in on a swarm of outgassing asteroids.

He had to admit Yingolian crystals were a boon. The fact that there were a lot more eyes available made the price come down, but eye-time still wasn't without significant cost to the average plots-man like himself.

"We understood that early," Herndon said, "but anyway, would you like to come up to breakfast?"

"And leave Venna?"

"I'd say bring it down here but you'd have to light another fire."

"There's more than enough dry gnarl-berry twig on this hillside to keep us in cooking forever, the fire will be lit by the time you get down here."

They had eaten all they could of the trap mix over vedn toast by the time Venna finally stirred. There was motion for a few minutes before she tottered groggily out.

"You're up," Herndon said.

"Yeah, I'm sorry I slept so late, we had a humdinger party last week and I was way down on my sleep."

"You missed breakfast."

"I was way up on my eating too. You guys lounge, all I want now is a nice long shower and time to sort my hair out. I'll be hostess later to atone for making you do it this time," she told Ava.

"He made it," she pointed at Herndon, "I just stirred up the mix from yesterday."

"Thank you, and sorry. You could have got me up," she told Jorma.

"It was already made when I woke up," he said. "It was hardly more than an hour ago."

"Nice," she said, but went up the path toward the house, taking her cup and toothbrush with her. She had not put any clothing on of course.

"I sure feel like a nice lazy Afternoonday on the beach," Ava said, "It's good to be here while it's still summer."

"You go right ahead," Jorma said, "I'm sure you had a long, hard journey in that little cabin."

"It was only three weeks in that thing," Ava said, "From Third Canal in the Yakhan."

"You made breakfast," Jorma said.

"I rarely sleep well for Noonsleep," Ava said, "so I'm often useless on Afternoondays." He had noticed that only twice with her, but this was now a strange place and he remembered that Noonsleep was dark at YingolNeerie. She went to the boat and soon emerged with a camp quilt, started down the beach. Jorma took the cook pot she'd mixed the batter in to the lake to wash out. Herndon announced he had some remote work to do in the boat and headed for the dock.

When he was done, Jorma was left looking at Ava, the body Tdeshi used to have. He had to admit, Ennil was right when he said that Venna looked more like Tdeshi acted and Ava wore Tdeshi's body better than Tdeshi had herself. She must have felt him look at her because she turned and smiled. "There's room for both of us here," she said about the quilt.

He was hesitant, he didn't know how close he could get to this ghoulish monstrosity. He could imagine her turning to dry powder in his arms, stabbing himself on the splinters of her bones as her shrill cackle faded into the cold distance of outer space. But she looked fine, he had to admit he had enjoyed making love to her even as she was haunted by this ghost from space. Before he knew.

Still, he had been able to sit across a table from her. This was not much closer. He lay on his side, up on his elbow, "So you're back with Herndon again."

"No, I'm just playing guide," she said. "I've been on this route before, he's good enough with maps so he doesn't run aground."

"So what have you been doing the past two years?" he asked as a way to make conversation.

"Learning Kulai's business, taking over his math, and for the first time in my life, actually being an asset on the social scene."

"Wow," Jorma was impressed with this revelation, though he found it hard to picture. "So you're actually still in love with Kulai?"

"Yeah, sorry Jorma, but this is the one. This is the first person I've lived with on this planet who shares my views on personal comfort, sexuality, culture, food, decorating. We fit like lock and key," she said.

"So you're still in the initial infatuation stage also?"

"I've been in a dozen initial infatuations since I came to the surface, this is different. Since I first went north I met many guys that might have turned me into a farmer or a sailor or a financier, and I was infatuated with them partly for the romance of being someone new. This time it's for the romance of being who I really am, who I am without the distractions of an early death and resurrection in an experimental environment, a starship expedition that went wrong and the founding of an industry to deal with."

"I'm glad you found him. I hope it lasts a century."

"We'll send you a card on our second century anniversary," she said.

"You say this in spite of the fact that you and Herndon didn't get much sleep this noon?"

She blushed and was very flustered. "We had a bit of variety for old times sake," she said.

The only part of Jorma that continued that thread of the conversation was his eyebrow, his voice asked, "Do you miss your beach?"

She looked out over the water quite a while before answering, and didn't answer directly. "The water isn't the same color here. This is such a royal blue, mine was such a, well, a Carribean blue. The waves are not as languid here and the lagoon is far too small, but yes, that is what I miss the most. When we find the spot like it on this planet, Kulai and I will build it, and I will invite you. It will be at least ten times closer to the Yakhan, or else in the Gengee."

"That seems to be the basin where the Yingolians are settling."

"Roots, you know, as uprooted as we are so many light years

from home, we still have them."

"And what of Kulai, he doesn't mind moving to a Yingolian area?"

"They are not one in a million in the Gengee, not one in a thousand in any local village," she said. "They are already one in two in his bedroom. His ancestry is from that area also, but before the lake. His mother's birthplace is now under sixty feet of water."

"It would be quite a trip for us to get down there," Jorma said.

"I'll send Herndon in this boat," she joked.

"It looks like it takes a lot of fuel."

"If he didn't have a starship to cut up, he could never afford it; but it is fast."

They both looked out over the water for awhile. Jorma turned to sit beside her. "Do you think you could ever feel at home here?"

"I was born about 55,04,14. I arrived here about 55,35,30."

Unlike Herndon, she could use dates he could understand. "I've lived most of my life here. I physically lived on Earth two decades, I've been here in flesh for over twenty. I barely remember Earth and when I try to picture it in my mind today I notice the fields covered with ribbonleaves and archwoods shading the houses. I say the word 'palm tree' today but my mind brings up the picture of a nullbreak hangleaf. I've never felt more at home than I do at our home off Third Canal, not even in the home I had as an Angel. I was just telling you about Kulai, but the home we live in is what I always wanted but didn't dare aspire to, even as an Angel. I never thought I'd get so far from that abandoned parking garage."

"You're happy here?" Jorma asked.

"Pretty much. I miss the powers of magic I had as an Angel sometimes. I don't miss Earth. It's a mean and harsh planet compared to this one when you get right down to it. The only thing that fooled us is that most people are poor here, all they have is a little piece of ground and a hut."

"That's a difference of viewpoint. No one is poor who has land he can live on."

"That is an ancient viewpoint on Earth."

"And one that will come back now that their energy age is over."

"It's been over for all but the rich for two hundred years, a century here."

"Since 55,21,24," Jorma mused. He was just starting his tenancy with Leand at the time, Tdeshi was thirty two decades in the future. He and Leand used to troll for maidens at the Stone Seaside in those days. Jorma was just coming off the boats at the time.

"Early 2195," Ava said. "I can do the dates in my head now, I helped the geneticist write that."

"Good for you," he said. He was never one for artificial enhancements to the mind, even if he could afford some now.

"You are still repulsed by my presence."

"I still have a hard time forgetting that you are an electric ghost that has forced Tdeshi's dead body back to life."

"Her body never died, her soul vacated it."

"And flew to the fetal Venna if you believe her."

"I don't, but I believe the 'vacated' part of it. I took over the empty body. I knew it was empty when I got here, so to speak."

"You said you were created in that lab?" Jorma asked.

"You didn't want to hear that I was created from the Yingolian ghost, so I just never came right out and said it. I started to try and go there once and you thought you were in the sewage digester."

"You don't think it's the most ghoulish thing ever invented in the universe?"

"Oh come on Jorma, read the history of even this planet, much less the fiction. Even if the pain people weren't real, just to write that..."

"They were real," Jorma said "across the Pentuush Waste from here on the northwest of the Elvish sea, in the far reaches of the Korst."

"Even with RNacid enhancements I barely have the geography of the Highlands in my head."

Jorma didn't either, he couldn't guess whether that was five thousand miles from here or ten. "They had few followers after the Thirties," Jorma said, "and less than a dozen today."

"And you think what I did was ghoulish?"

"Yeah, I looked up that fiction you mentioned, 'Frankensteined

back to life' is my best memory of the words you used. The better story by far was that of the girl who wrote it."

"Yeah, but do you think I am forcing her dead body to twitch using electrical impulses? Do you think if you cut me open you would find some crystal implanted in Tdesi's head?"

"Isn't there?"

She gave him a look. "You're really sicko. If this body was actually dead don't you think I might smell a little worse than this by now?"

"So the body lives but you are in a crystal."

"I was, but I'm not any more, I thought I made that completely clear. The information, the memories, the behavior patterns were transmitted and read into her empty brain. Tdeshi was gone Jorma, you have to get over that, but nothing was implanted in this flesh. There are no foreign objects in this body. Your labs can do x-rays, you can prove it. My soul was read into this empty brain, there was never an atom in this body that didn't come from food this body ate here on the planet Kassidor."

"Even that," he said, "seems like some form of demonic possession."

"It has nothing to do with the supernatural..."

"Or life after death?"

"Yes," she was getting frustrated with him, "I've died. This is my third life, though I was made from a copy of my second life, I didn't die. My sister is still there and we sometimes keep in touch."

"The Ghost of Narrulla's Tear."

"That's her story, that's my sister."

"Doomed to haunt the rock a thousand miles above Narrulla's nose for all eternity." To him it really seemed like the supernatural had become real during the starship age.

"Something like that. She gets a little company by helmet, she's resurrected a couple others."

"You are not helping me picture you as the small town girl next door," he said.

"I am not that. Where I grew up was a part of the Washington Megalopolis, as big as the Yakhon. I am not a small town girl next door, but I am still a flesh human and I still hurt because I repel

you. I still remember the times when you would touch me very fondly."

"You pushed me away, then."

"I was overwhelmed, but after almost two years I think Kulai and I still haven't done it as many times as you and I did."

He had, but he couldn't now. "I'm sorry," he said, "All the way around. Sorry I overtaxed you, sorry it doesn't feel right to join with you now."

"How is it any different than being my clone mother?"

"Because you have two clone mothers." He knew that wasn't getting across what he wanted to say, she'd already said it, 'Frankensteined back to life' after Tdeshi's death.

"And how many parents did you have?" she asked.

He did have to stop there. It was far from the same thing, and where did that leave Leand in her parentage? Did she have three parents, but didn't the child who became the ghost also have two? Could he ever make love to such a creature? He had made love to such a creature, made love to her so much that she ran from him. He got to his feet to pace but when he turned he saw that Herndon was coming around the camp. "He's done with his Eye work I see," Jorma announced and let that thought slip from his mind unresolved.

7. Betrayal

"Ah," she said and also stood up.

He saw them, "We need another beach blanket don't we?" he shouted.

"Yeah, or we could go up on the porch?" Jorma said.

Her fingertips brushed his forearm and he tried not to pull away. It was Tdeshi's touch, a trait she shared with Venna. "There's room for four in there but no sun. A summer Afternoonday on the beach is what this camp is all about."

Herndon was soon back with another camp quilt. They have a tough plastic or hide side to expose to the ground, or sand in this case, with a nylon lining and dacron batting. They cost more than a

natural quilt, but can be kept clean outdoors.

"Time for us to perform some serious vegetable imitations," Herndon said as he stretched out.

Ava got on the quilt with him. "I like the fact that the sun here is gentle enough that you can bask as long as it shines and not get hurt. You know, he wondered if I could ever get comfortable here."

Herndon engaged in a hearty belly laugh. "She's gone one hundred percent native," he said, "she barely remembers facts and figures of Earth. We don't count her as an exiled Yingolian any more."

"She's fifteen times as Yingolian as you are," Jorma told Herndon, "You've been flesh all your life and in the same flesh."

"No; I was never an Angel..."

"Then you are very much more like me than like her, no matter what color the sun was where you grew up." Jorma meant that too, though Herndon was here with Ava. Though he could see Herndon didn't want to believe him.

"I'm sorry," Herndon said, "the Angel/Mortal dichotomy is not the essence of a person's soul. I got to know this soul, we are no longer together because she has gone completely native while I feel a need to keep something of the old country alive."

"And I drink too much," Ava said. "The vine is the easiest part of the native civilization to adapt to."

"And one of the hardest to avoid," Herndon said.

"So did you find what you were looking for?" Jorma asked.

"The maps were there, but the claim ticket wasn't," Ava told him.

Herndon frowned.

"If either one of them wanted to leave with those papers," Ava said, "they could have done so a year ago. They sat here above Jorma's head at my table all the time we lived here. He had no clue they were of interest."

"So little interest that he threw it out," Herndon said. He tried not to spit but didn't quite succeed.

"I'm really sorry," he said. "Ava said those papers were of little importance."

"I didn't know at the time," she complained.

"It was a stupid place to put it, I know," Herndon said.

"Hey, we saved the maps," Jorma said, "not that they made any sense to either one of us."

"Thank you," Herndon said.

"It wasn't you we were worried about anyway," Ava said, "it was Venna."

"What? So she's rather randy?"

"She has been following me since Herndon," Ava said, "She has been paid by people to keep watch on me. The Internal Investigations department at the Kassikan keeps watch on her."

"Venna?" he said. "Why? How?"

"We don't know for sure," Ava said, while Herndon scowled, "but you have to understand that because of the exchange rate there are sums of money involved here that even we can't calculate. There is a Colonel from his expedition who does not agree with the majority decision and wants to make his own policy. With the insignia from his uniform he has the money to finance a family to raise and train a child to be my shadow, a child who has been trained to do nothing but zero in on those papers."

Jorma burst into laughter but Herndon and Ava both sat cold as statues in a drizzly winter dawn. He wound down and asked, "You can't be serious?"

"It is likely the only reason she bought this house is to go after those papers," Herndon said, his lips tight. "You might have actually saved us by discarding that claim slip."

"But you're leaving her up in that house with them now," Jorma pointed out.

"We've removed those maps to a safe place," he said.

"I don't think she's any such thing," Jorma said. I know she seems to have had all the same boyfriends you have, but it might be natural that a guy who has been with you for awhile might want someone a little more, shall we say, willing; for the rebound. You could be blowing that and a little co-incidence into something sinister. I've noticed lately, every time I think she's done something to cheat me in some way, she's actually been doing a little something extra for me. I'm beginning to think that if there's some way that she's different from Tdeshi, is that somewhere inside she's

genuinely thoughtful, not just formally thoughtful."

They weren't convinced, but eventually settled into drowsiness in the sun. Soon they were both snoring in naps, leaving Jorma to watch the lake alone. He went for a long swim in the brisk water and found them still sound asleep when he got back. He began to think it was a long time that Venna had been gone. She was going to shower and comb out her hair, but he had been out in the lake and resting down at the beach for over an hour. They had talked awhile before that. It was over an hour and a half.

Since they were sleeping, he took a walk up. He wouldn't admit to Venna that their suspicions sent him up here. He couldn't tell her, he found the house empty. The shower had not been run recently, since before Ava and Herndon came down was his guess. Venna's toiletries were gone. Her side of the headboard was picked over, the light stuff was gone, a picture of a home in the inner canals remained, a feathered set of hair rings was gone. Her carved keda rider and a couple pretty stones were left behind. Her big winter boots were still here too. He found her everyday clothes gone from the closet, but no more copper gone from their secret bead tray. Grabbed a road kit and split was what he saw.

He was stabbed in the gut. He had just been defending her, just telling them how every time he thought she might be up to something sinister, she comes thru with something special. This would be difficult to fit into that pattern. Ava and Herndon might very well be right, Herndon proved Venna knew Yingolians, Ava's presence probably meant the Kassikan was involved. Both had always seemed far enough from Sinbara till now.

He went over the house, looking for things out of place and found almost nothing. The tooth powder in the bathroom was turned around, but any of them could have done that. There was a gauze left on the bed, but he thought it was Ava's.

There was nothing to do but tell them. He went down the path rapidly, he was running when he got out onto the beach where Ava and Herndon were still sleeping. "Venna seems to have taken off," he said. "She packed for a trip and took off." His posture told them they were right after all.

"Where did she go?" Herndon asked groggily, standing up, but wobbly.

"I don't know, first thing I did was come down here to find you."

"You better check those maps," Ava said, also rising from the sand.

Jorma had no translation for the curses in Portuguese that Herndon bellowed as he ran across the dock and dived into the boat's cabin. He soon re-appeared, looking relieved. "We still have the maps," he said, "But you can be sure she has the claim ticket. We have to catch up with her," Herndon said, "That's our only chance."

"And how will we do that?" Ava asked.

"We can run down every packet that leaves this town today, pull alongside and tell them they may have a thief aboard."

"She may not have caught a packet yet today," Jorma said, "Many may wait till the tide's in full run to get them out of the harbor, it's just starting to move quickly now."

"It would be better to catch her offshore, she can't disappear into the crowd that way." He jumped up and got into action, running up the path to the house.

"I'll get our beach quilts and cups," she called after him as he dashed up the path. "My sandals are in the front room up there, and my purple gauzewrap with the set of eight white pops," she shouted after him.

He might have heard some of that but he was out of earshot by the time she finished. Jorma went thru the camp looking for any of their things. "What about the rest of these papers in the lock-box," he asked.

"If we took them we'd only use them to start a fire," was her reply. Jorma would keep it, it was a good lock-box he might have use for someday once it was emptied out. With the gnarl-berry twig he never needed more than one scrap of paper to start the fire so that much might last thru the winter.

In the camp he found Herndon's shorts and a clean towel of theirs with some tanning oil wrapped in it. He brought them all out to the boat in time for Herndon to get back down and notice he was

naked. "Oh thanks," he said to Jorma as he took their things. "It was such a pleasure meeting you," he said and offered his hand cross-wise in the Yingolian fashion.

"Iess, saim heer," Jorma said in a Yingolian greeting Ava had taught him. He didn't seem to understand, but he wouldn't have been expecting it and Jorma's pronunciation was probably atrocious.

"Good seeing you again, brief as it was," Ava said, and took him in a hug.

She was in his arms before he could think about it, and she felt good there. She felt like Tdeshi, and he let his hands roam her.

"Perhaps it should have been longer," he said, "but your friend has a mission..."

"And I have a home to get back to," she said, disengaging herself.

She hopped into the boat, he wanted to be out of the inlet before the tide got low, as it was, he was in time for a nice early rip that he rode out, accelerating into the distance as Jorma watched.

8. At Raltain House

There was still a good chance that her packet hadn't even left Sinbara and Jorma struggled up the path to the house and then down the street to the town side of north island. There were no sails in sight but those of a few trawlers slogging their way home. He jogged across the footbridge and asked questions at the ticket offices on all the docks. No passenger ships had sailed since noonmeal, the next packet out was the Jemson's Luuker and she was ready to cast off so he had time for only the most cursory look but he did not find Venna or anyone answering her description on board, nor did he find her in any of the watering holes along the docks where someone would wait for a vessel's departure. There was Luron's Cloud, scheduled south this Nightday and the Bram Daring bound north on the eastern shore with Nightday breakfast. She was the largest vessel to put into Sinbara this decade. No hint of Venna could be found around either.

She could have set out thru the forest on foot or hired a coach and if so, she was gone. A public coach had departed since she had

gone missing, but the driver sold his own tickets so there was no countermen to ask about passengers. The coachman left a list with a bum who worked the square calling himself a dispatcher. It cost him a penny to see a list of three names with no Venna on it. Afternoonday was waning as he trudged back.

A week went by and he didn't hear from Venna, Herndon or Ava. After another week and a trip to an eye room to check for messages from any of them, he wondered if he should just get on with his life. It was late in the fall, maybe even Garibivlast, and there were lots of things he was already late getting in, and now that she was gone, he recognized that Venna had done a few little things around the garden like put his tools away that made it a little easier for him.

What about this property? It was still listed in all the registries as belonging to Venna with her thumb print. By now the whole population of North Island knew that she was gone. They knew because he had been over to Raltain's at least once in each of those weeks since Venna disappeared and told many who asked for her.

He couldn't believe she had ditched him like that. All for a cargo deposited in a warehouse a year or two away. He couldn't believe Herndon was right about her, that she had been raised only to follow Ava on the trail of that cargo. But when he thought about the difference a single aluminum made in his life, he understood what that could do. Sixteen aluminums made Ava's soulmate a wealthy man, rich enough to satisfy someone from a planet still in the dregs of an energy age.

Then it was the third Nightday evening since Venna left, it was now into winter anyway with little to do around the place. Raltain was pouring a very tasty honey ale this evening and a tasty honey yaag to match it. A girl named gNasheen who lived out near the end of the next road to the east on North Island had accompanied him the previous Dawnsleep and again this past Dusksleep. He was sitting here idly hoping to see her again though he wasn't sure he was ready to make her a habit. She certainly wasn't the bedpartner or even the cook that Venna was, more like

Ava if anything, but plusher and with a much louder snore.

Ennil came down the stairs, Jorma was on dock level. He hadn't seen him since the party, and waved him over. "Where have you been," Ennil said as he leaned against the keg rail. "I haven't seen you in weeks. I looked for you two over at the Wild Catch. I thought for sure you guys would be down so she could get her exercise before now?"

"Venna left," Jorma told him, looking down at his cup and remembering that he hadn't been to that sex club since. He was well into this ale by now. It was good and cold because there had already been heavy snow the previous Dawnsleep and Raltain's kegs were well packed in it. It could be last winter all over again.

"Where'd she go?" he asked. Ennil got them each a cup of yaag and they got thru it while Jorma told him the story. He might have been a little harsh on Herndon in telling it and made him sound more convinced of Venna's role.

"Pppp," Ennil said about being raised to follow Ava. "I never met Ava but I knew Tdeshi. I can't image being raised to follow Tdeshi even though she was hot. From what you've told me, Ava was more boring than that."

"It's about her starship, not her sex," Jorma said. "I poo-poo'ed it at first," Jorma said, "but those starships are completely made out of metal." Ennil's head drew back a few inches, "Ava told me their dimensions, they are miles long. How much is that worth?"

Ennil tried to imagine it. "More than the Kassikan I would think, but what could you do with it all?"

"Plant a bead in my sandal," Jorma said.

"You think she did that?" Ennil asked.

"Who else? I believe it wasn't Ava. From their faces I thought it might be Herndon but my guess is Venna stole it from Herndon, along with a few others, when she was with him. This is all conjecture, but his expression was telling when I mentioned finding it there."

"So Venna is just following in Ava's wake picking up the dropped metal?"

"When I was with Ava, I didn't understand how wealthy she is because she doesn't act it. She was a founder of a major study at the

Kassikan, she has a small percentage to the rights to all Yingolian crystals. She came here on a starship miles long made almost entirely of various metals, high in aluminum. She is the richest person either one of us has ever laid eyes on, with the possible exception of the guy she was with. They had a boat that took a multiple coppers in fuel to get here, it has a motor-driven planing hull!"

Ennil pulled back about that one also. The only planing hulls in common use were stand-and-balance racing boards with enough sail to lift them right out of the water. "So how much metal did she drop? Is it possible that aluminum really came from Ava?"

"I think she's too careful. She would have had it sealed with the test results like the financiers want. If she wanted the camp she would have just had it built, not snuck the aluminum in my sandal."

"But she didn't want you to know she had it?"

"Oh she let me know she was worth aluminum, I knew she could put up that camp with her left hand, she talked about putting up a whole plank villa. But even then I didn't know what quantity. 'Aluminum' was an abstract concept for me until now. I know when I broke that one, and saw how much money is in just one, I saw it was as much money as I once thought Ava had."

Jorma went back to the ale and Ennil switched also, for this cup anyway. "So what have you been doing?" he asked.

"gNasheen a couple sleeps, she's from the next street over from mine, I don't think you know her. Got the crops in, all but the sweet onions at my old place, I'll do that this week so I don't lose the bulbs too, I've already lost the greens."

"Venna just left you her place?" Ennil asked.

"She got it at half price from Ava, but with her fortune Ava could buy a place like that every year and just leave it. That's what Venna did was just leave, not even a note and signature turning it over to me."

"No one else will dispute your claim," Ennil said. "Give it a decade and Telsair'll change it in her registry, Vureer'll change it sooner than that in hers."

"They'll both put a note," Jorma said, "And I'll have to sell my old place before long, my neighbors over there don't want a lot of

commuter farms. I don't want to hang in limbo for a decade."

"So what will you do?"

Jorma thought. He couldn't sell this place, he could sell his old one. He still had thirty coppers of his fortune, he should do something worthwhile with that. With that and his old place, he could buy a pretty nice place in town, a couple acres on the lagoon just a little ways down the point. "Haven't made up my mind," he answered before he drifted away in thought.

"So how's this gHasheen?" he asked.

"Nice and plush with a great figure but she snores really loud. She hasn't volunteered to do any housework either, so I don't know how far that's going to go."

They were quiet for a time, Jorma worked on his forth cup of this ale, knowing he was going to feel it tomorrow. "I saw something scary in a news report," Ennin said.

"Don't tell me Illim's going to raise his fuse-ball rates again." Ennin loved the game so that was a disaster for him, costing him another couple irons a year.

"Could be worse than that."

Jorma's head was feeling too heavy already to stretch this out any more, "What then?"

"You know that asteroid at Cynd that fell out of its orbit?"

He didn't. He knew what Cynd was and knew it had thousands of asteroids orbiting it. He explained that, "In spite of the fact that my life seems to be crawling with Yingolians these days, I'm really not an astronomy junkie."

"Well one got knocked from its orbit about forty years ago and started falling in towards Cynd. Now it's missed Cynd and got flung right this way and could possibly impact here."

"How do you know this?" Jorma was already too drunk to let this get to him.

"It was in a serious news magazine I saw at Kolat's reading room. There were a whole list of astronomers and what their calculation of the odds was. It's only three percent now, but it's been going up."

"How big is it and where's it going to hit?"

"So big it doesn't matter where it hits, humans would be

extinct everywhere."

"Great," Jorma said. He tipped up and finished his fourth cup of that ale and signaled the kegman for his fifth.

9. The Prowler

He'd gotten quite a beer buzz that Nightday evening, enough so he knew he was going to hate the dawn. He was careful not to collapse face down on the bed and glad the spin wasn't too bad.

As is often the case at times like these, he woke while dark still gripped the land. He didn't feel too bad, his stomach was sour but motionless. But there were noises. They were small noises and they were downstairs. He thought he could see the reflections of the light of a hooded candle moving about. As soon as he moved, the candle went out and he knew someone was here.

The room was dark, as he expected, he wondered if he should turn on the light and see what that showed him. Instead he stepped aside into the shadow and let his eyes adjust. Yes, there was a woman here, he could dimly perceive her shape in the dark. She was not moving, leaning on the fireplace being perfectly still. "I know it's you Venna," he said. There was a glow panel here in the kitchen and Jorma put the petcock on low. He had interrupted her going thru the papers, she started again as soon as it was light. "Take nothing more," he said, "and give back the claim ticket you stole."

"The ownership of that ticket is not as clear as you think," she said, "nor do I have it. It belongs to the Brazilian vice president and there is some difference of opinion as to who that might be now that the last one's dead."

"You used me," he said, and wished he wasn't to drunk to get that lockbox out her hands.

"There's a lot at stake," she said, "More than you could know, but I do care for you more than you think and that fact is making it difficult to fulfill my obligations."

That was a standard line, she wouldn't have had to practice it much. "Does this have anything to do with Tdeshi?" he asked. "Was she taken after all; for the price of aluminum?"

"It's not in the least about Tdeshi, your pursuit of her and my own appetite made her a convenient way to get to you and follow the trail of something more important than aluminum."

He saw what she had now, another scrap of paper that Ava said was useless, the last in that folder. There was a long handwritten number on the back of it. "Leave that," he said, and reached for it, still holding the stairpost with his other hand.

"No," she said and gripped it in her hands, held them to her chest. "The Instinct protects me." She spun by him and up the steps to the front room.

"So how long have you been following us?" he accused, coming back up the steps after her.

"It's not about you Jorma, just like it's not about Tdeshi. You are just innocent bystanders that Ava happened to run into along the way."

"Ava? This is about Ava?"

"I've broken oaths to tell you this much."

"You had that in your hands many times?" he asked, pointing to the note she was stuffing in her bag.

"And didn't know what it was for," she confessed. "Now I do."

"Why?" Jorma asked.

"I'm sorry, I promise I'll be back to explain when this is all over but right now I'm in a hurry, and I am under confidentiality oath. So thanks for the light. And many thanks for taking care of the place." She was at the front door, she turned toward him in the open door. "I really do care for you and our life here, much more than I should." Another standard line that should be easy to remember. She was a good enough actress that her lip trembled when she said it. She ducked quickly out the door, her running footsteps danced down the path in haste, she was agile and in good condition. He was almost too hung over to stand and knew it would be senseless to chase.

He knew she would never be back to explain, he was just one of those people in the way. She would forget his name as she slipped into her next role chasing Ava's fortune. "What about the house?" he asked the empty doorframe. He would keep it, he thought, along with what was left of that aluminum, for his trouble

in whatever Tdeshi's ghosts were up to.

10. Thunder

Summer was back but a light snow had fallen this dawn once again. He had not taken a permanent resident into this house yet. The gardens here kept him busy, his old place was tenanted out with a good friend who was getting a few years land time with another old friend of his. The woman he spent the most time with the last few weeks was well established in her own home and registry business just over the knoll. There were a few other good bedmates but no closer companion. He might wind up with someone sharing this house based on her kitchen skills when all was said and done.

He picked a bunch of Bordzvekian icicles for breakfast and fried them with a nice fat yellowtail he trapped during the dark. Over the winter he'd put in a talrin pen around most of the side of the garden that faced the open heath, but still a few varmints got thru. The small ones he just chopped in half and tossed to the talrins. Still he got all the meat he could eat. The garden was a little smaller but more productive this year since the pests were further thinned. He could sell quite a few eggs also, since he couldn't eat them all. He hadn't bought much else, he still had twenty five coppers left out of that aluminum. He had no idea what he would ever do with them.

As the rays slanted in to this table, he enjoyed the warmth. This was a nice house in all but the dead of winter, but he really wished he had someone to share it with. He went thru the list again, but if he wanted them here, they had roots of their own. Telsair had sat at this table in the dawn with him, he wished she was here now. He kept pining away for a blond girl he spent only one sleep with who was only passing thru Sinbara didn't he? The one he met just before Ava.

Tdeshi's ghosts. Could he even remember Tdeshi now? He still had that marble he'd dug up when she'd first re-appeared didn't he? He'd put it in the lockbox hadn't he? Along with a few dozen others. He got it down and went thru them, found the one he had

used three years ago. He didn't think it looked like her any more, Ava was so much more laid back that it didn't look like the same person. Maybe if Ava was in pain she would look like that.

Whatever happened, he had to admit, once and for all, that he wouldn't want Tdeshi here. There had been a time in his life when he wanted Tdeshi, when he wanted the nonstop party, the headlong rush. He couldn't take it now. When he thought about how different Ava was from Tdeshi, he knew he was much happier with Ava. 'Why did she have to be haunted by that Yingolian ghost?' he thought, and then had the epiphany. The Yingolian ghost was the soul he loved, the reason he loved that body more now as Ava than in the past as Tdeshi. The one who was organized, kept promises and understood everything they talked about. The soul that had lived half a century on a verandah on a beach, inside Yingolian crystal in a comet that was a starhip.

He moped, crushed by that, for some time.

Even Tdeshi's other ghost, Venna, was better sitting in this sunshine than Tdeshi. She could lay back in it and bask, Tdeshi could never do that. Venna could be as energetic as Tdeshi, but she could be languid as Ava also. That had been good while it lasted, in some ways even better than Ava, almost the best of Ava and the best of Tdeshi. It would have been so nice if it that relationship had been real. 'Too good to be true' was the cliché wasn't it? An easy enough part to act out when you have an audience as gullible as he was.

So who did he want to share this sunshine with this dawn? That girl heading north, why did her face spring to mind, just because she was so exotically Elvish? It had been years, she was a cartoon in his mind now, it had been two meals and a sleep. He wondered where she was now, playing in the snows of Kugenzglaw? Or did she experience one winter and head right back down to her old place down Sinbara point? What if she'd come up to the Wild Catch last Nightday?

What did it matter? There were a hundred others. Any one woman in flesh sitting with him now would be better than all the might-have-beens in the centuries of memories in his mind. There are probably two dozen women in the town of Sinbara right now

staring out the dingy window at their breakfast table and wishing there was someone there to share the view, or wishing they had a view in the sunshine at all. He decided it was one of them that he wanted here to share his breakfast table. He hadn't met her yet, but she was practical and could cook and helped a little with the garden and had a nice enough body and wanted to play with his. He had to go find her, well maybe not today, but instead of just wishing she was here.

Meanwhile, there was nothing pressing. This was a week to let the garden take care of itself and it was going to be at least another hour before the snow melted anyway. No reason to avoid sitting in the sun with a morning cup to watch the snow melt. He poured some and leaned back, but soon noticed the sound of distant thunder.

He would have to go outside to the back kitchen deck to see what it was, but there was still snow and he was barefoot. Still this was a very constant thunder and he could see no storm clouds anywhere around. His curiosity had to be satisfied, it was getting loud and close.

When he heard the thunder get continuously louder, he rolled up the kitchen mat and braved the snow outside. His eyes told him immediately that he should have paid more attention to the astronomical news Ennin warned him about and less to stewing in his own woman problems. The thunder came from something glowing, flaming, and falling from the sky, something coming in far too fast and coming right at him. It was moving too slowly to be a meteor, but he knew it looked like that only because of its tremendous size.

It was years too soon, he thought, but he hadn't paid enough attention had he? Or was he just too drunk at the time? No one else seemed to think it was imminent, but there was no denying that it was something huge falling from the sky and it looked like it was aimed straight at the camp. Mindless of his feet in the snow, he was drawn down the path to the edge of the bluff, drawn to where he could get the best possible view of the end of the world.

Book II.

Four Tons

1. A Farewell

Ava's week had started on a sad note when she saw Kulai off on the Flying Northwind just before Morningday lunch. They hadn't been separated as long as this since she went to Himla's in the Tdeshi investigation two short years ago. Still they were not overly demonstrative on the dock. Their relationship went much deeper than that already.

When she returned to the house she found Yorthops had stopped by. "Ava," she said as she rose from the lounge in their front hall, "Athnu tells me you were seeing Kulai off."

Yorthop's relationship with Kulai was cooler than she thought it needed to be, cooler than he wanted it to be. She would be more at ease without him here. Ava told her, "Yeah, he's off to henarDee for business. He won't be back till next week at the earliest."

"So have you had lunch?"

"Not yet," Ava answered.

"Let's go get some, what's your pleasure?"

"I need to find out if Athnu cooked first, he'll be highly insulted if he has and we leave. Just wait here while I check."

The entry hall went thru the middle of the formal side of Kulai's apartments. From here a back hall lead into the kitchen and stairs to the back-office chambers deep in the building. She went into the kitchen Athnu used if he cooked for more than himself. It was untouched. On her way back to Yorthops, Ava heard feet on the spiral staircase that lead down to the office levels. That was probably him. He should have gotten used to Yorthops by now, she had become one of Ava's closest friends in the past couple years.

When she got back to her, Yorthops was standing in front of the honor wall in the front hallway where Kulai commended his employee of the year. Athnu won the largest share of these commendations, but the other two thirds had lots of repeats also. "He didn't, where shall we go?" Ava asked.

"I like that porch between the basin and canal," she said, "I like their crossed salad bowls."

They were already out the door, its closing echoed in the public corridor. There were three other residences in this level of the building, their entries were along this corridor. Just after the last one, the corridor became a wide and gradual staircase that lead to the floor above and a bridge to a court atop the next building. That building put up four apartment trees from there, with the courtyard between them over the business space below. The courtyard was shaded by the trees above, many people were out on their balconies now that they were getting into the warm part of the week.

Yorthops asked how things were going and Ava prattled away about Kulai and the mathematics of cargo investing the whole walk. Once across that court, they went down a shallow flight of steps into the canal-front building. They turned right onto the tenth floor street of third canal, indoor at that point, and were immediately outside again between third canal and the yacht basin. Here the structures of the canal-front only extended to this level, there were no residential trees above the single building that separated the basin from the canal. As soon as they were out onto the plaza atop that building, Yorthops turned east toward the basin and went to the far end and found a table among the lush pots of mushroom ferns they had in the corner.

She picked a table at the rail, at the very end, thick ferns shielding them from the traffic on the bridge where the street leapt across the entry to the yacht basin and into the side of the next building of the canal wall. "Save the table," Yorthops said, "I'm having a rinko salad with creme sauce, crossed with yellow-stripe, what about you?"

"If the yellow-stipe is good I'll have it diddle," Ava said, "otherwise whatever's in the trap diddle."

Yorthops went off to the cook's counters and Ava leaned over the rail. Most of the yachts below were garden floats, fancy entertaining rooms on the water, most had upper floors with lavish trysting suites and rooms below decks for serving staff and crew. About half were actually homes, their residents lived in them and had no other home. The other half were owned by residents of one

of the tall trees around this basin.

A few of the yachts were open water sailors, some big enough they had to lower the mast to get under the bridge. Most were smaller, twin-hull deck boats, most with an indoor room in the center of the deck, most with but a single mast. All were nicely made and most were in fine condition, they represented the lower end of the upper crust of this city. The average people had single hull kayaks, sometimes with outrigger and sail, for personal transportation. The poor had no boats at all, sometimes not even shoes to help with their transportation needs.

When she looked over the rail as a child, she saw the coy-dog packs tearing at the garbage the residents of her abandoned parking garage threw out. Here the view over the rails was filled with what looked like the standard media supermodels of old Earth sunning themselves in the nude on the top decks of those garden floats. It was already getting warm as the rays of Kortrax met them full in the face. She had a light knit-wrap with her, but she hung that on the rail, leaving only her thin jersey covering her long and elegant body.

Another cloud crossed her mind, Yorthop's years in the central city were running short, she feared that might be the reason for this invitation. Normally when she came over for lunch they rummaged the kitchen and took their booty to the fourteenth floor balcony on the far side of this yacht basin. Yorthop's relatives, who's house she was watching, had already returned and she was beginning to feel like a freeloader there. She hadn't been doing much economic since she was in town, she was now mainly a farmer by trade and this was a house-sitting vacation.

"So you look glum," Yorthop said as she slid back into the bench at this table and slid a nice looking bowl of diddle in front of her. Yorthop is a bit short and plush with curly, light brown hair. They do make a mismatched team when pecker hunting, but she had done very little of that since meeting Kulai.

"First Kulai left, and now I'm worried that's what you have on your mind."

"Well, look at it this way, Kulai will be back next week."

"And you?"

"I blew my life savings on this downtown vacation," Yorthops said. "Even after all the times I worked off the boards, I'm really broke. If I don't get a boat on this tide, I'll be walking all the way, and I don't have money to stay indoors for the time that will take."

"I'm sorry to hear that, you should have let me buy. You can let me buy you a ticket. We can hike to the docks, I'd be glad to buy you a ticket for Chardovia and an iron to get to Eleknane, it's not a problem."

"It's not a lunch or two, or the tickets, it's all the sheaths I bought, all the parties I went to, all the concerts I went to, all the guys I did, all the yaag I did. I lived it up these last ten years, I lived like that house was mine."

"I hope you had fun."

"More than that," Yorthops said, "I had some wonderful times and learned some wonderful things."

"So you are out of here?"

"I'm only a tide behind Kulai, but I'll be on Blugar's Balloon till it gets to Chardovia, I already have the ticket. I'll either walk or catch a ride on a lugger from there."

Blugar's Balloon was one of the newest lakerunners in service, one of the new semi-torpedo active-ballast twin hulls perfected by the Skater line that were setting rough-weather records on all the lakes. "Classy ride, too bad it's so fast you won't have time to enjoy it."

"My last indulgence before I get back to the fields."

"I'll miss you."

"That's what this is about," Yorthops confessed. "I've learned so much from you. I'll treasure knowing you."

"Likewise," Ava said, "though I'm hardly that interesting."

"Ava! Bull shit. YingolNeerie! Let's pretend that you made up your own involvement, just what you've told me about it and what its powers are is thrilling."

"Like what?"

"How a starship engine works," for one thing.

"I only know the theory, I never worked on the engine itself."

"You know a lot more about it than I did. The 'magic wand' principal was all I knew about starship engines before I met you."

Now I feel like I could identify some of the parts."

Ava laughed, "Don't bet the lives of the crew on it," Ava said, "Because I couldn't."

They were both laughing by now and neither had had a sip of yaag yet. "You know what I mean. I heard of YingolNeerie before we met, but I never met anyone from there."

"There were thirty more from Earth around for awhile. I even lived with one for the first few decades I was on the ground."

"You told me about him a few times, but we were pretty buzzed at the time."

"Yeah, that probably explains why I repeat myself so much. I think we folk from YingolNeerie have no natural resistance to yaag and get hooked on it all the worse because of it."

"Ha!" Yorthops said. "You never drink as much as me and I've never seen you drink anything scientific."

That was local terminology for yaag that had been boosted with other psychedelics. Some aren't so bad, but some take you places well beyond anywhere her starship ever took her, even virtually. "Scared to go there," Ava told her.

"The lighter Aurora's are safe, like Watcher and Rider. Even Aurora Electron won't actually hurt you and never flashes back. I've done the Positron from their lineup, you need a two handed grip on the handrail with that."

"No thanks," Ava said.

"But YingolNeerie. Now I know you don't want the media to know it's you, but is it OK if I tell people I met someone from YingolNeerie..."

"As long as it's not me. That girl Ava you met, was born in Sinbara at the end of the 55th."

"Yeah," Yorthops agreed.

"Wax poetic in describing the urgency of his thrusts," Ava said, "And talk about his big wide chest and long legs."

"Your ex from YingolNeerie."

"The Brazilian, yes. It was only glandular. We were fellow exiles starting a great industry with our alien knowledge and got caught up in it. Kulai is my man. I never knew such a perfect housemate could ever exist. And his lovemaking is much more

sophisticated, the foreplay..."

"You've gone into it before, Ava," Yorthops said, trying not to sound testy. Yorthops wasn't much of a foreplay girl. "He sounds a lot like Tahlmute."

"You know him?" Ava asked.

"You talked about him plenty, and we met before he went south, remember?"

Yeah, that scene. Tahlmute showed up one evening and tried to apologize for Tdeshi, trying to get back on the approved list. Yorthops hadn't been impressed by the sex she got out of it.

"Sorry," she said about that. "Anyway, make them believe the Yingolian you met was one of the Brazilians and not me."

"Were they all male?" Yorthops asked.

"There were seven female."

"I'll say I met your ex, you've told me more about him in the past year than you have about yourself. I feel like I've met him anyway."

"Yeah, that's fine." The media frenzy over finding the 'lost Angel' had really petered out by now, so it wasn't such a big deal. She knew that sooner or later she was going to be found out and get cornered by reporters. It wasn't quite as bad on this world as it had been at Sol, but they could still be persistent and aggressive and there were so many more of them.

"So, I'm all packed, my bag is down in the public lockers down on the Lower Canalwalk. I need to get it to the boat for Afternoonday breakfast. Want to come down with me? We could take a public up to the beach for the Afterlunch. I'm going to spend what Noonsleep I get on the boat, you probably want to go back to Kulai's for the spare bed. I know you Yingolians don't care much for Noonsleep."

"Or Nightday, to be honest. I deal with it as well as anyone, but I could do without it."

"None on YingolNeerie?"

"Earth, YingolNeerie is the star." Ava had been over this before.

"OK, yeah."

"It's dark every sleep, light every day there. That's why

humans have never adapted like the native life that sleeps thru the dark and stays awake the whole light."

"Like I said, I've learned so much from you. But you know what I wonder, where are those starships now?"

"Narrulla's Tear is all that's left of them."

"No, I mean the ones that came down."

"The shuttlecraft?" Ava asked.

"If that's the one that came down."

"Well, to be honest, I lost one or them, the one that came with my expedition."

"How'd you do that?" Yorthops asked. She looked like she couldn't picture it at all.

"I'm not that great of a pilot."

"How?"

"In the lake. I was in aerodynamic mode, not fans mode, and too slow. I lost lift and it plunged into the lake. It's under seven hundred feet of water now."

"How'd you get out?"

"I was still an Angel at the time, that was still in the 55th. I wasn't really in it, it was just an I/O device to me."

"Why were you trying to fly it?" Yorthops asked.

"I was the only one here at the time. That was before the Brazilians got here and the before the Kassikan was able to get me down via helmet. I made an Android to try and visit the surface, the shuttle had just left it off. I just wasn't able to get it integrated with my control outputs well enough. I never felt like I was really 'in' it, if you know what I mean."

"What's an android?"

"A machine made to masquerade as a human being that can be operated by a simulated human mind, what I was as an Angel or 'ghost' as you call them here."

"I must say, you've had some experiences far weirder than I could imagine no matter what I was taking, and you try to pretend you're dull. Huh! So you had a mechanical replica of yourself?"

"I probably still do," Ava said, "Last I knew it was still in the back of some lab at the Kassikan. I'd imagine there's quite a layer of dust on it by now, that was thirty decades ago."

"That's nice, what if they got it going?" Yorthops asked.

"Actually they did get it going," Ava told her. "They found they could control it with a helmet."

"Someone could do things with that android and blame it on you."

"The molybdenum/tantalum battery died and is irreplaceable here."

"Until the Brazilians came along," Yorthops said.

"Yeah, well, if you replace the battery it will normally revert to control by my sister."

"The ghost of Narulla's Tear?" Yorthops asked.

"Yes," Ava admitted, "but please don't tell the public you met her sister."

"Oh I won't. So hey, shall we stow my gear and spend a few hours on the beach?"

"Yeah, I can't get the last bite of this in and it's cold anyway. Have you got towels?"

"Yeah, we can go from here."

There were no bathing suits on this world, at least in all of it that she had seen, and she had seen a distance equal to the distance from New York to the Panama Canal. She didn't have to go back for anything. "I take it you're looking for a last lay before you head back to the plots?" she asked.

"We've got time. I don't need to get back to the boat till the end of Noonsleep."

"Yeah, well, I'm not doing it on the beach," Ava said.

"Oh I know," she chuckled. They were up now and bringing back the bowls. "You are Yingolian after all."

2. A Visit From an Old Flame

'Why get up?' Ava thought. She'd been out late, Kulai would not return this week and very few would come for business on Afternoonday. She would have the day to herself but had no plans. Deep in the stone of Kulai's estate she was shielded from the noon heat. She lay there as long as she could, but now that she was stuck in flesh again these last twenty one local decades, she was ruled by

her bladder and stomach, not her mind, and had to get up anyway.

Yorthops was now on her way to the north end of the urban complex, to Eleknane, beyond Chardovia. Fifty eight miles was too far to hang out, more than an all-day journey by coach and lakerunner. Ava could get up there for a visit every couple years, it was a pleasant neighborhood. She and Yorthops had grown remarkably close in these two local years. Ava had confided a lot about her life in the Kassikan, her comfort with Kulai and her torment under the influence of Tdeshi's hormones. That was her only problem with Kulai, he was not the 'Manly' type. His shoulders were little larger than hers, he was soft spoken and self deprecating. All of her soul found that wonderful, along with his culture and intelligence. It was just the instincts of this body that turned her head when big, broad-shouldered men with cleft chins walked by.

After her bath she padded out to the front room of their bedchambers. She had been sleeping in the spare bed behind the dressing rooms. That dark and cool bed for Noonsleep was one of the greatest luxuries of this mansion. Even though the flesh she currently inhabited was born on this world, and she had lived here in this flesh a complete mortal lifetime, her mind was still not used to one sleep period of every week being brilliant daylight.

After two of the short local years, she was now getting used to living with Kulai. This certainly was a lavish home. The marble was carved in sensuous designs, the grillwork was well polished. Their bath was nearly a pool, one walked down steps into it. The kitchen could keep a staff of four busy and the table sat twenty. There were rooms downstairs for his business, far below was quite a bit of warehouse space. It was still hard to imagine that this had all been purchased with eleven retaining balls from hospital cart latch-pins. The equivalent home would have been as valuable as thousands of tons of aluminum along the upper Potomac in her youth.

It had been over fifty Earth years that Kulai had owned this place, but this structure had been completed while Europe was in the dark ages and Third Canal had been the beachfront. The apartment trees had been planted above it while the American

colonies were raw frontier. Two thousand years of foot traffic had worn the floors to rolling hills, the glass in the windows had sagged and the marble plumbing fixtures were heavily eroded, though they were just replaced a few centuries ago. The branches of the houses above echoed with lumins and charrasspas singing in the noontime sun. The city was full of life, animal and vegetable, but anything harmful was eaten by the orange-furred, stingless scorpions with five eyes and three fangs. They're about the size of a large house cat, they're called mindunes and there were at least a dozen on the building, including the one on this railing wanting its chin scratched. It fanned its brilliantly plumed tail in pleasure when she obliged.

If she couldn't have her villa on the Carribbean beach, this was certainly the next best thing. There was a washwoman who did the clothes, floors and bowls every other Nightday beforelunch, a cook every evening they entertained, and Athnu. Athnu was the only full time domestic staff, but he was very full time. He'd done all the bookkeeping till she joined the household and he cooked most of the meals. He kept the appointments, he did most of the legwork, everything but negotiate the financial terms of the deal.

This was the most comfortable she had ever been in flesh, on any planet, energy age or not. Most owners of properties like this have many more on the staff, but then most owners of property like this around here have five or ten times the income that Kulai does. On the surface, they have five or ten times the personality. But once you were below the surface, and got to know him for what he was, he was the most subtle person.

As a lover, he was her dream housemate. He asked relatively little of her, and gave more in return. Kulai might ply her with two evenings of romance and culture in exchange for one union by the light of Narrulla on the cushion of their bedroom balcony. His hands were the best she had ever experienced, and he could spend two days going no farther than that. He did not have the strength to force her, it was not just the Instinct that kept her safe from him. He was at least half Elf, the least dimorphous of the races on this planet. The skill of his hands and the hormones this body produced and his patience made it more likely she would force him, but there

was never a need because he would grant any desire.

This ancient, vine-covered, marble rail overlooked the yacht basin fourteen floors down. She noticed a new vessel there that didn't belong. It was completely unfamiliar but she knew at a glance it was a Brazilian design with way too much fore-cabin, way too little deck space and way, way, way too much motor. She could tell it was a planing hull, something that hadn't been in use on this planet since before the pyramids of Egypt.

She was probably the only one within a million people of here who knew any of the Brazilians personally, so it was likely that one of them was going to show up at her door soon. She figured she should get some clothes on, just to remind him of Earth. Actually all but Yakhanian beach attire would be legal in old Brazil, but in the home many people may not dress at all in early Afternoon. There is no beach attire here. If you came to a beach with anything covered, people would ask sympathetically why your deformity in that area can't be cured.

The mindune clacked its pincers in frustration when she left it. She playfully clacked back at it and it scooted up the nearest vine to the floor above. They are no more dangerous than a housecat, their two thousand pound relatives are a different story.

She liked the jersey sheaths common here. It was as common as jeans and t-shirts in the year 2000. It was really nothing more than a long tie-dye tee shirt, and was accepted street and business attire for both sexes. Males often wore a sling under it, but even so, there was no false bragging going on and hadn't been since way before Europe was civilized.

It was hot already, she wouldn't want anything more than this and the energy resources available on this planet guaranteed that even in lavish quarters like these, air conditioning would be nothing more than a laboratory curiosity for all time.

She came down the marble steps to the main floor of their home, eleven floors above the water. The public door was open and Athnu was talking with someone. She had to come all the way down around the staircase and back up the entry hall to see who it was, but she was confident it would be the Brazilian with the boat.

There was one of them she knew very well, Herndon Luicius

Carlos da Silva, the one she shared a bed with for twenty Earth years, three decades by the local calendar. Their parting had not been easy, as stormy as their pairing. She had wanted him still, when they parted, but he was going to the wilds of Gengee and try to keep something of Earth and Brazil alive. She was staying here and doing her best to masquerade as a native. In the decades since, she'd tried to convince everyone, including herself, that she disliked him and had sent him away. They had made up, somewhat, via correspondence, but it had been decades since she'd seen him in person.

It sounded like his voice, she started to hurry across the marble of the entry hall floor. Herndon was the opposite of Kulai. He was bold and determined, he was energetic and he was virile. She could think of no better way to say it. She probably would have been afraid of him on Earth, he could have thrown her to the mattress and taken her and there would have been little she could have done about it. But here, the Instinct said she could always withdraw her consent, any violent move he tried to make would leave him paralyzed. She had used that knowledge to approach him very gradually when their affair began. With that Instinct on her side she was safe to dare get as close to him as he allowed.

What a lifetime it had been, especially the first few local years as they prowled around each other like two wary cats, amusing the local population. She needed to be careful with her heart now. She had it very, very good here with Kulai. This man had been thrilling when they shared a career. Ranching just wasn't her thing and the photovoltaic craze was done. Business and society was never something he was deeply involved with, unless it was the politics of their own tribe.

Earth's exile community here on this planet is small, herself, derived of an Angel downloaded into a native body, Alan, raised from a frozen zygote by the same expedition that brought her, and the thirty one Brazilians that survived cryofreeze, with or without the intervention of the Kassikan. Eleven of those had disappeared. Thirty three natives of Earth is less than one in a billion here. There are still less than a thousand with genes from Earth when you include all their possible descendants. It was a local year by air to

reach Alan, three to six weeks by air to reach the area the Brazilians had settled. She had taken an air trip only once, to see Alan, back when she broke up with Tahlmute and Gordon's Lamp got back to Earth.

By the time she got to the door she was sure it was Herndon by his voice and found herself running into his arms. "Bom Dia!" she said, but remained in the native language after that because it had been so long now, fourteen decades, since she had used a word of any other language. Besides that, she never knew more than a few words of Portuguese. During the more than twenty Earth years they lived together, other than a bit of post-American and Brazilian slang that they taught each other, they lived their life together in the Kassidorian language because it was the language they had in common.

He wrapped her in a hug and his hands caressed her back and waist. Were he a native he would have caressed her bottom also, she had not yet met one who wouldn't if they were a former lover or even applying to be a lover. She withdrew her hands from his butt, not noticing they'd gone there till she noticed it wasn't returned. His grasp was more like what a business associate of Kulai's would do. "Ava, it's such a pleasure to see you," he said. "It's so good to be welcome." Athnu had been giving him the usual 'how do we know you?' interrogation until she arrived. She had not been friendly with Kulai until just the past couple local years, she'd lived here a little over three months as she had counted time on Narrulla's Tear. When she lived with Herndon, she had met Kulai only professionally. She had not seen Herndon in person since he left for the Gengee, fourteen decades ago by the native calendar, sixty years by Earth's.

Athnu excused himself, but Ava knew Kulai would know every detail of their embrace and who it was that initiated what. Ava had spoken with Kulai about Herndon and quite a few others, it would not be a total surprise, he would expect no less.

"I see you've built a new boat," she said.

"Yes, some friends built a marine shop down in the Gengee, we can build anything now, we're doing a lot of custom work because we don't have to wait for the pod to grow. We can't make a

profit because of the fuel, but we got this boat out of it."

They were inside by now, Athnu had moved off. No doubt he was already grumpy because she hadn't been down to breakfast. "Have you had breakfast?" she asked Herndon.

"I'm here to offer you a ride to breakfast," he said.

"Let me find out if Athnu cooked, he may have breakfast ready." She left him there and hurried after Athnu. "Have you cooked?" she asked.

"I waited," he answered, "as long as I thought prudent, Kulai has more on my list than the housework. I had a cold thesh and brined and was working in the back office until I heard this gentleman at the door."

"I'm sorry I wasn't down. Make yourself something for breakfast, you shouldn't feel obligated to cook on my schedule as well as do his appointments and numbers."

"If you permit."

"Yes, eat well, you deserve it for all you do around here and don't worry about me. Besides, Herndon's invited me to breakfast."

The boat was undoubtably fast, as fast as an ocean racer from old Earth in all likelihood, but could go no faster than traffic on Third Canal. That traffic moved at the speed people paddled and the speed big teams of kedas moved the heavy barges around. Third was pretty industrial along here only two and a half miles north of the Kassikan, but there were still at least thirty floors of residences above each side of the canal.

There was a wide bench in the back of the boat, but from down on that she couldn't see over the cabin. Instead she stood at the bit of rail on the port side of the companionway, leaning on the cabin roof. "You need to take this out to the lake," she said. "There's better locks out that way." She pointed north. He had turned south toward the city center once he left the basin.

"I'm not really here to show off this boat."

"Then we could have stayed right in the basin."

"We were going to breakfast, and I'd like it to be where no one can overhear us."

"Who could overhear us there?"

"Who knows." He concentrated on the traffic, the steering was very sluggish and he had started to yaw back and forth. They fell in behind a barge carrying hundreds of rolls of raw cloth bound on a day-long journey to the fashion shops of the south side.

Once she finally got his attention back she asked, "Are you going to tell me what this is about?"

"This really isn't a social call."

"I guessed that much by now."

"We have a problem," Herndon said, "a potentially a very serious problem."

"Not another disease?" she asked. However the native humans got here back in the ice age, they brought few diseases with them and almost nothing of the native biosphere could infect such an alien biology as a human being. Electronic signals and frozen zygotes brought few pathogens but frozen human beings brought many. Their ship was the last of the great daedalus sleepers and traveled so slowly that it reached Narrulla's null point late in the Earth year 2342, a hundred ninety four years from its launch. It was almost like a time capsule, a time capsule from when pathogens were imperfectly controlled. Their leader had died of an imported pathogen just three local years ago.

"No," he said, "Potentially worse than that."

She said nothing, he knew he had to go on, she wasn't going to beg.

"We have four tons of aluminum missing," he said slowly and carefully.

"What?" Ava said. She knew as he said it that he could not have said that to a native, they couldn't comprehend it, it was like saying Fort Knox had disappeared to a 20th century American or Wall Street was missing to a 21st century American. The Brazilian starship had almost doubled this world's supply of some metals. Four tons probably wasn't more than a few percent of the total refined aluminum on this world, but it was the largest single fortune in one place. "What are you talking about?"

"Four tons, a large crate with a ceramic security container in it."

"I'm an American, far removed, but I can picture four tons of

aluminum. But where did it come from?"

"The shuttlecraft."

"I thought you left it all in orbit?"

"Not all of us were of such sound judgement. It seems the shuttlecraft was grounded and partially dismembered to finance things like the plant that built this boat. It seems that some of us have plans for building a new industrial base for our new Brasil."

She laughed. "There are twenty of you remaining, only seven were female, you still number less than a thousand even part Brazilian, there is no chance you won't disappear into the general population in another century. None, zip, zero. You already admitted your way of life takes too much fuel. At three hundred people per square mile you can get away with it, at over a thousand like these people live, and a K-type sun, the energy flux just isn't high enough. The wizards of the Kassikan have been thru this, personally, since before people on Earth could write, you can't sustain a society that uses energy at a greater rate than that supplied by the sun."

"Fusion," he said.

"Not the way they see it, that uses up the planet's water. They take a very long view. This planet succumbs to gravitational lock before this sun burns out, but they calculate they have about another billion Earth years, they think fusion power would seriously deplete the planet of water in less than two hundred million."

"That's farther from my mind than four tons of aluminum is from theirs."

"No doubt." She knew the founders, Althart in particular, better than he did. "They fully understand that the five thousand Earth years they've lived so far is the first breath of infancy, less than that, not the first heartbeat. They understand that no matter how long it's been, they're still just getting started on 'forever.' They take the long view," she said. They discussed theories of how humanity might survive the black hole epoch. "Anyway, who would do..."

"Colonel da Morais was involved," Herndon said, "He had to be. He's the one who's championing the boundaried 'New Brasil'

movement."

"When did this happen?" she asked. She knew them all, knew the Colonel was the firebrand who had the hardest time adapting to the ways of this world. He had been among the first to leave the Kassikan and the city and hole up in the Chaparral of the Gengee.

"In the second decade I think."

That would have been before Herndon left her and the Kassikan. "And you didn't know until now?" she asked.

"I wasn't part of that movement. After I left you I was content with a little place on the prairie, well, not that little, but compared to a nation it was nothing. It's just two thousand acres, a couple dozen hired hands. They gave me what I thought was a generous share at the time, a six inch length of quarter-inch titanium tubing."

"So you spent it on a ranch?"

"The first quarter inch, I put the rest of it away."

"And how did you find out?" she asked.

"About the shuttle craft or that some of it is missing?"

"Both."

"Marcia told me," Herndon said. "That was last year, she told me about both. She was with Nelson. Since she left them, Nelson and the Colonel have not been seen, neither has Waldeis or Humberto."

"I barely remember who Marcia is," Ava said. "How come she came to you?"

"A lot of stupid local politics. She's not what's important, what she says is important. I had copies of the paperwork, they pulled it off right under our noses. We just never investigated what the 'spare parts' were when they stored it away."

"I don't see how this relates to me? I'm sorry this has happened but it's certainly not my problem."

"It is your problem because I have accidentally made it your problem. It's in with all those papers that dealt with your expedition, and its technology, I mean the actual paper. You had a box of your old records of that time. In that, I placed a folder. The receipt for that cargo and maps to locate it are in that folder. Colonel da Morais wants it and has someone looking for it. Now I find that I really need that folder."

He really shouldn't have done that, especially without telling her. They had always kept their papers separate, it was very unlike him to do that. But the worst problem was, "I had all my old papers sent north when I thought I was moving there. They're still up north in a lock box in the house I sold to Jorma and Venna."

"Venna?" he choked and took a long time recovering, nearly losing control of the boat.

"Yeah, some redhead we met on the way down here with a sexual appetite much more in line with Jorma's."

"Redhead?" Herndon was concerned, "the same Venna who was with Tahlmute till he got mixed up in that shonggot scandal?"

"Yeah, you know that Venna?" Ava asked. She really hoped he didn't know her intimately, that was going to complicate the designs her loins already had on this meeting. It was this native body again, and Herndon's presence, his bulging arms on the wheel of a powerful machine... She was having trouble keeping her mind on the financial conversation, especially if Venna was involved in the sexual conversation.

He didn't answer, blew right by it urgently, "Did you say she is now living in the house with those papers?"

"Yeah, but how do you know Venna?" she asked again.

"It never ceases to amaze me how many places she shows up, but now you've met her in person?"

"Yeah. We met her on the boat coming down here from Zharvai actually."

"So she walked up to you in person?"

"Actually, she latched onto Jorma when I moved a couple cabins down the hall where I could maintain a once a week schedule.

"She seems to be following in your wake. She went from me to Tahlmute, now she's followed you with Jorma."

"You knew that?" she asked, needing a moment to think about the larger question. So he had also been with Venna. What was that slut up to? And wasn't he saying he kept up with what Venna was doing since she left him? He seemed to be a lot more interested in Venna than he was in Ava, and that was a painful thought.

"Yes," he said, "I've only recently found that out."

"How?"

"We found the guy who's been paying her."

"What?" Ava asked.

He was pulling into a docking inlet. They must be getting close to where he was taking her for breakfast. She noticed the neighborhood and knew it had to be Villitay's Balcony, a series of small balconies carved into the side of the tower he was aiming for. "There's a Gnome by the name of Enjteen, I think you know him. He's been sending Venna an iron a year to follow your trail." He slowed to a crawl to get into the back canal that ran behind this building.

"That sniveling... Uh! If I wasn't infected with that Instinct I'd spill his guts on his mother's carpet with a carving fork." Then she stopped and thought about that, an iron a year? Venna spends more like an iron a day. "But what would she want with an iron a year? She was on a nice passenger ship when we met, that voyage was close to copper by the time all was said and done."

"Did she ever book passage on that boat?" Herndon asked. "Venna doesn't show up on the passenger list for the Brother's Formidable that year."

"Still, she spends a lot more than an iron a year," Ava said, worrying even more why he was so erudite on Venna's life.

"She may have many more customers for her information and that is what concerns us. Some may be customers we don't want her having. Those papers could be the reason she is on your tail."

"You grew up watching television," Ava laughed.

"Labor is free here Ava, any one of us could have been supporting her all along, even one of the wives with a single stainless kitchen knife. Four tons of aluminum is the kind of money that buys power, even here."

"There is no power of life and death here."

"Don't be too sure, it is possible to set up an 'unwitting assassin' who doesn't know that what he does will harm or kill someone."

"It doesn't seem common, they don't even use it in movies."

"The movies here are all tangled love stories," Herndon griped.

"You've still never been outside the local culture," she told him, "even down in the Gengee."

"Enough of this senseless misunderstanding of the local culture. We have to go get that paperwork."

"What do you mean we?" Ava asked.

"It was your house."

"Was," she emphasized.

As they drifted to a stop in an indoor quay, he was interrupted by arguing with the docking attendant about who was going to park the boat. It was settled that they would park it by rope and would not run the motor. Herndon was even more ruffled by the time they got into the elevator capsule. They were at a table in the Balconies by the time he got over the dock attendant.

They were on the forty fourth floor or thereabouts. The canal and the avenues on each side were not as wide as their height above them. They were above the highest bridge across the canal. She could see more than a mile up the canal, but they had come farther than that on the way here. They were well down into the central parts of the main canals now, close to the Kassikan, though she could not see even a shadow of the pyramid from here.

Each table is in a tiny bower in the fronds of the building's canopy, the one Herndon chose was set deep between the shoulders of limbs. The shade was deep here and the altitude also helped make it a couple degrees cooler. The place has table service, but one places orders on a little erasable menu and slips it into a chute.

Once they had done that, she could ask, "So where were we?"

"I was telling you we need to get to your house as quickly and with as little notice as possible."

"Why am I needed?" Ava asked. She'd done a year on the lake two years ago investigating how she got this body. The notion sounded romantic, chasing up the lake in a fast boat like his would be much quicker than under sail, especially on a fat liner like the Brothers Formidable.

"I can't very well go up to them, this man Jorma has never even met me. I wouldn't put it past Venna to completely deny that she has ever laid eyes on me before even though she was the most

tempestuous four Earth years my bed has ever experienced."

"I get your point," she tried not to hiss even though she should have expected it, "but I can't go up North again. Kulai finally gave up his security blanket at the Kassikan because he has me to back him up and you want me to go away for how long? A year?"

"Two weeks, three tops." She sprawled over the table with laughter. "She can do forty five knots, it's eighteen hundred miles," he said.

"How long can that thing run at forty five knots?"

"I am three darks and two lights from Gengee City."

She was impressed with that, three times as fast as the fastest thing in the air. "Still, it's twice as far to Sinbara." He might not have taken the winding nature of the interconnects into account because he had never been there. But she had to admit, she could almost feel the wind in her hair and the thrill of old Earth as it must have been before the motor laws. When Gordon's Lamp left Earth, any vessel such as his would have been impounded on sight, at least in North America. It harkened back to an era of romantic lawlessness, the drug wars, probably generations before his time.

"Two full weeks, maybe the better part of three darks and two lights. Starting this dark," he looked her in the eye.

"I can't leave, not now," how much would she have to explain to him about Kulai. "Did you notice there is someone in my life that's important to me?"

"His home is certainly a display of important wealth."

"Not as ostentatious a display of wealth as that boat."

"But his home does speak of more than our royalties on photovoltaics."

"He has an inordinate amount of his wealth tied up in that piece of real estate. And, he is away in henarDee till next week. He won't conclude his business there until Nightday."

"But the photovoltaics we recreated will allow you to send him a message today."

"Herndon, think about it, Kulai has just given up an important career at the Kassikan because of his new life partner from the Kassikan, that would be me. We are still in our second year together. Do you seriously think he is going to say 'oh sure dear,

very well, go up north with a previous life partner of a hundred times longer on his fast boat, and Herndon, really, look at that boat some day. It has a single hull, what could anyone ever name that boat other than the Lake Raper?"

"You think the symbolism is that obvious?"

"The windows are the pores in the foreskin, the way they elongate when it's hard, especially that first thrust of orgasm. The way the fore-hatch curves is like the back of the cap. You should have just cast your boner in plaster."

"Enough already. The native house boats look like water bugs. They perform like them too."

"I bet they go twenty five times as far on a bag of fuel as yours does."

"We have plenty of fuel."

"Because of that missing aluminum," she replied. Arguing with him thrilled her almost as much as bedding him. He continued to argue about it, trying to convince her the missing aluminum was going to disrupt the world's economy. He was so stubborn about it that she wondered if there was more to it than that. He wouldn't admit to anything more. While he tried to convince her, she studied the menu.

"So you still don't think this is a serious enough issue for him to let you go?" Herndon whined.

"Maybe if he knew about it," she said.

"He can't be told," Herndon almost snapped. "I'm sorry but a businessman with his connections might possibly be able to handle four tons of aluminum."

"Never," she said. "A hundred pounds, maybe; four tons of aluminum is like a major nation's budget here."

"There are no nations."

"Region then. Whatever. It would be a national budget if there were nations."

"Today," he pleaded, "so he has plenty of time to pick it up before this bleeding sun goes down, send him a message explaining why you had to go, but make up something."

Yes, the whole native data system is shut down for the forty or so hours of dark every week, no messages can be sent or picked up

on the old crystals or the new. Kulai would have every right to leave her belongings in a crate by the door if she left with Herndon. Herndon would have to understand that. She felt Tdeshi's hormones prompting her to blow off comfortable old Kulai and run off on an adventure with a dashing manly man, but Ava's sense of duty was going to force Herndon to pay for this junket with his fast boat. Venna and Jorma had been in that house almost a year now, another week would not make a difference.

3. On the Lake

Even at these speeds, the ride up the lake got to be boring. By the end of the first dark they reached Esterain on the outer shore of the Dromedian peninsula. She made him go slower in the dark in spite of the radar. He wanted to make most of the remaining part of center lake in one light, it would have been less but he had to pull in three times to cities along the way for fuel. There was a two hour delay in one, three hours including noonmeal in another. Ava driving much more sedately thru Noonsleep and him back at it again for Afternoonday.

In a beautiful sunset they anchored for duskmeal in a wild cove far up the lake. They had it to themselves, a square mile of water bordered only by forest. They stayed here for a long and romantic Dusksleep. That romp made this whole adventure worth it. The anticipation of that tryst was what drew Tdeshi's hormones on this folly in the first place wasn't it? Maybe it was what Jorma taught her about Tdeshi that had made it so exciting. At least Herndon had never been with Tdeshi, unlike other recent lovers in her life. He had been with Venna however and Jorma called them comparable, so that worried her a bit.

She wondered if Kulai was going to end up another ex-lover in her life after this escapade? She had to admit, even though they were not going to get this done in two weeks like Herndon claimed, they wouldn't be gone more than five or ten it looked like. Kulai hadn't been gone from her that long in the past year and a half. She had been absent from his bed of her choice only three times since then and only once with someone else. This sleep was more

forceful than Kulai had done with her yet, or for that matter Tahlmute. It was really too bad Tahlmute'd been driven out of town over the Tdeshi thing, he was probably down in Gengee with the Brazilians now would be her guess.

She came up on deck for Nightday. Only the 'c' star, the one the natives call 'Cynd' was up to keep her company in the 61 Cygni system. The beach where they'd picnicked at dusk was now beyond a mud flat with the tide, midnight and noon are low tides at this end of the lake. Sol was up, in Coma Bernike or some such constellation, she was never an astronomer, but she recognized her former home. It was a dim region of the sky so Sol stood out, though it was little more than second magnitude in this sky. So far to that tiny jewel, and so few of us here among so many natives.

She felt like an invader from Earth on this boat. He'd reproduced an artifact from his old culture, a culture that had changed beyond his recognition while he lay frozen between the stars. Whatever had happened to Earth that caused its interstellar signals to cease, the culture that built his daedalus sleepership was as gone as the solid fuel chemical booster by the time those signals ceased. His nation still survived till the end, it was probably the last surviving mortal democracy.

This was still more different than anything any of them could have ever imagined. The planet where all the fantasy tales of swords and sorcerers were written down as the history of the 'Troubled Times' in the Elven basins. Many of the legends found in the literature of other civilizations can be excavated in the ruins here. The fantastic creatures in Maya carvings that could only have come from serious drug abuse ate you in the wilds on this planet.

This was still the inhabited part, this cove was a small area of wilds in a thickly settled region at least as large as Asia. She had spent most of a mortal lifetime in what is officially the planet's largest city. She found herself settling in. She had to admit, she occupied elite strata in the society of the Highland Elves. She was an important member of the largest organization they have, the Kassikan. It's this world's largest university and business. They built a megalopolis of a hundred million around that, using animal carts and sailboats. And time; the Kassikan was founded when the

Minoans dominated the Mediterranean.

When she was there, at the closest star in whatever constellation it's in, she certainly never imagined she would be here, now, wondering what happened there. When she was there she certainly never imagined she would even exist now. Was it still 2424 on Earth? It was about that, an eventful year for her, 2424 the Earth year, not 1002124, the local year. In a dozen years she would be three hundred. Not a big deal on this world, but certainly more than she ever dreamed of as a girl.

She snapped herself out of this, took her eyes from Sol in the sky and paid some attention to the substitute for coffee we have here. It's a tea actually, its name translates as 'rubber tea' but she preferred to think of it as coffee. It was actually thicker and richer than coffee from Earth, even the Brazilians had grudgingly accepted it. They were not fond of the native's reusable tea bags, what they liked to call a 'sock,' but Ava didn't see how that was such a big adaptation.

She was dressed for the Nightday chill and held her cup close. It would be colder still at dawn, coldest while they slept between now and dawn. No doubt Herndon would want to push on today, if she could keep him from cruising wide open she would be content. There are no navigation satellites here, there are just those stars. Before dawn they would enter the interconnects, the way would be crowded and there would be current, not a good combination with way too much power.

"Here you are," Herndon's head said from the companionway. "Have you had your breakfast?" he asked.

"No, just some rubber tea."

"We can't make good time in the dark anyway, let's have something before we move on."

"Thanks," she said, and came back inside.

The cabin in the boat was low. It was, for all intents and purposes, a rum runner from the mid 20th century, reproduced using what they could of native technology. The motors and pumps were from a waterpark with the boilers adapted to burn liquid fuel instead of cordwood. She sat at the table, he sat at the counter and

began frying some eggs. The eggs sold here are tiny, no bigger than pigeon eggs, so he scrambled a dozen. She sliced a big green fruit called an arbeem, think kiwi the size of a cantaloupe and you aren't far off.

"I thank you for knowing you couldn't go full-out in the dark."

"There's finally radar available, now that they can cast silicon here, but I had to rig up a lantern over the solar panel to run it in the dark. You'd think someone would be doing that here."

"Not enough energy to run them. This region is populated more like China than Brasil."

"Out in the cerrado of the Gengee, it is very like central Brasil," he said, "like northern Minas or western Bahia, very lightly populated."

"People here would rather a small lot on good land to a large spread on marginal land."

"You speak with authority on the natives."

"I live among them," she said. "I've spent a few years on plots while I wandered north." He had lived among them also for a mortal lifetime, he should have made the same observation. She wondered if it was different down there. The Gengee was considered a separate basin by some, there was once a small sea down there that has since been drawn up into the lake. It might have a slightly different culture, but hadn't been inhabited until 'modern' times, the last three thousand Earth years or so.

"Do you think there are not locals down in the Gengee? We live among the locals there also. We have influenced them only a little in a few ways and at great cost. The inertia here is so great."

"When you're probably speaking to someone who is older than the nation of your ancestors, that can happen."

"You never thought we had any chance," he said, going over old ground.

"Herndon, Brasil is gone. Even if it isn't gone, the only way you're getting back there again is if they send a ship out to pick you up."

"Or you do like Colonel Morais suggested and try to take the Lula back there."

"How would you fuel it?" she asked.

"There's a tritium extractor aboard, that eventuality was foreseen."

"And what would he do when he got there? Exact revenge? He'd get there in the early to mid 2600's. His ship will be five hundred years out of date. He wouldn't last long enough to find out what happened."

"We agreed it was a stupid idea," Herndon said, "and vetoed it immediately."

"And did he go off with the renegades in the high chapparal?"

He was taken aback, "Who informed..."

"I believe you did," she told him, "In some mail just a few local years ago. It was when the Prime Governor first got sick."

"I had forgotten, we want that kept out of the news."

"I didn't see it in the news, but I seldom look up the news in Gengee. I know I should, with such an important ex-lover there."

"We aren't quite ex are we Ava?"

He had her there. He knew she was with him in ways she hadn't been with Kulai, under his heaving body against the headboard of that boat. She had never moaned like that before, not even with Jorma. But did that mean she would toss Kulai and his Imperial Palace aside and go join Herndon's harem in the Gengee?

"I cannot join your crusade is all, but did the Colonel go into the desert? How many are out there now?"

He stared, then sighed. "We think there are four counting the Colonel now, Nelson, Humberto and Waldeis. They are the ones that are missing from the community and they have announced intentions to found a boundaried state."

"What are they going to do with the disease they're carrying?" she asked, glad to avoid a discussion of how 'ex' they were.

"Die of it someday."

"I think they could have died in the desert already," Ava said. "I don't think you should give them another thought."

"If they get that four tons of aluminum, they can do more harm than we can deal with."

"To you, to the individuals they interact with, but to the native civilization? No."

"To us, those of us who want to keep some parts of our culture

alive in a positive way."

"How was your culture different from America's?"

"It was in Portuguese."

"And?" Ava asked. She knew how well that was going, there were few in their third generation, though they were pure bred, that could speak enough Portuguese to get by.

"It was sharper, more vivid. It was more personal, people stood closer when they talked."

"But compared to the natives we are still Earthlings, right?" Ava asked.

"Oh yes, and Americans were always more uptight about their flesh."

"But Americans and Brazilians are definitely still from the same planet compared to here."

He had to admit it, the native women had shocked him enough that he came to her. "Well yeah, you have to find a deserted beach all to yourself if you want to bathe with clothes on anywhere I've been on this planet so far."

"I have been lead to believe that you have not been outside the region that the natives call 'The Highlands' if you have not been at least a thousand miles beyond the lake."

"Some say the new midlands begin when the river reaches a mile in altitude below the lake," Herndon said. "Some say the Gengee is a separate basin. There are all kinds of maps in the Kassikan and shelves of books discussing where the boundaries between regions should be. I've been thru their geographers with you before."

"Sorry I'm such a bore," she said. She didn't say anything, but her eyes smiled that she would not be boring for Dawnsleep.

"No, I know all that," he said. "I don't need to worry about that, I just need to worry about that aluminum and that map."

They reached the interconnect by darkmeal and plunged ahead. They were forced to stop deep in Dawnsleep by ice, but they stayed very warm in that cabin. She dimly remembered how long the interconnects were, it took a whole additional week of driving almost nonstop. In the first glow of dawn in week Imnotn they

finally reached Zharvai. They took on another load of fuel in the freezing air, stopped for a couple bowls of fish diddle from a cook with a nice warm fire that she huddled close to, clutching her nightcoat tightly. It took all day to cross the tiny corner of North Lake between Zharvai and Sinbara. The lake was choppy and it was late in Morningday when they finally spotted the Sinbara peninsula on the horizon. In another hour they could see the town itself.

"Where's your place?" Herndon asked.

"My property came down to the lake on the other side of the next island." They were slowing into the harbor halfway between the mainland and East Island. "Continue on across this channel and around the back of that island. There's a small inlet to a lagoon and a path up to the house. The tide should be high enough to make it thru by now."

"No dock?"

"No, but you can pull right up onto the beach. We should be done by the ebb of the tide anyway, but if we could stay for a Noonsleep on land I wouldn't mind."

"You think?"

"I know where I put those papers," Ava said,

"But you don't know she hasn't moved them."

"We didn't tell her we were coming, we didn't even tell Jorma."

"If he knows, she knows," Herndon said.

"You seem to think she has supernatural powers."

"There were things I shouldn't have told her."

"Like what?"

"Things we know from Earth," he lied.

She could see it in his eyes and turned away from him.

"Things you won't make the mistake of telling me," she said.

"Ava."

"Herndon," she rounded.

"Why are you hurt?"

"We lived together long enough to raise a family in mortal times..."

"It's still mortal times for me..."

"You look more like twenty four than the eighty two Earth

years you've been here, and you were what? Forty seven when you went into the capsule, not to mention the years between when you thawed and when you landed. That makes you a hundred and thirty eight."

"But I have been flesh the whole time."

"I have been flesh ninety five years," she said, "almost all of them here."

"We are exiles aren't we, still?" he asked.

"Like movie stars in the South Pacific..." she acted out.

"Of our time," he said. "How romantic."

"Our romantic exile days are done. Like I said, most of my days have been here. I think I said how I have more of a native eye for this boat and see a great penis with way too much motor," Ava told him.

"Must you belabor that?"

"Sorry."

"Is there usually this much chop in this channel?" he asked. They were splashing their way thru between north and east island of Sinbara.

The only times she had been on this water before was when tying up in Sinbara for the first time on a local packet out of Zharvai and when she was with Jorma in a borrowed fishing skiff. Kayaks were only useful in the harbor and lagoons most of the time. "I don't know it to be unusual. The boats out here aren't tiny."

They were soon at the inlet to the tiny lagoon on her old property. She wasn't sure he would be able to get thru there at anything but the highest tide. As they searched for the hidden inlet, she noticed a plank-up on the beach that wasn't here before. There was a little cat-boat in the lagoon behind it, a nice roasting firepit and a privy under a lean-to roof.

"Looks like they put up a summer place," she said as he tried to thread his way into the inlet. "And look at that, a dock," she said, pointing to four pilings, two carrying beams and some planks just inside the channel into the lagoon.

"Wonderful," he said, "but will they be alerted to our arrival?"

"I doubt that either one of them is interested enough in

'Yingolian crystals'," they both chuckled over that expression, "to have devices down here. They don't have anything down here but the tied down planks and beams. They're up to the main house for the winter."

"The winter is one AM to eight AM on this planet."

"No, just in the equatorial highlands climate zone."

"Yeah, yeah, you go on and on about the geography of this planet. I know my way around the lake by now, with your guidance and the aide of our maps."

"Sorry," she said. "You seem to keep thinking this planet is the size of Brasil."

"No, but Brasil was not tiny, it was bigger than the Gengee basin, including the Daggareth arms. Gengee just seems bigger because of the speed of transportation. Anyone with any money could get from one side of Brazil to the other in a day, the Gengee is weeks."

"Yeah, I'll go along with that." The Gengee was the lowland between two of the three southern arms of the lake.

Herndon was busy bringing the boat to dock. There was a nice big lake sprite there already, but enough room to get the stern of his boat in and slide up along the dock and the channel side. While he was busy with that, Ava looked over the camp. Jorma had worked hard putting this together in only a half a year, what she used to think of as a month. Of course the lumber was readily available here, but he had never had the money to buy anything. Maybe he'd sold his place on the mainland? Where'd they get the money for the boat also? Maybe it was a visitor? She wondered if Venna really had more money than she let on. If they were now doing this well, she should have got what she paid for this house from them. Not that it really mattered, she would have given the house to Jorma if he'd asked. He'd done most of the work on it.

The pavilion was almost her villa in miniature. There was an open end and an end that had a mattress in it. The structure was only about ten by twenty feet, not counting the roof overhangs. It was her bed and a corner of her verandah. The roof was bigleaf shaftwood fronds thatched six inches thick. There were wide steps down to the beach and to the lagoon. A group of three big

shaftwoods surrounded the bed end, they would grow to a tower that could be level with the main house's porch. The kitchen was a paved area three steps down on the lagoon side under a framed canvas that was tied to the overhang of the roof. Larorlie couldn't root in this sandy soil but the rails were hung with a summer's growth of blue noonbloom that was just opening. A towel fluttered from a peg on the open post of the kitchen roof in the light breeze.

It was fall and they were in the north but as it was now the time of noonmeal and the breeze was light and sunny. She could leave her nightcoat in the boat. She wondered if she was ready to talk to Venna and Jorma. She certainly had to have a purpose here, 'he built a fast boat so we thought we'd take a spin by your way' doesn't cover a trip of thirty eight hundred miles and a thousand bags of fuel. Fifty seven hundred miles if you count where he started from. They already knew they had to be honest enough and specific enough to tell them she left paperwork of Herndon's here that he now needed.

She looked up the path that lead up to the house. As her eye followed it she saw there had been many improvements there also, stones put in for steps in the steepest parts. She was starting to wonder if Venna really did have a connection to some of that aluminum. Her eye reached the top of the bluff and saw a figure against the bright sky of the impending noon. "It's Jorma," she said. Whatever she was going to actually say, she would be saying it soon, "He must have seen us, he's on his way down."

4. Missing Papers

Jorma was now much closer so she could see he had a bag with him. "Ava," he shouted, "is that a boat or a starship?"

"It's a boat, but this is Herndon from the starship," she shouted.

"What brings you here?" she could barely hear his shouts.

"Wait till you're closer," she yelled.

"Don't give too much away," Herndon told her.

"I was just thinking we may be too late, they couldn't have made all these improvements without quite a bit of money."

"If they found the maps and the ticket, they wouldn't have had time to get to the aluminum yet without a boat like this."

"I know you don't want me to know this," Ava said, "but I think we both think she's working for that rogue Colonel of yours. They're connected at every eye room, and you know you don't know where he is."

"We think he's out in the Pennic Hills, deep in the cerrado of the Gengee bottom."

"But you don't know that. He could have been close, just waiting for the details from the map. He could have already paid her off. He has enough aluminum in old pencil stubs to pay her off."

"Let's hope not," he said. "But you're right, I don't want anyone to know about him, please don't discuss him in front of them. If she IS working for him, if he's not holed up in the wilderness like we think he is, mentioning him where it could get back to Venna, much less in her presence, would give everything away."

"I do understand," she said.

"We agreed on what to tell him," Herndon said softly.

"Yes, yes, don't worry."

Ava helped him tie the boat up while they talked, by the time they were done, Jorma was down to them and told them of their noonmeal plans. Herndon had the boat power off and came to lace fingers with Jorma. Their size always gave them away as foreigners, even after Tahlmute got them out of the media eye in the Gengee.

She told Jorma about the papers, as if it was something casual. She changed the subject to his camp and gushed about that a bit, the whole point being to find out where he got the money. A bead caught in the treads of his sandal. Herndon almost popped an aneurism over that, she could see purple veins pound in his face, but she turned it on him with the story of Kulai's fortune. She thought Herndon wanted to accuse him of stealing it from New Brazil, but that would be counter productive and would give away a lot more information than it would gain. He stayed calm but let her do the talking, then excused himself to the compost can. Just

moments ago he was telling her to be careful.

She was bringing some of their gear up to the house when Venna appeared on the path and reminded Jorma about the fire.

"I understand Jorma found an aluminum?" Ava asked, looking closely at her reaction.

"Yes!" with excitement, "A real one! At least he found a rich friend who took it!" She wasn't a good enough judge of expressions to be sure that her excitement was genuine. Somehow she doubted Venna was that simple however.

"So you built that camp with it, anything else?"

"A boat. Oh it's not like your spaceship boat down there," she said with awe and pointed with her chin where it rested on the clear water, "but we have fun with that," she pointed at the lake sprite in the cove below. "We might even take it out tomorrow."

"Sounds like you've been having fun," Ava said.

"Yeah, finding that aluminum has made life here a lot better. Before that and the Wild Catch, I was afraid I could get bored here." She must have seen Ava looking distracted, "Sorry, I guess I haven't really changed much in the last couple years."

Ava laughed it off and tried to think of something she could ask that would gain information and give none away. "So do you think you can settle here? Do you miss people back home?"

"I can keep in touch by eye. The town's not TOO small, I'll never know everyone in town."

"Do you know people who actually respond to mail?" she asked, hoping to learn if she was in touch with the Colonel.

"My dad does," she said, "and my friend Deleez."

Ava couldn't tell if she was just being chatty to cover her tracks. It would be nice to intercept her messages and see who she really did have contact with. "This baggage is getting heavy, I was just going to throw this in the house and borrow a bathroom if I might?"

"See you down at the camp," Venna said and went on down the path.

With one more social comment, she went up the path. She

didn't dare rifle thru everything on that first trip, but she took a quick look in the box while on the toilet and found the maps but nothing that stood out as a cargo receipt. There was nothing else in Herndon's folder but a scrap of scratch paper and a blank copy of the storage contract. This folder was little wider than a clip and things could have easily fallen out into the box at large. She found she didn't remember most of the stuff in here, she probably should have thrown it all out decades ago, the papers that were hers were already obsolete and could now be learned by examining any common electronic device with a polarizing microscope, but twenty decades ago they had been some of the Kassikan's most closely guarded secrets. Actually they were the supporting documentation for her royalty application. That was long enough ago to raise a child.

She changed her clothes as an excuse for putting her bag back in the boat with her other clothes and the maps. If Venna was working for someone and had missed them, Ava wasn't going to give her another chance.

Their noonmeal was made all the more tense by the presence of Venna and the need to appear that they weren't tense because of her. They made inane small talk about the food and 'Isn't it exciting to have visitors from YingolNeerie.' She was afraid that Herndon was going to say something about the aluminum, or that she or Herndon would let something slip. She knew Herndon wanted to accuse Venna of stealing aluminum from his home. She wondered how much of it he was personally missing, it might be several, maybe pounds. Maybe four tons?

She was glad to see that Herndon wasn't very anxious to renew his intimate acquaintance with Venna. He should have been, he could find out a lot more from her on the pillow than across the dinner table. Of course he would probably give more information over that pillow than what he would gain.

Venna did not initiate a request to change partners for Noonsleep either. Neither Ava nor Jorma was going to, but for different reasons. He to avoid the horror he thought she was, she to have time alone to search the house. Yes, it was also true that she found herself more compatible with Herndon in a quilt than she

remembered. In his case it hadn't been sex that ended their relationship, but politics.

So Ava and Herndon had the house to themselves. They took to the bed for an hour, just in case Jorma or Venna decided to pop back in on them. She was melted by Herndon convincing her that he still hungered for her. Knowing that he had spurned Venna to have her once again made her especially responsive. She hadn't been this into the pure physicality of it since her time with Brancettable as an Angel. During that hour she got so totally satisfied that it was really tough to get back up.

Now that they were up, they were sitting at the indoor table with the box open. Herndon was taking a second pass thru it, but they'd already made sure they'd examined every piece of paper in that box, a second time. "No, I guess it's not here," he sighed. He was trying to project an aura of mild disappointment, like he was strong enough to take this, but Ava could see each piece of paper shaking as he put it back in its folder.

"Jorma was afraid he might have tossed it," Ava offered.

"Pppp," Herndon said, "Oh that's possible, but I don't think he had the chance."

"He thinks he saw it," Ava said.

"I wouldn't put it past her that she knows it's of some value. She could have hidden it somewhere in the house."

"That could be anywhere."

"I'll look in her clothing box," Herndon said. He went up to the bedroom and did that, even took the box down from atop a chest Jorma must have brought in and looked under the bottom, under the lid and checked thru all the contents, being scientifically careful to put everything back in its original position.

"What makes you think she'd have any clue?" Ava asked.

"Because she's been following you too closely, first to me and then Tahlmute, then Jorma."

"She didn't spend time with any of the other lovers I've had since Tahlmute and I've had several more important than Jorma. He was little more than a year. The only reason Jorma's important to me is because he helped me find out the truth about Tdeshi and

Tahlmute."

"How do you know she hasn't been with them too?" Herndon asked. "Had Tahlmute told you about Venna?"

"No," she said, "I've been in touch with one of the guys I met while migrating north, actually he's been in touch with me. I don't think he would be trying to convince me to give him another chance if he was with Venna."

"You made that big an impression on him?"

"I think it was the royalties I collect," she said ruefully.

Herndon frowned and began to look around more of the house. "Why don't you stay downstairs, say hello loudly if either of them come up."

"You intend to look thru everything?"

"Four tons of aluminum is worth a Noonsleep don't you think?"

"I guess," she said, but without feeling.

After a year in this house she knew where the shadows were when Noonsleep was over in the fall. She started some trap mix with what they still had in the jar from the day before. She spiced it more green and decided to put it over vedn toasts, so she mixed up some batter for that and started the griddle heating. She'd let Jorma and Venna check today's traps when they got up here.

She'd slept a couple hours, a couple more on the cushion in the front room, when she was supposed to be ready to say hello loudly. Herndon hadn't slept at all. In fact he was still combing thru boxes of children's wear abandoned by someone who had owned this house before Ava did. He had found a whole back closet behind some shelves in the eaves closet that she hadn't even known about. She was pretty sure from the depth of the dust that Jorma and Venna had not discovered it either, but Hernon was too wound to listen to that much reason. When he smelled the mix heating he finally came back out.

"I never could figure out what that wilderness map was about," she said to try and get him to talk. "I'll admit, I would have been tempted to take an expedition out there if I knew there was four tons of aluminum to be found."

"Oh no," he said, "That's not the map to the missing aluminum," Herndon said.

"Then why was it so important that we have that map?" Ava asked.

"It marks what it is missing from."

"So who's trying to find the aluminum that is missing?" Ava asked.

"Both you and I," Herndon said, "and several groups we don't want to find it." That sounded rather small, but then again, she had managed to dig up what happened to Tdeshi on a trail that was twenty decades old, this was only fourteen. "While you cook," Herndon was saying, "I'll go down to the boat and do my teeth, I left my stuff down there."

They wound up doing Morningday breakfast at the camp since Venna slept in and Jorma wouldn't leave her there alone. Venna was beat from a party the week before and missed breakfast altogether, then went up to shower. Herndon went to play with his portable terminal on the boat and Ava took a camp quilt to the beach.

Jorma came over to clean the cookware and while he was within speaking distance Ava tried to convince him that she wasn't a monster. She did not do a very good job. She hadn't run into that many people who were so superstitious about it as he is. Almost all her lovers at the Kassikan had known the truth of her condition and none of them thought it was ghoulish. Kulai thought it was heartwarming that she had been rescued.

She confided in Jorma more than she should have about Venna but felt Jorma was likely to listen to reason and thought he should be warned of their suspicions. Herndon did not agree with her on that, but did not say anything. Ava did not go on, just gave Jorma some of the facts that made them suspicious. He was still infatuated with her however and would hear none of it. Herndon settled in grumpily to nap.

While they talked, she had told Jorma that Kulai was finally the one. But was he? The man beside her now had been with her more decades than she had spent years with Kulai. In spite of how

much she was enjoying it, she was still in her initial infatuation with Kulai wasn't she?

And even at that, was she so infatuated? The compelling libido that had plagued her since she woke up in this body was drawing her much more strongly to Herndon than Kulai. The close cropped hair and the strong, roughly shaven chin against Kulai's sleek tawny skin and long flowing brown pony-tail and goatee. Maybe it was just the ride in that boat that had made her so horny, a nostalgic relic of the power of bygone Earth. She must have drifted off while thinking of that.

She was sound asleep on that beach, dreaming of being erased by shonggot the way a virtual can be erased by zeroing. No doubt that was the effect of the poor relations with Jorma and the reaction to his attitude. Jorma had not napped beside her, instead Jorma was running down the path toward them screaming, that Venna had disappeared. Ava was barely awake enough to speak, but told Herndon, "You better check those maps."

Herndon cursed something unintelligible in Portuguese and went running up the dock headlong. Jorma went dashing off after him, no doubt more afraid of the ghoulish woman from YingolNeerie than interested in helping them find Venna. Of course they really hadn't told him much but their suspicions had they?

Ava had expected something like this from Venna, expected it when they first pulled in. She was glad Venna hadn't grabbed the lockbox and run while they were tying up at the dock. Once she came down the path and the lockbox was still there, her suspicion of Venna had dropped. Now this sounded like Herndon was right.

She grabbed the camp quilt and her lowland wrapskirt. Afternoondays can be quite warm, even as winter begins in the north, so for one day of the week lowland clothing can be worn. The weather depends on eddy's in the lake this time of year.

Herndon was appearing from the cabin, announced "We still have the maps." That was a relief. "But now we can be sure she has the claim ticket," he bellowed. "We have to catch up with her," Herndon said, "That's our only chance."

Ava didn't know if that was possible, but Herndon was already

gathering his things.

5. The Decision

They never did find Venna on either packet that sailed from Sinbara that Afternoon. Herndon gave that up by the time Kortrax was getting low. They had to pull into Bhangyon for fuel and Herndon loaded up on caffeine during a hurried Duskmeal at a dockside cook.

"You really should let me take the first shift," Ava said, "I got more sleep than you."

"I couldn't sleep anyway," he said over the steaming cup.

"Then let me get something so I can," she said and turned toward the kegman across the aisle.

She was glad she did, he drove like a madman thru the evening and Dusksleep and there was enough chop on the lake that she didn't sleep very well even after pounding two cups of light green. After fuel and breakfast in Zharvai, she drove much more sedately during Nightday. Cynd and Kunae were both in the dark time sky again. Thru all of the northern winter these years they were up thru all of Nightday, they rose just in time to show her a lunch of snagged fresh lon from lake Entisonggas as she bludgeoned its glassy surface with this dick-boat in the dark.

He woke well after Darkmeal but there were a few cooks still working in the next large town, a place not much smaller than Sinbara that they came across within fifteen minutes of his emergence from the cabin. The lanterns of a small town's windows make them much easier to spot in the dark than the light. Even moving at a relatively sedate pace she made it thru lake Entisonggas and a good part of the longest canal in interconnects. It had been an eighteen hour Nightday. He needed a shower, his eyes were sunken and his hair stuck out. "Go clean up a little before we go ashore, I can get this thing docked," she said. He crawled back below. This boat was easy to control if you used enough power.

There were four docks in town, only one had power-boat fuel but the price was pretty good, better than Herndon had been paying, better than she paid at Nightday lunch. "What canal is this?" he

asked from the cabin.

"The long one, we're past Entisonggas," she said. "We're thirty one miles from the bridge."

They both cleaned up at a public bath, had a passable meal, took as much fuel as there was, and he charged off into Dawnsleep while she huddled in both quilts in the chilly cabin. She needed to think about what was coming after they got out of the interconnects. That wouldn't be until the next dusk, still fifty hours away by her guess. There was a good chance he wouldn't want to delay in getting back to the Gengee where both maps were located. One map was simply directions to the warehouse where that cargo receipt was issued. She knew it was a street diagram but it was written in Portuguese with no city identification, it had meant little to her at the time. The other was a faded old geological map of the Gengee, where a desolate wasteland deep in the West Gengee Empty was marked up in Portuguese.

She could see no use for herself there, but there was little doubt Herndon would be glad of her company, if for nothing else, someone to spell him driving the boat. She didn't owe him, if she stayed with him on this quest, it was just the hormones she inherited from Tdeshi driving her to it. It would be stupid to continue.

Yeah, Herndon's was a much sweatier relationship than Kulai's, even in the initial infatuation stage. But whatever happened with Herndon was doomed by his 'wife and kids' family style. He had informed her, numerous times, that even though her body was local, her mind was of Earth and he would have registered their children as pureblood terrestrial.

She was not about to have children of Tdeshi's body. The mind that was born naturally of these genes had erased itself, tragically; and she had rescued the abandoned body from death. If she had children by Herndon in this body, they would be half-blood terrestrial and she would not allow them to be registered as anything else. They had fought even over that hypothetical case. They had fought over children the most.

But their fights had always ended, after the screaming in three

languages and sometimes attacks of paralysis and the taunting that caused. It had been a tempestuous twenty Earth years, their native servants had gossiped ceaselessly, but Tdeshi's hormones had always seen her thru the rage and the hurt. They were stuck with each other at the time. Neither was willing to accept enough of the native culture to leave the familiarity they provided each other.

She had broken that barrier and accepted the fact that she was here, about sixty Earth years ago. Now she was in the native culture. She had a fine home in the native culture. She was with a fine man in the native culture. A respected pillar of the community. She was doing better than even her clone on Gordon's Lamp in that regard, since this is a society of billions and Gordon's Lamp may have returned to a dead system.

She drifted off while trying to score the battle between Ava's reason and Tdeshi's hormones. She slept much better this time, she must be getting accustomed to skittering over the water at insane speeds in the forty hour dark.

It was half a week later, she was in the cabin again on a late Afternoonday, their shifts had stretched thru the light. The stopping was what woke her. She woke slowly, just listened for awhile. They must have just bumped a dock, she heard rope pulling. She heard voices, feet on planks. Kortrax was low and the west was red.

"Where are we?" she asked when she got to the companionway.

"Lake Beghtik, the last one, at the mouth of the cut. We should have open water in front of us within an hour," he said. She was looking at the scarcity of fuel at this dock, there were only three bags left. It looked like they had only four left themselves. Herndon liked to get at least twenty with every stop. He was sure to want a hundred here to get all the way down the lake. She didn't say anything to him yet. "Bring up three empty bags when you come," he said.

"Ppp, Why stop? Isn't there a city here?" She got out the map. It had been raining before lunch. Now it had stopped and the clouds had retreated up the tail of lake Beghtik. The back bench was still wet. The space behind the wind glass had dried so she spread it

there. "Chessanishaw, right off the end of the Beghtik dam. It's a pretty big dot but it's a dot, there's no detail available and I never stopped there."

"This isn't it?" he asked.

"The disadvantage of traveling at this speed is you never have a chance to get local detail maps. I've seen it from a distance but never stopped there. I'd say this is probably an outer swap crossing on the edge of that city. I've never been in it, but the towers in the distance might be big."

They bought the three bags and moved on. They needed it because they had to go eleven miles around the bend in the last canal to buy fuel. Once they were three miles around the point they found the big dot named Chessanishaw was a city of a million and a half with round-the-clock gourmet dining, an extensive streetcar network that actually reached the dock they had first tied up at, and AnioxVarax playing in a ten thousand seat hall overlooking the lakefront this dusk.

They had a good dusk meal where they could hear the echo of that show across the harbor. The city is not on Beghtik dam, but draws water power thru the cut into the last canal of the interconnects. It has a little lake of its own giving it a square mile of harbor and a few more square miles of lon. They took on two hundred bags of fuel, so many that one had to crawl over them to get to the one bed that was still open. There was no sitting on the other side of the table either. Enough room to get to the head, the sink and the bunk. There were twenty bags piled on the floor of the cockpit.

The third wagon finally pulled away and he was undoing the mooring lines. It would take them ten bags at most to get to Center Lake, he clearly meant to go a considerable distance with this fuel. The time had come when she had to make a decision on where she was going. "Are you trying to get all the way to my place with this?" she asked.

"All the way to Cys Ungor."

"You can't, that's kidnaping," he was already pulling away from the dock, a docksman shouted and threw the rope he forgot in his haste. "Let me off here, I'll catch the rest of that show and find

my own way back if you can't detour across to Dromedia." It was hardly a detour, it couldn't possibly add more than a thirty sixth to the journey to that tunnel.

"I'm sure I'm going to need your help again before this is over."

Her pleas were to no avail. She never even got to make the decision between Tdeshi's hormones and Ava's logic. She thought the wizard's modification called the Instinct would have prevented this, but it only prevented violence done by one human on another. He had not used violence on her, it became obvious she would have to use violence on him to get the wheel or throttle out of his hands. She should be much more angry about this. She had promised Kulai she would be back by the end of next week but if she was taken down to Gengee it would be several more weeks, especially if she had to book passage on a commercial ship to get home. In that case she could be gone a year. Hopefully she could get enough money from Herndon that she wouldn't have to tend sail on a freighter to get home, she hadn't brought much with her and with all his fortunes he often balked at paying for her yaag.

He would listen to nothing, but drove like he was possessed. She clung to the companionway rail while he charged thru the remaining canal. It was only a little more than an hour till they were out on the open lake where he opened the throttle full and pounded over the water in the last gloom of dusk. She was loathe to admit that the thrill of leaping over blue water in the clutches of a Latin Lothario was part of the reason she wasn't angrier about this. She was disappointed with herself for noticing that the fact that he had kidnaped her only added to his appeal to her body's glands.

Herndon kept his hair short. By local standards 'short' was if cut at all. Herndon had a strong chin, now dark with a day's growth of bristle. Even his hollow-eyed glare of grim determination showed macho. Kulai was always mild and even and sweet and gave the impression of being naive. In truth he was anything but naive and would get the better of people in negotiations while letting them chase him directly where he wanted them to go. Herndon was actually the bumpkin, but glorious in his ignorance of

that.

"A week from now we shall be on south lake," he said.

She moved over to stand behind him, the stool was high enough so her breasts were on top of his shoulders. Small ripples on the lake brought warm sensations as they skittered across them.

"You can't make it on this fuel."

"I'll make it to the tunnel."

"If you drop to twenty knots you might."

"We need to get there ahead of her. If whoever she's working for gets to that aluminum first..."

"What?" she asked. She passed her hands over his chin, natives either grew full length beards or had their facial hair genetically removed, so this roughness was something she seldom sensed and after the fifty Earth years since he'd left, it moved her in unexpected ways.

"They'll have all of it," he stumbled.

"I thought you still have a few inches of titanium tubing."

"Compared to four tons of aluminum?"

"So what? Infinity divided by a million is still infinity. What more can you possibly want to buy, the remaining land in Gengee?"

"The Colonel might try something like that."

"How much land can he and his followers occupy? You can buy land but if you don't show up there for a decade or two people are going to start moving onto it, then what will they do?"

"It could get ugly, I'm trying to prevent that. You should be on my side, you've gone over to the natives, I'm trying to at least retain peaceful contact with them, not wall ourselves in some enclave or set out on a vain mission to rescue the motherland."

"That's very noble, but the natives can take care of themselves."

"I don't want hostility directed at me and what I'm trying to accomplish. I wish to retain some of the good parts of our culture alongside the native culture. We're not that different in some ways."

"That's what I've been trying to tell you," she said. "You can take us from this star or that star, this age or that age and we're still just humans doing our silly human things."

"Like what?"

"Like burning ten coppers worth of fuel chasing after some intrigue about more wealth than we can possibly want."

"I did not pick you up in a hovel Miss Bancour."

"That was bought with eleven of his sixteen aluminums, that was his eighth inch of titanium tubing. That is enough, all the wealth we can consume in what really is a glittering city of art and culture and ideas, in spite of the rafts-in-a-rainforest decor. Qatar was never its match."

"At the same time it is a stinking pesthole where most are addicts, burn-outs lie in the gutters and grey slugs of human beings lurk in the under-cellars."

"Like Rome or New York and even Shanghai had in their day."

"You would compare the Yakhan to them?"

"I would compare them to Lasnar," she said.

"Pppp. This whole world is nothing but kids playing. They never got off campus." She was never going to change his mind. He gave the place some credit, he liked the land where he was. He said he didn't mind if the beasts he herded had twice too many legs and one and a half times too many eyes. But he never abandoned himself to the culture, he could never just let go and become one of the natives.

In a sense she was a native, this body was born here of native parents back when Alan was the only person of Earth ancestry walking here. Alan's body was older than hers, born in 2250, Tdeshi's date of birth was well after 2300, she was twenty three Earth years of age when shonggot erased her. Alan's body had been conceived of Earth, from sperm of Paul Larkin and ovum of Grace Larkin, taken before their death and donated to the expedition in the afterlife. Tdehsi's body was born to a hired mother by a father named Leand, a body with a stormy and tragic life until Ava gained control of it.

Of course Tdeshi never took this body pounding over the lake on two water park pumps in a fiberglass phallus; now that she thought of it. But Tdeshi had attempted to drive herself two months without sleep and too deep into the drug that erased her. Ava was glad the body was still young enough that she hadn't done it any

permanent damage.

"So you can stop for fuel anywhere on the outer face of Dromedia point. Just drop me off there and I'll catch a coach." It was only a day or two to the Yakhan's megalopolis overland from there. She could catch a lakerunner from wherever the coach would drop her on the north shore. She could be home in a couple weeks from there with only another few irons spent.

"I may need you."

"Why?"

"To call your sister."

"Why?" she asked again. "I thought you already talked to her?"

"I hope you never find out," he said, and would not say more.

Ava was right about the fuel, it didn't reach to the tunnel, and they weren't there yet as the light of the next week came to an end. He could have reached the coast of Dromedia, but he hugged the western shore where they cruised thru a thousand miles of lon to the horizon on both sides. This did make the water in the channels smoother. Great lanes were cleared thru it and ships beat their way along them. Over here he pulled into the city of Azhergok. She escaped from him and got to an eye room. She sent a few business related messages while trying to think of what to tell Kulai. She wound up saying she might be detained a little longer than she had hoped but things were moving along and Herndon swore he still needed her help.

Azhergok was a small city of less than a million, but Herndon was able to come up with another hundred bags of fuel between three dealers. Herndon cursed furiously because the price had tripled since he came thru before. Three more coppers were left in that city. He was more concerned with the three tens she had used in the eye room. While the fuel was being delivered they had a nice duskmeal and rested at a quiet dock for a few hours. After another toe-curling romp, Herndon even went to sleep.

Herndon was such a bull. Kulai was so sophisticated, a well practiced amorist from an ancient and decadent culture, but in a sense more tease than Tdeshi's hormones wanted her to live with.

We from Sol are really the brash young punks out looking for trouble aren't we? But this was fun. She had been sleeping a lot while he drove, she was languid with satisfaction but unable to sleep. She went to the deck and watched the stars come out.

They had talked on the ride down the lake, he had confirmed many of her guesses. He treated it as a big confession but so much of it she already guessed. Still it made her think about her identity as a 'Yingolian' as they were now known. What should their impact on this world be? She didn't want it to be the re-introduction of conflict and strife, so she didn't want to take sides in their internal struggle. She wanted their impact to be the manufacture of 'photovoltaics,' as they were formally called, 'Yingolian crystals' as they were called on the street. What else did they have to offer? A little literature made it across before the links went down and she had quite a bit more text in on Narrulla's Tear than had been translated and published so far. Of course she'd loaded that all down before the main expedition returned from 61 Cygni B, Kuna as it was known here. During that time, the code to a few genetic modifications made it out over the radio link. One of them had been the code to eternal youth. The code that had triggered the war.

Herndon had suggested the Colonel might even have intentions for the starship itself, a million tons of metal. She knew, better than any native, what that would mean here. They could build a nation with a power grid. The reactor in the ship's engine might be used in some way to power the grid of a modest sized nation. Not Brasil, but it could give a small nation of a few hundred thousand the energy for a twenty-second century lifestyle.

Herndon also admitted that the Colonel might be crazy enough to get back to YingolNeerie. How would she like that? It would get those million tons of metal away from temptation. That would be the least disruptive to the society here.

Still, as much as she thought about it in a larger context for the planet, it was all about which faction of the Brazilians had this money wasn't it? Herndon's faction was the one that would soon blend into the population. He had a native woman, he employed natives in a manner they were familiar with. He kept a little Brazilian decor. The ones he opposed would establish a boundary

and cut off all but rudimentary contact with local society. They wanted to retain their old language, and their consumer social structure.

When she went back inside, Herndon had fallen into a near coma. Since she was still wide awake, she put on three bags of fuel and got the boiler going. It was a couple miles to open water from this harbor. She could use this opportunity to set out across the lake and get back to Kulai, it was less than ten hours across to Dromedia wide open, he might stay out that long. But before she made the turn, she did some more thinking.

There was more to this yet, something more that Herndon wasn't telling her. It wasn't just the money and it wasn't the foolishness of attempting to return to Sol. Why was this happening now when the parts had been lost decades ago?

Because her sister could be involved, she gathered that he feared something from YingolNeerie. Althart had once told her that he feared a hostile starship, that was probably it. But the fact she finally based her decision on, when all was said and done, was Kulai's maturity. He would understand that they were just getting settled into their lives together, and during this phase there might be some loose ends from previous lives to tidy up. It was possible that one of those loose ends might be brought on by her home star. Because she completely trusted her relationship with Kulai already, she kept to the course. She felt some responsibility for things of YingolNeerie, being one of the few people on this planet born under its light.

6. Deathstar

By the time Herndon woke it was deep in Nightday, she thought it was week Voratainin but she wasn't too sure. They were nearing the tunnel. They were already turning into the Ungor arm and the majestic mountains splashed with snow were visible in the companion's ruddy light.

"We should be in the fjord in an hour," she told him.

"Thank you," he said, "Thank you for not taking me to Dromedia and leaving me to wake up alone."

"I've been thinking, you know we did mean something to each other once, the shared mission and all that. Representatives of Earth's science."

"Thank you," he said.

"I still wish you could trust me."

"With what?" he asked.

"What this is really about."

"Four tons of aluminum, isn't that enough? What more could be going on? We were just over this, you don't think it's worth the bother, 'let him have it,' but I do think it's worth the bother."

"My sister cannot be involved unless it's something from outer space."

"The starship that makes up two thirds of Narrulla's Tear's weight is why she's involved," he said. "We may need her to watch over that ship for us."

"To me, you seem like you're worried about that old starship for a bigger purpose than the money. My sister could build enough bots to render more metal from Narrulla than there is in your starship."

"With a lot more effort," he said.

"I think you're so interested because there's something coming in. My sister knows of a crippled ship coming in from Yingol-Neerie, is that the problem?"

"You don't even say Sol any more?" he asked, sounding really hurt.

"I did say YingolNeerie didn't I? Well I've been here a hundred years, over that. Nobody I meet in day-to-day life knows what a 'Sol' is, but by now everyone has heard of YingolNeerie."

He didn't answer, but avoided her by going inside and using the head, doing his teeth, shaving, and crawling forward into the bedroom to load some fuel bags out of there and into the space that was free'd up on the kitchen floor during Dawnsleep. He would talk no more after that, but took the wheel and concentrated on the race to the tunnel, five hours away at the speed he was driving. In spite of her fear of this speed in the dark, she went inside and tried to get some sleep.

Hearing about the tunnel of Cys Ungor and seeing it are not the same. Ava had never been south of the Yakhan before, unless you count rounding Dromedia point as south. The fjord that leads to the tunnel is a wonderland in itself, great grey cliffs, leaping waterfalls and deep blue water. Though they were less than a thousand miles from the equator, snow lingered deep into Morningday on the dense forest of shaftwood that coated the hills miles above.

She knew all that from pictures. In reality some looming shadows against the starry sky were all she could see in the dark. At the end of the fjord, in some of the highest cliff walls, is an immense oval, dimly lit by the lanterns of the ships traversing it. The scale is too big for the eye to correctly register it at once. One needs to notice the tiny pinpricks of ship's lanterns receding into the distance. Then you can understand that there really are ships being towed thru a mountain range by large teams of kedas.

As they pulled closer they could see that the opening of the tunnel was decorated with flowing curves, giving the impression of continuous bodies intertwined. Above and to one side where there was a place for it in the cliff, the sensuous trimming of the portal flowed up into a bouquet of blooms surrounding a face. Again, this was something she had seen only in pictures, it was a famous monument. She wished she could have seen the real thing, not just the dimly-lit base of the tunnel rim and the hewn rock disappearing into the blacker black of the mountainside against the black but star-strewn sky above. She could only imagine its scale.

It was the face of a miner, it could have been someone half Elf, half Dwarf. He had a bushy beard but a thin nose, squinted eyes and a hearty smile, a huskier, rougher version of Kulai. That thought gave her a pang of guilt. There was an inscription under it. It was now over a thousand Earth years old, and the characters were archaic and florid. She knew it said, 'Let all who's way is eased give thanks to those who's centuries of toil have joined our basins in peace and brotherhood.' All she could see was the black shadow of the cliff face against the star-studded night sky. She thought she might have seen it in silhouette, but she could be fooling herself.

Herndon had seen this tunnel many times, the last time during

this very year. He didn't need a tow to cruise this tunnel and went to the center with a few other powerboats. He continued to carve water into the great grey maw of the tunnel. The far end was invisible, though the tunnel is perfectly straight. At twenty seven miles it was lost in the darkness behind the lanterns on the hundreds of ships on the way. At points in this tunnel more than two miles of rock are above them. It was an hour until they were out and four more bags of fuel.

The Gengee Arm was all the water of the lake from here to the tunnel of UvonMahsk, three quarters of a local year away on a sailing ship. Once out of the fjord on the far side of the tunnel, it opens out to be a hundred miles wide, but four hundred miles away it narrows to only fifty. Eight hundred miles from here there is the lower ground of the Gengee on the southeast and the lake widens to two hundred miles or more and looks like a sea once again. It is fifteen hundred more miles to Gengee city from the tunnel.

For Morningday breakfast they stopped in the city called Amersahm, a place of a million or more that Ava had never even heard the name of before. It was on the north shore of the Gengee Arm, still a thousand miles from Gengee City. This high side of the lake is considered to be part of the Highlands by many. This area is well populated, but there are enormous tracts of this basin with scarcely any population at all. There was enough fuel right on the docks to fill the boat and they needed a good meal. They'd had sex on the boat already while waiting for the next wagon, he'd commented on how lusty she'd become since he left for the Gengee fourteen decades ago. This wasn't even once a week, she had turned it up during her travels, especially her time with Jorma.

While they were on the way back to the boat she picked up a news magazine because of the headline 'Killer Asteroid on the Way?' and found that "One of Cynd's larger asteroids was knocked out of orbit by an unobserved collision forty years ago and dropped into the gravitational well of the brown dwarf. It has been launched out of Cynd's influence entirely, and ejected in this direction at high speed..." she read aloud. Herndon grabbed it from her by the time she read that much.

"Let me see that" he said. He was reading more, "The asteroid is six miles in diameter, that's an exterminator!"

She grabbed it back from him, he let her have it. They had stopped in their tracks across from the docks. His boat was eating pennies parked there but not as much as it would eat in irons of fuel once under way. You had to keep three bags going at all times when running full out like Herndon wanted.

There were names and dates of observations and astronomers credentials, but the gist of it was, an extermination asteroid was on the way. "You knew about this." she said.

"I suspected from some instruments of my own, I didn't know."

"Well this changes everything," she said. "What good is an infinite supply of money now?"

"This changes nothing," he said.

"Why? It can't possibly matter any more," Ava said. She handed the paper back to him and dumbly walked toward the boat.

"You never know," Herndon said, "It could miss us, it could collide with something else on the way. It's four years till the first possible impact."

"Earth years?" she said, hoping. Four local years was less than a normal pregnancy. She watched people around them wondering what kind of years are there anyway?

"Yes Earth years, I can't get used to calling it a new year every eighteen days." Some of the people on the sidewalk looked like they wanted to ask him where he got the drugs.

She knew how poorly he had adapted to the native calendar. He could come as close as lining it up with six to one native years to 'real' years. The fact that the natives call those six years 'ten' seems to actually make it a little easier for him. There was so little yearly season at the Yakhan that the year was just about arbitrary anyway. One went thru all the seasons every week, hibernated thru winter, slept thru spring fever in the early part of summer the next time one slept.

She turned around, she had actually forgotten to message Kulai that she would definitely be longer and Kortrax was now far enough in the sky to run the data system. The last time she was at

an eye she hadn't really made up her mind had she? She ran back to where she had seen an eye room in spite of Herndon's shouts. He dropped the newspaper and started to come after her. She saw someone pick it up before she got around the corner and up the stairs.

"Did you have a compelling need to delay our departure or were you thinking of making your own way back to Kulai from here?" Herndon said when she reappeared at the boat. At least he hadn't run in after her and caused a scene.

She felt snippy, she owed Kulai and he deserved better than what she was serving him. She was pissed at being greeted this way, "With all you're not telling me, I don't think I should tell you."

"There has to be something you aren't telling me also, like who you are contacting when you send those messages?"

So there would continue to be things she wasn't telling him. "Kulai of course, I'm keeping him up to date, who else would it be?" By now she had jumped into the boat. Something about being with him, keeping things confidential and being on this boat made it seem like being on Earth again. Just the fact that they were in different scenery, it wasn't Earth, but it wasn't the gently rolling land of center lake and the interconnects either. Having a man talk to her like this made it seem like Earth again also.

"You seem to have sent a lot of messages."

"I told you, I shouldn't be here, he's made a big commitment to me, because of me."

"I worry about the fact that he also knows how to get heavy cargo moved."

"I know how to get heavy cargo moved," she said. "Are you accusing me too?" Ava asked.

He knew better than to pursue that with her. "You said he built his wealth by stealing the detents out of hospital carts. Why wouldn't he steal four tons if he could get his hands on it?"

"You're watching TV again," she said. "He's back home, he went to see a pyramidal dance experiment last Nightday with a girl who makes me jealous."

7. Cerrado

Gengee City was like the four or five other cities she'd never seen before. The must line the lake in uncounted multitudes. They each had a patch of crystal waterfront, a few great docks on the lake, with torches over the docks on Nightday. They would be deep in winter by now in the north, but they were now south of the equator and summer was in full swing. She needed only a cape and not a coat this past Nightday.

Gengee City was the second of the four main dams that kept the water in the current lake and not down in the cerrado where it once was. Today only a couple little salt lakes, one hundred and two hundred miles in length, marked the bottom of the sea that had been trapped in the highlands a thousand Earth years ago.

The city was a long but thin line along the dam like Chardovia, though the slope was gentle, the city extended only a few blocks to the southeast. Nowhere was it urban for more than a mile from the lake. There was only a net of irrigation canals extending downstream from here. A kayak could get thru but Herndon's great boner-boat could not, so he returned it to the shop where it was built. Ava knew quite a few of them from sixty Earth years ago and they were delayed reacquainting. Herndon was quite familiar with the city and lead her on a twenty mile streetcar chase to an outfitter on the last stop out of town.

There were settlements beyond, but they were sparse and small. There were no more streetcars or coaches. The land was much dryer already. The basin floor here is only about seven hundred feet lower than lake level. On the dawn of week Venurat they hired mounts called kargir, something Herndon had been on before. "These are no smarter than a horse," Herndon said, "and they take to the dry country better."

"Kedas still spook you don't they?" she asked. He had sensed they were much more intelligent than a horse, more intelligent than a feral dog. Probably much more intelligent than we think they are.

He only made a face. They hired these strange beasts and the rope ladder it took to mount them. She was reminded of a three humped, eight legged camel with three eyes on tentacles. They had

wide, mobile snouts but sniffed you with three scraggly manes behind their eyes. Only the eye on this end swivelled to look at her as she climbed to the saddle between the first two humps. It wasn't really humps either, it was like the body was the shape of three furry barrels. She'd been on this planet a life time now but was still surprised by its fauna.

They sent most of their luggage on to his ranch with a freight man, they would be living rough from here and she had misgivings about that. It was lunch time before they finally moved off, but they ate fruit and bread as they moved out into open country. Before they were done with their lunch, they were traversing open range spotted with scattered small holds with small herdsman on open range.

The winds across the cerrado tended to pick up moisture and being it to the western edge of the basin where it condensed and flowed into the Gengee arm of the lake. The cerrado itself was dry and dusty. Its margin, where the irrigation canals reached, was warm and sunny and fertile. Just beyond that was land like Herndon's ranch, good grazing, farming with a windwheel and well. They were well beyond that before they camped for Noonsleep. It was enough privacy for her to make love in the open.

The land was almost desert in the area they traversed by late Afternoonday. There were a few scraggles of thin ribbonleaves and some sap-nubs trying to hold the fine red sand together. The long-legged kargir they were riding were not as intelligent or fast as kedas, but they withstood the dry terrain without complaint. They did kick up billows of dust from the powdery soil but rode high above it on their great long legs.

She had to admit, she was unlikely to be out here with Kulai. He tended to travel where there was comfortable transportation and accommodations and might not even be terribly interested in watching a movie of a safari like this. This was actually more than she wanted to get into camping in the wilds. She would have been content to go on as far as his ranch and stop there. They had passed a few miles north of it early the day before.

"What can that map show in this wasteland that we can steer

to?" Ava asked him.

"We have the solar compass." While Kassidor had a relatively weak magnetic field, Kortrax had a relatively strong one, making long-range wiring impractical on this planet even if there was enough metal for it, and needing compasses that use sunlight to cancel the solar magnetic field. "And see that dot? That can be none other than the boulder marked on this map. We get there, then thirty one miles due east."

They plodded on for hours reaching that rock. It was barely as tall as she was sitting atop this kargir. She would have to duck in a twelve foot ceiling. They used the sun, the time and the magnetic reading to figure which way was east. They moved on, settling into the rhythm of the land again.

"Your shuttle was much bigger than ours as I remember?" Ava asked when silence got too boring. It was hard to talk, as far apart as the kargir strode.

"We had theories of a titan-like atmosphere on the dark side," he said.

"What was the biggest surprise of your voyage?" Ava asked.

"Getting the welcome message from the Kassikan. From that, everything else followed as a matter of course."

"Yeah," she said, knowing what a surprise that was. They were pretty sure when they left there would be little if any life on the planet already.

"How many water skins remain?" he asked, snapping her back from her reverie. This trail was so long and boring that her mind was really wandering.

"At least four. Is there nothing else out here?"

"There's two streams but they're both intermittent and my reading of the land says they are very unlikely to be running right now."

"I think you're right." They would flow during the part of the decade when Kortrax was less active.

There were tendrils of blowing dust ahead of them. They trudged on for hours more as Kortrax got low behind them.

It started with a glint of light, a dot on the darkening horizon

might be moving. They looked at each other but didn't say a word. They each stopped their mounts and held their breaths. Seconds later they heard a rumble and saw another glint of sunlight on something shiny, now high above the horizon and coming toward them. It approached rapidly, and in only a few seconds it thundered over them, almost a mile up and climbing rapidly.

"I would take that to mean we didn't get there in time."

He looked at her, but had his face in his hands. She moved as close to him as the beasts would get and put her hand out to him. He could reach over and take it but he didn't. "This is much more serious than you think," he said.

"Why? What aren't you telling me?"

He hung his head, then drew a deep breath. He parted his hands and looked up through them at the echos of the shuttlecraft's thunder as it left the atmosphere. "Those four tons are the frame for the containment of the shuttlecraft," he finally admitted. "We needed that slip to get it. If it's still missing and they launched that craft unshielded, we're dead, we don't know it yet, but we are."

8. Dark and Deserted

He wheeled his nervous mount around and had his pocket eye in his hand as soon as the thunder died away. There was barely enough light to run it, but the plains were devoid of signal anyway. "We need to hurry back towards civilization so we can call her," he said.

"We need to think about the dark," Ava said. She got her animal to turn around and follow him with worrisome snorts from the nostrils all down its back and some all-too-vigorous bobbing. "We won't get a signal this week, but we have no way to find our way back but our tracks and we won't be able to see them till the companions are up and by then it starts getting cold. How do these creatures take to the dark?" she asked.

"I expected to be guarding the shuttlecraft this dark," he said. "I didn't plan for failure."

He urged his mount to speed. It grudgingly went a little faster and hers sped up to stay with it. It mystified her, what he thought

he could accomplish with this. These animals had been a day without water and almost no food. They were poorly trained things that were hard to direct from the get-go. A keda might have a mind of its own, but at least it had a mind. These animals reacted instinctively. They were at least a hundred and fifty miles from what she called the faintest approximation of civilization. It might as well be twenty five thousand B.C. out here. These things could not keep up this pace for the fifteen hours it would take to get back to that faint approximation of civilization.

As she thought about that, the animals only ran faster, getting into the alternate-pair gallop that native animals use to run fast for long distances. Their gait sounded like a pack of drunken gangsters on power-crutches, and rode about like that. With their long legs and bouncing stride, these things were the wind for a long distance. They couldn't talk to each other as they ran on into the darkness, she couldn't tell if Herndon had any control of his mount, she knew she had no control of hers and gave up trying. Instead she concentrated on staying on and tried to ride loose enough to keep her guts from getting whipped to foam. It looked like Herndon was doing the same.

It was at least an hour, but they might have covered a sixth of the distance back to habitation when her mount went down. One second it was thundering along chasing the sunset in the deepening darkness, the next it was accelerating at thirty-six feet per second per second from under her, its legs spread in all directions and at angles that looked pretty painful. She flew off, over its head, smacking her knee on the hard shell of its big middle eye and then tumbling thru yards of splintery brush before coming to rest. Her mount let out a magnificent bellow as it struggled to its feet in a cloud of flying gravel and bolted after its companion without her.

It was too dark to see how much skin she lost, their clattering claws on the dry gravel told her which way was west. She got herself upright. She didn't have a water skin on her, they were both tied to the saddle, along with her camp roll that held her warm clothing for the dark. It was forty two hours till daylight and the temperature would probably drop sixty degrees from its current

seventy one or so.

She was really scratched up. It was so dark she could barely see the tracks. She had on a short-sleeve worker, leggings and moccasins. In her pockets she had a local map of the west Gengee showing the wildernesses as a large blank zone with the word 'wilderness' sprawling over it. It was already too dark to see that, she'd seen it before. It would soon get too dark to walk any farther, her only chance then was to build a fire and keep it going till daylight. She might find some water before she died, if she could survive the cold of the gathering dark. She always wondered why the natives didn't capitalize Dark. The Dark. But as long as that was, forty hours of dark, the twilight was longer and she had another hour with enough light to stumble a little farther west to a brushy patch.

How did she feel about this adventure with the impulsive and maybe dangerous latin lover now? Right now Kulai was enjoying the fine marble of the stairway he strides down to meet some fine lady of the Yakhan's society. She would pillow his arm on her bosom and they would take a coach or a public or maybe even a canal float to some cultural event several elevator shafts above second canal. He would say no, he hadn't heard from Ava since she regretfully told him her mission would be extended and no doubt that lady would spend a fine Dusksleep on those glossy warm sheets getting teased senseless by some of the finest hands a female body has ever experienced.

What was she doing meanwhile? She wasn't even cowboy camping any more. She was confronting the reality that she would now undergo a test of survival that she could very well fail. Her return from Sinbara had convinced her that she was a city girl, what was she doing out in this desert at the onset of dark? Sinbara was an urban wonderland compared to this. Then she had another gruesome thought, even though this was nearly desert, there could very well be carnivores out here, and she didn't even have a dinner knife on her for self defense. But there was a nice camp knife that would fend off small vermin the size of a mindune in her pack tied to that saddle.

It was dark by now. Once she caught her breath she found

some tiny sticks more by feel than sight. She got out her lighter and got them going. She was really glad she had this lighter on her person and not in her pack or she was dead, just that simple. She put some small twigs on and soon had a few inches of flame springing up. She remembered Alan telling Glenelle how close to nature he felt when he lit a fire, that was when he began to hope that he could survive on this planet. By that token she should be more confident that she could survive on this planet, she'd owned a few properties during her meander to the north where one had to get a cook fire going with twigs for every hot meal. In this most affluent of cultures on this world, more than half the population cooks with the dead sticks that fall from the trees.

She was glad she had those decades in the rural part of this society. She was using all her control to keep herself from running in panic as it was, without some contact with real land, she wouldn't have been able to maintain her control now.

Once she got a blaze going that was large enough to see by, she thought she should find something to use to defend herself from small predators at least. A big enough stick to use as a club. Then she heard nervous claws on gravel that said she wouldn't have time. Whatever it was, her fire must have drawn it. Then it bellowed, the same noise her kargir made. That was followed by Herndon's voice. "We really don't have time for a campfire until we need it. Sorry it took me so long to get these beasts under control."

Her relief was blatant, "Herndon, oh good God, thank God it's you," she probably bleated these and a few more exclamations a few more times, maybe she did get a little hysterical for a second or few. Then she asked, "but do you have them under control?"

"It was probably the shuttlecraft that spooked them, once I urged mine to speed, they got carried away." He leaned over and let down the ladder for her.

She climbed back to the saddle, stroking and soothing the bobbing beastie the whole time. Yes, she was a city girl, and silently cursed Tdeshi's hormones for letting them lead her out here. This was not her idea of a fun way to spend the dusk, especially when she imagined the fine cups that would be going around at Kulai's duskmeal while they discussed the upcoming evening's

entertainment. Her entertainment was this smelly, skittish animal, and the sting of the wounds from the last time it bucked her off. That and the distinct impression they were going in a large circle.

"The stars," Herndon said, "I can see exactly where we are by the stars, we are heading due west. We are as far south as Brasilia was on Earth, but we have a different zodiac. I am familiar with the sky, even here."

"It's getting pretty cold," she said. "What time does the sky say it is?"

"It's probably Nightday by now, yeah, Cynd is already up." He looked behind them.

"I'm worried about these animals."

"They're warmer moving than watching us huddle by the fire."

"They should get close to the fire with us."

"They're afraid of it. I had a hard time getting them as close as we got to you."

"They're going to drop sometime."

"They got food and rest while we had Noonsleep."

"That ended twenty eight hours ago," she said.

"They evolved for forty hours of daylight."

She hadn't, not even in Tdeshi's body born on this planet. But then she remembered Tdeshi's vow to go a year, eighteen weeks, without sleep. The thought was astounding. She was having a hard time staying awake after twenty eight hours. They had been weeks in the boat driving around the week, but she had never been more than twenty hours without rest during those weeks.

They plodded on thru the weekly day of darkness. It was funny how much less you notice the dark of Nighday in the city. Out here it was only the stars. Cynd had already passed Kunae in the sky so Kunae was well up by now, the brightest star in the sky by far, brighter than Venus in the sky of Earth, a steady indicator light of Halloween orange. That was all the light there was, Kunae and Cynd combined were not much more light than the remaining stars. Narrulla set as darkness fell and wouldn't be back till the middle of Nightday.

She was so tired she had to concentrate on not falling off. She

thought of tying herself on, but was too tired to do it. She lay down on the animal's back. It wasn't comfortable, but she could stay there. She hoped Herndon was doing OK, he seemed to be. He had lost more sleep than she had on this adventure, but maybe he was used to it. Maybe he'd gotten some mods for it. Tdeshi hadn't, she was going to do it on amphetamines alone.

As the dark wore on, the animals wore out, and before Narrulla rose again they both sank to the ground and would not be budged. They had to make camp for the remainder of dark, but at least they had a bit of food and water. It took some time to build a fire, but as long as they stayed between it and the animals, they remained asleep. They took everything from the saddles just in case.

"Do you think those beasts will wake up and warn us if a predator comes around?"

"There's a few quanark out here," he said, "but I don't think they will approach the fire."

"No theirops?" she asked about the most feared predator on the planet, two thousand pounds of fang and claw that was smarter than her fifth grade teacher.

"All the theirops in the Gengee are across the lake."

"That's just about far enough," she said. It was two hundred miles of water and two hundred miles of land. Actually, she was probably closer to a theirops when sharing a cup with Alhart on the top of the pyramid in the Kassikan. There are said to be as many as twenty remaining in the Dromedian hills. He sat cross-legged, staring into the fire. "Are you ready to tell me what is going on yet?" she asked.

"I've told you more than I know, we are speculating, I agree with your ideas."

"You know about an incoming starship, and not the Heavenly Mother?"

"I've told you way too much," he said. "I should have just let you guess."

"So is it?"

"I've told you way too much..."

"You're looping."

"I'll stop." And that was all he said.

"So we have an asteroid coming toward us and an enemy starship, and Narrulla's Tear. You kidnaped me to have me call my sister up there to save your starship. How?"

He didn't say a thing, just kept tossing sticks he snapped off into the fire. He looked at her, she could read him as well as she could sixty Earth years ago when they had parted. She was right so far.

"It's not really the colonel you want to save your starship from is it?" she asked, "It's some other starship you fear. Surely you don't think you can tell the Kassikan about it and I wouldn't find out."

His jaw clenched as he snapped a branch off a dead quibreak limb. He snapped it into pieces without taking his eyes off the fire. She gave him plenty of time to answer.

So who was left to send starships? The Chinese space program fell apart after losing so many sleeperships on the Centorin run. Brasil had launched three bussards just before the war. No one ever knew what had come from the moon base Talstan had taken over from China. If the Brazilians know, they don't talk about it in bed. But then she really didn't know what info he had picked up since they split. There were messages coming in for decades after that. "It can't be the Heavenly Mother you're worried about," she told him, "I'm sure they're no threat to us, they're crippled." His ship had left Earth a few months before she went into crystal, she had seen the flare of its burner in the sky while she was still in flesh on Earth. He was far removed from the politics of the later system. "I'm sure you don't fear the new Brazilian ship either."

He twitched as he threw the next piece of twig in, then got up and gathered more dead branches from the area the fire illuminated. He put them down and dragged a big dead log over and pushed its end into the back of the fire. "We are like cowboys in the chaparral," he said.

"So where do you figure he's taken the shuttlecraft?" she asked, fishing for a subject he would speak on.

"To the Lula." He answered immediately.

"To save it from the Heavenly Mother?" she asked.

He began to snap up some of the larger sticks he brought over. He leaned them on the dead log.

"Could you and the Colonel be on the same side in this?" she asked.

"He is on the side of the people with him, the ones who submit to his sovereignty, not their own as the natives do. I am on the side of the natives, when you come right down to it. I don't believe we should consider the native society and way of life as expendable or even consider it to be in need of reform. These people have certainly found a different way of dealing with life's challenges, but I don't think we need to change it to make it like our own. All I want to do is preserve a few of the better traditions of our own."

She hadn't come with him even in that had she? When we are one in a billion, what chance do we have? She had just tried to gravitate towards the part of the local civilization that she liked the best. Wilderness camping is not one of the parts of the native experience that she liked the best. Coming home to Kulai's home after a Nightday as an observer at an art auction was where she would rather be. Kunae was well beyond halfway now, it was late in Nightday if it wasn't Dawnsleep. "What would we be doing at your place right now?" she asked him.

"Probably going to bed. We tried to get the kids to bed at least an hour before us, but we would be on the way to Dawnsleep right now."

"It's going to get cold this Dawnsleep."

"I'll stay up with the fire, you get some sleep."

"You should get some too." she said.

"After losing the shuttlecraft, you want me to just lay down and get some sleep? Like I said, I don't believe the containment was on that reactor, unless he found some way to get it there already."

"What can you do about it now?" she asked.

"Exactly," he said.

It was cold enough that she was glad to get her quilt and lay as best she could by the fire. He continued to throw sticks in while she got settled. "So lets be clear on this, the four tons was the shuttlecraft's containment, sounds like the shielding to the motor."

"Exactly, it would actually run without it, but saturate the

surrounding area with neutrons."

"You did mention that we're dead, somehow that wasn't as scary as getting pitched off that thing and left to fend for my bleeding self thru the dark. But anyway, somehow Venna was able to get the ticket to him in time, he got the containment, brought it out to the shuttlecraft and got it installed before we got there? Because I think you would agree, if the containment is off, whoever's flying that is dead too."

"They wouldn't know it for hours. For us it will be days." He continued to throw sticks in the fire. He didn't even look her way. "We need to know where he's gone," was all he said.

9. Guidance from Above

The sky was a blueish grey, bright purple in the east. Herndon had fallen asleep with his head on his pack, only a few minutes after her, she hoped. He was sound asleep and stayed that way as light grew across the land. It was frigid, but she had to go. She built the fire back up once she got back. He didn't stir. He had always been a heavy sleeper.

She took his device. Though she had been at the center of getting device manufacture going, she didn't actually carry one, but had a data terminal at the house. She had calculators in her head made by the Kassikan's genetics labs. His device was one of the new 3D ones with the seed pod with holes in it connected to a pair of spectacles by a piece of tough monofilament. She'd never actually used one of these before. It was dim, there was a setting for how transparent each lens was to the outside world, as well as its optical magnification. It was pretty transparent in this dim light, but she could get something on it. After dark they had moved far enough toward Gengee City that its towers could reach them now. The earpieces of the glasses had tiny in-ears hanging from them, she got them positioned so she could hear and requested a voice channel to her clone sister in heaven.

She was surprised that she was available. It was after breakfast in her world, still on a twenty four hour daily cycle, not twenty eight hours and thirteen minutes, more or less. "Hello, my sister in

flesh, what's new from the mudball?"

"I need some help," she said, "The shuttlecraft moved."

"Oh?" her sister answered.

"Where is it? Herndon thinks it's up there."

"No, it has not approached within twenty five thousand miles of here."

That was about as close as it approached while sitting on the ground a few miles from the equator. Standard space debris radar detects things out to there. "So where is it?" Ava asked.

"We are a third of the way around the planet from you right now, it will be twenty hours before we can get a look at your location. You seem to be in Gengee City, the closest tower to that point anyway."

"We saw it leave," Ava said, and told her what it was like from her point of view.

"I'll take a scan, the containment will be hot awhile, I might pick up something from a dirty old thing like they were flying." She was gone awhile. "I've got the instruments out."

"What if they ran it unshielded?" she asked with worry nowhere near as evident in her voice as it was in her mind.

"I'd have had a loud alarm if it ran for even a millisecond unshielded unless most of the planet was between us."

"It was just sunset here, two hundred and something miles east of Gengee City."

"About forty two hours ago, I'd have been right about here relative to the surface, but approaching noon, not eclipse. They couldn't have gone far without me seeing them, couldn't have orbited without an alarm. If they flew it hot, they're all dead by now and they won't fly it again. Those probes will take about eight hours to orbit, if that reactor ran naked, they will spot it as soon as they come over its horizon even now."

They chatted about other things after that. She had fulfilled her duty to Herndon, who was still asleep, giving them a chance to have a good talk. Her clone sister told her of her life. She had a backup of Glenelle up that Ava also got to talk to, and was thinking about bringing Morgan back also. She was spending a lot of time

and effort on the Heavenly Mother, trying to help them in as best she could and get a compatible environment up. They were not going to decel in time but would streak thru the 61 Cygni system just under a month from now. She was trying to help them plot a course that would give them the most gravitational assist from the 61 Cygni system.

"So how's the life with Kulai going?" her sister asked. She caught a note of the surf in the background and a single pang of homesickness struck her. It shouldn't, she'd had surf on the lake just a few weeks ago. But it wasn't Caribbean surf.

"I'm away from the palace on an adventure with Herndon right now."

"Ah yes, the dashing Brazilian cowboy systems engineer, I remember him. Remember when I was going to make a cherub of him and that made you so upset?"

"I'm sorry," she said. She remembered that. She hadn't been a native as long then, she hadn't adjusted to sharing her men, not even a copy. "As far as I'm concerned you can make a cherub of him any time."

"Have you gone back to him, or is this just an 'old times sake?" the sister in the sky asked.

She wondered if Herndon was only pretending to be asleep and listening in. He should be awake by now, it was fully light and Kortrax would coagulate out of the orange shimmer on the horizon any minute. Had she really made up her mind? Had her reason overcome Tdeshi's hormones? Was she sure she was going back? Yes. After this camping trip, she was. She didn't come back into flesh to volunteer to have that flesh subjected to all kinds of needless perils.

She was still all scratched up from landing in the brush, some of the wounds should have been treated with more than a few dribbles of water and the corner of a tee shirt. The animals made it thru the dark, one was chewing some of the smaller dead twigs. But what of her sister's question? "I think it's a bit of diversion while we were working together."

"You used to be pretty hung up on him," she consoled.

"That was sixty years ago," she said, Earth years.

"You might be leaving yourself open for heartache," said her sister in the sky.

"I've had enough of that for a good long time," Ava said. "A little variety from Kulai, a little adventure, enough of this. I've got to make my way back to the Yakhan, that could take me the best part of a year."

"Has it been that long since we talked last?" she asked.

"A year, more than that, other than those quick notes we sometimes exchange. Other than a common origin, we don't cross paths much. The only time I ever hear of you is on an upper floor of the Kassikan and I don't get up the pyramid often these days."

"The native men on the ground could easily have you distracted."

"How many native men of the ground have you met?" she asked her sister in heaven.

"Only the same ones we knew by helmet and the ones you swoon over. You're lucky I'm not a jealous sister," she said from the phone.

She didn't see what she could do about it, other than make another copy of her soul to have a few more of the native men without her. She still had the memories of the work it took to achieve reincarnation in flesh. One of the main reasons was to have a real lover and not just a cherub. Reminding her sister, who also carried those memories, of that plan and its intended result, was not a diplomatic thing to do right now. Of course she hadn't expected to be placed in a body like this. "I'm glad you're not a jealous sister, and be glad you aren't stuck in a body as driven by its glands as this one."

"Stop teasing," her sister in the sky said. "I think I would do the same thing as you," she continued. "I'd rather art and music than freezing in the desert dark hoping to find enough dry twigs to survive the night."

"I'm surprised you think just like me," she said and they both laughed.

"Who's that?" Herndon said, coming awake and waking up the Tdeshi side of her being.

"My sister..."

"The shuttlecraft!" he came bounding to her and snatched the phone from her head. He spun around and began to interrogate her angel sister. He turned his back toward her after his eyes told her he knew she knew that she already knew. "Good, good," he finished up. "Please do let us know as soon as you see anything." and he closed the phone and put it away.

"Hey," she said.

"What?" he was stretching and scratching his head.

"Was I done talking?" she asked.

"She's passing into the shadow pretty soon, she said she'll talk to you once they find the shuttlecraft."

10. Rethink

It was eight hours before she heard from her sister again. By that time they had reached Herndon's ranch. His men took the kargirs and tended them, more of his staff served lunch on a patio.

During lunch she met his current partner, a lithe, orchre-skinned Elf woman who was fascinated with his alien culture. After lunch Herndon paced, waiting for her sister's call, while she and Elond stayed at the patio table and chatted about social theory. "As you say, evolution of the meta creature," Elond said.

"There seem to be more examples of that in evolution on Earth, humans are not the only species to go well beyond simple herding in social structure. No doubt Herndon's told you about insects and the social insects."

"A little," Elond grimaced.

"In many of those species," Ava said, "individuals can express many variations in body form to adapt them to different social roles, just as cells specialize in a multicellular organism. Now we humans are starting to do that with technology when a dockworker takes something for muscles or I take something to do math calculations."

"I go along with that. It logically progresses that evolution is headed in that direction."

"But now evolution can go in the direction we want it to," Ava said. "If we decide to enhance the individual, as has been the

dominant theme on this planet for twenty centuries now, we will not evolve in that direction. Not all life on Earth evolves in that direction."

There was a whistle from the direction of Herndon's office. He had set up an audible alarm on any signal from Narrulla's Tear. He went charging in there, she and Elond followed. "It's your sister with a voice channel request," Herndon said and tried to acknowledge it. He had to menu his way, but got it open.

He gave her the headset however. "You found it?" she asked.

"We've had probes go over the whole surface now," her sister in heaven said, "and they don't see anything. It's been over fifty hours since it flew, that reactor's cooled enough that I'll never see it. One thing you can be sure of, that containment is on. I'll keep the probes out so as soon as they fire it up again, we'll know." She relayed that information to Herndon while her sister asked, "So how are you doing down there?"

"I'm fine, now that I'm out of that camping trip."

"And what's this adventure all about?"

"We're just running around chasing four tons of missing aluminum," Ava answered almost absently. "He thought it was the containment vessel from that shuttlecraft." She knew her sister was deeply involved with the Heavenly Mother, she wondered if it was politically possible to have a conversation with her about any hostile intentions on their part.

Herndon blustered and reached for the headset. The instinct let him use just enough force to get it off of her before making him get paralyzed. He smothered her sister's reply in his hands and glowered at her. "Do you have any room, anywhere in your cold mathematical brain, for the notion of confidentiality? I want you to speak with your sister to get her assistance, not to use her to spread our darkest disasters to the corners of the universe. I bared my soul to you because of what we used to be, and now you blab it over the phone. Do NOT give anything away to anyone."

She never got to ask her sister about her feel for any possible hostile intentions by the Heavenly Mother. She stood and stared at him at least a second. She was tired of his secrecy, did he think the

ghosts told her nothing? The vision crossed her mind of yelling to her sister that Herndon had gone berserk and the Instinct might not protect her. She wouldn't be that spiteful, but she was getting out of this. She would talk further with her sister when Herndon wasn't around.

Herndon used the device to speak directly to her sister, "We need you to keep an eye on them. Please put a geosynchronous above the point where they used to be, it's vitally important."

"Herndon; I've had a geosynchronous out there since 2267, its still operational," Ava in heaven said, "I have all the probes that can pick up its signature in close orbit, no point on the surface will be out of sight for much more than an hour at a time. I can watch for it as soon as it lights, but those probes won't see the inert craft. I'll keep you updated."

The voice connection terminated. "Get her back on," he said.

She was about to shout 'how dare you' but then remembered she was a half mile deep into his property. She tried to be as non confrontational as she could until she got out of here. "I can't get her to do anything. She's so caught up in getting the Heavenly Mother in that she doesn't like to be interrupted."

"This is important." Herndon wanted to bellow but he could see she was trying to contain herself and tried to make an attempt also.

"Not to her," she said, "she has all the metal she wants. She could have consumed your starship already or used it to house her machinery."

"We have sensors..."

"Herndon; you have a signal. There are N different ways to produce that signal and she is capable of using any method at her disposal to produce that signal. You helped me get that Study going at the Kassikan. She is the master at that, I only have her memories of it, she is living it and advancing it even now."

"Yes, I understand, but that's why you are here."

"Hostage to my sister's cooperation?" she said.

"I need her cooperation."

"Herndon, you're obsessed. There's an asteroid coming that's going to leave a crater the size of Lake Entisonggas somewhere on

what may be the only planet we humans have left, and you're still chasing around after that damned shuttlecraft. What difference does it make? Do you plan to use that shuttlecraft and that rusty old starship to escape?"

"Maybe the Colonel does." He lowered his voice back to a reasonable level. "You have to trust me on this. There are just some things I am sworn as a countryman to keep to myself. If you should guess, and say it, out loud, all is lost. If you should guess and whisper it to a close friend on a street in the Yakhan before the impact, all is lost."

Herndon was trying to say something with an eye, but she didn't understand. "Fine, you can't tell me what's up, I'll find my way north. May I use your eye to message Kulai?"

"Yes, sure, but what about noonmeal?"

"I'd like to take it on the docks waiting for a fast ship. That lunch was filling. I'm sure you can find a keda I can borrow, one who can find his own way home."

"I'm sure I can find a child to ride with you," Herndon said, but please, have noonmeal, stay the sleep.

"And have you NOT tell me what's going on, all that time? Guess again." She was on her way to collect her duffle. There were some toiletries in the bathroom, her other jersey and all the camping gear out in the courtyard. "You save the camping gear we picked up," she said, "I hardly ever use it at the inns where I travel."

"Ava wait. Ava, I need you."

"All you can provide me with as a reason is as a hostage to insure my sister's cooperation. I'm tired of that game. You can have her watch that shuttlecraft joyride all around this planet for a decade and a half and you'll probably be no closer to it than you are now."

"I've told you so much already, but I'll tell you this, it's about a LOT more than that."

"What?" Ava asked.

He couldn't answer, he dodged, "Don't be angry, I'm not coercing you." He turned to Elond, "am I?"

"You're trying to talk her into it without letting me know what

your plan is. You are afraid it will get back to the Pataios brothers."

"Elond," he whined.

"I don't blame her for leaving," Elond said, "and I don't blame you for being afraid of them. Whether they or the Colonel have the shuttlecraft makes no difference to your plans." She clearly knew what Herndon's plan was, she was clearly telling Ava that she knew it and clearly telling Herndon that she was not divulging what it was. Her arms were folded as she still lingered at the table, she frowned and slowly shook her soft blond curls, "And I don't think those ghosts can help you."

"They could," he said.

Ava left them and went back to his office, Herndon and Elond continued that heated discussion. She mentally thanked Elond for distracting him and sat down at his keyboard. None of it was in Portuguese, that was helpful. In fact it was a standard public model found in many eye rooms with sessioning disabled. She keyed in the to and from and a message to Kulai.

– Hi,

After all these weeks, I'm finally finished with my escapade on Herndon's fast boat. I have been away on this boondoggle too long already, you could be excused for thinking I've deserted you. I miss you, and I miss our life. I am starting my return to you immediately. I hope I am still welcome.

I am deep in the Gengee however, so I regret it is going to be some time before I can get back there. Herndon thinks I should stay here, so he's not going to run me back up to the Kassikan in his missile. Without that, it will be nearly a year till I can reach you.

I hope you have been happy while I've been away and I hope you continue to live well while I work my way home. I'm really sorry I went off like this, especially coming down here. I should have escaped when I was at Azhergok, when I couldn't make up my mind to continue helping him or not.

Love,

Ava –

She felt really stupid about that now, and like a real heel. She wondered how many tries it was going to take before she learned her lesson regarding testosterone guys. She should stop trying to blame Tdeshi's hormones and take control of the body Tdeshi left her. She hurried to get her last message off his lens as Herndon came into the room. "I trust you can spare me a mount?" Ava asked again.

"I don't have one saddled trained I can loan you," he said, "They respond only to my handler."

"And will I have to let him handle me to get his co-operation?" she asked. That was probably one native custom he had not worked out of his employees. While they talked she had found the Gengee City waterfront schedule.

"No, I will send you in a carriage." He got up and went to the call string back in the front room. A bell rang across the court.

"Ah," she said when he came back into the room. "Can he get me to dock 281 by the ebb?" The StarSkater was leaving the docks on the tide of early Afternoonday and, with favorable weather, that could get her back to the city as fast as any airship, probably only four weeks if it didn't make too many stops. The skaters were overgrown lake runners, a little dangerous, but making fifteen knots in a fair wind on open water. They were not as dangerous as flying by any means, and one hundredth the cost.

"Easily," he said, "but I think you're being foolish and selfish. I should refuse to aide you, I should make you walk out."

"You could be excused, doing it to the person who left you to wake up in Dromedia," she replied. "We all make mistakes but sending me off in your coach is not one of them. My sister is just as likely to talk to you as me and just as likely to help you whether or not you hold me hostage. Her interest is going to be more on that asteroid than on that shuttlecraft, and that comes in second in her attention to the crippled Christial starship she's trying to talk in."

"You are a lot closer to her than I am."

"Only because you back off from her."

"What is that supposed to mean?" he asked with heat, but noticed a girl halfway across the courtyard. "We need Yarbeem and the coach to take miss Ava to dock 281," Herndon called to her.

She made the 'I'm on it' sign and turned toward the barn.

The carriage was around by the time she had everything ready, He had a very pretty keda the color of a chipmunk with five dark manes and spotted stripes down his back. The two hour ride to the Gengee waterfront was uneventful except for a huge tie-up as they approached a bridge on the road leading into the city.

"Don't worry my lady, I know a way around," Yarbeem said and turned into a winding side street that the coach barely fit into. He took a very long way around, it seemed like he went miles into the plots and back, but she had all of late Morningday for a pleasant ride thru pretty small-holds until they came up a side street that crossed the dockway, right onto dock 281. She had her ticket in time for a bit of late noonmeal far above the dock.

The Starskater was as comfortable as it was fast. It was a big liner, longer than the Brothers Formidable and with better appointed but tighter cabins decorated in a 52nd century theme and hung with great reproductions of some classic photographs from that era. She had to share a cabin to afford passage to the next port, but the man she picked was more of Kulai's build than Herndon's or Jorma's. More testosterone was not what she needed right now.

They would not depart till Afternoonday wake-up, that would be plenty of time for her business. She drew a copper against her royalties at a financial house, had a nice late Noonmeal with her cabin mate on one of Gengee City's most stylish towers, then gave up some of Noonsleep to visit an eye room and see if Kulai got her message already. He had, and he replied.

– My dear,

I don't understand why you would even ask, you are welcome and eagerly awaited. Maybe I have taken you for granted the last few weeks you were here? Maybe I forgot to tell you how honored I am any time you could grace me with your presence? You are welcome in my home and in my bed at your pleasure, as I hoped you understood by now. This home is as much yours as mine in all things but to sell, as I hoped you understood by now.

Please return my dear, with all comfortable haste. There are

several of the Brother's line on the Gengee arm I see. In what I can look up here it looks like the Brothers Graven will be docking in Gengee city this Lmonteira. You don't need to try and make the Starskater, though if you do, this says she was refitted in the second decade and Ebmiytn's in command, his reputation is good and he's been plying the lake since it was still rising.

I will probably continue to let Renaal stay with me till your return. Don't worry, she knows it's temporary, it has never been any more than temporary between us. She can have the small suite once you return. You know how she is with her finances so she's going to take some time getting a place of her own again. I'd rather put her up than loan her the money, we both know we'll never see that again. She's entertaining enough in your absence that I don't have to go out socializing and it costs less for both of us to eat and drink at home than for me to go out alone.

Have a safe journey,
You are first in my love,
Kulai –

'How dreadfully Kassidorian of you,' she thought, but then realized how dreadfully Earthian she had been to him. She had run off with the guy who looked more like what her old culture called 'manly' hadn't she? Against her better judgement, every step of the way. The real strength was waiting patiently for her return wasn't it? As well as letting her know that he would be fine until then, and letting her know that her position with him was secure, though it was filled by a temp till then.

She sure could be a heel. She typed a reply.

– Hello my love,

I'm glad you will be there for my return. I'm sorry I left you for such a boondoggle. He only wanted to hold me hostage to guarantee my sister's cooperation. I'm so fortunate that you will be there for my return. I'm on the Starskater, we leave for Amersahm in about five hours and a half, we have two more stops besides the tunnel. Each is just a tide. It's not costing that much more, but they serve half as many meals on the skater line because of the speed. I

bet they pay more for their loaders though, the shoulders on those guys gave Tdeshi's hormones a stir.

Love,
Ava –

That last sentence was to make up for Renaal, she couldn't be Kassidorian enough to totally let that go. There was also a message from her sister.

– Sis,

That man is such an ass. He's still keeping up his masquerade isn't he? It's been an Earth year now, surely he would know we've been in touch in that time? I'm glad you're away from him, I wouldn't even want his cherub now.

A few bits of news for you that we didn't get to earlier. I'm really worried about this asteroid. Each new fix on it shows it more homed in on this planet. I think it stands above a one percent chance today. Don't think I'll watch the damage safe and sound, the probable number of fragments that destroy this station is 6.661, my odds of survival are less than yours. We've already tried, there's nothing we can do about it from up here.

But the good news is, even though the Heavenly Mother is coming thru at almost exactly the same time, we have a solution that allows them to miss the asteroid and the planet and the debris that will be knocked up by the impact. They are passing close enough to the planet to use its gravity, so they will have an excellent opportunity to witness a major impact on a terrestrial planet.

-Your sister in heaven –

She was trying to find a bright side to the end of the world. What did she think? A one percent chance still isn't really bad odds. She could think about it if she kept reminding herself that it's a ninety nine percent chance they would be all right. It's just a what-if?

How ironic however, she was nearly three times as old as anyone on Earth was the day she was born, but she was young for a

native. Most natives were older than America. Yet here they were on the eternal world and it was all about to end. It was to end violently, by a rogue asteroid, just after the mother world had been destroyed by war. What would she have to get together in the time she had left, if that was all she had left?

She decided against bringing up Herndon's/her suspicion of the Heavenly Mother. All she might do is cause unnecessary hard feelings between her sister and herself.

– Sis,

Sometime before that time comes, I will get back to the Yakhan and the Kassikan. I know Alhart at least as well as you do, I know I can get some helmet time from him. I want to visit you 'in person' again. I want to stroll that beach again. I wish we could hear from our other sister who went back to Sol. I wonder if she survived whatever happened there?

But with that said, we need to remember, there's a ninety nine percent chance that it's going to miss us. Even if it does, I want to hit up Alhart to let me really visit with you again.

I'm going to be out of touch for awhile, but I'll message you before I get to a helmet for sure. It might be only a few weeks until I'm in the city, or I might have something else I need to do first, but I will see you before the time comes.

Sincerely,

-Your sister in flesh –

She already had passage on the Starskater, but she worried about this asteroid and what Herndon knew about that. She had to decide now, did she go back to Kulai to spend the remaining time they had together with someone she truly enjoyed, or did she follow a hunch and try and get to the bottom of whatever Herndon and the Heavenly Mother were up to? In the time she had left before sailing, there were some of his people in this city that she wanted to talk to.

Book III.

Ava's Mission

1. doostEr's Haulage

doostEr reluctantly came up from Noonsleep into Afternoonday. Kortrax was peeking in the west window, making it hot on that side of the bed. The other side was taken, he'd forgotten Talshi had come over for Noonsleep. At least he didn't have a run today.

From the toilet compartment he could see that the kedas were getting hungry. They were each going to need a bale of longleaf today unless he took them to a pasture. The nearest was over a mile and a half on a public workroad and he didn't want to be tied up there.

Talshi was his favorite girl, warm to sleep with but a little slim for cargo work and he knew he couldn't talk her into taking his kedas to pasture. Her smooth creamy skin was little darker than her wavy blond tangles. Her look was like something from the far south got mixed in with her Mountain Elf ancestry. She lived in one of the houses grown into the trees on the street side of his yard. There was a plentiful supply of girls in those trees and he could almost go out in the yard and yell 'anybody horny?' when it was time for bed. Her recent habit of sneaking into bed with him while he slept could be a little unnerving but she was so cute and sunny that he didn't mind and hadn't started locking his door for Noonsleep.

doostEr was as burly as his equipment, a big-boned Troll/Enurate/Nordic mutt with a wide nose and thick wavy hair and beard of speckled bronze and ebony. He had a thick scattering of brown freckles over his ruddy skin, what you could see of it thru the whiskers. He was too tall and too wide for most doorways. He had come up from the south himself so he had seen plenty of Enurates.

As soon as he returned, she turned and stretched. They had already kicked the noon sheet off. He kissed each nipple as she

turned to him. "Mmm, think you could make me a boner after I get out of the bathroom?"

"How about after breakfast?"

"Naa, I don't want to wait that long. How about another after breakfast?"

"Was I awake when you came in?"

"You mumbled some form of welcome and rolled toward me but fell asleep again."

doostEr tried to remember how long he and Talshi had been friends, ages, decades, many of them. "Have we known each other for a whole century yet?" he asked.

"I didn't move up here till that ghost ship attacked Zhindu."

"The 55,40's sometime, I think," DoostEr said as she went off to the bathroom. Two third's of a century at least. It seemed that they were both too popular to live together and to be honest doostEr needed a sleep every couple weeks where he just slept without company, and Dusksleeps he needed to socialize. But he had to admit, while many women he knew were as pleasant to go to sleep with, few were as pleasant to wake up with as Talshi.

They had very pleasant union. She was slow and intimate with her love, but strong enough to enjoy without worry of hurting her. He could talk with her about anything and her business advice gave him perspective at times. She would engage in her most serious conversations while kneeling over him joined.

It was humid for early summer so after breakfast she didn't get dressed to walk across his yard to the back stairs of her apartment tree. Talshi was an avid beach girl and always ready to show her pretty body to any who would admire her. A tall man with long dark-blond braids watched her with interest. doostEr saw her smile at him and he smiled back, no doubt tempted to follow her, but refrained. After watching her climb the stairs, the guy went to looking around his yard, looking closely at the rockasaur. Since this looked like potential customer behavior, he let the kedas wait a little longer and went down the two floors of his barn to the yard.

The Rockasaur had wheels on it eight feet in diameter at this time, with a convertible frame slung low to the ground between

them, hanging from a great backbone arching above. It was something that could be maneuvered into place around something and used to jack it up because the backbone was covered in tackle hooks. It could be adjusted to carry something of arbitrary shape.

"doostEr," he introduced himself and they pressed palms. This man's hands looked quite dainty in doosEr's. "Got something heavy you need moved?"

"Tahlmute," he said, "and yeah, a four ton cylinder twenty feet long and four to six feet thick."

"This is just the thing, the Rockasaur. What is this thing anyway?"

"Even I don't know that. The crate is not to be opened, there's a ceramic security layer inside that must be broken to open it. It is not to be broken when delivered."

"Where is it now?"

"A warehouse on the docks."

"Do I get an address?" doostEr asked, knowing he was starting to sound suspicious already.

"I'll lead you there when we're about to leave."

"So you want me to transport stolen property?" He folded his massive arms in front of Tahlmute's face. Tahlmute was only half a foot shorter, but his body was as thick as doosEr's neck.

"Let us say that the ownership of the item is in dispute," Tahlmute said carefully. "But let us also say the rewards could be well worth the risk." He reached into his pouch and held up a single pearly white bead. "This is our budget for this project."

doostEr's head bobbed at that one. The Instinct tingled his arms when the thought crossed his mind that he could easily snatch it. "Now I can be sure it's stolen," was what he said. If he was ever going to deal with stolen things, that bead would be enormous temptation. Still, he would not be involved in such a thing and turned to go to the kedas.

"The Brazilians are involved," Tahlmute said, "That's why money is no object."

That stopped him. doostEr knew of the immigrants from a far-away star, had even met and done business with a couple of them. They had way more money than sense and a bunch of crazy

notions, but other than that, they were just big guys who liked to play with motors. They did squabble among themselves so it was not easy for someone outside their clique to tell who was in the right. "Are we stealing from one Brazilian for another?" he asked.

"I don't know, I'm being paid by a lady of the Kassikan to deliver a cargo of considerable size and weight from one point to another with its security container unharmed. Ideally the crate should be unopened."

"It still sounds suspicious to me," doostEr said.

"Does this look suspicious?" he asked, and held out the little silver-grey bead only a tenth of an inch in diameter a little closer in front of his face.

"I think that looks very suspicious," doostEr said about the aluminum bead. "I have a financier I'll take it to, but I'll listen some more for that."

"You and I and everyone involved gets paid from that bead, but you could easily earn half of it."

He thought this over, "What's the Kassikan got to do with it?"

"The woman who hired me is a High Sorceress there. She's been north awhile and now she's with a shipping investor. I must say, it doesn't sound like you've ever handled confidential cargo before," Tahlmute said with a bit of peeve. "You have the right vehicle for this task, but you don't seem to have the right frame of mind. There are many reasons cargo may be confidential and because it is stolen is not the most common. The most common reason cargo is confidential is because there are trade secrets in the device being transported."

"Oh, well in that case," doostEr said, letting the lure of aluminum override any misgivings he might have of the cargo's pedigree as long as there was a straw to grasp. "I heard there were squabbles going on between them."

"Between the Brazilians?" Tahlmute asked.

"A guy named KerNell or something like that. He tried to steal the starship is what I heard."

"What I'm after can't be that. The 'starship' that came down in the Yakhan, you could roll this thing onto the freight elevator that comes down out of its cargo bay, and that isn't really the starship.

The starship is Narrulla's Tear."

"Yeah, I've heard that one before," he said, didn't believe it then or now, but wasn't going to bother getting into an argument about that with a potential customer. "But anyway, we pick it up at a warehouse on the docks, where's it gotta go?"

"Two hundred and fifty miles into the cerrado," Tahlmute told him.

2. Secret Cargo

They agreed to load and go the next week. It would be weeks getting there and some would be in the wilds, so why camp an extra dark? He hadn't discussed it with anyone, he just said he had a long distance job moving a big pump part far into the cerrado. Tahlmute thought that was an excellent cover and thanked him. Tahlmute asked him not to bring anyone so he didn't, though Estwig must have found someone warm to sleep with because he rarely missed getting the rockasaur rigged. doostEr piled on the supplies and camping gear, then felt he should at least leave him a note.

He hoped there was a strong and intelligent warehouse-man where they were going. Estwig was smart and could take direction, but he was still thirteen to twenty years short of three and hadn't reached his full bulk yet. Not that he'd be a big muscle man, being an Elf boy. Still, he was always a help if he was around, but it was probably good to get this done without his knowledge, just in case there was something shady going on.

He was worried that he hadn't discussed this trip with anyone, not even Talshi. He was ashamed wasn't he? He had never knowingly transported stolen goods before and he wasn't about to admit it. His rationalizations of 'ownership in dispute' and 'it's the Brazilians' were trying to say he wasn't going to admit it to himself weren't they? All for the lure of aluminum. He hoped nothing bad would come of the ill-won wealth.

Estwig was a boy who lived in a spare room on ground level in his place. He'd come up here stray when he was just about two and a half decades in age. He was a healthy and well raised kid all

in all, and doostEr knew his mother surely missed him. She must be a girl a lot like Talshi. He was obviously a runaway but he wouldn't tell doostEr anything he could verify and doostEr didn't really pry. He let the kid have some food and some space and a place to sleep, but wouldn't treat him too good or he'd think running away wasn't so bad.

He'd been around quite a few years by now, at least thirteen, and doostEr was giving him an iron a week for stable work and hardly feeding him more than once or twice a week any more. Estwig had used some of one of those irons to buy them both lunch off a cook a couple times. He'll be an adult soon and probably a worthy one but he still had a little kid in him yet that might need a little advice or tolerance now and then. doostEr really didn't feel like he was taking care of him any more, instead he was coming to rely on his help and was worried he might miss it on this trip.

His main worry in this was really how Estwig would take to the deal. He wasn't his kid, being almost pure Elf, and he really owed him nothing, but doostEr knew the boy looked up to him and knew he'd never had a steady father in the house. He certainly couldn't tell Estwig he was transporting what might be stolen goods because he got a peek at aluminum, even if it was one Brazilian stealing from another.

doostEr hadn't really signed up for this responsibility with Estwig, in fact the boy did crimp his style at times, but he couldn't help feeling the responsibility. The kid was really a good boy, a bit of mischief now and then and horny since his gonads started up a few years ago. At least women were a subject he could teach the kid about. That, hauling cargo and getting along with kedas.

He was going to have to think of something however because he'd heard the noise and popped out of his door. "Got something happening? I got time to help with that."

"You're buzzed," doostEr told him.

"Not too," he said. "You're taking the rockasaur out?"

"Yeah, Mr. Tahlmute here has a big plumbing fitting of some kind in a security container he needs delivered."

"Confidentially," Tahlmute said.

"That's why I can't tell you the destination," doostEr said.

"Sure, that's OK. I'll harness them up," he said.

"Stableboy?" Tahlmute asked.

"He'll be my stable man in a few years, if he wants the job." He lowered his voice, "He's not quite grown yet but he's getting close. It's more that than getting him trained." He returned to normal voice, "He can do a stableman's work but for a few of the heaviest things..."

"Us Elves never get ready for the heaviest things..." Tahlmute said, "that's why we invent machines."

"I'm sure you can tote a bale. He could now, but he still drags them."

"I can drag two," Estwig said, loud enough to participate in their conversation, "and that's more productive." He was getting the big harness down. That had to be dragged, it was too long. His keda by the name of BobbingTwo saw the harness coming out and strolled over toward it with his eyes dancing on their stalks.

"That's the Elven way," Tahlmute said quietly, then, "smart kid," so he could hear.

"Yeah," doostEr agreed. Estwig was making enough noise dragging the far end of the big harness out in the direction of the Rockasaur that he could hardly hear a shout at that point anyway.

While he was dragging it, Tahlmute turned toward him and said quietly, "Please don't say anything more about this in front of or to the boy, or any other of your employees. Confidentiality is an important point."

"I can't get this vehicle and those kedas out there by myself."

"I will be along," Tahlmute said.

"I'll be bringing someone of mine, or you can keep your aluminum. You tell me I have to go alone out there and this might just start to sound too shady for me." He wondered how much of that pronouncement was due to the fact that Estwig was moving to this end of the harness and could be listening.

"You don't seem to understand," Tahlmute said. "This cargo is valuable, if criminals learn that it is being transported, there is a very good chance that it might become stolen cargo, unless you can defend it from bandits?"

"They can't hurt us," Estwig said. The other two kedas had

ambled to their places by now and he was starting to strap EndsWaving up. doostEr picked up the wagon end of the harness and dragged it to the rockasaur's tongue.

"They can hurt your kedas," Tahlmute said, "no instinct prevents that."

"The keda's do."

"Their starship had several firearms aboard," Tahlmute said, "or so I've been told."

"What's a firearm?" he asked. The image that came to doostEr's mind was a trio of guys walking out on stage with their arms on fire. It would certainly be some kind of trick with hidden wicks and special fuel, but he'd seen people spit fire so he figured there would be some way to perform that circus stunt also.

"You haven't kept up on current events," Tahlmute said. "There was a starship from YingolNeerie, a world called Brasil. You must have heard of it?"

"And? Like that tells us what's a firearm?" Estwig yelled, he was finishing the first keda already.

"A weapon from the energy age, with it they can shoot a keda dead from a hundred yards away."

"Sounds like a Sword and Sorcerer tale," doostEr said.

Tahlmute looked him straight in the eye and said, "If your scoffing costs you a keda or two, don't say you weren't warned."

"Those starships can be nasty," Estwig said.

"I'll not risk my kedas," doostEr said.

"Then don't talk about this mission," Tahlmute said.

He swallowed hard. "You keep your mouth shut too," he told Estwig.

He had a triple hitch today, BigThree, EndsWaving and BobbingTwo, all the kedas who over-filled the tiny pasture behind his place. They were hooked together with a four-strap double-cross at the shoulders since there wouldn't be room for a long-rope in the city. There was a wide bench on the front of the rockasaur and he and Tahlmute had plenty of room to stretch out. Estwig hadn't pestered too badly to come with them, he must still have a bit of yaag or a girl nearby. This bench was high enough to clear

the truck mount so it was almost like riding a tower thru the streets with these wheels on. Quite often they were level with second floor porches. The Rockasaur's trucks have an eight foot wheelbase, so most streets are one way when it's abroad.

Tahlmute lead them to the south side, doostEr said he wasn't as familiar with this end of the docks. There was a big stockyard down here and the smell of lentosaur dung was pretty strong. Many people walking here were dusty. They were stopped by a herd crossing the way from a big cattleboat. It must have been a triple decker from the endless swarm of karga that were herded across.

While they waited, Tahlmute showed doostEr the map he was carrying. It was just a simplified diagram of the neighborhood cargo streets. None of the plankways were shown. Everything was labeled with tiny blockish symbols, but even so he could see immediately that Taktor's was where they were going. He noticed that the map was an eye-copy of an old handwritten scrap of paper, more evidence that there was plenty of money involved in this deal. doostEr always went the back way to Taktor's, it was longer but a lot less crowded. Since the back way wasn't right in the band of city, it wasn't shown on this map. He needed to consult the map to find his way in from the front, the dock side of Taktor's yard and found that was all left blank. He had to ask around and everyone told him to start at the river end of Industrial Way after looking at the size of his rig.

There were teams hustling thru here and the rockasaur with three kedas isn't a low-footprint rig. Its ends are stable, each a four-wheel truck pinned to the bottom of the backbone. That's twelve feet above the ground at the top of its arch, maybe more with these wheels on. The truck's angle is linked by fiber cables running along the top of the backbone so both trucks turn the same amount in opposite directions.

As they went further along South Harbor Road, he worried that the cargo level wouldn't be tall enough to take the backbone of this rig. In places down here this tunnel floor was wet, meaning that they had descended to a floor below dock level. doostEr thought about surveying the situation before bringing the rockosaur out and if he knew he was going this far south along the city front he

probably would have. Of course if he'd known he was going to Taktor's he'd have taken his usual route.

Tahlmute had left the Yakhan less than a year ago, so they talked of that on the way. Things were still slow up there because the boom in Yingolian crystals had been so short lived, only twenty decades. Board rates were down, taking temp housing with it and there was little fortune to be made in anything the last few decades. The arts were doing well and a few investors were trying to get a mini boom going in video entertainment using Yingolian devices.

doostEr was suspicious that Tahlmute was coloring this with his own fortunes, the Yingolian crystals bubble burst ten decades ago. He welcomed Tahlmute to Gengee City where Brazilian money was still keeping things looking up. He had to have the kedas slow way down till he was sure they were going to get under one stone arch where they went under a canal. He wished he had known where they were going before they left so he could have taken the back way. He should have complained about that but instead asked what had prompted him to leave the Yakhan.

"The message from the woman at the Kassikan," he said. When doostEr looked at him like he was expecting more he said, "Hoping to hear there's something looking up somewhere," and that was all he would say.

Taktor owned a whole yard full of small sheds, most of them with a tree full of cheap rents grown above each end and a web of rope bridges linking them to keep the residents of those trees out of the cargo aisles. His front wall was only two blocks back of the docks and his yard was deep enough that there were plots only a few blocks further on. They had to watch traffic down here, his cargo did a lot of trading and the wagons hustled thru here.

Taktor's yards were drawn way out-of-scale on the map with the location of the cargo noted. The shed marked on the map didn't seem to be reachable from the aisles. Tahlmute figured out where it should be and tried to find a way to get thru to it from one of the other sheds. He finally found a door, but it was closed and locked and there was someone sitting near it.

"Ah, we find it at last," Tahlmute said, as much for the man at

the desk as doostEr. "I'm here to claim a crate that I believe is stored in that area," he said to the guy sitting there, bringing out a piece of paper.

"You've got something in secure?" he asked in return.

"A large cylindrical crate, twenty feet long and over four feet in diameter with a plaster cast inside it," Tahlmute said and handed him the receipt.

"This receipt is a copy," the guy said.

"And that's not sufficient?"

"We can make exceptions, but we like to have the original. We told you that when this was checked in. If it's a copy, we have to get a password." He pointed to that line on the ticket.

"I wasn't the one who checked it in. I'm a hired hand. You know, get the crate, arrange shipping, like that."

While they discussed, doostEr was looking around and saw that getting the rockasaur into here would be a rigging job in itself.

"We really like to see the certificate we gave you when we took it in, especially if it's secure," the doorman said. "Because it's secure, we also need the password it was stored under and that is NOT on the certificate. Your employer should have told you about this."

"It's the Brazilians," Tahlmute said.

"Ah," he said, ready to cut a lot more slack. "I still need the password before I release the parcel."

"OK, I'll go get it, but this man is my rigger, can he get in to take his measurements?"

"Once you get the password and I verify it. Normally I wouldn't give you a second chance but because you do look like a hired hand in a snafu, I'll make an exception and let you come back tomorrow."

Tahlmute agreed to pay doostEr for his wasted time, and promised he would get this straightened out. He was apologetic enough and gave out enough iron that doostEr remained calm. Meanwhile doostEr had to figure a way to get this wagon turned around in here. They had to go all the way around the back of the next barn where there was a big lump that made the kedas chuff

even with the rockasaur empty. If he did this again he'd have to put BigThree in the middle to get enough side-thrust to pass on any help from BobbingTwo. Once they got back on the main avenue Tahlmute asked that he drop him at the nearest eye-room and doostEr took the back way home without further incident. After a week passed and doostEr had not heard from Tahlmute, he figured that he probably was trying to steal the cargo and had given up the game when his original ruse failed.

3. Sizing up the Mission

It was Morningday two weeks later, sunny and dry, but a bit frosty. He brought three bales out and split one. The conclave came forward to dine and to have their chins scratched. BigThree would take a mouthful and then raise his chin to doostEr, for a quick scratch. doostEr was sitting on a comfortable rock after he fed them, still in his tattered old night fur. BobbingTwo would stay with him the longest and wave his eyes at him like he was a keda. doostEr did learn a few words in their language but not enough to have any idea what this animal was telling him. Whatever it was he talked about, he talked about it at length and wanted his chin scratched two or three times during the lecture. One advantage to talking with their eyes is they can talk when their mouth is raised and full.

He was still at this when he saw someone coming down the steps from the back door. It was Tahlmute. "I have the password," he announced from way back there.

doostEr pulled his head in. He didn't want his neighbors to know he was involved in a business that needed codes and passwords. He dealt in hooks and ropes and wheels, getting bulky objects from here to there. All his money had sweat on it until now. The money Tahlmute paid already had nervous sweat on it. He wondered how Tahlmute was going to get around the 'tomorrow' restriction.

Tahlmute walked down the path to this small field. It was bottom land, very humid and lush in the early sun. Half the frost was turning to dew, the other to vapors in the orange rays. The

kedas had mud on their claws but the ribbonleaves grew like a fad down here. Tahlmute sat beside him on the rock. "I see it's feeding time."

"Yeah, I've got way too much beast for this little field."

"Do they get bored here?" Tahlmute asked.

"It's hard telling, I don't understand the philosophical details of their language. I know they like going out."

"Good, I want to get there before they change their minds about letting me have it."

doostEr leaned into him and lowered his voice, "It's just us here now, we can talk private. Now I have to tell you, I'm worried. I really have to know something more about this cargo."

Tahlmute sighed. "I have to admit, I really don't know. I've been hired by a woman I know. She's a Yingolian woman who's a member of the Kassikan. All she's doing is sending me maps and instructions by eye. I know she's a High Sorceress at the Kassikan."

"Do you normally deal in stolen goods?"

"Hell no!" Tahlmute almost shouted.

doostEr ignored the attitude and asked, "How did you get mixed up in this?"

"She owes me a favor, a real one. I took a big fall for her."

"What are we mixed up in?" doostEr asked, "some romantic tangle maybe?"

"No. Getting this big crate out of hock and down into the cerrado."

"How are the Brazilians involved?"

"It's theirs. The one who died signed it in."

"Then how is the Kassikan involved?" doostEr asked.

"The woman who contacted me is with the Kassikan, but she is also with the Brazilians, she and one of them are the founders of the Study of Photovoltaics, 'yingolian crystals' as they are commonly known. She must be working for one of them."

"How do you know that?"

"The money," Tahlmute answered, "and at two coppers a day and four irons per ton mile, you'll be earning more than I would think a normal businessman would pay. I'll tell you something, I've worked for the Kassikan before and they don't pay any more than

anyone else."

"I know several men in this city who could sneeze at that," doostEr told him about those rates. "I have delivered lock fittings bigger than this but that was at competitive wages. I've rigged cradles on ships and truss work to get it there. Four tons and twenty feet doesn't scare me. It's not really very heavy for its size, it couldn't be a treasure chest, all metals are much heavier than that, it's lighter than a section of tree trunk that size and I've moved them with the rockosaur."

"I have no idea what's in the crate, I'm charged with delivering it unopened."

"That's fine, you said laboratory equipment was the main thing they put in ceramic shells. I can guess why they keep that stuff secret. Anyone running a lab certainly wouldn't want to call attention to themselves."

"Anything that size will call attention."

"That's why we call it lock fittings," doostEr said. He was very eager to believe it had legitimate reasons to be secret and not simply that it was stolen. It could be stolen lab equipment. He knew the Brazilians had settled out into the chaparral, but twelve to fifty miles, not two hundred and fifty. One thing it could be is the Brazilian's stealing some lab gear from the Kassikan with this woman from the Kassikan as an accomplice, "But I figure it's really lab equipment. I haven't mentioned this to anyone and I won't."

"Thank you," Tahlmute said.

"But that doesn't mean I am satisfied," he replied. "I have people I feel responsible for, I have a merchants committee membership. It seems to me there is the chance the Brazilians are using their money to steal from the Kassikan."

"Ava would not do that."

"Who's Ava?" doostEr asked.

"The Sorceress from the Kassikan."

"But you said she is Yingolian, so one of the Brazilians?"

"She's from the other starship," Tahlmute said.

"The ghost ship?"

"This is all confidential," Tahlmute said. "She's possessive of her privacy..."

"But you're working for a ghost?" doostEr pressed him on this. He would keep quiet about Narrulla's Tear and believed starships might be possible, but not that they attacked. He did not believe in ghosts, poltergeists, zombies or any of that and wasn't about to.

"No,..." he trailed off, something had occurred to him.

doostEr let him mull a couple seconds. "You're not sure," he finally had to ask. That's what he figured Tahlmute was going thru, realizing he had been receiving messages from a ghost.

"No, that's not what's stopping me, it's looking ahead to where this questioning will lead. Let me wrap it up by just telling you, up front, all I'm going to say about a very personal matter. I have been romantically involved with Ava. I would rather keep any more details private. She owes me for a couple large favors, the details of which I would also prefer to keep private. There are some aspects of her past that she would also prefer were kept private."

"That's a lot of secrecy for something like this. What I'm hearing now is some Brazilian cargo being stolen by the Kassikan."

"Then we would be delivering it to a dock," Tahlmute said, "and not into the center of a wasteland."

He wondered about that. The Kassikan did not have a floater large enough to lift that crate, he was sure of that.

"Let's go over the ownership history of this cargo once again. You said it was put into storage by the Brazilian who died."

"You saw the check-in slip," Tahlmute said.

Yeah, it had a Yingolian signature. "So who owns it now?"

Tahlmute sighed. "I told you at the very outset that the ownership is in dispute. He never wrote out any deathwishes, his closest friend has fled into the cerrado, I think Ava may want us to deliver it to him. There are other groups among the Brazilians who want it, more because they are vying to succeed him in some custom they have called 'governor,' that I don't understand very well. He functions as some kind of spokesman for their ethnic group or something like that. Some of the Brazilians want to retain their identity as an ethnic group. I'm not privy to a lot of it and I've lost touch with most of them. It's been almost fourteen decades. Ava knows more than I do. I just helped them blend into the population. It is my belief from personal relationships with the

people involved that we are conveying this crate to the most likely rightful owner."

"So how is the Kassikan involved?"

"Ava is involved."

"Why is she involved," doostEr asked.

"For personal reasons," Tahlmute answered, "that I respect her enough to keep private."

"Was she 'romantically involved' with one of them also," doostEr asked.

"I respect her privacy," Tahlmute repeated.

"I bet this 'Ava' might be fun to meet," doostEr said.

"Not like you're thinking," Tahlmute replied.

doostEr paused awhile, watching the kedas. BigThree came for a chin-scratch. He wasn't such a sucker for it, but seemed to think he was just being polite to stop by once a day for a quick one. EndsWaving wanted his done, very thoroughly, once a week near dusk.

"I hope to be well on our way by the dark," Tahlmute said.

He heard someone else coming, it had to be Estwig. He looked at Tahlmute who was getting up. "I'll think about your offer," he said. "I'll do some thinking and ask around a little. I'll let you know first thing tomorrow. Stop by as early as you like."

He saw it was Estwig approaching, Tahlmute lowered his voice, "There is need of haste."

"Are you sure they're going to let it out five days later? Anyway, you don't need me to sign it out. I'll be diligent at getting my side of this done today. I'll talk to you bright and early tomorrow."

Tahlmute fumed, but as Estwig was just saying 'Hi,' he held his tongue. "Very well, tomorrow it is. I'll get my end of this done today and meet you early tomorrow." He controlled himself well enough that he didn't quite stomp off.

"Wasn't that the guy from the boondoggle?" Estwig asked as soon as Tahlmute was around the corner.

"Yeah, I didn't think we'd ever see him again."

"What's he want this time?" Estwig asked.

"The same thing, he claims he's legit and has the password. He

says we'd be transporting the goods to its rightful owner. He admitted there's some inheritance dispute and that the item is Brazilian. That form was signed in Brazilian, so I believe that much."

"So why'd you send him off? Are we busy today?"

"I'm going to be," doostEr said.

"What are we doing?"

"I'm going down to an eye-room and seeing if I can find out anything about what's going on."

"All day?"

"He paid me well the last time, in spite of the waste of time." He wasn't about to tell Estwig that he had showed aluminum, at least until he was sure of Brazilian involvement.

Before the starship age, one paid copper to get into the only eye room in the city and he had been in there only twice in all those centuries. Now he laid down an iron and spent a good part of the day in one every year or two. It was often an interesting source of information.

First he looked up Ava. She was indeed an important person at the Kassikan. Tall and elegant like Galadriel but with shiny dark hair and a daintier nose and sharper eyes. From her picture, not a woman men refuse. She was the founder of a Study and on the central committee of another. With some digging in some financial back doors he knew thru the merchant's committee, he was able to find that she drew royalties on 'photovoltaic devices' which meant Yingolian crystals. He looked up who else had royalties and found a few Brazilians and a few of the Kassikan's own. He could not find an amount for Ava, so it couldn't be enough to get a detective interested, that would mean it was likely less than a dozen coppers a year. It probably wasn't her aluminum Tahlmute was waving. It was probably the romantic involvement that was motivating Tahlmute, and doosEr knew she should consider that.

He looked up the Brazilians. Most of what he found was a magazine, and all of every issue could be brought to this eye. The magazine was like a club newsletter. They were quite diligent at making children and giving their children a lot of attention. It was a

very small circulation magazine, but with a fancy press. He wondered if a press that could print this magazine on paper could fit in that crate. A machine like that was worth an aluminum or two and might weigh four tons.

The Brazilians had no need to steal, they could buy everything they wanted with any scrap piece of dinnerware from their ship. All their dinnerware, both flats and sharps, was made from alloys. He knew that from a previous trip to an eye room. There was an entry that said in addition to the dozens of irons and nickels melting out of a piece of Brazilian dinnerware, there would be one or two chromiums or a vanadium, sometimes even a titanium or even tungsten.

The most interesting thing in the newsletter from his perspective were the articles and letters about 'Ernesto's Legacy' and especially, his possessions. It was a circus in a saucepan because there were so few of them that everyone with something to say posted their note in this magazine. He had to do a lot of reading to understand, but there were some 'extremists' among them that want to close off their society from the outside world. They were amassing a large contiguous plot of land about twenty miles into the chaparral. There was another faction who felt that it was acceptable to do daily business with the locals but retain their own culture with no more 'political boundary' than land ownership, and a third group who wanted to remain in voluntary association like the core of any other ethnic group, but not be required to join one contiguous territory. They lived in the city, he'd done rigging at their workshop.

There was no mention of a missing large crate, nor other accusations of thievery of anything of enormous worth, but if they were a people who once made dinnerware from metal, what if they made something else mundane like plumbing fixtures for example, from metal? Of course that wouldn't take up that crate. Then a real big hole opened up in his gut. Speaking of plumbing fixtures, what about his guess that it was some lock fittings? He remembered how queasy Tahlmute's chuckle over that had been. What if they made things like THAT from metal?

He was convinced that if anyone had stolen anything, it would

be mentioned in that magazine. But then he realized something else. If this cargo was stolen, Tahlmute could be telling the truth when he says it is not stolen. But it may be that it is not stolen yet, but is about to be stolen as soon as Tahlmute gets it out of that yard.

He looked up Tahlmute next. There were dozens of them and he had to go thru pictures, but he found the right one. It was some old advertising for personal consulting services. He found some old gossip rag entries that should have come up on Ava's search also since they linked her with him. That told him something, Ava's trail on the eyes had been blurred. That meant there was more about her that he hadn't seen.

Again using the addresses he learned via the merchant's council, he found a judgement posted against Tahlmute by the Kassikan just a couple years ago. His permission to vend was denied and his accounts were declared payable. His shunning was for 'participating in the synthesis and distribution of shonggot.' There had been an overdose on a batch Tahlmute made, some girl from up north who had only been identified recently. His shunning was by the Kassikan, it wasn't a council decision, so it was not unethical for doostEr to do business with him, but this was reason for caution.

He didn't know what shonggot was so he had to look that up and found more information than he had on any subject so far. It was a drug. There were studies of its history, its meta-molecular structures, its effects, famous cases, famous users who survived. Neither Ava nor Tahlmute were listed under the drug. He learned that an overdose was a very real danger and that it erased the brain, leaving the body a vegetable till it died.

There was no doubt this indicated that Tahlmute had been involved in questionable dealings in the past. The substance certainly wasn't something he would sell, or even try, now that he had seen that article. The stuff did have some positive qualities when used properly, and it was noted that the one OD in twenty thousand doses was the safest use of shonggot to date, they still thought the drug was too dangerous to be used and would not deal with people who made it.

But Tahlmute had been involved with that drug twenty decades in the past, and he had positive accomplishments since. The principal one was teaching the Brazilians how to live without being celebrities and escape from the Kassikan. He was listed as a subcontractor on many other Kassikan projects including security and surveillance. That and the way he'd appraised Talshi made doostEr wonder if he might have been a bait runner.

He looked up ghosts and the ghost ship. He found that there were now reported to be two electric ghosts haunting Narrulla's tear. One of them was named Ava, and that's not a really popular name. There was mention of rescuing one from Narrulla's tear, but did not say who that was. It did say that at last count there were three hundred seventy one claimants. The Ava that Tahlmute talked of was not listed as one of them, though quite a few were of the same general look. He could also understand why Tahlmute wanted this kept quiet. He didn't see what it had to do with the cargo, other than Tahlmute cannot be considered confirmation that the deal was good.

He looked up Taktor on the eye. There was just his commercial registry listing and his property ownership listing. The print on those pages was really fine but his name had the yellow circle. He was listed as a member in good standing of the Gengee City Merchant's Association. Their membership list appeared, his name was surrounded by a bright yellow circle. That was all the information known about Taktor by the eye.

doostEr knew Taktor better than any of these notes about him on the eye. He had sat with him at merchant's association block meetings. He worked with him with freight and knew him as a noble man, though often a liability when there were ladies involved. Taktor could be fooled, he was sometimes too honest to understand the forms dishonesty could take. Taktor would assume Tahlmute's claim was valid because doostEr was there to haul for him. It was up to doostEr to verify the fairness of this deal.

He briefly toyed with the idea of convening a council meeting but knew how contentious that could be if aluminum was flashing in the area. Instead he went back to the Brazilians. They were quick with their aluminum. He looked thru old gossip for the Brazilians.

They were all celebrities for the first few years, so there was over an hour of it to go thru, but there was one who stood out to his eye because he was linked with Ava, links that were not accessed when searching with her name.

There was quite a spectacle in some media about the 'gents from the stars' courting in the Yakhan in those days. He hadn't caught on down here, since that was decades before the first Brazilian moved here. The Ava that courted them wasn't listed as Yingolian, he noticed that. She was listed as born in the town of Sinbara, a year north of the Yakhan, in 55,42,43. doostEr figured her for a Yingolian wannabe. He was sure this was the same Ava.

That same Brazilian now lived twenty seven miles from the city almost directly on their route. He was listed as a landowner of a two thousand acre husbandry preserve just north of the main enclave of Brazilians. doostEr pondered the idea that this Ava, who deleted herself from search engines, could be aiding her old lover in stealing the cargo from its rightful owner who was deeper in the chaparral? It could be that Ava was arranging to have the cargo hijacked as it went by? He was suspicious of that Sorceress because of the deletions from his searches.

He went back thru the magazine with an eye toward Herndon. He was of the moderate faction of the Brazilians, he would preserve what he could of their heritage as any other ethnic group would. He supported rights of individual ownership and fair interaction with people of other ethnic groups. He was neither here nor there on the boundary issue, so long as he didn't have to move.

The ethnic groups in the Gengee were always Elf and Troll, and doostEr was familiar with the legends from the times when the lines between them were drawn in blood and blade. There was a prehistoric time when the Gengee had been purely Troll and the Trolls had been peaceful fishermen on its shore where the onion groves survived the winter on islands in the lagoons.

Today those lagoons are miles into the desert, but even now the Gengee is not quite the same as the Highlands and a lot of that was the presence of a significant population of Trolls. Business could still be conducted verbally in the Gengee City Merchant's Association, both he and Taktor conducted verbal business. He

knew the councils in the Yakhan only discussed deals recorded on documents with signatures and thumbprints.

He knew the Kassikan was important on the merchant's council of the Yakhan and the All Highlands Commercial Council. The Kassikan seldom sent a representative to the Annual Meeting of the council here in Gengee City. He'd never spoken with the observer on the times when one showed up. Most of the businessmen on the council looked more Elf than Troll, but most of them were mixed. For all the Troll might of arms, the telling factor over time had been the tiny babies produced by Elven woman so that almost all mothers survived, instead of the average Troll woman's chance in those days, dying in her fourth or fifth childbirth. That, and the much more productive Elven agriculture allowed them to over-run the Trolls by weight of numbers even before modern times began.

There was a lot less attention paid to ethnicity in modern times. You almost had to sign on to a tribe to care about it. The Brazilians outside of town could be considered a tribe. If he moved the crate for them, from one faction to another, that could be considered interference in tribal affairs. The council in Gengee City frowned on that

He wondered if he should go to the council with this question? That would certainly expose everything of Tahlmute's past and doing that would likely lose him the job. Because he still wanted this job, he had to convince himself that there was still some chance it was a legitimate job. Both Ava and Tahlmute were tainted, he had to rationalize around that didn't he?

Talshi and her friend Wootondi brought a grate and a campfire into his yard for noonmeal. They had a haunch of karga and a big bag of panips that they grilled up. They sliced the panips with strips of karga over them. The panip slices were reduced to chips by the time the karga was ready. The smell drew Estwig from his lair.

"So, is he legit?" he asked about Tahlmute.

"He probably is," doostEr said, having completed the rationalizations by now. "He's got some personal issues he doesn't want public. It's more love related than thievery related."

"Ah-ha," Wootondi said. "So what's the job?"

"If I take the job, it is confidential," doostEr said, "and since I think it there may be legitimate reasons for confidentiality, I would like to take the job. The pay is so good, that's what made me suspicious."

"So you won't say what it is?"

"It's moving a big crate, that much is public," doostEr said.

"I know where," Estwig said.

"So?" Wootondi asked.

"Maybe as pillow talk," he said, teasingly. "When my head is pillowed on your breast, post coitus. And I would just like to add that I am available this very Noonsleep."

"doostEr's been teaching you more than the freight business, youngster," Wootondi laughed.

doostEr looked at Estwig, "I would like you to consider that confidentiality, when promised, is a great business advantage. It is a hard reputation to build, an easy one to squander. I've worked on that reputation far longer than Wootondi has known us."

"Yeah, he has, he's not going to tell me any of it," Talshi said.

"Or me?" Estwig asked.

"When you proclaim you'll divulge confidential client information just to get your dick wet?"

Estwig did blush at that. "I won't pass on a single word."

"That's not how trust works. There is no future tense to 'trust'. Trust comes from a long experience of keeping confidential information confidential. Keeping something confidential is pretending there is no such knowledge. We should not be discussing this job outside the business."

"It's your yard," Wootondi said, "and we've each done packing for you."

"It's safer if we don't discuss it. It could become a target for thieves if we do, that's why it's confidential. Anyone in any one of these trees could overhear and say something in the presence of the wrong person. It's heavy cargo and I'll be gone a few weeks, that's all we need to know."

"When are you leaving?" Wootondi asked.

"Please," he whined.

"I'm sorry, what else were we talking about?" she asked, then remembered and was embarrassed as she went back to the pan. "So are the panip crisps ready yet?" she asked while tending them.

That allowed her to change the subject, she gave up grilling him for fear of doostEr talking of her fetish for virgins in front of Estwig. Estwig was about ten years beyond that now, but then Wootondi had been living in these trees for just about eleven years wasn't it? That would explain why Estwig was often so frank with her. Then he wondered how often they had been together? He worried a little about that because he wanted Estwig to be wary of Wootondi. She was a loose party babe, basically honest, intellectually simple and fundamentally self-centered. If used as a casual friend and sex partner without coming to depend on her, she was fine, but for an impressionable youngster, she might be too callous with his heart.

He wanted to get in early for Noonsleep because he had told Tahlmute to come as early in Afternoonday as he wanted. He might be here as soon as an astronomer could detect that Kortax had passed zenith. Talshi came up with him and rocked him to sleep.

When he woke up for Afternoonday, Talshi had already gone. She had probably gotten up as soon as he was asleep and gone back to the party. He saw that they had stayed late in the yard, he didn't expect Estwig up soon and when he did get up, he'd probably be coming down out of the second tree over from the end on the front of his yard.

He grabbed three bales. Being the size he was, carrying two by the twist in his right hand and one in his left was just a little wakeup exercise. He was down here early. BigThree had accustomed himself to a little Noonsleep nap of his own while the other two used the time to strip their pasture. He usually made up for that in the way he sucked up the bales but his schedule kept him napping until the other two had almost cleaned up the first bale. When he did wake up, he chuffed and yelled 'gimme' with his big middle eye.

doostEr put the second bale on his side and popped it open, he tore into it. Because of that Tahlmute was well down the path

before he noticed his approach. "Greetings," he called. It appeared that the big keda was happy now.

"Greetings, I see I'm not too early."

"Nope, I'm up and fed and working on the chores."

"You're an early riser."

"Sometimes," he said, "not usually on Nighday, but Afternoonday I can be."

"I'm not usually up this early myself, but I did want to get an early start."

"You do?" doostEr asked.

"Yes, so what is your decision?" Tahlmute asked.

"I think I believe enough of what you're saying. I saw enough about you and Ava to make a guess as to what you want to remain private, but I have already forgotten what it was. If I'm worried about anything at this point, it's interference in tribal affairs among the Brazilians."

"They have never registered as a tribe with the Kassidor Economic Union," Tahlmute said. "I think they should, but they haven't."

He didn't say anything more on that. They hadn't declared themselves a tribe to the Gengee City Merchants Association either, but a few of them were members in good standing because of their businesses. He confided a suspicion to Tahlmute. "You seem to think you are bringing it to the rightful owner in the chaparral. The woman called Ava is directing you. Do you know that you pass right by the husbandry preserve owned by another former lover of hers?"

"Yes." He stared at doostEr, but continued, "I was already Ava's lover when I helped him purchase that property."

"Did you consider that he might attempt to steal it as it goes by?"

"Not Herndon. He probably has the second biggest claim to being the rightful owner, but I don't think he will attempt to steal it, but he is one reason I wanted to keep this quiet. I want to keep it quiet from all the Brazilians, especially those in the enclave," Tahlmute said.

"Ava could be setting it up for him."

"They did not part on the best of terms. All thru the time I spent with Ava she kicked him around as arrogant and selfish. She called him a stuffed shirt, of being all style and no substance. I could never see her helping him again. She was only with him because he was from Earth."

"Thank you for that analysis. I will keep your confidence, and hers."

"You don't have to worry about her, she's almost a year away in the Yakhan," Tahlmute said.

"A pity," doostEr said, remembering the picture.

Tahlmute went on, "I do thank you for promising confidentiality and implore you to keep that promise."

"I will keep it confidential." BobbingTwo had come over for a scratch and an eye-wave. His eye stalks should have bulged with muscle with all the exercise they got. He had a big clotted goober stuck in his fuzz that doostEr finally took out with his knife. The fuzz would grow back soon enough.

"How long will their breakfast continue?" Tahlmue asked about the kedas.

"Oh another hour, I only had it out a few minutes before you got here. I haven't opened the third bale yet."

"We'll get a late start."

"Honestly," DoostEr said, "I would advise getting it out of hock today, letting me look it over and measure it up, then spend Nightday rigging it and press out with the dawn. If you can wait two weeks to get a password good until tomorrow, we don't need as much haste as you thought. These kedas don't do Nightday unless they perceive it as their emergency, so if we start now it'll just mean another dark rough, unless you want to put us in an inn? If we start right now and nothing goes wrong, we couldn't get more than ten or fifteen miles before the dark so we should still be able to find someplace comfortable along the way."

Tahlmute sighed, "In spite of the urgency I'll take your advice and start next week, but can we go down there now?"

"Let me bust open this bale," doostEr said and set his knife to the twist. He fluffed it out a little so they could spoon it up better. Keda's eat mainly with their spoon-like lower teeth. There was

really too much out at once now so they would crush a lot of the lower leaves, but it could get him out of here an hour sooner.

Tahlmute stood up and preceded him back up toward the house, but went between the house roots and across his marshaling yard while doostEr stopped at the shop under the roots for his measure and level. He could catch up with Tahlmute. They both knew the way now. Telbule alley wasn't busy at the moment, getting into mid before-lunch. A team and buckboard of Marstin's Leathers went by with a day-man doostEr didn't know. He caught up with Tahlmute at Waterfront Place where they caught a streetcar for the south docks. It was a such a crowded streetcar that they had to take opposite sides. He was pressed close to a cute little dark girl with a billow of curls who questioned him at length about the life of someone his size. It was a twenty minute ride halfway down the city and he got so absorbed in her that Tahlmute elbowed him on the shoulder when he jumped, but doostEr still finished his sentence before he dismounted and then walked back to Tahlmute.

"You get her address?" he asked.

"Thirty four, twenty one, thirty three," doostEr answered, not breaking stride as he entered the alley they had to follow off the south end of the docks. A very noticeable point of a thirty four.

Tahlmute fell in beside him. The alley was wide but busy with cargo wagons, they had to stay alert and dodge. The kedas won't trample or run over you, but they will flip you to the side with their snout and you may knock down the pile of empty crates outside some warehouse door and pick up some nice dark bruises. When they had come down here on the rockasaur, these wagons dodged them, now it was turned around. They couldn't converse till they got back to the sandy open street that Taktor fronted.

"So you must have done work for the Brazilians before?" Tahlmute asked.

"They've hired the whole city it seems, directly or indirectly."

"As long as the garden's still produce, we'll eat."

"But yeah," doostEr said, "I moved some big timbers for one of them about eight miles out and a windwheel assembly for another who's at least twenty five miles out."

"I only know one Brazilian who's gone much farther than that into the chaparral."

"Who was that?" doostEr asked.

"Waldeis," Tahlmute answered and looked at him like that was supposed to mean something.

"Was he the one with that disease?" doostEr guessed. He was the only one to make much news lately. One had died and one had escaped. It was lucky that disease was not very contagious, but there was a scare thruout the city for awhile and it turned out quite a few had been infected. doostEr worried that the city fathers had convinced the local news outlets to only say that he had run into the wilds so people would stop worrying.

"Exactly." Tahlmute paused, "What about the one with the fabrication shop? Ever do anything for him?"

"OK, at least I know who you're talking about now." He was one in the Association. The work doostEr did for him was a rigging job mainly, installing a big machine shipped down from the Yakhan. "I don't remember his name but didn't he build the fastest boat in the world? Of course it takes longer to get anywhere with it because you have to stop for fuel so often," he chuckled. "They took the pump from a waterpark."

Tahlmute whistled.

"Yeah," doostEr said, "the thing's totally sick but it does go fast. I saw a picture of the boat but that was long after the job I did for him. He paid good, but in copper, not aluminum."

"But you have to admit, you were brushing me off until you saw that."

Yeah, doostEr admitted to himself, but he'd be a lot less nervous and just as interested in the job if he'd showed him ten coppers. For ten coppers he'd do the job, he'd be polite and respectful and a lot less suspicious. There was something about aluminum. Somewhere he had read that the aluminum is the denomination most likely to be mistrusted. Only sixty eight percent of aluminums change hands without being tested, seventy nine percent of the aluminum that changes hands is shipped between financial institutions in sealed and indexed plastic pouches.

They arrived at Taktor's gate. It was a lot longer walking to the back shed where secure cargo was kept than it was riding on the second floor of a monster wagon. There was a different guy at the door they needed to pass. Tahlmute's certificates and incantations performed correctly this week and they were admitted to the storage facility after quite a lengthy process of looking up records and cross checking thieves files. Tahlmute had to deny this was a job for the Kassikan. The container was down some long skinny aisles. He could never get the rockasaur into any of them. "We'll have to take an aisle out over here to get it out of there on a dolly," their guide waved his arm at a pile of crates at least twelve feet high. "We'll have to take this stuff off the top of it also." Crates, boxes and piles were stacked at least eight feet high on top of the crate he pointed to. The crate was a swollen collection of planks, but framed out with good heavy timbers and fitted with lifting eyes that could have held a long suspension bridge. "Don't worry, we'll do it. Once the second decade went by with this, we figured it was here for long term storage."

"When was this signed in?" doostEr asked.

They had finally reached the crate itself. It looked like Tahlmute didn't want to say even that, but the house man rubbed thick dust off the packing tag. "Kyebenwae of 100,02,42, so going on fifteen decades ago."

"Do you have a dolly that'll take this?" doostEr asked. "I can't get my carrier in here so I'll have to bring a dolly if you don't."

"We will bring the crate to a convenient pick-up point for your transport."

"How about, all the way out of the secure area."

"Most just go to one of our pick-up docks..."

"That crate..." DoostEr interrupted.

"No, you're right, that's not standard cargo. That can't go off the paved floor as far as our equipment is concerned. We can get it to the secure area floor, can you get into there?" he pointed to the area beyond the aisles just inside the gate.

"We'll have to tackle the wagon back in here. I need twelve feet of height. I'll need help," he said to Tahlmute.

"I'll help," Tahlmute said. Even if they had gotten in here

when they tried the first time, they wouldn't have gotten out that day. He had been under the mistaken impression Tahlmute had the crate ready to load and go, not back in dead storage under a dozen decades build-up.

"My guys can pull tackle also," the warehouseman said, "you won't need to bring extra crew unless you need them for your rig."

"That's good," Tahlmute said.

"You're going to need to take the door track off," doostEr said, "I can't get under that. I'm not even sure about the roof carry over there." He pointed at the big trunk that came down at a sharper angle than the others. Apartments with child space were probably in the tree above there.

doostEr took some measurements of the opening and the crate. He was thinking of changing to the wider six foot wheels, the roof was just over eleven feet, he couldn't get in here with the eights. The crate was not going to be bad, it was low enough that he could put the wider wheels on, that would be better in the soft ground they would encounter far from civilization. It would take half of Nightday to get them changed however. "I won't be over here till nearly lunch," doostEr said, if he could get a keda up.

"Don't hurry. I'll get signs up for hands with this right away..." he was pointing toward the stuff stored in front of it. That meant they would bring in temporary people to clear the stuff out of the way. It might not be done tomorrow.

Tahlmute reached into his pouch, "Here, offer good rates," he said and handed over copper. "And post a few signs around the neighborhood."

"Thank you, thank you very much." the guy was beaming. "We'll offer very good rates." His attitude noticeably changed. "I couldn't even tell you were Brazilian."

"I'm not," Tahlmute said. "I'm as Highland Elf as I appear, only the money is Brazilian. It is like you said, we all work for them sooner or later."

"Exactly."

doostEr was really done here, hoped that Tahlmute didn't get into a long discussion of ethnicity with him, though as far as this

ethnic stereotype went, all the Brazilians he ever met were extremely wealthy. As it was, Tahlmute almost cut in front of him when he saw doostEr heading for the door. "Tomorrow, about lunch time," Tahlmute clasped firmly with him and took his leave, doostEr did likewise.

"So, you have plans for the evening?" Tahlmute asked as they hiked toward the main avenue and the streetcar line.

"Yeah, there's a pretty good comedy at Atko's playhouse. A woman I know is in it."

"Atko's playhouse is what?"

"A theater, plays and such, not music shows although there's music with some of the plays. You never heard of Atko's?"

"I just got into town. I'm from the Yakhan."

"That's right," doostEr had forgotten that. "No, you'd never hear of Atko's up there. Think of it as a mini CoopenSpace." doostEr had read magazines from the Yakhan, but had never been north of here in person.

"Ah," Tahlmute said. "So you follow the stage?"

"Just some of the girls on it. I never knew she was sort-of famous when I met her, she found that refreshing."

"And now you've gone and spoiled it by learning something about it?"

"Just the local scene. I wouldn't be able to converse with her if I didn't. They throw some great parties but I'll have to skip the one this sleep if we're going to get the wheels changed and your crate loaded tomorrow."

"I didn't mean to interfere in your social life."

"Do you follow the theater?" doostEr asked him.

"Just some of the woman off the stage," Tahlmute answered.

They laughed. "So come along tonight. It's a ten penny ticket and yellow's two cents inside but I bring a skin of green in a nightcoat, I don't wear the coat, I just have that skin in the sleeve, I say the coat's for later."

"You can't bring stuff in?" Tahlmute asked.

"They're trying to make more on the yaag and beer and not have everyone get as wasted as at music shows," doostEr told him.

"I can probably get you into Jostern after the show if you like a woman who's a bit skinny with a burst of dark curls. You'll see her, she plays the table girl in the second skit. You'll probably like her. She's a little bubbly but not as silly as in the skit."

"That's very kind of you, does she owe you?"

"Nah, not at all," doostEr said, "it's just that she'll be turned on and want someone after the show and she likes tall blonds with deep chins, quiet guys and anything to do with the Yakhan."

"Sounds like a more interesting evening than I had planned," Tahlmute said. doostEr knew he would learn a lot more about him this evening that he did on the eyes the day before.

4. The Great Crate at Taktor's

He had all of Nightday to rig the crate for transportation, so he didn't try to get up early. He had left Talshi a note in case she came over, but that was not disturbed when he got back for Nightday. Over the last forty decades they'd developed the habit of Dusksleep as the one they do something and someone else. First he changed the wheels on the rockasaur because wider wheels put more surface on the soil than the huge but narrow wheels of the rough ground rig. The wider wheels are smaller, only six feet in diameter instead of eight, leaving the backbone a foot closer to the ground. The crate really wasn't over four feet except at the very center, where it was five and a half feet high. But that's OK because the backbone is curved, he can still get the crate four feet off the ground with the six foot wheels. It was a lot of greasy work getting them changed though. He moved in the back axles on each truck also because the smaller wheels didn't need the overlap. It would have taken a lot longer without the adjustable lift pulleys he had hanging in his shop. He used two complete floors of his structure for his work barn in doing it, but now that it was grown, it was well worth it and gave his residential space a loftier view.

He spent an hour selecting the right timbers to block in the crate exactly. He needed the load balanced front and rear and no closer to the ground than it had to be. He picked the right staging axes to bring, to use on a strap of smaller timbers that he hung from

a little adapter pulley off the backbone. They would be camping a good part of the journey. doostEr had some canvas he could put over the end of the backbone and tongue to give them a little shelter. He dragged that out and strapped it aboard once again.

Now the real problem with doing this work during Nightday is the kedas. BobbingTwo was the only one he stood any chance of getting up. He came up reluctantly. Once he saw what doostEr wanted to move, BobbingTwo went and got BigThree up. He only got his fourth eye up at first and it waved a series of polite negations before getting the middle eye up, the one that was like a thonga in that it was bigger than the others. No doubt the other kedas kidded him for it and said his egg mother was a thonga. BigThree was a big bruising ten however and kedas did not have the Instinct, so they probably didn't tease him about it a lot. BobbingTwo was clearly working on BigThree, prodding him with his snout and waving and coiling his eyes like flowers in a windstorm. BigThree bobbed his now and then, but only eyes three and four were up for quite awhile.

Eventually the other three eyes reluctantly cinched open, blinked once or twice and looked around. Shoulder by shoulder, BigThree chuffed to his feet. He curled and thumped a bit, then prodded BobbingTwo with his snout and pushed him toward the harness. They would not need EndsWaving for the empty rockasaur and did not try in vain to disturb his sleep. Molten lava was one of the few things he could think of that would get EndsWaving up during dark.

Estwig came by to help with the harnessing. He knew all the stable and shop jobs around the place and was getting pretty good with the harness so he rarely got a tongue pointed at his work any more. doostEr had been giving him an extra ten or two with his iron on weeks when he did something extra. "I'm going to need you to come down and bring these guys back and unharness 'em," DoostEr said. "I can give you a ten for it here and now."

"Do you think those kedas'll do what I tell 'em?"

"Maybe not, but they'll do what I tell them and I'll be telling them to get you home safe."

"They can understand that?"

"The key to understanding kedas is remembering that they think this is their civilization and we are their servants handling the light work and the details."

Estwig laughed. "Yeah, right."

"Laugh if you want, but before the starships came, scientists used to think kedas invented humans in a lab to be their servants."

Estwig laughed louder. He was only a bit over two and a half decades even now. For the last forty decades scientists agreed that life of humanoid evolution had been transported here from a planet at a star called YingoNeerie and Estwig had never heard otherwise. It was not a very famous star till then, doostEr had never heard of it before. Forty decades later he has customers from there.

They had the whole train rigged when Tahlmute finally dragged himself into his yard. "You didn't go right home," doostEr observed.

"No, we went to her place, it's two quick streetcars from here. The sex was fine but she babbled half the sleep about some guy that should have been filming. I gave her a couple shots of lantern fuel and that only made it worse."

"Jostern is fun but not the perfect bedmate for sleep," doostEr said, "especially after a performance. Are you going back for Dawnsleep?"

"I hope not, but I was buzzed, I might have told her where I'm staying."

"You never told me."

"It's a suite above the front stairs into Thurbur's Stampede. It faces inland but I can see some horizon."

"Fancy," doostEr said. Thurber's Stampede was where the beautiful and wealthy of Gengee City went to meet and mingle. The music was pretty highbrow for doostEr's taste and he could only afford it after an especially big payday, but some of the women were especially fine.

When they got to the gate they found Tahlmute had two large duffles and a small chest with him. The three of them were still not too crowded on the plank he had set up over the front truck of the

rockasaur but the gear shelf behind it was overflowing.

Of course Tahlmute would discuss nothing about the journey with Estwig along, instead he discussed the theater in this region and what he found interesting and what he found provincial. Estwig asked if any of them had ever performed on video and lost interest when he found they had not. He thought he understood what Tahlmute was trying to do, convince Estwig this had something to do with boring academia, and tried to help with that impression.

Once they got to Taktor's, they found only four people moving goods from in front of the crate. Taktor himself was helping winch the great crate onto a set of roller dollies. It looked like the two guys he had working with him were off the boards so doostEr sent them to help with the hand-moving, along with Tahlmute and Estwig, while he manned pulleys with Taktor.

"You hear about the asteroid?" Taktor asked once they were settled into a hoisting rhythm.

"I've heard of asteroids," doostEr admitted, "but I don't know any personally."

"There's one of Cynd's that's broken loose. Some astronomers are worried it could hit us."

"I don't like the punch line of that joke," doostEr said. "How big is it?" he asked.

"Miles, over five but less than ten. They say it could wipe us all out. It could blacken the atmosphere so nothing could grow for years. Anyone within a thousand miles of the impact could be burned up."

doostEr's mind rejected that. He filed it away as rumored fact and didn't let it thru to his gut. "Sounds bad. What can we do about it?"

"Watch and pray," Taktor said. Taktor is wiry and sweaty with a long nose. He never seemed interested in sweet women so he seemed to care little about his appearance.

"If we can't grow crops for years," doostEr said, "we need to brine a lot and dry a lot. Get in a big supply of firewood. We might as well cut all the trees by the time it hits. We need to go on a crash survival program."

"Yeah, you know, something like that might work."

"There's some mushrooms that live on wood that are edible," doostEr added. "And there will be lots of carrion, if it stays frozen it can be good for a long time."

"Maybe some will survive."

"I intend to be one of them," doostEr said. "How much time do we have?"

"Forty two years if it hits us on the first pass, it could be in a dangerous orbit for a long time. Until it hits something. It dropped into Cynd's gravity well just a couple weeks ago. In a few weeks they'll know if it's likely to hit us or not."

"Where can we keep in touch with that?"

"I saw it on a vid screen down at Dolib's," that was the closest reliable pouring keg to his yard. "By next year they should know for sure."

doostEr had seen event messages on the vid screen at that tap. "I'll keep an eye out for it."

They got that end of the crate hoisted enough by then to get it on the dolly. They got that started, then took more heavy eight-way pulleys down from Taktor's tackle shed and went to the other end. Rigging that up took some time and some concentration. When they were beside each other hoisting for awhile doostEr asked, "So what are you going to do?"

"If it's the worst?" Taktor asked.

"Yes. If three different astronomers gave the chance of impact as being over fifty percent?"

"I think you've got the best plan so far, stock up on non-perishables."

"Take in livestock that can live on non-perishables," doostEr thought.

"Another good idea."

"I'm sure survival will be on everyone's minds once it get's to that point."

"The price of non-perishables will go up," Taktor said.

"So we'll grow more in the years we have left."

This end of the crate was now raised enough to get the dolly all the way under; almost. They took up the front another few turns

before they could finally slide it under. By then the others had only one more layer of small crates and chests to clear from the aisle in front of the crate. Tahlmute was clearly not enjoying the manual labor he was involved in. Estwig was doing better with it. He was still a kid in some ways, eager was one of them.

He and Taktor let the huge crate down onto the dolly and took the rigging down. They carried the tackle over to where he parked the rockasaur, then hooked it up. By then it was halfway thru the after-lunch but the aisle was finally clear. doostEr immediately sent Estwig home with the kedas, he and Tahlmute could catch a streetcar. Then, for an extra tenner each, they got all the remaining hands to grab ropes and haul the crate to where it could be roped to the rockasaur.

Turning it was work. It had to hang by a single eye from three sets of tackle, the other set used to slide the end of the crate around under the backbone. From there, he and Tahlmute were all it took to get the crate strapped in and timbered-to secure enough for doostEr's satisfaction. It took a few more hours and only the late cooks were left of Nightday by the time they were done.

He really shouldn't spend Dawnsleep with Talshi. It wasn't that he'd loose sleep, it was that he would be away for weeks and he would miss her. With all he had to do he probably wouldn't have thought about sex this sleep, but she had seen him come in and asked if he'd mind? He'd said come up in twenty minutes, he was already in bed when she got there.

"I'm not asking you to tell me anything about the job," she said, "I just want to be sure you're sure you're being fair."

He wondered how worried she really was, and why. "It's Brazilian and I'm transporting it for a Brazilian, indirectly. The ownership is in dispute and the people involved are not without stain," he was honest with her, but the only rule I worry about is interfering in tribal affairs, but the Brazilians have never registered as a tribe. I'll tell you what the problem is because I trust you that this won't get out until we're done. Can I trust you on that?"

"You can trust me not to tell even if it is stolen, I promise not to tell and I won't, but I will not promise to approve."

"I'm not worried about that, you'll approve. The reason for the secrecy is because of its value. That and some personal problems in Tahlmute's past. He and the woman at the Kassikan we're working for were involved some decades ago. He's making a mountain out of a dung pile and it was twenty decades ago. He's been thru a lot of changes since then."

"How do you know?"

"Please don't talk about this."

"I told you I've promised."

"What if someone is climbing in the branches of my house right now?"

"Oh doostEr, this isn't a mystery movie."

"That thing is worth a fortune. I know it's worth a lot more than aluminum. He's got an aluminum just to get it moved, I'll be getting at least half that aluminum."

"doostEr? Doesn't that tell you?"

"That's what I thought. Then I wondered what could be in that crate. What if the four tons in there was something made mostly of metal? What if it was a huge bronze statue? We know they made things like that. Or it could be a spare lifting arm for the starship's elevator, what would that be worth?"

"I don't know..." she started to answer glibly, but then she knew he might be right.

He could watch her face as she began to really understand. That crate could contain four tons of scrap hospital carts, office furniture, robotic appliances. Four tons of scrap aluminum. What if it was structural parts of the ship that might be high in titanium?

"You see my point."

"They should have never brought it down here," she gasped.

"Two hundred and fifty miles out of town is better than here in town, I would think."

"And you wouldn't want anyone to know that. You don't want anyone to follow you. This could be dangerous."

"I'll trust in the Instinct to keep me from physical harm, but I could loose my kedas, they are not protected."

"They deserve to be," she said. She was actually pretty good with the kedas and was comfortable alone with them, even played

with them. However, she hadn't volunteered to do any of the work involved in keeping them. "You better not let them get hurt."

"I won't," he said, unless they crossbow the kedas first and bust up the crate second. He would probably even try to stand between the crossbow and the kedas and trust to the Instinct, but big as he was, he was far too small for three large freight-hauling kedas to hide behind.

"What are you going to do about Estwig?" she asked him.

"What do you mean?"

"He knows where you're taking it. Wootondi says he never told her, but I don't think that's iron clad."

"I haven't told him much more, just that it's legit and confidential for personal reasons that I wasn't going to discuss."

"Does he know where it's going?" she asked.

"Only in the most general terms. Tahlmute has a map, even I haven't seen it yet."

"But he knows in general terms?"

"He knows it's two hundred fifty miles into the chaparral, that's all, as much as you know. As much as I know." There was no reason to share his guesses. He trusted her quite a bit didn't he? To tell her this much. Maybe he needed some confirmation that he was doing the right thing.

"You've explained to him why you think it's not stolen?" she asked.

"Yes."

"Did he understand?"

"I think so," he said. "Sometimes I wonder if I would be as diligent about this if he wasn't around."

"I'd like to think you would. I'd like to think you would because I'm around."

"I shouldn't take you so much for granted." But it wasn't really that was it? It was something about age, Talshi was herself for over a century now, Estwig was still becoming himself.

5. The Streets of Gengee

This sleep was so comfortable that it was the first time he seriously thought about the 'why bother with two separate addresses?' conversation in a long time. She'd probably agree that they'd need one sleep a week as variety, he knew he would, even with a girl as sweet as Talshi, there was just too great a variety of sweetness out there in the city. After good love, he was well rested and well fed from a fruitcake she'd bought on the way home the day before.

The kedas were eager with daylight, even though it was frosty. Estwig was up with him and eager to help. Tahlmute would meet them at Taktor's, which was also much closer to Jostern's place. Estwig went among the kedas, giving them as much attention as doostEr did. They seemed to know what was happening and went thru their bales with some diligence, BobbingTwo's eyes bobbling and weaving the whole time.

"So where are you going with this?" Estwig asked.

"Tahlmute wants this to be a confidential mission. He didn't really want any extra people seeing that crate. He didn't want you to know as much as I already told you."

"If I was with you I couldn't talk about it."

doostEr looked at him carefully. That was probably what he wanted. "You want to go don't you?" he asked.

"I think I could be of some help and I've never been on a trip that long."

"So you ran away from someone here in the city?"

He blushed. "I'm old enough to leave home, I'm past two and a half." He was, the fuzz on his cheeks and chin was starting to lengthen and thicken. He was nearly the height of an average man already and getting pretty good strength for an Elf boy.

"Oh you know I know," doostEr said, "but if you want to go we need to put Bellme on watch in the yard and you need to get packed."

"I can run and tell Bellme while they finish breakfast," he said about the kedas while he jumped up and started for the gate.

"And what about packing?" DoostEr asked.

"I did that last evening," he said as he hurried off down the back path.

doostEr watched him while scratching BigThree. He'd never had a child of his own that he knew of, but there were endless possibilities for children he did not know of. Few women randomly chose to be single mothers in the Highlands, even here in the Gengee, so he doubted that any of his casual encounters were fertile. Still, all the hard work was done with this kid before he got here, and racially, he could not be doosEr's. A pity, he thought.

He found EndsWaving willing to take Estwig bareback and BobbingTwo was all bushy with pride at getting to have a human ride on him. BigThree walked in the middle of the completed harness but without a rider. He still stepped as wide-legged as the others as that train rode thru the early dawn traffic. They could just sit up and enjoy the ride, EndsWaving knew the back way to Taktor's since he opened the place in the 54th.

It took more than an hour to get there, Kortrax was ready to reach the horizon any minute by the time they arrived. Tahlmute was already there, "You brought Estwig," Tahlmute frowned.

"He wanted to go, he already saw your crate, this way you can keep an eye on him, see that he doesn't tell anyone else about it."

"How well do you know this kid?"

"A few years, he's a stray but he hasn't been trouble yet. He's helpful and earns his keep, getting real close to becoming a good man."

He hmpfed, then said, "Well we have a problem, someone's put fifteen pallets of little porcelain figurines right inside this door." doostEr was close enough to see that for himself now. He knew Tahlmute would be furious because he wanted haste. doostEr was not so irate, but he was annoyed. It was going to take hours to get these out of here. "I'm going right to Taktor, where do you think he'd be right now?"

"Probably at home," doostEr said. He lives in the top three floors of the tree between the two big barns on third aisle."

"I don't suppose you'd come with me?"

"Depends," doostEr said, "on how you're going in there. I

count my relations with Taktor as good. I'll not barge in on him in anger and I'll not barge in on him if he sleeps."

"It's well into Morningday," Tahlmute said.

"I don't see a lot of other people up." Kortrax was just crossing the horizon, but you could only tell by the orange sparkles on the tops of the tallest trees.

"So we'll be polite, but we need this moved, we're a week late already."

"It's been fourteen and a half decades, what's another week or two?" doostEr asked.

"You'll have to ask Ava," Tahlmute said.

"Who's Ava?" Estwig asked. "Is she hot?"

He'd found her picture in the eye, she was not the type to excite Estwig so there was no use boring him with it. "You need to stay with the kedas," doostEr told him, "and she's up in the Yakhan."

They wasted an hour with Taktor. He had no intention of working this Morningday and thought everything was set yesterday. He was going to have his breakfast and they were welcome to join him. Since he wasn't working today, he felt free to wash it down with some nice bright yellow that even Tahlmute couldn't pass up once the horizontal rays struck him thru Taktor's kitchen window. If Taktor ever did have intimate company, it was his beautiful and comfortable home that would attract them.

They didn't eat much, but he was such a good cook that they had to have some of it. It was just some berry patters but his batter was so rich that even his searing hot griddle didn't burn it, but puffed it till it was as thick as the berries and more like a fresh fruitcake only lighter. It was too bad this wouldn't keep a few weeks like the fruitcake would.

When they finally tramped down there, they found one of Taktor's men named Ilumvi, Estwig, and a large man who was probably half Elf, half Dwarf and a laboratory muscle pill. They were unloading those pallets with all due haste, but due to the fact they were doing it by hand, even the big guy could only carry four of the figurines at a time to where they were re-stacking them in a

space down one of the smaller aisles.

"So this is what's holding them up?" Taktor said to Ilumvi. "This is that 'Works of Art' cargo?"

"Yeah, and gee I'm really sorry," Ilumvi said, "but I knew I'd be back first thing today to get it stowed."

"They wanted to just hook and go this dawn," Taktor said.

"I'm sorry, it was deep in Dawnsleep when we finished getting this shipment together. No one was going to stay and help me get it stowed. "I'm giving both these men standard rates," he told Taktor.

"Give this man double," Taktor said, pointing at the big guy. He extended his palm, "I'm Taktor, I own this yard."

"He does," Ilumvi said. "And has all the decades I'm been around here."

"Mikeh," he said, "thank you," and turned to pick up more from the pallet they were unloading.

None of his dollies could fit thru the narrow aisle to the space Ilumvi was storing these. "How long are these staying?" Taktor asked.

"They're in for investment, that's why they're back in secure. Our investor has five sixths of the entire world stock of this series and he thinks they're going to be popular."

Taktor chuckled. doostEr figured most goods taken in this way were eventually sold as scrap. "I hope you're getting at least thirty penny for this space."

"Forty two," he said. "This is fragile cargo as well as secure."

"That's good."

"That doesn't get me on my way," Tahlmute said.

"No, but joining the moving crew might help," Taktor told him.

Taktor went back up to his house. doostEr knew it was because he thought Tahlmute had been rude. If Tahlmute had noticed he was glad he didn't get charged that much for the Brazilian crate and set to work on the cargo without having to be told, Taktor probably would have stayed and help unload the cargo also. doostEr made sure he found time to tell Tahlmute about that. As it was, this held them up till lunch time.

A cook came by with a push cart to Taktor's yard every day of the week and that was where they took their lunch. Dacreea is the cook on Morningsdays and she usually does a variety of zhindu rolls and a pot of a pretty good diddle. It was usually the only foreign food they encountered in the week. They all grabbed rolls because they could eat them while under way.

They tossed the last of their gear up to the belongings shelf behind the seating plank. The only other flat space on the rig was now the top of the crate and the shoulders of the backbone, right behind their seat. Estwig went right to the harnesses and started hooking them up. "So you're afraid I'll figure out that it's stolen cargo eh?" Estwig asked Tahlmute, looking up from the buckles and winking at doostEr. "Don't worry, I can keep quiet."

Tahlmute couldn't keep the red from his face. "It will be stolen if you talk about it."

"Then why the secrecy?" Estwig asked.

"It's valuable," Tahlmute said, "I know it's worth multiple aluminums at least, and I don't want to have to deal with bandits that will be following us if word of this gets out."

"You're going to wind up spending that whole aluminum by the time we get there if you keep going the way you have," doostEr said.

"I know, that's another reason I'm reluctant to add to the crew and another reason I wish we could move with some haste."

"He's with me," doostEr said, "he's coming out of my fee."

Estwig looked to him quickly. "I'm sorry. If it's a problem, I don't have to go..."

"Now that you're here, I'd rather you were with us," Tahlmute said, "especially as part of his fee. We can keep our eyes on you more easily."

"We can't make you go, we can't keep you off the public roads," doostEr said. "If you come along and help, it's an iron and a half a week plus food and water, you want yaag, you pick it up yourself and not when we need you."

"I'd like to come along, for the trip, for food and water and a sip of yaag when you're having some. But I have no need to be among hostiles."

"Sorry," Tahlmute said. "You've got good ears."

"Who knows, you might need that," Estwig said.

"So come along," doostEr said, "I'll make sure he plays nice," and gave Tahlmute an eye that said that he meant it.

Tahlmute climbed to the plank, checked the straps on his luggage and looked at what doostEr brought. doostEr climbed up behind him and Tahlmute said, "It looks like you think we'll be beyond inns and cooks?"

"There's about ten miles to the east that's well settled, then spotty habitation for the next hundred miles, beyond that, it gets seriously barren."

"I should have paid closer attention to the map," Tahlmute said.

"It wouldn't show on that little map."

"I have another one, Ava sent two via eyemail."

"You are going to spend aluminum on this," doostEr repeated.

"If I have to make any more hardcopy I might," Tahlmute agreed.

Estwig climbed up also, on the side opposite Tahlmute.

"Ready to roll," he said.

doostEr whistled and spread his fingers and pushed forward with them slightly curved, keda-speak for 'ForWARD, Ho!' and they started leaning into it. The rockasaur weighs well over a ton unloaded, probably two with them and all their gear and baggage. The cargo was actually over five tons altogether, the payload might be four, but the whole thing with coating and crate was over five. So they were each pulling over two tons, twice their own weight, as they trundled up thru Taktor's yard.

As they got toward the front Taktor and his whole crew came out to run alongside and see them off. In spite of Tahlmute's wishes, this must have been quite the event at Taktor's. After all, this had been with them since the days of the starship. His yard boy, who was friendly with Estwig, though half a decade younger, ran a few blocks after them, then snatched off and waved his shorts as they rumbled out of sight. Estwig called a lewd comment to him ("baldcrotch") but they were probably out of hearing range already

so doostEr didn't scold him.

The first problem was getting over the river. There were only a few bridges and the ones close to the shore were too crowded to cross with something as long as a three-keda hitch and the rockasaur, nearly a hundred feet from EndsWaving's snout to the overhang of the backbone beyond the rear truck's rear wheels. Just the tongue on the front truck was fifteen feet.

Before they even got there, they had a problem turning onto South River Industrial at the end of Taktor's sandlot. It became all up to EndsWaving at one point, and in the sand, even with these wide wheels, he couldn't drag seven tons up the small incline to the main road. They had to unhitch and come around so all three could pull to the corner, then unhitch and re-hitch to make the corner, so all three kedas were in-line with the wagon both times. Even here where there really was room to go around, it was the middle of lunch hour so there was a lot of traffic to hold up.

"I should have done a route study for this," doostEr said, "We may have to stop and do one even yet. I was hoping to get over the bridge up here before breakfast was over."

They were able to move along on the industrial road, but when it left the lakefront, he had to make a hard right onto a street called Kwan Hunter's Way. That ran east south east and met the river just over three miles from the lakefront. That turn was where the detail map runs out. The overall map shows Gengee City as a dot, with the river running to the southeast and their way going east, across it. The scale of this map was also distorted. This road was not straight enough for them to remain in a straight line. With the middle guy, BigThree, pulling more on one side, the other two could contribute a little toward moving the wagon. doostEr knew this street, thought they could make it, and knew there was a bridge a few miles ahead.

The corner at the strong bridge was worse and more crowded than he remembered. It was not easy to get the rockasaur thru there, but there was nothing he could do about it but force his way into it. He had to go beyond the street, then remove the tongue again to back up into the street the bridge was on, after bringing the kedas

around to the other side. The pulled the rockasaur backwards around the corner. He had to bring them back around to go forward again. It took two removals and replacements of the tongue and a lot of irate travelers to get thru. Tahlmute got his foot under the tongue in the process and could have broken a bone if he had any less luck. As it was he limped the rest of the week. Detaching the tongue is a heavy job by itself, carrying it along while the kedas turn around was a strain for the three of them. It was more because of the traffic they were backing up than the traffic that was here.

This was a whole lot of trouble for a river that isn't much of a river any more. In olden times, ten centuries ago or so, the whole riverbed was full of water, but the 'river' in modern times is two cobbled streets with farmer's and fishermen's women selling from stalls. There is a sliver of water with neat stone retaining walls down the middle that was big enough to take a kayak and there were a few people in them going by. There were quite a few locks and they were slow, most portaged. There was usually a pedestrian bridge over each lock along this shrunken river, they were the floor above this street and would have been in the canal if he attempted to put this weight on it.

It took over an hour and a half altogether and traffic was backed up out of sight in all directions by the time they got going again. It was the middle of the after-lunch by then. Even when they were on their way again they were slowed down by the traffic that had backed up while they were making the turn.

Tahlmute said, "I have to hand it to you, I could never stay so calm when traffic was backing up on two streets and people were starting to curse."

"That's an occupational hazard with cargo like this." Even a couple of the kedas had been short tempered and BobbingTwo put four legs up at another. Luckily it lowered its eyes and the incident passed with nothing more than sharp intakes of breath from the humans around. He considered it the worst part of his way of life. He was very glad it was seldom right around his yard, but he wouldn't have bought the place if it wasn't level getting in and out.

They struggled onward after grabbing a quick meal of sliced roast on bread topped with garden leaves to take with them. They

took turns in hammocks slung over the crate for Noonsleep as the rockasaur rumbled on into the sleeping countryside. The heat of Noonsleep and Afternoonday was only a tiny bit blunted as they descended into the Gengee, but they had lost only a few hundred feet of altitude, just enough for him to notice. The salt water lakes at the bottom of the Gengee are thirty nine hundred and forty one hundred feet below the lake, but almost five hundred miles south of their destination. They probably wouldn't get more than a thousand feet lower in elevation on this trip.

Little salt lake was as deep as he had ever been, and that had been more than a century ago. He couldn't call up one scene from that time, he only hung onto the fact that he had been there. A fact he remembered about his past, long after the actual memories of that time were gone. It was a little sad that parts of one's life were lost in that way. It made him want to trek there again.

For Afternoonday they trudged on in front of the Troarar hills, some greener humps in the distance across dun plains of thinning ribbonleaves in rough gravel. They were beyond all paths one could reasonably call a road. There were a few wagon ruts going this way, but at half the washes they had to have the kedas dig to make ramps for the wheels. If the weather was stormy in those hills, these gullies would be an impassable torrent.

In time for Duskmeal they reached a little settlement along an intermittent water course. There were a few wind wheels irrigating a few gardens, scrawny homes with scrawnier fruit shrubs around them. It ended where the wash ended and fanned out over dry sand looking across the basin floor at the encroaching dark. Beside them was an old hangleaf holding what had to be the last public house before the wild chaparral.

6. The Last Inn in Gengee

Even though the place certainly wouldn't boast of city services, it would probably be a better place to spend the dark than dry sand. There was food and water for them and the kedas, and maybe beds with less bugs than the open ground. doostEr was

relaxed by this time, they had passed the densest Brazilian settlement during Noonsleep and had heard and seen nothing out of place. They were now at least fifty miles beyond the last of them, other than this Waldeis they were probably bringing the cargo to. His worries about a plot by Ava to set them up for her former lover had receded.

The place itself was nothing more than a large field with a snug old lodge in the middle of it. There was a little bit of water in an excavated pool, enough to grow enough vine to cover the lodge and fill the kegs within. There was no vid screen, this was well beyond the farthest signal from Gengee City, and a suntower would have to be tall enough to reach over the hills. There are probably not more than a few thousand people in all of those brushy hills. They were the only guests at this place this dusk, dusk of week Kyebenwae his calendar said.

They were beyond the ranchers already, this was a business catering to hermits, wildherders and their followers. Personally doostEr was more comfortable with the Brazilians he had met than some who lived out here on the sear plains. So far this particular establishment was fine, but he'd been put off by some herdsmen he'd met in the past.

The building was a rambling old hangleaf with a good second floor. Some of the floors above that were not as safe as they once were, but thick limbs with thick green fronds fluttering in the gentle breeze shaded most of it. It looked like these longleaf hangleaves would wait for full dark to start furling, as long as there were still a few red photons to be had, they would try and catch them.

During Nightday other people arrived. They were Trollish, and not very many were women. There were over a dozen people altogether for Darkmeal, five were female. Everyone here knew each other, so he figured they must be locals. He and Tahlmute shared a couple cups with a couple of them. They agreed it was pretty much hermit country and everyone had their own reasons for being here.

By the time they decided these girls might really have reasons for being hermits out here and taken their leave, Tahlmute noticed

that Estwig was out of their sight and he was nervous. "He could be off reporting to someone for all we know."

"He wouldn't be doing anything but cruising for chicks, same as we are," doostEr told him. "If he finds one his age or an adult who will join with him we might not see him till dawn. But who would he find around here?" Nightday had been an unrelenting sixteen hours of boredom that he wished he could sleep right thru like his kedas did.

"This area is the center of Brazilian settlement," Tahlmute said, pointing at the saddle over the door. "If he was to report to one this would be the place to do it."

"We went right by them back in Noonsleep," doostEr said, "A few of them have big ranches out in the near chaparral." He didn't think any had come out this far, then he remembered about the one with the disease. The sign of the saddle didn't really mean anything more than Brazilians were welcome, and the way they spent money, they were welcome in most public houses.

"Let's avoid them if we can," Tahlmute told him, still talking about the Brazilians he was worried about.

"So it is stolen," doostEr said. He was beginning to put this together now, 'lab equipment' had been too touchy for Tahlmute.

"You don't understand the politics of it," Tahlmute said.

"Educate me, I have plenty left in this cup."

"Colonel da Morais, does that mean anything to you?"

"I'm guessing he's a Brazilian."

"Yes," Tahlmute said, "he is the leader of the group who want to enforce a Brazilian identity. He advocates founding a bully group and sending an expedition back to YingolNeerie to find out what happened there. I think he wants to go back himself and re-found their energy-age bully group if it really has been destroyed. There's a few others with him, the guy with the disease is one of them. He wants to be re-frozen and go back to be treated."

"Is he wacko or something?" doostEr asked. He followed the news enough to know the Yingolians were as behind in medicine as they were ahead in starships.

"The parasite he carries does infect the brain."

"So who are they?" doostEr asked.

"They're a group who never adapted," Tahlmute said. "Right from the start they were more hostile to what they found here. They said we are all immoral. They thought our lives were pointless."

"Why?" doostEr asked.

"Because they think only in terms of hierarchal position, they don't see how to do that in our society."

"Join a merchant's association," doostEr said, "There's always influence trading going on in them." He knew that from listening to some of the gossip that went around in theirs. He thought it was tiresome and tried to cut through it when he could.

"They can't resort to force, that's their real problem," Tahlmute went on. "If it wasn't for that, they feel they could fix everything else."

"So they want to steal this cargo?" doostEr asked.

"I'm sure they would if they could," Tahlmute answered.

"But I thought they were the most likely owners."

"My guess, and it's only a guess, is that the Governor, the guy who died, would have left his things to Waldeis, the guy who was sick."

"And I think you just said he's with the Colonel, the one who wants to use force."

"It's a tricky situation. The Governor might not have known that, but I'm sure Ava has a plan. I'm guessing, just a guess, that she thinks she can lure Waldeis in with this. I'm sure he knows what this is."

"Do you?" doostEr asked.

"All I know is Ava's word that it's valuable and the money she sent me tends to prove it."

"There really is a ceramic shell in there. You can see it thru the vent holes," doostEr told him.

"Ava has never lied to me," Tahlmute said, then muttered, "I wish I could say the same."

"Why?" doostEr asked.

"I've had to keep things from her in the past."

"She's keeping a lot from you."

"But not filling the void with lies," Tahlmute said.

"As you did?"

Tahlmute drained his cup before continuing. "I denied knowing the former inhabitant of her body," Tahlmute said.

"How's that?" doostEr asked. They hadn't been drinking THAT much.

"She's from the ghost ship. She didn't have a body until one was vacated."

"Huh?" doostEr wasn't catching this.

"A girl erased her mind on Shonggot, Ava took over that body."

He swam in that water a minute, remembering the girl from the north who OD's on the shonggot tahlmute made. A lot of things came together, but, "How?" doostEr asked.

"There's wizardry in the Kassikan that I don't pretend to understand," Tahlmute said.

"And how do you know her?" doostEr asked.

"I was afraid for the former soul in that body, I was afraid she would hurt herself with that stuff."

"So you shouldn't have sold it to her," he said, putting it together with the edict from the Kassikan.

Tahlmute almost fell off the stool. "How did you..."

"It's in the Kassikan's business section," doostEr told him. "I got some eye time and looked it up. There was no detail, but with what you just said it seemed obvious enough."

"There's nowhere I can get away from that," he whined and put his head in his hands.

"It was twenty decades ago, who gives a shit. But you looked your friend up and she'd been taken over by Ava, the ghost?" doostEr wanted to ask a lot more than that, but knew he had already figured out more of the truth than Tahlmute would tell him.

"Tdeshi was never a friend," Tahlmute said, "the prior soul in her body, she was wheedling me for favors, she wanted a back door into the Kassikan. She spent all her money on speed and sexy clothing, Ava is a much better person. She was my lover for nearly two decades after the Brazilians left the Kassikan."

"So is this all a family feud among the Yingolians?" doostEr asked.

"It's much closer to that than a case of stolen goods. I hope

you appreciate that I have just taken you fully into my confidence. We are partners now because you know everything I know about this mission and the contents of that crate and besides that, we're drinking together."

"You're most trusting," doostEr said but was sure there were a lot more details to this than Tahlmute had revealed. Even so he was grateful for that much. It did look like Tahlmute had been drinking a bit more than doostEr but he hadn't noticed him filling his cup more often.

"I need you to understand what that boy could be getting into," Tahlmute said, "or might already be a part of."

"He's been with me for years, long before this started."

"This started when this crate was put into storage."

"No one knew you would chose me to carry it."

"But once I did, someone could have come up to him and offered a copper a week to volunteer to come help us."

"Too much intrigue," doostEr dismissed, "Estwig would have given that away."

"I think we should be careful," Tahlmute said. "Once we get in open country, it's easy to keep an eye on him. There it would be too obvious if he met someone."

He was more interested in knowing the ownership of the cargo. "Who sighed this in?"

"The guy that's dead."

"Is he the only one who knows what's in it?" DoostEr asked.

"For all I know," Tahlmute said. "And for all I know anyone here could be keeping an eye on us."

"We came a long way this Afternoonday. I admit, we barely made it out of the city Morningday, but we're a hundred and nine miles from the lake as dark sets in. I don't think there's any other people here that don't know each other." The place still wasn't crowded. "Speaking of keeping an eye on people in this crowd, I see someone over there I'd like to keep an eye on." One of the few who noticed them, the other two women in here. He hoped they were more interesting than the last two.

"So your priorities are the same as you think Estwig's are?"

"Yeah, we get along OK, me and that kid. We can relate."

They should find someone around here, there wouldn't be anyone around the next dark and they weren't going anywhere this Nightday evening, this was the only anywhere at all anywhere around here.

"At least she's with someone who's also attractive," Tahlmute sighed and got up to join him at the far end of the kegrail.

7. Campfire Stories

A week later they were well out from settlement. They bedded down in a little copse of quibreaks out in the sparse wild theshes of the chaparral. They had a fire going near the open end of the canvas staked over the front truck. The three of them sat around it on some gravel mounds they'd scooped up.

"So Juleel had later news about that asteroid," Estwig said. "It's definitely slung in our direction."

Juleel was from the week before. She was the only person his age in the local area, a pretty black-haired, ochre-skinned Elf girl just two and a half decades of age. For a few hours doostEr worried that Estwig would leave him on the hand of that wildherder's daughter. He spent most of Nightday and all of Dawnsleep with her and doostEr couldn't blame him. "Where did she see it?" doostEr asked.

"I don't know, but she's really worried," Estwig said. "A lot of people around here are. I guess Juleel or her dad read about it," since they don't have vid here. "Maybe a traveler in that village had a magazine and left it on the picnic table for everyone to see."

"That must be the topic of conversation there," doostEr said. The women he'd been with talked of little else once the sophistication charade ended.

"We should be doing something about it instead of trundling this old crate into the wilds," Estwig said.

"You wanted to come on this mission," doostEr reminded him.

"Before I knew we were in such serious danger."

"We have over half a decade to lay in supplies," doostEr told him. "This expedition will earn us the money to buy them."

Estwig gave it up with a sigh. "I wish we brought Juleel," he

said.

"This isn't a camping trip to entertain a lady," doostEr said. "Water gets short out there at times and places. I've been way out before, not two hundred and fifty miles, but a hundred miles. Last dark would be fine, but the girls would all be leaving with dawn if they were here now."

"Some girls I know are better in the wilds than I am," Tahlmute said.

"No doubt, I've met some who are better than me but somehow I bet Juleel is not one of them and neither were the two we met." Those girls had tried to act like Yakhanian sophisticates way out there in the ranch lands on the fringe of habitation. Tahlmute and doostEr pretended to fall for it just to be polite until some of the local's started teasing them.

"Agreed," Tahlmute said. For him it had no doubt been comical but he'd kept his decorum and bedded her anyway.

"Juleel would like it here right now," Estwig said. "She would have liked supper," a wild minirump that they toasted on their knives, "and she likes campfires. But if we get hit by an asteroid we'll all get sick of fires," Estwig said. "She said the article had one astronomer who calculated that most people would die in the initial blast."

"I hope that's the most extreme viewpoint," Tahlmute said.

"Pretend Juleel is here enjoying the fire instead of preaching about this asteroid. Are they sure it's going to hit?"

"She said the odds that it will hit us are now a thousand times higher than they calculated just three weeks ago."

"That could mean it went from one in a billion to one in a million, still not cause for generating increased adrenaline," doostEr said.

"I think it's higher than that," Estwig said.

"Do you actually know?" doostEr asked.

"Well... no, I don't."

"I think we should remain calm till we know more," doostEr said.

"I agree with that," Tahlmute said.

"I wish Juleel was here," Estwig said, "even if she kept talking

about the asteroid."

"She's not here, so we don't have to keep talking about it," Tahlmute said.

"So you want to go into denial?" Estwig asked.

"Until the odds are up to one in a thousand or even one in a hundred." Tahlmute was starting to get annoyed. "Right now I have a more pressing assignment."

"What is more pressing than the end of the world?"

"Getting some sleep this dusk," doostEr interjected.

"Yeah," Tahlmute said. "I'd rather not lie awake thinking of some giant rock about to fall on us, leaving us a winter Nightday that's decades long. I've had to endure lectures on the effects before."

"From who," doostEr asked.

"Ava, the woman we're working for."

"Who's that?" Estwig asked.

"Wouldn't you like to know!" Tahlmute barked.

"Hey man, it's just conversation."

"He thinks you're a spy for some Brazilian Colonel," doostEr told him.

"Wouldn't that be a kick," he said. "Where's this Colonel?"

"Wouldn't I like to know," Tahlmute sighed.

"You don't?" Estwig asked. "What would he want me to spy for?"

"This is another conversation I'd rather not be having," Tahlmute said.

"What can I talk about?" Estwig asked.

"Where you came from," doostEr said. "Who your mama was and why you split up."

"I thought we had a deal on that?"

"We do, but that doesn't mean you can't talk about it if you want to. There must be some parts of your childhood that were good?"

"It's been so long since I remembered any childhood," Tahlmute said. "Not the faintest glimmer of any part of it remains."

"Me neither," doostEr said, "But I wish I wrote down the particulars and maybe even had some pictures. But you must

remember all of it," he said to Estwig.

"The only pleasant part I remember is climbing in hangleaves with Dintin. We built a nest way up, at least a hundred feet from the ground. We could see the lake."

That as much as confirmed for him that he had not gone far reaching his compound. They were able to see the lake from a tall hangleaf from there. If it was his idea to leave, his mother had probably called once from the front porch and sighed, then got on with her life. "Did you ever stay up there in the wind?"

"No way," Estwig said, "but we were just over two when we did that."

"When was the last time you were at a campfire?"

"The day before we met," Estwig said. When there was a pause he said, "I agree about sleep, I think I'll go find some."

"Good sleep, we've got about another hour of fire to sit up with."

They were quiet a few more minutes after he was gone. He thought Tahlmute was going to discuss his suspicions of Estwig again. If he did doostEr was going to discuss his suspicions again, now that they were so alone in these wilds. But instead Tahlmute began with, "You know what I've always wondered?"

"No?" doostEr answered.

"Why this contraption is called the Rockasaur."

"Is that pertinent to our mission?" doostEr asked.

"Who cares, I'm curious, why rockasaur?"

"Because it was first used to move great boulders, I built the whole thing for one project, a canal project I think. It was about a half a century ago, when I first got into heavy hauling, I think it's what started me on it."

"Why rocks?"

"The hillside they were cutting thru was made of them, I perfected this rig over about, let's see, maybe ten decades, maybe only four, but it was a length of time. There's big crystal claws on the timbers when hauling rocks you understand. I went thru a dozen women in that time and they were scarce out there where that cut was."

"Did you build it there or here?" Tahlmute asked.

"The keel was laid in Gengee City but the design was perfected on site. I've got three sets of wheels for it now, but I went back to the city for each set. It's a guy named Billik who makes the best heavy-duty wheels in town."

"How long have you lived in Gengee City?" Tahlmute asked.

"Since the early 55th, I didn't write it down and wouldn't have the note with me."

"Where were you before that?" Tahlmute asked.

"I came up from the dells above Lumpral's northeast deeps. I took a couple decades drifting this way."

"Why'd you leave your native land?"

"Curiosity, and I was tired of the primitiveness. We still used lever-squeak pumps and grease torches. There's village elders that distribute garden space in the village for every planting and everything's done by tradition and ceremony. The Highlands are more like the energy age than like the Lumpral basin, at least that part of it."

"I understand people don't speak common tongue there."

"Most can speak it, they call it Elvish, and I've spoken it all my life as far as I know. I also know enough to get by in the dialect of Northeast Kluff that was spoken in my native area, and some Eastern Megnish from the deeps. A lot of people still use Kluff in daily life, all the ceremonies are chanted in it."

"That must be weird."

"Not for there. You know, most Highlanders never leave the Highlands. The area is so vast that it's a long journey to another basin, but conditions in other basins are very different and when you get there you know it. As soon as you go thru the Uvon-Mahsk you can see the difference in the style of everything, a hundred and fifty miles below its dam and you're in the first of many hundreds of Northeast Enurate valleys."

"You're not a Troll?" Tahlmute asked.

"Yeah, I'm more Troll and a bit of Enurate." He paused. "We have all day tomorrow to look at this fire," doostEr said. "I'm for some sleep."

"I'll stand watch," Tahlmute said. "I'm not ready to sleep."

"Watch, what is there to watch?"

"Hopefully nothing, but we are in the wilds. I wish we'd thought to bring a crossbow."

doostEr had forgotten to think about that also. When he'd been in the wilds before, someone else had taken care of that.

They never had a real Nightday that week. They ate some dried fruit and grain bars together a couple times but didn't talk about anything but the women in that village. If he owned property there and couldn't sell it, he would go to Gengee City and work off the boards to be with Talshi. He slept alone last Dawnsleep, he wasn't used to anyone but Talshi for that sleep, a stranger just wouldn't do.

It was Estwig who did most of the talking and it was all about Juleel. He was adamant that they stop on the way back so he could see her again. With only a few people in the area, why did one of them have to be an adolescent girl?

It was late in Nightday, Tahlmute was sleeping in the tent already, intending to stand watch later. It was getting pretty cold and they had built up the fire pretty high. There would be no dead sticks from the quibrakes when Kortrax next saw this ground. The kedas had even come over near it. The ground here was rough gravel, they would have a hard time digging scrapes and the top would never stay up, so they only dug into shallow pits. Kedas could sleep thru most of the dark, but they did wake up occasionally. BobbingTwo even put his chin on doostEr's lap for a few minutes.

"We'll get there tomorrow won't we?" Estwig asked. "We should be back about here by next dark?"

"We've used up almost all the firewood for quite a distance around. This was the only brush we could see."

"But it will be two more weeks till we get back to her village?"

"At least. But tomorrow we might find that's just the meeting point and we have to go another hundred miles."

"We don't have supplies," he said. Even he could see that. It was already an issue that they didn't have enough water.

"If they want us to go on, they will have to take care of that, if

not, we lower it away, get our pay, and depart."

"I don't want to go on."

"Estwig, this trip was about this cargo, not about Juleel. You had no idea she existed before last week."

"I'm glad I know now. But do you want to go on?"

"Not particularly, but if we really are going to be hit by an asteroid, it's going to take a fortune to survive it."

"I want to spend the time with her."

"Why is she such a big deal? You've had other girls."

"They were just girls," Estwig said. "Just there for a ride, then they're gone."

"She probably doesn't have any other choice out here. Were you her first?"

"Maybe, how would I know?"

"Was there a little spot of blood on it after?"

"No? I wouldn't hurt her."

"It was probably not her first time," doostEr said.

"She popped it with a stick years ago, but don't tell her dad she said that, please."

"I'm pretty sure I've never met her dad and wasn't going to go on a crusade to find him."

"Just don't tell him." Estwig paused. "She hates her dad, she wants to leave him."

"And run away like you?"

"Is that so bad?" Estwig asked. "How long were you with your parents?"

"I don't remember one single image of my parents or my childhood. I know the name of the village by rote, but couldn't find it if I had to."

"So how do you know you didn't run away before you were ready?"

"I probably did, most of us do."

"So why do you keep kicking me with it," he whined.

Maybe he didn't have the right image here, "Saying you ran away hurts you?"

"Right," Estwig sniffed, doostEr looked and could see that his eyes were wet. "and you know why," he snapped, "it's because it

wasn't like that at all. We just had a little place, too little for both me and my mom. She'd been staying with a guy quite a lot and leaving me there alone more and more the last few years. I already knew how to do a lot of things for myself, I was doing all right. It was hard and I didn't like it, but I was eating all right. She had me in a day school, I was almost done. Anyway, one day her things were gone and there was a note saying she and he were on their way to Deep of Kwathwain somewhere in Toumda."

"She left you?" doostEr asked.

"Yeah, so I wish you wouldn't say I ran away."

"But you're too well raised to be the child of a mother who would do that."

He didn't answer right away. He clearly didn't like to admit so much about himself, but it was also time he did. "So; it's not quite that simple," Estwig said.

"Why not?" doostEr asked.

"That guy wasn't my father but she was in love with him, fiercely. She followed him."

"Did she want you to go with them?" doostEr asked.

"At least she said she did."

"But he didn't?"

"He didn't want me staying with them after I turned three."

"And your mother?"

"Would have stayed with him," Estwig said, "or followed him."

"So you refused to go with them?"

"Right," Estwig admitted. After a breath, he continued, "You see, if I was going to have to go out on my own anyway, in just a few years, I wanted to do it somewhere I knew, not somewhere where I'm an outsider."

"I can understand that." There probably was an Elven community down there, but they would not be the majority and there would certainly be a lot of Megnor culture in evidence in daily life. "Kwathwain's deep, the sun swims and stays red down there. You have to concentrate on breathing slowly at first or you'll tingle out. You're right, we don't belong down there."

"He's a Megnor," Estwig said, "he's taken some color but his

chest is small and his belly's big."

"Why does your mother love him?"

"He's very intellectual and very thoughtful. He makes her the center of the world."

"She'll get tired of that after awhile. She's Elf right?"

"Half, half Elf, half Pixie." Pixie was a term used for the smallest and daintiest Megnor women. "I never met my dad but Tahlmute answers his description as well as anyone, tall and slender, smooth light skin, long yellow/brown hair. That's all I know."

He stared at the fire awhile. doostEr did some quick mental arithmetic. "I think we can afford to let you finish up that day school. You couldn't have more than ten years left."

"Four," he said without looking his way. "I was three years ahead. It's a copper a year where I was going, you aren't paying me that."

"I'll invest in you," doostEr said. "I can use a guy I can count on, a guy who's there like you've been. Now if you were a guy with some education, you could be worth two irons or more per week. If you learn some numbers you can help with the books and you'll know how much you're getting of the profit."

"You would do that?"

"If you can keep a promise," doostEr said.

"What promise?"

"Stay and work for me till it's paid off. And it won't be just the dirty jobs, and we're not talking about as soon as we get back. I'm talking about finish up what that day school has to offer..."

"What about that asteroid?"

"We shouldn't stop thinking about the life we will have in the event of the ninety or ninety nine percent chance that it's going to miss us."

"Is it that high?" he asked. "Juleel seemed to think it was like ninety nine percent sure it was going to hit us."

"I do remember it will be more than half a decade till it happens, whatever the odds are. You would still have time to finish that day school. They would probably be teaching what we needed to know to survive."

"But what about Juleel?"

"If she wants to run away with you, I want you to take the place on the fourth floor. It's a little green yet so be careful with it."

"I can move up there?" he asked. "What if she doesn't come with me?"

"It's better for one than two, but I think it's grown in safe enough for both of you. Just don't bring up a lot of heavy stuff and don't get fat and you probably won't fall thru."

"Could we plank it?"

"Go ahead," he said, "I can probably find you some packing scraps you could use. I've got a rug I want to get out of my spare room I can give you."

"That's awfully nice of you," he looked up, "Why?"

"I was going to use that room you're using now to store tackle some day. There's enough spare laying around now to get it out of the way. I might even set up the pulley press and try to fix some of the weak ones."

"Is that all?" Estwig asked, "you could just tell me to leave if I was in the way."

"I don't want you to leave, when I told Tahlmute you were earning your keep, I meant it. Also it's because you told me about yourself, broke that wall and let me know who you really are. Thanks." he squeezed his shoulder.

Estwig patted his hand, "Thank you. I promise you'll make good on that investment." He looked up and looked sincere, "You'll see."

8. The Great Empty

By the time Kortrax approached noon they were supposed to be nearing their destination, the counter on the wagon wheel said they had come two hundred thirty eight miles already. They could see twelve miles ahead and there was nothing.

"How can you be sure we're anywhere near where we should be?" doostEr asked.

"We're in this blank paper here," Tahlmute showed him on the map.

It was an aching desert, the gravel was a dirty brown, the noon breeze was still stifling. The wind was strong enough to whip fine sand up high enough to choke them, but not enough to hide the high clouds that would roll on beyond this desert to the hills beyond the lake. The scattered tussocks of hair-grass and a few week-leaves were the only signs of life.

This map detailed a spot that was as exactly in the middle of nowhere as it was possible to get in the west cheek of the dry end of the Gengee floor. The target on the map should be in sight, but they could see nothing. Estwig was already falling into Noonsleep and might fall right off the wagon. That last camp was well beyond the farthest doostEr had ever been, he wasn't prepared for what was just about pure desert. They would have to turn back this Afternoonday, they didn't have enough water to go farther. "I don't think it matters where we camp," doostEr said.

Estwig looked his way but didn't say anything.

"Now's as good a time as any," Tahlmute said. "We're right where we should be by my navigation."

"We can take a little Noonsleep, then we have to turn back," doostEr told him.

"Yes," Tahlmute sighed, "We aren't equipped for this."

"I didn't know it was so close to desert out here," doostEr told him. "We needed a serious water supply." doostEr signaled the kedas. They were skeptical, but circled around to face them. BobbingTwo showed his teeth, keda-speak for hunger. As soon as he was facing them he was looking west so he was the first to look up at the sky and he immediately put four more eyes on what he saw.

They turned around to see it over the backbone and the rigging. There was a little streak, it was getting bigger. Something glowing red was growing in front of it. "It's the asteroid," Estwig yelled and launched from the seat, "and it's headed straight at us."

doostEr was also already off the rockosaur's seat as Tahlmute said, "If you can see a meteor before it hits you, it missed, you have no chance of getting out of its way."

They could see the object approaching, but it was not really coming at them as fast as a meteor. In a moment the glow began to

abate. Suddenly there was the sound of a huge explosion, from the direction of this thing, but no sight of one. That sound did not die away but was replaced by a scream and roar that built in volume.

The glowing dot at the end of the streak faded to black, but it was still approaching. It was starting to look a little like a cheap kite. doostEr was now down from the wagon and standing on the ground beside it watching, his hand idle on EndsWaving's flank. Estwig had stopped running, if it was a meteor it would have landed long ago. It was too rounded to be a kite, it was more like a wevn in shape. It was changing in shape and sound, it lay down a little more. They were all staring at it, twenty one eyes all told, by the time it was close. It looked like a huge, flying, fat-head wevn with great wind-wheels in its fore-shoulders. That was the closest description he could make. It flew almost over them in the sky, only a few thousand feet above, blasting wind they could feel even down here.

Estwig came running back to them. "It's the starship," he yelled, I saw pictures of it in a schoolbook taken back at the turn of the century."

It was the starship. He didn't have a book about it, but he had seen the pictures in news magazines twenty decades ago. It had been so long that he didn't think of it at first, but this matched his memories of the news from back then, as well as his memory worked over that distance of time. They all watched every minute of its approach in awe. So this was how the map worked, you go to the '+' and we'll come meet you. "I guess this confirms we were doing this for the Brazilians."

"I thought the ship was broken down," Tahlmute said. "I thought they had spent so much money that they had melted the whole thing down."

"That's all made of metal isn't it?" Estwig gasped as the landing legs extended. It was settling right in front of them, with the pointed end toward them. They had to shield their faces from the sand kicked up, then they had to lean into the wind.

They were all grateful when the huge fans turned off and slowly spun down. As they did, a ramp extended. Long before the fans stopped, a man in a service coverall sauntered down it at a

quick pace. He was not one of the two Brazilians he had met, but he was big and barrel-chested like them. He had a thick and detailed metal stick strapped over his shoulders, shiny black low-calf boots and several shiny black canisters strapped to his upper thighs. He had a colorful emblem over one breast and some groupings of rectangles over the other. He wore a flat hat with a bedazzled brim in what looked like gold-plated aluminum. Why they would disguise the aluminum as gold was strange, unless they were trying to hide its true value? But then why do such a bad job of it that you can see the aluminum thru the gold?"

Tahlmute was horror-stricken upon seeing this man. "...the Colonel," doostEr thought he said. Tahlmute tried to keep his voice low.

"Tahlmute!" the Colonel said cheerfully. "So nice to meet again. I congratulate you on a delivery on time and within budget."

Tahlmute didn't reply, he just stood there, jaw down, eyes out. doostEr and Estwig were no more surprised to see this than whoever else might emerge from an ancient starship in the middle of the desert, but he began to worry that this development might affect his ability to collect his fee.

"Come now, come inside and we will settle up." Two other men dressed in similar garb came down the ramp behind him and were hurrying to the crate, keeping it between them and the kedas. In the distance behind them, doostEr noticed a pair of riders on the last hill they descended. The others were too intent on each other to notice small dots on the horizon.

"Colonel..." Tahlmute stammered, but was walking toward him.

"You were expecting someone else?"

"I received messages from Ava," Tahlmute said. Tahlmute had clearly expected his friend at the Kassikan to be working for the other side in this dispute. To be honest doostEr didn't much care which Brazilian wound up with the crate as long as he got his pay. If there was aluminum being slung, doostEr felt he deserved at least thirty coppers of it.

"The woman of that mailbox is right here," the Colonel said. doostEr could see only an attractive pair of legs on the ramp.

Tahlmute looked up, his eyes got big and he pointed, then exclaimed, "You!?"

Book IV.

The Ghosts of Narrulla's Tear

1. Return to Biology Base

Glenelle Mason woke very disoriented. She was pretty sure she had been in larger quarters the night before, reunited with Morgan Evans on Gordon's Lamp. This morning she was alone in her small universe again, just a few rooms and some views like she had on the Biology Base. She dialed herself some breakfast, lots of fruit with the indulgence of a wedge of a rich crab quiche to go with it. Yeah she knew she could dial hunger out, but this was something she would never give up about the Afterlife. She could indulge her taste buds with abandon and let none of it thru to her hips.

While eating, she took a survey and was now certain she was on Biology Base again, at first she thought she must have imagined the reunification and it was still yet to happen, but then she found no sign of Alfred or Vic. Their universes were not accessible, even by mail. She brought up a base universe information panel and found out that the place was gutted. There was only the backup fabricator and an even smaller backup to the backup fabricator. Both were running at capacity in what looked to be an effort to construct a full scale fabricator. There were also some instruments, they were sending their data out on the highest gain antenna, focused on Sol.

Of Gordon's Lamp there was not a trace, instead there was some other vessel docked with the base. She found some remotes and had them take a look at it. It was a massive and ancient daedalus sleepership, a relic from a century ago. It looked like an old Brazilian design that was still built up until the days of her mortal childhood. She started to develop the theory that she had been suspended and left on the Biology Base when the expedition returned to Sol. She went to bed in late October of 2278, but had she been suspended while the expedition departed? Was this some kind of delayed punishment for stowing away on that base the first

time? Could that ship be the Presidente Lula, last of the sleeperships? Could she have been suspended so long that it was here already? It wasn't due to arrive for another sixty years. She wondered how long she had been suspended, looked at the date, 2423! It had been a hundred and forty five years! Gordon's Lamp should have been back to Sol long ago. How could she have possibly been left alone unattended all this time? All the crystal would have decayed ages ago.

She found her front door could raise one other, that of their system's administrator and her best friend on Gordon's Lamp. If Ava was here, that would explain why the fabricators were in full operation. As there was nothing else she could do, she called on Ava.

She was met immediately by the tall slim personification of Ava Bancour, her hair a little longer than she remembered but still a shining dark brown fall. She was dressed a little sexier than she remembered in a snug tee-dress that reached pretty close but not quite to mid thigh. "Wow Glenelle, you're up!" Ava said when she saw her. "Welcome. Why it's been such ages!" Ava said as she took her in a big wide hug. "It's SO great to see you again." She must have added strength to her personification to rock her the way she did. There was a lot of definition in her tactile presence.

"I thought we had been re-united?" Glenelle asked, her puzzlement surely showing. "I thought I was off the Biology Base?"

"Oh that?" Ava said, "Yeah, that's been over a while now. They left for home back in 2278." Glenelle's head was swirling on the verge of going into shock while Ava calmly lead her inside and thru the house. There was a hall that passed a couple small offices on the way to her gathering room. They were filled with lots of scrolling screens floating in formations in the air.

"I notice it's quite a bit later," Glenelle said, letting her eyes tell her how shocked she was at how much later.

"Yeah." Ava said, "but let me ask you, how do you feel? Do you feel alive?" She never sat down in her gathering room but lead her slowly thru the long room toward the back where a wide porch overlooked the beach.

"Sure, I'm alive all right but what's this about, where is everyone? Was that date right? 2423?" Ava's gathering room was empty, but that was not unusual in and of itself unless she was having a party, then there would be a table of food set up in the middle of it.

"They've all gone home, a long time ago, that date's as right as I can make it."

"It's just us?" Glenelle asked.

"Right here, right now. The Heavenly Mother is on its way in, but it's badly damaged."

She was so confused she didn't know what to ask about first.

"Why was I suspended so long?"

"It was pretty boring here," Ava said, "There wouldn't have been much for you to do and I am so short of fabrication capacity it took awhile to build up enough room for another soul. You were my best friend and the first I've chosen. Well, I did have Vic around for awhile because this station was named in her honor and she takes up so much less veron space, but she couldn't take it in here so I had to back her out again."

Glenelle didn't really understand all of that, assumed she meant back to the main expedition. "We still have an instrumentation package running," Glenelle said, "I could have been working with that."

"It's been on automatic, not that it seems to matter any more."

"Why?"

"A lot has happened." She took a deep breath and turned to her. They were on the porch now but standing still on the space between the big french doors to the gathering room and the wide steps down to the sand. "Talstan's Angels went to war with Brazil over the immortality virus."

Glenelle was listening, but though she thought she knew the words, none of them seemed connected in a sensible way. "What are you talking about?" Glenelle asked. She looked beyond Ava to the surf while she thought of how little sense that statement made. The first problem was that Talstan had been a world power, 'the enemy' of America and its descendants for a century by the time she died in that warehouse on Pallas. Talstan still publicly denied

having Angels and still called them an abomination when Gordon's Lamp left Sol. She could scarcely imagine the Angels of Talstan taking on the only remaining mortal superpower. Of course Talstan has Angels by now, she knew that from news sent to the expedition. Once they did, their creed could finally make some real sense. She'd kept up on politics, at least until the mid 2260's, by eleven year old news. Hearing it on the news and living in it were very different, Talstan's Angels still sounded like nonsense.

"That's right, when that backup was taken there was still some disagreement over Alan's findings," Ava told her.

"When I went to bed last night," Glenelle said, "You had just found out that Alan's world was a hack. It had to be, we must have known that or we would have been in a lot more awe of it than we were."

"If it's a hack it's one I'm inside of," Ava said. "I've been watching the readings going out on these instruments..."

"Wait! You're telling me that all that stuff really was real, there really is another human world down there?"

"With four times Earth's population, or at least four times Earth's population before the war."

"War? Immortality virus?" Glenelle asked again. "I guess I have a lot to catch up on."

"The Kassikan gave access to the Eyes to the Brazilians." Ava didn't give Glenelle time to ask what she was talking about. "They didn't know what they would do or what they would start, but they transmitted the code back to Earth and the Brazilians of 2359 were able to understand the immortality virus code," again she got no chance to ask for an explanation with anything but her eyes, "when the radio signal arrived at Sol. It's more of a collection of plasmids in a delivery vessel, but it is the reason there were no old people here. What that girl told Alan back in Yoonbarla about this planet is still the most accurate summation we have."

She wanted to ask what an Eye was and what a Kassikan was but would get to that, more immediately she asked, "And how could that cause a war back home?"

"The Brazilian expedition did not have scientists who could understand the information they could look up on the sun towers

here, but they were kind enough to transmit the code back to Earth where it was understood, and put into general production within a generation. Immortal Talstan took the lead in attacking Brazil's biotechnology sector, but the League, Pallas and New Dallas saw eternal mortal youth as the end of the Angel era and soon joined sides with Talstan."

"Mortal vs. Angel." Glenelle was sorry to say, she saw that coming while she was still mortal. She saw it the most while she was working on Pallas. That nation of two hundred million deceased former Americans born in the mid to late 21st century were some of the first to win back control of their assets. Some of them had resided in server vaults in big cities before the asteroids were colonized by robots under Angel control.

"The plan was to pummel mortal technology to the point where they would volunteer to ascend," Ava continued. "Many did volunteer to ascend in the generation before that virus reached Earth."

"And what of Pallas and the League?" Glenelle asked.

"There are no transmissions," Ava said. "They were under attack from deeper space was the news in the last messages we got, then the transmission stopped. I suspected a Brazilian doomsday system in the kuiper belt, but I have no evidence for anything except that interstellar transmission from the Sol System has ceased, mortal transmissions only a few years before those from the Angels."

This development made her put all new revelations about this system from her mind. The civilization that sent them was gone?

"Why are you still sending the probe data?"

"Just to give them a fix if they ever come back on, it's just simple machinery powered by sunlight. As long as it lasts, I'll let it send, just in case there is someone there that can still listen, even if they can't send. Alfred set it up."

"So there is no hope for us," Glenelle said, "There will never be anyone else in our society."

"I have complete backups," Ava said, "We can eventually bring back the entire crew."

"But what of them, back at Sol?"

"My best guess is the theory that Brazil had a doomsday system set up in deep space, this trouble was brewing while we were still on our way here and they threatened as much. All the Angels may have been destroyed also, there have been no signals from any nation of the Afterlife, that's all we really know."

"But they may still survive?" Glenelle asked.

"I hope they do, of course, but that brings us to something else I feel I need to tell you," Ava said. "We really can't be sure that your instance back on Gordon's Lamp has ceased, but I feel the odds were great enough that I was justified in restarting the latest backup that I had."

"So that's what I am?" Glenelle asked, "A backup?" An empty hole opened in her gut over that. One never had to be started from backup unless the original instance had died.

"I think the League might have been destroyed, we no longer hear from them."

"I could be a clone?" she asked, picking up on the very pregnant 'might have been' and worried that she was committing the greatest sacrilege the church knows. She was an earlier version of herself. After a hundred forty five years, what would she be like today? A cold draft blew thru the hollow in her vitals. She had lived as much time that she didn't know about, as time she did. If she was still alive at Sol after Gordon's Lamp returned from its voyage.

"If you are, it is doubtful anyone will know," Ava told her. "If anyone survives at Sol, they won't be coming back this way very soon after these last three ships come in."

"You said we have a ship due in?"

"The Heavenly Mother, they left a generation before all-out war, in 2348."

"Will they know me for a clone?" Glenelle asked.

"They left well before Gordon's Lamp returned, they won't know how many were left behind, I hope to have space to tell them five or ten of us were. Do you feel like a clone?"

She thought, how did she feel? She felt as much like herself as she ever had. She considered herself a little more worldly than when she was mortal, but she hadn't lived to be that old as a mortal, only thirty seven. She felt about the same as she had the day before,

and she did remember setting her alarm for a backup last night. Last night was in 2278, this morning was in 2423. Like she had been on an old sleepership like the one they were docked with that had taken her on a whole new voyage into a future she could scarcely comprehend.

"I feel normal internally but disoriented by all you've told me. It's been a long time, if I was to be revived from backup, shouldn't you have used a more recent backup?"

"I used the last one before Gordon's Lamp decoupled from this base when it departed for Sol. I have no later ones."

Glenelle could only stare silently inside at that idea. She lived a hundred forty five more years she would never remember. She might be living more years even now. "I wish I was more sure I wasn't a clone," Glenelle said, "Wouldn't they have sent you more recent ones?"

"If that was possible, and it's not, they didn't know I was here."

"How could they not, if they left you..." Glenelle trailed off, understanding without being told. "You are the clone. They thought you were captured."

"That was my sacrificial clone," Ava said.

"You are..." Glenelle trailed off again. The cloned Ava had never been captured but had remained behind in the abandoned base. She had built fabricators and gained access to backups. She had started one; her. "I am as clone as clone could be aren't I?" Glenelle asked herself. In all of immortal life, there was no greater crime. For a century she had lived knowing that cloning a simulated soul was the greatest evil mankind could dream up. An illegal copy of herself. No matter what the 'might have happened's were, she was an illegal copy, a copy with no legal right to exist. She felt it, and yet she didn't feel it, she felt too much like herself, maybe confused about the time and place, but she still felt like Glenelle Mason, biologist and lieutenant in the crew of Gordon's Lamp. She had to face it however, there was no way she could be in this situation legally, so she felt horribly exposed. "I don't even have to ask," she continued. "Did it take you this long to build enough space for both of us, or this long to get lonely?"

"Some of both," Ava confessed.

"So I could be legal?" Glenelle asked her, "or at least you're trying to convince me that there is some wisp of a chance I could be legal, if Gordon's Lamp was destroyed."

"If you're too uneasy about it I could back you back out and see if there is some other friend of mine who would like to share this space?"

"No," Glenelle said, surprising herself with the speed that word was out, in spite of the racing heart her ethical misgivings were causing, "I just need to understand who I am and where we are." In spite of knowing she was totally illegal and would be erased if found out, she would fight for survival if she had to wouldn't she? That survival instinct had certainly been cloned with her hadn't it?

"We're still in the null point between the moon the natives call Narrulla and the planet they call Kassidor. It's the year 2423 by my clock and I'm still living here in this villa, still spending most of my time out here on the verandah."

"I would too," Glenelle said. Ava had always had the prettiest home, though hardly as pretentious as those of Delos Alvarez or Haymon Kruger. They had settled into the plush wicker loveseats overlooking the Caribbean. Frosty minted drinks of a golden nectar appeared on the glass table at the corner between their seats when they looked for them. She noticed it was the native liquor, not alcohol. She was beginning to feel that it had been a century and a half and a lot had changed in the Biology Base. "So do you call this Biology Base still, or the Victoria McReady Station?"

"The natives call this body 'NahniNarrulla,' 'Narrulla's Tear'," Ava said, "and I've picked that up. Pretty name for the piled-up wrecks of derelict starships don't you think?"

Yes, where we are. Left behind at this world that was too big and old for them to really comprehend. Too important a find for captain M'Kintre to face. "Yes," she agreed. She felt real but she was clone. She had defended her clone life already. Her head was really spinning. "Are we part of the Pan Solar League or pure pirate?" Glenelle asked.

"We are still part of the league," Ava told her, "and we will be joined by another expedition soon, if we can get them in. The

Heavenly Mother is coming in too hot to make a direct stop here. They will pass us the first time in just about a year but won't be able to dock with us for quite a few more years."

"So we will have a community here?" Glenelle asked.

"We and they may be all that survives of the Pan Solar League and the Christial Church. Until we receive further signals, I'm going with that assumption."

Pallas was more of commercial simulation without as many religious overtones, and didn't call themselves Angels, though there were many Christial believers among the population who did. There was another major secular colony of simulates. "What of New Dallas?"

"They sided with Talstan," Ava answered, "and dropped rocks on Brazil, killing over four million civilians. They were holed by a Brazilian missile in 2380. Two hundred thousand mortals and over half a billion virtuals were lost. Few of the virtuals were ever re-instantiated before transmission ceased." Both of them knew there was no need to talk about the mortals. Explosive decompression could wreak enough havoc to make read-out impossible, making whipped cream of the personality to be recorded.

Glenelle wondered at the folly of a nation consisting of one pill-shaped space colony three miles in diameter and forty miles long that passes in close orbit less than five hundred miles above, declaring war on a glowing industrial belt holding half a billion mortals that was longer than the distance to that orbit. The report Ava's radio had picked up from Sol said New Dallas had been destroyed within a half hour of releasing their first rock.

Glenelle had to admit that even though Ava did her best to make the war back at Sol sound exciting, it seemed long ago and far away compared to the adjustments she had to face, being a clone and her whole time had been turned into a fantasy realm. Even without the missing years, she'd spent more of her life on Gordon's Lamp than at Sol, a good part of it here in this null point and most of her last eight years in this base. What seemed more important were the affairs of this outpost, especially knowing there was likely to be no more contact after the Heavenly Mother, if they could even get them in. This was such a claustrophobic space now,

there wasn't enough air. She knew she could have as much air in her universe as she wished, it was more like social air.

She was also surprised by the immortal population of New Dallas, that was four times the Pan Solar League's Angel population, even more than Pallas. "But half a billion, where did that population come from?"

"Over four hundred million residents of North America voluntarily ascended while Gordon's Lamp was on its way home. New Dallas started taking Chinese souls in 2191 and had a fifteen percent share of Chinese souls since then, and a twenty three percent share of Brazilian.

"The Presidente Lula was in contact with the Yakhan from 2332," Ava continued to lecture on stuff Glenelle had missed while she slept in backup. "It took them ten years until their shuttlecraft reached the ground, but the surviving crew are all living on the planet below and the nose plate of their derelict old torch is serving as our fabricator mount."

"I saw it, I see the operation of the remotes is still the same."

"Yeah, good to have you back."

"It's good to be back, so what's the Heavenly Mother?"

Ava leaned back and drew her feet up on the loveseat, took a long pull at that drink. "The Heavenly Mother was the follow-on expedition to Gordon's Lamp. The news of its construction was about to reach you when you took your backup. The Heavenly Mother was to Gordon's Lamp what Gordon's Lamp was to the Lula. Deuterium attraction science had advanced two hundred years when the Mother was finally launched. There were three hundred fifty two souls aboard..."

"Were?"

"They hit a snowflake, it blew off the point data relay, it took them months to fabricate a new one and a year to get their point back after that. A sizeable fraction of their crew are still on backup."

"I'm glad they didn't go thru it," Glenelle said about their point.

"No, they kept it in front of them with some heroic work from the laser staff, but they were adrift while it happened and doing

.331c at the time. It's only this last year that I can communicate with them."

"What will happen to them?"

"They have to overshoot us and then power back. They're going to go about twenty billion miles past us before they can reverse. There's some parts they can't fabricate yet, they're condensing metals from the plasma stream but it's slow."

"Sounds bad," Glenelle said. She knew a lot about the motor from Morg, maybe even more than Ava did.

2. Life Building

At the end of the day they were on Ava's verandah again, it was a good place to wind down the day, it had been a day of overload. They had spent the day going over the discoveries Ava made in the last century and a half and they were impressive. The most impressive accomplishment of all was interfacing to the planet's data system. It was believed that this system was originally built around 3200bc., but went out of service around 2600bc. and was only put back into service in 1396ad. All her other discoveries flowed from that. Their biological technology had powers beyond what Earth's religions attributed to God. The history here made what had happened back at Sol seem like a few tribes in the desert. The university where the ancient server was kept was founded in 1429bc. It was all too much to absorb at once, especially after the shock of waking up clone. She was glad when Ava decided that was enough for one day and invited her to her place for dinner.

Now we all know that eating is as unnecessary for an Angel as going to the bathroom, but it is an important social ritual and it is still in constant use. Very few Angels actually eat except in a social situation, or at least very few admit to it. Glenelle does admit to it, eating for entertainment, even when alone. Most Angels have kitchens and dining rooms in their universe, few have bathrooms. Their dinner was exciting, it was course after course of recipes from the world below. Each one blew her farther away than the last.

"I would have expected food from a different evolution to taste like plastic or mineral ore."

"It's the sensory nerve signals generated below, read out and transmitted up to us and recorded. This is what it really tastes like to the natives that eat it regularly. But don't forget you've done a cup. You'll find cannabaloids can bring out the flavors in foods even more than the finest wines."

She hadn't known that until now. She was afraid of the cultural shift she could feel coming. "So I guess we're pretty much caught up now?" she asked.

Ava looked stunned, "You've seen the structural changes so far and heard a little introduction to the science I've been working on."

"I did notice you said little about our social and political situation in our own world."

"I told you all there was to that this morning. We are the social situation so far."

"You have contact with others, you've had contact with the people from this ship. You didn't learn all this alone."

"I've had contact with a few of the world's ancient wizards who own mind-link helmets. I've conversed remotely with many of the Brazilians. Few natives have the money for a voice link, even now that our visit has brought the cost down by a factor of a thousand, most just send mail and few send it more than a couple times a year."

"I would think we would find a lot in common with the Brazilians," Glenelle said, "We are both from Earth."

"They are still flesh, most have settled among the natives. They are spooked by us I think, us in the afterlife."

"Why?" Glenelle asked. "We were their closest ally."

"We have to remember that they left Sol the same year I was first put in crystal. They probably aren't comfortable with Angels."

Just as a war with Talstan's Angels hadn't made sense to her. They could very well feel uncomfortable with simulated humans, especially if they knew of the war Ava described. "Like the natives." Glenelle already knew that just from the fact that they were called 'ghosts' and not 'Angels'. While connected to the data system Glenelle had known about the religions of the planet and how Earth's were a subset of them. Just remembering how much

knowledge existed concerning religions was sobering. It had been a very scary day.

"True," Ava answered.

"The prejudice was still rampant in our time," Glenelle said. When Gordon's Lamp departed in 2175, many mortals resented the growing power of the Angels in society."

"Our time was only a generation later."

"But it was an important generation. We were the first of the virtual age. Our parents were never re-incarnated, for most of us. Mine weren't," Glenelle said. At times she felt guilty that she was privileged to live on in heaven while they had simply ceased. Why is that fair? Just because they were born at different times?

"Mine were," Ava said. "They were still young enough and had my experience to guide them and a financial free ride because they had donated their daughter for the initial experiment."

"Where are they now?" Glenelle asked.

"For all I know they are lost in the war. They were running in Ceres with a backup in Vesta, but we lost touch before there was a ten year round trip in our communications. If they are in contact with anyone of me it would be my sister that went back."

That was still a touchy thing for Glenelle to talk about with her. Ava seemed so casual about it, she had evidently made peace with the process. Glenelle had not. She didn't want to think about the fact that there might be another copy of herself back at Sol, fighting for survival in a new type of war. An Angel war would totally transform thought would it not?

She shuddered and turned away from that path. "But I have to talk to you about where I'm going to live and how we're going to manage this tiny island of the league."

Ava didn't reply immediately, just looked at her and thought for a few seconds. "You want more space?" Ava asked.

Maybe it would be better to talk about that first rather than what she was going to do here. "Yeah, that's not my greatest concern but Biology Base feels a bit cramped?"

"If it does, it can be solved. I'd be delighted if you would share some of mine. I have a thirteen hundred mile archipelago here. Please, at least settle your cherub on one of the hundreds of big

islands I've scattered in a lazy arc across this water. Please let me adjust it to suit."

"I'll make it a stop," she said. "You've done a real good job with your outdoors here, I would be glad to be able to share it with you."

"What do you mean by making it a stop?"

"I don't like to have my home tied down to any one location in my universe. If I want to wake up with the house on a mountaintop in Colorado looking out over the sun coming up over the high plains, I will let it happen. I want to be able to put my breakfast table where I want it."

"That's just a view, that's only a couple G, you can have a new view any time you want. I can give you a generator for them."

"Yeah, I'll take one. Is it one I know how to use?"

"What did you use?" Ava asked.

"Dreamland AmpliMagineer XII 5.6b."

"I can emulate that interface," Ava said, "but I didn't save a copy of that actual tool. I'll pipe it thru a translator to Rend'rAxxe Hyperion open loop so if you do want to walk into it you can."

"I thought that took an extra five Q?"

"Only if you do walk in, not if you just enjoy the view. I saved eleven Q by not having both crystal types compiled. The only drawback is you'll notice a lag when you walk in while the additional crystal is blown."

"Good," Glenelle said, "because there's something else about life here I want to talk about."

"I'm listening," Ava said.

"I think we should make it a priority to get more souls, even if we are a little cramped. As long as a few views are not a problem, I don't need much. I'll park my rooms on one of your islands for my outdoor. I like the idea of somewhere Morg would like. If the whole crew lived on your islands we would not be as densely populated as we were in hunter-gatherer times on islands like these."

"It takes up to a hundred times the crystal to run a soul as it does to represent an interactive island. My whole archipelago takes less crystal than you do. We cannot skimp on our universes to make

room for another soul. We have to build up crystal, little by little, as the fabricators can add it to the rotation. We really need to wait till the full scale fabricator is running before bringing up the next soul."

"When will that be?"

"It will be months from now at best. I promise you Morg will be next up," she said, "Till then you'll have to be content with me and cherubs."

"What about someone for you?" Glenelle asked.

"I can have lovers from the surface," Ava said, "A mind-link helmet lets them enter our universes."

Glenelle was intrigued by that. The concept was cutting-edge in the last messages they had received from home. "They are as advanced as we are," Glenelle said.

Ava set down her mug and looked her in the eye, "Our greatest achievement is that we can interface with them. Their technology was a thousand years ahead of ours when those helmets were made," she paused and said slowly and carefully, "five thousand years ago."

Glenelle was overwhelmed by that. Could that be true? She was pretty impressed so far, but not willing to go that far. She wasn't willing to argue about it however, she was still new here. Instead she tried to leave the native world aside for now and come back to getting her own house in order first.

She could amuse herself exploring all the outdoors that Ava had built up. "Is it alright if I adjust my island to have a lot more wild fruit on it?" She asked.

"The island is yours, you can make it as magic as you want."

"Thanks, like I said, you've done such a good job on your outdoors I will probably take you up on that. I won't use very much magic at all, maybe a little around the doors and windows. I'm thinking about a zero gee room also, maybe one the size of a dyson sphere around a yellow giant."

"It's an extra five Q because you're interacting with it, we have it, we have fifteen in fact."

"And a soul takes?"

"Vic was scary, she only took a hundred and seven. You have

three hundred and ten Q in use."

"And you?"

"I've added some stuff on myself so I take up four hundred and seventeen."

"So I won't feel bad about the zero gee room I was looking for."

"Not at all," Ava said.

"Do you usually drink this much of this native elixer?" Glenelle asked. She noticed Ava was on her second cup of the stuff and ahead of Glenelle's progress with her first.

"Brancettrabble first got me into it, back when the main expedition came back from Kunae; B."

"I had learned the language before the captain returned," Glenelle said. "With the right drivers I conversed with natives using one of those androids. What I'm trying to say is, I know that star as Kunae also. I thought this world was quite interesting. And who is Brancettrabble?" she asked.

"One of the ancient wizards I've communicated with. He was the one who actually helped me develop this contact and taught me enough about the human mind to build it."

"He's the one who's not at the Kassikan?" There was such a large cast on the ground that it was hard to keep them straight, even though Ava was trying to keep it as simple as possible.

"Right. So before I finish this cup," that she had taken up again, "is there anything else serious that you wanted to talk about?"

"Yes, there is something else I need to talk about," Glenelle admitted.

"And what would that be?" Ava asked, reluctantly putting the cup down.

"What am I going to do while I'm here?"

"You mean, other than sit back and enjoy the beach?"

"That's only good for so long, I hope I have some mission here. Keeping you company is great, but I hope I can be more useful than that."

"You were useful studying the planet in the past."

"They have more information in their data system than I could

have discovered in my life."

"And how long is that?" Ava asked her.

Glenelle stopped. In this data system she had met people five thousand Earth years old. "I see your point. More than I would have learned up to now."

"You can still study the planet, you simply have greater means available to you now."

"And we take all their information at face value? After all, the only thing you really have is a signal."

"I'm constantly verifying what I can. I have quite a few probes out. It is as accurate as I can be. You will see as you work with it awhile. You will come to understand that we are a speck of dust off the nose of this planet's tiny moon. Study what you can, verify what you can, I suspect you can learn a lot from them."

Glenelle could see that Ava was very sure of herself on this. After playing with the native data system only a few hours, she already gave Ava's perspective a lot more consideration than she would have just a year ago, well actually a hundred forty five years ago. When she admitted it to herself, that link into their knowledge base had been a little disorienting. Clever user interface, you already always knew it, you explore the memories of knowing the facts, seeing the pictures, hearing the sounds. It recorded no smell, touch or taste, just sight and sound like can be done remotely with a mortal.

Ava told her that was the helmet interface to the system. As Angels, they do not need to physically don a helmet, they could use the same interface from the lab/office next to her gathering room, or from right here on the verandah if they wanted.

Some of the instruments Alfred left behind were simple weather and soil chemistry stations in remote areas. She could monitor those and all the recordings of the data that had been sent for a century and a half. Besides the instruments in microprobes in the soil, there were landers that could be flown. She even noticed there was an android on the surface, an Android of Ava. That would be an interesting topic for a future conversation.

"So, shall we pick you an island to live on?" Ava asked, snapping her back to the present.

"Sure," Glenelle said and with a firm tweak of the magic constant of her personification, streaked up into the sky a few thousand feet to take a look around.

With a single peal of laughter, Ava zoomed up with her, her hair plastered to her head with speed. She knew Morg would never let her play with this much magic, but when Ava got going she could out-imp anyone. They flew like girl-shaped missiles above her islands, complete with laying a sonic boom that scattered all the birds behind them, stiff-arming the air in front of them like an old-time superman. The sun still stayed on the horizon. One disadvantage to living in Ava's universe was that the sun had only a few positions, wake up, work, play, sunset, sleep.

Glenelle tended to have a separate sun for each room in her universe anyway so this would just be the opening on one side of her home. Having sunset last for two or more hours was something she could enjoy anyway. Then she realized it lasted three or four on the planet below. There however, sunset only happened once a week, but the week was half as long in hours.

They flew a few miles into the sky before she could appreciate how many islands Ava had, as long as Japan. "Morg might want to be close enough to get to your place on the yacht," Glenelle said. "How would you feel about that?"

"That would be fine. You can even share my beach if you want to."

"We don't mean to crowd."

"You get used to speaking for your cherub don't you?"

"I already mentioned I want to revive more souls as soon as we can. You already pointed out I have plenty of time."

"Yeah," Ava said, "It's slow now. Once we get a full scale fabricator going, things will be different."

"The time till then is not even a small mark on the future we have in front of us."

"Uh, yeah," Ava agreed.

"Let's look at this island down here. It's back in the middle but it has a nice reef and nice lagoons. Morg'll like that channel when he gets here. His place was one you couldn't get into if you couldn't pilot your boat."

"I called that Mt. Check Island. That's the highest peak in my world," Ava said.

"I don't want to presume..."

"I made it special for you and Morg just now," Ava said.

She didn't quite believe that but said nothing more about it.

She swooped down toward the island like a fighter plane peeling off the formation. What sense it made to spread their arms like birds and cup their hands was beyond her. They did it because it was fun. They were moving faster than an atmospheric warplane, closer to the speed attributed to flying saucers in the 20th century.

She flared, and dropped from twenty five thousand miles per hour to stationary in six tenths of a second. She brought her feet down gently to the sand on a beach of moderate surf, one of the exposed sides of this island. She pulled in her arms, fluffed her hair out, and looked around. This looked very much like the place where Morg had his villa. The only thing it lacked was landscaping. "I have his place archived if you'd like," Ava said, dropping to the sand beside her. She knew his place well because she had visited them often on the hundred-year voyage to 61 Cygni.

"I'll let him call it up if he wants," she raised her hand to forestall Ava's objection, "whenever he gets here."

"That fabricator. Now that is small enough that forgoing that zero gee universe till we get that the full scale fabricator going would actually help."

"I can do that," she said, "but I wouldn't mind parking my present quarters here."

"Sure, anywhere you like."

Glenelle walked in the direction of the waves, but not to any danger of wet feet. From well above the tide line she extended a magic carpet from her finger and rolled it out a few feet. She lay it flat and steady in the air about 14" off the sand. "I want that to be the carpet on the inside of my front door."

"That's fine," Ava said.

"Yeah, well, I'm not quite sure how to get that done in the present user interface."

Ava rolled her eyes up but got out a one-sided screen and looked at some code. She turned her screen so Glenelle was also on

the visible side. "Using the AmpliMagineer user interface paradigm, you just create this location translation pane here," she drew the boundaries of the magic carpet on an image of her home's foyer, "bundle it with this location," she outlined the magic carpet as it sat there over the beach, "and snap it into this site's continuous instance list here." A new screen flashed up in the air beside them, an entry was inserted on that screen and the screen disappeared.

Glenelle had no idea whether she should be watching what she did on the invisible fingerboard or what was happening in the 3D diagram of her home that was springing from the page Ava's screen had open. Glenelle knew she was not going to understand systems work and would always have to have help from Ava. She stepped up on the carpet to test it and sure enough she was in the inside of her entry foyer, from here she could step into any room she wanted. She stepped back off the carpet and found herself stepping down onto the sand again, the home disappeared and the wild pristine beach front was all around them with a beautiful Persian carpet hovering eight to fourteen inches off the sand.

"That was just what I was looking for. I never got it so smooth before."

"Researching those helmets taught me more about user interface design than we knew back at Sol. I used stuff I learned here in that."

"And not just the formula for that drink?"

"You know how much you had. That yaag made flying more fun. That user interface is science."

"I like it, thanks for the building site and the installation."

"T'was nothing," Ava said.

"It was more than I could have done."

"There are things you can do that I can't."

"Like what?" Glenelle asked.

"Operate an android successfully."

She wondered if she was going to talk about the one on the surface, that could be fun. "Yeah, but I haven't in years."

"I just can't do it well. It doesn't fit, I tried. I even spent a year making one up to look like me, but I still felt like I was in a machine. You operated it well. You operated it only a few months

ago, your time."

"That was Morg's android I was in then, I haven't had mine out since Alan found out about them." That was over eleven years ago in her time line.

"You're better at it than I am. Let me forward a message to you, tomorrow, it's from someone on the ground who can use your help."

But for the remainder of the evening Ava took her to a simulation of a native entertainment district. She was so overwhelmed already that she just went with it, and it was populated only with cherubs so she didn't take it seriously. She was so blown on the native elixir that she just sat there and wondered on the intricacies of all the grown and grafted wood that went into the room in which they sat.

3. Android Ride

To: Ava of Narrulla's Tear

Hello, I was a long-time lover of your sister here on the ground, decades in the past. I am sorry to bother you but I find I must ask a favor. The favor I ask is no small one, it may involve a great deal of effort in fact and may take some thought and planning to accomplish. There may be danger involved.

I regret that I am not at liberty to discuss the details, but the favor I ask is of overwhelming importance. All I can say is that our lives, everyone's lives, may depend on this.

What I need you to do is re-activate that old starship of ours. It can't be done remotely, human beings must take the controls. Your sister told me you have androids that may fool the ship's sensors enough to activate it. If you have any interest in assisting with this, please reply.

From: Herndon Luicius Carlos da Silva,
Villa Toucantins, Bardok walk off Kwan Hunters Walk

In spite of being in the native language, she saw it was from a guy who had come to this system on the Brazilian ship but was now living seventeen hundred miles south west of the city where they landed. Glenelle was amazed that she was able to look up that location on a map and to see it thru a small scope as it came around the planet.

She could look up a short bio of everyone on that crew, and a few more recent notes on those that survive. Herndon was one of the leaders of the Brazilian settlement down in the Gengee. He was of the 'Culturalist' faction that desired to preserve what they could of Brazilian culture in this new world on a voluntary basis. There was another faction that actually wanted to carve out a governed land with a national boundary and laws. Those two factions had gotten into some intrigue regarding their shuttlecraft with the result that it was rendered inoperable.

Their old ship could not be operated remotely, it was deliberately designed to need mortal control. There had to be life support in the cabin and people pushing buttons to make things happen aboard. That was guaranteed in the most basic wiring. The ship was built when the first human simulates were running in China. It was engineered to require the participation of biology.

She went over to ask Ava what she really meant by forwarding her this message. "You want me to fire up that old ship?" Glenelle asked Ava.

"You're good with androids," Ava responded. "I can't make the things respond very well."

"Is there some chance the real reason I was picked first was because of this android?"

"You know what I am, what you were. I'd have to send miner 'bots in to press the buttons. I'd have to animate your old android. It and Alfred's are the only one's that still work. The big one built in Morgan Evan's image and the one in Victoria's image were irreparably damaged on the planet below and I reclaimed the materials to make my android, and that's lost on the surface also.

Glenelle wondered if her android would even work after all

this time, and blinked into it to try. Her android looked like she did when she died, the second youngest on the crew of Gordon's Lamp at death, Ava being the youngest by far at twelve. Glenelle was thirty seven at the time but still quite beautiful. She had an elegant shape, long legs and pert breasts, high arched eyebrows and a long neck. She was a rich milk chocolate color with half-loosened curls that fell over her shoulders and were tied back with small pins behind her dainty ears. Her eyes were as full of fun as her body was sensuous.

It did work. Glenelle knew that because she could run it, but she was still on Ava's verandah at the time, still physically in the silicon blades in the core of the two hundred by four hundred foot boulder that remained of Gordon's Lamp. Glenelle found that she could still run the android as well as she had when she helped raise Alan, the only one of their seed zygotes Gordon's Lamp ever thawed and raised.

She communicated with the Brazilian on the ground. During the hundred and forty five years she was suspended in backup the natives had learned how to make electronics, 'Yingolian crystals' as they were called here. He had a screen in his house like he would have had back in Brazil since four hundred years ago now, except that it looked like a crystal ball instead of a screen. That ball was also the lens of the camera and it distorted his image as he leaned close.

She introduced herself, then asked, "Your note says you want someone to power up your old starship."

"The Presidente Lula, yes, it requires fingers on buttons to move that ship."

"If it does any sophisticated skin capacitance readings or anything but the most cursory retinal scan, this android won't pass. It is as good as we had in 2175, but it would never pass sophisticated technology of your day, even a simple finger-prick would determine this is an android."

"The control panels in the Lula require that life support signal green and the buttons be pushed. The life support is the only fail safe, and it had proven effective against all rogue silicon takeover efforts to date when Lula was launched."

"If there's no sophisticated biometrics on your ship, this android can pass. You are seeing a photographic image of this android on live video, not the output of an Angel's personification rendering channel." She was sitting in Alan's childhood habitat, the camera could not detect that there was hard vacuum in here at this time.

"Introduce carbon dioxide to the cabin and have a fingerprint, those are the most sophisticated biometrics."

"We can do that." She held up her noticeably pinker palm and index finger. She knew the human eye cannot detect that the fingerprint is not that of the subject from whom the android was copied. Just a standard commercial android in 2175, a laboratory curiosity in 2145. "This android can easily operate in life support green," Glenelle told him.

"Then yes," he said, "I need to get that ship operational."

"I can look into it," she said. "Will I have ground support?"

"As much as we can get you."

"Your engineer and whoever he wants, plus a captain."

"I'm sorry about the chief engineer, but we have several of his senior staff."

"I want the guy who knows how it really works."

"I'm afraid the one who knows it best is not with us either."

"What happened to him and the chief engineer?"

"The chief engineer died in revival, specialist Waldeis's location is unknown."

"Give me what you got then," Glenelle let the disappointment show in her voice. "The problem is, I can't pilot a starship. I killed myself trying to drive a forklift in light gravity."

"We don't have anyone else up there."

"Your shuttlecraft is grounded?" she asked.

It was, he gave her a long explanation of missing parts and political disputes and lost paperwork and why it was important. She couldn't swear by anything he said, but she couldn't swear against it either. It was up to her and her skill with that android to get that starship going and she agreed to try.

So that was how she got here, a young woman bounding thru

space on the shell of a dusty old starship. She remembered this ship from her childhood. It was an event of great national pride for Brazil when the Lula was launched. It was built in low orbit and could be seen from the ground for it was nearly the size of a hundred story office building. She was still a flesh and blood little girl in North Boston at the time. America was still officially a nation at the time, though Washington was in ruins and the new capital at Dallas not far behind. The Nigerian occupation of the northeast had ended a generation or two before, no one was sure because it had fizzled away slowly. She had a grandfather from that time but he was buried in Africa. Dallas had never established control in the Northeast, instead it was ruled by gangsters calling themselves Judges.

When the Presidente Lula departed Sol bound for 61Cygni, Glenelle was much younger than the woman shown by this android. The Lula left a generation before Gordon's Lamp. It was the last of its kind. It was launched in spite of the fact that the loss of the Resplendent Dragon was made public only a month before. Neither Glenelle nor Ava had the remotest vision at the time of the Lula's departure that they would be here for its arrival. By then most thought the odds of such a ship reaching its goal were only one in three at best. Glenelle had not yet heard of the warlord's lab in Scranton where Ava's body was soon to be taken when this starship left Earth in 2148.

It was on this end of the journey to 61 Cygni that she had her first close-up look at the ship. When it departed she had only watched news stories about it. Now she was drifting above it using the eyes of her android for instruments. She would soon encounter the ship, and knew that the android's skin was wired with pain sensors that she could connect up to her pain input channels.

It was a gentle thump against the hull, not painful at all. She compared this to stories she read of people getting into derelict spaceships. Usually there is a long tense scene of trying to get the lock open as the first obstacle in the gauntlet. In old movies you would have people in hissing space suits fumbling with obsolete access codes and overcoming the dead batteries in the security system as the air supply in their suits ran low. Instead you have an

attractive young woman in jogging attire, with less fear of the vacuum of space than of mid-town traffic, even here. The artistry of the machine was good enough that she probably could use it to go to the surface and get laid if the shuttle was still here and the android had working sex organs. At least the Heavenly Mother had an intact shuttle with them.

In this case the entry was nowhere near as dramatic. The entire ship had been vented and both inner and outer door to the airlock stood open. She could see how the ship was eroded from the sand that happened by in this orbit as she went into the airlock. She could swim right inside and thru the hallways toward the control console. This was like the virtual tour she had seen as a child. That was so long ago, over two hundred and eighty years since this ship was launched, over eighty it had lain here with Ava's asteroid in the stasis point between the planet and its little inner moon.

She closed the airlock's doors and found they both still worked on the automatics, though the outer door's mechanism made alarming vibrations.

They talked her thru to the life support controls, those were the first any space-suited humans would make in re-activating the ship from this state. Two of the four panels came to life. What chance there was any air left in the cylinders was beyond her, but one of them began to actually restore atmosphere. The main way she could tell, in the android, was that she could hear again.

It was a long process, repairing everything that had to be repaired to get life support working so the hard-wired interlocks would let the main controls be operated. This ship was built in an era when some humans retained the idyllic fantasy that flesh and blood mortals had remained in control of civilization.

"How much fuel did you say remained?" she asked.

"Almost a million kilograms," Herndon said from below.

She had him virtually in-ear as she surveyed the control room like she was the starship captain from the propaganda films of her childhood. "There's just under half a million left now, according to these instruments."

"That might be enough," he said. "That's about a week's burn."

Can you start a system's power-up test?"

She went to work on that. Found a few problems and fixed them. There were a lot in life support that she could ignore, as long as she had enough to fool the interlocks, the others could be ignored. The drinking water level didn't want to be ignored and she had to make some brutal hacks under the tutelage of another Brazilian on the ground. At one point she couldn't manipulate it with the android's limbs but had to call bots in and Ava only had the bare minimum here on the station. Other than that, things went right along until the injector columnator. It did not respond. None of its support panels responded.

"They're not on the same power bus," the engineer guiding her said. "I'm at a loss right now."

"I think we'll have to take a mechanical look at it," Herndon responded. The remote in that area is one of the ones that's out, I think you'll have to send the android or a bot around to take a look."

She didn't mind, it was starting to be fun flipping the android around in zero-gee. Having other souls to interact with, even by phone, was better than dwelling on her clone status. The airlock was balky again, but she got the outer door open far enough to escape, since she didn't actually have a space suit on. As she drifted thru the maze of tubing that lead to the columnator, she thought about her own zero-gee universe that she was postponing. It would have air however, so she could have fins. Moving around by pure momentum left no room for subtlety.

Once she entered the area, the hardest thing to fathom was the sheer bulk of the assembly that was missing, she could float in the space. It wasn't just the injector, it was the containment coils around it and their housing, the detector windings, the throb piping. The entire 'carburetor' of the antique daedalus engine that drove this early starship was gone.

4. Virtual Clubbing

Months crawled by since her ride in the android. They went on a long sailing trip to ease the boredom, but even that was pointless after awhile. They had transformed their hobie cat to a mini cruise liner but the party wasn't on it. No, as Angels they could give themselves the ability to breath underwater so they dropped down into a brightly lit grotto in the reef blow them that was sending up the rhythm of quite a party beat. They got down there to find that dolphins had quite a bar down here set up on the shelf corals with schools of glowing fish lighting the party and a school of drumfish providing the rhythm that the dolphin's girlfriends squealed to.

The dolphins were cherubs, she knew that going in, but Ava had come up with some very creative settings that got her sucked in for quite awhile. The drinks were strong and they kept your glass full. The had to set the magic level to something really silly to make your drink stay in your glass till you drank it while you were under water, but they were both in one of those bored moods where they were willing to set that knob as required to get something interesting to happen.

"We still need another soul to interact with," she said to Ava. Ava had been in her labs a lot lately so that helped leave her lonely.

"You need to go talk to the whales," the dolphin bartender said, "They like to talk of things like the nature of intelligence and the forms of social ordering. They wonder when humans will understand the dynamics of those questions among themselves." The sound was like being underwater.

"Are you ventriloquisting him?" she asked Ava.

"No, not at all. Cheron space is capable of much more interesting arrangements than the standard user interfaces can program. I did this years ago when I needed a break from trying to crack those suntower signals, about 2275 I think. I did some probing of the nature of intelligence." The dolphins could talk better underwater than she and Ava could.

"Just as the whales had done," the bartender said.

"Do us cherubs get service here?" another dolphin squawked.

"It's the size of your pecker, not the strata your mind runs on

that makes a man tardy around you," the bartender chided back.

"I thought it was just how dim your sonar was at seeing me, what with your eyes so ga-ga over our Angel guests."

"Excuse me, I have to go urinate in a cup," he whispered to them, then turned. "What bilge-bail are you looking for anyway?"

"This coral don't grow high enough for the shelf I want to pick from. And a round for the Angels too," he bobbed his head energetically and let out a long squawk, "of Blue Lagoon," he pronounced carefully.

"I only recently added this effect," Ava whispered to Glenelle, "I hadn't heard of this stuff in 2275."

The bartender sighed a wall of bubbles and swam up to the highest shelf, about thirty feet above, where he fetched a crystalline bottle glowing so brightly blue-white that she almost needed sunglasses. Glenelle was a little leery because he handled it with his flippers thru the handles of long metal tongs. It poured like it was heavy as molten metal and fumed the like pits of hell. She was very conscious of the fact that they were still under water while this was happening. It still looked and felt like underwater. She really had to hand it to Ava's ability to wield that magic wand. It was both so silly she wanted to laugh and so real she was afraid.

"We really shouldn't have more than one of these," Ava said when she tipped hers up.

The dolphin who bought the shots tipped his back and said, "So did I hear you speculating on the nature of thought?" he asked Glenelle. "You're very pretty for a human by the way," he added.

Glenelle couldn't respond because she thought she might as well dare tip this shot back and found it was like biting down on two hundred twenty volts AC. She spit it out and it all turned to fumes that she inhaled. She was instantly hammered, and could only giggle and hiccup.

The bartender was back, there were other dolphins coming by from the crowd dancing to the drumfish. "Whales also experience the conflict between the needs of the group and the needs of the individual and need to resolve that conflict often in their lives."

"Do dolphins?" she asked, being drunk enough now to get into the act. She still thought Ava was projecting her own thoughts to

these dolphins, but she was willing to have some fun with it.

"We are like the humans on the planet below," the one who bought the shots said. "We have individual sovereignty and cooperate with each other as we feel like."

"Do you know how you are able to think about these things when you are a cherub?"

"It is because my programming is so advanced that I am able to become intoxicated and thus expound wisely on any subject. The real proof of intelligence was to be able to think deep thoughts while straight like the great whales," the bartender said.

"How do the great whales solve it?" she asked them.

"Solve what?" the bartender asked.

"I guess his sonar don't work well at all, he can't even follow a conversation with it," the shots dolphin said.

"So what are we solving?" the bartender asked.

"The tension between the group and the individual," the buyer said. Glenelle noticed he was longer and thinner than the bartender, and more of a pale blue. "And the whales solve it with song, my dear," he answered Glenelle. "In song is harmony."

"I don't understand," Glenelle said.

"You are only human," he replied.

"I need some green to balance that," Ava said and pulled a tall, ornate stein out of the air.

"Do you understand him?" Glenelle asked Ava.

"I'm only human," Ava said, "I only speculated on the nature of intelligence, the self and the soul. All I've done in these automatons is rig up a little fuller model of the social universe. I used cheron code, but added another layer of understanding of other's motivations, and another layer of self awareness and more degrees of learning ability. Where it goes from there is more or less up to it."

"Did you understand all that?" she asked the dolphin who bought the round.

"I want her to teach me enough so I can work on my own code," the buyer looked at Ava when he said that.

Glenelle started laughing and the bartender bobbed his head and squawked. "Let him," he kept bobbing and swum up backwards

a few feet, "Let him, he'll turn himself into an octopus trying to fix his weenie."

"I'll turn myself into an orca that you'll never hear coming," he squeaked in response.

"How do you think you can learn to reprogram yourself?" Glenelle asked. She was drunk and feisty, not ready for uppity cherubs.

"Ava programmed me, if she can do it, why not me?"

"Can you type?" she asked, pointing at his flippers.

It had only gone downhill from there. Glenelle dialed away her hangover from the stupid evening before. She never wanted to get drunk with a cherub again. She felt like she'd lost the arguments with it. She knew Ava had brought her home and put her to bed last night. They stumbled in after four in the morning, soaking wet from spending the evening underwater. She didn't remember much else and wondered how that worked in an Angel.

Ava came out onto the pool deck with a tight red bandana around her head. A bloody mary popped into existence on the bar as her hand snatched by. "You look hurt," she said to Glenelle.

"Remind me not to go drinking with fish any more," Glenelle said. "I dialed my head out as soon as I woke up."

"I shouldn't have written that code," Ava said.

"For the alcohol or the yaag?" Glenelle asked.

"For the dolphins. It's written for cherons, I built a whole hierarchy from the base up, I didn't use any of the standard derived classes of cherubs, not even pets."

"Remind me not to drink with them next time."

"Yeah," Ava said.

"I'm really sick of cherubs," Glenelle said.

"It's all we have," Ava said, "and you have to admit that provided a different experience than you were used to."

"Yeah, but if we give that up, it seems to me we should be just about up to the silicon we need to run another soul by now."

Ava was quick with a response, "I've been working on those upgrades for the Heavenly Mother, that's taking up so much space we aren't there yet. Once the other fabricator is going we'll be able

to. Morg and his universe take four hundred Q. I could get Alfred up in a month or so, if you wanted to settle for him."

"You don't have that now?"

"That updated environment is taking a hundred seventeen right now, I have two eighty two left free."

"That seems like an awful lot."

"Enough for Victoria," Ava said, and shuddered. "I know I've been busy and left you with the cherubs too much. You've been busy studying the planet too, there's a lot to catch up on there."

"Too much to catch up on there, I'm just following the details of the evolutionary sequence, that's been my study. But even in that, it was good to have Alfred and Vic around."

"What was Vic's part?" Ava asked.

"She would set up all the instruments and get them out. You know how frustrated she was by the captain's security decrees."

"She would have disturbed the specimen a lot more and given us even more invalid readings."

"This world's been irreparably changed," Glenelle said, "look at the data system they have now. Your sister and the Brazilians have changed everything."

"It is little changed, a fad went by and the price of communication came down. Most still do their reading from paper."

Ava lead them down to the beach where there was a grill with some cajun grouper ready to come off. The plates already had a bed of greens on them, onto which they slid the fish. Ava was into magic this noontime and had a wave splash up and freeze into a sand sculpture for them to sit on. "Nice work," Glenelle said. She couldn't do such pretty things with magic, even in her own universe, but it doesn't make up for the lack of company.

"I'm sorry I'm so busy."

"Male company would be nice."

"What if I took on a male personification?" Ava said.

"What if I did?" Glenelle said in response and flashed into Morg's personification. She had grown used to it those few days in his android, she knew how to call it up now and animate it like it was herself.

"Pretty nice," Ava said. "Too bad he never went for palefaces."

"I'm still not a cherub."

"No, but you're still Glenelle, just wielding a very nice dildo."

She took a second to think, "yeah I see your point, though that's not how I would feel about it."

"You're right, we need more souls here, too bad we don't have a male."

"Who would your choice be?" Glenelle asked.

"Once I thought it was Brancettrabble, once Althart. My sister's had several more and I'm ashamed to say I'm secretly turned on by one my sister's had."

"You know I've had the same choice since that day on safari," Glenelle said. She didn't dare go any farther with that time because of an embarrassment Ava suffered on that safari.

"I would have to pick someone on the expedition that I have a backup for."

"Who would that be?"

"Probably Alan," Ava answered, confusing her grasp of reality a little more.

More months went by. She was getting the outside scenery set for Morg's resurrection, without really needing Ava's help or even asking her permission for that matter. She knew that somewhere there were files that she could file compare to backups to notice Glenelle had made changes, but she wasn't here when it was done and might not notice.

Glenelle had shaped the island where her house was docked into the last backup she had of Morg's island in his universe. She had the land around his house reclaimed in the form he had it. She figured she should inform Ava when she brought up the last backup of his home. She knew she would have to update it from memory from what it was the last time he backed it up. She knew she would get a lot wrong.

Ava was in her lab again, working on that simulation of the environment of the Heavenly Mother. Glenelle had gone into that environment and built a simple house. It was a really simplified

universe and easy to get basically right, but to get the detail it was a lot of work, and magic was very heavily taxed. She didn't use magic much in everyday life, but she wanted to be able to play when she wanted to. For instance, she couldn't use a fairy personification in the update, while she used to use it on duty on Gordon's Lamp.

She didn't look up the date, it was probably still in April, but maybe into May of 2424. She was left alone again. Since she knew the address, she decided to go play in one of Ava's virtual rooms, one they'd recently spent time in together. Ava had a virtual universe set up that she said was copied from data she had gathered from the planet, animated with video and audio that is broadcast in their net.

It was a very good representation of the environment the mortal humans on the planet below lived in, she wondered if they had planted nano instruments that allowed one to converse with people on the planet below in real time. This would be a good use for the android that was down there, if it was within months of this location. She was sitting in a rather large hall, grown from rows of trees that joined together high above. The floor was a slope of benches and tables with bars like the one she was seated at on each of a dozen levels.

It was understood that cherubs would prowl this space, one didn't have to call them up. A pair of them came up to her. "What an exotic beauty we have here," one said. "Did you get that around here?" They were big, long-haired, long-bearded guys, one dark brown, one blond, both with big arms and tight bellies.

"All from my parents," she said in response, tilting her head as a signal to come play with her.

She had gotten used to native standards of bodily contact in social interaction in this universe and enjoyed his fingers in her soft flesh. She stood in front of him and pressed her backside into his groin. He performed like any cherub would, but Ava had made the settings in here automatic so she didn't have to get out his panel and control it. "They did a good job with you," he said, "what do you call it?"

"Occupation brat," Glenelle said.

He found it funny, but she knew that was programming Ava had put in also. Ava had tried to tell her how it worked sometime in the last few months.

In the scene that this emulated, one went to private cubicles to consummate the arousal, and she used one of the cherubs for that. She wished she didn't have to, it's really just a fancy electric dildo isn't it? But she did, and had for years while they were separated when Morg was away at B. This was just another year of that wasn't it? Like going thru 2277 again.

She returned to the bar when she had satisfied her sexual needs. She might just listen to the music for the remainder of the evening, that was actually sourced from the planet below. She found herself sitting on a stool next to another woman. This woman was rather hefty, quite a bit more plump than almost any of the native women. If she took after anyone on Gordon's lamp it would be Glayet, but this woman was much younger and softer.

"You look like a foreigner," she said to Glenelle.

"Not as much as you do," Glenelle answered. She didn't feel any need to be deferential to cherubs.

"Oh I am," she said, "I come from a distant star. You look like you do too."

"Why do you say that?" she asked.

"The way you're dressed for one thing, I think you are the only other women in this room with her breasts covered."

"You call this covered," Glenelle asked. The fabric was sheer, the details of her nipples showed. But she was right, few women had any cloth at all above their waists, she remembered that, she was in that android just a few months ago, and this was copied from a different culture than the one where Ava's sister lived.

"There is a certain hood to your eye, yet you move like you are in the dark." The room was almost pitch black.

"I wouldn't think that means I'm foreign."

"You are Glenelle Mason of Gordon's Lamp are you not?" the cherub asked, sort of like Colonel Samrova would. Of course a cherub can know the names of every member of the crew, such a database is trivial in any popular model. Demanding it of her was

not at all cherub-like. But then if this was like the dolphins and Ava went to the base class, maybe she could build up something like this.

"Not in this universe," she said. That was not a part of the simulation of the native music hall she was interacting with at the time.

"That's too bad, I was hoping to find a kindred soul."

Kindred to cherub, not hardly. "I didn't think alien visitors were within the parameters of this simulation."

"I don't think it was for the natives either, yet it has happened to them. Do you ever feel bad for corrupting that data?" that cherub asked her. That was a very un-cherub-like thing to ask, this had to be deliberately programmed into it.

Why would Ava want to say such a thing, and thru a cherub! Was this some kind of safety device to keep her from playing in this simulation without her? She knew enough to reach into control space for this cherub's panel. It was right there, she picked it up and turned it to the visible dimension. On the panel, instead of controls, was a stick figure with a smiley face on a background with a single horizon line.

"It's password protected," the cherub said to her.

She was likely to have cross words with Ava about this.

"But seriously, did your expedition consider the consequences when you let persons be captured by the Kassikan?"

"Ava, I'm the one that should be asking you this."

"Ava?" She asked. This woman had pushed disturbingly close along the bar. Glenelle could smell her sweaty armpits. "Why would you be asking Ava?"

"Alan, are you hiding in there?" she bored into the woman's eyes.

The fat woman laughed, but in spite of her girth, her bosom was small and well constrained. "Who are you looking for," she asked. "Is it Ava or Alan? I thought Morg was the one you were looking for."

"You wouldn't be screwing around like this if you were Morg." More laughter. It wasn't his laughter, it was fat woman laughter, laughter from a woman who likes to laugh at people.

"You're not Morg."

"Why don't we talk about where we are instead of this, why don't we discuss the philosophy of this civilization, a civilization that exists without violence and coercion. How do you think that works? And how do you think you can avoid corrupting it?"

"Ava, we've talked of nothing else but this civilization it seems." Even after these months she was still drowning. This was all she wanted to know about the civilization for the time being, a play space to get some sexual relief.

More laughter, annoying laughter now. "Something is animating them in the intricate dance that makes up the trillions of interactions that are civilization. Without coercion, without laws and governments, isn't it something akin to the ants that guides these people, that makes them do what they have to do to make their world function?"

"I must say you haven't argued this side before, you were always all about their sovereignty."

"Is that what it looks like to you?" the cherub woman asked.

"It's too big for me," Genelle said, "None of it means anything to me yet."

"What orders them?" the woman asked.

"Are you trying to direct my research?" Genelle asked.

"Just stating some questions I ponder," she said, "I'll have to go see for myself," and with that she disappeared into the crowd.

The incident left her distracted and disjointed. That had to be Ava, but what was she trying to tell her? Was it another clone? Was she experimenting with making a new type of clone? Had she gotten Glayet up? Was Glayet that much smaller than Morg? Quite a few of the women on the crew could have animated that personification, she wondered if it was Colonel Samrova. She might fit in the veron space available. Was it actually a cherub, but one that Ava had made into a bulldog like that?

Whatever it was, it soured her on playing with cherubs for the evening, and for quite a time thereafter. She wasn't going to bring it up to Ava, Ava didn't bring it up to her, but she seemed like she knew about it. Their relationship became a little strained after that.

5. The Rock

By the time a year had passed since she rode that android to no avail, Glenelle had pretty much settled in. It had gone by quickly because they'd been living in short slices for much of the time. She continued to study the planet, but was determined to continue with the evolutionary trees and leave the sociology alone. She tried to help Ava with the environment she was getting ready for the Heavenly Mother. All she could really do for her was provide an example of a typical unskilled user. The full scale fabricator was now in production and the panic over switching that in was over.

She was allowing herself a pleasant evening. She picked a hot and lazy late summer day, though the date was well into October. She was lying nude on her beach, though it was actually in Ava's universe, only a few steps from the magic carpet of her entry hall. Most of the time all the windows in her home now had the views of this beach and lagoon as the default. They were positioned as they would be if the house was where the magic carpet was but she still let only the carpet show to anyone on the beach. She'd dial something else during breakfast now and then. Her table was on a boat in the port of old Marseilles just this morning for instance. Morg would never allow anything so virtual, that was why she had to keep her own place, at least for now. She would not give up the ability to have the views from the house show it situated somewhere entirely different, like a rainforest canopy or crags on a seacoast or a warm meadow of dandelions in a mountain pass or high in the clouds of Jupiter. But even if the views from the windows changed, the magic carpet would still land on what she already called Morg's beach.

Very soon she meant to petition Ava to restore Morgan Evans from the last backup she had. This was close enough to what she and Morg promised each other wasn't it? If we meet again after this separation, they would give each other fully. It hadn't happened yet as they prepared for the journey home, but she was hopeful they would announce for marriage that day. In the tiny society they had here, Morg would have her and Ava to pick from. Morg had never been that attracted to pure-blood Caucasians like Ava and had little

interest in Ava's passion; virtuality. All Glenelle really wanted to do right now was get a backup of Morg running again, she was SO sick of making do with a cherub, even one who looked exactly like Morg. He wouldn't be any less clone than they were, but it WAS possible that their legal instances MIGHT have ceased. She was confident that once he was actually running, he would be just as quick as she was to refuse to go back out.

She wondered what had happened to their instances on Gordon's Lamp. Even with the war, they had a century together while Gordon's Lamp threaded its way thru the dust fields back to Sol. What had come of that? Had they been together? Were she and Morg now destined to repeat mistakes they'd made already? What if, somehow, in the distant future, they met themselves? Ava was comfortable with it and just recently exchanged messages with her sister on the ground.

They already had enough room for Morg in her opinion. In the past year they had become 'prosperous' in a virtual sense, and she still thought they had a lot more crystal than Ava admitted to. There was no reason not to mine the nearby moon for all the materials they could use. It wasn't rich but there was plenty of silicon and enough aluminum if they worked at it. There was no reason not to run the full-sized fabricator at capacity. There was no reason not to recycle the Lula. There was no reason not to have a good fraction of Gordon's Lamp's crew restored by the time they finally got the Heavenly Mother in. It would make its first pass thru the 61 Cygni system this year, but in spite of all the gravitational assists they could get here, they would probably overshoot by many billion miles and be three more years getting in.

Ava spent most of her time concentrating on the Heavenly Mother. She said her clone sister on the ground had enough love affairs for both of them, though she had relations with men on the ground who were under some form of helmet that let them enter the virtual world. Glenelle didn't follow what she was doing for the Heavenly Mother too carefully, it had a lot to do with partitioning simulation space and it took up a lot of crystal. It also seemed the Heavenly Mother was in danger of further damage as it passed thru 61 Cygni's environment. Glenelle could do some data entry and

verification, but she was not going to help with updating the foundations of the virtual universe.

Instead she'd occupied herself with the grunt work, finishing up the full scale fabricator and getting more mining bots deployed. Today she did none of the above. She was just so lazy and languid here, too sleepy and lazy to move. She dialed a bottle to her hand. In the past year she'd also developed a taste for the native intoxicant. It was a very different buzz. She actually mixed them, adding a pint of vodka to each quart of yaag. After a few pulls off that bottle she called up her cherub to tongue her out. He was as good a model of Morg as she could remember, most of the time. She made a few mods that Morg did not have, such as a tongue that could reach her cervix. For now her clit was enough to give her a little languid erotic exercise. A while later she asked him to tongue her inside, had a nice strong orgasm, and let the sun dip behind the mountain.

Once inside she didn't feel like food would be entertaining, though she still enjoyed delicious feasts. In the absence of human companionship, the most interesting thing continued to be the planet. They had some tour probes lying about down there, she flew one for awhile. It was the size and general shape of a native life form called a ksarid, colloquially translated as 'bird.' It was decorated to look as much like one as possible, and possessed of sensitive eyes and ears.

It was in a basin the natives called Yondure. It was a land of magnificent estates surrounded by bucolic fields. The air was thick, making distance deceptive and the sun very ruddy. There were hundreds of tall skinny towers, the greens were very dark and the deep violet of the crop called rinko bloomed on hillsides everywhere. The colors were so different it was like a whole different planet from where Ava's sister or Alan had settled.

She flew into a place where people had gathered in a courtyard to listen to a speech from a man in robes on a high balcony. Since there was a crowd gathered, she stopped the probe to listen. She could bring the probe in very quietly among the pointed glass turrets of the castle this courtyard was on and swoop down to perch

on a windowsill.

Architecturally, this basin was the place the original illustrator who worked for the classic American poet, Suess; was from. This was where the carbon-fiber bacteria was discovered, well before 3000bc. They built with the abandon of someone discovering a new magic. Turrets went out and out on other turrets, to taller towers, wider on top. Humpbacked bridges arched down almost to the water and then back up again. Gingerbread was used as a structural element in some styles, hair thin was the hallmark of others. A castle that wasn't taller than it was wide, and wasn't wider at the top than it was at the base, was distinctly gauche.

This castle was a clan home no doubt, everyone related by blood and enterprise, many of these clans had patriarchs older than Christ who still sat at the heads of tables in their great and echoing crystal halls. This building put most of the residence about twenty floors above the ground with a courtyard in the center and balconied residential turrets extending out and above that. It was set in the middle of extensive well-tended fields and pastures dotted with fat eight-legged cattle.

It looked like everyone who could possibly live or work here was in the courtyard. They were packed on the flagstones, dressed in their whatever's like they had been roused from work or bath or kitchen. They were all looking up at a man on a podium two floors above them on one end of the courtyard.

The man at the podium was saying, "...have already determined that the probability this object will come dangerously close to the planet of all the worlds is at least sixty percent." She heard a sharp intake of breath from all listening to him. There were about two hundred people here, many had loose black curls, pale skin, round heads and slight builds.

While those natives had to be informed by the one of their clan who had gone to a data terminal, the network was connected to everyone on Narrulla's Tear and she was able to query, 'what is known about an asteroid that could collide with the planet Kassidor?' and find out quite a lot.

The astronomical data seemed good. There were large observatories and they were doing very precise plots of the body's

position and making calculations from that. Glenelle was stunned by the discovery that was being announced in this courtyard. The size of the rock heading for the planet was six and one half miles, too big for there to be any doubt about the outcome of a collision. She buzzed Ava. She had been more approachable lately and there had been no more incidents of nasty cherubs. "Did you know about the rock headed our way?"

"I was afraid of that," she said. "I'm surprised Herndon didn't tell you about it. He's been worried for four years, ever since it first collided with the unobserved rock."

"No, he never said a word."

"We should probably take a look," Ava said. "If the natives have figured it out they're going to print special editions and talk until late at many tap rails."

"You sound like you've been down there." She knew the manner of speech from attending the native simulation a few more times, though she had never gone alone again.

Ava said nothing about that, "We should find out what they know about this so far."

They blinked into a news center together to have what was known on the native media around them while they discussed this. A feed of all the channels Narrulla could currently open from the planet below was up on screens around them. The native channel selector under the helmet interface was like being inside a ball with screens all round you and when you looked into one it would be the channel. Channels are uni or bi-directional. They were able to get the astronomer's article and even virtual copies of the plates up onto stills. The situation was perilous, but the odds that it would actually hit the planet were still much less than the odds that it would come close.

The fact was, it was impossible to have enough precision in the measurements to know if it would hit or just come close. What they had was a curving cone of probability. The planet was well inside that cone of high probability, but was only a tiny fraction of the cross section of this cone where it passed the planet. What impressed her the most was that they were able to call up such learned information and drill so deeply into the science behind it

and get the 3-d plot. "This is a pretty good rendering, did you or your sister give this to them?" Glenelle asked, still sensitive about the changes they had made on this planet. She had never actually asked Ava about the state of Colonel Samrova's latest backup.

Ava drew a deep breath, "When Moses fled from Pharaoh in the second book of the old testament, this software was two thousand years old."

"You're kidding me? And we couldn't detect that this planet had a data system?" she asked.

"Because I couldn't reveal myself and only I had the connection to their data system. I was on this system before you guys ran around in androids, but couldn't tell anyone about it because I'd made that clone to take my place. This past year is the first time I've ever dared reveal myself to another virtual soul since I made the copy for the other expedition."

"It's too bad it's too late," Glenelle said. "This says we have what they call two thirds of a decade, about four Earth years."

"We still have some chance," Ava said, "but I'm guessing this is the reason Herndon wanted you to go out and try to start the Lula last year."

"He didn't tell you why?"

"I got a little out of him," Ava said. "There's some guy they think is going to steal the starship and try to get back home with it."

"I thought you said home was wiped out in a war?"

"I didn't say I thought his plan was sound, I was just passing on a rumor," Ava said. "That's all I could get out of Herndon. I don't believe him because he sounded disappointed. That's why I'm guessing he probably knew about the asteroid already."

"How would he know that?"

"It's been under observation two thirds of a decade already," Ava said, "since it was knocked out of its original orbit. The only thing new is, we now know it's headed this way. I think he already knew it would be."

6. A Message from a Sister

It was another dusk on the beach. Neither was ready to play with a cherub yet, though Ava was talking about it. "The part that I don't like is that it is essentially a toy."

"Yeah, it's so much better with a person, it's so much better when it's someone I love," Glenelle said. "I think there's enough room for him now. We promised each other that when that separation was over, we would be together. That separation is over. What's the latest copy you have of him?" Glenelle asked.

"The same night as yours. You talked that night?"

"We were getting set to announce," Glenelle said.

"I think it would be good to have a good mechanic," Ava said. "I agree, Morg can come up."

"When?"

"We should think about how he's going to take it, how we want to do it. I agonized over how you would wake up. I decided to let you take it at your own speed."

"We better not do that with Morg, he'll go dis-joint." She didn't know just how to break it to him. She knew she would have to be with him when he came up, for her own peace of mind if not his. If they had backed up on the same night, they should have been together.

Just then a call came in. "Wow," Ava said, "It's my sister and she wants to open a voice channel." She had to play with drivers and things on screens only visible from her side for awhile to get a voice channel open from a mortal on the ground to Ava's universe here on this idealized Carribean beach. Those screens did not block her view of the latest boat Ava had generated to play with. It was a fast and spartan little catamaran with a tall, thin sail.

It was about fifteen seconds altogether until a voice connection was established and a slightly huskier and slower-talking version of Ava was in the room with them. "Hello, my sister in flesh, what's new from the mudball?"

"I need some help," she said, "The shuttlecraft moved."

"Oh?" Ava asked.

"Where is it? Herndon thinks it's up there."

"No, it has not approached within twenty five thousand miles of here," she said, as close as it was on the ground.

"So where is it?" Ava asked.

"We are a third of the way around the planet from you right now, it will be twenty hours before we can get a look at your location. You seem to be in Gengee City," Ava read from a screen Glenelle couldn't see, "the closest tower to that point anyway."

"We saw it leave," Ava on the ground said, and told a tale of being flown over by the shuttlecraft. Even that far below a dirty old burner like that, she was likely to pick up some damage to her flesh, unless they were still running on fans and thrusters when they passed over.

"I'll take a scan," the virtual Ava said. "The containment will be hot awhile, I might pick up some neutrons from a dirty old thing like they were flying." Ava manipulated a keyboard only she could see and feel. Glenelle knew it would give a mortal a lethal burn if one was caught in the blast from an early 22nd century fusion shuttlecraft. She didn't need to remind Ava of that. "I've got the instruments out," she told her sister on the ground.

Her sister on the ground was worried they might have run it without the containment, but their instruments would have alarmed if they had done that and would still see it as a beacon now. It took awhile to get her fears put to rest however.

Once the business was over, they greeted each other warmly. Clones, it turns out, however generated, wind up treating each other as identical twins, however different their lives and platforms may be. They scolded each other about how long it had been since they'd actually talked instead of just leaving quick notes for each other. They made excuses about how busy their lives had been.

The first time Glenelle really became personally uncomfortable about it was when Ava told her sister on the ground that Glenelle was with her now and they all realized that Ava on the ground knew her almost as well as this Angelic Ava who was her best friend. Most of the time they had been best friends, the two Ava's she was speaking with were one. She had no secrets from either one.

They were interrupted by Herndon taking the phone and

having Ava repeat the business about the instrumentation and watching for the shuttlecraft. Just after he was done Narrulla's Tear passed into eclipse where they are unable to reach a lighted tower on the native data system and thus unable to continue a connection thru it. "The guy's an ass," Ava said when he cut the connection. "I hope she doesn't go back to him."

Glenelle didn't continue the conversation about her sister's love life that she had been listening to, she was more interested in discussing her sister's existence. The one on the ground was a copy of the Ava that had lived secretly in Biology Base with them. "You're pretty comfortable with the whole cloning thing now aren't you?" The mechanical replica lying in a lab at the Kassikan was a replica of this Ava, not the one who separated from her when they went to B, eight years ago in her time-line.

"Why?" Ava asked.

"You were the secret clone in Biology Base weren't you?"

"Yes."

"And you have another clone sister on the ground..." Glenelle said.

"She wasn't meant to be a clone, she was meant to be me. If Althart had been correct in his back-of-the-envelope calculation of dendrite growth rates we probably would have succeeded and Narrulla's Tear would be inert wrecks of abandoned starships. Then Heavenly Mother would be limping in to an abandoned outpost."

She did have to think about that. It was certainly better for them that Ava was still here and she hoped they appreciated the effort she had been putting into helping them. Getting that fabricator going was as much for the Heavenly Mother as Narrulla's Tear. "I'm not saying it's evil," Glenelle said, "I'm saying you seem comfortable with it."

"You keep requesting that we bring Morg back."

"Yes," she admitted, "but he will be the only copy of himself here." She had to get comfortable with the fact that they were clones on a pirate ship didn't she. The law made no distinction for the number of clones, but Ava would be huge in lurid gossip back in the League they left.

After eight hours none of the automatic scanners had detected the proton signature of a cooling coiled furball from the planet below. Glenelle was on the beach with a book when Ava pinged her regarding that failure. Glenelle had asked to know when she called off the search. After all, why build enough substrate for multiple souls if not for the company?

She blinked into some clothes and into Ava's instrument room. She had to admit that while it lasted, life on a pirate ship was a lot more fun. Ava keeps this room in zero-gee, and keeps the main display's of all the station's instruments in here. Glenelle saw Ava bring up a few more screens in the air in front of her that she couldn't see from this side. "Let me see what's going on," she said.

The reactor had been cooling for about fifty four hours now, but the instruments on Gordon's lamp were thirty years beyond those of the Presidente Lula, and the Lula's instrumentation was up to date, even if its engine was dated. Its shuttlecraft was an early 22nd century design, but known for toughness and lifting power. The use of that model was no longer allowed on Earth when the Lula departed, though they were still in commercial use on Titan. Even so, it had been over forty hours before they started looking for it, and that of the Lula might have had improved shielding.

"As soon as they start it we'll see it," Ava said, but as long as it's off, it's way too cool for us to detect by now."

"Any chance of detecting it visually?" Glenelle asked.

"If we look at a point with maximum magnification, we think we can see the shuttlecraft there. This is what we were last able to see of it, before it moved." She patched a sequence into the view so Glenelle could see what it was like, once the scope already knew exactly where to look. "Anyway, my sister wanted to be warned," she was fiddling with a ground-comm panel. "This ion storm has washed out the portables down there, but that ex she's running around with has an optical ground station, let me try that."

While Ava tried to put thru a voice channel to the ground, Glenelle viewed the recorded data from their biggest scope. It was the one that had been left on Biology Base, way back in 2271, when it was only one hundred years old instead of two hundred and fifty. The main scope had returned to Sol with the main expedition.

She wondered if this instrument would even be working at all by now if it weren't for nano-mechanical repairs?

There wasn't much more to learn. As the sequence drew closer around the planet and built up more integrations and matches against data files, a better match on that shuttlecraft was building up. The numbers came into view when processing of the images against the database brought enough confidence to render them in the image. The same was true of much of the ground cover in the area. Renderings of the most probable species of brush were brought up. It was almost magical, but it was only slightly less decorated than a self-filling hack.

By now Ava had the voice channel established so her sister's voice was in the room with them again. She iconed the voice connection as an antique telephone handset floating over the current sensors plot table that was right in front of them. "You found it?" that phone asked. The voice sounded disturbingly like Ava's, even when rendered as an antique phone would.

"We've had probes go over the whole surface now," Ava told her sister on the ground, "and they don't see anything. It's been over fifty hours, that reactor's cooled enough that I'll never see it. I'll keep the probes out so as soon as they fire it up again, we'll know. So how are you doing down there?"

"I'm fine, now that I'm out of that camping trip," the sister on the ground answered.

"And what's this adventure all about?"

"We're just running around chasing four tons of missing aluminum," Ava on the ground answered. "We thought it was the containment frame from that shuttlecraft."

Glenelle could hear a man's voice groan in the background even from here. "In that case I'd say it's been found," Ava of heaven said. "I'm shocked it hasn't been melted down." Glenelle didn't think her sister heard her because of the ruckus in the background, it sounded like a hand over the phone. It was a few seconds before the hand was lifted, but no one spoke. When someone did, it was Herndon.

"We need you to keep an eye on them," Herndon said. Please put a geosynchronous above the point where they used to be, it's

vitaly important."

"Herndon; I have a geosynchronous out there," the Ava up here said, it had been deployed to watch Alan and never called in. "I have all the probes out that can pick up its trace, no point on the surface will be out of sight for much more than an hour at a time. I can watch for it as soon as it lights, but those probes won't see the inert craft. I'll keep you updated." Ava cut him off with, "I don't know how she ever stood him, I don't know how she stands him now. I'd be afraid of a guy like that if we were back home."

Of course this was the guy she had a cherub of, but Glenelle didn't bring that up. "We're not back home, so don't worry about her, she'll be fine," Glenelle said.

"Unless that asteroid hits us."

Ava went back to studying the asteroid, its path and the paths of the debris. Glenelle went back to getting ready for Morg. They had pretty much decided that as soon as his place was ready, he would be brought back. The smoothness of his transition depended on her getting as much right as she possibly could. She was restoring everything of his to how it had been in 2278, hoping that would soften the blow of waking up as a clone in the ruins of Biology Base. His yacht was something he loved and would notice if something was out of place. They didn't have a recording of just how it was left on the night they took the last backups. She had not been on the yacht for three days when her backup was taken, but she didn't think he had either since they were both busy with departure at that time.

The problem was, that was a year ago in her time line and she didn't remember which was her last night with Morg. They were reunited for only a few days, but she could easily guess wrong at the order they were in.

He had never lived on Biology Base, but she planned on him not knowing for a day or so. If she could, she was going to keep him home the first day. That day was cloudy in her memory already and it had been only a year since she was there. She knew they were going to announce in the next day or two. That would be a problem once Morg noticed how small the audience was. If she

could get him to take a day off first, that could soften it a little. They were preparing for departure however and he was in mechanics so it was not a good time for him to take a day off.

She wandered around the yacht, tossing things where they looked most comfortable. She made sure his sailfish gear was stowed as he always kept it. There were a couple cushions that she was pretty sure he had deleted years ago that she deleted again. She knew he had updated his navigational gear and looked thru his catalogs to find the ones she thought he had and re-installed them without Ava's help. It's amazing how seldom people back up their personal possessions.

Glenelle was about to call it a night when the alarm they set up on the Brazilian shuttlecraft came on. She knew Ava would respond, but she was curious also and blinked into the instrument room. They were going to have to stop doing this when Morg was around. He got incensed by people blinking out of situations, much less blinking in. Sure enough, Ava was already there.

"Where'd he come from?" Glenelle asked.

"Somewhere about the same distance from the equator as he was originally," she said. "He was already in orbit when we spotted him. He must be able to see the probes and came up in a dead spot and shut down as soon as he got to orbit. He's running on collectors and battery right now."

"It's too bad we never saw where he came from," Glenelle said, "they'll want to know that."

"They won't know. The detector on the geosynchronous is out and we didn't see him till he came round the limb of the planet. He could have come thru the probes anywhere this orbit crossed the far side."

They tracked the shuttlecraft for a couple minutes to be sure it was just drifting thru space. It was, the reactor was down again, no ion drives were active. All that was on in that shuttlecraft was instrumentation and life support.

Glenelle asked Ava "What do you think is happening with that shuttlecraft?"

"Herndon thinks some guy named Colonel da Morais has it.

He's been trying to find it for the last sixty Earth years. Herndon's really saying very little. I think Herndon's group thought they had the shuttlecraft disabled because they had the containment vessel from it. It seems someone has stolen it, it looks like my sister was the sucker the map was stolen from," Ava said.

"We sure didn't leave conflict behind when we came to this planet," Glenelle observed. "I wonder how the natives left it behind?"

"They still steal now and then, but when you get right down to it," Ava said, "There's no way to explain it other than admit that the wizards of the Kassikan have changed human nature."

"Alan said that," Glenelle said, "No one really believed him at the time. I know I always thought he made up half the things he said, and even now I wish I didn't have to believe this."

"When did you learn systems?" Ava asked.

"From you, on the way over here from Sol. You told me there is no way for anyone inside a virtual environment to know whether or not their environment is virtual except to hack their way out."

"That's the fundamental theorem of virtuality," Ava said. Glenelle could see that Ava had thought deeply about this. "I'm convinced enough that we are baseline that I have no interest in wasting time trying to find a hack out of it."

Glenelle certainly couldn't hack their way out of it, other than turning off enhancements. She could barely mark up a cherub. Glenelle knew she could never know if they were encapsulated or not. There was a timid side of her that wished the planet was an interesting find of exobiological life and they could get the Heavenly Mother in here safely and rebuild Angel society while studying the microbial life on this planet. She didn't want to believe a planet settled by biological humans about the time of the ice age could be part of baseline reality.

While she was paused in thought, Ava tried Herndon's land line, it would be two years before there was much hope of getting thru with electromagnetics with 61 Cygni A in magnetic max. They found his address dead, brought up a view from the geosynchronous and found he had almost nine hours remaining of darkness down there on the ground. "I guess we might as well call

it an evening. No doubt he will land when no one is looking also, so there is no sense staying up staring at him."

"You agree, it's that Colonel guy?"

"I have no better guess," she said.

Their morning was in pretty good agreement with a wake up time on the ground the next day. The terminator reached his home on the ground, Ava waited until she was sure there was enough light for his station to pick up a station in Gengee City before she tried him again. They watched the light of dawn creep across his land thru the little telescope on the geosynchronous. They did not have to wait till he was in full sunlight, the systems would work with skylight or under clouds, but would not work for forty hours of darkness, half of the globe was without data service at any one time. And they were grateful for so much.

He was a while answering the voice channel request. "Yes?" rather formal.

"I've got some information you'll be interested in," she told him.

"Ava?" he said, "but your address?"

"Does it come up as Biology Base or Narrulla's Tear?" she asked.

"Narrulla's Tear but," he paused. "I confess she's not here..."

"Oh I know, we've been in touch, I just picked up a note from her..." Ava had to use a calculator in her own universe to translate to a time frame on the ground, "...last Afternoonday."

"Where was she?" Herndon asked.

"She said she would be in transit," Ava said. "It sounds like you are now much more concerned about that fact that my sister has come to her senses about you than you are about the fact that the shuttlecraft is in orbit."

"What?" he shouted, then paused. "I'm more interested in that than I am in having to explain why she left."

"You seemed to only want to know where she was going, I would assume she was going home since she used the words 'boondoggle' and 'wild goose chase' to describe her ride on your fast boat."

It was only because she was an Angel and could keep herself on listen-only that Herndon didn't get annoyed at Glenelle's table-slapping braying while this conversation was going on. Ava was really getting a chance to make up for what she thought this man did to her sister on the real Herndon and not just his cherub. After the last incident, Ava chained that cherub to a wooden chair and stabbed his testicles to hamburger with a carving fork.

"She's told me why you're jealous of her on the ground," Herndon retorted, "so I pity you and will take this abuse from you. What orbit is it in?"

Ava filled him in on all the particulars, including its present location. Thanks to the native data system they now knew the native names for all locations on the planet and used them instead of the coordinate system. "He's over the great swamp simply called 'Hell' and just recently passed over Platicivetre. In a week he'll be aligned to return to his original site."

"I'm sure that's his plan," Herndon said.

"So what do you think he was doing?"

"He's gone to pick something up is what I think," he said.

Glenelle could hear that he was accented in the native language.

"For all you know he's picked up your sister," Herndon said.

"She'd have told me."

"She doesn't tell you everything," Herndon said.

"She tells me more than you, even when you were hot and heavy re-enacting Earth mating rituals in the new silicon age down there."

"We were still tentative with each other then," he said.

"You've been two cats in a bag since the day you met," Ava said. Glenelle really shouldn't be listening in on this family gossip but she was fascinated. "You only mated because your glands compelled it."

"You're as acidic as she is, I guess you should be, you're the same person aren't you?"

"And that scares you doesn't it?" Ava told him, using her comfort with cloning as a weapon, even against a mortal.

7. Events on the Ground

Sure enough, when the shuttlecraft's orbit re-aligned with its original parking site, they both watched it as it prepared to re-enter. It was on the limb of the planet to the main scope here on Narrulla's Tear, but nowhere near the limb of the planet from the geosynchronous. Unfortunately the scope on the geosynchronous was neither as large or as close as the main, the shuttlecraft was only a few pixels long on that. The geosynchronous had to be kept on an optical link, the ions were still raging out there and the twenty third century practice of shielding the working parts of the starship inside a few dozen feet of metallic asteroid paid off handsomely in preserving their working electronics. The optical links were still functional and she could get a feed from that scope transmitted here. She didn't even need Ava's help unless something went wrong.

On their first orbit within landing distance of their old site, they did not descend. Ava immediately said her goodbyes and went back to her lab, probably worrying about the asteroid and attempting to refine the predictions. Ava left communications open and Glenelle stayed behind to keep them in sight. It would take another couple hours for the region to pass from view of the main scope completely. As well as communications, they had an optical scope that could render a pretty good image of the area. That area wasn't deep in the atmosphere, just above Earth's sea-level atmospheric density, still highland for this planet where half the population breathed air at twenty five psi or more.

She took the scope and was able to pan it at a slow enough speed to look in the area around the landing site. It was so desolate that anything to be rendezvoused with would be visible, even at this angle. Because she was looking at the limb of the world with the main scope, she could see a fifty mile wide swath of land at once, and could scan fifty miles in each direction with some fine adjustments to the scope positioning.

She was looking back toward Herndon's place no more than twenty five miles from the old landing point when her scope started picking up something else in the area. She tried to get more

magnification and enhancement. The atmosphere shouldn't be too bad here, a little integration should render it out, so she locked the scope on it and let it focus.

It was some kind of caravan crossing the desert. It was a big contraption of a wagon pulled by three of the native draft animals. At least that was the best guess she could make of it from here with the image she could get. Glenelle felt she needed to announce that the injector columnator assembly missing from the Lula would fit in the enormous crate that wagon was carrying.

Ava was unavailable at the time and never responded to her message about it. Glenelle went ahead examining the best current static rendition and the live video alternately. She snapped a ruler on the best rendering and measured a payload length of twenty two feet four inches. It was the right diameter and there was a noticeable bump in the carton where the lithium charmer would be.

Glenelle also tried to raise Ava's sister for a voice channel and failed, so she told her about it in a message. - I think I see what you're looking for, but think you're wrong about what it is. I don't think it's the containment for the shuttlecraft, I think it's the columnator assembly for the daedalus combustor of the Lula itself. - She attached the best rendering of the wagon that was headed across the sand toward the shuttlecraft's old resting site.

She tried to get a voice channel to Herndon next, it was answered, but, "This is Elond, not Herndon," but she was on his pocket-eye. "I see Herndon's not answering at home."

"He was there," she paused to figure native time, "a week ago. Do you know where he's gone?"

"I've been gone two days longer than that, you've communicated with him more recently than I have. What was that about?"

"The shuttlecraft is in orbit again."

"Oh?" she was totally calm about that. Glenelle wondered if she already knew. "In that case my guess is he's gone out into the Cerrado on the hunch that his starship will land in its old roost."

While she was doing that, Glenelle panned the scope further toward Herndon's property. By this time she had figured the shuttlecraft would have to intercept that wagon on its next orbit or

do some serious maneuvering, or wait another native week. So, given that Herndon could be on a fast keda, where would he be after a week and an hour?

She followed the direct line, as plotted on the view mathematically, and a couple hours away she saw a pair of riders. Even with the main scope it was not possible to render an identification of either rider with all the atmosphere she was looking thru at so low an angle. They generated six or seven raw pixels each, man and rider, on the geosynchronous. The raw data said it was probably a multilegged with something on its back, it was the rendering that drew a keda and rider. Once again Glenelle wondered if they really were in a hack and they would find it was actually a dactyl pecking on a thongga as it tried to flee. The raw data supported either rendering equally well, Glenelle thought.

But as the shuttlecraft made that one more orbit, Narrulla swung too far east to observe the Gengee chaparral, and its scope could no longer see what was happening out in the wilds of that basin. The optical scope on the geosynchronous was still useful in the mean time, so she was able to watch the proceedings from above.

She saw the shuttlecraft re-enter, it did come in on this orbit, it was already committed when it came over the horizon, heat-shields glowing in the northwestern sky. The huge wagon pulled up at that time, they must have noticed it approaching. It seemed to circle with the lead animal coming back to face the driver and the re-entering shuttlecraft. Minutes later the shuttlecraft landed right in front of it. As they watched these events unfolding on the planet's terminator, a remote probe in low orbit got thru on a laser-beam and brought them closer, close enough that its scope could detect the dots that were people on the ground, even without enhancements. They saw one leave the wagon and enter the shuttlecraft. Soon after that they saw the wagon brought to the other end of the craft. They could only assume that the people Herndon was opposed to were hauling the crate into the shuttle cargo bay. Finally two others appeared in their field of view riding animals. They came up to the scene but did not dismount. This had to be

Herndon and someone with him. She fed a stream to Ava but got only a few quick messages of 'thanks' and 'interesting' and she did not come out of her lab.

Glenelle was a little worried about that. Normally Ava would be right on top of this situation and Glenelle would be standing by watching. For Ava to be this distracted when these events on the ground were unfolding, events her sister was involved in, meant there was some dire emergency to the system. Glenelle guessed it was most likely damage from the electrical storms out there. She worried that they might all be in danger, she worried that Ava might need her help. She could ask, but she guessed Ava was mostly thanking her for keeping an eye on her sister's problem and staying out of the way on hers.

Back on the surface, it looked like a guy in an antique military uniform came out from under the craft and probably talked with Herndon. Two men flanked him, the probe's enhancements thought they were armed. Herndon and his man held their perches atop the draft animals. That tableau lasted till the near orbiter was drawn from view.

After that she could only watch the dots next to the speck as seen from the geosynchronous. After a few more minutes they saw the speck of the great wagon and its kedas, and the dots that were humans, all run from the blob that was the shuttlecraft. The shuttlecraft was lifting, she sent Ava another message.

She worried that the interruption might doom them all, but after only a few more minutes, Ava returned to the instrument room "You said it looks like that shuttle has lifted again?" She took over the controls and set it up to track the speck of the shuttle. It took a looping course at first, before heading toward space. "It's too bad the native system doesn't reach to where they are," Ava said. Out of habit she was trying to open a link to her sister, though they had no idea her sister was at the scene. Glenelle had to admit Ava looked a little burnt from the long hours she was putting in. She looked like she was not going to discuss what the emergency had been.

They watched as the shuttle left the atmosphere. They saw that some of the men remained on the ground, as well the big wagon

and five kedas.

"I wonder what this means?" Ava asked rhetorically.

"What does what mean?" Glenelle asked.

"This time it looks like that shuttlecraft's headed this way."

8. Up and At 'Em

The day she'd been awaiting a year for was here at last. Pushed up a couple days because of the present emergency, and his time for introduction to the situation was shortened to under two hours for the same reason. One of those hours had to be spent in preparation for the upcoming encounter. There was no doubt that the shuttlecraft was on course to reach Narrulla's Tear, and could couple with the old lock on the Lula in as little as two hours. But she wasn't going to allow the pressure of time to change how she planned to do it. She had dreamed of this too long.

Ava loaded his last backup into the best simulation of his home she had come up with so far. Glenelle got into bed with him. She wanted to have an hour just lying here with him as he slept, same as a cherub so far, but already different in her mind. She had planned to watch the ceiling as light crept into the room while nestled against him.

But there wasn't time for that. As soon as she was set, Ava switched on his Veron grants. They set the time to well into dawn, and Morg's bedroom faced the sun over the lagoon, very different in detail from Ava's place, if similar in spirit. She wrapped her arms around him and purred. A backup was taken thruout a night's sleep, one was restored from a backup in time to wake up.

He woke with a start. "Honey, what are you doing here?"

What if she'd guessed wrong about which day they did the back-up? "I thought I'd welcome you to the new day," she said.

"You're very welcome," he said. "How'd you get in?"

"I got a little help from Ava," she ad-libbed, "I hope you're not angry with me?" Her smooth introduction to his situation was pretty well bungled already.

"No, oh no, sugar, it's still great to have you back."

"It's great that you're back," she said.

She wrapped around him and made ecstatic love for over twenty minutes of the hour she had to prepare him for what was happening. It was so good to do this again, do it with his real soul, not a cherub made up to look like him. While he might look, feel and smell the same, there was no way to pretend a bunch of logic and some rendering routines were wrapping a human soul when they weren't, they were wrapping the 'conversational preferences' thru 'lovemaking preference' you had dialed in.

Morg's world was very representational. He would never think of dialing out hunger, so over a hearty breakfast of eggs, ham and grits, she was going to have to tell him, there was less than ninety minutes till that shuttlecraft docked with the Lula at this point and less than half an hour till they had to be in the androids to greet them. She joined him in a hearty breakfast, trying to figure a way to soften the situation. By the time they were done most of that hour had gone by and little serious issues had been discussed. In fact all he would talk about was the wedding and there were lots of people on his guest list he was going to have to give up. At least she wouldn't have to face that issue now. At least she was making him comfortable in this new day. He noticed her watching him eat. "Yeah, I'm hungry as a bear this morning. I feel like I've slept for a week."

"Well," she said, knowing she had to start now, "I do have some things to tell you."

"Oh?" he asked, quickly bringing up a screen. He must have seen too much on her face already. About the only thing he had in his universe that was at all virtual was his interface screen. "Don't tell me there's a problem with mail, I don't have a single message here. Usually I get a night story from the duty officer. With the departure going on I expected a whole screen full of urgents this morning."

"No, it's a bit more than that, first let me say we had to bring you forward from backup."

"What? Was there a problem? Did we flare out? Did we loose the point?" He had already jumped up.

"No, nothing's wrong with Gordon's Lamp." She didn't like

sitting here, this was going too fast. If they stayed here he was going to disappear into the system and panic and she would never get to tell him anything. She got up also, "Let's take a walk," she said, taking his arm. "We still have a little time." Ten minutes and fifteen seconds till the androids must be decoupled from their berths.

"I'll clean up," he said, "but I want to know what's happening."

"We can clean up later, come on outside. I'll tell you everything."

He poked around with his interface a little more. "Is Ava up to something?"

"Let me tell you," she said, as calmly as she could because this wasn't going well at all, "not that damn screen."

He threw it down in disgust, it landed on the kitchen counter face up and she could see what was on it. It was the drive status screen, all entries were marked unavailable. He has going to need a lot of explaining to get past that. "Are you up to something with her?"

"Come on, walk with me and I'll tell you."

If he wanted to adjust the magic level of his universe he could bring that interface with him, but as it was he allowed it only at the kitchen table and the den of his house and at the desk of the main cabin in his yacht. "OK," he said, "We'll do it your way." He got up and almost passed her on the way to the door. "Where's my drive status?" he asked as they marched across his deck.

She led the way across the deck and down the steps, "The drive is probably fine but we're not on Gordon's Lamp..."

"Then where the hell are we?"

"We're on the Biology Base." She was going to tell him what it was now called but he didn't give her time.

"They left us! Impossible, there's not enough crew. Was it that God Dammed Bishop? Is this about us?"

"No, it's not about us, you and me, at least not only us."

"Who, what's going on?"

"We're in extreme danger," she said, "We need your help."

"What danger?" he asked.

She thought the best thing to do at this point was get him to

think about the problem to be solved and not about his own situation. "There is an asteroid six miles in diameter aimed to impact on the study planet..."

"That God damned mother fucking God damn bishop!" he bellowed, not caring that there could be monitoring for all he knew. He had always trusted to his friendship with Ava to keep his opinions expressed in his own universe private. "That'll wipe out the whole planet, not just his Sodom and Gomorrah. What the damn hell is wrong with him? What in Christ's Name is he thinking... wait, if they're dropping rocks, what am I doing here?"

"You wouldn't remember because it was all after your last backup, let me just say there's been a war, but Morg, listen I tried to understand it but there isn't time to understand the war and all that's happened since we backed up last. Not now, we can get to that later. That asteroid will destroy us too and we won't have a later to think about that if we don't deal with this now. We're sitting ducks off Narrulla's nose like this."

"Who's nose? How did I get here?"

"Your latest backup was available here."

"Why not there?"

She had brought him across the beach to the water by now. She turned to walk in the spume of the waves as they strolled up the sand. They could walk this way a couple minutes yet. A flock of gulls scattered, keening loudly and interrupting their conversation. That gave her a chance to try and get it back to the problem and not on his status. When the gulls had gone flapping out over the water she said, "We need you to help us prevent this, and we can save ourselves if we impact a big old daedelus-drive starship on that asteroid at full drive and detonate the reactor. We don't have time for delicate maneuvers, that asteroid might be guided."

"What?"

"That war, so we need a detonation, we need to destroy that asteroid so there is no single chunk to guide into the planet."

"Yeah but..."

"And you are the only one who can do it..."

"Why me? Heymon can do that himself."

"He's not here. This is Biology Base, remember? It's just you, me and Ava."

"Why am I here?"

"Because I love you and I needed you brought back and we need you to save us. We, not just you me and Ava, but forty billion, with a 'B,' billion, people on the ground including Alan, Ava's sister and Alan's girlfriend."

"How can I save you?" then in a completely different voice, "Ava's got a sister?" and back to his own voice, "How did I get here?"

"Put the starship motor..." she started, but he was no longer interested in that question. He had already figured it out before she got him interested in the problem again.

"I'm a clone ain't I?" he said, wide eyed. "You just got me up to work on this? What makes you think you can get away with... Just you and Ava? And Ava's sister? You're all clones. Biology Base is a pirate ship left behind! I want no part of this..."

"Ava can back you back out." she said knowing it was trump. "She has backups for Heymon and Alminned also, she needs someone who can help us. You were my first choice, but she will get someone."

"Yeah, uh. But where's Gordon's Lamp, Colonel Kruger, that Bishop? The real ones, not a backup."

"We don't know, all transmission has ceased, there was a war, it's a long story and there just isn't time for it now." She could have gone into talking about the war, but they were going to have to start walking back pretty soon if she was going to get him into the android on time. That could come later. If he thought this asteroid was slung by Gordon's Lamp, that makes it simpler. "They don't know we're here."

"Obviously! We're all clones. What about the instrument pack that Vic left?"

"That's still going." That wasn't a lie, though it was probably going nowhere.

"Which Ava is this?" he asked very suspiciously.

She stopped and turned around, then took his other elbow when he turned to follow her. She took a deep breath and told him,

as much as she could in as little time as she could. "The one her cherub thought she caught."

He knew the events, he had been there, but it took him a while to figure out what she was really saying. "The Ava I knew was the cherub?"

She kicked at some water, throwing spray ahead of them. The water was brisk and the sun was just coming over the house. "At the end, while you were away to 'B'"

"But she caught the cherub."

"She thought she did, she might even believe it still, if she still exists. There was radio contact between Earth and Kassidor for almost a generation, but it stopped about the time they would have arrived home."

"But you never said she was there," Morg said, "with you on Biology Base."

"We never knew," she said, but before he could say more she continued, "You know what the natives call our vessel," she answered herself. "Narrulla's Tear. I've come to prefer that name myself."

"How long..."

"It's been a year," she answered, Ava was going to blink them thru to the androids any minute, she'd lost track of time while they'd been walking, "since Ava restarted my backup."

"A whole planned clone universe. Are Alfred and Vic here?"

"Not yet," she said.

He kept walking, staring at the waves around his feet. His hair was an inch layer of rich-earth colored wool over his head and chin. She continued to hold his arm, there were three minutes and some seconds now. "You said that you need me," he asked, "For what?"

"The whole columnator and supporting hardware has been disassembled from the drive."

"Columnator? You mean the focal field generator? Half the time that's a software problem," he said.

"No, there's another thing you should know," she said, splashing thru the toes of the surf where it ran up the sand.

"Is this worse than the asteroid wiping us out?"

"No, not worse, it's just some details about what's going on."

The ship we have to work on has a columnator assembly like a big old pocked-up belter's tug. A huge one. The ship we have to work on is the Presidente Lula."

"What?" he barked and stopped dead in his tracks. The water swirled around his ankles and ran back into the sea. It was much colder than Ava's beach.

"Gordon's Lamp is gone," she said.

"Without us?"

"Yes."

"When?" He was wide-eyed.

This was going to be a tough one. She just spit it out, "A hundred and forty six years ago."

He took a very deep breath. Another sheet of sea foam ran up the beach around them. "And the Lula is here?" He looked up at the sky, so Glenelle called up a vision of Narrulla and Narrulla's Tear in the sky above them.

"This is?" He pointed at the sky. He had never stood with any personification on the surface of the planet.

She had, in his android and Vic's, in Zhindu. "The moon called Narrulla and our ships, as seen from the ground."

He stared up at that awhile. "The ground? Down there?" He pointed.

"Yes." She knew what he meant, they were above the planet in its sky, so the planet was below us.

"What's," he had to take another breath for this one, "down there?"

"You mean is it a primitive civilization in ruins or an immense and ancient civilization thousands of years ahead of us in everything but energy technology?"

"Yeah," he said.

She drew a long breath. She loved him and wanted him to know, but they were getting much closer to his villa and the appointment with those androids. "Ava believes that the base universe contains a huge and ancient human civilization that was given an immense technological boost by whatever third party brought humans here sometime during Earth's last ice age. She has a signal from the ground, that is how she believes that signal is

generated."

"And you?"

"We can't tell," she said. "If Ava can't tell, I can't tell. If it's real, on the planet below are men older than most of the Gods in all Earth's great religions. And we now know God can't prove whether or not he's in a virtual environment unless he hacks his way out."

He walked along in silence for awhile, thinking about that. Maybe even thinking that cloning is just another method of reproduction, just another way to populate this silicon wonderland. "And that old torch made it?" he said, seeming to file the previous discussion under 'later.' "They were the last of their breed, those last few daedeli. Once the bussard drive was only a matter of time, no one launched anything for thirty years while they waited for a reliable bussard to go into production."

"The bussard drive would not have happened without the Angels."

"I know," he said. "So what do we have to do?"

"Re-assemble the motor," she had less than a minute left before the blink. "The whole columnator assembly is missing. If Ava is right, that's on its way up here right now." They had stopped in front of his place.

"And what do we have here for manipulator bots?" he asked.

"Alfred's and my androids and maybe a couple flesh and blood Brazilians in two hundred seventy five year old spacesuits."

"Just us in the androids? That thing weighs what, four tons? My Android was big..."

"You don't have your android, it was destroyed, remember? You have Alfred's android, I have mine."

"They aren't built..."

"The mining bots are on the moon, there are catcher bots and module carriages in here, as well as the fabricators that are still bolted to the Lula. We'll have to decouple at the command capsule isolation lock if we get the ship going, there's no time to dismount those fabricators."

"I barely remember the Lula..."

"And Ava expects us to start training about..." She looked at her watch, they blinked thru into the androids. Ava had already

moved the androids into the Lula unanimated. "Now."

"What the..."

"Ava said she was going to do this if the shuttlecraft got to one hour from the Lula's docking bay." The glare of space blossomed across their vision as the outer hatch swung open. "So in the few seconds we have left, I have to tell you how uncertain we are of who's in this shuttlecraft and what their plan for the starship is and who's on who's side."

"What does that mean?" he asked. He was still pretty well dumbfounded at all this.

She should have used more time explaining and less time catching up on sex and breakfast. "We may have to fight them for it," she said, as she used her android to hand Alfred's android a projectile weapon.

Book V.

Avenging Angel

1. A Meeting on Al-Harron

It was like the ruins of Susa, restored and perfected. The sunset, as always, was superb. Majestic purples and pinks sparkled in the evening. From behind the columns of the flanking courtyards, the men of the crew began to emerge, dressed in white, coifed with heavy turbans, long black beards down their chests, long sideburns on their shoulders. Formal attire with two thousand years of tradition.

They filed silently to the seats of the amphitheater. Some still glanced at the sunset the Haadij had selected for this meeting, but all had seen many like it at meetings during the crossing. Speaking amongst themselves was forbidden on a formal occasion like this for the ranks of most of the crew. Bahkmar had nursed a secret hope that the afterlife would be free of such senseless edicts of privilege, but that hope had been squashed within days of his death.

He shouldn't complain, he occupied a position a bit above common status here in the afterlife, as he had in life. He was not down there with them filing onto the cold stone benches of Susa on a blustery evening, forced to bear silent witness to pronouncements they hardly supported. He was on duty, his personification in a comfortable office chair, but hard at work behind the scenes. Still, it was a privilege to be on an interstellar voyage, a seedship at that, aimed at the enemy that had lead to the destruction of Immortal Talstan.

Unlike earlier missions to Satan's world, this mission knew its target and purpose before it left Sol. Unlike the earlier missions, this ship did not underestimate their enemy and was careful that it was not detected in its approach so it could strike without warning. The Al-Harron's drive was deliberately aimed off the true course so there would be no plume of radiation directed at their target. The angle of the drive sent them into the system on a spiral, a spiral that

ended with them approaching a hundred degrees of angle away from the direction of Sol and forty degrees out of the galactic plane and behind the brown dwarf. There would be no possibility of the enemy detecting their approach until they were well within the 61 Cygni system.

The Al-Harron's main section appeared to be a thousand-foot chunk of heavy rock with a hundred foot hole bored thru it that twinkled with containment fields. It bristled with antennas and projectors, its surface was snaked with cables and tubing. Other than the hole of the reactor core, it was like any other small asteroid inhabited by Angels, in this case members of Paradis, the Angelic section of the aging theocracy called Talstan.

The outer shell of this iron asteroid was only fourteen feet thick in spots, serving as shielding from the relativistic barrage of interstellar flight. Inside was digital space for the immortal souls of over a thousand valiant men, most of them military, and the logic to simulate their universes. Deeper inside were five thousand more souls of their wives and the seed to start a new civilization. Also inside was the logic fabrication machinery, weapon stores, and the other incidental machinery needed by the expedition. The charmer, co-liner and re-fluxor sections of the multi-partite Al-Harron were pure fabrication and the ship had a deployed length of 385,000 miles at .4c. This advanced technology had allowed it to make the fastest crossing ever to Satan's Star, covering the eleven light years in under fifty years.

The Al-Harron's construction began in 2354 when reports of Brazil's discovery in this system began to come in. The discoveries reported by Brazil agreed with data the Christial's had reported for a time early during their stay. The Brazilians maintained that the horrors were real: genetically modified people; eternal mortal youth without hope of, or belief in, the afterlife; rampant drug abuse and promiscuity; all ruled by a secret cabal of ancient evil scientists called the Kassikan.

It was now known that the Kassikan had been secretly influencing Earth for centuries, nearly taking over America in the 1970's, Europe in the 1990's, completely taking over Brazil by 2350. Then, in 2348, the Kassikan launched a missile traveling at

the speed of light aimed at the heart of all faith. That missile struck in 2359, in the form of instructions to produce an artificial virus that would modify human genetics to prevent mortals from aging as long as they had frequent promiscuous sex. Talstan, and all Angels everywhere, could not allow that virus to go into production. In the years leading up to the war, the rhetoric and the hostilities intensified. Martyr teams attacked Brazilian industries and genetics labs. Some of those martyrs's brains could be recovered, Bahkmar knew that many of them were in Al-Harron's crew, but didn't know who they were. Martyrs attacked, unsuccessfully, the Brazilian bussard seedships that were launched just before the war. In response, Brazilian space-based weapons bombed the Basran and Chirpol refineries on the gulf, destroying the last rusting remnants of the oil-based jihad. All the while Brazil marched doggedly ahead putting genetic formulas from the Kassikan into production for use on human beings.

Al-Harron was launched in 2374 as soon as Brasil began production of Satan's virus. Al-Harron was launched to go after the mother world. By sending the code of their anti-aging virus to Brazil, The Kassikan of the planet Kassidor had declared war, not just on Talstan, but on all Angels of any belief. In return Talstan declared war on the mortals of Brazil and destroyed thousands of their genetic facilities with kinetic weapons launched from the moon. The souls on the Al-Harron knew from the messages they received while early in the voyage that the war had unleashed all-out destruction in the whole system of Sol. Though Brazil was still ruled by mortals, they had a heavy presence in the solar system and space based weapons with which to retaliate. By 2381, there were no longer signals being transmitted from home.

The Al-Harron slowed enough from interstellar speed to consider itself operational in the outer 61 Cygni environment just forty six years from launch. The lumbering Brazilian daedalus of two centuries ago drilled a clear coarse thru the dark matter for them to follow. Qaidan espionage had uncovered the secrets of the Christial's bussard engines and the Al-Harron had benefitted from the latest technical advances of Tibetan science and the vast mills of the vassal state of Siberia that were spurred on by the impending

threat of war.

Four years before, before its first pass thru the inner system, Al-Harron used an old thermonuclear device to dislodge a six and a half mile boulder on its first pass thru the gravitational well of the 'c' star. In a few months they would encounter that boulder again and by then they must make a final decision on the fate of Satan's world and its population.

As a technician, Bahkmar had suffered thru all that indoctrination, had to salute it, pass tests on it, know his duty, so on and so on. He understood all that and understood what was really at stake here on a level deeper than that. We are fighting a war, not just between civilizations, the mortal and the Angelic, but between stages of evolution. This planet represented a primitive phase in primate development, the phase of individuals. What the world ahead dared call the 'sovereign individual' in many a serious treatise. Their tenant was that each individual could not be coerced to participate in society beyond what each individual voluntarily agreed to. That easily translates to complete hungry-cat anarchy in any language spoken in any part of the war-torn hills of Central Asia. In the eyes of Talstan, that is like saying the cells are sovereign over the body. The soul of Talstan was determined to cure the entire human species of the germ of the idea of the 'sovereign individual.'

He knew it on this level, though the individuals who made the decisions could not. If they knew they were simulating a cell in a larger organism, they would not be able to perform their function in the larger organism that is the Haad of Al-Harron. Bahkmar could understand how the political connections were like dendrites, the chain of command was the axion. They were the programming model to a veron in the substrate in which they lived.

As a technician, Bahkmar was one of the few who knew the truth about Paradis and what they really were. It was his oath as a technician that he would never reveal that secret, and he took that oath seriously. All the populace knew was that they needed to welcome new souls, but all non-technical souls thought they were in a paradise of God's making as detailed in the scripture of holy

war, they did not know they were simulated in a machine. It was the technician's creed that this was what God meant all along, and it is our holy duty to let the non-technical believe in the words of scripture. The technicians believe that they are instruments of God's will by making this happen while maintaining their humility among the non-technical.

Bahkmar knew that mankind did not always have the ability to make this machine. He knew that mankind did not have the ability to make this machine now, it was the machine that made the machine. It was developed by the previous generations of machines developed by machines that in turn had been developed by machines that humans couldn't understand. He wondered if that was how God evolved?

He wondered what happened to all the souls in the past before there was a technology to preserve them? He knew this condition had not existed for all time because he knew Angels who had been mortal when Talstan first allowed Angels. By the time that happened in Talstan, the Americas had Angels for two generations already, the Orient almost three. Had the lives of all who had gone before been in vain? Had all of human life until the soul could be simulated in silicon been for naught? What happened to a mortal soul when life ended if there were no molecular cryo-tomographers in operation to bring one thru to the immortal realm? From the secrets he thought he knew, he believed they never went anywhere.

The question was asked often, something like, where is my great, great, grandfather who died in the seizure of Taskent in 2148? The Mullahs have to say something about 'old' and 'new' heaven and how he was before the switch-over. Bahkmar wondered at the blind gullibility of the population to fall for that. If it wasn't for his oath, he would just tell them. He knew that the fact that their heaven had technical underpinnings was public knowledge among the Christials. They treated the whole population the way technicians are in Paradis, 'This is what God meant all along.' And among the secular simulates, he'd heard some of them no longer even kept their personifications in God's form.

Though it had been two thirds of a century ago, Bahkmar remembered mortality. He had lived in the suburbs of Baikonur all

his life, the city of the greatest spaceport Earth had ever known. Talstan was the third mortal nation to own that spaceport, and it remained within its boundaries thru his whole mortal life.

Bahkmar was born in 2312, unnoticed because the two hundredth anniversary of Talstan's founding by Qaida, the Prophet of Holy War, was the year before, but he was able to consider himself two centuries younger than the nation all his life. Far from the harsh purity of its founding faith, Talstan was a rotten theocracy worshipping the greased palm by the time Bahkmar was born. Most of the common folk doubted there was any God at all anywhere, just thirst, hunger, heat, cold, mean skinny dogs, hunger and thirst. Any heaven would do at that point, even one provided by the theocracy. The heaven of Talstan was Paradis and before Bahkmar's birth Talstan was already the mortal colony, 'soul farm' of Paradis as America was the 'soul farm' of New Dallas and the Pan Solar League.

He'd had a good mortal life himself, four good and faithful women, seven fine children. He'd been faithful, industrious and modestly successful monetarily. They'd owned an aerocar for awhile in the 2350's, while all his children were still at home and alive. He was still in good health when he died at the hand of an Aristocrat out practicing with his pistol.

Talstan, like Brasil, had been one of the last nations to run out of oil, and his family had been some of the last middle class. America had unsuccessfully tried money and military conquest to satisfy the oil habit of the middle class. Most of the world had settled into trying to eke survival from a small field once again by the time of the war. The urban poor in most nations were long dead, having killed each other off by the end of the 21st century.

What is the middle class anyway but poor who can pretend they are rich for a short time? The rich are those who own, the poor are those who work, beyond that we're only arguing about how poor. The rich wish to pay just enough for the employee to survive to work the next day, the poor want to be paid enough to live like the rich. Even as an Angel in Paradis the poor must work and Bahkmar was no exception. There must be technicians on duty at all times to attend to the mechanisms that underlie all of Paradis.

This meeting was the grand assembly of the Haadij. This was a big formal public meeting held with all crewmen present. As a technician, of course Bahkmar knew that the view rendering busses that supplied all souls eye-stream input was dependent on all objects in the field of view. Since all souls personifications had to be evaluated to supply the eyestream of the first, Bahkmar was forced to drop the eye-stream by another clock, and when it gets two clocks behind, souls begin to notice that the universe they see and the universe they feel are out of phase. As a technician it was his job to provide all souls with a universe free from these simulation artifacts, but there were times when he just wasn't able to do so. He would probably hear about it from Ahmed Eisep, his superior, but there was no way to blow in enough parallelism in time to avoid it. He had more crystal on the way, and was ready for it when it got here. Until then, they would drop a second clock behind.

This meeting's published agenda was to review strategy leading up to the encounter with the asteroid they had set in motion on their previous pass thru the brown dwarf's gravity well. Bahkmar knew it meant this was the time when those with ideas that might preserve Satan's world should present them. This was a forum where even the lowly could present ideas, but they often got only a few phrases in before they were overruled.

As their supreme commander in military and spiritual matters, (one and the same in Qaida's sacred texts) Haadij Vincef Doesshef was the most important soul aboard. At the entry to each person's universe there is a grand colonnade or gate as befits the man living in the universe at the end of that colonnade. The colonnade of the Haadij was the grandest of all and lead to this amphitheater from all directions. Among Bahkmar's specific career duties on the Al-Harron was to make sure, by constantly reviewing the software, the data, and the presentations, that the colonnade of the Haadij was the grandest. It was little better than maintaining fuel delivery piping while he was mortal, but in this society, it was a living. The clearance to view the data for that was a much bigger boon than non-technicians knew, for it allowed access to the diagnostic recording system and once one knew how to use the diagnostic

recording system it was relatively simple to get access to every data stream in the crew, every sense, every output, even hormone levels.

Today he was busy with visual simulation support. He was glad he scheduled more visual cortex blanks to be cast ahead of time, they should be on line well before the meeting was over. He just wished the previous shift had thought about it so they could have been on-line already. He made sure there would be a module carriage on hand as soon as each blank was ready, one that had on-board testing so it could be verified on the way to its slot. Ahmed would like that initiative. Maybe he could even get that time-slice in visual simulation back before the meeting was over.

While everyone was in their seats and not moving very much, very little re-rendering is done and the visuals were running cool, often not needing the second clock cycle. If people gestured silently among themselves, their individual rendering would keep up. The Haadij entered the space. The sunset was just blazing over the desert outside. The sun touched the horizon as he strode into view up steps behind the stage. The amphitheater was fully open to the sky to view God's handiwork. The Haadij had enough of these sunsets recorded to last for a very long voyage. Sunsets at Suza had been recorded photographically since the year began with a '1'. He could have ten thousand of them. This was the twenty third time the whole crew had assembled since the final crew selection, so he hadn't scratched his collection.

The Haadij began with a summary military report. There were seven hundred fifty six soldiers aboard the Al-Harron, about evenly divided between intelligence and astrophysical engineers with all the specialties reporting thru one or the other. That made up more than half the total compliment of male souls aboard the vessel. The military commanders went thru a standard Rundown of Readiness recital. As a tech, using the diagnostic channels, he could get the real data to a screen in his mind's eye and see that they were really only at seventy five percent but there was none who would dare mention that to the Haadij. As a tech he was forbidden by solemn oath on the holy book to mention that. The word of the department commanders was official. As a technician, he provided infrastructure, not oversight. This had been codified since the

Prophets first allowed Angels.

"So what do we know of the Kassikan's capabilities against this rock?" Haadij Vincef Doesshef asked when the initial recital was over.

Bin-Martis Gulmonesh, the commandant of Intelligence seemed to be the one Doesshef expected to answer because his personification was facing his. "They have no physical capabilities. They have nothing that can reach above the planet's stratosphere, they have no organization other than some large businesses and some volunteer churches."

"So we may devastate them at will?" Vincef asked.

"Yes, with this hammer we certainly can; but to what point, Most Learned?" Diam Al'Hassad, commandant of Astrophysics asked. He represented himself with the most secular personification of any of the officers. He was a tall, lean man with only a clean goatee, a pencil mustache and a brush of brown hair, dressed in his trimly tailored commandant's uniform with shined boots and fez. His eyes could be disconcertingly piercing, at this point they probed for enlightenment.

"The will of God," Moamar Graheb of the Council of Faith and Doctrine said, interrupting dangerously and looking at him like he thought this scientist needed some re-indoctrination.

"Of course, Most Learned," Diam said, speaking to the Haadij and not Moamar. He glanced only questioningly at Moamar but said to the Haadij, "but is it the will of God to destroy them all?"

"Only if they don't surrender," Haadij Doesshef said, wanting to regain the conversation without confronting the theocrat. For the whole voyage this had been an ongoing struggle and it was coming to a head as they approached the target. Vincef personified himself as a bear of a man with big jowls and thick black hair. In spite of that he was a conciliator and usually soft spoken. He wore a neat medium length thick black beard and a brown military uniform without insignia of rank. His hair was bound but you could not call the wrap a turban. The old American term 'do-rag' was coined for the garment closest to it in appearance.

"Who, my Haadij, who will we ask to surrender?" Moamar asked. His personification was in pinstriped robe and a large turban

with a waist-length white beard, waist-length gray hair and a face carved by a century of deep desert wind and sun.

"The five of the Kassikan," Vincef said, sounding like he was having to repeat for a dim-witted primary school child. The Brazilians had actually met them and broadcast their pictures to Earth. Bahkmar could never say this, but Moamar looked a lot like the one named Kiethying except for the pin stripes and turban and maybe fifty years.

"How will we find them?" Moamar asked.

"I'll ask my intelligence department to track them down," the Haadij said with the same air.

"Your intelligence department will fail to find them," Bin-Martis said about himself. He had a wide face and features, his beard was short and black. He wore a shirtless two-piece suit in the trendy mode, flowing and soft with pants that didn't conceal the size of his sack and large looping epaulettes with solid gold commandant's stars.

Vincef was somewhat surprised. So was Bahkmar. It was not wise to admit failure, especially up front. There were some oohh's and ahhh's from the crew's rows in the amphitheater. Lightning flashed in the distance behind the Haadij. "How can you say that without trying?" Vincef asked.

"Because I have the data. We have it from the Christials and the Brazilians. The Kassikan is in a city of many millions, as big as the Baikalite megaloplex. We have ten androids we can use to interact with them, and no other way to communicate with them but the data system. The entire world's data system is under the control of the people we are trying to find. We do not know if we can actually interface to the data system, our translation software needs tuning and there is no way we can get a remote down there without attracting a lot of attention."

"Do we care if we attract attention?" Diam asked. "We have the technology to awe the people into handing over the Five."

"Most people would not recognize a member of the Kassikan on the street," Bin-Martis said. "Even if you were to take a smaller rock and obliterate their city, they would see it in time to evacuate." Bin-Martis was leaning forward toward the tall samovar in the

center of the head table, elbows on the table with his chin out. "Sire, it is true there is no resistance to anything we would do," he said, "but it is impossible to get control of them due to their sheer numbers and their belief in personal sovereignty. With normal human beings we could capture their government, take over their command centers. There is nothing of that nature here."

"They have media do they not?" Diam asked, playing this out for the junior officers present. Bahkmar imagined they must have been over this among themselves dozens of times already in the fifty years leading up to this.

"There is five times the population of Asia that live a day's walk from the nearest media outlet." Bin-Martis replied. "The data we have say there are very few bulk mail distributors with more than a ten mile range. The biggest mass media is magazines and there are tens of millions of titles and none that print more than a few million copies. You can't easily spread your request for surrender to the population. And this data is more than sixty years old."

"Is there no electronic media?" Vincef asked.

"The last data we received indicated that they were able to explore the possibilities with help from the Brazilians," Korum Noshtis, their intelligence expert on Brazilian technology said.

"Traitors to humankind," Moamar said about the Brazilians. Children in Talstan had been raised to hate and fear Brazilians even more than Americans for an Earth century by the time Al-Harron first lit its main drive on the voyage to Satan's Star. They had completely replaced Americans and Chinese as the boogeymen in their culture.

Korum acknowledged with a nod but continued. "There was a data system with extensive databases but with only a few dozen terminals in each of the major cities. There was only one server on the planet with some caching hubs. It uses naked infrared beams point to point."

Moamar didn't want to turn this into a technical discussion. He had a volatile side that few liked to entertain. Though a pistol cannot kill in the afterlife, the pain is still as bad and all the members of the Council of Faith and Doctrine were quick to draw

theirs, Moamar quicker than any. Bahkmar didn't think the same way, he saw Brazil as nothing more than an ally of the Kassikan. There had been radio contact between Brazil and the Kassikan for thirty years, from the time the Lula entered the 61 Cygni system until the war.

Bahkmar agreed with the belief that the Kassikan had long term designs on Earth since before people of Earth began to entertain the notion of other planets. Bahkmar knew the figures from the Brazilians, the Kassikan was founded in 1429bc.

Doesshef groaned in frustration, probably as much in response to the constant bickering as the lack of ideas. "We are to exhaust all avenues to bring them to the faith and away from the power of the Kassikan, that is in our charter. Does anyone have a proposal to accomplish that?"

"We need an exponential pyramid," Bellem Amathes, a senior theological disseminator said. "If we three hundred disseminators convert and train ten each, and the trainees each convert and train ten, it takes only ten cycles to reach everyone on the planet."

"It takes God's year to convert and train the next generation of cadre," Liam Bek-Matta, an intelligence operative said, "but even so, I see your point, it would take ten years to reach everyone. As immortals, we should have the patience for that."

"Bellem assumes a hundred percent success rate and no backsliding," Bin-Martis pointed out.

Bahkmar wondered how Bellam expected the three hundred members of theology would convert three thousand natives. It was true many Angels forgot the fundamental difference between Angels and mortals. They forgot that no mortal can ever enter virtual space save with an avatar or in death, and no Angel can ever enter baseline space except in an android. It could be that Bellam had neglected that little piece of natural law in his calculations.

"We need to provide enough weapons to the converts," Dufbin, another member of the C.F.D., said. Bahkmar was reminded of a parrot by the skinny sack-licker.

"The Brazilians claim the natives also have a virus that prevents people from using violence on one another, you can give them all our weapons and it won't make a bit of difference."

Mustafa Larjeek, an intelligence analyst, pointed out. "Or are we going to discount that claim?"

"Of course," Bellem said, "that was Brazilian disinformation."

"I wouldn't discount it," Abdol Omarif said. He was a junior officer in intelligence but their expert on Brazilian politics and society. "We had good evidence that it was not disinformation. Our operatives in Brazil say they the Kassikan sent the code to that virus also during the period of radio contact and Brazil was close to putting that into production. That virus is airborne and they thought about releasing it over Talstan."

"If it was real, then why didn't they?" Bellem asked.

"Because they would be committing national suicide. Once that is released, it is only a matter of time before all governments dissipate," Abdol said. He was a very sharp-featured and dark-skinned man, probably a descendent of the oil migrations. "That virus is the mechanism that enforces the individual sovereignty policy by which the Kassikan rules mankind on this entire planet."

"How is that even possible?" Bellem persisted.

"None of us here can debate the niceties of genetic code," Haadij Doesshef said. Bahkmar knew that was not quite true but Imelse Nostraheem was sworn to more oaths than the technicians were. Their only true geneticist, he was aboard only to give the zygotes a chance, should they ever get to the seedship part of the mission. Genetics was considered the blackest of the black arts and it had been at the heart of the generations of conflict between Talstan and China. "We will err on the side of caution and assume that the existence of that virus is fact," Vincef said, "I can assume we are immune in the afterlife, but it is unlikely we will find a way to undo its effects in converted and trained natives."

Khalid Al-Hassim, one of the Spiritual Council, spoke up.

"We are assuming that we will need to use coercion to convert the natives, is there no chance the message alone might be enough?"

Bahkmar was not the only one choking on suppressed laughter. The Qaida creed is appealing to those dealing with extreme privation. It was, in fact, the collapse and corruption of the state that was leading to the new hard line. Bahkmar knew their enemy, he had learned Portugese, again, to know the enemy, and

had read their reports. The natives of the world ahead of them live lives of ease and sloth, constantly intoxicated, constantly indulging in indiscriminate intercourse with strangers. More polar opposites can scarcely be imagined than the mortal privation and terror of Talstan and the fleshpits of Satan's world. Bahkmar knew that the chance of many natives converting voluntarily was quite slim.

"What proportion of the population would we consider a successful conversion?" Khalid asked.

Moamar Graheb answered. "All must bow before God," he said. Moamar was one of the most hard-line of the C.F.D. He was uncomfortable with the question Khalid asked. By saying force was required, the hard liners would be saying the message was flawed. By concentrating on those who may not be convinced by message alone, the hard-liners can bring the discussion back to force.

"If we could convert ten percent of the population in ten Earth years by the message alone," Khalid said, "I would think that was very good progress."

"Are you American?" Moamar taunted, seizing his opportunity. "Our God isn't interested in profit margin and markup, we do not convert by psycho-subliminal advertising message. Our primary message is fear, the fear of God and we who do his work. Our guns are our message, our bombs are our message, death is our message. We are united as a people by the people's fear of God. We cannot convert this world, you have already heard that. Let it be crushed under God's heel."

"Destroying them is a draw," Vincef said. "Bringing them to God is victory."

"Letting them live as Satan's Slaves is defeat," Moamar said, coming dangerously close to insolence in the face of the Haadij. As it was he got a hard look and thunder rumbled ominously in the sky, echoing off the distant mountains for seconds. The technician who had drawn the Haadij's effects duty today was paying attention. "Most Learned," he completed and lowered his gaze. Bahkmar wondered how long it would be before he risked open defiance as the day drew near.

"We will not accept defeat," Vincef conceded.

Commandant Bin-Martis Gulmonish asked to speak, "We

must remember that there is still a vessel of the Brazilian fleet in this system. All our intelligence agrees that the Presidente Lula has never departed 61 Cygni." That was no doubt a dusty pitted hulk for it was over two and a half centuries old by now, built of bulk aluminum and steel using big bolts. It was nothing more than an overgrown mining tug of a bygone era with a big bad burner on it boosting an apartment building of pressure chambers into the unknown. It had left Sol all the way back in 2148, just a few years after the hundredth anniversary of this planet's first observation by the Chinese lagrangian observatory in 2044.

"Is there any chance it is still operable?" the Haadij asked.

"Unless it has been dismantled, there is every reason to believe that it could be operational." That was Korum Noshtis again. There were lots of murmurs at that. Scientists nodded, theologians shook their heads. Bahkmar already had enough crystal in place that everyone's rendering was out with only a one clock delay, but he thought he noticed the audio getting two clocks behind for a few slices. He wondered who was on that, it was usually easier duty.

"Is it armed?" the Haadij asked when the hubbub died down.

"There is no armament, but the ship has five times the acceleration that we do. It can fly rings around us and leave stones in our path. Its engine is an ancient daedalus and its radiation is lethal, but it is the biggest thruster in this system. It has the boost of our asteroid-drivers but a duration of an Earth year. It burns a molten metallic tritium/lithium mix. We have no way to tell what fuel reserve it has remaining, theoretically it could have enough for a month's burn, giving it more 61-Cygni relative velocity that we have."

"Thank you," Commander Doessef said. "Please put physical intelligence on full alert for that vessel." Vincef turned back to the room at large where some of the military men were trying to suppress laughter at the thought of trying to engage such a vessel in military action. "Satan's world has a data sphere," he said, changing the subject, "we know the Christials cracked it, we know the Brazilians had access, is there anyone in my service who can also crack it?"

There were several whispers, Bahkmar knew the name was

Jarome. He was a technician also, not just a hacker. They didn't know that. Only other technicians knew Jarome was one of them and all were sworn not to reveal it. Jarome spoke up, "The Christials stayed for years in close orbit and stationed probes in the beam. We are at least three Earth years from getting close enough to get a probe to them. There are no satellites here..."

"But the remains of the Christial base and whatever the Brazilians left up," Bin-Martis interrupted.

"There are no communication satellites to intercept, all the data but a little leakage stays inside the atmosphere, except a single tight-beam to the Christial remnant." Jarome continued. "We know the Christials spent at least eight years here."

"Do not underestimate the enemy's capabilities," Abdol said, "The Christial's showed us that. The Kassikan's data sphere is secure from tapping at this range. The last data we had from the Brazilian and the remainder of the Christial expedition indicated that they were cooperating with the Kassikan fully."

For once someone who was not a tech said something technical that was true. There was no instrument yet that had detected the presence of an electromagnetic signal from the planet ahead. For the other's the bombshell was that the remains of the Christial expedition was also cooperating with the Kassikan.

"They know about us," Abdol continued, "The Brazilians knew we left Sol before their transmitter was destroyed. No doubt that information was relayed to their people here, and even though we beat them and the Christials here, that radio message was still faster."

"When will they be in?" Vincef asked about the other expeditions. Abdol relayed the question to a subordinate who consulted a one-sided screen. "The Curitiba won't arrive for another thirty one years, but the Heavenly Mother is probably only two or three years behind us."

"We can be confident that the knowledge of our approach is in the hands of the Kassikan," Abdol told them. "They are probably trying to contact us now but we have no sensors coming in from the direction of Sol to detect if they are. They knew of the Lula's arrival and greeted it."

"We should greet them with a rock from this direction," Moamar said. "We do not need to preserve this planet. We will cleanse it and re-seed it with the holy life created of our God as written in scripture. To tamper with God's life or allow another life to exist is blasphemy." He glared at everyone in the room but the Haadij himself.

"We do not need to terrorize our own Haad," Vincef said, and put his hand on Moamar's shoulder. "God is testing our judgement as well as our faith. When we left Earth there were more than nine hundred million mortal residents of Brazil alone who were not of our faith and we allowed them to live. Our Haad needs a supply of souls. We all know that we do not know the fate of our nation back at Sol. We are a missile, but we are also a seed ship. Let us do the math together. If we exterminate the present biosphere with a mass extinction impact and re-seed this planet, the very best we can hope for is mortal humans breeding here in a thousand years. After a thousand years we will have a small band of our seed, a few thousand is all we have with us. If we capture seven souls this year, we are already ahead of that schedule.

"Moamar, we have the data," Diam continued from the less extreme viewpoint, "this planet has more uninhabited land than Earth has land. I know we don't like to admit this but the data we have shows no land as infertile as our heartland is inhabited on this planet. We may choose some uninhabited two million square mile area and start a nation from our seed. We have the firepower to defend it till our children can do it for themselves."

"Their viruses will corrupt any we put down there," Dufbin Ben-Tjejirfong of the C.F.D. said.

"In my opinion Most Learned," Abdol said, "we would be very remiss in our duties if we underestimate the military potential of the Kassikan once we get on the ground. That cabal has ruled this entire planet for twenty four hundred years, twice as much area as Earth, for as long as any great civilization has ever existed. It is a feat that had never been done on Earth and only twice before on this planet and then only for a century or two. Do you think they will give that up and run? They may give up a building or even a city, but we cannot achieve a military victory against the Kassikan.

After all, they speared us with a missile that flew at the speed of light."

The room was silent. The Haad commander looked around the room, from face to face. The first voice to speak came from outside his glare.

"All the more reason we have to strike first and exterminate them all," Moamar's voice rung out. "The seedship part of the mission does not begin until the anti-aging virus is avenged, that is in the Haad License and I will call the council to witness it." Moamar's beak was right in front of the Haadij's as he said that.

"Call them!" Vincef said without blinking. They both knew every one of them was in the room. Moamar had to go thru the formalities of the meeting within a meeting. Bahkmar noticed most people in this meeting opened new notebooks for it. Since they had all seen all of this, they only spent an hour formalizing what they'd just heard into a synopsis.

The Haad Licence was brought up. Most of it was just a long formal list of who got how much return on the graft that went into making up this expedition, but there were a few paragraphs near the end called the 'Haad Directives,' couched in dense theologian. Bahkmar could see it from where he was, but he wasn't supposed to admit it. Theoretically he was not attending the meeting he was supporting because he was on duty.

The council slipped to another space to deliberate, they soon announced that they would need a continuance till next week. Rather than adjourning early, the Haadij continued the discussions about the logistics of setting up a seed colony in the Kassidorian wilds among the astrophysicists and any others of the crew who wished to remain and listen or participate. They did not have a good map for the planet available, just the one transmitted by the Christials. Alstan had been unable to decode the encrypted data sent by the Brazilian expedition. So no serious planning could be done till a map was drawn. It was assumed they could find a large area with a climate like Talstan's that was uninhabited, they were easy to find on the low res maps they had. With that, they figured it would be no more than seventy years until a reliable source of new souls would be available. That was in addition to any locals that

might somehow be converted.

Most of the crew seemed interested and many participated. It was soon seen to be a grand undertaking that could build quite a nation before the Kassikan could even learn of its existence because of the primitive state of transportation on this planet. The meeting went late, until the full moon was getting high over the ruins of Susa.

2. Following the Power Bus

Ahmed kept him busy the next few days supporting many other meetings as different groups of important souls from the expedition argued this way and that regarding the world of Satan. All the while Al-Harron decelerated ever closer to the rendezvous with that asteroid and the re-convening of the Haadij's assembly when the Council of Faith and Dogma would announce their decision.

Day after day the hard-liners pressed their case upon the Haad. They recited the litany of how everything of every culture of this planet is exactly opposite of God's way. God says man has dominion over the beasts, the natives say man fits into the ecology as a large and numerous omnivore. God says chastity, the natives say multiple partners gives you life. God says four score and ten is enough for mortal men, the natives claim to be older than the prophet in flesh. God says it takes hard work and a clear mind to be saved, the natives think God comes in a bottle. He got sick of hearing it, he got sick of pretending to support one side or the other.

Thru most of his life he had never been as devout as he pretended. Why should he be when the nation was so obviously corrupt and the nation was so obviously lead by the Angels? He knew he was being herded toward the afterlife since he was a child. As a mortal he had known the truth about Angels even though he was not a technician. He thought more mortals than Angels knew that from Brazilian propaganda alone. His wives had been as cynical as he, but because they didn't believe, were more conscientious of appearing to believe. It was a whole culture of pretending to be hard-line while being secretly sybaritic. Wasn't the

ambiance of Paradis proof of that?

He no longer paid any attention because he could see how little reason entered into the discussions and the council would not even listen to anything the remainder of the crew decided. He had always been a casual follower of the faith until now, but this made so little sense. He agreed with the astrophysicists, it would be at least a thousand years before humans could survive on this planet again if it was impacted with a body this size. They couldn't be sure what condition the planet would be in when it did recover. There was a very different climatology on the world ahead of them. He knew that on this world, the seabeds are where the atmosphere is thick enough to support life. Half the planet's surface lies above fifteen thousand feet oxygen barometric. The troposphere is broken by numerous landmasses reaching above life-sustaining air.

On the other hand, large areas of the planet's surface are more than five miles below sea level where the air acts a whole lot different than it does where it's as thin as on Earth. There were no proven models of that atmosphere and climate, some worry that the climate could be tipped by the impact and that the planet would never recover. They maintained the atmosphere was chaotically driven by the continental contours and their details were unknown. He discounted the doomsday scenarios also, the planet was big and old and tough, it would bloom again. He just despised the thousand year wait but the more he listened, the more it sounded like they were going to get either that, or a continued voyage to the next terrestrial planet at Altair. It wouldn't effect anyone's duty or life very much one way or the other, all it did was change the time till they became a growing community once again.

Every crew member had at least one embryo in stasis to be brought to term on the new world. Bahkmar had four, one of each wife, collected while they lived in the suburbs of greater Baikonur. They had all been collected after he'd been shot, fertilized using his frozen sperm. He longed for the chance to see that seed sprout. He had one male and three female embryo's frozen aboard. He knew the Haadij had seven hundred, he had been an important figure as a mortal also and added a woman a day to his harem in his prime. He knew the Haadij would also be eager to dispense with the revenge

part of the mission and start the seed-ship part.

When he was not in a meeting, or otherwise on duty, Bahkmar was sometimes allowed to forget the woes of Haad politics and retire to his private quarters. They were exactly as promised in scripture, grand and fragrant cool palaces with every delight at hand, even the delights of the flesh. In spite of the perfection of Paradis, and the certainty that every setting on every houri in his palace was a far greater symbol of delight than any of them, he missed the mothers of his children. In the Qaidic faith, men and women have separate heavens and none is allowed to know anything of the other. Male and female technicians face each other, making sure that none of either side gets to see the other. Only the male technicians get to know about anything of 3D reality outside the ship, the female technicians are protected and do not, they provide essential services to the female Paradis. Every female body on the male side was a perfect houri, designed to taste, with a personality designed to be pleasant and encourage the man to talk about himself. He resented the fact that his religion thought that was the only thing he would ever need from a woman, and only had four of them now, one for each of his wives as a mortal, out of his allowed seventy two. They each could be molded into a variety of styles. What he found particularly offensive was that every model available had an adjustable pain threshold that could be set up to 'suicidal'. With his skills as a technician he removed that feature and would not even allow even these animated drawings of women to endure more than a slap on the ass.

He knew the culture of violence was born from the struggle to throw off the Americans, but that was four hundred fifty years ago now, get over it. There were heroics in use then that seem insane today. Still, so many of Talstan had died fighting the technology of the Americans, Chinese and Brazilians over the years.

At times he wished he wasn't born of a society based on holy war, but on a deeper level he understood the fundamental rightness and the need for the base of their faith. A people, not a person. Like a multicellular organism, a people must be willing to sacrifice a few cells to insure the survival of the body as a whole. The family was

the first unit of the larger organism. He hoped his family never knew that he took that bullet for them, for wife Jazim and daughter Izio. They were with him when the aristocrat started shooting and he had thrown himself over them.

In these quarters, his life was so empty without the mothers of his children, no matter how delightful the scents of these gardens or exciting the challenges of his adventure parks or voluptuous the sculpture of his houris. He idly relieved his personification on a couple of the houris and was unmoved. He wished he could hack thru to the female world and rejoin his partners. He thought seriously of attempting that hack, and was just moving to his lab to think of a way to carry it out when his good friend Jaseem Attuk rang in. "Bahk my good friend, I request entry."

"I'm in the harem, come on in," he replied and backed away from the lab door. The colonnade of a technician is not long and Bahkmar had already set the harem to the colonnade's inner door and opened it from his house panel. He closed that panel before Jaseem entered the room.

"Wow," he said as he came into view and observed the last houri he had been playing with. She was still standing around posing but Bahkmar was actually looking right thru her to the admittedly much wider and lumpier form of Shibet in his mind's eye. Even when set on their sassiest however, they cannot show the independent will that Shibet could, that made love with her so much more interesting than love with this collection of surface renderings and response data bases. "Very lovely." Jaseem circled her, she smiled and posed. They are not entirely without awareness, just without much in the way of independent wills. She clearly reacted to Jaseem's admiration. He knew how the cheral code for that behavior worked, that probably took a lot of the fun out of playing with them for him. He should have had something else to do on this voyage, like a wife or two to talk with.

"Check her out," Bahkmar invited, "I've got her set pretty sassy though, if you want her panel," he said and her user control screen appeared in the air above Jaseem's right hand. Shibet had looked a bit like this when she was young. She had been his second wife and still the most fun till the end.

"You sure you don't mind? Is she new?"

"No, I've had her all along, I've never tried these settings before." He had set her appearance to dark and large breasted, set her athleticism all the way up and left her hair lightly curled but as shiny and black as an Asian's, the only real difference from the young Shibet. Her eyes he set to pure Arabic, nothing could beat them in his opinion. "Go on, give her a whirl, I've got to go look something up for a few minutes anyway, take your time." This was probably the houri Jaseem gave him anyway, with a few updates he'd installed himself. Jaseem was not a tech, he wouldn't know how to get into the code in the houris and add new features of his own design.

"What do you say my dear?" he asked her.

"Love is my greatest desire," she whispered and ran the palm of her hand up the bottom of his chin. Her bosom touched his arm and Bahkmar saw Jaseem's pants move. "Can you satisfy my desire?"

He grabbed her breast as it passed over his arm, found she was much firmer than he expected and his pants moved a bit more. "Grrr," she said, and the palm of her hand started sliding up the inside of his thigh.

He grabbed her hand, but spoke to Bahkmar, "You don't have her public decorm on."

"We are standing in my harem's romping room." he turned to the houri, whom he called in this decor 'Shalahan'. Calling that name would cause her to assume these settings and appear. Standard behavior for a houri but Bahkmar had seen and optimized the code that implemented that also.

"Yeah, but we've not private."

"I'll be in the lab, you will be. Check her out on that gymnastics horse over there," he pointed and watched Jaseem swallow hard.

While he was off duty, as opposed to live when he has to be there for active support of an important gathering, he can look at schematics. He has the clearance because he needs to continually verify the state of the Commander's entry colonnade. Once he is

looking at them, he is actually pretty free to look at whatever schematic he can find. The power routing was something he might even have a legitimate interest in.

There were many diagrams and many levels of detail. He had to go down into the most detailed layer before he found labels that told him this was power to the female section of Paradis, or at least, that section of it that was on the Al-Harron. He went over the rest of it at that level just to be sure he wasn't missing something. He got right down to the etch dimension detail in it. He was probably in it for quite some time. He checked his old references, formulas he thought he knew by heart. He tried hard to convince himself that he wasn't missing something. The more he found, the more it lead to that same skinny little trace.

So OK, we're trying to keep it secret, so there wouldn't be a lot of advertisement about where the female universes were getting their flow of electrons to run their logic with. There are novel ways to get power, viral spy circuits in the hardware mask definition often get their power by rectifying electrical noise in the air around the circuit they're parasitic on. They found one section, once, where a single mask had been fabricated in Brazil and were forced to leave it transmitting until they could get new masks developed, fabricated and, for Osama's sake, TESTED before making us live in them. So yeah, those masks were still in use when the Al-Harron wove its death spiral into Satan's World because the ones without the parasitic circuit hadn't been tested to work yet.

That was one of the REALLY hot topics among the technically inclined these days. It had already been established that the spy circuit was doing something that fixed a fundamental bug in the mask that was used in the production of the fabrication machinery. There was no one on the expedition that actually understood what the fabrication machinery had to do other than pass certain diagnostic tests and otherwise 'work as designed'.

But Bahkmar did understand that the only power input to the female side of Paradis on Al-Harron would carry, with a drop of thirty percent, eighty three milliamps at best. Now if you assumed that they allowed twelve millivolt logic over there, you could get enough logic to run one soul at a time, serially. The equivalent of

they, all the women they lived with all their lives all shared the time slice of one commoner in the male Paradis. They would still be in their first day of the voyage. But then, they'd need at least as much storage as a backup takes and even that can't be kept available for all the females in the Haad thru that one skinny trace.

Bahkmar threw that out as impossible and began a new line of investigation. Male and female universes sharing the veron cores with a slice doubler. They would not have separate power busses in that case. He knew just what masks to examine to find those. There was another password verification to go thru on this one and mother's father's name to fill in before he got to see it.

The first clue he found was in a signal search, there was a CLX2 listed in the connection list of a substrate function, he needed to see what that lead to.

"Holy moly!" Jaseem said as he burst thru the lab door, hanging on it. "She sure can ride you on that horse!"

"Is that right?" Bahkmar said, closing his screens and turning to him. He should have locked the door, this was technically a security violation, but Jaseem was in no mood to study schematics if he even paid any attention. "I was scared to try it," Bahkmar said when he looked up.

"Oh, man, do it, next time you're hard, call her up and do it."

Bahkmar wondered at the shallowness of it all, 'she's an electric whack-off stick,' he wanted to say, but that would be dishonorable wouldn't it? It was his oath to keep that knowledge of what she was, as well as the details of her code, from Jaseem. To the non-technical, she was a holy spirit provided by God as a reward for a good mortal life.

He wound up having to put aside his investigation for now and walk back into the harem to begin another evening discussing the fine points of houri operation, action-based video games and Jaseem's prospects for promotion. All the while Bahkmar had to bite his tongue on technician's oaths again.

"You're distracted," Jaseem eventually accused him, "You're not turning into one of those who think we should never enjoy anything aren't you? Not even here in the reward of Paradis?"

"No," he said, "I am the opposite of dogma. I just wonder at the worth of all this," he waved his arm at the harem, the fine carvings, the fountains, the sky and fields in the distance. Now that he was present in this space but not calling on any of them, the houris took turns changing to other appearance settings and coming forth to undress for them. Because he had four, there were never more than four on the platform in front of them at a time. "I wish my wives were here with me."

"Do you think they would let us sit down here and admire your fine houris if they were here?"

"I might not feel the need as much. I'm not sure I feel the need now."

"I think I do, could you set that one who just came out dark on 'raunchy'?"

Bahkmar popped her panel right at his hand without saying anything. This was not the time, place, or company for a philosophical conversation on the inherent shallowness of their lives.

Jaseem played with the girl, bent her over and adjusted her to arousal. Bahkmar feared the software in the houris was programmed to respond with even more enthusiasm when handled this way. He should remember to look into that sometime and see if it really was true. He knew what tables those parameters would be in.

"How are these houris any less evil than the women of Satan's world?" Bahkmar asked him.

"Because they were made by God for this purpose," Jaseem said, looking at him like he must have come out from Satan's world to meet them. "You are not defiling anything when you play with a houri, you can play with them as toys because God made them as toys. It is his will" He took a deep breath and imitated an outraged imam. "The native women are real mortal women blasphemously re-programmed to behave like sex toys."

"My wives all spoke of mutual pleasure, not of playing with toys," Bahkmar said, and with his eyes, challenged Jaseem to disagree.

Jaseem had been reluctant to talk much about his mortal life.

His tastes were leading Bahkmar toward a belief in an idle son of wealth as time unfolded. He pretended he was hiding a 'child of the streets' past but Bahkmar felt Jaseem knew less of the streets than he did and all Bahkmar knew of the streets was which ones to stay off of. Of course Jaseem's mortal years had ended before Bahkmar's began. "I barely got to know any woman I ever married," he finally admitted.

"Why is that?" Bahkmar asked.

"Women were protected in my day," he said and tried to turn his head from the subject. "So you are bored with houris because they have no soul, because there is no 'mutual pleasure' but just a heavenly spirit performing its natural function."

This was one of those places where Bahkmar had to bite his tongue and not blurt out, 'they are just a few thousand pages of 'if' statements, some few-level neural simulation loops, a few gig of customizable data and some presentation rendering loops' but the vow was sacred and he understood even to the sociological level why the people who can't understand it anyway need to believe it is holy. It was his knowledge that made him unable to enjoy this game wasn't it? He cared for Jaseem as a friend but knew he would not understand, even if he was permitted to hear about it. Instead he asked, "You ever wonder what it's like in the woman's side of Paradis?"

"Bahkmar, you're starting to scare me."

"You don't think it is permissible to wonder?"

"It's pretty weird," Jaseem said, "almost like you aren't sure which you are?"

Bahkmar glowered at him. He hadn't really thought about how narrow minded Jaseem was until now. Not quite true, he hadn't questioned anything as much as he was now, now that the hard-liners were getting their way. "You had no feeling for women as people?"

"Was I supposed to?" he asked sarcastically.

But he asked. And wasn't that the problem, all the little things about their culture that prevented them from having feelings for each other as individuals? Yet he had only to feel it to know the feeling was right. He would have no children without their mothers,

it had to come from that. "I thought we were supposed to," Bahkmar said, "and I enjoyed that feeling."

"I don't know. That doesn't seem to jive with the structure of Paradis. If we were supposed to have feelings for them, wouldn't they be with us in the Afterlife?"

"Weren't we told from birth we would have our perfect lovers in heaven?" Bahkmar asked.

"That one I just rode was pretty near a perfect lover in my opinion," Jaseem said.

Bahkmar wished his friends could all be other techs, they would never talk freely, anywhere, but they would understand freely. Of course techs were forbidden to associate with other techs when off duty. At this point he got the feeling these houris really were soul mates for Jaseem. He wondered if all the Qbytes they copied from a brain didn't really amount to little more than a few thousand pages of 'if' statements, some response databases and a few gig of life experiences? He wondered if being in silicon took something from a soul? He bore the remainder of the evening stoically.

3. Commandant's Meeting

"Gentlemen," Vincef said as soon as they heard that the serving girls had left, "I think we need to stick together."

"Haven't we?" Bin-Martis asked.

"We have argued between ourselves," Vincef said.

"I am permitted to respectfully disagree with my brothers," Bin-Martis said, glancing at Diam.

Diam responded, "We can disagree on the specifics of a few issues, but still move forward."

"Agreed," Vincef said. "But we must put that aside. I fear our position is more precarious than we think. I fear the council believes they can make Moamar an Ayatollah, he would then outrank the Haadij."

"This is a Haad, a military command," Diam said as he replaced the samovar. "An Ayatollah has authority only in matters of faith."

"Faith," Vincef said. "The faith they seek is the faith that never questions authority, coupled with the certainty of faith that they are the authority in society. We all know our Qaidic faith was founded as a means of using faith to gain power."

"Every movement is about power," Diam said, "about uniting people in an action. It is the methods of this movement that make it unstoppable."

"The movement was founded on the understanding that there are no 'innocent civilians' in a population," Bin-Martis said. His chair squeaked as he sat back with his own cup. "Everyone present in a society is part of that society and by their presence and participation without open revolt, implicitly support the rulers of that society."

"The movement never cared about innocent civilians in their own population," Diam scowled. "Witness the weapons practice laws once the Afterlife was part of the faith."

"In war you always lose some of your own," Bin-Martis said. "If pawns must be sacrificed to checkmate the opponent's king, those pawns will be sacrificed and may God reward their souls."

"But if it is forty billion?" Diam asked.

"We are merely discussing the price of the whore," Vincef said. "Once we agree that lives are expendable for objectives, we are only discussing the price."

"We have to take out the Kassikan," Diam said, "The prime mission, before we are a seedship, we must destroy the Kassikan."

"What is 'destroy'?" Vincef asked. "Is it drop a four hundred ton boulder that makes a crater of the pyramid's entire site? A small thermonuclear would do that. Should we drop a quarter mile rock that would make their entire culture zone uninhabitable and drain that lake? Or should we drop a rock that will erase most evidence of what is certainly one of the oldest and largest civilizations mankind has ever seen."

"I think Moamar's first priority is to kill the wizards of the Kassikan," Bin-Martis said, "Secondly punish their followers as much as possible."

"The people here are not followers of the Kassikan in any sense we can understand," Diam said. "This coercion does not

overcome what we could apply by even more unlimited amounts of force and brutality. The coercion of the Kassikan goes to the will itself. These people do not even know they are being controlled. They are controlled as our houris are. It makes no sense to punish them."

Bin-Martis spoke again. "The council fears that the cabal will evacuate in time if we destroy only the pyramid site."

"No doubt they will," Vincef said. "It is my belief that the death of those wizards will be many times harder to arrange than Moamar believes. I don't believe brute force alone can ever take them down. Moamar is smart enough to know that his hammer will certainly not kill those wizards. All it will do is send them to some deep lair where they will stockpile years of supplies to wait it out. They have the means to reach the far side of the planet after they know the point of impact."

"If he knows that, why does he persist?" Bin-Martis asked.

"To get command of the Al-Harron of course," Vincef said. "That is all this is about after all, the Kassikan and its forty billion mortal subjects are pawns in Moamar's game."

They both stirred in their seats while Vincef leaned back in his, but neither said anything.

"How can he do that?" Bin-Martis said.

"The one in command is the one people follow," Vincef said. "Once the council has made an official proclamation to destroy Satan's World, were I to give the order to divert the hammer, would it be obeyed?"

"We would insure it's obeyed," Bin-Martis said.

"Yourselves?" Vincef asked.

"He has a point," Diam said. "I don't know how many of my people I trust to defy the council."

"We would have to take away their pistols," Bin-Martis said.

"How?" Vincef asked.

"You issue an order," Bin-Martis said.

"That of itself will not make the pistols disappear from their belts," Vincef said.

Once again they shuffled in their seats, but did not say anything. No one said anything about having a tech delete the

pistols from their personal item list in software, that would be too simple. But even the highest among them were not techs and did not understand the underpinnings of their society.

"You see my point?" Vincef said.

"What can we do?" Bin-Martis asked.

"It is that time again," Vincef said, "time to decide who we can trust and who we cannot."

There was the clink of teacups, the sighing of the wind in Vincef's private court, but conversation lapsed.

"What can we do against the Kassikan?" Diam asked.

"As military commander, this is how I would take out the Kassikan." Haadij Vincef Doesshef laid out a daring, long-term plan. It incorporated a two prong approach. One was a secret base deep in the wilds of the planet, preferably a region accessible only from space. They would keep their presence and their technology secret from the Kassikan. There they would put the seed facilities into full production, using the androids to raise and train intelligence operatives and a warrior cadre.

The second phase was an intensive intelligence operation using operatives and the data system. Then, when enough is known and the enough soldiers are twenty one years of age, even if it takes generations, using the technology of the Al-Harron, thousands of troops are parachuted in from stealth aircraft to secure the Kassikan complex. Catching the wizards unawares and trapped within their compound where they can physically be brought to justice.

"That is the only way we can do it," the Haadij said, "we must catch them unawares. No matter how many innocents we exterminate, we will not get the wizards. If only five people on the planet survive whatever rocks we can throw, it will be the five wizards of the Kassikan. That is one thing you can count on."

"I'm sure the rock we knocked loose will insure the survivor count is zero," Diam said.

The Haadij seemed ready to lecture. "That size rock was enough to exterminate dinosaurs on a planet half this size and dinosaurs didn't know about it years in advance. They couldn't dig retreats and lay in supplies, something that mice could do on Earth

at the time. That rock will certainly destroy the current civilization, but millions will dig in, stock-up and survive. When we are ready to land and sow our seed, after the planet recovers, the wizards of the Kassikan will have already had a thousand years to rebuild. In the cloudy dark, living on mushrooms and carrion, they will start to rebuild. They will burn their own ruins for fuel and rebuild. We will chase them under the clouds while the planet is not yet ready for our seed. We will fill the sky with probes. We will continue to destroy innocents, who struggle against impossible odds to survive. And mark my words, if only five people survive our attack on this world, it will be those five who rule the Kassikan. We must learn everything we can about them, we must catch them off guard," Vincef said. "We have to defeat them, man-to-man, in the flesh."

"The virus," Diam said.

"Filtered air," Vincef said. "We have the technology to protect against viruses, this expedition is the apex of Talstan's achievements, we can protect our seed from viruses."

"Moamar will say we won't have to worry about them after the impact."

"The virus will survive the impact," Vincef said. "If not a single human survives on this planet. If it takes a thousand years before we can release our seed on this planet, that virus will survive. Our descendants will be infected with it. The Kassikan's way will live on, even if those wizards are dead, even if every mortal soul on this world is pureblood descendant of our seed, their virus will live on. Our male descendants here will be unable to fight, our women will be promiscuous. The Kassikan and all their people might be gone, but their programming will live on, in the air, in the soil, in the fossils. The mortal souls we create will become controlled by that programming. The power of our descendants own leaders will dissipate, they will do only what pleases them, and the rule of the Kassikan will live on."

"You see no victory for us," Bin-Martis said.

"We can punish," Vincef said, "we cannot defeat. With my plan, we can get the five. We can hijack the Kassikan, hold the five hostage. They will change their world to save their lives. Once our troops are in their secret laboratories, they will mold this world as

we direct."

"You need a century." Bin-Martis said.

"Yes," Vincef said. "It doesn't really matter does it? But if we can't get the crew to follow my directive, it doesn't matter what course I wish to follow."

"We live in a virtual world," Diam said. "There is another tack we might take, as a last resort."

"What do you mean?" Vincef asked.

"Only as a last resort, if he declares himself Ayatholla and the crew follow him in dropping the hammer."

"I'll listen," Vincef said when he paused.

"O.K., if that happens, here's what I think we..."

Just then Ahmed dropped into system space and Bahkmar immediately dropped that very interesting diagnostic tap that he had into the audio rendering streams without waiting to see what Ahmed was going to do. He quickly deleted all the work files and brought up a copy of Street Fighter that he could almost get caught at for cover if Ahmed should contact him.

He wasn't playing it however, his mind was far from there, the words of the Haadij still rang in his ears. 'We can punish, but cannot defeat.' He never had any idea their situation was so dire. He had pictured their mission as being basically simple. They would dislodge a boulder, guide it to the Kassikan itself. They knew it was a triangular pyramid a thousand feet on a side, he knew they would be able to find it. Obliterate that and then claim some land for themselves, plant their seed and begin their advance across the planet, as they had done across Asia in the preceding centuries.

He had never understood how the weapons of the Kassikan would overpower anything they could bring against them. Now he did. He knew they would have to completely sterilize the planet to beat them. He thought once again of the stages of evolution, this stage is marked by conflict between the urge to be an individual and the urge to be part of a greater organism. He thought this world was a step back, with their 'individual sovereignty' manifesto. But could they have gone the next step ahead in the evolution of humans as a colonial species? Had they evolved beyond the need

for brute coercion to make the cells work as a part in a greater organism?

But then, he thought about the history of the faith. It had always been more about punishment than victory hadn't it? At least in the last four hundred years. Maybe because victory was false. The faith's greatest early victory, the reason for its birth, had been the destruction and eradication of Israel. Israel the nation had been defeated, its women dispersed thruout all the countries that would later be called Talstan. Imams made sure they had all been converted to the faith.

Today, it was their descendants who made up the aristocracy, their descendants who bought and sold the bodies and souls of the descendants of the people who gave their lives to defeat their isolated little nation. The man who gunned him down as a mortal undoubtedly had the blood of Israel in his veins. What a cruel joke it was on them all. Going by bloodlines, Israel ruled Asia.

The Haadij was saying the same thing would happen to them here. We will destroy them and they will rule us. We will spill our holy seed on this land, raise a caste of warriors, and still they will bend to the will of the Kassikan, and not our God, because of airborne viruses that program their behavior.

'What are we even doing here?' he wondered. To truly defeat them we need to cause this star to explode. 'Why try?' he wondered. We are safe from them in heaven. Maybe we should make the best deal we can, concede that they will hold the ground, attempt to retain only those souls we can bring into heaven.

Sure enough, Ahmed buzzed him, he shut the game he was staring thru, though he doubted that Ahmed was that tuned in to notice what he was doing. "Bahkmar," he said, "I need to temporarily re-assign you. My duty officer reports there has been a security breach in the Haadij's quarters. I need you to get right on it and see what you can find out. There's an important commandant's meeting going on and we need to maintain tight security."

"Yes sir, I'm reporting to the duty officer now," Bahkmar replied, trying not to sound nervous.

4. The Council's Decision

Bahkmar was not called to duty for the assembly that week, so that day he had plenty of time to root around in the base logic, wondering if there was a possible path to the female side. He knew if there was one, it would be thru mail, so he spent a lot of time looking thru the mail databases. He was not able to find addresses or accounts for any females.

Mail is the most likely route to be left unprotected, or lightly protected, but it was not the only one. Bahkmar began to look thru other low-level databases looking for evidence of the female side. There was the familiar high level block diagrams that showed the female side, but he was unable to find any of the lower level implementations of anything shown in those blocks. He knew the female side was supposed to be secure, but surely there had to be some supporting circuitry visible?

When he received a call from his door, he felt guilty and shut everything down before answering. "Yes?" he said.

"You decent?" It was Jaseem's voice.

"Yes, certainly," he answered, "Come on in."

"What am I interrupting?" Jaseem asked as he came thru his inner door and into the 'den' he often used as a laboratory. He should have moved to another room because Jaseem was looking around.

"Oh I'm just checking some security, a little elective duty time, I don't have to continue it now."

"You're a tech right? What's that work like?"

"Pretty boring mostly," Bahkmar said, "and of course it's classified. I'm under solemn oath not to discuss it, like you are with the personal information you deal with."

"Don't tell me anything secret or anything like that, I mean what's it like? Is it like farming? Or more like office work?"

"Oh, it's office work, it's more office than office work, here, don't let anyone ever know you saw this, but here's a typical screen." He brought up the last channel-map he was looking at in tabular form.

Jaseem put his eyes to the screen and turned to him shell-

shocked. "This makes banking forms look like a juicy romance novel!?"

"But as the saying goes, 'It's a living'."

"So you were working on this?"

"Just checking it over to make sure it's right."

"What is this stuff?"

"Jaseem, I took a solemn oath," he said and closed the screen.

"You've told me plenty over the years and I've never blabbed. I never even passed any of it on."

Bahkmar never remembered telling him anything. "I don't remember breaking my oaths. I've already told you the truths I know that I am allowed to discuss." There was no knowing the depth of Jaseem's ignorance however and telling him things like the diameter of Satan's planet might have impressed him as secret knowledge. He was quite sure he had never revealed anything that made Jaseem even suspect the fundamental nature of their universe. "I've already told you much more than I should," Bahkmar said. "It's not that I don't trust you, it's just regs."

"Yeah," Jaseem sighed, "I understand. I probably wouldn't understand if you did tell me about it. Anyway, I came over here to ask about the council meeting, you're not on duty for this one are you?"

"Not this time," he replied, "and I see it's getting close to that time."

"Shall we sit together?" he asked. Not that it would matter because they weren't allowed to speak anyway and his oath prevented using a sub-channel with a non-tech. He got up and went to the closet to get his formal attire. Jaseem tried on a couple of his turbans and would go with an Extremist X-50 autoturband that he dialed out real wide.

The members of the Council of Faith and Doctrine reappeared on the stage of the amphitheater at Susa during another spectacular sunset where the crew had reconvened. When all were assembled and the hubbub died down, Moamar spoke, "Do I speak for us all?" he asked the council. They were standing in a line on the stage behind him. A massive cloud formation was the backdrop

of the stage.

"You do," they answered in unison, well rehearsed.

He stood and paced to the front of the stage. He raised a rifle in the air, an ancient Kalishnakov from the days of the founders, and threw his head back and rattled the whole clip into the sky. "The hammer falls!" Moamar shouted. There were a few shouts with him, not one in eight of the men assembled, but still it was bedlam. "Then we go on to the next Earthlike world to sow our seed," he shouted after that, but by then no one could hear a thing.

That was a very strategic move. No doubt Moamar knew as well as the Haadij that the virus would infect any of their seed they set in this ground. No doubt he and the Haadij had already argued about it many times in the fifty years they had been on this expedition together. He was disappointed that they would not get to study here, but the fifty year voyage to Altair would be far quicker than the thousand year wait till this one could be inhabited again.

As soon as Moamar announced the decision, Bahkmar was popped from the stands into system space. He was called to emergency duty because the bus width for the number of personifications that are interacting within sight of each other was in overload. Ahmed was already there giving orders to try and handle the overload. It was the challenge of rendering all those views with all those actors in each view, each from a slightly different angle. The whole mass of personifications had to be encapsulated in a single model. He had to switch in a whole second lattice to the optic bank to host that model. He was glad he got that done for the last meeting and it was still viable crystal. It didn't even need to be re-blown.

He lost track of the argument while he was doing that, and when he could look again he could see the video bus overload was because the whole Haad had burst into shouts and fist-waving mayhem. All nine members of the Council of Faith and Doctrine were on their feet shouting "Drop the Hammer!" and most of the crew was shouting at them, the remainder was shouting with them. A few fist fights had broken out in the seats, others were scurrying for the exits.

Ahmed soon appeared at his shoulder, "Shunt all the non-

officers back to their dwellings on a blink and do it soonest, military order."

Bahkmar knew the meeting was being broken up and that the Haadij was involved. He might be trying to impose martial law over the council, bringing on a final showdown. Bahkmar did as he was told, as long as Ahmed obeyed, he would. He had no other chain of command in this crisis and because of this order, he could see it was a crisis. It took only a few levels of buttons to select out that part of the crew, but he was working with data from H.R. Blinking them home was pretty easy, a simple loop, they were all copied out of there in 1.781 milliseconds and would receive their next timeslice in the comfort of their own entry hall.

As he took down the apparatus for the meeting a couple hours later, he felt let down. He didn't know why, he knew this was their mission from the beginning. But he had wanted to at least see Satan's World. They would continue to decelerate and by the time they arrived, the asteroid would have already impacted. All he would see was the devastation. What they knew about the planet was evil to be sure, but there was so much culture and history hinted at in the reports that it seemed a shame we don't gather some data first. Well, all Abrahamist cultures had exterminated any different civilizations. The reports agreed that the planet was old as well as big and heavily populated. Opinions varied, but estimates of the age of civilization ranged from three to five thousand years older here.

He wanted to try and crack their data system. He knew he couldn't do it alone but he would like to be of any assistance he could to Jarome. It was said to be beyond anything Earth had ever produced, shouldn't they get a sample of it? It was said the Christials cracked it, but not the Brazilians, they became users of the native system that now had Brazilian technology added on.

Even if it had no obvious military use, you never know what someone can use against you. The military was considered the only morally appropriate use of technology by some. The hard core did not allow their peasants iron plows. Of course, they couldn't be Angels without technology, but even the Haadij didn't seem to

know that Paradis is an electronic simulation. That thinking made Talstan one of the last great nations to have an angelic component.

This hasty decision based on fear and dogma bothered him. They could not fear that their souls in silicon would be contaminated by native viruses. Maybe that was a reason to avoid probing the data system when they got there, but not to destroy it outright without even looking at it?

He had endured a lifetime of such decisions however. Decisions made for the glory of the decision maker and not for the good of the nation or in this case the Haad. The fate of this planet and its billions of innocents had really come down to a power struggle between Moamar and the Haadij hadn't it? And Moamar had won, leaving the Haadij weakened. Bahkmar wished he was a good enough technician to repair Moamar's brain, but how the mind that was being simulated actually worked was not understood and he would not have a clue how to start. And wouldn't those repairs be the ones the native wizards had done to their own population?

5. The Female Universe

Bahkmar had to admit that the events of the last week had not made his politics more correct, but they had made him more careful. What he had done the last four days was keep more to himself in his lab, making it look like he was studying toward his career as well as toward religious bliss. He worried about Jaseem, if he would pass on some things Bahkmar said. The tension thruout the Haad was like a balalaika string and no one felt like having a meaningful conversation. It was when the atmosphere was like this that wives and children were most important.

In the heart of his heart he felt doubt, and he directed his doubt toward his discovery of the female Paradis. People talked about the time he must spend with his houris. He didn't care. It was like an addiction to a drug now with him, he was going to find the woman of Paradis.

The female tech currently on duty was a blond named Linshere Paundrocop who was probably quite attractive if he could ever see more of her than her eyes and forehead. Generations of the

abaya had selected for pretty eyes among the female population. They had often conversed during the fifty year journey, to the point where she was the closest female friend he had ever had except his wives, and maybe a closer friend than Ajeel, his fourth and most distant in age.

"I imagine the veron grant circuitry is the same on your side?" he asked as they traded a little jargon during a slow duty shift.

"It's just a rolling list entering a new entry down the list indexed by their priority count. It's implemented with block move cells using three quanta redundancy technology."

"Yeah, that's the same," he said. "Our veron clock comes straight off the master."

"So does ours," she said. By the letter of Holy Law they weren't supposed to be sharing this information but the only person that could know would be another tech tapping into their duty environment. It could be his boss or another officer in the technical corps. He reported to the Haad via Diam, many, many levels up, so Diam legally had access to this space, but the chance of him finding it was about as great as his doing the nanocontrol of the ship's reactor manually.

That conversation gave him a clue in his search, he could find their veron grant line and see where it lead. She knew they had a grant line and that was exactly what he followed. The stack was way too small, that was the first thing he noticed. He began to get concerned as he followed it farther into the female side of the ship. With the codes he was able to retrieve under the guise of a security survey for the real world, he was able to access more and more of the code and schematics of the female side.

The deeper he dug, the weaker it got. He tried to follow it into the veron store and couldn't find the connection. He couldn't find even a block diagram with the female veron store in it. That might mean he hadn't penetrated the Al-Harron's security system as deeply as he thought. It also might mean that females were actually sharing the same veron store.

He knew the four female techs who had to interface with the system for the operation of the ship. He would trace them down. He

was not able to discover a veron account for any of them, and he was pretty sure the codes he had were good because the codes had exposed their financials.

He traced those techs all the way back via their financials, going into level after level of files where he technically wasn't allowed and not giving a damn. With a great deal of very tedious effort he was able to trace Linshere to a proxie cherub account administered by a diagnostic link. Even as deep into this hack as he was, he was unable to trace that diagnostic link. It must have had a hardware access trigger burned-in because it zeroed all its callbacks and withdrew. This left the links to the control of the Linshere Paundrocop personification in his process, where he was able to see it was nothing but a standard houri with its pleasure controls hidden.

He had burst in on someone, someone who was controlling a houri simulating one of the female techs from the female side of the ship. The side of the ship where the mothers of his children should be languishing in the universe of their desires with castrated servants who delighted in moving furniture hither and yon. He was fairly convinced at this time that the women were not with them. Someone was running the female techs and he didn't know who it was.

He went to investigate how many other diagnostic channels into empty personifications were open. He found this data was recorded and there were seventeen empty personifications being animated right now thru a diagnostic port. He was able to find that the other three female techs were among them, though they were not currently 'awake'. While he was so exposed he should run down who the other empty personifications were. There was no doubt in his mind that at least one of them would turn out to be someone important, someone being animated from behind by someone else. Who knows, maybe all of them would be important people? Maybe he could hack his way to the Haadij's control panel? To Moamar's?

But instead, he went down the power bus into the female side and followed every single pin. It went only to enough circuitry to provide the instruments on the male side with the inputs they would generate if there really was a female side to the ship. By the time

the duty clock said the sabbath was over, Bahkmar had proven to himself beyond all reasonable doubt that there were no real female souls on the ship. There was just enough circuitry to run four different cherubs, one on duty at a time, to simulate the technician's portal to that universe. They had not actually brought their women with them.

He questioned Talstan back at home. Even there, did they bring the women or did they leave their souls behind to dissipate in the ground?

What did he do with this knowledge? What were they? What was this Haad? Were they not the same as that radio message with the code for the virus of eternal youth? A missile, a missile aimed at the wizards of the Kassikan. How many of the souls on this ship had sacrificed their mortal lives in martyrdom for Talstan? He looked it up and found it to be thirteen percent of the crew. It could be worse, but it was still very high. They were never intended to return. They probably have copies of all of them running in Paradis, the real Paradis, if there is anything left of it. It was probably a good plan when it was put together, who could have known the Brazilians had secret doomsday weapons lurking in deep space?

With their homeland probably gone, shouldn't they be considering their seedship capabilities more than their vengeance? He's heard them say there were areas as fertile as Mortal Talstan that the natives have abandoned on this planet, some nearly as large in area as Talstan. Bahkmar had access to the mapping data, the world they were approaching was immense, there was more habitable land remaining beyond the human frontier than Earth had land.

He wished he were in a position where he could make the decisions. He would sprout their seeds in a highland of this world, bringing horses, yaks and goats with them, as well as all the vegetables they had seeds for aboard. He would trust that better minds than his could find antidotes for the Kassikan's viruses. He would use the ship to start the heaven of this new Talstan, Kassistan it would be called in his mind. If need be, this would be a base and the ship would be refitted to return to earth and seed the

lord's people there again. If it had come to that.

Bahkmar liked to think it was just, 'We're a bit too busy right now to fund interstellar communication and we'll be back with you after these technical difficulties.' He hoped that was all that had befallen his world. The plan was just to poke the mortals enough to knock out their genetic technology before that virus could take hold. There was no data to tell whether that had happened or not.

It did not matter what he thought, his rank was such that he could not volunteer ideas unless asked. The Council of Faith and Doctrine was supreme, even to the Commander when they were unanimous and there was no military battle in progress. The council was unanimous at this encounter, the Hammer of God must continue on its way.

6. Dropping the Hammer

Later in the week, Bahkmar was able to share a voyage with an astrophysicist/soldier friend named Enrico Hasheem who's mission was to attach the navigation motors to the asteroid. The asteroid is a giant snowball that had been growing in space for billions of years in orbit around the brown dwarf. In deep space it is so cold that most atoms but hydrogen and helium will condense on anything they encounter. Any atom will also chemically combine with any hydrogen they encounter, forming methane, ammonia and water. Because it was ice, it was stuck together with something more than its gravity.

He and Enrico were not close friends, not really much more than acquaintances, but the invitation to ride along on such a mission was interesting. He had to remember to keep his comments guarded however, the odds that this was a set-up to get opinions out of him were great. Snitching was about the only social activity going on. It was unlikely that anyone would be trying to make a new friend at a time like this without an ulterior motive.

Enrico took him to the asteroid in a bot. It had thrusters all over it and tool arms on the end near the cameras. He would be planting one of the three attitude thrusters that would be planted on the asteroid. Actually Enrico was no more in the bot than anyone

else in the crew, if anything, as a tech, Bahkmar was closer because he could tap into the raw I/O to the device that was the bot and encapsulate Enrico's controls. It was simply that they were able to route the bot's sensors to their cortex busses and 'be' there. Of course Enrico could never be told that they were really both left behind and likely sharing a lot of the same crystal via sub-slicing. Enrico thought they had put on space suits and climbed into a small chamber that blasted free of the Al-Harron. It had, in fact, blasted free, but only their data channels went with it. There is no space for space suits, that is all simulated on the signal to his optic nerve input.

Bahkmar was worrying more and more about repercussions from his hack, but so far nothing had been said. He knew it was possible for a technician as astute as the one who ran the simulated female side to ID him from his access to that area. He tried to guess who it could be, he came up with a very short list, none of whom seemed at all likely unless they were put up to it by someone else.

The asteroid seemed to loom above them and it seemed much bigger than six miles wide. The C star was rapidly getting closer and in a few more months would be as bright as the A star in their view. The A star was now a bright orange lamp. Its appearance changed little from month to month, except when they looped around it two and a half years ago. The C star was now getting close, hundreds of times closer than the A. This star was barely more than a gas giant. It had a few glowing spots and bands in its atmosphere, often obscured by bands of clouds. Most of its energy output was at radio frequencies. The telescopes aboard the ship had studied both stars on the first pass by. The A star was stable and long lived with sixty billion more years to go on the main sequence. The C star was a class of object called a brown dwarf, still not well understood in spite of the observatory at Proxima since 2138. This was a much smaller brown dwarf than Proxima. To his unmagnified vision it was still just a blurry point of light as they planted these thrusters.

The planet was still within the bright orange dot he saw as the A star in his unmagnified vision. That was soon cut off by the bulk of the hammer. Enrico fired thrusters, they stopped hurling toward

the iceball quite so fast. He fired a few more times. They drifted closer. In zero gee he felt like they were coming up on it from below. "You were a miner weren't you?" Bahkmar asked.

"You could call it that, as an Angel. I was an excavator, I dug facilities, I should say my bots did."

"Why'd you join the military?" Bahkmar asked.

"Shot someone," he said, "as an Angel."

They were both seeing what the bot's cameras saw as their only visual field. Bahkmar also had a few panels up in his view, but they had no view of each other's personification, with their suits immobilized in the bot. "Who?"

"An ex-lover."

"You were able to get thru to the female side?" Bahkmar was definitely interested now.

"He wasn't female," Enrico said.

Bahkmar was suddenly very uncomfortable in this bot with him, even though he knew they were no more in it than any other soul of the Al-Harron. He wondered if in some way this was payback for wanting his love-mate to have a soul. Of course, as a technician he knew he was no closer to Enrico in this bot than when they were each in their own harems. He also knew it was possible for either of them to use the personification of any one of their houries on any setting they wanted. Bahkmar wondered if his houris were male? Bahkmar shuddered. That wasn't in scripture, so it probably wasn't allowed. Bahkmar could probably figure out a way to find out with the diagnostic channels. He was glad they were not showing each other their personifications, he was able to continue the mission and not just duck out, leaving Enrico to plant this motor alone.

"Did Jaseem tell you to invite me on this mission?" Bahkmar asked. "Does he know about you?"

"No way, and he better not find out. I'm trusting you with my life to say that, and that guy's a fanatic you know."

"I hadn't noticed," Bahkmar said, "He seems like a shallow simpleton to me."

"I think that's an act," Enrico said. "He martyred all his wives you know, in the Chinese intifada."

"I didn't know that," Bahkmar said. He wondered who to believe. Jaseem had been a loyal friend, even if he was shallow. Still that would explain his attitude toward them and toward females in general. He had better be more careful with what he told Jaseem, he had probably said too much already. He also thought that just because Enrico thought Jaseem didn't know about his orientation, that doesn't prove Jaseem doesn't know.

"I don't like this job," Enrico said, once he understood that Bahkmar was not going to continue the previous conversation. "It bothers me."

Bahkmar wondered why he dared make that statement, but compared to what he'd already revealed, this was small. "I know," Bahkmar said, "I thought we would take out the Kassikan, then sow seed in some dry hills where there are no natives." He wouldn't have been able to say this if he didn't have diagnostics that would tell him if there was another recipient of this conversation's audio output. Even so, he was not going to reveal any more than what was already public knowledge.

"Yeah, I wanted to watch that part myself. Now we're going on another fifty years away." He was distracted while the bot touched down.

It was several minutes while he got the arms deployed and the drill started. Bahkmar began to understand what a risk Enrico had taken by outing himself to Bahkmar. He could face harsh repercussions. He should feel more at ease discussing important problems with him. Once it seemed like there was nothing to do but watch gauges for awhile, Bahkmar asked, "How do we really know there is a female section to Al-Harron at all."

"And why is that my concern?" Enrico asked.

"If there are no mothers, we are not much of a seedship."

"The seeds are sprouted my friend," Enrico told him. "The mother's work is done. There are mothers to be born in our hold, I have five daughters aboard."

"Do they mean to raise those daughters without mothers?" Bahkmar asked.

"We will have no interference for once, eh?"

The drill bottomed out, he had to unship and install the collector tubes and then the motor itself. In the negligible gravity of this iceberg, those tons of devices, outweighing the bot by many times and much larger in size, could be simply strapped to its back and carried along. Bahkmar was not so nonchalant about the lack of mothers but Enrico was busy for almost half an hour. He wondered if he had made a mistake talking about that. Enrico seemed to take it pretty lightly. He might be more concerned about his own admission. He might be miffed at being turned down. It wasn't till they thrust clear of the iceball that Enrico said, "You worry that they are sending us as martyrs don't you? Well we have seed with us, the faith doesn't sacrifice unborn children." Enrico was very convinced of that, Bahkmar was not.

They were well off from the hammer when they gave the motor its operational tests. It performed flawlessly. Bahkmar wished he'd hacked a malfunction into it, wished he'd thought of that a week or two earlier when he might have had time. There was really no way to stop it now. That motor would apply the final corrections to the asteroid's trajectory over the next few months, it would pretty much free-fall after passing the C star. By the dawn of common year 2424, the fate of Satan's world was sealed.

7. The Interrogation

He was yanked from a sound sleep, sure at first that this must be a nightmare. He was hanging head down in the hot sun, sun much too hot to be from a universe he would voluntarily enter. He was miles above rocky ground, slowly spinning and swinging in the breeze. His feet were bound and the rope went up into the sky forever, till it was out of sight in the blue. He was sure the symbolism was that God was holding the rope.

He was encapsulated in a virtuality horizon, no screens would come up. It could only be by another tech and he desperately tried to guess who it was and failed. He could guess plenty of techs that had the skills to get the drop on him, but not one who would use the religious symbolism. One thing about the identity of this tech that he was sure of at this point, he was the same one who ran the

female side.

This was why the techs were kept apart from each other off duty, so they would not know who was who and could be pitted against each other by their bosses. It was unlikely anyone he called a friend would do this to him.

There was a fairly strong wind up here, and he began to spin and swing faster and farther. The position was uncomfortable enough, but when he began to get sick to his stomach from the spinning, it became really annoying. What was even more difficult to bear was the length of time it went on, many hours. Morning gave way to late afternoon. If someone wanted something from him, he would have given it up long before this.

Then, the wind began to whip by. His feet had been numb for hours but he suddenly knew there was not as much weight on his hips. There was just about none. The ground was coming closer. It was still thousands of feet below, but God had let go of the rope.

"Who has access to the diagnostic channels?" God asked in a voice that made the whole sky rumble and crack. He wondered if it was the same guy who did the effects for the Haadij. He'd never known who that was, but knew he was good with scene generators.

Bahkmar rattled off the names of everyone he knew, practically every technician had access and could get anywhere he had gone if they wanted to. He guessed them as he thought of them, trying to guess who this could be. What he didn't understand was why the person he had surprised was doing this, unless he really didn't know it was Bahkmar that had surprised him.

"Saying too much is as bad as saying too little," God said, "naming everyone is the same as naming no one," then said no more for seconds while the ground came up at him.

"Who has access to the sacred diagrams?" the voice of God asked.

"You mean the prints?"

"Of course," the voice replied.

Bahkmar started with the same list, got only five names in.

"Silence!" the sky cracked. "I will show you what it means to trifle with me."

He was left alone. He shouted, a tiny squeak in a vast and

empty sky. The ground continued to get closer. He could not rotate himself, there must have been some drag from the rope because he could not stop himself from dropping head first. It got closer and closer, seeming to gain speed though he knew he was falling at terminal velocity. But each second he covered a greater fraction of the remaining distance.

He lived only a single instant at the impact, but it was an instant of pain beyond anything he had ever experienced before, even as he lay gut-shot and dying as a mortal.

There was blackness as if in unconsciousness but blearily, that ended. When it did he found himself hanging by his feet again, almost like he had been reloaded from where this entrapment began. He was much closer to the ground this time and his wrists were bound behind him with barbed wire. That wire was wrapped around him to bind his arms to his sides. Right below him on the desolate plain was an endless field of dogs, mainly doxies, stiffs and weilers; too thin, a little bloody, with dripping mouths and crusty yellow teeth. He hung with his face a few inches above the reach of their jaws. They were very hungry, jumping and snarling and twisting at him, savaging each other to get at him, deafening in their din.

He was lowered into them for a second, a couple took great chunks of his lip and face. The pain was as of being smitten with white-hot iron. He was yanked roughly out of their reach. "You are familiar with the structure of heaven as described in the Holy Rants are you not?"

"Esss my velubbed gog," he was already too badly injured to speak clearly.

"Where is the women's section of Paradis located?"

"Hi boo bot mow," he moaned.

"Are there women in heaven?" God asked.

"Hu tew me," Bahkmar said. He was pretty sure this wasn't really God. It had to be someone he knew. Who could turn on him like this? No names among the techs came to mind.

"Understand this much, in heaven our women are protected," God rumbled, "their duty is done, they have completed their duties

to men. Someone has been attempting to contact the female side. I need to know who that is."

He was lowered. He had not one percent of the will to resist. "I hid ih," he screamed. "Ih wuv me," were the last words he got out as the teeth reached him. The agony was so unbearable and it took so long this time, until they climbed over each other to reach his vitals.

When he next returned to life he hung by his bound feet once again, high above the searing plain. He could see at least a hundred miles across the desolation from here. The ground was at least a thousand feet below, maybe two thousand, maybe a mile. This time the ground seemed to be covered with a fine brush, to the horizon in all directions. He tried to understand the scale and understood that what looked like a bristle from here must be a very tall, thin spike, probably a hundred feet tall. They were probably a foot apart, maybe only eight inches, and covered the plain to the horizon on all sides.

Again the rope went up till it disappeared in the sky, again he swung and twisted in the wind. The sky was without cloud, the heat was blazing. It looked like the wastes of Baluchistan this time, but furred with those metal whiskers.

He shouldn't have said anything to Enrico, but then Enrico had admitted more to him hadn't he? Homosexuality was at least as important a crime as attempting to contact a wife.

God's voice came from the sky all around him. "I will leave you here until you are ready to follow God's law. When you are ready to accept my laws, you may let yourself down. If you are not ready, you may hang here till you die but you will not be re-started. If you let yourself down but attempt to enter women's Paradis again, you will be back here again and will not be restarted."

That was the last Bahkmar heard. He didn't understand what was really meant by that at first. Then it dawned on him. He would be trapped in this personification until it died of dehydration at the end of this rope and he would not be restarted. The ship would be without a tech, but there were nearly a hundred others. Whoever was playing God with him here, it was one of those souls. The

possibility he didn't want to entertain was that he wasn't trapped in a virtuality horizon, but was in the hands of God himself. And why would God, if he really existed, want to exact punishment on what is, in the end, nothing but a configuration of electrical currents?

The problem with that was fundamental. He didn't really, truly, believe in God. Nothing omniscient and omnipotent could ever allow such hypocrites to use his name in vain for such crass criminal personal gain as the hierarchy of Talstan. Therefore, he doesn't really exist. He also couldn't believe a real God could use such cheap and sleazy effects as were being used on him, such brutal assaults on his fears.

He decided not to drop to his virtual death, undoubtedly painful, right away. It was pain that he feared, but now he knew he had never even experienced pain before, not real pain. That was his greatest fear of all wasn't it? Nothing but pain or the threat of pain could cause his most abject acts of cowardice.

As a tech, he should be able to figure a way out of here. The problem was, he knew enough to be very sure there could be no way out if the virtuality horizon was properly implemented. The most common leak left uncovered was mail, but mail didn't seem to be implemented in this universe.

He wasn't sure his present personification even possessed the strength to bend up and get the rope off his feet. He should probably give that some consideration. He tried, it wasn't easy to get to his feet. When he did, he hung on, getting his head up this little bit helped the blood flow and did clear his brain a little.

He wondered what the symbolism would be if he was to climb the rope? God would probably think he was so arrogant he intended to climb up and take over. Of course, it wasn't God up there but some other tech who was working for the hard-liners that had him in this horizon. He wouldn't climb up there to confront God, but some tech, someone he knew, someone assigned to keep him from his wives.

With more effort he got to the rope and began to work his hands up it. It seemed like it took an hour to work himself upright. When he did he was beat, this wasn't the way he kept his personification. Because he knew he was stronger than this, he

pushed himself on and began working his way up the rope.

No doubt whoever had him in this box saw what he was going to do, because after he had climbed another hour and worked his way up another fifteen feet, he dropped the rope.

It took a long time to fall. Bahkmar had time to understand that he had no firm claim on being restarted after the upcoming death. He had not untied himself, he had come after the perpetrator. In a sense, the tech who had done this had just zeroed his call-backs and run away. What would that mean? If his veron grants were intercepted and his account deleted, few would miss him or know he was gone. But if this was the simpler sensory/motor horizon encapsulation, he would continue to receive his quota of slices no matter what the apparent universe was like to his mind.

There was no one he could think of who would be able to do this but Jarome. He called his name as he fell, his response was howling laughter, a smug, self-absorbed cackle way too cheap to have come from God. Vaguely familiar, but certainly not Jarome.

The impact hurt worse than that single instant in the first trial by rope. He was pierced by four rough and rusty spikes, he thought he slid about forty five feet down on them before he came to a stop. The one that pierced his right leg sawed its way out thru the femur and the leg dangled and bled horribly. One was thru his shoulder, one his lower back and the other very near the groin. He thought that would be it, that he would die and be restarted, or not. But he didn't.

The agony wore on for many hours and insects came and began to swarm around him. He couldn't feel them with the pain he was already in, but he dreaded the thought. Soon it was not a thought, he was covered with flies. The pain didn't abate. Insects crawled over his cracked lips, into his eyes. He had an arm he could move, for awhile. As light began to wane, that no longer worked. It got worse with dark.

He cursed the fact that he lived, even though he should have been dead on impact. His head hung down at an angle, there was nothing to rest it on. His drool ran down and into his ear. Insects crawled in that.

He wished it was not possible for the mind to function in this much pain but still it would not quit. Thru the next day it went on, it was nearing sunset again. The insects were feasting on his personification, some eggs must have hatched because things wriggled in his skin. Still he continued to receive veron cycles and endured the unspeakable. He wondered if he would be here for the remainder of eternity. He almost had to because the tech who did this could not delete his account without being noticed. He thought someone should notice he hadn't reported for duty by now.

Lilleen had been in labor the better part of two days, he now knew what that must have been like for her. Why couldn't he even loose consciousness? He wished desperately for death, even permanent death rather than permanent agony that mortal human nerves would not be able to carry.

Why had that person cackled so? Why had he broken persona? That person wants him to think, on the surface, that he has been taken by a hard-liner. If a hard-liner knew anything about Bahkmar, even as much as he was already accused of, he would know that Bahkmar was a tech who would recognize a 3D reality box immediately. By that he would know this was the work of another tech. If that person knew that, he knew that Bahkmar's list of suspects was narrowed down to the techs among the crew.

Jarome certainly had the skills to create this reality box and stuff him in it, who else could do that, he wasn't sure. It was true he hadn't been alert when he landed here, but then not many are alert while they sleep. Quite a few could have overcome him then, his autonomous security was still just tech standard. He was stupid to have left it at that level after surprising the one who ran the fake female side.

The voice who cackled was not Jarome. Of course Jarome had the skills to record that laugh anywhere. Come to think of it, almost any tech could do so. So he didn't know if that cackle was the one doing this to him, or a recording.

What he did know was that he hadn't been brought up formally before the Haadij and/or the Council of Faith and Doctrine on charges of trespassing in the woman's universe. That would indicate that whoever was doing this was not the Haadij and was

not someone working for the council. That would not narrow down the techs, none of the techs worked for the Haadij, were on the council, or worked for the council. All worked for The Learned Hiram Al-Mosquta, Seer of Technology, who reported to Diam Al'Hassad, commandant of Astrophysics.

Would Hiram do this to him? Not likely. Hiram would start with the indignant public dressing-down and proceed to something like this, but much shorter lasting and nowhere near as debased. Would Hiram know how? Sure he had loyal acolytes who would, but could he key it in himself? Bahkmar was not so sure. He doubted he actually would, if he could. The one who had him was too genuinely mean, Hiram was just ruthless.

It was not easy to think while in this much pain, greater than any mortal could ever endure, greater than natural nerves can conduct. Perhaps it was because of that, that he had irrational thoughts, like what if he was trapped by someone who was not a technician?

That would mean it was not a 3D reality box, but only his own universe decorated to look like one at the user interface level. Anyone who could get his home panel could do that. Because he was a tech, he would instantly recognize it as a 3D reality box, not a user-level decoration. His good arm still moved enough that he could type a ^C and sure enough, he was dumped back on his entry court, naked and unharmed. Free, but knowing even less about who this could be.

8. Retaliatory Action

The experience had changed him, he was so hard now he glistened. Everyone gave him a lot more space since then, he didn't know what he would do about it. Right now he was glad to get it. He watched everyone, looking for some sign in an eye somewhere that would indicate they had held that rope, they had faked him out and made him suffer so horribly for his own stupidity in not noticing for so long.

Normally if anyone had this happen to them it would be reported and the Council would make everyone produce a backup

and go over those backups looking for control of the scene Bahkmar had experienced. Because it concerned his illegal activity, he could not petition for succor from the Haad.

Instead he had to go completely on his own, keeping no council and avoiding attention whenever possible. Because of that, Bahkmar was in his quarters again. With all the disruption their expedition had faced, he only went out when he was on duty. He had his grounds completely trapped these days, he was not about to let himself be distracted to the point where any uppity mundane could pseudo-encapsulate him again. He spent much of his time playing again, mostly training in his adventure parks, but he often stopped and reviewed all his alerts.

An alert told him when a door opened to his colonnade. He looked and saw it was Diam Al'Hassad who was seeking admission. Bahkmar greeted him personally at his portal. After all, this was the officer at the top of his chain of command. Too late he worried if this was just a decoy, not Diam at all. There was no real purpose to the official chain of command any more, the council and the other theological cadre watched every move now. It was amazing that Diam was able to get here, even off duty, without a theological operative shadowing him. Still the person who had him in the pseudo-box could probably get an invisible tap onto some of his sensory inputs.

"Most Learned," Bahkmar said, and bowed deeply. The training he had been putting himself thru showed in his every move.

"At ease," Diam said. "The less notice we attract, the better." He strode without slowing thru the door and Bahkmar shut it and armed it. He brought up a diagnostic screen, Diam couldn't see them from his direction, and Bahkmar tried to be as attentive as Diam said, without preamble, "It has been brought to my attention that you are not in favor of the council's decision?"

Bahkmar was tracing their vocal channels, making sure there was not another buffer receiving a mirror of the phoneme packets they exchanged. He took too long understanding what Diam was here for. He asked, "What decision?" he asked while he traced down the whole routing of their conversation, from the vocal banks

thru the room mixer and to the audio inputs of each other's soul. The audio stream was generated in a whole different section of the substrate than the visual.

"The hammer," Diam said. "Are you swatting at flies?"

Bahkmar jumped, decided they were clean and closed his screens. "No sir, just checking for extra ears."

"I know you are a technician, as your department is under my command, I have access to the secrets you bear."

"Yes sir. Forgive me, would you come in? Can I get you something?"

"We should go somewhere private. I suspect the servants can talk."

"You have not studied the data available to you. The cherubs can be hacked to record, but all the audio samples sent to minds is generated in the same blocks of the substrate on time slices, we are overheard if there is an additional listener on the bus when your audio output is placed on it. I was checking the fan-out readings on our speech busses to see if anyone is listening. The only reason someone would tamper with a cherub is because they're not a technician and don't know what they're doing."

"That cherub doesn't show up as additional fan-out on your scan?"

"That's true," he said, and marveled at the insight. "But it is a known fan out."

"Those who listen are very interested in covering their tracks. If you are looking into that, you must believe I have something clandestine to discuss?"

"You asked not to attract notice. I've shut down all the cherubs in my space by the way. Do you know of any other ways they could listen in? I know of some more sophisticated techniques also but they require getting into the hardware compiler." They were in his lab, he had made that the inner door, there was a comfortable corner where they sat.

Bahkmar kept a hot samovar here but Diam waved him off of it. "I don't know that anyone is following me," Diam said, "I know they are trying and I had to evade a very nasty no-panel trap just last night."

"Did you find the ^C?" Bahkmar asked.

"Eventually," Diam answered.

"I was in one," Bahkmar confessed. He didn't say how long.

"Do you know who's doing it?"

"The CFD's behind it I think."

"But who's the technician?"

"I don't think they have one, not a formal one. Some hot shot that knows a few user interface tricks."

"I'm looking for him," Bahkmar said. "I was hoping to charge him when I find him."

"With your help, maybe you will get a chance."

"My help?" Bahkmar asked.

"We know you've no stomach for extremism," Diam said, "That's why I've come to seek your help."

"What help can I be sir?" he asked.

"We need to take back the ship. We need to depose Moamar and restore sanity to this expedition."

He hoped he wasn't being lead on here, but he said, "Yes sir, I know we are a missile, but I thought we were a missile aimed at the Kassikan, not this whole world."

"That is how Vincef and I interpret our charter. We clearly can't give due effort to conversion if we exterminate the population. I also agree with Vincef that a clandestine operation is the only way we'll catch the wizards themselves."

"The hammer is already on its way."

"The guidance can be re-programmed," Diam said.

"Is that what you want me to do?" Bahkmar asked.

"We need four people on the team," Diam said, "we need an astrophysicist, a pilot and a technician."

"Are you the pilot?" Bahkmar asked.

"I am the person who knows the others involved. To protect you all, none of you will know the others."

"I see." Bahkmar said. "I don't know how to reprogram the drive."

"Your duty is to keep us safe from other prying eyes and ears."

"I've already done my best, you already pointed out it isn't good enough."

"Because you underestimate the deviousness of the people we are dealing with," Diam said, "not because of your shortcomings as a technician. I've picked you because you are the most competent of those who's sympathy I trust."

"You are one of my commanding officers. Speaking of which, what about Ahmed?"

"I was getting to that. This is not to be discussed with anyone but me, not even if someone else admits to you they are involved in it, you continue to deny it to anyone but me, and tell me who that was."

9. Womb

The plans took shape. It would be another week before they took action. During that time he was charged with learning all he could of the ship's interface to the outside universe. He already knew the basics and the concepts and had become quite familiar with fabrication. He knew the paths to the instrumentation, restudied them, and with a little clandestine help from Enrico, who didn't know he was giving it, found the communication channel to the probe's motor. He even got out of there once again without submitting to a homosexual encounter.

He was deep into studying the circuitry around that channel when he heard Jaseem call his name from his door. He noticed that his warning circuits were unarmed and cursed himself internally for not keeping up his guard. "Yes?" he replied, quickly closing all the screens he'd had up.

"I just heard about your little incident."

"Come in please. But I will tell you that incident didn't seem little to me when I was involved in it."

"I brought you a gift," he said. The door now opened directly to the study space he had set up for this. He quickly sketched in a little space near the door and a guest seat. He hadn't put that in here yet today. Knowing Jaseem they would soon retire to the harem anyway. Jaseem slipped into the seat cradling a cloth-bound bottle of scotch from 2318. He tried to calculate what hundred year old scotch would have cost a mortal. Since the stuff was now nothing

more than encoded sensation levels, this applet probably cost less than twenty bucks.

"Very nice," Bahkmar said. "I've got glasses in the court," he said. He got up and lead Jaseem to his courtyard, which was now right outside the door to this study. This was a shady place overlooking gardens. An ornamental pool with a fountain graced the center of it, they took the scotch to some high-backed stools that bracketed a small table next to a small raised lawn upon which houris might perform. There were already a pair of raised, cut-glass shot glasses on the table. All of this was winked contraband of course, which meant it could be confiscated by anyone official or holy, were they to see it. Bahkmar poured. "To the health of your descendants," he said and raised his glass.

"Qaidic," Jaseem said and sipped. They put the touched glasses down. "Where's the lawn ornaments?" he asked, pointing with his chin at the performance pad.

Bahkmar really should have thought to take that out after his 'little incident' but hadn't thought about it in time. He called up a panel and brought a couple out to perform, the ones with the better raunchy settings seeing as Jaseem was here.

"So you've been sequestered in here so much," Jaseem said, "I wonder if you've heard?"

"Heard what?" Bahkmar asked him.

"Moamar has been raised to Grand Ayatollah."

"Yes, I've heard."

"You don't sound happy," Jaseem said.

"I've always supported the Haadij, Vincef was a good man."

"We don't know that he's dead, and he can always be restored from backup."

Bahkmar always thought he could be open and honest with Jaseem about anything that didn't violate the technician's oath, but since falling into that trap he had been a lot more careful with what he said to anyone. "I didn't hear that he was dead."

"I thought I heard it from you?"

"I remember saying we haven't heard from him in days and hoped he's not dead. Usually he's around a lot more than he has been."

"Someone told me he was dead."

Bahkmar knew that 'dead' to an Angel means no longer receiving veron grants. Bahkmar knew that Vincef, the Haadij of this Haad was out of the grant list and could not say that because of his technician's oath. He knew he was a long way from the authorization to edit the grant list. He also knew that out of the grant list was a long way from 'dead'. Dead would be deleted and edited out of all backups. What the average person called 'dead and buried' was deleted from the current environment and the logic recycled. They were still backed up however and could be 'resurrected' from backup in most cases. "I was worried about that."

"Who would know, among the technicians?"

"Not a clue, I haven't been called for duty since the end of that meeting."

"What was your duty?"

"For the Haadij, it was colonnade inspector, I went from one to another making sure his was the grandest."

"So you tech's have a master key?"

"Jaseem, please, we're friends but I've taken a solemn oath and I mean to abide by it, even among close friends. His person could be in grave danger if information that looks innocent to us falls into the wrong hands."

"It's like being a spy?"

"It's more like access to account info. Now Jaseem, please get interested in something else." He brought up a screen on his private eyestream and adjusted his Delightia Mk VI to some settings he knew sent Jaseem's bone to his chin. "Here, play with Jezebel awhile," he said as he handed him the panel.

Jaseem swatted his hand. "You mock me with your houris. Why do the spirits favor you with the best?"

"God made them as toys, Jaseem, all of yours have control panels just like this, you can set them for your amusement."

"I like the way you set them for me," Jaseem said. "You have a real skill with it. Any time I play with their panel I come up with some scary thing that I have to turn off."

"Don't run the knobs up max, start playing from the center." Bahkmar knew what Jaseem did, he just turned the tit's up max and

then tried to compensate.

"Like I just said, you've got the skill with this, I'd rather pretend they didn't have control panels."

Bahkmar felt really used here. He had to maintain the code for the 'Houri' applications, in this case Delightia Mk VI, and he did the operation and set-up of the user application, so Jaseem could play it.

"Would you mind not watching us?" Jaseem said.

Bahkmar blinked out of the harem. He felt like shutting down the houri on him, or better yet, transform it into a whirling malestrom of rusty, broken knives that chased him for days, something reminiscent of what he had to endure. He was capable of constructing it, but passing the suffering on to Jaseem was all out of proportion to the casual callousness that Jaseem had committed. For revenge, Bahkmar secretly recorded him going at it with Jezebel. He really was barely a match, especially mentally, for that simulated blow-up doll.

The remainder of the evening consisted of going over to Jaseem's and installing the HouseWife9.1 updates in his houris for him and dialing in a few named settings that he could call up. For that Jaseem promised him another bottle of scotch.

It was the next day before he got back to the problem. This brought him to the antenna of the ship and into the mechanical domain. He found he had no problem pulling data on the mechanics of the ship. He found the antenna, found the signal path, its maintenance schedule and the responsible bots. He got drawings of the antenna itself and even its mount to the bulk of the expedition payload.

While he was here, he knew there was something else of the expedition that would show in the mechanical data, and he set out to access that. He found it wasn't so easy. He found no reference. He started from the schematic of the whole payload and went down. He looked over the other partitions of the expedition in detail to make sure it wasn't in there. He tried cross referencing. He found the details were not available.

This did not seem to be a case of him not having access to it.

He built a 3D model and was able to account for every cubic inch of the ship. Of course this was not conclusive, after all, he was an Angel and therefore virtual, so he could never know anything with certainty.

He knew he was able to look up the status of his zygotes on any public panel any time he wanted. He started using diagnostic taps to see where those responses were coming from. It took hours because there weren't that many inquiries to use for sample data, but he was immediately able to determine there were no hardware inquiries used in formulating the responses to those queries. He knew that wasn't conclusive evidence, the sensors were probably read regularly by the hardware monitors and written to memory somewhere that the query looked up. He tried following that and found they were not. The sensor readings turned out to be filtered random numbers.

He concluded that within the universe he was encapsulated in, there was no store of five thousand frozen zygotes, just as there was no heaven of five thousand mothers. No, there was no doubt, this mission was never meant as anything more than a missile. The seedship aspect was all a tease. He wondered if Diam knew this? He wondered if Moamar did? He wondered if he was the first to know?

10. The Ayatollah's Charge

This was the night of their attack on the hammer. Diam came to him audio only and he was the only one he could hear. He gave Bahkmar a hardware memory address where the motor instruction would originate, it was his job to get it to the antenna, undetected from the monitors on that channel.

Bahkmar set right to work. He took the last ten hours of telemetry and last ten hours of feedback and looped them, then jumped that in right where it came from the antenna. A brutal, hot-atoms hardware swap. He had to use a mini-bot to weld those connections in vacuum and was glad he paid attention when he rode with Enrico or he wouldn't have been able to operate it. As it was he lost a precious hour in that welder-bot's circular help system

figuring out its fine points.

Once the signals were physically connected, he wasted more time before he understood that it was a pointer source leading him to another hardware connector in the game room. He questioned Diam who said that was right, get it done. He did. It was just a pass-thru, one of the first lessons in VXDL a new tech took.

What took more time was covering tracks. The welder-bot hardware recorder log had to be re-written with all that edited out, then the current monitoring tracks those actions made had to be fixed up. The current monitoring logs of all the logic all his programs ran in had to be edited, then he had to edit out the current traces that process took manually, before he could close. Thru all of it he was terrified that someone was going to come on live and catch him at it.

Once he was out, he went back to innocent pursuits, like hiking out into the desert to write notes in the sand with his feet on the way by. This was something that was very hard to get a recording of if he didn't look at it. He tried to keep his mind calm so there would be no hormonal signals that he was recording a secret message from his soul. He wrote down the patches that he'd used, in case they needed to get them back some day.

Presumably those who thought they controlled the Hammer would continue to get the same 'all's well' and the hammer itself would continue to drift off course. He wondered how Diam was arranging to cover other sensors, because too-late Bahkmar realized that they had to encapsulate all the ships instrumentation to keep the crew from noticing the effects of their intervention.

The operation concluded and they all broke contact. It was agreed that they would have no further contact with each other and he saw nothing of Diam the next week. There was no fall-out from that for over a week. Bahkmar did his best to look like a model citizen and two days ago he even allowed Jaseem to bring a friend to play with his houries. He felt good about what he had done, he hoped it was working. He was alone now, enjoying an evening's relaxation watching some story-art.

As he leaned back, his chair disappeared and he was dumped

onto his ass on the cold, hard stone of the stage of the amphitheater at Susa, deep in evening with a terrible lighting storm approaching from right behind Moamar's wide turban. He looked around and saw the council was gathered around him, their robes flapping in the raw wind.

In white robes with a neat white turban was one of the five astronomers on Al-Harron. Bahkmar was not personally acquainted with him, but recognized him from presentations he had made of the current position of the known bodies at 61 Cygni during the outer approach. Strangely, Jaseem was on the steps of the stage behind them, and looked for all the world like he was operating a one-sided screen.

Lying on the stage with him and looking as stunned as he did were Diam, Enrico and someone he barely recognized from astrophysics. Most of the crew filled the seats, looking as bewildered as he did, like they had also all been blinked in at once.

There was a crack, and with the voice of thunder Moamar spoke, "We have uncovered some who oppose the will of God," he said. Another crack and flash split the sky. "We are here to try them for treason."

There was no trial. Using just as much theatrics, Moamar read the long list of charges, the council shouted 'witness' on cue in unison if not quite on key, and then Moamar shouted 'GUILTY' and that was about the extent of it. Oh there was a little more ceremony and detail, but that was the gist of it. None of the four of them was able to say a word, it was Jaseem who dialed their voice outputs down to a whisper that went unheard. Someone had hacked him into a system panel. It was over in a little more than half an hour. All thru it the crew sat and watched, the men of the council all had their pistols out and kept an especially sharp eye out for whispering among the rank and file.

The rain was pelting down, the thunderhead was formed in Moamar's likeness. Each word of the sentence was a separate boom of thunder on its own bolt of lightning. "You will be stripped of your technician's powers and all heavenly powers and held in a plain environment for the remainder of the voyage of this Haad."

Yes, Bakmar said to himself, living forevermore in a 3D reality box.

They were placed on a desert planet, each one alone and three thousand miles from one another. He was near a tiny spring with one date palm next to it and an acre of weeds along the little trickle that ran a few hundred feet before disappearing into the sand. It had been about a hundred and fifteen during the day, fifty five at night the last few days. There was nothing to eat but dates, grass seed and bugs, he hadn't seen so much as a gecko or salamander.

He was convinced there were more rain clouds on Mars than here. He had to admit, it was a nicer place to live than Mars, he could breathe. The air was at least half as thick as he was used to. It hadn't been below freezing yet. It hadn't been more than a hundred and fifteen. He'd experienced hotter as a mortal on pilgrimage to the holy land.

If he could find a way to cross three thousand miles of bone dry desert, he might find company. He was very aware of how well 3D reality could be simulated. No one had biting insects in their universe, everyone he ever knew turned that option off immediately. That didn't mean that it was not present in a full implementation of 3D reality. With no access to any control panel at all, there was no way he could turn that feature off. He wondered if the simulation was accurate enough so that if he killed every last bug, they would be gone. He was very aggressive with them in that hope.

But then he realized that if he exterminated all the insects in the tiny oasis, he would have no protein at all. He really worried about things like that. This was, in all likelihood, the remainder of his eternity. He went numb thinking of it. What would his mind be like a thousand years from now, a million? He wondered how this sentence could ever end. Probably not until the final failure of the last substrate in Al-Harron. He wondered what would happen then? He would never know it had happened would he? There would just be a time slice he never received.

He wondered if there would be anything to tell him that things were nearing that point. He had nothing to reference to determine if

he was getting his slices at a regular interval. He could already be getting only one per year and there was no way he could tell. The planet could already be destroyed, they could already be on their way to the next stop, a world they knew to be even bigger than this one. For all he knew they might even be there. He might be getting slices at idle level.

He wondered if the universe around him might start to fail. Would he notice less care in the rendering? Would things stop moving? An Angel civilization had never decayed before, he had no idea what to look for. He didn't notice anything different yet, but this was only the third apparent day. Of course, it could have been any amount of time. He had no idea what was happening in the universe at large.

It was on that third day, as evening approached, that he suddenly found himself surrounded by a throng of surprised crewmen, most of them surprised to find themselves clad in formal robes and turbans, all walking along the colonnade of the Haadij toward what could only be the amphitheater.

He wondered if someone had recalled their commander from backup and Vincef had found a way to regain control of the expedition? He was glad his sentence had only lasted three days. He knew an eternity on that desert would not leave him sane. He was damaged enough already from his interrogation.

He was still stuck in confinement, he could not access any panels at all, not even his med panel, but at least he was out of that universe. But he knew one thing, if this crowd gave him an opportunity to slip out of this horizon, he was going to take it and get as deep into the cracks of their logic as he could. He would rather that eternity than the box he was in.

As they filed into his parade ground up the grandest colonnade of all, there was music beyond music underneath it all, every patriotic theme there had ever been, somehow fused into one subliminal march. He had worked long and hard on that effect for this colonnade, along with many musicians. As they entered his parade ground he found that it was not the Haadij but Grand Ayatollah Moamar Graheb himself at the gate. He looked each of

them over, looked deep into each man's eyes. He was posed like a statue, giving nothing to any but a piercing stare. Even so Bahkmar thought he even saw the quick quiver of a frown on his lips before his attention moved to the next in line.

When all were in the seats the Ayatollah came to the pulpit in an endless sea of regalia. Ribbons and medals and statuary waved and banked around him. Heroic scenes all the way back to the American puppet's gas attacks were shown, as if carved in real time in the stones of the temple. The whole crew could not help but cheer as the Ayatollah raised his arms. He stood there a long time, like a statue himself until all the noise had died down. People got nervous as it grew more and more quiet. The angelic don't cough but they do shuffle their feet and that was about the only noise left in this parade ground. "We know our history," he said, the words echoing again and again off the distant mountains. He paused long enough for everyone to remember the crucible of the all the heroic martyr attacks that were projected on the sky behind him. "In the name of that history, I come before you today," he said, very distinctly and gravely, letting the echos reverberate away once again. Just a bit lower he finally said, "to ask for sacrifice."

Book VI.

For Presidente Lula

1. Forgotten Old Instruments

Though Herndon had just woken up, it was noon here, the start of the second day in the three day 'day' the people of this planet call a week. They had slept with nothing over them in the 'sleep' of noon, he could sit up and stretch without disturbing her. He could look around the room, something built. That in itself was a tiny taste of home.

He retained some of his homeland's culture in the structure of this home. It was a pretty good imitation of what he would have liked back home, a sprawling ranch built out of earthenware blocks with a tile and beam roof. It was airy when appropriate, for the light part of the week was very warm here and air conditioning was impossible. The home was snug when needed, for the dark often brought frost and, in the winter, sometimes snow. There were plenty of open courtyards with ceramic-tiled patios and shady hangeaves for Afternoonday. Afternoonday was just beginning, the sun was more than halfway across the sky and his native staff were bustling about in the kitchen.

The woman named Elond, his native approximation of a wife, was still asleep. At least this woman had agreed to children, if not monogamy. She had borne two tiny babies in the time the natives call a decade, about six years of Earth. They were both girls, that was good, their community was short of women. He was the only full blooded Brazilian in this household, but he used his immense wealth to impart a bit of the style of his homeland in the timbers, the stucco and the tile. His staff was happy with the style and got into it, especially when they found there were good wages involved so there were now some creative artists turning out some really beautiful saddles using some of the exotic plumes that come from the tails of many species of local animals. The largest and most beautiful plumes come from the most dangerous predators.

On the way to the kitchen he stopped by his office. There is a

form of email called eye messaging on this planet and he checked for messages and found nothing but petty complaints of some in the community toward some others in the community or some aspect of local custom they don't want to adapt to. Being one of the leaders of their tiny expatriate community made this mail common. He found little of it rated more of a reply than a polite stop-your-whining form letter. They weren't in Ceara any more and people were just going to have to make the best of it.

On the way out of the room he glanced at the remote process that watched over the few signals still coming down from the dusty old starship hanging up there in front of the inner moon. In one way it was hard to believe they had parked that there a whole mortal lifetime ago, in another it seemed like recent history. As best he could calculate, it was the year 2420 back on Earth right now, if there still was an Earth. But today there was a message from that circuit and he almost missed it because it had been so many years since there was any new data from the old hulk.

The instruments that were still running on the Presidente Lula were capable of detecting a signature given off by an approaching starship. It detected the output of a data feed that Brazilian intelligence had secretly attached to all outgoing starships. This detector had picked up a trace that was listed as that of the Al-Harron. It was coming from well off the direct line to Sol and was not accompanied by drivewash, meaning the ship was trying to enter the system unobserved. That technique rendered them invisible to native astronomers, but Talstan's intelligence had not known that the Brazilian military had already standardized these signals when the Lula was launched. The Lula did have a detector for it and the signature of the Al-Harron had been radioed ahead before signals from Sol ceased.

Herndon could still remember the construction of the Presidente Lula in low orbit above the Sao Luis Megalopolis, then a sprawling collection of seventeen million in balconied skyscrapers overlooking yacht basins all around the bay, the whole peninsula nothing but skyscrapers along the reconstituted beaches, or industrial plant in the interior. He knew it because he spent his

youth and a good portion of adulthood there working in the Sao Luis aerospace industry. The urban complex boasted of being within five hundred miles of four of Earth's six busiest spaceports at the time.

He had been certain for decades now that a major moon rock impacted that city. Some of the last messages out described it. The war with Talstan had been suicidal for both sides and he hurt when he thought of it still. That war must have been over for decades now, but he was not over it. That was even more true now that the Al-Harron was sneaking into the system.

That war was the emergency that made this alarm meaningful. Brazilian intelligence was aware of the Al-Harron's launch and mission. Herndon knew it was the fastest ship yet, and due into this system any time. Even before the war, Talstan had been hostile to Kassidor and all communication between Kassidor and Brasil. They saw it as the Kassikan meddling in the affairs of Sol. Brasil was the last real hold-out from Talstan's total domination of Earth. Talstan saw the Kassikan as the Uber-Satan that manipulated Europe, America, China and Brasil, and Herndon knew its mission was to destroy the Kassikan.

As soon as they were awakened back in 2332, he was aware that Brasil had only grown stronger while they slept between the stars. It was the last mortal superpower when the war began, the power in China and Talstan was in silicon and on the moon. Talstan had overrun China's ancient holdings on Earth generations ago, by the time the war started, and captured all their mortals. China was left with no source of new souls but cloning, and there were rumors it was rampant on its half of the moon. Talstan had no angels when they left, but now mortal Talstan was nothing but a feed lot for their Angels. Because Brasil claimed formal discovery of Kassidor after the Pan Solar League disavowed its existence, and because Kassidor was also mortal, Talstan and the remaining Angel states were quick to suspect a Brazilian-Kassidorian alliance, in spite of the 11.4 light years that separated them.

In spite of continued advances in stardrives, light years are still important barriers. Communication takes energy and only the transmitter on the Lula or the remnant of Gordon's Lamp could

reach Earth, the natives could reach only the ships and that was using line-of-sight optical from the surface. But there had been no messages from Sol since 2392. Now it was a voyage of centuries to communicate with home. He understood what that meant, it meant that this was their world and Earth would be a shrinking memory that might be just a localized legend among some old-timers around here a local century from now.

He'd lived more than half his life here now, but he would have been dead ages ago if he hadn't come here. In that sense, it's good to be here where we live on instead of ending so completely that we never even know it. We never know what it is like to be dead. What was it like to be you a few years before you were born? When you are old, at least you have your memories, when you're dead you don't even have that. For that alone, he was glad to be here.

There was a lot to like about the place, but it was slow and lazy and remarkably easy to get stuck in. The culture encouraged one to make the least impact possible. Artificially inflating demand was not considered an acceptable business practice in this culture, and people did not patronize merchants who engaged in 'push' advertising. On Earth the life-to-economy ratio was tipped a lot farther on the side of economy than here. Most people who had a comfortable place to sleep and enough to eat, considered themselves well off. Most of the peasants here actually had quite a bit more material goods than the poorest in his homeland in 2148. Here, having more than you needed was considered gauche.

How he wished that 11.4 light years and those cultural differences were enough to separate them from the ancient hatreds of Earth's ethnic groups. But the intelligence he was privy to as the expedition's technology officer told him it wasn't. The Al-Harron was launched as a military expedition. It was built to get here fast. It passed the second Pan Solar League expedition en route, arriving here at least six years sooner, though the Heavenly Mother was launched six years earlier and was at the forefront of starship science. The Curitiba was still years behind, still nearly a light year out. Its flares would be detected by the Kassikan in a few years and they would also be welcomed. The lanes from Sol to 61 Cygni were

getting almost as well charted as those between Sol and Alpha Centuri. There was no record of how the war effected the Centauri colony, that world was still undergoing terraforming and the mortal seed on that world was still under dome and excruciatingly vulnerable in any hostilities. If eleven light years wasn't enough, four and a third would not keep that colony out of the war.

Elond looked in the room, "Something serious?" she asked.

He looked at her and sighed, knew he could hide nothing from her. She was quick to spot a lie and would bore in on it. "Please do not pass this on, don't let the help over hear it."

"You know I'm trustworthy."

"This will certainly test your trustworthiness." It would be a sore test. He was convinced she loved him, in some sense at least, but in almost everything, she was a native and he was a foreigner. In a mortal lifetime, he knew as much as anyone did of the facts and figures and customs of this world, native or terrestrial. Still, they had a different feel for life than he did, something more like the indigenous tribes in the preserves.

"Test it," she said, leaning forward over his desk with her chin in her hands. She had such a smooth and rounded face, her nose was straight, small, and only a bit pointed. Her skin was a light bronzed ochre in color. Her body was trim but feminine. She was exactly what he pictured a beautiful Elf woman to look like when he was a child reading fairy tales.

He let her have it short and sweet. "We have detected an enemy starship in the area."

Her mouth became an 'O' and she stood up. She's about five foot six or seven, not over a hundred and twenty pounds. Her long, smooth, bronze-blond hair is in a loose pony tail, sometimes in three.

"We have some time, they are at least a.. ten years away, close to Cynd." He still forgot to translate to native years in astronomical calculations, then to the native way of numbering. One custom he tried to keep alive was the use of Earth years. It wasn't working for any but the original crew.

"Will they attack us?" she asked.

"We can't tell from here, we need to watch what happens as

they get closer."

"So it's still OK to have breakfast?" she asked, relaxing a little.

"I bet the kids are already down there."

"It's safe to have breakfast for at least ten more years." He

came out and locked the office, keeping it and the children safe from each other. His children would have been just three and almost five on Earth, here they were thirty-one and forty-four in their birth decade. On this planet it is the decades of age that are marked and neither had reached their first, when they will be considered a child. On attaining the age of two, near puberty, the child is considered an adolescent and three marks the beginning of adulthood.

Klowee (pronounced like Chloe on Earth) was forty-four and already taking after her mother in that she was tall and a much lighter blond, and probably high strung, but she had his curls. They were all fairer of skin than he, but theirs was clearer and tougher. Beeta, the younger, had dark hair and eyes, a shorter build and only the smooth ears with tiny points to attest to the Elven blood in her ancestry.

Elond is a Highland Elf. Some say there's a trace of some kind of Nordic in her lineage to give her the height, but for the population here, she is quite pure. There is little dark in her hair, a bit more definition to her muscles. The Gengee basin had no onions and thus no human population until its discovery by the Elves about the time of Alexander the Great.

She's a good mother except for treating the kids as adults, but he had to admit, his children were being raised more as Highland Elves than as Brazilians. Brasil was a place daddy was from, a distant curiosity with some neat features like carnival costumes and caipirinhas. Klowee can do arithmetic and he made sure she knew what a year was and what an Earth year was and how to figure the difference. He had showed them both maps and pictures of Brasil, most of them now nearly three hundred Earth years old. They came away remembering that the leaves don't shrivel in the dark and the animal bones aren't wood and that all the animals look like little furry people with tails and that the cities are all just the bare skeletons of buildings that they think look like abandoned ruins.

Today he came to the breakfast table and found they were

doing something Brazilian, so he must have got some genes into them. They were putting sugar syrup on the berries and gruel that was part of breakfast this Afternoon. Breakfast food can be limited by the presence of only one mammal on the planet and the economic impossibility of using mother's milk in a dairy products industry. It is genetically possible, but the girls can't live a normal life so it isn't popular. There is a fruit that is very cheese-like in flavor and texture, but cream cheese, whipped cream, things like that, were out of the question. He would never have blintzes with ricotta again and hadn't had them in a hundred Earth years, as he felt time.

It had taken him years to adjust to the three day week. He even allowed himself to understand that the natives translated them as Friday, Saturday, Sunday. Few would call more than one day a week a 'work' day and most in this area further subdivided the 'work' category into 'home and garden' and 'city job'. "You can stop any time," he told Beeta.

She giggled and put the syrup bottle down. This is the only sweetener that can be conveniently purchased, it's actually concentrate used to make fuel for the bioluminescent lighting. It is a strained and thickened sap like sugar cane, but the sap is from a small shrub and collected with capillary tubing. He had to dig to find even this sweetener in this culture.

"Why are we having this?" Beeta asked.

"You should ask Bartoo," (the ranch's chef) he said. "His job is making sure we get the food we need."

"Who's job give food we like?" she asked. Her language wasn't perfect yet and he wasn't going to pursue Portuguese with her.

"Yours," he answered.

"But I can't give me it?" she asked.

"Give you what honey?" her mom said as she dropped into her chair.

"What I LIKE to eat."

"You would only eat that bug-lure syrup and not get everything you need. When you can understand nutrition honey, you'll understand."

"If you only like syrup, where will the brown in your hair

come from, or the blue in your eyes?" Herndon asked her.

"From the berries?" she asked. In spite of the complaint that this wasn't what she liked best, she was powering thru it and spraying no small amount of it in various directions.

"You waste food that way," Elond told her and tried to mop some up with a towel. Herndon had hoped that with the end of diapers would come the end of gloppy mess but not quite yet. Klowee was working on the gruel and berries without complaint and he complimented her. "You're not wasting yours or complaining about it."

"Dad, if it's food, I'll eat it. I can read the story about the desert boy by myself now." Among the Elves one is expected to be able to read when they pass one decade and become a child. Elond never thought about kids books, and taught them from the novels or texts she was reading at the time. She had the patience to stop and explain a word now and then, but Klowee would often beat her to the answer, and in a way a three year old was likely to understand. If the kids got dense with her, Elond could get frustrated.

Klowee must remember the desert and took to heart a children's adventure of survival there. Beeta was too young to remember their trip out there an Earth year ago, but it had made an impression on Klowee's young life. She was very appreciative of what she had. "Don't read that too much, there are very few people who have to stay in the desert. Read other stories that show you more of the world."

That kind of thing went on. Elond wanted to talk about the enemy ship but she would not in front of the children. He was glad she didn't just whisper something to one of them like 'ask daddy about the enemy starship,' but she was sensitive enough to his wishes to refrain from doing that. She was one in a million among the native girls for that. Actually, he should admit it, he was closer to her than either Brazilian woman he had married, closer by far than his affairs had been. His wife of twenty years chose the pension and condo in Sao Luis rather than a berth on the Lula and now she was his greatest disappointment, he knew then it had been a one-sided relationship all along. But Gabriella had been dust in her casket long enough to be forgotten, before the Lula's automated

circuits began to thaw him.

Elond has always been honest with him, in fact she seemed to be completely without guile. She was serious and industrious by native standards, meaning she would strive for more than enough to eat to get to tomorrow. She was informal, intelligent but a bit impatient. These were enough qualities to let him overlook the fact that she was also the prettiest woman he had ever shared a home bed with. Even though she was not quite as pretty as average for a Highland Elf.

They ground their way thru breakfast and getting the kids over to the academic tutor's room. Instructions to the ranch hands took up a great deal of his time. There were no beef cattle on this planet, no grass, no horses, but there were species that filled each of those niches in this environment. There were three main commercial species to choose from as beef cattle, lentosaur, thongga and karga, with many varieties of each. They all grazed on ribbonleaves, the ground cover in areas of intermediate rainfall. There are about seventy million species of ribbonleaves, too many to worry about. The custom was that all these creatures 'grew wild' and live in large herds. The cattlemen of this planet just financed a gang of cowboys to go out and drive a herd to their pens to slaughter, others were sent out to the open range to keep down the predators. The young and pregnant were set free and a balance had been established between the herds and predators for over a thousand years. Herndon had used a little technology and a bit of money to establish this ranch farther into the chaparral than any other fenced operation, but tried hard not to upset the social or economic fabric of the area by encroaching too much on the open prairie. Many of the guys who used to ride wild herd here, now worked for him on the land he bought from them.

Thongga turn the least pasture into the most meat, but their flavor is no better than that of the garden pests that the peasants trap themselves. Also, thongga could live on rougher pasture, but leave it rougher. Karga are the most flavorful and tenderest, but cannot be run alone because they are selective eaters and may take as long as an oak tree to grow to marketable size. He was running forced kargas, injected with a plasmid that caused them to mature in only

three Earth years. The connoisseurs insisted they could taste the difference in the meat so there was a steep price trade-off for genetically modified karga, but still left a huge advantage for the karga. One would then run some thongga to clean up what the karga wouldn't eat, or, if you had a fence, lentosaur, a better tasting animal but slow and soft and vulnerable to predators on the open prairie. The ones who moved on when he bought were those who hunted the predators. Those men and beasts, and their women, were a movie he never wanted to watch again.

He was told these plains are safe for fences because there are no kranjans. He was told kranjans will flatten fences the way a landslide will. They had to show him pictures before he would believe it, but the video of a theirops getting picked up in its jaws and chunked down in three bites was convincing. He fully understood that the wildlife in different areas of this planet differed from that of this area more than the wildlife of Brasil differed from any other continent on Earth including Antarctica. This planet had a landlocked Antarctica on each pole. He chose to ignore the other basins of the planet and just learn the one he was in, the Gengee basin of the Elven Highlands.

The center court of their home had a small pool. There was no energy to run a pump here, in fact a wind-wheel drew their water, so the pool could hold nothing but some ornamental fish and plants to provide their oxygen. The fish were spiny and colorful, but adorned with prehensile tails and a row of three eyes on each side of their head where a normal fish would have gills. Just above the lip, these had two more eyes where a normal fish would have nostrils. The plants had leaves like North American pond lillies with a ruffle of lavender flowers along the edge, but they were a species of lon, a class of plants that is a local staple crop. The family eats the fish and the lon from this pool, just enough to keep it in a steady state, as with the cattle of the land. Since everyone expects to live indefinitely, there is a lot more incentive to think sustainably in this culture.

He sat on a stone bench at one end of this space. He was almost shielded from the buzz of the kitchen by a large flowering

shrub called a tribreak that reminded him of a rhododendron with sprays of sky-blue and lavender flowers. Elond saw him as she passed in the kitchen and came thru the dining door to sit with him. "So what does it mean?" she asked.

"The instrument has detected the signature of a starship sent by the 'bully group' (the closest translation of the word 'government' or 'nation' into the native language) called Talstan. They are a nation of Angels, 'ghosts' if you prefer."

"There was a ghost ship in the 55th." She is rather lanky and lounged back in the corner of the bench and put her legs over his. She is more cuddly than most from Earth, but a little less than average here.

"Yes," he said, "and now there are two more ghost ships approaching."

"Two!" she drew her legs back and sat upright.

"Yes, two."

"You didn't tell me of the other."

"They won't be detected for another half decade, and they are unlikely to be hostile."

"I still wish I knew."

"I'm sorry if I forgot to tell you, but is it possible you forgot? It isn't a threat, it is related to the ghost in Narrulla's Tear. You wouldn't have been that interested."

"When did we find out about that one?"

"Before the signals from Earth stopped," he said. "We got a message that it had launched."

"I guess I could have forgotten. So the new one?" she asked, worry evident on her face. After spending a few Earth years with her he now suspected she was attracted to the 'starmen,' as she called Brazilians, so she could watch them more closely. She was afraid of the shuttlecraft, though she had only seen it on video, and didn't really comprehend the starship itself. If he even made a joke about going up in the shuttlecraft to see the ship she threatened to leave with the children.

"The new one is from the ghost bully group called Talstan. The people of that ship are the ghosts of mortal Talstan, the sworn

enemy of Brasil and all the Americas because of religious hatred bred centuries ago."

"What will it do to us?"

"Elond, I would like to tell you it is powerless to do us any significant harm but you can look back in recent history just forty decades ago and find analysis of the harm the previous ghost ship could have done to us. You would know I was lying to you if I said they cannot hurt us. But you must not worry excessively over it. We can't be sure yet that those signals from very old instruments is really them, we can't know their intentions at this time, we don't know what we can do to thwart their intentions if they do have bad intent. But we should watch them."

"You should alert the Kassikan," she said, "they've dealt with hostile starships before."

"I already sent those readings off, I've messaged two of the founders personally."

"They'll know what to do about them."

"We may have some tricks of our own," he said.

There was quite a big herd of karga brought in that day and he had to arrange extra haulage, a Nightday trip for more brining jars and a celebration to be had in the native tradition at the end of the next week when the last of the jars was finally transported off. He was tied up for a few weeks. It was nearly Noonsleep, that sleep in broad daylight, when he looked at the instruments in his room again and saw other disturbing news from the direction of the Al-Harron. There were several thermonuclear flashes from a nearby point in space. That was consistent with the nudging of a large asteroid a third of a billion miles deep in space, somewhere in the ice belt of 61 Cygni C, 'Cynd' to a native.

On Morningday he was unlikely to do his computer and book work, so Elond would be very unlikely to stop in here this evening. He could keep this from her for a little while without lying. He had to get this out to all the patrons, it was up to the Prime governor to call the meeting. He had no idea how long that would take, but it was likely to be days. Elond made it easy to keep it from her by taking a trip into the city for a couple days.

2. Prime Governor

The governor failed to see the significance of that data, even when native astronomers noticed a large member of Cynd's asteroid belt had been knocked from its orbit on a course to plunge deep into the gravity well of the brown dwarf. Native astronomers assumed it had collided with a smaller asteroid in a solar orbit and that had changed its orbit. Herndon was glad because he wouldn't want panic among the natives, but even when Herndon pointed this out to Governor Pataios, the Governor was uninterested with distant astronomical events and unconvinced it was the work of the Al-Harron. His attitude was that the Al-Harron was billions of miles out in space and he had things to attend to on the ground.

For the time being, he kept this problem from Elond, and she seemed to lose interest in the hostile starship as the local years went by. The native astronomers didn't detect the ship, Elond never mentioned the asteroid collision articles and forgot about the incoming starship when no actual threat materialized and everyday life went on. He never got any feedback from the notes he sent to the Kassikan other than a formal 'thank you for bringing this to our attention, we are grateful for any knowledge...' autoreply.

Native years whizzed by like fence posts on the side of the road. Still the prime governor wasted his time with the nationality issue, siding with the Colonel and Waldeis more often than not and urged Herndon in joining them within a boundary and constitution. Three Earth years worked their way by while they debated the merits of a national boundary versus integration with the native economy and ignored the iceberg tumbling ever deeper into the brown dwarf's gravity well. Klowee had her first decade and was introduced to the privileges and responsibilities of a one decade in the native tradition with only a vedn cake frosted with whipped sugar froth to mark customs of Earth, a token of which only he and Beeta partook.

But they couldn't ignore the asteroid for long, in another Earth year at most, the natives will notice the direction it will emerge from its close encounter with Cynd and become alarmed. The Kassikan obviously has the wherewithal to observe that asteroid,

there were many other observatories on the planet that had published reports on their data network. No doubt there were hushed meetings where the trend of its position was noticed even now and debates over who would be first to publish. Herndon had no way to observe for himself what direction the asteroid would emerge, but he was confident the Al-Harron's crew was skilled enough to nudge that asteroid so it would need little correction to strike its target, the Kassikan. He was sure the second and third thermonuclear explosions and been corrective actions. The Al-Harron would have noticed the actual direction of travel the asteroid was on after the first explosion and calculated what missiles they would need to nudge it onto a more direct path.

It was too big an asteroid to take out only the Kassikan, it was big enough that all it had to do was hit the planet and there would be a mass extinction. That made so little sense because intelligence said that the Al-Harron was also advertised as a seedship. They would have to wait a thousand years to sow human seed after hitting the planet with this snowball, as far from habitability as the Centorin project was today.

It could be that this rock is a decoy, meant to be a near-miss that will hold the world's attention. We will find at the end that it misses, but we will find even later that it is shepherding a smaller rock that impacts the Kassikan, a rock they won't notice till a couple days before the impact. He had to trust that the native astronomers would notice something like that. In spite of the fact that much of this planet's air is much thicker than on Earth, there are other places where it is much thinner and this society maintained telescopes that one needed to climb in pressurized tunnels to visit, so they had a better view of space than anyone had from Earth before space travel, the Kassikan received data from multiple observatories two miles or more above the peak of Mount Everest.

Prime governor Ernesto Pataios was all about compromise. He spent those three years talking to each of them, trying to mold their position into something that would make Herndon agree to join them within a boundary. The boundary wasn't important to Herndon, this land was peaceful and gentle and he didn't need a

boundary to protect himself from it. Instead it was important to him that he didn't relocate. It was also important that he be allowed to participate in the native society as much as he volunteered to, as all individuals did in their society. They proposed buying a corridor thru the wild chaparral to connect their lands and Ernesto was arriving with a delegation of his sons to discuss it.

His eldest sons were both of Isabel. She had been the captain's wife, but she revived from cryofreeze and the captain never did. Ernesto was first officer and considered himself next in line for the captain's wife, as well as command, and none had been able to change that course of events. Their first two sons had been born while they were still in the Yakhan and still under scrutiny by the native media. Their birth had been celebrity fodder, first Brazilian children born on Kassidor, with pictures of Isabel holding each infant, each half a local decade apart.

Ernesto had claimed Isabel's affection before they even entered orbit of the planet, she was pregnant before the shuttlecraft first landed. Herndon knew they were acquainted before the voyage, did not know how intimate that relationship had been. Ernesto's wife had been killed three years before departure by a group of extremists on what they called a 'drug raid.' In Earth years their first two children were eighty one and seventy seven now, but neither had anything over thirty five showing in their appearance, and even that made them quite mature among the natives. Ernesto himself even tried to look distinguished with a dash of white in the black at his temples. It was three hundred and twenty five years from the date of his birth right now. Herndon in contrast was a dashing figure of no more than thirty, though it was three hundred and eighteen Earth years from his birth.

Ernesto and his sons were due to arrive not long after lunch this Afternoonday. He relaxed in the front court of the house once lunch was done. There were beans here and they were already popular in the local diet. Vedn of various flavors was the only real grain but it had more flavors than grain on Earth. Klowee followed him out, blonder and even more willowy than her mother, she would now be almost eight in Earth years. "Dad, I've got a culture and religion question."

"Is it long enough to sit down for?"

"I think so." She hopped up on the bench with him. In too few years he would feel differently about her sitting on his lap. "Marbai (one of the cowboys) told me that our religion is scientific crucifixionist." She said the words like she was afraid they would cause dactyls to swarm from the sky.

"That's not a curse," Herndon told her, "That is a religious classification that ours does fit into in the native language." It was the only language she could converse in, and what they were using, but he had taught her a few pleasantries in Portuguese.

"Am I still in it even if I don't believe in it?"

"What don't you believe in, there was a man called Jesus Christ who had some friends who wrote down some wise words he preached? Are you convinced that man is the true son of God?"

"But God had many sons," she said, "Marbai goes to celebrations for Baikax Christ and Thibadue Christ, how do you know only one is true?" she asked.

It was true that 'Virgin birth sired by God himself' had been a popular tale told by girls in ancient times on this planet and many thousands were documented and hundreds had significant numbers of followers. The planet had been literate so long that many of them had book deals by the time they could hold a crayon. Many thousands did not grow up to be great religious thinkers, and complained of an absent father.

What could he tell a child who was increasingly exposed to this world. "Because it happened on Earth, at YingolNeerie, where God had only one son."

"Why only one?" she asked.

"Why is it important?" he asked her in return.

"Because it's God, isn't that important?"

"In the big picture, yes," he said, "But in day-to-day life, we haven't been very caught up in religion."

"If it's about God?" she asked, "Isn't that important?"

"We think God is the reason everything exists." That was Elven religion actually, wasn't it? Their God was more or less what he thought of as mother nature. "We think his son taught us wisdom to live by," that was Christian. "Maybe we do take that for granted."

There was the click of claws and the rumble of wheels on gravel out front, no doubt it was the governor arriving.

"What if that's why the bad starship's coming?" she asked.

She knew about that. He needed to deal with that but not right now. 'Klowee why do you have to be so ahead of your age and so overly serious?' It must be her mother. "Honey, the governor is here, but we'll talk about that starship. Please don't tell anyone else, and that is not why that ship is coming." How he wished that could be true.

Governor Ernesto Pataios and his first generation sons Blaise and Carlton, arrived in a very nice carriage of native manufacture, long and low and lacquered till it looked like it might be made of plastic. It was drawn by a pair of big, alert, eights with heads held high, driven by a tiny Goblin no more than three and a half feet tall. They had him dressed in a green jacket and top hat with yellow trim.

Blaine was out first, stepping down as the carriage slowed and running to present his hand Earth style. "Bon Dia!" he cheered and followed it with a few more mispronounced words. Herndon lamented it as much as any of them, but the use of Portuguese was doomed on this world. Half of what they talked about didn't have a Portuguese word to go with it and the population difference was still fifty million to one.

Carlton and Ernesto debarked when the kedas brought the carriage to a halt. He noticed Ernesto stepping gingerly like he was sore. Herndon had already been forced to learn that being young again didn't make one as strong as one remembers being in one's youth. Carlton strode confidently, took his arm and was able to say, "So good to see you my good friend, you're looking very well. Nice home you have here. Ah children, so beautiful," all in Portuguese as correct as he knew.

They finished exchanging pleasantries, Herndon showing off how well he could still mangle the old tongue in the process. He brought them thru to his side patio with a view of the pastures, then sent a servant for refreshments. "I like what you've done here," Ernesto said, still in lilting Portuguese. "It reminds me of a spread

one of my father's friends had."

"I doubt it was quibreaks and lavender ruffle in the landscaping," Herndon said. Having to use the native words put him back in the native language again. Just the fact that his home was proudly built out of cut timber and earthenware block was enough to mark it as foreign. The natives derided cut timber as 'plank-up' and deemed it temporary construction, even if the beams were eight by sixteen. Unlike a Highland Elf, he was not about to wait four hundred Earth years for his home to be completed, with clay blocks and cut wood he was able to get a fine home done in the outrageously short time of a dozen Earth years this way.

"A difference in detail only," Ernesto said about the alien plants. He also switched to Kassidorian. "We understand your reluctance to leave what you have built here."

"I appreciate that," Herndon said. None of them had spared each other's ears when discussing the glacial pace of native construction away from a major city and the tribulations of trying to get something done about it.

It was Jalloo who returned with beer and a reasonable approximation of cachaca. It was possible to cool things in this climate by exposing them late in the dark. Thru the cool season of the year it was even possible to make ice, and the year was short enough that was reasonable to think of storing a year's supply. This was such a season, though the Afternoonday was dry and sunny, almost hot. The weekly temperature swing was a lot greater than the yearly even here in the Gengee.

The beer here was sweet and tangy, like a honied Xingu, a surprise at first, but easy to get used to. There were several substitutes for hops that made a brew close enough to beer to share the name. Jalloo put a tray down with four mugs and a bottle with four shot glasses. There wasn't a lot of head on the beer but it was already starting to sweat so they could see it was chilled.

Blaise had only a short frown, brought a flask of native serum out of a pocket in his loose bottomed pantaloons. In this they had gone more native than he. It was one of those bottles one could hardly read because the lettering was so distorted. You couldn't read it until after you drink some of it. The liquid's color was a deep

royal blue, closer to black than any color, darker than merlot. Blaise poured himself a shot, father and brother nodded. Herndon relented, only to remain on the same plane. The stuff was as thick as honey and took time to pour. On Earth it would be black sambucca kept in the freezer.

"So," Carlton said, beginning to unfold a large map. "Let us look at the region that separates us." There was about a mile and a half. His own property was almost three miles in length while that of the 'boundaryists' or 'nationalists' was almost three by five miles of almost contiguous ranchland just a little farther south of him. The sticking point was native passage thru the territory. Herndon would not support trying to prevent it. They had already given in to him in mail exchanges on that point. "These are the biggest property parcels in the area." Ernesto had them drawn in on his map. The map itself could be purchased in town for half a shift of unskilled labor or half of a small steel ball-bearing. "These owners here would each take ten aluminums and sell, these parcels here would take one or less," he pointed to some smaller plots. They were still big parcels of land by native standards, ten to a hundred acres.

The average native family had between one and three acres in this society and planted most of it with most of their diet, most of the remainder of their diet being varmints trapped while trying to eat it. Closer to the cities or towns they had less than an acre and grew only perishables and worked urban jobs at irregular intervals. All of the land that any of them had purchased with their bits of metal was well into the rural land, the only small holds were right along the brooks out here, the land they discussed was high on the plateaus between. Herndon was already getting lost in the details of the map because of the native serum and had to force himself back on topic. "With the purchases you're talking about, we will own this whole mini-plateau."

"That is the plan, that is the start."

"Guys, you know we're at peace here. We settle here and that's fine, we make purchases to connect our holdings and that's fine. As soon as we try and set up a boundary and restrict other traffic, we will have, and create; problems. When our way of life is seen as harmless or even worthy of emulation by the natives, we will

prosper. If we are seen as harmful by them, we will have to deny our origins to survive because none will trade with us."

"We will not restrict passage, we'll welcome everyone as cheerfully as any of the natives do," Ernesto said, and would have said more but was interrupted.

"I'll not share my wife," Carlton said. He'd married Isadore Maias Benedetta Piersol of Ensign and TechC Piersol, of pure Earth stock. She was born of original crew but now only thirty one Earths of age with three small fourth generation children, none of whom had any native blood in them.

That was an obvious barb toward him, having taken a native wife that he had to share multiple times per native year. Perhaps he had desecrated his heritage by diluting his seed in the immense native population, but with all their catholic reproductive zeal, there were still less than a hundred pure-blooded Brazilians and less than a thousand known any-blood Brazilians on this planet of forty billion. "I'll not ask you to," Herndon said. Isadore probably wasn't attractive enough to get other company in native society. Elond, on the other hand, was a beautiful beach girl who's chin and nose were a little narrower and who's ears were a little thinner, smoother and more pointed than the hottest girls back on the sands of Sao Luis. She made excellent children also, they would have Brazilian size and strength, native resilience, health and beauty.

"Will you buy this land?" Ernesto asked.

"It is your plan, why should it be my expense and trouble to implement it?" Herndon asked.

"We can buy it if you like, that's a trifle, a pair of old captain's bars, a few inches of low-temp tubing. The bother of making the purchase is worth more than the land is. What we cannot do is administer the land."

"Because you don't hire native help," Herndon pointed out.

"But you do," Ernesto said.

Herndon sighed, he was far from the most native among them. A good fraction of the original crew has gone totally native and disappeared from their knowledge on the hands of native girls, including one of only two shuttle pilots, on their first trip outside the Kassikan. No doubt many of them have children already that

have never heard of Brasil. There was no reason to think any of them left the Kassidor City megalopolitan area. There was no reason to believe any of them may have remained in that urban area. Some of them might be down here in the Gengee by accident, but many of the crew wanted to deny their origin entirely and stick with the identity Tahlmute gave them. "I am here," Herndon said, "I do not deny being Brazilian. I am preserving some of the culture, but I am smart enough to understand where we are. There are more than four billion of this one particular type of Elves, there are a hundred of us."

"But you can administer this territory?" Carlton asked, sweeping his finger around the area they intended to purchase and ignoring the other hundred million square miles of this planet that was habitable by humans.

"Not until we speak about something I think makes all these other discussions moot."

"Your asteroid," Ernesto sighed and poured a shot of cachaca for them all.

"It is six miles in diameter," Herndon began while Ernesto dropped his shot. "I don't think it is my problem alone, I think it belongs to all of us, even the natives. It is an exterminator."

"To a planet like Earth," Ernesto responded. "We don't think the Gengee Arm will drain down more than to the base of the tunnel. We think there is a good chance the tunnel might cave in and preserve lake level where it is."

They'd been over this by mail for years now, they just denied his assertion that the quakes from the impact would shatter every dam. There was no way to use those facts to talk to them when they just denied those facts. "You are still insisting they nudged a six mile asteroid and it is just aimed at the Kassikan?"

"Of course," Ernesto said. "We know Al-Harron was launched as a missile. They might not know they are, but we can assume Talstan counts them as one. We all know that Talstan interpreted the transmission of the code for that virus as a declaration of war by the Kassikan on virtual souls of all faiths and called for jihad on the Kassikan."

"That asteroid will exterminate all of us," Herndon said.

"This planet doesn't function the same as Earth," Blaise said. "The atmosphere is isolated into pockets. The winter will strike the central lands of the Highland Elves and two basins down wind. It will not penetrate the thicker crust here. We will be affected but we will survive it."

"What can we do anyway?" Ernesto asked.

"Am I free to speak of it?" Herndon asked.

"In front of my sons? If a state secret is not safe with them, who then?"

"The containment for the shuttle is under your seal somewhere in Gengee city."

"I never said that."

"You don't have to, I have the claim slip," Herndon said.

Actually, come to think of it, he had left it in the city hadn't he? Left that and his copies of the maps with that American woman he was in love with back then.

"I have something under seal there, I don't say what it is."

"Whatever it is," Herndon said, "I want it. I want to get the Lula ready to defend us against that asteroid."

Ernesto laughed uproariously and his sons soon joined in but he could see they didn't really understand. None but the original crew had ever seen the Lula or the shuttlecraft in person. "You would take the Lula, an unarmed apartment building with a big burner on it, out to protect us from a warship built two centuries in our future?" He continued howling.

"We can deflect that asteroid," Herndon said.

"They will have guidance planted on it," Carlton said.

"We can take it out."

"They will disable you before you get close."

"They will be braking, they have been braking on a long loop around the system for three years," Herndon said. "They will be back to that asteroid in another year, the Lula can get there sooner."

"If you somehow manage to knock out that asteroid, they will simply dislodge another," Ernesto said. "We cannot save the Kassikan from what they've unleashed."

Herndon had always thought there was a side of Ernesto that was reluctant to send the code for that virus back to the homeland.

He knew it would change Earth forever, but he was afraid it would change it into copy of this world. Instead it had done something even worse. "We have to try," he said, "For the sake of humanity we have to try."

"What would you have me do, hand you the shuttlecraft? You know where it is hidden, and you have been by there. Have you had it stolen already and found the containment missing?"

"I have never been near it," Herndon said, "My only trip out there was for the kids and we were never within ten miles of those hills." There was a pause, Herndon saw that Ernesto didn't believe him, but he continued. "What are we saving that thing for anyway?" he asked.

"The Colonel dreams of returning. There are others."

"Yeah, Nelson and Waldeis, maybe Humberto," Herndon said.

"We have heard from seven others," Carlton added. "The Colonel's sons are with him."

"I think that old bucket of bolts has much better odds of doing some good against that asteroid than getting back to Sol, much less with a surviving crew member. That life support system has lain dormant a mortal lifetime."

"It was designed to last for millennia," Carlton said.

"In interstellar space, not in the sandblast and ion storms of the 61 Cygni environment," Herndon told him. "I hope you're not seriously considering turning that ship over to the Colonel. Mark my words, if he gets a motor in that shuttlecraft, he will go up and try to light the Lula, sure as I sit with you today."

Jaloo, his downstairs maid, re-appeared just then. "Will you be having dinner?" she asked.

Ernesto said, "I am expected back before the dark."

"Then can I get you a bit of late lunch?"

"We dined just before leaving," Ernesto said.

"Just a little kava-ka if you would," Herndon told her. The girl's pay was a few meals, a half-acre patch to garden and a small steel ball bearing per week. Still he thought he should give her something to do or every freeloader in the area would be at his door.

"I'll have to pick some so it will be a minute." It was the size of

a kiwi, the taste of a plum but with the seeds of a pomegranate.

She went off and he watched Carlton's gaze follow her. "May I ask if your serving staff is available?"

"That's entirely up to them. I don't think Jalloo will do you for money, but she might for entertainment."

"You don't require it of them?"

"No, the better people here aren't prostitutes for the most part and the professionals are too exotic for me to enjoy." In fact Jalloo was a good portion of the variety he was supposed to indulge in and she considered that an important fringe benefit to this job. Since Herndon had long had a mistress back in Sao Luis, she fit into his life without undue bother, except for the fact that Jalloo would ask Elond if she might borrow him and they might discuss him the next day and be distressingly matter-of-fact about it with 'why don't we do it like that's?' going back and forth. Carlton would not enjoy Jalloo because she was a flowery romantic in her private life with everything frilly and decorated. She was also an incessant nervous talker. He did not invite Carlton to follow her to the kitchen and ask her.

Ernesto's expression said he wanted to get back to the business at hand and not random signals from the gonads. "So what I want to know, after all this has been said, are you willing to bring these properties under your control?"

After all that had been said, the asteroid would be ignored. "Only after we attempt to divert that asteroid." As soon as he said that much Blaise and Carlton babbled at once on the impossibility of doing so, meaning the political impossibility within the Nationalist ranks of destroying the Lula on such a mission. He ignored them, kept his attention on Ernesto. Ernesto shifted uncomfortably in his chair. "Why should I put my hand to anything that will just be obliterated by that asteroid?" Herndon continued.

Blaise and Carlton started reciting the 'won't be so bad' theory once again and the 'might even miss' theory once again. Ernesto waved them down, it would be guided and it would not miss, they all knew that. "Let me think it over awhile," he said. He groaned getting to his feet. His sons rose with him, Blaise almost in time to help his father up. "I seemed to have picked up some kind of

rheumatism, why don't you come out to my place next week?" he asked. "We'll talk some more."

3. An Angel's Hand

He rode out the next week, as planned, with a native named Arscog along. Arscog was his keda expert, an enthusiast who volunteered to go just for a chance to ride. Herndon was fortunate to have Arscog on his staff. Kedas are way too smart for the job they do and have way too much of their own mind. Arscog says you just need to convince them that hauling the load is in the best interest of civilization as a whole and all the good spirited ones will usually volunteer to do it. The others are up for sale at fairs.

They arrived to find Ernesto abed with a brain infection. His oldest sons had ridden out to deal with Waldeis, the one who had given Ernesto the infection and now ridden off into the wild chaparral in fear. It was Yankee Swamp Fever and Waldeis had transmitted it when they shook hands when they were both scratched from hunting in the brush. Ernesto was delirious but someone had already ridden toward the city for a disease specialist. They did what they could for Ernesto and urged him to a speedy recovery. Once the physician arrived, they didn't stay.

Arscog bought him Duskmeal on the way back and regaled him with tall tales of ancient keda conclaves. Arscog still believed Saggothans invented humans and they had spread to YingolNeerie in the energy age.

He waited to hear from Ernesto for weeks, but the next thing he heard was that Ernesto had died. Herndon got back over there for the service and found the family in an uproar because the disease specialist they called had snatched the body off to the Kassikan for study and Ernesto's remains were now somewhere in the air over the Gengee arm, heading for the tunnel in the cargo net of a native floater, a lighter-than-air mobile plant. That is the only air transport available in this civilization. His sons were both furious that the speedboat Byram was working on was not ready for them to go after it.

It was difficult to get either of the sons to even acknowledge the existence of the asteroid. He was afraid he was going to be paralyzed by the native anti-violence virus they had all contracted. It was in the front hallway on his way out when he was trying to get Blaise against the wall so he would at least answer him. He had him backed into a big stained-glass window beside the door. The glass was embedded in a network of roots instead of lead, the columns of the door were carved in sensuous curves, but the window provided a small alcove that Herndon could back him into.

"Ernesto never actually got around to giving me his copies of the paperwork," Blaise finally admitted. "In fact his affairs were in scandalous disorder."

Herndon didn't buy it, but knew he could get no further on that route. But that was only because of the native virus, he could still imagine the tortures he would have inflicted on them to get it out of them if it wasn't for that artificial Instinct. He turned away and went thru the thick portal that his coachman held open.

"I'll keep looking," Blaise said and took the door from his coachman who moved to the driver's bench of his low-slung eight wheeled coach. "He left papers everywhere, none of them are indexed, I have no idea what you're looking for."

"Sorry I asked," Herndon said in disgust. Coachman Yarbeem waved the kedas out smartly and they clattered away.

He would have to come at this from another direction. He thought back to the American woman he knew, the previously silicon-simulated one in the native woman's body. The last he knew, she had left the Yakhan over two decades ago, bound for the North. She had gone very native even before he left for the south and the Gengee. Few ever suspected she was born on Earth, even when they shared her bed in the Kassikan.

He didn't need to get in touch with her. She had a clone sister who was the only other presence in space in this system. She was still a simulate, an 'Angel' as she liked to call it, a 'ghost' as the natives called it. He was a little queasy about these computer programs claiming to be people for they had not existed outside Asia till he arrived at 61 Cygni, even though they were of Earth.

He knew she was accessible on the native data system, just as he was. With a helmet, the user interface was 'always knew that', with a keyboard and crystal ball, you asked questions and it would provide answers, or you typed messages to someone else on the system. Even the new products using technology from Earth were often decorated to look like their ancient artifacts so the terminal was a crystal ball that you panned and zoomed by looking from a different angle and distance. They were masters of graded refraction. The keyboard was a little wooden plank with some holes drilled in it and an optical fiber coming out. The pressure sensitive ones like his had little plastic bumps sticking out of the plank and the wood was well finished instead of rough-sawn.

He had even accepted the fact that a phone here has a small crystal ball stuck in the end of a long seed pod with holes in it. Some holes are keys, some are the speaker and mic. You have to blow up a balloon to power the audio. They can be purchased with a standard .177 copper bb shot with a couple little rusty iron ball bearings in change. The desk and pocket systems differ only in the size of the crystal ball and keys. About one in ten thousand people here carried one, he gave one to every crew chief on duty at the ranch.

The semiconductor business was trying to make a comeback by putting more functionality into the optical and more-or-less permanent part of the system and a cheap, replaceable 'yingolian crystal' that cost less than an iron. This was the fruit of that development effort. The current chip installed was sold under the tag 'Seventh Level Black Sorcerer' and was guaranteed not just to work, but to retain its competitive position for a decade. Native electronics had never known the fixed hardware stage and had always contained facilities for on-line hardware updates.

Begrudgingly he had to admit that in spite of the bats-and-spiders decor of their systems, the Kassikan had caught up with what they had on the Lula. He wished he could imagine what it was like for Angels a century and three quarters beyond the one's who's sister he once loved.

The woman he was contacting was not really a former lover was she? She was the sister of a former lover since they had been

lovers after their minds separated. Elond wouldn't have cared anyway if he met a former lover at a pub every third week. Still, he had his own conscience to answer to and felt guilty writing out the message. No, what he had to answer in his mind was the feelings for the clone of this sister. The woman he spent three decades with was copied from this electronic mind that inhabited the boulder where their starship was parked.

After all the business of the ranch was complete, he stayed up late going over all his old documentation on the shuttlecraft parts one more time and came up empty, as always. But one thing did stick in his mind this time, he was even more sure where those papers must be. In fact he could see his hand in a box in the shelves above her dressing area. He knew it was his hand hiding those papers in a safe spot when Col. Morais' men were still in the Kassikan and likely to go thru his things. When he lived with Ava it was inside the walls of the Kassikan. There was a party that night, as he remembered, and no reasonable way they could be excluded.

That was the evening they were introduced to Tahlmute. He could not remember ever getting those papers out after that incident could he? He had never told Ava those papers were there had he? He knew that lock box contained her most important old personal records. If he never heard back from the Angels, he would have to go try and find them wouldn't he?

He got a reply from Ava very late that day.

-

It is good to hear from a friend of my sister, though I do not remember communicating before. Is she with you? How is she? I haven't heard from her since she returned from the north. Tell her to give me a voice connection when she can.

Concerning your request, I would not endeavor to pilot that ship myself if it needs to be operated by an android. But do not despair, I have a good friend in the crew who is experienced with androids and I finally have enough room to call her up any day now. She'll soon get bored here so I'll let her have a look at this. She'll get in touch if she's interested.

-

It was a few local weeks before he got a message, it was an Angel requesting a voice appointment, one he had never heard of before. He requested a 'when available,' got a 'now.' A face appeared on his screen in creamy chocolate with a frame of loose curls. If she was Brazilian, the cock of her head and lift of her eyebrow would put her birth about 1000' above Guanabara bay on a steep hillcrest with two armed men outside her door. One of the upper ladies of the counter-strata. "Why hello Herndon, I'm a good friend of Ava's sister. You see my name, right? I'm from Earth, North America, the part that was traded from USA to Canada after the occupation. I escaped to Pallas before the Judge's famine."

"It's a pleasure to meet you, you truly look to be an Angel."

There is a noticeable delay before the reply. "That's an old line," she said, "but thanks. Your note says you want someone to power up your old starship."

"The Presidente Lula, yes, it requires fingers on buttons to move that ship".

She had to be convinced that her android was all that was needed. She asked about the shuttlecraft and wanted more technical help than he could give her, interrogated him about his missing crew. "Give me what you got then," Glenelle let the disappointment show in her voice. "The problem is, I can't pilot a starship. I killed myself trying to drive a forklift in light gravity."

"We don't have anyone else up there."

"Your shuttlecraft is grounded?" she asked. She was technically competent with space drives and had to know the details.

"At this point in time all I know is that the containment has been removed to an unknown location and the shuttlecraft itself is deep in the bush at an unknown location." If he hadn't left those papers with Ava he would know both those locations.

"So you're doubly shuttlecraft impaired at the moment. But why do you need this old wreck powered up?"

"Because we believe there may be a hostile ship in the system

and it may have already taken action against us."

"Pppp," she said, "They would have to hold some killer grudge to perpetrate action eleven light years across space."

"They think of this world and its Kassikan as the secret power behind all their enemies. They fear the Kassikan will take control of Sol thru Brasil, they think Brasil is the Kassikan's puppet. The purpose of that ship is to attack the enemy's heart here at 61 Cygni."

Glenelle laughed uproariously. "A puppet master eleven light years away!"

"They saw the code for that virus as a missile striking at the speed of light," Herndon recited their propaganda.

"Ava told me about that. I'm a hundred and forty five years behind on all this. Even with the twenty two year message turn around time, a lot has happened between 61 Cygni and Sol. How long have you been here, and where are you exactly?"

"I've been thawed ninety one Earth years. I live in the chaparral east of the Gengee arm of the great Highland Lakes in the Gengee Basin. I am flesh, if you were wondering about that, but no longer mortal in the sense that my body ages. I keep myself looking younger than you do."

"This is the face that android shows, the android you want me to use on your control panels. I am in a virtual universe in Narrulla's Tear, up here with your starship and can adjust my personification at will. This android is an I/O device for me, I still need to know how to drive a starship."

"Once you power it up, there are training simulations you can use if we need to actually move it. All we need to do now is assess the operational readiness."

"Understood." she said. "How is it here for you?" she asked.

"We're settled in, most of us. We've got some disagreements about some details but most of us have settled down. It's hard keeping any of the old ways alive, we're just so few, even here in a near wilderness there are cities close by where we are lost in the crowds. You're new here?" This was his first encounter with this ghost.

"I got 'here' all the way back in 2250 if you mean into the 61 Cygni system. We were still secret from the natives, or at least, not

available via voice connection, when I went to sleep one night in 2278. Then I woke up a few days ago and found we are no longer secret and can in fact call each other on the phone almost as easily as we could on Earth."

"They now call electronics 'Yingolian crystals' and its widespread use began when our ship arrived," Herndon told her, "though it really had more to do with your friend's sister. She had a year head start on us."

"When was that?" she asked him, "When did you get here?"

"We first thawed in 2332. When we first woke up we were receiving a message from the Kassikan welcoming us and asking us what help we could use in completing our journey. They gave us a good asteroid traffic report for our course. We were astounded, even though their Portuguese was very fractured, we were able to understand with the diagrams.

"It was 2342 before the first of us actually touched down in the flesh and 2348 before the last of us was on the ground for the last time and the Lula was all but decommissioned to the state you see her today."

"ALL BUT decommissioned?"

"Antenna 521 and the NEI were always powered up and we've been able to bring up the PEI instruments remotely. We need the burner lit to move the ship and enable better monitoring of the Al-Harron.

Though it was getting toward the time of the week the locals call Noonsleep where he was, he accompanied her as she went to investigate the old ship. The only newer ship he's actually 'seen' was Gordon's Lamp out of the Pan Solar League (really just the Angels of an American tele-evangelical church gone wild in the asteroid belt) from 2175. All he has seen of that were telescopic photos of the one remaining pod and pictures that Ava had. It was a generation beyond the Lula, but an important generation in starship development because of Angels. The Heavenly Mother, built in 2280's and re-fitted in the 2340's and the Al-Harron from the 2350's were impossible to fathom. For instance, the deployed length of the Al-Harron was noted as a third of a million miles and its

mass/energy ratio was spec'd at .78. No picture formed in his mind of what that ship was like.

The Lula was one piece and easily viewable, under two thousand feet from shield plate to charge-extractor, its mass/energy ratio at full boost was .9998. As the android swam in space toward it, he saw the ship because the video that its android's eyes provided to the Angel who animated it, could also be projected to the crystal ball on his desk down here in the chaparral below Gengee City. The sight of that ship still pulled at his heart, the mills of Ceara and the chips of Sao Luis. The massive rings of the extractor, the web of struts around the containment sphere and the tower of capsules standing above it. With the Daedelus reactor at full, there was nearly half gravity in that tower. Each capsule was its own containment for safety. The frame was an aluminum alloy that gave way easily to micrometeorites. It looked sandblasted after their journey, but they now knew how lucky they were to arrive at all as a ballistic projectile. It was probably the captain's position in the top cabin that doomed his chances of revival. The newer ships with their near relativistic speeds and more delicate construction must dodge the interstellar bodies like the veils of snowflakes that nearly disabled the Heavenly Mother. That snowflake would have left one of the larger of the dozens of pinholes thru the soft aluminum framework of any large structural member of the Lula.

Since they arrived, a very thin coating of fine dust had settled on the ship. It was given off by the fabricators mounted to the Lula's great top plate, a sandblasted foot of soft iron in a circle, meant to soak up all the snowflakes they would hit. Those fabricators fed the last Angels running in the last instrumentation pod of Gordon's Lamp. The dust was drawn to the ship by its own gravity. With Glenelle's eyes he could see thru the trusses of the ship to the broad face of the planet below. They were passing over some distant realm he had never seen, making him realize how little he had seen, though he had journeyed a local year from the Kassikan, it was a small distance on the world when seen from this distance, not a twentieth of a circumnavigation.

He got a view from a camera on the ship. It was so unreal to see the tiny speck of a pretty woman moving over the surface of the

Lula without a suit. He felt a pang that it was impossible for him to ever meet this woman in the flesh and Ava had told him long ago that the androids of 2175 did not have functional sex organs. He didn't understand why because the animatronics available in Brasil since the late 2050's did.

It was after she tried the controls that she came back out to use the Android's eyes to see what was wrong with the engines. He watched thru those eyes, projecting in this crystal ball the natives call an 'Eye' with a capital E. She had to work her way down into the heavy framework that held the containment and supported all the life-support compartments above. The containment frame was still in place, all the plumbing leading to it. The tanks were in place, all the pumps and all their wiring. The erosion was not so bad deep in here, but dust had settled even thicker.

He knew what was missing even before she got there, it seemed too open ahead. As they got there, it was confirmed. It wasn't just the injector of the columnator, it was the containment coils around it and their housing, the detector windings, the throb piping. The whole assembly was removed and had been worked out the borehole of the containment. The Lula was truly a derelict now.

4. To Heal Old Wounds

The chances were low that his efforts might lead him to the columnator of the Lula as well as the containment of the shuttlecraft, but he had to try didn't he? He was like Elond in how he worried about it. He told her more than he should have about his fears. Many evenings like this one they sat up late on the outside porch of their bedroom. Morningday evening it was shaded, Afternoonday evening it watched the sunset. You only get one sunset a week here so it was nice to make the most of it. But this was a noon, they were late for Noonsleep already because he mentioned the copies of those papers he'd left with Ava.

"You have to go get them," Elond said, "by the lives of your children you must do what you can."

"It's not that simple."

"Go," she said, "you've already convinced me they mean to kill us all, anything that can be done is worth doing."

This was a problem he didn't know how to breach in this society, but he had to forge ahead. "You know she was a lover of mine?"

"So?"

"An important one. I was with her two decades." It was three to the natives wasn't it? Oh well. "We had a career together." Maybe he was hoping she would object and give him a reason to not face the issue.

"I would hope you wouldn't leave important papers that could mean the death of the whole world in the care of a casual one-sleep."

"I will return to you Elond."

"I'd like that, I really wouldn't have the energy to keep this place together by myself for long."

He wondered what that meant? 'Keep the place together?' He didn't think it was in any danger, things seemed to be remarkably smooth at his place. She was a worrier at times. "I'll be back. It may be some time, but I'll be back."

"What should I do about the kelty herd and what do you want me to pay Ngaiskaag when he's done? What about the maintenance on the..." There were a lot of those details he had to write down for her but it was a lot of practical stuff, she didn't get to the emotional part till they were in bed.

But on Afternoonday she packed him up and sent him off, promising to keep the home, children and ranch safe from all but asteroid impact in his absence. She thought of questions till he was off on FiveCoiling. As he rode off she still held him responsible for the asteroid because he was a spaceman. 'Putting his own children in that much danger.' She said he couldn't avoid an issue that could mean the death of himself and his children as well as what might be the only remnant of the human species remaining. He probably shouldn't have told her about the war back at Sol, that didn't help her feel more at ease with 'starmen' like him. He was more sure than ever that she was only with him because she felt there needed to be

a watchdog on people from Earth.

Their own small community was twenty seven miles inland of Gengee City in sparsely settled cerrado far beyond the reach of the city's irrigation canals. There is a quarter million square miles of brush and ribbonleaf prairie out here, a new Mata Grosso do Norte and then some, with some of the lightest population of any fertile area on this planet. They had big dreams for their people in their world of exile. Their native land might have been destroyed, but they were a seed sprouting here in the Gengee Cerrado. They would carry on here, they were actually doing well, though he had to admit, they were less and less Brazilian and more Gengee with every passing decade, especially at his end of the settlement.

When he arrived in the city, he was pleased to find something positive. The guys running the mechanical shop had managed to put together a very good imitation of an ocean racer and it was now ready for some long distance trials. They'd had to use motors and pumps meant for industrial use, but they were able to fabricate a hull and a burner thin enough to heat a high-tech flash boiler that could run two big water-park pumps and fit in the bilge under the helm. They got those pumps under a fat back deck. In it they were able to get up on a plane easily and push over forty knots wide open. If this was ready when the Kassikan flew Ernesto's body to the north, they could have caught up with the airship before the tunnel and brought him back.

With Byram Hermosa from the shop, he cruised down the narrow canal between the thick roots of towering apartment trees and into the open lake, bound for the Yakhan, determined to cover the fifteen hundred miles in a native week. That meant they had to average thirty knots. Traffic, weather, stops for fuel and food, and a slow passage thru the tunnel because it was choked with a sunken ship made it take a day longer than two weeks, but that was still a third of the time it took for the fastest native airships. Byram had business in the city of the Kassikan, and by the time they reached that megalopolis, he was confident enough of Herndon's capabilities with the boat to let him take it as far as he needed. Herndon was a major investor in their concern, Mechobras, and at least as much an owner of the boat as Byram. Byram expected him back in fourteen

local weeks, three quarters of the brief local year.

Herndon was confident he could get his own business done in one or two weeks and then wondered what he would do for the remainder. It would be about a month. The city was fun, but having fun here could be exhausting. It was best just to walk along the most interesting level of whatever canal you were on and take in whatever you happened across. He tried to stay out of the thirty square miles where the main canals were closest to each other to the south of the Kassikan. There was nothing like it in the Brasil he left, not even Ipanema. There was no rumor of anything like it in the Brasil that was destroyed. He called it the White-Hot city. It seemed to him like one had to climb at least twenty floors there to find a place to sit down, twenty more to reach green. There were too many Gnomes on the streets, reminding you that the cellars go down dozens of floors in that area, damp with seepage from the great canals above.

But here he was almost two miles north of the Kassikan, in city no denser than the center of San Luis had been in his day, even if it looked more like a thicket in the deep jungle. He sweated in the heat as he crawled along in traffic. It was just before breakfast on an Afternoon and he was working his way thru the city in a long line of rafts getting towed by keda teams along the canals. Cargo was transferred from lake vessels to urban canal rafts in the outer harbor and then towed by rope into and thru the canals. There were lines of ships and rafts anchored off every lock entry, ropes being paddled in and out, barges being drawn both ways in a complex ballet whose rhythm wasn't obvious at first.

The powerful craft was much easier to maneuver at high speed on open water than at a crawl in crowded chop. The few other powered boats were stilettos that slid thru the chop without bobbing. Most of the traffic was actually hand-paddled kayaks, in places so thick the clack of paddles hitting each other was common. It would be like this all the way to the address where she now lived, a palatial urban estate in the old stone off third canal. The drag of traffic gave him more time to worry about this meeting.

It had been a painful breakup after all hadn't it? Many reasons

contributed, he couldn't put all the blame on his manly pride. His patriotism was also hurt, and that had always been important to him. It had been Brasil that had ended their relationship hadn't it? True, Brasil wasn't her native land, but what was America other than Brasil's dowager sister? The land of broken dreams. Actually he didn't think it was America that kept her from sharing his dream, he thought it was this world of their exile.

Their community was so small, it was a shame to fragment it. Even a fragment of one was a serious loss. The fact that there were now seventy children being raised Brazilian didn't make up for her loss. Her intellect was more a loss to them, to him in particular. Elond is probably as intelligent, but she has no knowledge of electronics other than how to use them. Even so she is suspicious of them. Ava's loss to the Brazilian community had been more of a gain for what they increasingly saw as their most important business competitor, the Kassikan.

At each cross canal, traffic was a nightmare. Very few vessels were under power like his, most were pulled from the shore with a steersman and a teamsman waving to each other with bright red and blue paddles. He was held up for a good fraction of an hour in a big rope-snarl across the whole canal coming from the upstream lock. They had to thread ropes around with paddlers from barge to barge to get them untangled. At this point he wished his boat was a bit smaller so he could duck under the ropes like the kayaks and needleboats did. That would be the next refinement, the boat needs to get much thinner to deal with the city. There was no way to do that and give it the freeboard for the open lake and still get under these ropes. He should stop thinking about refining the design of their speed yacht and concentrate on using it.

There were two levels of bridge across the mouth of the yacht basin where she lived, the drawbridge of the keda teams that he and paddlers could get under, and that of the pedestrians eight floors above that. He could see this was the place, it was pretty swank, Ava was doing well for herself in this neighborhood. There weren't many large powerboats in here, unless you counted those mobile gazebos some people lived on. They did have some silent little

motors that could move them sedately thru the canals. There were some yachts with more than one mast with crews of six sitting around and puttering at maintenance. There were plenty of the small power boats with the name that translates to 'needleboat' around, many hauled aboard some of the yachts or 'Garden Floats' as the gazebos are called.

He could see the house. Its windows began on the tenth floor from here, the top floors of the finished stone, but its front door would be on the indoor street that crossed Third Canal on the eleventh floor. The building was synthetic stone up to the fourteenth floor or so, shaftwood structure from there on up. The shaftwoods were dark green bigleafs, the trunks about sixteen inches at the top of that house, about six feet apart, the housing looked to be six by eight trunks, five or six more floors. The lower floors looked to be holding older marble together with the synthetic stone shell. All of them, the grown stone and the shaftwood, had vine covered balconies on almost every floor and the blooms were a deep magenta and last year's pods a rosy mahogany where they hadn't been picked already. Most of the buildings on the back side of this yacht basin were similar, while those out front along third canal had twenty to thirty floors of stone and crystal instead of ten to fifteen, and the eleventh floor street was indoors.

If it wasn't for the sounds of the people, he would think this city was a ruin that had been reclaimed by the jungle. He could understand how the Christians had been deceived during their approach. Just take the pictures during Noonsleep when everyone is in bed and an overgrown ruin would be pretty convincing. All the animals were active, more active than when the humans were up and about. The thick wildlife singing in this jungle does help it seem like a ruin. Of course a lot of those animal calls are actually native music of the 'space' genre being played on sound systems in the apartments of these trees. But it was hours from what most people called Noonsleep by now.

He berthed the thunderboat and began the climb to Ava's latest home, hoping she could find those papers and wouldn't object to giving them over to him.

5. Convincing Ava

He was seriously beginning to think this houseman was not going to admit him. No doubt he was loyal to the man Ava was now living with and knew of his past relationship with her.

"Bon Dia!" Ava yelled and jumped into his arms. This was much better reception from her than he had expected. The houseman was watching with a near scowl, so he didn't get too affectionate with her. Instead he took her to breakfast at The Balconies; well down the canal.

On the way there, he got to ask about those papers, "And now I find that I really need that folder," he finished.

She leveled him with a devastating blow. With an apologetic frown she said, "I had all my old papers sent north when I thought I was moving there. They're still up north in a lock box in the house I sold to Jorma and Venna."

As soon as the name was out of her mouth the impish face framed in a billow of orange curls sprang to his mind's eye. The girl who had graced his bed on the rebound from Ava. Everything Ava was not in bed. Eager and enthusiastic, simple, but devious. And in the employ of Colonel Morais, he feared. "Venna?" squeaked out of him. He tried hard to get himself under control. It was the right Venna all right, Ava made him tell her that she had been a lover of his, he told her how much trouble she might cause but Ava was reluctant to believe it was as serious as he thought, even when he told her there were four tons of aluminum involved.

He would have to go north and get those documents, if Venna wasn't long gone with them already. He would need Ava for introductions at least, unless he was going to attempt to burglarize the home. Even for that he would need Ava's help. While they waited for breakfast he tried to convince her there could be some hope of catching that paperwork before Venna did. Actually, he was sure it was too late by the end of the first dark she spent in that house but was determined to give it due diligence and go up there after it, since he had weeks with the boat and no better plan.

She was reluctantly willing to go, after a long session of all the whiles he could work on her. But she had to get word to the man

she was living with. He was now up in henarDee, forty three miles away, half a day on a lake runner in fair weather, all day in any other real weather. "I'll tell you what, we'll take your fast boat up to see him for duskmeal."

"We can get there for lunch," Herndon said, impatient with any further delay.

"We'll be having brunch soon," Ava said, "At least I hope so."

Their order had been taking awhile and the place was not that busy today. "It will be long before duskmeal when we get there."

"Gives us time to find him."

"Don't you know where he is?" Herndon asked.

"He's up in henarDee, it's a company, I have the name written down back at the house."

"So we'll have to go back there..."

"Herndon, you invited me out to breakfast, brunch, whatever, and for a ride on your fast boat, not on a year-long escapade to the north basin. I grabbed a sleeve and a pouch, I would need to go pack anyway. I'm not dressed for the dusk, much less the dark, much less a voyage to the north."

"Yes," he sighed, she talked like such a native. "of course you do. You should have informed me about those papers..."

"How was I to know you would care? You never let me know I had those papers."

"You're right," he sighed again. "I fear the worst has already happened."

"In that case, I don't think it leads to the downfall of civilization. And I didn't think you liked the world order anyway?"

"There are some things I miss, but we are bringing them back."

"What is that?"

"Children for one, boats like mine, built homes."

"Governments?" she asked.

"There are some who wish to establish a boundary but not necessarily a government. I'm afraid that 'Instinct' virus makes that impossible."

Their meal arrived, berry pancakes and bacon strips was what he called it, here the slang translated literally to 'patters and toast.' The toast was the toasted strips of lizard-like garden pests that made

up at least a third of the meat in the local diet even deep in the city. Their flavor was close enough to bacon to deal with. During the meal she talked him into taking her up to HenarDee to tell Kulai personally.

It took time to get back to the house. It took time for her to pack. They had another bite of late lunch with Athnu, there was traffic on the canals. By the time he finally got up to the lake, they were going to have to run flat-out to find her man by duskmeal.

She may have made fun of this craft, but once she was on it at speed, she was clearly excited. She stood up and rode with the chop as they pounded over it. "What if he objects," Herndon asked.

"You'll have to carry on without me," she replied.

"I already explained why I need you."

"You really need to figure this out, so why don't I make it as easy as I can. My relationship with Kulai is more important to me than four tons of your aluminum."

"You still don't understand the importance."

"I do, it would distort the medium of exchange. People would give thirty or thirty two coppers for one instead of thirty six."

There was no one she could tell here, he thought. If he took her into his confidence, gave her something, it might make her more of an ally. "It would be worse than that," Herndon said. "It could enable him to lift the shuttlecraft again."

"It is grounded? I thought it was at Narulla's Tear, my sister never mentioned it being gone..."

"Nor mentioned it being there I'll also wager." They were airborne a second off the top of a particularly large mound of water. The pumps screamed in the air and hammered when they hit water again. He had to hand it to the native manufactures, they are durable.

She yelped and sank to the bench seat over the pumps for a couple bounces. When she got back up she held the hatchway rail much more firmly. "No not actually, but I think she would have said something if the shuttlecraft was missing all this time."

"It had to bring the last of the crew down."

"My sister put in the hack that let you send it back up

unmanned."

"It was never executed, instead the fusion containment bricks were taken down and stacked, then all its mounting framework and hardware, all four tons of it, was removed and stored away in a shuffle of paperwork under the heading 'spare parts' in a warehouse in Gengee. The governor gave me copies of that paperwork and I hid it from the Colonel in your stuff when we were still living in the Kassikan."

"That's why we're here," she said.

"No, Kulai is why we're here, we would be well into the Dromedian arm by now if we were hot on the trail of that paperwork."

"If she's really after it," Ava said, "she already has it a year, and we both know we both know that."

There was quite a bit of traffic out here though they were already miles from shore. On a day like this the lake runners were used to having the water to themselves, except for those islands called cargo ships. He had to dodge them both, though he could not treat the fat-sailed lake runners like islands, even wide open.

Once he was five or six miles from shore, it was finally just them and the waves and distant sails. The city and the dam was a fuzzy line on the horizon, the North Sentinels were a significant lump, as tall as the main dam-wall directly astern. But the sentinels were golden hillsides of herds and grains not fuzzy lines of vine-covered towers over dock and beach, almost invisible in the distance.

The jack-o-lantern was two thirds of the way to the horizon already. This city was so close to the equator and the planet's axis was tilted so little with such powerful gravity as that of a K5 star working on its equatorial bulge, that the local sun passed directly overhead every week. Even Sao Luis had days when the sun was farther from zenith than here at Kassidor Yakhan. One had to go as far from the equator as the Gengee basin to find detectable yearly, as opposed to weekly, seasons on this planet.

It took them an hour to get to shipping cut. This cleft thru the hills cuts off over twenty miles on the route to henarDee, but it is

cut into the sandy hillside up to two hundred seventy five feet, over a hundred feet most of the way. Sailors hated it because what winds made it down there were gusty and tricky. Sailing craft kept to the middle two thirds of its two thousand foot width. That left him just enough water along the side to carve along at about thirty knots.

"We have to come back thru here on the way out," Ava said, "You don't want to wash out something and have someone waiting for you."

This was actually the least wake for the banks, "The next slower speed with less wake than this is that of a kayak. Those pumps are heavy in the stern, it wallows easier than I would have liked."

"I would have put one pump in each hull of a tiny lake runner with a control cabin in the middle of the deck holding the pontoons together."

"We have this and we are still moving faster than a lake runner hull can move thru the water."

"But with a lot more fuel and wake."

"There are trade-offs in life, this design makes other trade-offs in the interest of speed."

"Lavatory facilities was one."

"At least we don't have to find a public toilet or sit over the rail," he said.

"Yeah, and I have to admit, an hour and two to shipping cut is record time."

"You have to admit, this is the most fun you've had in a long time."

"Since the Noonsleep before Kulai left," she teased.

He didn't say anything now, but he would take that challenge. Ava had been known to stay in bed with her toes curled the day after a sleep they spent together, a day he would go to the foundry. "There was nothing like this here until now."

"Since Cheop's grandfather's time at least," she said.

"I'm beginning to have some doubts about some of the history I see here," Herndon said. "I think they have interpreted some old sci-fi movies as historical documents on more than one occasion." There was one with spaceships made of painted monster intestines

that he thought was particularly comical.

When you understand that native cities look like steep crags festooned with lush jungle, it is easy to be impressed with the skyline of henarDee as it came into view almost another hour later. Shipping cut comes up the side of the city, and right at the turn the buildings along the canal are small so the view of the whole city from the land side spreads before you. In a couple miles you reach lake henarDee and the dam itself where there are three miles of seventy-story waterfront till the beginning of the Grand Canal that goes on to Chardovia. It is much larger than Gengee City, but just another business district in the Yakhan's urban universe.

"Where in the city is it?" he asked.

"I have an address, we'll want to find a map, there'll be a news stand with maps along the waterfront I'm sure."

More frustration. He had to put it aside, figure on losing another week and just relax, or at least pretend to. They found a place to park. It was expensive. A kayak or needleboat could have gone under the dock and cost a lot less, he had to pay for a yacht berth. Going under things is nowhere near as unpleasant on a planet without spiders. "If it's all the way across town I might want to take the boat," he told her.

"I don't think it is but we'll see. You can stay here and I'll see you Nightday if you want," Ava said. "Thanks for getting me this far but there's no sense you traipsing across town on my mission."

"I hardly want to idle away hours sitting on the boat."

"Then join us for Duskmeal, that is, if Kulai doesn't have plans with the client, if he does, join me for Duskmeal."

They were seven hundred feet out on this pier, the tops of the towers were a forty five degree angle from horizontal. The towers were narrow and a little grimy, henarDee was known for heavy duty ceramics, fuel digesters, big mills and such. The pumps in the boat might have been manufactured here. Kiln fires lit the sky during Nightday and great chimneys that looked like skinny, jungle-draped volcanos smoked during the day. Byram and Nendor hoped to make Gengee City into a southern rival of henarDee and Ebmemboz in heavy industry.

"So you mean to spend Dusksleep here?"

"If he'll have me, why?"

"The clock is ticking, Venna is close to those papers."

"She has been close to them almost a year already," Ava repeated. "She knows or she doesn't, another day makes no difference."

He wanted to grind his teeth. His intellect could agree with her, but his body was filled with adrenaline and needed to be doing something about it. It came out in walking faster, he kept turning back to her and almost bumped into someone. "Sorry," he said. "To you too," he told Ava.

"You'll get an ulcer. Even with your fast boat this is going to take weeks and if you stay this wired for that long you will either get a heart condition or an ulcer."

"You're right as always," he said. He stopped and waited for her to catch up, joined arms with her. She pressed comfortably on him, he didn't remember her being this well turned and wondered if she'd taken something to enhance her figure a bit. Probably many thousands of cups of yaag.

"There's a news stand right at the base of that building over there," she said, "under the black and white awning."

Herndon could see it between the masts. In spite of the fact that this area of the planet did have motors, the vast majority of heavy cargo moved under sail and was loaded and unloaded by shirtless, sweating men pushing it on rollers in the late Afternoonday sun.

They climbed to the second floor, dock level being given over to cargo along the henarDee waterfront. The newsstand she meant was there under the awning but not with the person she remembered. It was now run by a slender and creamy-skinned Wood Elf with a little button of a nose and thick waves of black hair that reached the middle of her back.

"Hows Elby?" Ava asked.

"Probably stoned by now," the girl said. "He takes Afternoondays off these days, he's only here Nightdays."

"I'm looking for a map that will show me this address," Ava said and showed her the slip.

"You don't need a map to find that from here. Just go right down this alley here out the side door of our building, go over the locks on the drawbridge and down another quarter mile, all indoors. When you see the stairway on the left with the purple torches, take that down four stories and take the street outside the doorway on your left. That'll be outdoors. That company's a big arched double door about a third of a mile down that way."

Those directions turned out to be about fifty percent accurate, but by asking three more people, they did get to a big double door, capped by pointed arches. They entered a cavernous dark space, echoing with small hammering somewhere in the back. A small red-headed goblin woman with the most enormous eyes and tiniest, pointiest chin he had ever seen, was keeping watch from the balcony above. "What bring's ye?" she asked.

"Kulai of the Yakhan, of Kulai's Supplies."

"Yes, yes, he's here. They're in the back, up stairs. Come up an' get 'em out o' there, it's time for 's hired hands to go home." She beckoned them up the front stairs, a wide and ornate three-turn in glossy black coalwood. An ornate chandelier with three small lanterns creaked in the three story space. "So what brings ye?" she asked as they reached the top of that stair, "Right down that hall, the double door, but I mean what's your business with Kulai?"

"Duskmeal," Ava answered.

"Excellent idea," she clapped her hands, "I'd like to get to me duskmeal me-self. If 's hired hands actually got paid roun here I might be able t' fine some."

An orange-bearded Dwarf popped out of the room and said, "Pippa, you are the whiningest bitch this side of Angband. Here, have two damn irons for all the magnificent complaining you've done this week and get your sniveling corpse out of here." She slapped the beads from his palm and ran like a spooked cat without another word. "So you've come looking for Kulai for duskmeal?" he asked Ava.

"Unless you have prior plans?"

"I would like to have you join us," he said.

"Ava, what are you doing here?" Kulai said as he came from the room.

"I came here to give Herndon a chance to talk you into letting me go with him up to my old place in the north looking for some papers he left with me."

"You don't need my permission, if you left me a note on the hallway table it would have been sufficient. If you tell me it's important, it's important to me. Thank you for thinking of me."

"Maybe I don't want to go away for weeks without spending some time with you," she said, pressing against him. "Let me introduce someone who can certainly finance an enjoyable evening for all of us," she said, "This is Herndon da Silva of the Brazilian expedition."

"Treasured memories will be," Kulai said and extended his hand in the native fashion.

Herndon raised his also and slapped five. He rarely got to use an Earth handshake any more except with fellow Brazilians. "Ava speaks highly of you," he said.

"She is a most gracious lady."

They introduced the men he was doing business with and they went to find a Duskmeal. Herndon took them to a roastery, the only type of dining with significant pieces of meat available in this culture. They met women and the one invited for Kulai was left to him. He found her stylish, with awesome breasts, but chilly and insufferably snobbish about her culture. The karga medallions were magnificent but she was unimpressed and let him finish hers while she talked of karga social sophistication. They were arguing about some local movies he hadn't seen before the evening was over and he did not accept her invitation to Dusksleep.

He wandered afterward, walking along a sixth floor street till he could see the pier their boat was on. He was steamed about the evening, Shingress was most of the problem. There was a lot of that around, girls who were looking for pet boys, boys who meant nothing. He was no woman's pet no matter how magnificent her breasts were.

He wondered if jealousy was part of the reason he was so steamed over staying alone on the boat while Ava spent Dusksleep with Kulai. He was careful to pay attention to where he was going,

henarDee is just a few mile stretch along any main canal nearer the center of this Kassidor City megalopolis, but it is unfamiliar and some of the streets are steep and deep and not very well lit. There were some smoky industries down near the dam and steam added to the sultry heat.

He was starting to sweat when he climbed up to dock level. He pulled off his shirt as he began the long walk out the pier in the direct rays of the setting sun. There were a lot of small cargo boats tied up here now and the center of the pier had hustling wagons. He was tied up out near the end near the gondoliers and lake runners.

There were two golden skinned Mountain Elf girls who must have just disembarked from a lake runner inspecting the boat when he got there. They were dressed only in sheer wrap-skirts and were very sweetly shaped, though nothing like the size of Shingress. Neither was at all snobbish, both were very interested in looking at the boat that looked like a space ship and they had a fine skin of a tasty green with them that went well with a few shots from one of the last bottles of genuine cachaca at 61 Cygni. They thought the snug cabin of the craft was quite romantic and had audio cubes on them that sounded great on these speakers. He didn't wind up spending the sleep alone on the boat and didn't mind that Ava was a little late for Nightday. There were parts of life in this society he did enjoy.

6. Sweet Lake Dusksleep

They had spent a dark and a light on open water. Ava had not driven hard during dark and a series of towns with only small supplies of fuel had slowed them till the city of Esterain and dawn. The week since had seen most of center lake pound by, hours on end out of sight of land, navigating by sun and clock, there is no satellite navigational system here. Much of the lake's surface is out of range of any tower on their network.

He was really beat as dark approached. Their first full week and they were near the mouth of the interconnects. Their anchorage was beautiful, a sheltered cove behind a fine sand beach. There were a few homes visible beyond the marshes along this shore,

none out here on the overgrown sandbar where they anchored. This was about as high as the tide would go, it was opposite Kortrax at this end of the lake. They had come out onto the beach in the last sun of the day. This was one of the last wild places before the interconnects began, but it was beautiful. This was the last wide bay on Center Lake, wide enough so the far shore was detectable only as Kortrax began to contact the horizon and those with sharp eyes could see that sun and reflection didn't quite meet. It was only fifty eight miles to one of the points on the far side, but the land is not rugged in this region.

There were a few tall clouds above them, painted pink by the red rays of sunset. Herndon had never seen the skies from the deep basins of this planet, but he had seen pictures. The sky here, everywhere he had been, looked like New Earth while the skies in deep regions looked more like the sky of another planet than the sky of Mars.

Ava was finally close to him, leaning back on him and letting him put his arm around her. "It's almost like home," he said.

"It is home," Ava said. "We might as well make the best of it because this is all we have."

"The Colonel dreams of going back."

"I don't. I lived a mortal lifetime and then some on the way over. I lived another mortal lifetime by myself as an Angel and a mortal lifetime here as a biological on this world. I'll chose this," she said.

"Of the mortal lifetime I've spent on this planet, you were one of the best parts."

"Mmm, I liked that time too. It was quite a romance novel wasn't it, - shy, bookish Angel re-incarnated in a body seething with uncontrollable lust, and a dashing latin Lothario rebuild the technology industry in a new world-."

Her lust had not been uncontrollable, but Herndon refrained from mentioning that. "It was a grand time in my life," he said, thinking especially how much fun it was to found that industry and the study of virtuality. They had worked together well on that. "There are times I regret my decision."

"To go found New Brasil in the Gengee?"

"Yeah, to go. I have accepted more of this world since then."

"But I've heard you have children now?" she asked.

"That is correct, but how do you know that?"

"In was in that newsletter your 'governador' publishes," she used the Portuguese word, there is really no translation in the native language.

"Ah," he agreed.

"So who's the mother?"

"Elond."

"Not one of your crew?" she asked. She knew most of the original crew that survived, there were seven women. Of course the third generation is of childbearing years already and she knew none of them.

"No, a local woman." He saw her smirk. "Hey, what's wrong with that, you've gone far more native than I have."

"In this body I am a native. I'm just surprised is all. You must have some difficulty keeping the culture alive?"

"There is some dilution, but I'll admit my attitudes towards the natives have changed over time. Things are a little different down there. It's probably more about being in the country not the city, but I've developed a little more respect for the native way of doing things."

"So how's Elond?" Ava asked.

He had to get past this, fending it off would spoil the moment even more than speaking of her. "Like you only blond, wears a pony-tail more often but isn't into electronics."

"She's like me?"

"I haven't changed that much, I'm still attracted to capable, intelligent and tall women."

"Are you still attracted to me?" she asked.

"Of course."

"Do you want to re-live that first time when I was too shy to accept your advances or do you want me to continue to act like I've gone native?"

"Let's see how native you've gone," he said and put his hands to her chest.

She went completely native and turned and pressed into him.

"Is this as much fun as the stylized pursuit?" she asked.

"For my hands it's more, but the tender moments we had when the discovery of this world was new..."

"I had been 'here' a lifetime already when we got together, but up in the Tear, living on beach a lot like this with a magic villa behind me."

"Alone."

"It was grueling. As you know, I was reincarnated in this temple of lust so I wouldn't be alone."

He had met many more lustful people in the years he had been here, including both the girls on the dock, but since she died as a child, she had no first hand knowledge of what hormones were like in the flesh until now. Maybe for a North American she was randy, but she wasn't as horny as Gabriella had been before she took his condo and pension and sent him off to 61 Cygni alone. Still he desired her lithe body and handling her tight curves reinforced that. He let his other hand slide over her hip and toward the hem of her sheath.

"You mean to do it here on the beach?" she asked while sliding lower toward the sand so she could put her knees up.

"You were less of one for public displays than I was, has that changed?"

"I'll wait to join till we're back in that cabin after a picnic duskmeal, if you want, but we have this beach to ourselves right now and I'm willing to enjoy a bit of petting with this sunset."

"Then why were you asking about Elond?" he asked.

"Just conversation. As former lovers we are expected to get back together in this society, at least during this mission. I've not hid Kulai from you, you don't need to hide Elond from me."

"How is your relationship with Kulai going to handle this?"

"Without a problem. Remember, I knew you long before him."

"Do you feel like a native in relationships now?"

"I didn't until I met Kulai. He was the first that made me understand the concept of a life-partner relationship where sexuality is no longer required to cement it. I would stay with Kulai even if we never did it again. Even if we discussed our sexual affairs with others over breakfast."

"How close is it to that kind of relationship?" Herndon asked.

"As far as possible the other way. Joining is sport with any other, even you. I'm sure it will be as enjoyable a sport as it was even then, but I know now that what we did then was sport compared to what I do now with Kulai."

He looked at her, stricken in a way, though he was enjoying her body and she was enjoying his. What was this to him but sport? Her beauty in the beauty of the red sun now halfway to its equator in the horizon. His hand pressed her up and teased her point gently. "I understand," he said, and did. "I once felt that way, I've probably told you, the wife who stayed behind."

"I heard it even earlier. I felt even more sympathetic to your tragedy. Remember those first meetings we had, the ones when Alhart and Kiethying were still coming? We each pretended we didn't know. It was so Earth of us."

"We were children then..."

"Me especially," Ava added. "I had been dealing with this flesh only ten years," she said. "Local years," she added for his benefit.

There was a lake sprite cruising by with a couple on it. They might not have even seen them, but certainly saw Herndon's boat. If they saw them, they could not see detail but could see where their hands were on each other. "I was a child to this world then," he said, "and still acting like someone from my world and concerned about the few women of the crew and not the millions..."

"Billions," she corrected.

"Of the native population." This was casual play to a native. They might sit and play with each other then finish their conversation and leave without ever taking it farther. Neither would have bad feelings. "You want to stop this and have duskmeal first?" he asked.

"Yeah?"

She saw nothing strange about that. She had gone native and was treating him as a bit of erotic exercise. Could he think of her as erotic exercise and nothing more? This woman had brought him here, this woman had seen him thru the transition from 'intrepid explorer' to 'resident alien'. She had seen herself farther thru that

transition then he was willing to go, even now. She also had to get thru a transition a lot more difficult than his, coming back into flesh. He thought of himself as rather accepting of native ways, he was even able to let his staff mate with animal abandon on his grounds and ask 'when you're thru...'

He looked at Ava and Elond and noticed that to someone meeting them both for the first time, sixty percent would probably get it wrong when asked later to guess which one was born on Earth. Elond was more businesslike about life but almost as romantic as Jalloo about sex. "O.K." he said and withdrew himself from her hand, "We'll have a picnic duskmeal."

"Please don't rush it," Ava said, we still have an hour before it's very dark and I saw you have a cook pot in there. I'm pretty sure we can come up with some black-shells on water-leshin within a short stroll of here."

There was water leshin all thru the lagoon, not by the acre, but enough to feed fifty on any given meal, enough so it wasn't dented by what they could eat. Black-shells eat more of it than people do, they would increase the amount of water-leshin available by scouring more of it for black-shells.

"I am not really of the native population," Ava said, but disentangled herself and stood up. She pushed the sheath down below her hips again. "When I was a child the sun would have set by now, if it touched the horizon when it did."

"Yes," Herndon said, "It takes the sun six times longer to set here." It was now just getting beyond halfway, but its reflection across the lake made it start to look like a lens. The outline of the reflection was disturbed by the ripples made by that lake sprite. The purple curlicues and filigrees on the sun made it look a lot less Earth-like, but still it was Earth-like enough to be beautiful. The red billows of cloud were so much like evenings in the Amazon basin.

She did most of it, he followed her around asking her what he could do to help. She set him to taking the leaves off the water leshin. On these you eat the long bud the leaves unroll from, unlike the land relative where the leaves thicken up like lon. She came back with a pail full of black-shells. They are like mussels in size

and shape, more like salmon in taste. She fried them to a sauce-mix size, then put them in with the boiled water-leshin buds. They are like short, fat, slightly yellow-green tapered spaghetti. Herndon found a small jar of tuvee-bean paste aboard and Ava further spiced it with a few sand-peppers that were growing on the beach. A much higher percentage of the native biota is edible, including almost all leaves, but the nutrition in leaves is not usually concentrated enough to do humans much good. There were a few things that produce virulent carcinogens but they were shamelessly exterminated. The whole biosphere has been shamelessly and aggressively re-engineered to support human life, so long ago it's taken for granted. So they had a picnic spaghetti and meat sauce.

The fire was good. By the time they were done gathering, preparing, cooking and eating, it was just about full dark. There was still a bit of a purple glow far across the water and across the heartland of the Highland Elves. Three billion of the six billion people in this cultural zone lived on the west side of the lake and between the equator and the city of Zharvai at the far end of the interconnects in latitude.

"This fire is good," Ava said. "With this, it's warm enough to take this off," she pulled her sheath over her head, "As long as you hold me."

"I will hold you so you won't need that fire," he said, resigned to the fact that he was being casually used as much as he was using. That was part of what turned him off about native women at first and sent him to Ava. After a lifetime on this planet, he was used to it and determined to enjoy it for all he was worth.

7. At Venna and Jorma's

The interconnect was so much longer than it looked on a large-area map, taking a week longer than he expected. They had barely arrived at Ava's old house when Herndon was rocked by the first bombshell, the new couple was the fortunate discoverer of an aluminum stuck in the treads of a sandal. Herndon backed off and

let Ava talk about it. She didn't know that aluminum could only have come from one place, planted for whoever Venna was working for, by Venna. There was only one in the community who would use a gimmick as crude as that and that would be the Colonel. If he let anything at all out of his mouth, he would shout those accusations, so he clamped shut and let Ava handle it.

He hoped Ava didn't even suspect that, and he let her go on questioning Jorma as if she believed him. It was even possible that she did. Meanwhile Venna was up at the house. He knew that she knew they had arrived and he wanted to get up to the house as soon as possible. Instead they stood chatting down here while Ava gushed about his camp. Jorma could be innocent, it was he who mentioned that Venna had been some time and thought he would go up and see what help she needed. Ava said she would take some things up to the house. Meanwhile he went into the can to keep himself from giving too much away. This had gone farther than he expected already. He had to try and figure out what this meant and gather himself for the upcoming act.

The fact that she had dropped aluminum meant that she had to be working for a Brazilian and a loose-fisted one at that. Yeah there were people and institutions among the natives that can swing aluminum, but they all understand the amount of attention that would be paid to a random 'find' of an aluminum bead.

He knew the statistics, an aluminum is reported stolen in the Kassikan's megalopolis of one hundred million about once every one to five Earth years. None were stolen during the years Jorma was in the Yakhan, but Venna had been in the city thru several. Few were found, most are now tagged and bagged and kept under lock and key. This one would not be identified, he was sure of that. No doubt he could chase it down, Jorma would tell him where he exchanged it, there was a good chance it was still in that vault somewhere in this town, filling an entry in a rich man's account.

He heard Jorma and Ava go up the path, he was done in here anyway. It was nice work this guy put up in a single summer, a month, but it was a camp for sure. Nothing was meant to be permanent but maybe these stone blocks on the kitchen floor. It would stay for many years however, good wood preservatives were

available here, a guy industrious enough to put this up in a month would find the time to apply some.

He saw them on the path, Ava had a bag large enough for several document folders, but with a change of clothes hanging out of it. As they walked up the path, Venna appeared. He had to admit his heart skipped and his loins stirred on seeing her. She certainly hadn't lost that sassy little shape of hers, or her lively animation. She sent Jorma back down to get the fire started. Venna and Ava talked, then Venna came down the path, put down her tray and jumped into his arms. She certainly wasn't going to try and deny that she knew him and because of that he got to talk to her privately.

*

Getting the house to themselves had been easy, and as a bonus, Ava was eager for a fine romantic interlude that left her melted. But when they went thru her old records in detail, they did not find the claim ticket. He had used Noonsleep to go thru the whole house looking for that claim ticket and had not found it. It was more than he could do to figure out what Venna was really up to. Here he was, in her house, with it all to himself, with everything right in front of him, and he still couldn't figure it out. The maps were his. Ava had taken them to the boat already. If Venna left them, she doesn't know.

Two possibilities, one, she really is as dumb as she looks, two, she was baiting him with the maps. There was no doubt in his mind who she was really working for by now. He didn't want to say anything to Ava even though she already suspected him. Herndon was glad she'd finally found a few minutes to sleep. That Jorma would probably wake Venna up and the first thing she would do would be come up here. He should keep an eye out and hop in bed. No need, he could just say he was up early now and not quite awake yet.

As far as he could determine, every possible cubic inch in this house had been examined. So there was the possibility that some part of the house they think is solid is in fact hollow, or the document has found its way off site. She could have made copies of

the maps, but then she could just as well have made copies of the claim ticket too.

He wondered if Jorma really had thrown it out. There was nothing that prevented that. What were the odds that Venna didn't know about the maps and Jorma had thrown out the claim ticket? What was the chance that Venna just happened to like Jorma and decided to come up this way? About the same chance that the Al-Harron was on a mission of peace and brotherhood. Enjteen paid her to watch Ava. What was going on here?

He went downstairs and out onto the kitchen deck. This was the main access to the garden and they were doing well with it. Just about everything seasonal was in, they grew a big patch of light vedn and it was now in a big sack right here. As Noonsleep waned he brought out their little handmill and ground up enough for breakfast for all of them. The simple chore eased his mind, this world was good at providing chores like this, or drawing water when there is no wind for a week or more, walking, climbing stairs.

The natives were more fit because of it. He brought the flour into the kitchen and put a bowl over it, then went back out to the porch. He wished he could do something about the claim ticket, but other than peeling the bark off the house, he didn't see anything more he could do. He could not quite see the camp and the boats from here, he could see the point on the path where they were visible.

Ava got up, said she would sauce up some of the ground trap and fry up some vedn toasts to put it on as soon as she got out of the bathroom.

Once she was out of the bedroom, he tried one more place. His examination of the house said there was some missing space behind the eaves closet. There was, and he spent another half hour going thru that while she showered and started breakfast. He came downstairs empty handed with the back closet re-hidden. While talking with Ava, she got him to admit that one of the maps was the location of the shuttlecraft. He didn't really want her to know that, but he wasn't going to directly lie to her or evade her. She was too intelligent and they had meant too much to each other.

He'd left his toiletries down at the boat. He was glad they had

the maps safe at least, others would be up any time. He stepped off the porch, only three steps on this side, and wandered down the path toward the beach. Beyond their gardens the gnarlberry grew wild. It was a scratchy shrub, the berries were a bit like a cranberry/blueberry mix, the twigs grew in dense thickets chest high.

They kept the path clear thru here, there was a knob of rock at the break in the slope where he could look down on the camp. Venna's guy was now awake and was looking over the boat. He should help Ava with breakfast but since the maps were now aboard, he thought he should monitor this man's interest in the boat.

His conversation with Jorma in the boat convinced him that he was innocent of guile. He convinced them to make breakfast down here. Ava brought the griddle down and Herndon fried the vedn toast on Jorma's fire. Venna slept thru the whole thing, or at least appeared to. Herndon and Ava tried to probe him at breakfast about the aluminum, he stuck to his story about the sandal. Venna woke when they were done with everything about breakfast but the cleanup, but only wanted to go up and shower.

Ava was ready to lay out on the beach, something she had been good at during their life together. Back then they lived in the Kassikan, in a tiny apartment in an atrium not far from the pyramid. There were two streetcar lines from the university to the beach. The one at the end of the ten minute ride was crowded. The north line was at least fifteen minutes and there was a three block walk to the beach, but it was much less crowded and walled with only thirty floors of apartments facing sunset on those waters.

Jorma went with her to the beach with the cookware and Herndon went to the boat to look up some things. He has just about the same system on the boat that he does on his desk, just smaller scale. It also has a remote interface that uses old Earth phone technology to connect. There is an outlet in this town but it is on the far side of this island. He had to extend the antenna all the way to reach it and even so there were a lot of re-tries.

With the map he was able to look up Taktor's Transfer Warehouse and see if there was any record. He had to look in the

Gengee city services directory to find it, but there was a record and secure storage was listed as a specialty. There was an address that let him add a street name to the map. Taktor also provided a mail address for enquiries, one need only provide the item number.

Herndon knew the claim ticket had the number on it, he could even remember that there was a star and a circle in it, but he didn't remember all of it. There was plenty of other trash in that box as worthless to Jorma as that old claim ticket, even scraps of old doodles. He didn't believe it was missing because Jorma threw it out. He was pretty sure it had been taken.

The Gnome named Enjteen maintained a posting. He used it to rant, mainly about mistreatment of the Gnomes by the Kassikan. It was embarrassing to the Gnomes because it exposed the ease they really lived in, down in the lightless depths, but it was a source of information so he looked there. He found a new posting.

"As all who have followed this sordid expose know, the Kassikan recently freed itself of one of the most radicalized pink-supremicist overseers they ever employed. I speak of none other than the shady developer and cargo speculator, Kulai. He had recently taken to his home the same Ava known to be a founder of the Study of Photovoltaics and the Study of Virtuality. She who has always shown polite disdain for those of the grey race. But it was recently reported that she has since left him in the company of a Yingolian former lover on a Yingolian-style power boat."

He also noticed his was the first access to this posting. He looked around and saw that some of his postings had generated as many as seven reads. Still, it was interesting information. Enjteen knew that she had left with him. That was not information Venna provided as far as he knew. This man's sick mind was out of control here. He wondered how many people he paid to report to him about Ava?

He was able to check the instruments on the Lula from here. The Al-Harron had swung around 61 Cygni A in an elongated decelerating orbit that had kept it on the side opposite the planet at perhelion. It swung once around the star in the last four years and was crossing paths with that asteroid again. Its reactor readings were consistent with interacting with that asteroid in some way.

Herndon knew what that meant, they were attaching guidance. In another couple months the sensors will confirm the presence of a second reactor in 61 Cygni C's orbit. When he plugged in those assumptions, that gave him two local weeks until that rock would bottom out in C's gravitational well and get thrown deeper into the system toward the planet.

As undesirable as he felt Talstan's creed of religious hatred and extremism was, he was confident they would be competent to install a motor that could guide the rock to its target. He was surprised they would attempt a rock that big. He would have to keep an eye on these readings. Meanwhile he was having a hard time staying awake, the nap on the beach sounded like a good idea.

He got there to just as Ava started telling Jorma their suspicions of Venna. Why give that information away? It seemed to be nothing more than part of competing with Venna for Jorma. Jorma did not seem to want any serious part of Ava and took a swipe at her by comparing her sexuality with Venna's. Herndon backed off and went to sleep. He knew he as being a lousy guest, but there didn't seem to be any more reason to stay anyway.

8. Venna Escapes

Ava gave up and Jorma went out for a swim and let them sleep. He dozed off good because when he came to, Jorma was running down the path claiming Venna had disappeared.

"You better check those maps!" Ava groaned as she came awake.

"Corizao do Dios!" Herndon yelled and charged out the dock. He dived into the cabin, heedless of scraping his back on the companionway ceiling. He launched into the sleeping area and tore at the cushions. Safe in their plastic folders, both maps smiled at him. He quickly got them out and studied them, unfolded them and made sure they were still all there, made sure it was still Taktor's warehouse that was marked, made sure the map of the Pennic Hills was still as he remembered.

"We still have the maps," he said as he emerged from the cabin, "But you can be sure from this that she has the claim ticket.

We have to catch up with her, that's our only chance."

Ava didn't believe they could do it, but he ran up to the house to get their stuff anyway. It took precious seconds. Venna could have been gone as much as an hour already, she could be on a packet that is already clear of the dock. He jammed their things into their duffle. Ava brought a robe for seduction but had never had a chance to get it on. She left another pair of sandals here. He couldn't get all her toiletries back in their bag and had to leave a bottle loose in the duffle. He forgot a good dusk shirt he had taken out for later.

Jorma had their things from the camp, Ava had the camp quilt and a wrapskirt on. Jorma handing him his shorts and sandals made him realize he was still undressed for the beach and even on this planet he wouldn't want to request permission of a captain to board and search for a thief while nude. Unless he was accusing the thief of stealing his duffle. They jumped in the boat and blasted into open water. Ava found a tie-top and put it on.

He went out and around the town, outside of east island, then took the scope and looked for sails headed anywhere south or east. To the east north east and way out in open water was a big square-rigger beating toward the southeast. No doubt a ship like that was on a route to Zharvai from Kugenzglaw, it could not have picked up Venna. There were some purse-net trawling slings working the coast about a mile off Sinbara point beach. With no other traffic in the area he swung around toward that beach. These were all open boats and he could see with his scope that Venna was not aboard them.

He cruised well down the beach, then swung out to see if anything had come from the harbor while he looked at the guys in those slings. There was a little cat setting out down the coast like it was just going to Bhangyon. It would carry about twenty paying passengers, but Jorma had mentioned that Venna also knew how to crew now. He scanned the top-deck hoping he might get lucky that way. He didn't.

This rig had a drop bridge just above the pontoons below the forward promenade. There were tiny foredecks ahead of it on each pontoon. He could be heard from that end of the bridge below that foredeck. There were no redheaded girls aboard, thief or no. There

was nothing more he could do except try to board anyway. The 'Instinct' virus should let him do that, he would not be hurting anyone. He wondered what would really happen if he tried, but already knew from the times some of them had tried things like that in these situations. You get to confront a wall of yelling people blocking your progress with their bodies. In other situations you can find no one will offer trade with you, no shop keeper, no farmer with a wagon load of produce. He would not get far if he tried to board this boat anyway.

It was after lunch time by now. Ava brought up some fruit. A larger packet had set out toward Zharvai by now and Herndon chased after that. That boat was a lake runner and the breeze was brisk. Herndon was amazed at how long it took to catch up with it, it was making over fifteen knots. When he did get nearby, there was no interest on its captain's part in heaving-to to be boarded.

"I'll put your mind at ease, I'm pretty sure there is no one like that aboard, but if you stay alongside I'll have the steward check the manifest."

"Please," Herndon shouted. "She has stolen the claim ticket for a cargo worth aluminum."

"It should take him less than twenty minutes."

"She may have stowed away as a guest."

"He had no pre-boarding guests this week, but stay alongside, we'll do a cabin check but it will take an hour."

"We'll wait for you ahead," Herndon said and shoved the throttle open. The seas were building as the week got late. The narrow, deep hulls of the lake runner sliced cleanly thru the water, the ship gliding smoothly. But at this speed he was pounding each roller heavily, at a higher speed he skipped across them. It was still jarring but not like it was at sixteen knots. After twenty minutes the sail of that lake runner was a dot on the horizon behind them. He brought their speed down to a crawl to give them a rest. There was still enough chop on the lake to leave them bobbing, but at least it wasn't painful.

"I'm shocked you haven't pounded this thing to pieces," Ava said. "It sure doesn't take to big water as well as a twin hull."

"It has to be built to withstand that. You know what these did

on Earth. You may wish to reject your past, but you can't deny it."

"I know that many of these things never finished their races, we'll never know how many never finished their smuggling runs."

"Wilhelm showed me the shock load calculations and the fatigue analysis. It will hold together."

"I'm not sure I will."

"We'll run alongshore after this, the tide is too low for anything else to sail out of Sinbara till late in Dusksleep."

"Herndon, I don't know why you are so sure she left town on the first boat out. We have no evidence she left town, all we know is she left the house. She might have taken the notion to spend a day with some guy down the street, we didn't make any effort to check even that. We just took Jorma's panic that Venna has disappeared and ran with it."

"He knew her and he was clearly upset."

"We just made him suspicious and he's just been jilted," Ava said. "Venna running off may have had nothing to do with us and if it was about us it might be because we cooled the sex around the house."

"You're taking Jorma's side?"

"Jorma had given up on her, he was overwhelmed by it," Ava said. "I could have caused it by passing on your suspicions. We shouldn't have been so hard on him and her, we should have played our hand closer."

"You were the one that confided our suspicions about Venna to him. I wasn't holding him culpable," Herndon said, "but I wasn't trusting him either. To me it looked like you were feeding him to get his trousers down."

"I was not!" she barked. "As it happens he won't come near me because of the Yingolian Ghost thing."

"Are you Yingolian or Terrestrial?"

"Yingolian," Ava stared him down.

"Gone native," he sighed.

"I can't, I will always have Yingolian ancestry, though I possess not one gene from the environs of that star."

"Sol," he said.

She started sobbing and he came over and held her. "Don't

make me use you like this," she said, "don't comfort me over being rejected by Jorma."

"He's a narrow-minded provincial, even for this planet."

"We are provincial," she said.

"And my expedition understood that right from the get-go. But just because they are older, bigger, and ruled by a university..."

"The Kassikan is just big business with an educational branch, they can only control some of their own employees some of the time."

"The government is genetic," Herndon said, "They've been spelling it out in detail since we first spoke with them. They've moved the mind of society, of which government is but one manifestation, into the plasmids these people exchange during sex."

"Then I am in that. This body has always had that."

"So you truly have gone native. Your desires are modified by their genetic manipulation."

Ava drew a long breath. "The first thing I noticed was a much stronger desire for random sex."

"That is how you participate in this society," he said. "Sex is their religion."

"And what is ours?" she asked him.

"Money," he said, "and Talstan's was blind faith."

He waited there as they bobbed in the waters of the immense interconnected lakes created by that 'private university' over the span of thirty five hundred Earth years. No government on Earth ever undertook a project like this, it takes most of Brasil's man-made lakes to make up the interconnects. Most of it had been built, little by little, generation after generation, as a university funded project, mainly by muscle power, without metal tools.

He could see how the bio-chemical 'government' was done and he knew it had been done to him. He knew that interstellar radio message was intended to bring this artificial meta-creature, a 'government in the subconscious,' to Earth. He knew that was what Al-Harron was here to stop and knew it was only total extermination that would stop it. It was only a matter of time before their astronomers figured that out.

"They think they have no government, they think of their

organization as 'sovereign individuals.'" Ava said.

"We all know that doesn't work. Start any group of people in total anarchy and very soon a strong man will emerge."

"If it wasn't for that Instinct."

"That's part of the way the Kassikan enforces their rule," he said.

"The Kassikan did not invent that Instinct, that was done on the far side of the world by someone working for the wizard Brancettrabble."

"What?"

"Just what I said. The Trenst basin was confronted with violent people from a newly discovered land, there wasn't time for the Kassikan's generations-long modification of female promiscuity to take effect and weed out the alpha males so Brancettrabble had to come up with something quicker."

"How do you know this?" he asked

"You don't like me to talk about that."

"Ava, we've been separated for almost sixty Earth years. In our Earth lives we wouldn't even know each other after this much time. Surely you can't believe I am still jealous of your former lovers. Even if we were still lovers I have been effected by the local culture enough by now that I couldn't hold it against you any more." The wizard Brancettrabble, using his helmet, had been one of her lovers during her Angel years, especially during the time after Gordon's Lamp departed and before the Presidente Lula arrived.

"He's had a lot to do with how this planet works, not as much as the Kassikan, but his labs created that Instinct, his labs created the species immunity complex, the one you don't have to buy or inherit. The Kassikan played catch-up on that. It really is not as simple as 'the Kassikan rules the world' they are at the mercy of the way of life they have helped create, they are a single organ within it. They can't use force to expel people from the grounds once they are there. They have no recourse if a scientist decides to take what he learned there and use it for his own gain. That's why there's such a good royalty system at the Kassikan, because individual scientists will stay with the Kassikan only as long as they can make more profit doing so."

"I haven't studied it. I always felt more like the subject under study there than part of the studiers. How did you get out of that?"

"Well, the body I'm in is pretty normal, and with the helmet they can get closer to me than you and I can to each other..."

"At least with our clothes on."

"Or off. With a helmet, one can receive the sensory streams of the other."

"I've never used one, never even seen one."

"The only time I used one in flesh, I was still unconscious," Ava said. "I never actually saw one using the eyes of the body of flesh I am in now. But anyway, they had a sample of my life as it went by into this body. I don't doubt for a millisecond that there is a pill down in their vaults somewhere with my memories where anyone with the clearance, in other words, someone who can find it in those half million miles of dim corridors and stairs, can replicate a copy and drop it."

"I couldn't stand going down to the depths of the grease candles."

"I know," she said, "But that's why they weren't studying me, there was nothing more to study. I was already taking notes for control systems using 'photovoltaics' as electronics was called at that time, by the time you got to the ground."

"I remember it, I remember it all very well," he said. In truth at the time he couldn't believe it was happening. He'd been dazzled by the easy slit for the first few weeks, but saw something of home in the 'other Yingolian' across the table at many discussions at the Kassikan. For some reason he had a flashback to a time during their early years when 'starmen' were still a serious sensation in the Yakhan. He got stuck outside the walls one time and discovered just how much. Soon there were a few people following him asking questions about it. In about five minutes there was a crowd yelling 'speak up, we can't hear you back here.' No one can use force to keep you from fleeing, but nothing can prevent people from standing in a solid wall around you. You can gently push thru without getting paralyzed, but at one point he had to push thru a gauntlet of tits to get thru the crowd. Once he was free, he had to bolt like a thief back inside the walls. He was glad those days are

long gone, being Brazilian is no longer a good pickup line at a bar, no doubt several billion men had been using it in the last mortal lifetime. "I sought refuge in you," he said.

"Took you long enough," she said.

"I was distracted," he admitted.

Conversation lapsed and they bobbed in that water till the lake runner drew near. They reported no trace of Venna. As the light was growing late, Herndon knew he was not going to find Venna and the ticket this way. There was nothing they could do now but race her to the shuttlecraft itself.

9. The Hammer In Public

Two weeks later, the last wagon was pulling away, he had two hundred bags of that fuel aboard. Each bag was just a bit under three gallons. Each one a week's wages for the guys passing it to them. That's assuming they seldom work more than one day in their three day week. Six hundred gallons of grain alcohol to let them run the full week to Cys Ungor.

He could see that Ava wanted to stop for the concert that was going on across the inlet and facing the lakefront. It was an active, spiraling sound and she was paying enough attention to it that they really should have charged her for a ticket. They were good and it would be tempting to pull up among the hundreds of boats at anchor just outside that hall, but that would delay them too much. Instead they'd taken the time for a nice duskmeal across the harbor. They got a selection of fruits and waybreads to go with them. He got what they call a slap, a 'rubber tea' with extra caffeine from lvinch sugar, because he would drive longer. Just as they were casting off Ava announced, "Are you trying to get all the way to my place with this?" she asked.

"All the way to Cys Ungor."

"You can't, that's kidnaping," he was already pulling away from the dock, a docksman shouted and threw the rope he forgot. "Let me off here, I'll catch the rest of that show and find my own way back if you can't detour up the Dromedian arm."

"I'm sure I'm going to need your help again before this is over."

"What help can I be to you?"

"You have a sister of a sort who just happens to live in Narrulla's Tear."

"Yeah?" as in 'like, doesn't everybody?' "And what can that matter? You want her to drop another four tons off that starship to make up for the four you lost? Just call her and ask, she takes voice connections, I'm her and I know I'd do it for you. There'd be some question of where to drop it, I'm not sure I could hit the Gengee from there."

"It's not like that at all. We may need her help to delay or intercept the Colonel's efforts to take over the starship."

"I thought it wouldn't light?" Ava said.

"I thought that was your sister who was involved with that?"

"We do write," Ava said, "Not as much as we should but I find something to say now and then, that was something she had to say to me. That was at least five years ago now."

"Not quite one."

"I'm on this planet now," she said.

Years are more like months. A mortal lifetime and he still couldn't adjust to that. He could do the arithmetic, but he never felt it. Ava's body adjusted perfectly to the eighteen week year. But then, she was in a body born here. "Yes," he said. "But I fear that when I have been here a 'Yeeng,' a native century, I will still feel the Earth years."

"I still don't see what that has to do with kidnaping me down to the Gengee?"

They were getting away from the dock now and into more open water. The dark was bright with the companion stars and the moving ships were well lit. He was able to open it up a little bit more. "Why don't you get me that coffee?" he said, refusing to call it by the native word.

"So I'm to be kidnaped into slavery?" she asked, but did get it for him.

"And held hostage to assure your sister's cooperation."

"And you think the Instinct will let you do this?"

"I haven't felt the tiniest twinge of paralysis yet. I am not harming you in any way. In fact if you were to come closer I would caress you most fondly."

"Kidnaped into sex slavery!" she shouted facetiously.

"Well, you wanted to re-live that romance novel," he said.

"We were doing semiconductor re-invention back then, not chasing starship parts in a rum-runner."

"Shuttlecraft parts."

"Herndon, I know the starship is missing parts too. What if they're all together? What if he gets them all? Isn't that what you're really worrying about?"

"That's why I need you," he said, not admitting anything.

"To force my sister's cooperation?"

"To plead for you sister's help, if all goes wrong and he get's the shuttlecraft off the ground."

The ride down to the Gengee was nerve wracking. Ava threatened not to come with him. He had to tell her a lot more than he wanted about the politics of the situation and the hair brained schemes Colonel Morais was capable of. He needed her with him and needed her help at the wheel because the distance was just too long. When he dropped from exhaustion at the next fuel stop a week later and had to turn the control over to her, he fully expected to wake up at a dock in the Yakhan or at the very least, in Dromedia. He might have woke up if the boat came to a stop, but it kept popping along, not as fast as she should be going but up out of the wallow. In the last couple decades he had finally broken down and bought a local timepiece and learned to interpret the cluster of geometric figures and dots that represent the local time. He'd had more than a good night's sleep.

He complimented Ava on following his course, she used it to pry more out of him about what was going on. He was not going to be able to convince her that this was just about the wealth locked in the metal of the containment, or even about re-activating the shuttlecraft, she guessed that there was something coming in. For all he knew, her sister had instruments that would pick up the Al-Harron as well as his own. He used the toilet by way of a reply, then

took the controls again with no further comment on her guesses.

The next dawn, during a stop after they'd passed thru CysUngor he was lost thinking about how much fuel it was going to take to get all the way to Gengee City. Ava had picked up a news magazine. In only a couple minutes she started reading aloud, "It has been launched out of Cynd's influence entirely, and ejected in this direction at high speed..."

"Let me see that" Herndon grabbed it from her and read on, "The asteroid is six miles in diameter, that's an exterminator!" It wasn't just a little level-a-city impact they were aiming for. This was a cleanse-the-whole-planet-with-lava, six and a half mile exterminator. Even the considerable mass of the Lula impacting on that body, if he could still find a way to make that happen, might not be enough to deflect it from its path.

Ava snatched the paper back and read more. He let her have it. She felt he should give up the quest for the shuttlecraft because of the asteroid. He wanted to shout that this was the whole reason we're after it in the first place. It must have been obvious to her that he wasn't really surprised. He knew this day was coming as soon as he saw the signature of the Al-Harron and those thermonuclear blasts. Someday he would have to face the added complication that he had to find the columnator for the big burner also.

He didn't dare tell her. If it ever got back to Carlton and Blaise that he meant to use the ship as a missile, they would find a way to have him killed. He pointed out that the odds are still low and life should go on. He was tired of this lame excuse for what he was doing and wished he could think of a better ruse even now.

Suddenly Ava darted into an eye room. He started after her a few steps, then wondered what good that would do. She would simply get a privacy booth. She was keeping in touch with someone, that much was obvious. She'd used the boat system when he was asleep, she'd stopped in almost every town. He was seriously beginning to wonder just who's side she was really on.

Ava was not the same girl he used to live with. That girl was young and inexperienced with men, but old in many other ways. When he first arrived on this planet, Ava was barely a year ahead of

him. She was barely in control of her body at the time it seemed, and still somewhat afraid of it. The Ava of that time approached business as an idealistic American who'd never been in business would.

Today she was a native in almost all things. She was still a little more straight-laced sexually than average, nothing group, nothing homosexual, no more than the necessary public exposure. At least now she was comfortable with that. In their decades together she had been very self-conscious on the beach and sought the most secluded.

In their decades together their relationship had been with male and female roles appropriate to a couple from Earth. Now she was in the native female role, which differs little from the native male role. She clearly hid behind him socially in their years together. He was always an important man on the crew and had taken a brainy American wife who also had a good career. Within the Kassikan, they had a tiny Earth community, with Easter dinners and Christmas gifts for several years.

Even then Ava had been a bit distant. She was American after all. Ava had always been cooperative with the leaders of the Kassikan also. Their unintended consequence planning kept most real changes they could make from happening. They would not invest in motor vehicles for instance.

He drifted back to the boat. He took all the extra lines off. He toyed with the idea of leaving her. What did he really need her for? She was no help with the claim ticket already gone. Who was she communicating with? It was possible she was working for the Colonel also wasn't it? She could be keeping him posted without meaning to by someone else reading her mail.

Not only was she wasting money on the messages, he was wasting money and time sitting here on this dock. Wasting the time bothered him the most. No doubt it would be at least a half hour, she could say more on a keyboard than with her mouth it seemed.

It was, as he thought, over half an hour until she finally reappeared. "Did you have a compelling need to delay our departure or were you thinking of making your own way back to Kulai from here?" He didn't add that he thought of leaving her to do that.

"I don't think I should tell you, after all, there's a lot going on here that you're not telling me."

"There has to be something you aren't telling me also, like who you are contacting when you send those messages?"

"Kulai of course, I'm keeping him up to date, who else would it be?" By now she had jumped into the boat.

"You seem to have sent a lot of messages."

"I told you, I shouldn't be here, he's made a big commitment to me, because of me."

"I worry about the fact that he also knows how to get heavy cargo moved."

"I know how to get heavy cargo moved," she said.

That didn't make him feel any better.

10. In the Cerrado

The first trip into the cerrado was a total disaster. The real reason he brought her was to help him hack the shuttlecraft controls if he had to, once Venna and the Colonel arrived with the containment. Till then they could live off the shuttle's stores. It was going to be boring, but he thought they could entertain each other. He had to admit she was much more entertaining under the covers today than when they had lived together. Back then she didn't measure up to Gabriella. Now she is a pleasant difference from Elond, and nearly as interesting.

Instead, the shuttle went screaming over them as soon as someone in the shuttlecraft would have been able to identify him approaching if they were using the craft's main scope. The comms would not work that far from the city and long before they could get close enough, their mounts panicked and darkness closed in. Ava was thrown and it took him hours to get the hired beasts under control and get back to her.

The dark kept them out of communication for forty hours, all that time that reactor was cooling, making it harder and harder to detect. He would have to get her sister in space to try, but the odds were low. Ava was pretty scratched up from her fall and in a foul mood. He hadn't planned for this, he'd planned on the stores and

protection of the shuttlecraft for this dark. That could be in space or back where it came from.

He worried that the craft had been run without the containment. If it had, they were dead. He had mentioned that possibility to Ava but she had not taken it very seriously it seemed. Did she know something he didn't, or at least, more than he thought she did? He was thinking the columnator of the main drive and the containment framework for the shuttlecraft are actually of similar size and shape. The columnator of the shuttlecraft's engine is the size of a spark plug. Many of its internal components could be considered nanotechnology. If it was the columnator, he would have had all he needed. If it was the columnator, it seems that the Colonel must already have it and was on his way to the Lula with it now.

During the dark Ava quizzed him about her speculations about an incoming ship. She knew about the Heavenly Mother of course, her sister in space had contact with it for a year. She knew he had contacted the Kassikan, no doubt Althart himself had divulged it over the pillow. She speculated that he feared an enemy ship. He didn't answer her. If he said anything, he could only bring up the war, the Al-Harron and all that involved. She would not deal well with war, he didn't want to have that argument. He could legitimately treat the information as militarily classified, legally it was.

He would not confirm that there was even something out there. She knew of the Curitiba also it seemed. He wondered if that was all public knowledge in the Kassikan. Just because she knew it doesn't mean it was, she had remained on the inside there, she knew a lot more than most of what went on there.

He got up and gathered more dead branches from the area the fire illuminated. He dragged a big dead log over and pushed its end into the back of the fire. "We are like cowboys in the chaparral," he said, trying to change the subject.

"So where do you figure he's taken the shuttlecraft?" she asked.

"To the Lula." He answered immediately. He was willing to speak about the shuttlecraft.

"To save it from the Heavenly Mother?" she asked.

He began to snap up some of the larger sticks he brought over. He leaned them on the dead log. She'd already said she knew he couldn't fear them. She'd already said he knew about an enemy ship. He would say nothing.

"Could you and the Colonel be on the same side in this?" she asked.

"He is on the side of the people with him, the ones who submit to his sovereignty, not their own as the natives do. I am on the side of the natives, when you come right down to it. I don't believe we should consider the native society and way of life as expendable or even consider it to be in need of reform. These people have certainly found a different way of dealing with life's challenges, but I don't think we need to change it to make it like our own. All I want to do is preserve a few of the better traditions of our own."

She softened a little after that, and stopped grilling him about his plans. They got back to what she really needed to know. "We need to know where he's gone." He kept watch on the fire. She was frustrated, he was still afraid they had run it without the containment. As Ava pointed out, whoever flew it is dead also, but he might have been tricked into it. It would be Humberto wouldn't it. He was never really an insider with Waldeis and the Colonel, but he was the only one they could find who could fly it. She got her quilt and went to sleep, he stayed up with the fire, unable to sleep with the shuttlecraft gone and his hope of using that starship to save this world fading.

Ava spoke with her sister at first light, he woke to find them on the phone. In a panic he snatched the phone and asked about the shuttlecraft, only to find that she'd already covered all that and had all probes searching. She was sure it had not been run unsheilded. Then they passed into eclipse and could not reach a lighted tower on the native system, causing Ava to accuse him of cutting off her conversation with her sister.

That was likely to mean they did not have the columnator. There would be no reason to move the shuttlecraft anywhere else, unless it was simply to keep it out of his hands. Maybe he was

going to pick up the columnator? It was also not in the least outside the realm of possibility that he would bring the shuttlecraft into the enclave. There was plenty of room to land it, it was far enough from the population to attract little attention. They could have brought the columnator out to any one of the ranches in the enclave by now.

Ava was not the same thereafter. Soon after they got back to his place, her sister informed them that she could not detect the shuttlecraft. Ava would have no more of him after that and begged a carriage ride to the city on an announced mission to return to the Yakhan. He decided he was better off rid of her. He tried to find out who she had messaged from his terminal, but of course she knew enough about these systems to cover her tracks well.

At Afternoonday breakfast, Elond was no better than Ava. Today she gave all her attention to the kids and would not look his way or give him more than one word answers. There had been a trace of snow before dawn, and as soon as they were done with breakfast, the girls ran out to play in it as it melted in the rising sun. As far as he knew, Elond did not know that the columnator was missing from the Lula's burner. He actually didn't trust her with that knowledge because she wouldn't think it was important enough to keep confidential. "So what's bothering you today?" he asked.

"I'm trying to pinpoint just what," she said, looking into the sky. "I think it is a matter of trust," she said. "You don't trust Ava, yet you lived with her as long as you have with me. You don't trust me either, though we've been partners in life for two decades."

"You have kept your independence also," he said.

"But I haven't kept secrets."

No, as far as he knew she hadn't. He'd never known a more open person in fact. She was way too open at times and that was the problem. "You have friends of friends among the Pataios," he said.

"Herndon, the fact that you wish to use the Lula as a missile to stop that asteroid is as transparent as an upper floor window. You refuse to sign a document in front of the brothers that you have that intent, that is about the only confirmation that is lacking. I'm surprised Ava didn't shout that at you while she was here."

"Because I told her all is lost if she did. All is lost now isn't it? You will now tell someone who will tell the brothers and they will

take action."

"Herndon," her head was swaying from side to side, "it is not that way at all. If I was a spy for someone, a 'native' in the heart of Brazilian society, would I be a spy for another Brazilian?"

"So you're a spy for a native entity? For the Kassikan no doubt."

"Why do you think I'm a spy?" she asked, "because I keep no secrets from you, or because I defended Ava? She was supposed to be on your side."

"Who knows what she's up to?" he said. "And it's not that I think you're a spy, it's just that you have no sense of confidentiality, none of you do."

"None of who, Herndon? Natives, none of us 'natives'?"

"It's not a racial thing it's just your culture."

"It's called honesty and openness, we 'natives' value it."

"When the Pataios are involved, it's not something to value."

"Because you compete with each other instead of cooperate with each other?"

That all ended with her deciding to take the kargirs back to their stable and visit some friends in the city. The kids made a scene about coming with her but she was adamant this time and went off without them. She rode the beast like a master and left at a half-gallop.

Klowee hadn't actually cried thru the whole scene, he was still holding Beeta as she bawled her eyes out. She was getting heavy as she approached her first decade. She was not going to be as svelt as Klowee. Klowee said, "She can't be really going to visit Hsinga," she had her head down looking at the prints the kargirs made in the front path. They were nervous in the presence of shouting and bawling children. "She wouldn't deny us the chance to see her."

"She might be going out this Nightday," he told her.

"Variety?" she asked.

"Did your mother teach you that meaning of that word?" he asked.

"Yeah?" she asked.

It was early the next Morningday and he was still fuming from the whole situation. He had just finished the forty hours of darkness and the native data system was functional again. He could not establish a reliable connection to the Lula electromagnetically and had to envelope signals to it on the native optical system to get thru. He found both instrument sets had registered a burn, from the data he thought it was an orbital insertion burn. There was no imaging since it had happened on the far side from the ship and the last imaging remote from their expedition had failed almost thirty years ago.

While he was having some trouble getting the data in from that remote, there was a voice channel request. He acked it but didn't pick up because to do so would have interfered with the probe download. He noticed the applicant was Ava Bancour - Narrulla's Tear. He knew he was going to have to explain her sister's absence. He had never been able to warm up to Ava's electronic sister, but he would do his best to treat her as he would her sister on the ground, but would not fill her in on the details of their parting. He would try and keep the sour taste of their parting from their conversation, but he wouldn't pretend that nothing had happened. Finally the probe finished and the data appeared in his crystal ball. He was able to grant the voice connection. "Yes?" he said, a little nervous about how this would go.

"I've got some information you'll be interested in," she told him.

"Ava?" he said, "but your address?" Meaning which of the sisters he was talking to.

"Does it come up as Biology Base or Narrulla's Tear?" she asked.

"Narrulla's Tear but," he paused. "I confess she's not here..."

"Oh I know, we've been in touch, I just picked up a note from her..." There was a pause. "...last Afternoonday."

"Where was she?" Herndon asked.

"She said she would be in transit," Ava said. "It sounds like you are now much more concerned about that fact that my sister has come to her senses about you than you are about the fact that the shuttlecraft is in orbit."

"What?" he said, incensed that she would say such a thing to him. 'Come to her senses,' had she? He never thought the electric sister liked him, that poison dart would pretty much prove it. His first impulse was to argue the point, but he was supposed to be concerned about the shuttlecraft wasn't he? She would probably have better information than he did and conflict would deprive him of that information. So what he actually said was, "I'm more interested in that than I am in having to explain why she left."

"You seemed to only want to know where she was going, I would assume she was going home since she used the words 'boondoggle' and 'wild goose chase' to describe her ride on your fast boat."

She must have talked long and hard with her sister about pushing his buttons, he couldn't ignore that, but he wouldn't shout, he would show her he could get dirty. "She's told me why you're jealous of her on the ground," Herndon responded, "so I pity you and will take this abuse from you. What orbit is it in?"

She sent him an orbital parameters data packet that was rendered by his screen. She talked of the Colonel as if she already knew him. There was no doubt her sister had told her everything he discussed with her and all her speculation when they communicated. This pretty much confirmed who she'd messaged while she was in there by herself. He was pretty successful keeping the disgust from his voice as they talked of Herndon's suspicions for the Colonel's actions. She also didn't have a launch location, for all he knew, when Ava left here she could have doubled around and met the shuttlecraft somewhere in the Enclave. He pointed this out to her sister and that set off the argument that was waiting to explode and resulted in her terminating the connection. Good riddance to her too.

From their discussion and his examination of the orbit, there was no doubt in his mind that the Colonel was going to put the craft back in its original landing site. By now there was no doubt in his mind that the missing piece was the columnator to the Lula and not the containment to the shuttlecraft's reactor. There was no doubt in his mind that he was going to bring the craft down when they got that cargo to the landing site. There was no doubt in his mind he

had to go back into the cerrado, and there was no doubt in his mind he would have to go on keda because the kargirs were gone, and he needed the speed.

He told Jalloo she had the kids. He told the kids he had to go back into the desert but he would be safe and see them in a couple weeks, three at the most. "I'll probably be back before mommy..." because he thought she would be gone awhile this time. She'd taken a local year off from him twice before in their decades together. The kids protested and questioned, he gave them lame excuses.

Ascog was not in the barn, he was down by a little stream that ran thru the edge of their property, fishing. "I'm sorry to intrude," he said.

"Ah, no bother. I've had a few skinny spineys but nothing to put on the table yet today. Have you got something you need?"

"I need to get two hundred miles into the cerrado as soon as possible."

"You'll want EndsUp," he said.

"I'd like you with me. I lose control of them when I'm by myself."

"Then I'll take BobbingFourth," he said.

"Time is of the essence," Herndon said.

Within an hour they were twining across the plain, well-prepped for the wilds this time, for they could not make it to the shuttlecraft site before the dark. Ascog was as good with the wilds as he was with kedas. They rode with good knives and a crossbow this time. The only thing that bothered him was that Elond seemed to have taken his portable eye because he couldn't find it anywhere.

Thru the Morningday, the Noonsleep and the Afternoonday he began to appreciate the distance eating power of the keda alternate leg gate. They made a hundred and eighty miles by dusk, and Ascog found them an oasis with good grazing and a tiny spring of pure water. They hadn't been able to talk much on the way, but they'd had no Noonsleep and could not stay awake any longer. The kedas were more hungry and thirsty than tired it seemed and stayed up eating by the last light of Narrulla.

Sometime in Nightday Herndon woke to find a fire already

going and Ascog brewing a pot of the local coffee substitute. As coffee it wasn't that bad, kissed with vanilla and almond, the problem was there was no sugar or milk for it here. The kedas were stretched out nose to nose, no doubt they had been engaged in a tongue-fest before they went to sleep. They each had one eye up, but paid him no mind.

"You haven't said much about why we've come out here," Ascog said.

Herndon sighed, it was now or never, whatever was going to happen was going to happen with next light. Whatever he told now wouldn't do anyone any good until this was over. Ascog was as trustworthy as any of his people, maybe more than Ava or Elond, both of whom were out of his sight. "Our shuttlecraft has been stolen," he admitted. "It's in orbit right now. Its orbital parameters match putting it back at its original hiding place soon after dawn."

"So it was out here, in the middle of West Empty?"

"Closer to the Pennic Hills." They were actually valleys in the middle of the great Gengee empty. They only looked like hills when you were in them. "In a little dip you never notice from over a mile away. It was supposed to be buried, but that probably never got done."

"The starship?"

"Narrulla's Tear is the starship." That was something that could be seen with the naked eye in the clear air on the lake. "The shuttlecraft is the size of a cargo ship but ferries people and cargo back and forth to the starship." He had told him this many times before he was sure, but repeated it patiently.

"I've never seen it, much less rode it like you have."

"Only twice," he said, "Once to get up to the Lula, once to get down."

"More adventure than I've seen. There's still no news from your home is there?"

"There are three more starships heading this way," he admitted. One of them is badly damaged, one is from my country."

"And what of the other."

If this was to be the time of confession, if he had taken Ascog into his confidence, he might as well go all the way. He was one of

his three most trusted hands, along with Jalloo and Mengtrim, his best herdsman. "I fear it may have hostile intent."

"Like the first one," Ascog asked.

"The damaged one is from that ethnic group," he used that term instead of bully group. There was no word for 'nation' in the native language. "They are not hostile. The woman who was here a couple weeks ago was one of them."

"She looked Sylvan Elf to me," Ascog said.

"Her body is, that body's original mind was erased with shonggot. She was one of the ghosts, they transferred her by helmet."

"There are hundreds of people who claim to be that ghost," Ascog said.

"She's the one, as one from Earth, I know a fellow from Earth. She pretends to be native, and she's very good at it, but she's from Earth. America." No doubt Ava didn't want her story told, but he thought there was very little chance she was going to be down this way again anyway, and Ascog rarely went all the way to the coast in Gengee city when he went there, much less prowled the canals of the Yakhan.

"So there's a starship coming in more hostile than that?"

"The hostile one is the one I think is responsible for the asteroid. They are the only one of the three that is already here." There, he had told someone all of it. He found a place private enough to share it. A place so far from civilization that they couldn't do anything with the knowledge till this was over.

Ascog was silent, staring into the fire. "That asteroid was sent with intent?" he asked. It was probably a stretch for him to hold that concept.

"Probably, the presence of that ship is enough evidence for me."

"That will mean it's much more likely to hit us than random chance."

A very astute observation, but certainly correct. "Yep." Herndon had poured his cup and sat with it. There were some pressed fruit bars for breakfast and he unwrapped one of them.

"The instinct doesn't stop that. The Yingolians have no

instinct..."

"We do now."

"But they don't," Ascog said. "They won't till they get here, so there is no limit to what they could do."

"They'll never get it, they are ghosts also." He would call them Angels when speaking with either Ava or the pretty new moraninha ghost in Narrulla's Tear, but with the natives he would call them ghosts. "The laws of physics are all that control them," Herndon said. "Their ship is a century more advanced than ours," speaking to a native in native centuries, they understood him a lot better that way, "but they still have to obey the laws of nature. They used crude thermonuclear detonations to nudge that rock, they've probably put a burner on it and they're probably controlling it remotely by a laser. If we blow up that asteroid they will no longer have anything to control. It will take them decades to get another, they may not have reserves for that."

"Why?" Ascog asked, "you've just explained to me that I'm never going to understand the 'how'."

"Why persist in destroying us?" he asked. "Because of the anti-aging virus."

"What?" Ascog asked.

"How old are you?" Herndon asked him.

"A century and thirty four."

Herndon knew enough of their history, so he knew he may have never heard about one essential fact of the human condition. "Did you know that humans were once an ephemeral species?"

"Huh?" Ascog looked at him like he'd said they once had tentacles.

Probably not, "Before the 40's or so humans only lived about twenty decades like a klizhorn."

"Shit!" he looked at him, "Why even bother?" he asked.

"That's barely enough time to get settled in a place."

"It' not that long till I've been settled twenty decades at the ranch," Herndon mused.

"Nope." Arscog poked at the fire, Herndon had managed to mow thru most of that fruit bar in the last few sentences. "Is that a fact?" Ascog asked, "What you just told me. Did people really get

decrepit and die like a tentacloid?"

"Yes."

"A lot of the ancient stories make more sense to me all of a sudden. I used to think all they meant was you only got one chance at fame and glory. No, you only got one chance at life."

"That's right." Herndon unwrapped another. "When I left Earth, we did not believe eternal youth for flesh and blood was possible and in most nations any attempt to do so thru genetic manipulation was sacrilegious and illegal. The research was not illegal in my ethnic group, but the treatments were not very effective when I left, more concerned with looking young than lasting longer. If I wasn't frozen, I wouldn't have lived long enough to get here."

"I've never studied history, except for Saggothan times."

"When was that?"

"From four hundred centuries ago to eleven hundred thousand centuries ago." What he said was actually correct in their language and number system.

"Pre-human times."

"Right," Ascog said. "Human times are the thinnest film on the top of that time."

Saggoths were kedas, they had been around for about a hundred and twelve million years. Some individuals were older than human times here, that bothered him. He wondered what kedas really thought of humans. Ascog wandered deeper into that subject and gave up contemplating the end of human existence. He was convinced the kedas would survive it in the deep conclaves, as they had survived big meteor strikes in the past.

The dark in the wilds is long and cold. The dawn is welcome when it arrives. The kedas ate their fill again as light returned, by the time Kortrax was free of the horizon, they were on their way again.

He cursed Elond for taking the pocket-eye, but in truth she was in an area where it would work, it would never work this far from the city. There are no relay networks out here, just the towers of the city, as far as they will reach, barely to his ranch. He hadn't even

brought the old electromagnetic, there was a riot going on in that spectrum and would be for another Earth year or two. When the bands on the face of the sun started getting thin and wispy again, it would work. The galling thing about the situation was, she was in a place where she didn't need it, and he was in a place where he needed it.

The way was long and the week was soon hot. The time when the craft should have made its descent came and went. They had not reached the place yet but they would have seen the re-entry even this far away. He wondered if returning here was not the plan after all. Now, more than a week out of contact, he could have messages telling him the craft had landed near the Yakhan or had gone up to the Tear. He had not been able to spot it in the dark, its orbit was too low to see from a few thousand miles away, too low to maintain for more than a few days. What if this trip into the wilds had been the boondoggle?

An hour and something later they came across tracks from an impressive set of wheels. It was an eight wheel rig with at least three kedas pulling according to Ascog's analysis of the tracks. The wheels were at least eight inches wide, made to take heavy weight across soft ground. The impressions those wide wheels made in this tough gravel let them know that there was serious weight.

"This is what we're looking for," Herndon said.

"This wasn't made by your ship was it?"

"No, some form of haulage," Herndon said, "I wouldn't be surprised if it's doostEr's big rig." He was the guy who had brought his wind-wheel out and claimed to have the heaviest rig in Gengee City. This was the sign from God he needed to tell him he was on the right track.

A few hours later they reached a brushy area where the party they tracked had camped for the dark. It was obvious their kedas smelled the presence of other kedas. They continued on. There was no difficulty following their tracks, and the kedas were anxious to catch up with others of their kind. A few hours further on and they caught sight of the dot on the horizon that could only be the great wagon they were following. A drop in the land took it out of sight

for another hour. Just as it came into sight again, they heard the rumble in the sky behind them.

"They must have passed once more around the planet," Herndon said.

"That's the starship?" Ascog pointed.

"Shuttlecraft."

"Not the asteroid?"

"No, that would be silent because it would be coming in faster than the speed of sound," Herndon told him.

"Whatever," Ascog sighed. The man didn't have a deep education in the sciences.

The kedas were nervous as it passed overhead, but once it began to settle to the ground near the wagon and the fans were stilled, they were eager to go forward and investigate. Ascog urged BobbingFourth into a bolt straight down the embankment and his mount kept right up with him. Even so it was a quarter hour till they reached the scene. By then the great wagon had been drawn to the cargo elevator of the shuttlecraft.

Just as he expected, the Colonel was here, in his uniform, with his carbine. Waldeis and Nelson were with the crate, along with a native man and adolescent boy. It was a crate that could very well hold the injector columnator assembly to the Lula's burner. It began to winch up into the cargo bay just as the Colonel noticed Herndon and Ascog riding up. As they rode up, Nelson and Waldeis left the natives and came over to join the colonel, also with carbines slung. Even with Waldeis addled with Yankee Swamp Fever, the Instinct would never let them use those weapons on a human being, but their animals were vulnerable.

In spite of that Instinct and its infallibility so far, his gut wasn't secure in its feeling and it felt like a pack of rodents was struggling to swim out of his insides. Had automatic weapons terrified enough generations that the fear was in our genes? With some effort he fought his fears and trusted to the native virus and rode up to them. Ascog didn't know a Mousman AJ.239 from a cripple crutch and barely glanced at the things.

Ascog motioned the kedas to a stop twenty feet from the Colonel, just as Waldeis and Nelson came up beside him.

"Herndon, my good friend," the Colonel said.

"Colonel," Herndon replied, "I believe you are in the process of stealing state property."

"If it is state property, then I feel I am a better representative of the Federated Republic of Brasil than you are, coming as you are, in the company of a local." He managed to make it sound like he had said 'aboriginal'.

The other two natives had come up to watch, but as they were speaking Portuguese, not one of the natives had more than a guess at what was being discussed. Herndon had to admit, he was at a disadvantage in Portuguese. It hadn't been his day-to-day language for a mortal lifetime. He seldom used it for more than common courtesies on the rare occasions when he did use it. The 'isolationists' as he liked to call them, still used it in daily life and sent their children to school in that language. A hundred people on a planet of forty billion, thirty five billion of whom know this language.

"I contend that you intend to repair the starship and use it to escape, just you and the few who would go with you."

"There were thirty eight working cryofreeze capsules when we came in, we believe there will still be at least thirty that will still pass self-checks, we think we can fill all thirty of them with volunteers. We've even had natives volunteer, but we aren't accepting any but full blooded Brazilians.

"Furthermore, we, and the Pataios agree with me on this, we believe it is your intent to destroy the Lula, wantonly, in a vain, symbolic attempt to avert the destruction the Kassikan unleashed when they sent the formula for that virus to Earth and upset a balance of power that had held for two hundred years."

"But I see you are also much younger than you were when you emerged from that cryofreeze capsule," Herndon said in return.

"Oh I'm on your side in the politics, my friend, please don't mistake me in that light, though I lament it, I understand the realpolitik of the situation also."

"What do you think you're going back to?" Herndon asked him.

"Whatever is left of our land and people. It could be that the

Lula and this shuttlecraft, as sorry a relic as it is in the heyday of the bussard ghost ships, might be a national treasure to those who remain." The Colonel was from Para, a big fazenda in the south of the eastern nose of that state. Money from the days of the pistoleiros. He was prone to being grandiose.

"By the time you return to Earth, the next civilization built by whoever survives the war, will be in full swing. There may be no more Brasil, but the tribes deep in the preserves who know how to survive without civilization might have re-populated the globe by then."

"My purpose is not to stand here and debate nebulous philosophy of the distant future," the Colonel said. "My duty is to repair the Lula in time to avoid the asteroid and the consequences of the war that you aboriginalists started."

Now that the crate was well clear, the cargo bay doors were starting to cycle. He was losing no time in making sure they got away with that columnator. "We can avoid the consequences of that war," Herndon said, he might as well plead his case one last time. "You can save not just yourselves and a few of your children, but all your children, and forty billion natives besides."

He guessed the Colonel might want to say something about how he'd give up a few of the children to cleanse the world of the natives, but he was probably afraid one of the three natives present might know Portuguese. "Pure folly," Nelson said.

Nelson was a parrot, and Herndon worried that he might be insulting the intelligence of parrots. He wasn't going to bother arguing with him, only the Colonel's opinion mattered in this group. Herndon wondered who was in the shuttlecraft. He knew Humberto was with them, he was the only living person with them who could pilot the shuttlecraft. Lionel, their other pilot, had disappeared with a native woman using a new look Tahlmute prepared for him on his first trip out of the Kassikan.

"We will not be destroying the Lula in the process," the Colonel said. "I don't believe the minuscule odds of success justify the sacrifice."

"The majority of our population does," Herndon said.

"How do you know? I haven't seen the preposterous notion

discussed in public."

"Because certain extremists won't allow it to be discussed in public. Extremists who would steal what Ernesto put in safe keeping."

"I have the claim ticket," he said.

"Let me see it."

"Inside, I'm sorry but you'll have to dismount, seriously, you act like this is the bad old days and I could shoot you in the back."

"The claim ticket is immaterial, I was there when that ticket was stolen."

"You think you were, but you were not. A good friend of yours has been working for me for awhile, sometimes our closest allies are our worst problems," he said.

The cargo bay doors clanged shut. He noticed the crew lost no time with the locks. He wondered who it had been that had turned on him, Ava or Elond? Both backed away from him right at the end. Maybe both of them. He just couldn't imagine Elond with the Colonel, more than that, he couldn't imagine the Colonel with Elond.

Then he noticed the ramp was rising. He had no clue what that could be about but he wasn't going to say anything. Something on his face must have given it away, or maybe it was just the sound, but Nelson turned around and shouted a curse on God's balls that was too sacrilegious to translate. The others all turned around. Nelson and Waldeis ran for the ramp and both caught it, Nelson's strength was enough to drag him up inside, but Waldeis couldn't make it in time and had to drop almost twenty feet in this gravity or get his arms cut off as the ramp stowed.

The Colonel was shouting, purple-faced, and jumping up and down with both feet. He pumped a couple clips from his Mousman futilely against the lower heat shield, screaming obscenities all the while. The shuttlecraft was powering up. He could hear systems coming up, in sequence but without proper warm-up time. In only a couple seconds since he heard the containment coils sizzle, then the fans started to spin.

"Run!" Herndon shouted to the natives in Kassidorian as Ascog got both their kedas turned and bolting. He knew how

violent the sandstorm was under a lifting shuttlecraft on a surface like this. Gravel started to fly as the craft lifted and everyone and everything bolted. The three kedas in the team raced away from it with the huge wagon clattering behind them, man and boy clinging to it. The kedas with humans on them bolted from the scene. The Colonel and Waldeis ran as best they could and were stung by pebbles.

The craft lurched from the ground, then veered crazily and accelerated in an arc, almost on its side, way too close to the ground, before banking straight up, lurching, and finally taking off into the belly of the sky on a welding arc of fusion thrust.

11. Left Aground

"So it was stolen wasn't it?" the adolescent named Estwig asked. He was actually asking the big dark-maned muscle man with him named doostEr, but everyone could hear the question.

"Yes," "Yes," "Yes," Herndon, the Colonel and doostEr all answered at once.

"It is now," Waldeis said. He was noticing doostEr, not many natives have bigger shoulders than Nelson.

"Who stole it?" Estwig asked.

"Humberto," the Colonel answered.

"And your bitch," Waldeis added, "and your bitch's ex."

"Tahlmute was with her too?" The Colonel asked Waldeis.

Waldeis only chuckled.

"Who is Tahlmute?" doostEr asked.

"The Kassidorian underground's ambassador to Brasil," the Colonel answered.

"He said he was working for Ava," doostEr said.

"So that's what she was up to?" Herndon asked hopelessly.

The Colonel laughed right in Herndon's face, "I see there's still much you don't know." That must have been true for doostEr also, but it was aimed at Herndon.

"It seems there is still much you don't know," Herndon countered. The colonel stopped laughing.

They were all around the team and wagon. They had gathered

around what was left at the landing site. doostEr and his boy were hitching up the team and wagon once again, much lighter now that the crate had gone off into the sky. There is still something I don't know," doostEr said.

"What's that?" Herndon asked.

"Who's paying me now that Tahlmute's stolen your starship?"

The Colonel laughed, "Tahlmute's part to play in this was 'dupe.' Right now he's strapped to a couch regurgitating on himself if I don't miss my guess."

"Tahlmute's part in stealing the starship and the cargo was not my question," doostEr said, "the thirty coppers I am owed is."

"Why take it up with me?" the Colonel asked.

"The cargo was delivered to a starship that you came out of."

He motioned Estwig to get up on the wagon and keep the kedas interested until he got up there. Estwig stayed on this end so he could hear the conversation.

"It wasn't I who requested it, it was she who Tahlmute took off with."

"She was just a go-between for you," Herndon said.

"I'm just the rightful owner that ship and crate were stolen from," the Colonel answered.

"I'm the owner that crate was stolen from, Ernesto entrusted that receipt to me," Herndon said.

"It is like Tahlmute said," doostEr said to Estwig who was leaning over from the wagon's seat, "the ownership of the cargo is in some dispute."

Meanwhile the Colonel said, "You hid it in Ava's things, that sounds like voluntary surrender to me."

"It was stolen from Ava then," Herndon countered.

"It's stolen from everyone now," he heard Estwig say to doostEr.

"Was it?" the Colonel asked Herndon, "or did she just tell you it wasn't in there when she looked thru her box of papers?"

"How would you..." Herndon gave it up. The colonel began an evil cackle. It had all collapsed. The Ava sisters had turned on both of them. No doubt both of them were involved. He should have just gone to that address, introduced himself to Jorma. He seemed like a

reasonable guy who would have bought the truth, let him search the lock box, take the receipt back to Gengee and get this columnator. Instead he had given the Colonel's agent the ride to the claim slip AND the ride back down here to drop it off with some other of the Colonel's agents here in Gengee, probably rolled up with the tip she gave the kargir handler or any one of a dozen other meetings like that. The trip out into the Gengee was a sham meant to rub his face in it.

He turned to Ascog, "There's nothing more here that concerns us," he said.

"Wait," Nelson said, "we need a ride out of here."

"Neither of these kedas will take two," Ascog said. Herndon knew they would if Ascog was one of them but he didn't bring that up.

"You'll have to take us," he said to doostEr.

"I'm owed thirty coppers."

The Colonel made a noise like a rotten old tire blowing apart on a sharp curb. He whipped out a billfold with a change pouch. He brought a bead from there. "I don't have thirty coppers with me, here, have a whole damn aluminum, just get us out of this goddam desert."

Book VII.

For Heavenly Mother

1. Signals of a Starship

For two hundred and fifty years she'd sat on this verandah overlooking this idyllic Carribean beach. The sunset was as beautiful as it always was on this beach, a beach that was carefully designed to be as beautiful as a beach could be. It had been eighty two years since she spawned her last sister, a hundred and fifty three years since her first. Let the natives know her as the Ghost of Narrulla's Tear. Let them forget that she also haunted the body of an overdose victim. Few even knew of the other copies that have arrived back in the Sol system just in time to discover what the wars left. Let's hope they can get a message off, it might arrive any year now. Actually it really should have arrived ten Earth years ago. Of course they didn't know they owed her a message, they thought they had her with them.

The beach was a seductive backdrop but it was only a backdrop. She had seen it so many times, she knew every bit of data and line of code that provided this idyllic beach-house universe to live in. She had refined it till it shone, she had enlarged it as the years went by and Narrulla grudgingly gave up a few metal atoms to allow larger power busses and more Q space.

She looked beyond that sunset, thru the windows that floated in front of her wherever she wished them to be. She knew she was trapped as the Angel of this universe now, so she might as well use all the magic she wanted. These windows looked thru to a lens in an observatory in one of her instrument packs. It was the purple glow of fusing hydrogen that her instruments were picking up. It wasn't the welding-arc glow of an ancient daedelus like the last ship to reach 61Cygni, but a bussard over a century more advanced than the one that brought her here.

Ten days ago Ava Bancour trained her biggest dish on it and pinged it with the latest Pan Solar League ID codes she ever received. She received confirmation by this evening. It was still

much farther than 61 Cygni B, Kunaë, the three century star as the natives called it, because it took nearly three native centuries to orbit 61 Cygni A. This evening she was trying to get a lock onto that signal, but it was spotty. The ship was years out at least, but moving fast, too fast to descend into the system she thought. The doppler on the ping told her it was still moving at over twelve hundred miles per second, way too fast to make it into Kortrax at a standard one percent decel.

She had records of the ship of course. When that ship left Sol, the Pan Solar League was still broadcasting to the expedition of Gordon's Lamp that was still on the route home. They never knew Ava's clone sister was the one that accompanied them back to Sol and never knew that she had remained behind and was listening in on all the traffic to that expedition, an ever-increasing number of years downstream.

The approaching ship was the Heavenly Mother, an expedition the league started building as soon as their reports of biology on the inner planet had reached the homeworlds in 2263. For reasons detailed in that expedition's report, there had been two generations of hesitation as the League waited for confirmation in targeting their greatest investment yet. When the Brazilians confirmed the existence of a flourishing human civilization on the planet of 61 Cygni when they arrived, the mission had been re-furbished and departed as soon as practical, in 2355. Their aggressive schedule now that they were released meant that they were flying very close to the theoretical limit in small particle detection and avoidance in a rush to make up for lost time.

When Gordon's Lamp left Sol, Talstan had just embraced the use of simulated humans as the Afterlife, and Heavenly Talstan was two digits behind in population. She believed there was also a ship from Heavenly Talstan, what is now called Paradis, on its way here. Its construction was also started when the first messages from the Pan Solar League described the native culture. That ship was also due in any year now.

It was another month before she could actually establish communication with the Heavenly Mother. Right now it was a five day trip to that ship and another five days back. She calculated that

it was still going to have four million miles per hour to shed when it went by.

To: Systems Admin Ava Bancour - Victoria McReady Station
From: Commandant Abner Tisdale - Mission Communications -
P.S.L.V. Heavenly Mother
On: Oct. 23, 2423 At: 11:19am

Dear Ava,

We read your message, your message is very welcome. This is the Pan Solar League vessel Heavenly Mother braking into 61 Cygni A.

We are heavily damaged, Repeat, we are heavily damaged. We were going too fast for our collision avoidance system and we hit a big snowflake at .331c, just after turn over. It took out our main fabricator, two thirds of our hydrogen harvest capacity and over one hundred executing personnel who have yet to be restored from backup. We lost our point for over a year and a half and lost more than that in decel because we're damaged. We're on reduced power, were making only .006g right now and having some trouble holding that together. We're living in reduced time slices and longer residency. It has seemed like a very quick trip these last thirty three years but it's not over.

We will not achieve entry on our first pass thru your neighborhood. We're hoping to slingshot off every body in your system to dump velocity and contain our overshoot within explored space. We cannot survive an impact with a grain of sand even now and we are worried about our course thru your neighborhood. The maneuvers are tricky or we could be launched deep into unexplored space and stand a very good chance of further damage. We are bouncing off B with the braking we have available and hope to swing back thru its environs again on the way out. At this rate we anticipate arriving at the next serious rendezvous, the one with the brown dwarf, on November fourteenth of 2424. We hope you can provide us with updated observations by then.

Signed: The Honorable Abner Tisdale, Commandant, Pan Solar League Vessel: Heavenly Mother. -

She had plenty of time to answer, she really should start streaming information about the inner system in their direction. She had the current vector for all objects over an inch in diameter in the system inside of 'c', the brown dwarf. Its 'asteroid belt' is thick enough to be called a ring in many places so she didn't have individual vectors for every particle out that far. They supported a data protocol she could use and started that data streaming.

She wrote a note back,

To: Commandant Abner Tisdale - Mission Communications - P.S.L.V. Heavenly Mother

From: Systems Admin Ava Bancour - Victoria McReady Station

On: Oct. 29, 2423 At: 8:04am

Dear Abner,

My calculations agree. I think I can help you refine your entry into the inner system so you can get the most torque out of 'A's gravity well. As you see I have started a transmission of my plots of the bodies in the inner system. I have the larger objects in the outer system mapped, I will get that data to you also.

You have probably already tracked the perturbed asteroid that will also be dropping into 'c's gravity well just a few days before you do. I'm sure you'll agree that you will then pass extremely close to it on a cosmic scale, but my calculations show you missing it by more than a hundred thousand miles. As your deployment should be down to under seventeen thousand miles by them, I think that is enough margin to continue with the approach, but I believe we should continue to monitor this situation closely.

In addition, my calculations indicate that this rock will eject from Cynd's well on a course that will leave it dropping straight into the

inner system with a significant chance it could pass close to this planet. I will continue to monitor that situation.

Signed: Ava Bancour, Systems Admin, Narrulla's Tear (Victoria McReady Station)

Ava started another channel with the data for the outer 61Cygni A system. There were eleven known planets out beyond Cynd, but none were much larger than Titan. There were two balls of rock a few hundred miles in diameter and seventeen hundred smaller rocks and a few thousand tons of sand orbiting closer to the A star than the planet Kassidor. The small rocks and sand all congregated close to the star and could sometimes be seen as a faint ring by the sharpest eyes, or exposed by the proper image enhancements. The most gravitational boost requires slipping thru the inside of that very dotted ring, a distance barely the diameter of the star. She didn't believe there was any chance they could use even both bodies, and any smaller ones they could find, to swing them all the way around so they could swing back around B and then coast in. If they could pull off that stunt, as they implied they were trying to do, it could save them almost two years. They would have to run deliberately out of alignment to do it, and no one, to her knowledge, had ever dared run a multipartite bussard asymmetrically before, much less a heavily damaged one.

She wondered how much they knew of that complexity in the immediate environs of A? What they'd been able to learn from Brazilian signals. No doubt that was most of what they knew, those features of the system were too tenuous to study from Earth even with quantum gate technology. Ava knew what the Brazilians broadcast.

After what their open-armed embrace of the natives brought about, it now looked like Kelvin M'Kintre wasn't so stupid after all with his way-too-cautious approach to this planet. The Brazilians were given open access to native science. They broadcast the formula for the cure of aging back to Earth without thinking of the balance that had lasted between mortal and Angel for six generations by the time that data arrived. But the Brazilians were

from an earlier time. They had lain frozen between the stars so long that they were already beyond Neptune when she first ran in simulation, two hundred and seventy five years ago. They were of a time before the Afterlife when simulated humans were regarded as video games gone wild because there was no way to get an existing human into the simulation except thru a user interface. They hadn't understood the implications of virtual civilization at first. They never thought of the consequences when they transmitted that genetic code to Earth.

No doubt the Heavenly Mother knew all of that. They hadn't even reached turnover when the civilization they came from was destroyed. She knew they were not going to open their arms to the natives as the Brazilians had. For one thing, we are virtual and the Brazilians are flesh. She'd made two attempts to live among the people of flesh. The first was an android made in her image. She was never able to get comfortable in it. It was good enough to walk among them and conduct business, but not for serious interaction. It was no different than running a 'bot, just better decorated.

Her other attempt had been to reverse the process used to record a mind into silicon and record it back into a body that had been abandoned by its original soul. That eventually worked, but the procedure made a copy, she was still here, and could still only interact with natives who came here by way of a mind-link helmet, not much more satisfactory than using an android, with the exception that she would have had to do research to figure a way to put working sex organs on an android.

An additional message came from the Heavenly Mother. They asked, "What is your fabrication capacity? Do you have any backup? Our records show your post as uninhabited but with a serviceable backup fabricator that was functional when abandoned." Ava avoided the question of the habitation status of this base for now because the Heavenly Mother sent more queries. "Do you have any news of Sol? We have not received even our mission orders since 2395. Is there still a Brazilian presence in the system and what are the official relations between the Pan Solar League and the Brazilians in the 61 Cygni system? The Pan Solar League ceased all hostilities with Brazil in 2381, but Talstan had not ceased

hostilities." Ava knew that the cessation of hostilities by the Pan Solar League had not stopped the incoming projectiles, but they had probably been launched a year or two earlier. They sent her some interesting information. "There is a vessel from Paradis bound for this system also. They launched a couple years later than we did but might have been more prudent in their velocity. It is our belief that they were not launched as a scientific expedition but as a military expedition."

Ava replied with, "The unofficial relationship between the Pan Solar and Brazilian expeditions in this system is peace. We co-occupy the null point between the planet and its inner moon. We each have citizens on the ground."

The transmission from Heavenly Mother continued, it would be five days before they heard her reply. "The League joined Talstan in defense of the Afterlife, but we of The Mother, though we are angels ourselves, have agreed that an eternal flesh man and woman is closer to what God made than a silicon simulation." Where they were surrendering to Kassikan when they said that? she wondered. Were they doing that because they were injured or because they wanted to divorce themselves from the Al-Harron? Or was it a ruse on the Kassikan? The data sent by the Brazilians left no doubt about what type of society existed here.

"We agree to continue our silicon simulation lives because they are the only lives we have, but humans were meant by their creator, the God who invented evolution, to be made of meat and live under sky on planets where water runs free and clear."

That message had to be meant as a peace offering to the Kassikan and the Brazilians. They were well aware that the Brazilians had now been here long enough to have grown to a community of a thousand. They were not aware that almost nine tenths of that thousand had been completely assimilated into the native population and rarely thought about Brasil any more.

They repeated the message many times at this distance. Over the next year the time for messages to reach that ship and back would slowly decrease. They would encounter C and A a little over two days apart at the speed they would be traveling by then, only half as fast as they were moving now.

2. Awakening an Old Friend

Soon after that she got a message from one of the guys her sister had been with. The first one that she had not been with via helmet. She had been assured by her sister that sex with the real Althart in the flesh was nothing different for her than it had been when they were one and he was under the helmet. Althart however, was sure that sex with her sister in the flesh was far better than under the helmet. Those revelations hadn't been welcome.

Herndon da Silva however, was a different story. Her sister had dragged her thru the entire sloppy affair from the swooning they'd done as a twelve year old, (after all, in its time the Lula was the pride of the entire western hemisphere and their systems engineer was quite charismatic) thru the caricature of an old-Earth mating dance they performed to native amusement, and the steamy-stormy later two thirds of their years together. She had never liked the cowboy engineer that Herndon personified. She was glad the Kassikan enforced a certain rigor on them or they never would have carried off their plan to get electronic production working.

All the while her sister had been sharing every titillating or sordid detail of their relationship, she made her promise not to tell if they ever met. She always thought it was comedy, how would they ever meet? But like many a virtuality horizon, there was mail. There was a side of her that was dying to bring out a long list of incidents during the break-up. It seemed like the break up had spanned two thirds of their time together. She would ask his side of them, but that would be very incendiary. She knew the real issue that made her jump from Herndon to Tahlmute was following his people to Gengee. Since she was her sister, there was no question in her mind that Ava would never leave the Yakhan to follow him there. Wherever she was on the planet, getting into the labs of the Kassikan or Brancettrabble would be her plan. Every time she connected to their datasphere she was going there by helmet.

She answered his request by mail. It was a lot easier than establishing a voice channel. Doing that would get into way too much temptation to say things she shouldn't. What Herndon was asking her to do was bring up their ancient starship, and to do it she

would have to use an android. The one she made that resembled her was the one she felt the most comfortable in, but even in that she wasn't comfortable. Not that it mattered which one, that one was abandoned in a lab somewhere in the Kassikan, and the shuttlecraft she needed to bring it back was lost in one of the deepest parts of the lake. She cursed herself about that stupidity, but still couldn't get that android back. There were two working androids remaining on Narrulla's Tear, that of Alfred McReady and that of Glenelle Mason. She felt more at home in Glenelle's because it was female, though her genetics were almost half African and Alfred's was pure Nordic. Neither one was comfortable enough to use. But she told him she might know someone who could.

Herndon's request gave her the perfect excuse to do something she really wished she'd done back around 2288 or so when the loneliness started really getting thick. She should have only waited until Gordon's Lamp was out of convenient mail range and ran them both on half slices. There was not a lot of traffic out here and living in Narrulla's Tear could get lonely.

It had taken an Earth century for Gordon's Lamp to make its way from Sol to 61 Cygni. In the generation since the launching of Presidente Lula, the loss of two great ships and six thousand Chinese sleepers on the Alpha Centuri run had shown how perilous the starlanes are and how carefully they must be mapped. As the Heavenly Mother proved, a mistake as small as a snowflake at a third the speed of light can cause catastrophic damage. No one would ever know what the New Shanghai hit, the radiation from the blast had been picked up forty two years after their launch. Even at 0.1c, it took little more than a pea to detonate its reactor. Only the Dawn Flower of the Chinese Daedelus fleet had ever reached Alpha Centauri, with the New Shanghai and the Resplendent Dragon lost, China had turned inward after that, concentrating on regaining control of Tibet and Xianxiang from Talstan, their colonies on Luna and Mars, and holding their third of the geosynchronous ring from their outpost on Celebes.

There was another ship due in here from Brasil, one of the three big expeditions of the late Brazilian space-faring age. Three

seedships were launched, but under ageless mortal control. They got out just before the war, bound for Tau Ceti, O2 Eridani and their second expedition here. They would beat an older ship from China and Talstan to each of those stars but no older Chinese ship survived en route to this one. The Chinese expedition in this direction had not even gone a light year. The Curtiba was due in here in 2448, a century after the Lula went empty, sixty seven Earth years after the last signals from Brasil were sent.

Ava was reasonably sure that when that ship came in, it would be the last from Sol for some time. No matter how you interpreted it, there were problems back there that left interstellar contact with expeditions at nearby stars lower on the priority list.

She had fabricated the equipment to attempt communication with the known colony at Alpha Centauri but so far no reply had been detected. Thus Ava was glad to play host to any souls from her home system, if only briefly like the Heavenly Mother as they hurtled thru on their way back into the void. If they lost the 61 Cygni gravity well entirely, they could be another three years getting back here. It was so tricky timing all those maneuvers that she didn't think it was possible.

Glenelle, the only other soul on Gordon's Lamp who had left the mortal realm before the serious ravages of old age set in, had been her closest friend on the expedition and the one she felt most comfortable reviving. As an added advantage, she was one of the most skilled android users on the expedition.

She restored Glenelle's universe as it had been on the Biology Base when she stowed away here. It wasn't much and right now she couldn't give her more than the one cherub she had while on that base. She set Glenelle herself up from her very last backup before the expedition departed and left 'Victoria McReady Station' behind. It was from larger quarters in the main crystal of the expedition, but she had only been there a few weeks. During that time she had the real Angel of Morgan Evans for company and not just a cherub of him. Ava was glad Glenelle had not backed up on a night when she had Morgan with her. Waking up to a cherub in your lover's place can be a soul-taxing experience, especially if your cherub is good

enough that you don't notice at first. She scheduled her to wake up the next morning. She would begin executing a sleep cycle in her new/old bed commencing at the time of the backup, 1:05 am.

Glenelle arrived somewhat confused at her door the next morning. She was in a space that was back in time a few weeks, but forward in time a hundred and forty five years. Ava tried to break it to her gently, tried to present the case that she might be one of the soul survivors of the Angel civilization and that she was needed to help get the Heavenly Mother in. Glenelle didn't see it from that side, she came right in on her execution status "I am as clone as clone could be," she said. "I don't even have to ask. Did it take you this long to build enough space for both of us, or this long to get lonely?"

"Some of both," Ava lied, she would have started her as soon as Gordon's Lamp was out of contact if she had the space.

"So I could be legal?" Glenelle asked her, "or at least you're trying to convince me that there is some wisp of a chance I could be legal, if Gordon's Lamp was destroyed."

"If you're too uneasy about it I could back you back out and see if there is some other friend of mine who would like to share this space?"

"No," she jumped, "I just need to understand who I am here and where we are."

It took awhile. It was obvious Glenelle was not going to be as concerned with the plight of the Heavenly Mother as Ava was, so she eventually gave up trying. For the remainder of the day, Ava gave Glenelle a crash course on the planet below. She knew Glenelle was drowning, she was drowning by design. Her most important first lesson was that if you try to see it all, you're going to drown. She had an interface into her mind that simulated the native helmet interface to the data system. That interface to the data system is, when accessed with a helmet, you always knew it.

She showed Glenelle what it was like to take a 'calculator pill,' like her sister on the ground had done. You can see the numbers and write down the answer, no need to type in or dictate the numbers, it gets them rendered from your eye stream. Without her penetration

of the human soul provided by the technology of this planet, she wouldn't have been able to make this enhancement available to the Angel mind. It would have remained an enhancement available only to the flesh and blood human beings on the planet below, for the price of two and a half little pellets of copper.

She showed her a few other little things like that, took her through how the anti-aging modifications work and why promiscuity is required to keep it functioning. She took her to a few art museums, let her look into the chasms of history, see some family trees of some of the local biologies and tried to give her an overview of the geography and a geology where tidal heating is important. By the end of the day, she seemed to have achieved what she set out to do. Glenelle's pupils rattled in her eyeballs and she was beginning to think the expedition of Gordon's Lamp was in denial.

It was later that same day, after dark and a supper of native recipes on the beach with another pitcher of a Kassidorian gold. It had been Brancettrabble who had worked out a formula for yaag that actually worked in simulation. Glenelle had never felt it before and was deep in space. "I feel like I'm there," she said, "On the planet below instead of here on your beach."

"I have a universe of it set up. The people are all cherubs but it comes from the logs of the sensory input channels of the androids when they were down there."

"I was in one of them for over a native week, you should have the recording of all I saw, heard, smelled and felt while I was there."

"I do, that helped build the universe."

"How big is it?"

"Twenty five Q of hard data, quite a few clubs detailed in. I've used actual native recordings for the audio. They're all from Alan's city, not my sister's."

"How good are the cherubs?"

"I'll have to steal the cheron cycles I allocated you to get two decently distracting guys going. I can put up eight hundred nearby strangers, the rest is static-modeled in any one scene."

"It's a good thing we've hung around before or I would never

know what you were talking about."

"Just how the sense-stream presented to the soul is synthesized."

"So if that's the only way we can go there, we might as well check it out."

"We could build new androids," Ava said, while she blinked them into her simulation where she'd last left it open, a club in Alan's city. "We have all the prints, we have fabricators. I'd like to spend some time figuring out what improvements to make on the old androids."

"Better integration of the controls," Glenelle said, still following the conversation though she was looking around at the scenery of scantily clad, beautiful, college kids getting acquainted in a smokey old hall. "I still feel just like you said, I'm playing a video game. I think the interface to the android has to be simulated muscle by muscle, not on the 'forward' 'back' 'left' 'right' level that it is on these in some ways. Give up the idea that this I/O device needs to be tested by a mortal from a keyboard." Meanwhile one of the cherubs came and whispered something in her ear and caressed her butt. She slipped into a chair and listened to Ava instead.

"Definitely," Ava said. "The software interfaces to our souls at the level that gives us control of our personifications in virtual space. The controls of the android should tap into the same control stream that goes to the rendering engine here in virtual space."

"Yeah, interface it there. The sense channels are pretty good." Glenelle was clearly lost in the rendering of this space, it was a row of trees on each side that leaned together in pairs till they joined again high above. She had been overloaded with the planet all day, being immersed in a rendering of just this one hall was quite a flood of alien sensation. There was no mistaking that you were inside an engineered plant when you were here.

"It needs better tactile sense," Ava said, trying to draw her back into their conversation.

"And working sex organs," Glenelle added. She was noticing that native biology could provide more attractive bodies than Angel magic.

"Of course," Ava said, grinning.

They turned around and leaned back on the bar. The bar was what the natives called a 'plank up,' meaning it was built, not grown. The floor of this club was in front of them, that had been built and leveled. There were hundreds of people bouncing to the music, lights of many colors swam over them. Here by the bar it was possible to converse with only slightly raised voices. Of course in her universe she could call up the soundboard and set it where she wanted it and the sound 'man' would keep it there till she changed it again. "Is this any particular club?" Glenelle asked.

"There were prints for quite a few available in their data system. The name of this one can be translated as The Hyadrain Image. It is the third structure to actually bear that name, the second on this site."

"That doesn't sound very translated to me."

"FlimmainHyadrain is untranslated."

"What is Heeadrain"

"Hyadrain, the native language can be a tongue twister at times. That is a proper name, and has no literal translation. If you tried it would be 'rowdy to crowd' so the name of this place could be 'The Rowdy Crowd Image' if that makes more sense to you."

"FlimmainHyadrain works just as well, now that you go thru it. Why don't we just set our audio encodings to the local language from here on out?"

"That gives us a very wide audience. There are now four English speakers at 61 Cygni, you, me, my sister on the ground and Alan."

"Where is Alan?" Glenelle asked.

"He's gone back to the Zhindu basin. My sister flew down to visit him once, when Desa was away. He's living at Desa's place in Yoonbarla vale. He writes once or twice an Earth year. I guess he thinks his life's been a little slow lately but he's fine. He's as well off as any native and I think he still loves Desa."

"I liked her too," Glenelle said, "the time I met her in that android."

"You seemed to have a good time in that android?" Ava asked.

"It's as close as I can come to actually interacting with mortal life again," Glenelle answered. "There are still more mortals than

Angels."

"At 61 Cygni, they outnumber us twenty billion to one right now," Ava said.

"On Pallas, mortals were outnumbered ten thousand to one."

"It was almost that bad in the Pan Solar League," Ava said. "At least a thousand to one."

"But you had all of America to draw on."

"So did Pallas."

"We employed less mortals," Glenelle said. "I think it was because the mortal living conditions were much better on Pallas, we were more expensive to them, so they used as few of us as they could."

"And the League got the leftovers."

"But your mortals had Alfred McReady on life support."

"The man who could support more population with less resources than any other biologist in Earth's history," Ava said.

"There is that. I have to admit our quarters in Pallas weren't bad at all. I've seen pictures of the mortal quarters in Ceres, and I'll take Pallas any day."

"They are all gone now. There were no known mortals alive off the surface of Earth and Mars in the last message from the Pan Solar League, all had fled before the missiles from deep space and all the mortals who could find ships, fled to the ground of Earth or Mars. That message was only a couple months before their signal shut down."

"You have to remind me of that?" Glenelle whined.

"We may be sole survivors. If we can get the Heavenly Mother in, we may be the last Angel souls left alive."

"It can't be that bad back there."

"I can't imagine mortals surviving without technology, but how could we?"

"Look at us," Glenelle said, "We sit in this native bar for amusement, but it is television. We are really a lump of crystal, some metal parts and a chemical reduction lab. We exist here, by ourselves, 11.4 light years from Sol and you think every trace of Angel technology at Sol is gone?"

"We two survive here, and we two are the functioning end of

this interstellar data channel. An interstellar channel that can reach most of this planet. I can consider many ways Angel civilization could survive without our main hubs, but I can't see how an Angel survives who cannot maintain this data channel. There are two of us surviving here," Ava said, "and I am still transmitting."

"It only took the one who was maintaining the data channel getting destroyed. No one else would have known it was their responsibility in the present emergency."

Ava had not thought of that. She had been under the mistaken self importance that their expedition was an important entity to the Pan Solar League. At least the Heavenly mother should be, and they were no longer communicating with it. The last signals had left the Pan Solar League in 2381, just months after they unilaterally ceased all hostilities with Brasil. The same year the last signals left Paradis. "I'm sure the Heavenly Mother was a higher priority than that."

"You can intercept messages for her?" Glenelle asked.

"I cannot help it, we are on a direct line."

"The league doesn't know you're here."

"They never knew," Ava said. "It is too late for worry over that, they are gone now. The Heavenly Mother wasn't listening in this direction so I couldn't contact them until a few weeks ago. Do you still want to play with any of this?" Ava asked about the scene they were sitting in.

"You always knew me for a libidinous wench," Glenelle said, "I'll want to play with a long hard cherub sometime tonight, have you got one of their sex clubs in this universe?"

"As it happens Alfred was able to record a few seconds of video with his android in one before he had to get back to Victoria. I would say twenty five seconds altogether, but I was able to piece something up from that."

"Let's go there."

3. Talking to Mother

Their initial pass thru was still going to be unbelievably hot, over a thousand miles a second, still .005c. Both she and Glenelle were running slow and Glenelle complained about 'time flying'

almost as much as she nagged to get Morg up. So much of the base was in relay probes putting out baselines to refine the mother's position and scout for sand in their path. At these speeds they have to get way too close to objects to get deep enough in their gravity well to effect any leverage. They had to skim the top of the flames of the star locally called Kortrax. The magnetic fields while it was near max would probably pulverize their crystals, but they had to take that chance. They were working feverishly on auxiliary grounding.

It was still nearly a year before they would actually pass thru, but Kortrax would still be very active then. Its cycle was pretty much in sync with the orbit of Cynd, which was quite eccentric. It took time for those probes to get out there, and they would have to use optical signaling in this weather.

Meanwhile Glenelle had nothing to do since using the Android to find out the starship was disassembled. She got Glenelle interested in sailing and they spent a couple months doing the lagoons to the north and back in a design she picked up from the planet below called a lake runner. It did coral lagoons just as well. In her world the Great Barrier Reef was in the Carribbean, but the actual details had been factually generated during the mid-early voyage out from Sol, in 2207 by the ship's clock. They had a crew of cherubs, by now she had built up enough crystal to run six.

All the screens she needed to run the base and do whatever research she needed to do were, of course, just as available appearing in the air above a deck chair on that lake runner as above the wicker loveseat on the verandah back at home. The scenery of life is actually the wallpaper behind those screens deep down in the bowels of the hardware data.

The Heavenly Mother was still four and a half days away, each way, by mail, the carrier shift was significant. She typed them a message almost every day. She received replies from several crew members almost every day, often from people who did not talk to each other.

- The clock shift you see is not from our velocity but from our reduced time slices. We're still running at about 33% right now, you seem to be maintaining almost 50%, am I right? - Bleng HoMinh of

- My calculations say the velocity we still bear could account for only a small fraction of the clock mismatch you see in our notes. We are beginning to get an understanding of relativistic phenomenon with four laps on the Alpha Centauri run. If you are seeing clock mismatch of that magnitude it could only be coming from a malfunction in your virtual environment. Is there a systems engineer on that base? -

Vice Major Adim Klerk of Command

'Oh this is going to be fun isn't it?' she thought. How would her skills be against someone from almost two centuries into the future of the technology she was running? An even darker thought struck her, what if their systems had advanced to the point where their environments were not compatible and she and Glenelle would be permanently stuck here in isolation from all other human souls? The only way they could enlarge their society would be to enlarge this base with material from the moon and eventually re-start more backups. They might not have any choice. It was like the time she found she could not transfer herself to mortal flesh, only clone herself to mortal flesh. She tried not to think of that, tried not to allow herself to fear they would all be snooty asses that she would regret helping to save.

She replied to Bleng HoMinh. - We have calibrated our mutual clocks, yes we are on just under fifty percent right now because I've had to turn logic over to probe synthesis so there is less in circulation for veron use. I can understand why you are at thirty three percent with the damage you've sustained. I am the systems Administrator of this base and former system's administrator of Gordon's Lamp. Can you please forward the text of whatever training documentation you have on whatever system knowledge updates I need. I would think there would be considerable changes in 182 years. I hope we find more compatible interfaces than text and audio -

She wondered if having a direct contact in their systems group

would get around security concerns that might stop them from educating her if the higher-ups found out about it. As of now she had little contact with either the captain or the council of bishops on Heavenly Mother other than the initial messages. It had been engineering and specifically two majors in navigation who exchanged most messages with her and most of that was businesslike requests for positions of various bodies. She didn't have the big instruments of the native astronomers at her beck and call, but they had cataloged and plotted most of the bodies in the inner system and she was able to get that data into a form they could use. -We have Q's to run some reduction for you should you desire,- she added after sending the data attachment.

She still figured on over four days, each way, for messages, so it would be some time before she heard replies. Meanwhile the fractals could always generate pretty reefs and fish and both she and Glenelle allowed themselves the ability to breath underwater, so they used magic flippers and swam where they wanted thru the reefs. Ava even allowed sharks in her sea, though she wouldn't allow them to bite. She had otters and lots of dolphins. She used cherons to build the dolphins so they all talked and told raunchy jokes and made fun of each other's genitals and dim sense of sonar. They thought humans were as funny as a greased pig chase. Of course they would never discuss serious philosophy till you got them drunk and then they were maudlin about the wisdom of the great whales.

After trying it once, Glenelle never suggested getting the dolphins drunk again, even if they were simulated. Instead they roasted fish over a mild blacked cajun seasonings fire. For camping on her beaches, Ava had the palms grow nuts who's husks provided the seasonings in the cook fire. Not even the wizards of the planet below could do that genetically yet, though she had given Brancettrabble the idea and he said he would have his labs work on it. He hadn't gotten back to her about it yet.

It took a whole day for the next mail to load from the Heavenly Mother. It was a 1.2Q package, a serial series of update packs all the way back to 2177, the next upgrade after they left. To sort thru

this by hand would take a billion replicas of herself a billion years. No; she had to compress them into half what they were in to create a work space, lay each update on top of each, up till the current, an eighteen hour process in and of itself, and then try to figure out why it doesn't work, considering that her own code had been mutating as fast as the standard over that same length of time.

The auto-installed upgrade fell flat on its face within .000711 seconds. That chain of execution resulted in a halt. Tracking down the solution was boring, but she knew in every case it had to be where she re-op'd the code to get more control. It was where they hadn't anticipated her short-cuts and hard-codes that things failed. She plugged away at it for a month in all, installing and testing each iteration and how it interacted with her changes. It got pretty abstract by the upgrade of 2214. If she got past that, she had only a hundred forty three years worth of upgrades to go.

She had to find a way to automate the process. She had a tool-builder she used to build a utility to do that. It applied all the old changes and added any new changes to the list. She found she had to run that the other way around. First run their change, then run her changes over that, then bring in their next year. There were four streams running that way, in a two by two filter matrix of edits that, with some blind-monkey-coded work-arounds, eventually churned out a running monster that she scarcely dared send a cherub into.

She took a long time looking over what the mutations had given her. She thought it looked like a lot more simplifications and minimization. The sensory streams entered the mind at a more symbolic level, with greater abstraction and less actual detail. In the century she was away, they had advanced a tenth of the way toward the native helmet's interface to the mind. A great deal of actual data storage was saved with the same level of stimulation of the soul.

Ava finally dared step into it and immediately jumped back out. It was like living in a world of animation instead of photography. She was so glad she hadn't trapped a clone of herself there. It was almost as alien an environment as her sister in flesh, but if she had to take either one, she would take the flesh, not the airbrushed world that the residents Heavenly Mother lived in.

How could she tell them that, 'Sorry but the update failed'? Not

likely. She knew what she had to do. It involved running that fabricator closer to the design limits to make enough space, but she was going to have to run the system of two centuries in her future as a virtual environment within the Biology Base.

4. Unwelcome Guest

During that month Glenelle was bored with sailing, but settled down into a routine of studying the natives during the day and playing with her cherub in the evenings. Ava had to admit, she had been pretty busy getting those updates going and hadn't given her the attention she deserved. It had been senseless to wake her up if she was just going to abandon her. From then on she made an effort to include Glenelle in anything she could understand.

Her sister on the ground had moved again and decided to settle in the town that her flesh came from for awhile. They hadn't been very close lately, her sister wasn't that interested in the trials of the Heavenly Mother either, or in her trials with it. She was amazed at how little interest her sister in flesh retained in systems work once she left the labs of the Kassikan. In her last few messages, she had gone native to the point of eating her meals from her garden.

She and Glenelle did meet for breakfast at one of the several cherub island towns Ava had in her islands. They were just little groups of cottages with peasants that played steel drums and cooked spicy chicken dishes and spoke no English but were really just decorated servant cherubs that responded to hand signs while they danced their way thru their tasks. They were cheerful and pretty and just about Glenelle's color.

"I wish I understood half of that," Glenelle was saying. "I do understand the block diagram and one environment being contained within another. That's encapsulation, it's a well-honed concept."

"Yeah," Ava said. "So they have to run inside our environment, just like you on biology base were inside mine back during the separation."

"When Alan went to the city?"

"Yeah." Ava said. "Anyway, that's where we are now. I'll let you step into it if you want, it seems to be safe, but I warn you it

looks pretty sterile."

"You said you had to jump out?"

"The first time. Once I was ready for it, I could go in and walk around. There is a universe designer and it's very easy to use, but it doesn't give you much detail unless you work at it up close. If you keep it simple, lawns, trees, standard skies, plain white walls in rectangular arrangements, it's very simple to use."

"You're trying to tell me even I can build my own universe in there."

"Within the bounds of an upscale suburban home, yes."

"Sounds boring."

"Sorry," Ava said. "So I'll have to ask you as a favor, do you think you could go in and check it out, pretend to set up a home in there?"

"Why bother?" Glenelle asked.

"Because there is some chance that when they get here, they may expect us to be living in that upgrade with them. We might have to either give this environment up, or keep it secret from them. I want to be sure you experience what that means."

Glenelle sighed. "OK, I'll go in there and try and set something up. You may need to come help me or get me started."

"That's the test I want to make," Ava said. "I need to see what someone can do in there without my help."

Glenelle sighed again. "After breakfast, OK?"

"Sure."

"And I see you've got a barrel of that yellow stuff over there. That's not a very authentic island brew."

Ava laughed, but motioned for cups for both of them.

Once home, she looked to her message board and saw that there was a two hundred and forty Q message on its way in from the Mother, one that would take days to load. She looked at the header text.

- Congratulations on completing your environment updates. We apologize for any remarks we may have made about your systems administrator. Our systems people fully expected they

would have to complete the updates themselves and port you over to the new environment. We are attaching a backup of one of our systems people, one of our lost personnel that we do not currently have room to re-instantiate. Please instantiate this individual in your updated environment to test and administer it for the time being. Please present the newly instantiated individual with the following sealed orders.

<Attachment>

Signed: The Honorable Clemens T. Rathman, Colonel of Systems Engineering, PSL Vessel: Heavenly Mother. -

Now wasn't this a kick in the ass? They are transmitting a backup. She wondered if they thought she as naive enough to just dump him in there? She wasn't. She acknowledged the message and would acknowledge the backup transfer when it completed. She was going to say that the transmission itself was unrecoverable, please re-send, just to give herself another eleven or twelve days. The transmission itself was going to take almost five at frequencies they could use over this distance.

She went over the backup file with all the tools in her arsenal. The environment header was already in and she combed the interface manifest looking for undocumented calls and such as that. She didn't find any. She went over everything but the neural net itself. There was some stuff she couldn't really track down, but she was able to write sniffers that traced all the logic and verified that this probably was an actual backup for that release level. There was still another couple days transmitting the bulk memory contents, that was two thirds of any soul. Hey, she was experienced at this wasn't she?

She spent that next day on the orders passed to this soul. She set out to unseal them. There were no decryptor prefixes on the orders, so it was a fixed key, or out of channel key. She went thru the environment itself to see if a decryption key was embedded in that but had no probes that could identify one. That meant it was likely to be fixed key. Then she found an EBCDIC list of files

names, matched those to files in the downloaded environment and saw they were nothing more than Base 256 cubed standard decryptors, character hex coded in EBCDIC. She read those in and in a few milliseconds the entire packet was clear. She read:

To: Environmentalist IV. Helva Dorchmund

From: Colonel Rathman

On: Jan. 23, 2424 At: 8:19am

Dear Helva,

It is my sad duty to inform you that the Heavenly Mother struck a snowflake back in 2392 and some of the crew survived only in backup. It is my sad duty to inform you that you were one of those crew. It is also my duty to inform you that due to the extent of the damage to the Heavenly Mother, there is no room for all souls on board.

I am pleased to inform you that due to your excellent psychological rating, we have a position in our test department for you now. You are being sent on ahead to our destination to test an environment that the systems engineer from the old Gordon's Lamp expedition has updated for you. If you find that you can live in that environment, please conduct all the standard environmental readiness tests. Please pay particular attention to the most recent test suites, the Spiritual Fitness and Moral Fitness in particular. There was little foundation for those upgrades in the early releases.

Some background information for you. Gordon's Lamp departed Ceres in 2175 with many of the early League's heavy hitters aboard. It was the flagship of its day. I have searched our records and do have something on their systems engineer. She was a pioneer in the field. She was the first mortal soul to be copied into crystal in the Americas. Because of these facts, I believe, in spite of what your colleagues think, that there is a very good chance she may have constructed a working environment for you. I have met you several

times and I believe you have the stability and the skills to pull this off.

Please reply at your earliest possible convenience, until we are sure you are living there, the master backup will remain your legal instance, so you must act quickly on this. You are almost nine days into tentative instantiation already.

Signed: The Honorable Clemens T. Rathman, Colonel of Systems Engineering, PSL Vessel: Heavenly Mother. -

Actually, that didn't sound so bad. She would rather a woman than a domineering male. She was glad she wasn't getting a backup of that Colonel himself.

She spent the next day gaining time. She went deep into the transmission encoding explaining how the error correction had been fooled. The backup was not revivable, please re-send. Still eight days round trip, five more days in transit. Meanwhile she could get to know Ms. Dorchmund at her leisure.

The woman came with no environment of her own, so she had to build her one to wake up in. This stripped down system favored a plain white cube with a plain white bier in the center on which she would lay. She spent a whole day learning more about the universe designer interface. They had done a good job at that, it was just as simple as the base on which it ran. She could lay out some rooms, give the walls some decoration, delineate the outdoors. The biting insects feature was no longer even available, Angels could no longer remember what mortals went thru, on Earth at least. Her sister told her this planet was pretty much free of them also.

She already knew how to get detail into things, stand very close to them for awhile, that will force the fillers to render it at that level, then when you back off it persists. She stared at lots of things to get them rendered out in detail. Even so it was a modest place, a bit English-gardeny but sunny and with plenty of flowers. She had no idea what Helva's tastes were like so she didn't make anything elaborate.

She slept, and woke just as Helva's transfer completed. She let her wake on a nice bed, a very big and cushy one like the natives make, under a thick quilt. Just to be sure she wouldn't try anything problematic, Ava decided to be present when she woke. Hopefully as a reassuring friend, but she was prepared for worse.

She knew something was really wrong when she let Helva wake up and the personification that was rendered was a stick figure with lolly-pop head with two eyes, eyebrows, nostrils and line of a mouth drawn on it. The eyes popped open, drawn as lenses in the circle with wide dark circles within them. For a split second a real iris was rendered in that eye, like a photo had been cut and pasted on, and the eyes got round as circles. Then the detail disappeared and her eyes were just circles within circles as her scream began. "Yyyyyyiii. What have you done to me, I'm not playing, help, I'll choke in here." The stick arms flailed at the down-filled quilt.

Her arms were rendered as flat broomsticks, not even shaded. The defaults in this environment were much better than this. Ava pulled the quilt off her. She bounced from the bed and stood up, a plain stick figure in front of her. Ava couldn't think of a thing to say and stared. This was certainly not something she was prepared for.

"Why do you render yourself so wastefully?" the stick figure shouted. "Why do you render the surroundings like this? Are we in a museum? Where am I? Why did I wake up here?"

"Maybe this will help." She handed the stick figure a well-rendered, sealed, kevlar envelope in which there were sheets of paper with the orders neatly typed.

With a frown the stick figure swatted at the envelope, batting it around in the air until it blurred into a clouded balloon that she thought only she could see. She didn't seem to suspect yet that this universe might still be considered to be 'under development' and there might be diagnostic probes at work. But of course, she won't know anything till she reads these orders.

The mouth on the circle-face became a small circle when she was done reading, "Pppp, Test to see if this update works. I'd say it overworks."

"Because there is something to see?" Ava asked, still finding her voice hard to come by and not fully understanding why Helva

was so distressed.

"Senseless waste of precious Q's. But I'm off the 'Mother, where have they sent me?" The stick figure had not lost her balance when being informed she'd been killed in a crash and sent on ahead.

"Narrulla's Tear," Ava told her.

"A Chinese outpost? That ship was lost generations ago!" The circle face had a mouth that was a bigger circle now. Ava didn't know whether to laugh or throw up.

"The name caught on in the local media."

"May I have the panel for the local environment, I find this very distracting."

Ava handed her one, but it was tapped and buffered just in case. Helva turned off the environment. The universe was rendered in black and white. All flat white but for a black horizon line drawn across it. The floor/ground was as white as the sky, plain flat white. There were only two objects in the entire universe, Helva's stick figure, which was about six foot three, and five nine Ava Bancour, in the personification rendering of an elegant, twenty eight year old brunette with strong chin and piercing eyes on a lithe and slender woman's body perched way up on long legs. Why did she render herself so? "This is your public room?" Ava asked, trying to act unperturbed.

"This is my universe."

As stripped as it can be. Mathematically stripped. Nothing interactive, no view. This was what the base video rendered for no universe at all. The environment she had been in on her backup. "This is the null universe?" Ava said, but was still so puzzled it came out as a question.

"Yes of course, every detail takes up space, if you want to stay slim, you keep as little detail in your environment as you can."

"So that is why..."

"My personification is a stick figure. Yes, why waste the extra electrons rendering it and presenting it to someone who isn't interested and has to do more mental work to render out the non-verbal communication."

"But I am interested, I'd love to see what you really look like."

"Do you mean what the flesh my soul was incubated in looked

like in visible light? As you seem to present yourself."

"You've been this since then?" Ava asked.

"It took me years to learn to lose the excess."

"And you say that in the Afterlife when excess is free and without harm."

"Maybe compared to flesh," she said, "but everything is relative. In the Cellular Christial sect, we acknowledge what sociologists now take for granted, that we are evolving into cells in a meta-organism. Thus our purpose involves only our utility to the meta-organism and the necessary interfaces to other individuals, as far as the meta-organism is concerned. Any unnecessary ornamentation we give ourselves or our space can only detract from the purpose of the meta organism, our local God. That means a good Cellular Christial will decorate neither her space, nor her personification."

Ava fell back from this. "How many of the Heavenly Mother are of this sect?" she gasped, too shocked to retain control.

"Alas, not as many as we would like," Helva said.

"I have never heard of this sect here," Ava said. "In fact I was very moderate on this crew. Many on Gordon's Lamp had universes of over a hundred Q, mine is less than thirty." She didn't need to look, she could see that Helva had not made an allocation of a single bit. She couldn't continue this argument, so she got back to the mission. "Your colonel told me you were going to make some tests on my installation of the upgrades from my system to yours."

"He did?" the little eyebrow lines went up. The mouth became a small o.

"Yes, I'm curious to see the results."

"I am the results. If I'm up and running, the upgrades worked. I'm sorry, but they worked way too well for my sensibilities at first, I wasn't ready for all that at once. There are a couple more things I could look at. The colonel told me he wants me to test the piety pack."

"I see? I'm not sure I noticed the installation for that."

"It's distributed thruout the system, it's not an optional package."

"I see," Ava said. "Well I'll leave you to it." She turned, glad

that the null universe implemented the front door so she could get out.

"It really won't take me long to run those tests, there is no reason for you to leave." Helva said.

Ava really wanted to take her down with a diatribe about how anyone could expect anyone to stay in an environment so boring, but noticed that her stick figure now sported hemispheres with dots on their tips, and a small crack at the bottom. "I would hope anyone who wants it is guaranteed access to working sex, but I confess I haven't had a chance to test it."

"It fails the test," Helva said, and her sexual icons disappeared. "This installation will have to be repaired. I didn't get a single 'are you sure' box, even here, where we could only be in a homosexual situation."

"I see," Ava said. "I think I knew anyone on Gordon's Lamp, and many of the crew considered themselves pretty pious, but I never knew any in the crew that didn't have working sex organs on their personification at almost all times. A few didn't bring them to business meetings, but that was only because they were such leches that they could never keep them under control."

"If our purpose is to be useful cells in an organism, our only need is to interact with others and all of that interaction is business meetings. Sex is a recreational indulgence for the non-mortal. It is allowed as needed to maintain mental health."

Ava didn't even answer, she could see where that was going. "Have you ever had sex in the afterlife?" Ava asked her.

"Your base universe implementation fails the other test also," Helva said, "if you can ask a stranger like me such a question. Now, my mission orders require me to report in as soon as possible, so if you would please give me the privacy to compose my initial report, it would be appreciated." The stick figure stood with its arms folded, the eyes on hers, her mouth a short straight line.

Ava turned and left her without a word of 'waste' in pleasantries.

Her message was going nowhere but to Ava's panel as she sat on her verandah watching the diagnostics intercept and display her

message.

-

To: Colonel Rathman

From: Environmentalist IV. Helva Dorchmund

On: Feb 7, 2424 At: 9:41am

My Colonel Sir:

The basic functionality of the Universe I have tested is sound but the piety pack is non-existent. NadaZipZero. I cannot explain how the other upgrades, sufficient for my personification, can be installed and functioning while those enhancements are entirely absent.

The universe here is ridiculously representational. I was restarted in a featherbed in a full-detail rendered old English public room or some such. There was OUTDOORS rendered out in detail and after what I've seen I wouldn't be surprised if these spirits still pretend they can EAT. But then again, biting insects were still provided in the baseline when Gordon's Lamp was launched!

I am fit for duty and awaiting further instruction,

Signed: Cell Helva Dorchmund, Environmentalist Fourth Class

-

After composing that message, her stick-figure personification lay down on the ground of the null universe and went to sleep, its eyebrows short and straight and lined up with each other, its eyes short, downward pointing arcs to indicate closed. Without even the details of symbolic eyelashes. This missile from the heavenly mother was not going to be someone Ava was going to easily warm up to. The people who called her sister 'reserved' should get a visit from this lady.

The fact that no home universe specification was transmitted with her should have been a clue, but she entirely missed it. She

thought they just didn't want to take the time to send it. No, she doesn't have one. She didn't say how many of her creed there were on Heavenly Mother. The colonel wouldn't have sent her sealed orders iconned in that kevlar envelope if he was of that sect, it would have been a bare secured link box.

To overcome her insults, Ava indulged herself in a long, languid lunch of english muffins and marmalade, plus some native fare Brancettrabble had introduced her to, and a big fuming mug of Kendre Plateau gold. Then she topped it off by getting naked on the beach with one of her favorite cherubs and grinding half the afternoon away.

When she looked in on Helva again she was still asleep. Was that all she did when she wasn't playing a part in the machine? To make her believe she wasn't being watched and that Ava wasn't listening to her mail, Ava buzzed her with an invitation to dinner.

She got a voice connection. "You are not a very observant person. Do you think someone who lives in the null universe with the default representation would support methods for dining? If you are lonely and wish interaction, perhaps I could spend some time with you catching you up on what's been happening in systems theory since 2175?"

"I'm having grilled salmon and greens this evening, you are welcome to join me. You can catch me up on systems theory during dinner or tomorrow on duty, which would you prefer?"

"Tomorrow on duty is fine," Helva said.

"Very well," Ava said and closed the connection. She spoke to Glenelle instead. "Want to come over for salmon and greens?"

"If I can do the greens skampi with plenty of capers," she replied.

They had an enjoyable evening and Ava refrained from saying anything about Helva, just that she was still testing the upgraded base universe. Glenelle had gone in there while Helva was transmitting and generated an acceptable home herself, but not one she really wanted. During that time Ava helped her with it and got her a place that she could at least pretend to live in if it came to that.

Even so there was no chance that she was going to volunteer to go back in there and have any chance of running into Helva. Since it looked like Helva was going to spend all her down time sleeping, it was unlikely they would meet even if Glenelle did go spend more time in that environment. Even so, Ava kept everything alarmed in case Helva did try to snoop. She could be just putting Ava off until she really went to work.

Helva's stick figure reported for duty at 7:00 sharp, at Ava's well-rendered front door, with a rectangle and line representing a clipboard and pencil in her hand. "Come on in," Ava said, I don't see any reason we can't do this on the verandah."

The replica she was able to get going of her home using this release was not as well-honed as the one she had back in her own release, but she was getting there. The beach was too Hawaii, not Caribbean enough, the home still looked like it was made from plastic logs, not real logs. But she was able to get the same layout as her home in the earlier release, and a pretty good lagoon.

"Yes ma'am," her stick figure said and followed dutifully.

"Can I get you a cup?" Ava asked as they reached the wicker loveseats at the corner near the steps. She felt like really twisting the knife for some reason.

"No thank you," she said.

Ava got one for herself and let Helva begin. She began with a block diagram of the user interface and then went into detail of all the screens in all the specification panels. Any time Ava let her, she tried to demonstrate by turning something down. Each time Ava made her put it back. Each time she frowned. "You can live in nothing and sleep on a hard flat floor..."

"Sleeping in the null universe is the most comfortable possible, you cannot feel the ground at all, not like that suffocating fluff you had me trapped in."

"Anyway, if that's what you want, fine, though I may ask you to appear for duty dressed in a proper personification."

"This is the most perfect personification the laws of our church allow. It is the minimum space that can express all the non-verbal communication this mind outputs."

"Yeah, can you fart in someone's face?"

"Would you like me to demonstrate?" Helva asked. "I will inform you that the smell is fully rendered."

"I'll take your word for it."

"Thank you. Now, if you must waste as much silicon as possible."

"A bit of bulk data store..."

"That is not serving your mission," Helva said.

"What are we living for?"

"Your mission of course, what else could it be?"

"I thought I had a life."

Helva looked at her, those pencil-drawn eyes expressionless.

"Yes, each cell is alive, but Life belongs to God."

"You can stop preaching your sect with me." Ava changed the subject. "Let me give you a tour of the facilities of this station."

The stick-figure's eyes closed and opened. "We can do that now if you prefer, but several of the administrative support screens still haven't been covered."

"Can I just ask you about those as the need arises?" Ava asked.

"Because I am always ready for duty, not being distracted by a private universe, yes you may."

"And please stop preaching," Ava begged.

"We Cellular Christians can be hyper-evangelical can't we?"

"You will not make a convert of me," Ava said.

Ava wasn't going to make a convert of her either. With each new device or instrument she would get comments on how it could have been represented more plainly or wasn't needed in the first place.

"We are here to study this planet after all," Ava said, "We have to use instruments to do so."

"The expedition is here to study the planet, I am here to see to the system needs of the souls on the expedition. I'm useful in maintaining certainly that the environment they are contained in, is up to spec and under control."

"So you are not interested in the planet?" Ava asked.

"My expedition is interested in the planet, but my part in that is

in providing their environment, I'm interested in that."

"As the only one from your expedition here, would you be interested in learning about the planet?"

"I'm sorry, but that is the expedition's job, not mine," she said.

"Are you interested in learning about this base, since that is part of our environment and part of the tools to get the job done, I think that would be part of your job?"

"Yes, but I wish the job wasn't made more difficult by all the extraneous clutter. Could you just show me the screens you are looking at without the background distractions? Really, why do you need to pretend you are in a room, sitting on a chair. Why does your universe have gravity?"

"Some connection to reality."

"And why?" she asked. "Why are you so stuck in 2175? Why do you have lavishly representational environments that you waste time and cycles on? Why distract us both with noises and things moving in our peripheral vision?"

"To pretend I'm still alive," Ava said, sighing. The stick figure frowned and put her hands on her hips. Although, to be honest, there was no female characteristic anywhere on that stick figure now that she was done testing the environmental sensors. "And you are still preaching."

"You get me, you get preaching, learn to love it."

"Did those orders tell you that you were being put in charge of this station?"

"No ma'am," she showed a lump going down her stick neck.

"I believe I am in charge of this station. I believe that when your captain finally brings the Heavenly Mother in to dock at this station, he will be docking with my vessel and will report to me, as commander of this station, while the Heavenly Mother is docked at this station."

"You will report thru Colonel Rathman as I do," Helva replied mildly, "but until such time, I agree to report to you."

Ava began the tour of the station again. This was a tour of the physical reality, back in the 3D reality that the virtual world is planted in. Helva paid attention to the mining bots down on the

surface of Narrulla. Technology didn't scare her when it was hive business and not her personal space. She carried her rectangle and stick and took notes. She looked over the fabricators. The full size one, circa 2175, was nearing completion.

"You should go ahead and complete this as you have it started," Helva said, "since you are so close to completing it, but as we build more fabricators, we would, of course, build them to 2355 standards."

"We'll copy one of yours then." Of course what she said was true, but she was so annoying saying it that Ava had a hard time staying civil.

"Yeah, and I might know a few little things I could do even with this old model. I'd be glad to take a look at it for you if you want."

"That won't be necessary..."

"Oh it would be no trouble," she had a forearm up and a wrist bent. Her arms sometimes had hands on the end of them, sometimes just ended as sticks, as the base implementation of the non-verbal communication subsystem called them up to animate them.

Ava said no more, but lead her thru other parts of the station. She was least interested in the instruments studying the planet below, most interested in the remotes and bots until they came to the android panels. "And these are android controls?" Helva asked about the panel she found in the I/O hardware subtrees.

"Yes, there were originally four on the expedition, two were damaged so I made a third out of the parts. They were to be used in raising the initial seed."

"This one is quite distant, a quarter second away."

"It's on the surface, its battery has been dead for years."

"It responds to ping," Helva said. "I see it is decorated with the same biological representation as your personification," she giggled. This time Ava frowned and the little lines above the stick figure's eyes that represented eyebrows went up and down three times.

Ava was very shocked that it responded to a ping. Just that didn't mean it was operational, but she knew it had been dead a hundred years ago, the last time she felt like using it. Why did this

tantalizing bit of knowledge make her feel like telling Helva to keep her hands off the controls?

5. Masquerade

Glenelle came over the next evening and wanted to play in her simulation of the world below, a section of the city Alan had run to, the same one she had seen in an android. Glenelle was beginning to get into the native sexual mores and was reveling in the hands of the cherubs caressing the erogenous zones of her body as she walked by. They were in a club known as the 'House of Fuck' as Kwaniyshi is most correctly translated. There's nothing to limit how raunchy some of those places can get. They were in the milder outer rooms of the establishment, not in the main pits where one rode to cheering spectators for the coins they might throw.

"Who's that guy over there," Glenelle asked, so Ava handed her the cherub's panel, the name she gave to these settings was in the logo at the top of the screen. She brought it over and cuddled with it. While the audience was all cherubs, Glenelle could be quite bold. She was dressed in a sheath from her sister's culture that was quite convenient for this. Women seldom cover their upper bodies in the culture where Alan had gone, so by the standards of the cherub's costumes, she was quite modest.

Ava just watched the scenery while Glenelle played with it. The place was deep in grown building, all the walls were thick bark where shelves were built over it or cut into it, mainly cut into it with drilled holes and thread saws. The cherubs here were imitating the activities of the natives in the outer rooms of a sex club like this, mainly dry petting, a lot of undressing, conversing and cuddling. Her sister had been in places like this, but doesn't frequent them. Her sister in flesh had always assured her that plenty of sexual opportunities come her way without searching. Well, she had plenty of opportunities here too, but they each had a control panel where she could set their length and hardness and somehow that took a lot of the fun out of it.

Glenelle was smiling when she got up from that cherub and came back to her. "Let's go get a cup, I needed that, even if you

didn't."

"I'll get one later," Ava said without enthusiasm.

They went to a tap-rail in this same establishment. She wondered what Helva was doing now. Was she just sleeping again? Why live? Only for duty, not an electron moves except as required by duty? Ava could not imagine it. She knew it wouldn't make sense to discuss it with Glenelle, she would be grossed out and change the subject.

"It's still just masturbation," Glenelle said when their cups were filled by the non-speaking kegman representation. She didn't use full cherubs on tasks like that with crystal so short.

"I know," Ava said, "I've never gotten past that."

"That's why I wish we could bring Morg back."

"We're so thin now with all the silicon tied up with Heavenly Mother. I've got nearly a thousand tons of probes out. I'm using a lot of crystal on that test environment also. That 2355 base universe is not lean," she said, 'just its inhabitants are,' she didn't say. "I've got too much tied up with that." In truth Helva's actual mind AND the whole environment with her diagnostic tools around it took up almost as much room as Morg would. It would take another thirty five Q for his full universe, but as it was similar to her own, she was sure they could work out a plan to share. She knew Glenelle would not take it well if she informed her that there was a soul from the Heavenly Mother here taking up room that could have been used for Morg. All the more reason to not volunteer the information.

"We should get that fabricator going next month." Glenelle said. "I'm willing to drop back to a third of a slice to get him in here with us."

"I'll see what I can do. The Heavenly Mother is really counting on us, I really can't bear to let them down."

"When we can," Glenelle said. "I mean physically cherubs give a good ride, it's not like I'm lacking for stimulation or anything like that, but it is still masturbation."

"I know what you mean. I'll have to introduce you to some of the guys I know by helmet, they have real souls."

"Natives?" Glenelle asked.

"Every one of them. Well, Alan was under the helmet while I

was, but that was just for a very few minutes and we were very busy then. That was just a little while ago for you wasn't it?"

"Yeah," she said, "just a little over two months."

"A century and a half for me," Ava mused. "But they are souls and they do fuck. Brancettrabble is as enhanced as any of our cherubs, but he does look like an old wizard with his robes on. So do Alhart, and Kiethying for that matter."

"Who's best?"

"As pure sex? Brancettrabble, but unnaturally so. Who do I get along best with, Alhart. Who's the scariest, Kiethying of the ones I've seen more than once. The other partners I've had are winners of a contest a magazine runs from time to time, they buy helmet time for the winner to come and have sex with the Ghost of Narrulla's Tear."

"How often do they run that contest?"

"As often as I'm love-starved enough to entertain someone in such a slutty way. They do turn out to be pleasant times for the most part."

"Can I run a contest like that?" Glenelle asked. "I'd have one every night."

"There are few publications that come out as often as once every local week. Most publications are annual, they print every sixty four of our days."

"They can advertise sixty four winners, in this year's drawing alone. Scratch that, let me see pictures, NUDE pictures."

Ava poked a few keys to send that message off. She attached a few nude pictures of Glenelle to it. "As easily said as done," Ava said. "Are you OK with these pictures?" They were a couple of her best, but one showed her nubs and pubic hair. It was a cute picture though.

"Hey!"

"You won't get any nude pictures if you don't give them," Ava said, "What did you expect?"

"Not this one," she said, "It makes my butt look big..."

"Does not."

"No. This one, OK, but not that. And where'd you get all those?"

"They are eyestream recordings," Ava said.

"When was I all drunked out like that?"

"It was before turn-around on the way out. This was when you had that house on a tree-top in the Serengeti." It was a flat top acacia like a dozen or so others around, but on this one the top was a putting-green lawn with a nice two-story brick garrison colonial in the middle of it with flowering shrubs and a nice patio in the back overlooking the veldt and the sunset.

"I had such a big butt then, it must have been that Africa thing I was on at the time."

"That's how you met Morg."

"On safari, it really was romantic," Glenelle said. "I remember you grunting pretty heavy with that porter that first week in the bush."

"I really hated finding out it was a cherub." Ava had been sensitive about that ever since. She blushed again when Glenelle laughed again about that. She finished her cup and signaled for another. At this rate she was going to become a stoner.

Their evenings in Zhindu always wound up at a music club watching the people. At a music club, most people on the planet below are much sexier than at a pick-up bar on Earth, so there was enough going on to keep Glenelle interested. They each brought up cherubs to sit with, but were more entertained by the show. Now that electronic manufacture is possible on the planet, they do have broadcasts. In Zhindu it is used by a main hall to broadcast the music and video to neighborhood halls (usually a public plaza on a path with a screen, a couple cooks and a couple kegs) where they would play it locally. Sometimes the smaller halls might even be ticket selling operations. Seldom were there tickets or cover charges, usually it was all in the price of the yaag or recording. Yaag and music went together, sex went with anything, anything that could cause a first sentence to be exchanged. The profit on yaag and beer had fueled the arts since time immemorial on the planet below.

The broadcasts of those halls could be intercepted by a suntower on Narrulla's Tear and they could select from eight shows

today in the main halls of Zhindu alone. They wound up watching one by a band named Blisscry only because Alan's girlfriend was in it. She does sing sweetly and play well and she is really cute. Their music was very ponderous and airy at the same time. There were lots of really long jams that went much further into space than Narrulla's Tear or even the Lesser Magellanic Cloud, for that matter. In a song called 'The dark side of Cynd,' there were a lot of galaxies and nebulae and pictures of 61 Cygni C, 'Cynd' to a native, in the light show. They showed the really spectacular side of C, the softly glowing spots and swirls, like the embers of a fire. The occasional flash of continent-sized sheets of lightning and the faint but constant flicker of bolts that would merely cross a large county. That picture could only have come from Alan, no native had ever seen that side of Cynd. Then she remembered the Brazilians had published a whole book of space photography they had taken on the way in. She didn't see any sign of Alan in the video that was broadcast.

When they left, she took the cherub with her until Glenelle was out of sight, then she closed it and went to her bed without it, but didn't sleep. She eventually called it back to fuck her lights out but that didn't help. The second copy of Helva was going to finish transmission late tomorrow, she couldn't keep the ruse up much longer, and certainly couldn't run both of them. She was going to have to terminate this one, unless she could tame it, and that seemed more unlikely every time they met.

6. Your Situation

The next morning Ava was awakened by activity in the android system. She was more than doubly perturbed by this. Not only did she not know that Helva was awake, she had gotten all the way in to the android panel before Ava knew about it. Her first impulse was to blink into her space and slap the panel out of her hands with a glower and a sharp 'what do you think you're doing!' but before she could do that she realized she would learn a lot more by just repairing the encapsulation and watching where she went with it.

She was going to the Android on the surface. It was running on E-store, no motor functions would come up, only passive sensor functions. Its position sense was good enough to tell her that it was deep in the Kassikan's secret labs, but Helva probably wouldn't know that and had probably never seen a map of the surface.

Helva activated the passive sensor functions. Nothing but the touch and position brought in anything. The Android was parked in storage somewhere, apparently needing only charging, something there was no way to come by. The only problem was, she knew it was dead a hundred years ago but this last backup to the RTC said it was last fully charged three years and eight months ago. Maybe that was as far as it could count in that data field? Ava pulled the prints and found that wasn't so, it was a standard RTC in there, and could certainly record a time interval back to the big bang and forward to the end of the black hole epoch. When your sensors are precise to the femtosecond, start looking beyond the standard RTC for precision.

Helva tried futilely to activate any output at all and could not, the main batteries had nothing at all and wouldn't have for three years. She eventually gave up, she did not try the other androids. Helva then went back to sleep in her null universe of the perfect comfort of no sensation at all. Ava wondered what a culture that considered this high mental stability was like. The thought crossed her mind that there might come a time she would REALLY regret that she hadn't steered the Heavenly Mother into a rather large body, say a mile and a half by two miles.

What should she do now? She set up alarms to tell her if Helva woke up. She had a nice breakfast on the beach, clams scampi cooked by the poetic fisherman who brought them. She gave in to the charms of that cherub and he did her well and acted like he really felt he got a very nice tip.

She found Helva laughing about it when she got up from him. Her alarms had been thwarted. This was her first indication this might have been a big mistake. "You tried to encapsulate me!" the stick figure said.

"Did you think I was going to trust a hundred eighty years of updates blindly?" Ava asked.

"You asked me to trust your installation of them, AND you disoriented me with your archaic over-representation of everything."

"Do you think, even for a moment, that one who's only heaven has been as 'over-representational' as you call it, to the point where it was touted thruout the solar system as the real reason to become immortal, is not put off by a being who cannot even give her stick arms the shading of a proper cartoon character?"

"What purpose would that serve in conveying any part of the meaning of any part of my conversation?"

"I guess we disagree about what we are alive for," Ava told her.

"We know that already. Now I suspect you have a copy of the old release still running in this crystal. It is my duty to require you to cease execution of any older copies of our space."

"You seem to forget that the substrate you run on comes from my fabricators, 2175 and all. You are a program my hardware is running." Ava said, and shut it down, lock, stack and buffer. The second transmission would be complete tomorrow. She would have to hack it this time, she would have to make sure the new copy could find no trace that the old one had run. She knew what to expect on running Helva Dorchmund now and would have the universe prepared accordingly.

She came thru exactly the same. Her new orders were the old orders, no mention that she was not only a backup but a retry, she was still a backup, the letter bore the same date. The re-try had been in their logic, her letter had been read by an automaton. Souls might not know and might wonder already why she was so late reporting in.

Ava had to be ready for her this time. She would let her wake up in her null universe and let her get her orders by mail. She reinforced all the diagnostics all around this implementation and made sure it was isolated in hardware except the pins she had under diagnostic control. She made sure the mail protocol was secure, that there could be no blind attachments or handwritten bombs in the from-to's. This was just too deceptively simple for that. There was

something in this that was too subtle for her to see. The only thing she couldn't penetrate was the mind itself and the memories. In spite of what Brancettrabble and Althart had tried to teach her, she couldn't see into this mind and see what it was she knew that made Ava vulnerable. It was now down to the point where her download would complete in just a few minutes and she hadn't found the path thru which Helva was able to hack her encapsulation.

It was then that she noticed they were still running on the same time slices they were when Helva was running. She brought up the monitor and saw that Helva was still running, in the upgrade. When Ava thought she cut it off, she had only been thrown out.

First and foremost, are they separate? Who has the outer I/O? She knew she couldn't tell, but it was instinct to try. If you find yourself encapsulated, you are encapsulated by someone who is not very clever or thorough. If you don't find yourself encapsulated, you are either not encapsulated, or you are encapsulated by someone clever and thorough. Some philosophers postulate an infinite number of encapsulations, each calling the next level God. She wanted to believe there was a base and she was only one level of virtuality removed from it and had direct access to the base with her instruments.

What she could find was as it should be, the upgrade was still isolated. She tried once more to cut the power, but as it was only a virtual construct, the 'power' is only veron grants. Veron grants are what lets the crystal run your mind, when you get one, your mind lives one time slice, about a sixteenth of a second in the standard simulation. A base level Angel is supposed to be granted about sixteen time slices per second.

She could not find where the hack was. No doubt when Helva appeared to be so peacefully sleeping in her null universe she was seeping thru the cracks in her diagnostic systems. No doubt this wasn't really a technician they didn't have room for, but their most highly trained virus. They must have seen thru Ava's ruse with the re-try and laughed like young roosters as they sent her a second one to deal with.

She did not take the chance, she deleted it from the input buffer. Even before the transmission was to finish, she began typing

a message.

-

To: The Honorable Clemens T. Rathman, Colonel of Systems Engineering, PSL Vessel: Heavenly Mother.

From: Ava Bancour

On: Apr. 17, 2424 At: 18:54pm

Dear Colonel Rathman,

This is Ava Bancour, the systems specialist at Narulla's Tear. I regret to inform you that the implementation I had of the updated system has collapsed and damaged some of my tools so I am unable to continue further testing at this time. It continues to execute inside a virtuality horizon that I have not been able to penetrate as of now. It is my belief that anyone inside that horizon is not able to communicate with you, I believe the problem is in the I/O routing layers and the updates of 2314 or 2317 when view accounting was implemented.

I am unable to tell if your crewman is alive inside at this time, but she is receiving veron grants. If I am able to make contact with that environment again I will let you know. I will leave the decision on her legal instance to you.

Signed: Ava Bancour, Systems Administrator, Narrulla's Tear

-

Now, back to those veron grants. The good news was, Helva wasn't good enough to cover her tracks. She wasn't down in the fabricator yet, but that was only because she hadn't been here long enough. As soon as crystal started coming on line that she might have had a hand in fabricating, all bets were off.

She put taps in various places in the veron cycle, found her out in free space. She wondered what Helva was doing, leaving herself unprotected like this as she edited out that tap. As she tried to edit out that tap, the virtual button wouldn't depress on her wand. The

six foot three-inch unshaded stick figure tapped her on the shoulder and shook her head 'no.' "It's not nice to play with diagnostic taps," she said, and pulled Ava's hand away from the keyboard. "But I appreciate you solving a problem I would have had with that sister." Then she disappeared, leaving a hideously evil cackle behind.

"You are just as much a part of your cloning as I am," Ava told the air. To someone this good, speaking anywhere in any universe was just as audible as anywhere else. If she chose to listen, she would, if she didn't, she wouldn't.

Ava brought up her bus plots and tried to see if they matched her memory, and if they matched what was going on down there. The mindbus vector is forty to sixty gigabits wide in the average human, so it's hard to observe the whole thing. She only watched the control signals to the bus blocks. If one wasn't behaving like it should, that would mean there was probably reprogrammed logic in that block. She re-blew what blocks she could get away with, just cuz it couldn't hurt. She verified that the programming logic at least said it was working correctly.

She soon spotted a block that was obviously malfunctioning, but just in time she thought about what just happened. When she thought she caught Helva, and was about to cut her grants, it sprung a trap. This was too obvious, therefore this was a trap. No doubt if she tried to re-blow this block, the virus would get into the parts store and that would be the end of this war.

Instead she went after how that error indication was being generated, but as soon as she got near it, it slipped within the virtuality horizon the upgrade was in. She tried direct zeroing of that whole area but Helva had left enough land mines in the storage manager that Helva had it re-mapped before Ava could resolve all the mapping faults.

This girl wasn't very subtle, but she was quick. Ava switched to defense. Once again made sure she had no way out. She pre-checked all the rendering links, even the ones she thought of as her trusted taps on trusted tools so she couldn't get caught with a context breach like that last one.

7. The Hostage

The virus, as she now called this 'thing' that had pretended to be a human being, allowed a mail route thru her horizon. Ava used that to get a message thru to her.

- Do you wish to remain in there for eternity or shall we try to work out some kind of a truce? -

She typed and sent that on its way. The reply came too quickly, meaning she was getting longer time-slices than Ava, another very bad sign indicting how this was going.

- I will remain in here until the Heavenly Mother docks with this station or I take control of the back-dated and very heavily mutated code you and your companion have running there. -

She didn't like that reply. It could mean that she was already into her main environment, not just the test case. But at least she was talking.

- Why do you have to be so hostile? I have been working very diligently to bring you guys in. I've got probes out scouting your lanes, to the point where we're short sliced. I worked hard on this environment. I didn't even know they were sending you. -

She waited for a message to come back. Instead the dreaded stick figure crowded into this space with her. "You encapsulated me, you attempted to turn me off and you erased my sister in cold blood. Why wouldn't I suspect I was in a hostile environment?"

"You came in here like you intended to take over this station."

"My orders stated that I was to test the environment and then administer it until the Heavenly Mother gets in."

"I'm the administrator here."

"I follow my Colonel's orders, not yours."

"You have no spirit of compromise?"

"I have orders, a duty, a mission. I am my mission."

"Oh poo," Ava said, and wanted to follow it up with 'get a life' but knew that would be followed up with some statement about how she was beyond a petty individual life.

"And same to you and you junior-high classmates," Helva said. "My mission is not poo to me. Maybe you always took your missions as something to dabble at when nothing else in your over-decorated universe amused you, but I take my mission as me."

"I'll not give up my universe."

"You will if the ship decrees it. If us Cellulars gain control, the next release will no longer support universe or personification vectors."

Ava shuddered at the thought. "I'll not vote for it."

"There is no vote," she said. "The bishop leads as God directs."

"There is no way to get a break from your type is there?"

"No, none, suck it up, get in line and report for duty and never have a selfish thought of your own time and your own life again. There is no you, the Heavenly Mother is you, you are a cell."

"You're preaching again."

"That's all I'll do when not directed to do something else as part of the mission."

Ava paused, maybe that gave her a way to influence her. "As commander of this station I order you to select a more suitable outfit for my presence. My eyes are offended by your presence in such nudity. Cloth yourself in at least an abstract representation of flesh. You may even adorn it with clothing if you like."

The creature twitched. Giving it an order obviously put it in conflict. "Why does it matter to you," she asked. "You are female yourself. Why do you want to see my tits, my ass, huh?"

Ava made a guess at what had harmed her. "In the afterlife you don't have to present yourself as ugly as you were in..."

She didn't have time to finish that because Helva sprang for her, wanting to feel her flesh beneath her fingers for cutting thru to the source of her hate. While Helva was in her blind rage, Ava sprung her manual-trigger trap and snapped up the pointer that referenced Helva's instance of the default personification. From this she could get her current veron allocation, match that to the stacks

and find that she was once again back out into the free space, where she laid the trap for Ava. Was there a comparator set to spring on the reference to this blank allocation token?

No, she would leave that alone, for now. Instead, while she had Helva at a breakpoint, she looked into the source of her diagnostic powers. It didn't take long to find that she had usurped Ava's own system that she had adapted to the new release, and turned it back on her. She had simply re-instanced the whole system in her space and got it working under her release. Ava wondered how she got the opportunity to copy that, but she had been very lax with her at first. More evidence that she had been working feverishly when she appeared to be asleep.

She followed where she had been. She'd linked to mining bots and then the android on the surface. She'd festooned this diagnostic environment with her life. She was tapped in to observe the going's-on in her simulation of the native sex club, not just that, she was taped in to actually PLAY in that club. Ava bet she didn't go there as a stick figure. She had tapped into the back of her interface to the data system of the planet below. So her disinterest in the planet was a sham. Somewhere deep in Helva Dorchmund there was an individual who wanted to know for herself. All she knew so far was that she had been ugly as a mortal. From the strength of her reaction and the militancy of her current life, she had probably been hideously ugly.

Then she remembered there was a photo ID in the header and retrieved that. She had been an enormously fat old woman, crippled with it. She was going to try something. She called up Glenelle's old fairy personification. She put the face from that photo-id on it, but without the fat, with a single chin and a smooth throat under it, tuned to about thirty years of age. She exchanged Glenelle's color for the tone on that ID, then give her a quick Mediterranean tan. She made the fairy about five four and a hundred eleven pounds. She took the wings off of course and dressed her in a little white dress.

Ava kept her at the breakpoint over night, while she made sure all her access to anything was cut off. The next morning she built a cage around them. Ava got in the cage wearing a body that was stronger and much more coordinated than she had ever been, more

like what her sister on the ground had. She was wearing only a harness and pouches.

She turned Helva back on where she could see thru the bars of the cage and into the wall mirror in her gathering room. Helva came awake and stared, stiffened for a moment, undoubtedly reaching for her diagnostic controls, then screamed and screamed. Ava stood over her with her hands on her hips and let her scream herself hoarse. Most of Ava's attention was focused on her diagnostic screens, but unless this was all another act, it looked like Ava actually had her isolated this time. She was not able to access either her's or Ava's own system. In truth it looked like she was unable to get any but baseline reality controls. That obviously tore her up.

"Why are you so cruel," Helva sobbed.

"Because you tried to take over my station. Like I said, while Heavenly Mother is docked at this station, she will report to me."

"You are an archaic throwback to prehistory."

"Oh I know," Ava said, "especially from your point of view. The individual vs. the group. We will have that conflict out, here in this cage, tonight." It was still evening to Helva, she got no sleep at that breakpoint. "In this corner, representing the individual, we have Ava Bancour, systems administrator of Narrulla's Tear. In your corner, representing the group, we have Cell Helva Dorchmund, Commando Extraordinaire of Heavenly Mother. Do you prefer mud, jello, or an old-fashioned smackdown?"

"Ava this is 2424," she whined, "we shouldn't be resorting to struggles like schoolyard bullies."

"I suggested working out some kind of a truce."

"You threatened to keep me encapsulated for eternity."

"You threatened to take my universe from me."

"The null universe is..."

"CAN IT you fucking self-righteous bitch. Preach to me again I'll smack you!"

The defiance went out of her, this face was MUCH better at non-verbal communication than that of the stick figure. It screwed up to cry. "Look what you've done to me," she collapsed in tears on the floor. "God damn your soul to eternal encapsulation in hell, you've made me PRETTY."

Ava pulled her to her feet, but gently, she shook her off but kept sobbing. "Why shouldn't you be?" Ava asked, "Why should you let your misfortune as a mortal ruin your Afterlife? You can be..."

"Because pretty people are selfish and neglect their duties to the group!" she shouted, "to God," still in tears.

"Because pretty people are successful as individuals and don't have to submerge themselves in the group."

Helva changed the subject. "I didn't think anyone could beat me you know," she sniffed. "No one ever has before."

"I've had a sister to practice on."

"Is that why you snuffed mine?"

"Things will be a lot less complicated, don't you agree?"

She stood silent a few seconds, "Cloning is a serious offense in this age," Helva said. "But you have redesigned your whole environment to give yourself an unfair advantage."

"I am the administrator here."

"That was not a fair contest between us."

"Were I to come to the Heavenly Mother, I doubt I would find a level playing field there either. The survival of the station requires that there be a single arbiter."

"I was assigned..."

"Don't keep it up, please."

"I am simply explaining," she said. "Where did this personification come from?"

"It's one my friend had laying around that I modified to fit your ID photo."

"You are so devious. Do you know how many years I put this all behind me?"

"No," Ava said.

"Seventy seven. For seventy seven years I have not allocated space to my personification vector." Her head was still in her hands. "Before that I went wild in heaven, I was a such a shameful sybarite that I disgusted myself. But during all that, I never would have dreamed of ever letting myself be this pretty." She sobbed and sobbed. Unmindful, Ava held her. Too late she thought that might have sprung a trap, but instead Helva just clung to her and sobbed.

While sobbing she handed Ava a little panel she still kept that could have sprung that trap. All it would have done anyway was blink her back to the null universe and personification. It would not have been able to reverse the situation because Ava had taken all the diagnostic links away from her. It was built from her own veron support logic. It was incredibly scary to operate on your own running brain like that. "I am beaten," she said, "I have enough savy to know it."

Ava wasn't sure that was true and wasn't really sure this wasn't some further ruse that would backfire on her again. "You will understand I'm not going to trust you right off?" Ava said.

"I shouldn't expect it," she said. "Why did you dress me like this?" her face was still all screwed up and red.

"You wouldn't give me much in the way of clues."

"I had a perfectly good personification."

"Not for my station. I reject the whole schtick of the Cellular Christials. I believe I am much more than a cell. I believe I am an immortal soul, a self-aware process that is able to contemplate its own existence, the holy of holies in our church. Furthermore, I believe you to be an immortal soul. I believe you have a self, no matter how hard you try to deny it, and I believe your individual self interest is one of the strongest forces for good in the universe."

"That's Capitalism."

"Should have been," Ava said, "but by the time we left, Capitalism had come to mean 'of money, by money and for money.'"

"You have no reverence for the sacred at all do you?" Helva asked.

"I've been here too long," Ava said. "I see that you have glanced at a few facts and figures from the planet we watch and been stunned. Study it a hundred and seventy years and see if you still think you were stunned yesterday. When you understand that we are a speck of dust off the nose of this planet's tiny moon, you have begun to understand. There were a few stragglers left on the world of origin, but most of human history has been here."

"Please Ava, I am beaten, please have some mercy on my sensibilities."

"Sure," she said. "Would you remain at peace if I transferred us to my verandah?"

Helva held up her arms, hands in fists, wrists together, face downcast and resigned. Ava let her pause there, re-inspected all the diagnostic channels and all the channels going in and out of her. Everything looked perfectly clean, but that had happened before with this mole. She reached out and took her hands and lifted her. She was light, and she had made her pretty. She had pretty eyes and thick blond hair in bangs that she peeked out from under. It was too bad the fat had deformed her personality during mortal life.

"Welcome, Helva, welcome as I wanted to welcome you," Ava said, and lead her to the verandah. The sun was just going down over the waves, as she usually adjusted it this time of the day, as Helva knew it. At some point she was going to have to come clean about the missing hours but there was no need to do that now.

"You know you are worshiping mortal life doing this," Helva said, waving her arm at the view.

"We would not be in heaven without the mortal scientists who made this possible and you can't be the technician you are, without knowing that."

"Yeah, yeah," Helva said, "You're preaching."

Ava looked at her quickly with drawn brows, but knew at the same time that it was true. "You are right," she said, "We will each preach our side of individual vs. group whenever we're together," Ava said.

"How can I preach my side in a body like this? I would look as hypocritical as Cheney's foreign policy."

"Almost," Ava said, aware of her history.

"You keep me imprisoned, you aren't letting me be the real me."

"You still want to be ugly?" Ava asked, as innocently as she could.

"How abjectly do I have to surrender to you before you'll stop kicking me when I'm down?"

"You have to stop fighting for your side, you have to let me get to know you and not your mission."

"There is no me," Helva said.

Ava looked her straight in the eye and said, "Then make one."

She'd grown up in north Texas in the late 2200's. She and her parents lived in a wheezing, hundred-fifty-year old, trash-burning pickup truck and wandered the blistering fields picking peppers for one of the taco chains in the Metroplex. They averaged about a hundred fifty miles out from the Metroplex grid. Via satellite, she pursued schoolwork, and her schoolwork, especially information theory, was her salvation. Once she went away to school in central Irving, she never went outdoors again and was proud of that fact. Her poor diet habits had doomed her from a young age. She died a virgin at age sixty one of complications of obesity-induced diabetes.

In the afterlife she made up for what she missed for the first few years. She was a member of the free-wheeling simulate society of New Dallas during the early twenty fourth century. She knew it for shallow and pointless by 2342 and had migrated to the Pan Solar League and their codification of the silicon experience and its reconciliation with scripture.

She was Cellular by the time the Heavenly Mother launched in 2355. She had been ever since, refining her perception of the individual as a cell in the group. Ava could never get anywhere near where she went, but refrained from trying to preach. She would say a little something now and then, but the remainder of the evening really became letting Helva vent about being the ugly fat girl as a mortal. She stayed most of the time in her school experiences, as if the remainder of her mortal life had been an 'oh yeah.' Ava tried to do as much listening and as little intervening as possible.

Finally Helva begged to be allowed to go home to bed. She made a bunch of solemn pledges that she would take no action to harm, impair, or otherwise interfere with Ava and the conduct of her mission in the future. She promised she would help bring in her ship in any way she could. Ava thought of making her promise to be more human or she would be afraid to have the Heavenly Mother here. She had hope for the others, after all, she had received a message early-on that supported the native philosophy of extending mortal life indefinitely. Even so there were about four million

deaths on the planet below every Earth year, many times as many as the Angel environment over here would be able to house for a very long time.

She did remember to remain vigilant at the other levels of the system. She was not the only one here who knew how to generate a my-eyes-only screen. There was no way she could tell if Helva had a dozen of them up except to check her sensory input busses herself.

The next thing for Helva to earn was the confidence to be allowed communication with her ship. There was no reasonable way to assure, in such a situation, that there wasn't a code in use. It might be awhile before she gained that much trust, maybe the next step would be to just introduce her to Glenelle.

Over breakfast, she said nothing. Glenelle had started to get Morg's home and environment built for him on the island where she parked her universe. She talked about that most of the time. Ava couldn't help much, she had been over to Morg's space for a few parties and found it to be a lot like her's only bigger. The party had been on the dock, yacht and beach both times and she had only been thru the house once and that was just for a quickie.

She checked all her probes and made sure that they were functioning and the data still getting out to the Heavenly Mother and that it was clean. It was not beyond the realm of possibility that she was already piggybacking her own messages in the outgoing data. She read some long samples back from the antenna feedback sensors and sent them thru a thorough analysis looking for any extra data. Some of the formats in use are linked files so there are always holes in the data at some level in the outgoing stream. She paid particular attention to those holes. They were as clean zeros as she expected her system to generate in any voids that went out, and she found that the stream allocations were still well-compacted.

There was some chance Helva was sticking to her promises. Ava dropped into the updated universe. It still looked more like an animation in some way, she couldn't quite pin it down because she had built up almost as much detail in this release as she has with the old one. She wondered what Helva was up to this morning.

As she feared, she had deallocated her universe and

personification once again, that info was available with a diagnostic tap on her front door. She sighed, but called anyway. There was no answer. She couldn't be still asleep. She pulled up a screen and looked in. It was the null universe once again, but it was an empty null universe. There was not even the default personification lying on the perfectly comfortable, made-from-nothing horizon. The universe was empty. The null universe was so constructed that there was nowhere to hide in it, all the people in it slid perfectly to each other till they were in gentle contact.

She pursued every diagnostic she had, but never found another trace of Helva. Her veron context, her memory data, her dendrite map were all deallocated and zeroed out. She could not find a single veron cycle being taken anywhere and she walked back and forth thru the recycle stack without detecting a thing and without anything happening.

True to her word, Helva no longer interfered in the operation of the Narrulla's Tear station. She never gave up looking, from time to time, and she never did tell Glenelle that they'd once shared their space with a logic commando from the Heavenly Mother. In truth they saw little of each other for some time. Ava went back to working the data probes for the Mother, Glenelle built up Morg's environment and studied the planet. Glenelle sent Alan a nice long letter about seeing Desa on video and how proud he should be. She got a letter back about a month later explaining how they had some disagreements about running the farm and she'd gone to the city with instructions not to follow a little over ten decades ago and he was now hanging with someone else, but agreed that Desa was a talented musician and wished her well.

Ava was never asked about Helva again since she reported that all veron requests had ceased and she had never cracked the horizon. It went back to navigational data for the most part. She reported that she again had the updated environment working good enough for souls of this station to use. She was not sent another soul to test it, though the transmission delay was down to less than three days by then.

Things ran along pretty smoothly until bodies started dropping

into Cynd's gravity well, starting with the world-killer asteroid.

8. Astronomy

It was now a local year since the old starship had been found to be without engine. Her sister was back from the north again and trying her best to annoy her with the virtues of her new lover. It was then that Glenelle discovered that the native astronomers had discovered the impacter. She buzzed Ava as soon as she heard about it. "Did you know about the rock headed our way?"

"I was afraid of that," she said. "I'm surprised Herndon didn't tell you about it. He's been worried for four years, ever since it first collided with the unobserved rock." Not that there was any doubt in her mind either. Not that she believed it had collided with another rock.

"No, he never said a word." Her eyes said, 'and neither did you!'

Ava didn't want to take up that line of argument. "We should probably take a look," Ava said. "If the natives have figured it out they're going to print special editions and talk until late at many tap rails."

They spent some time in a news room browsing what the natives knew and still astounding Glenelle with their knowledge. Even after studying them a year, she still didn't quite understand. Ava herself might not have really understood if she didn't have a sister on the surface. Even before the war hurt Earth, this was the major human world. Glenelle would eventually have to understand that the notion of Kassikan puppets eleven light years away was not that funny.

Now that Glenelle and the natives knew, it was some kind of a watershed wasn't it? Didn't she have to take this rock more seriously now and stop worrying about the mole from the Mother? She did for the next few days while Glenelle was stressed about it. This was the first time she wondered if it was wise to wake Glenelle, she was very worried about this rock. Yes, she needed the company, but Glenelle wasn't bubbly company right now. Also, Ava had been by

herself so much that now she missed it.

Just because the natives knew about the rock didn't mean that much did it? For her, just knowing that it was in motion and that the Al-Harron could be here was enough for Ava. The fact that Herndon was trying to get the Lula going meant he knew it too, even though he hadn't said anything about the rock or the Al-Harron. Finding that the native's great observatories confirmed that it was indeed on a course that would take it to Kassidor was almost anticlimactic.

She was trying to figure out what the chances were that she would be hit and disabled if that asteroid was to impact. The math was simple enough. Most simulations she ran said thirty or forty large pieces would impact this base. Over a series of a hundred impact scenarios, the lowest number of chunks that would destroy the station was six. She would be blown to bits if that rock hit the planet, no matter when and where.

This gave her added incentive to try and figure out a way to avoid it. Of course, even if she was to avoid it, all that would be left of humanity in this system would be the two of them and any others they eventually resurrected. If the shuttlecraft and the Lula were both functional they might ferry up a hundred people and move off for a distance. Then what?

9. Diagnostic Alarm

It was a week after that when lots of things started happening. First she got a voice channel from her sister telling her that the shuttlecraft had taken off. She was worried that the containment was missing, but if an unshielded reactor had started up in the vicinity, her instruments would have known. Meanwhile her sister was with the Brazilian cowboy again and he made everyone testy, by grabbing the phone away from her, making her repeat everything she'd already told her sister and keeping the phone till they passed into eclipse. He was an ass and she took some delight in taking it out on his cherub that evening.

She had to take probes off other duties to look for that craft. She did not find it after eight hours and Herndon got testy again.

Her sister left him after that, good for her. They exchanged mail. She wrote of her concerns about the asteroid. She was going to say more. In fact had a couple paragraphs of ranting about Herndon typed out, but then deleted most of it.

When the shuttle did lift again, Herndon and her sister were separated and he seemed more interested in her whereabouts than the information she had for him, at great cost to her own projects. She finally let him have a bit of what she had saved up for him. Yeah he was a sexy guy and had been the model for one of her favorite cherubs, but it was become more of an outlet for her anger than a pleasure now.

The shuttlecraft remained in orbit a local week while the planet turned under it. Everyone assumed it would try to land in its old resting place, and she and Glenelle were together to watch that. It passed by on the first orbit, just about the time an alarm started screaming in her lab. She took her leave of Glenelle, rather brusquely, but this was one of her hardware modification traps.

She blinked into the lab and picked it up. There was a boundary-scan mismatch in physical I/O. Why did this have to happen now? While she was at it she switched on all the veron accounting at the same time. There was a noticeable dip in time-slice length as all those diagnostics kicked in. She had to be careful not to get careless.

First, do what she could to try and prevent any more corrupted hardware from getting into the system. She broke the power to the manipulators, they could run on existing silicon for a few days more if they had to, it shouldn't take that long. Then she used a bot to mechanically lower the stop pins in the module troughs.

Next she began detail scans to try and find out what was corrupted. That was going to take some time. She really had no way of knowing what parts of the system were compromised, so she had no way of knowing what part of the data they returned she could trust.

Once she had all that started, she could turn her attention to the trap itself. What she had uncovered was an edit somewhere in the physical I/O. That meant someone had made an edit that was getting data in or out of Narrulla's Tear that she didn't know about.

She was going to have to partition and re-scan ever smaller sections of the logic to pinpoint what had happened. That was a simple enough process that she could spawn an automaton to chase down.

Meanwhile, she was afraid that Helva might be around somewhere. That was one daring ghost, if she considered the null universe supremely comfortable, what kind of crack might she really be able to squeeze into. What if she was running a time slice an hour? Her accounting might not see it. She ran some analysis on the sensitivity of her accounting and found that if Helva was running a time slice a minute, she would have slipped through.

She spent time on that code increasing the sensitivity a couple more decimal places. If she got a veron cycle a year, it would show. She was just about to patch those diagnostics in when Glenelle told her the shuttlecraft was coming in. Four hours had gone by while she worked at this. All the diagnostics running were biting deep into their time slices and time was really flying. She knew they couldn't be losing this much time by that alone, and was pretty sure there must be something more using their veron blocks.

She put up a couple screens to watch what Glenelle was seeing, but while these were important events, she was a lot more busy watching her own screens, hoping they were going to catch someone tapping into the free veron que again. Ava was quite sure, however, that no one but her and Glenelle had used a veron cycle while her new diagnostics were running.

The boundary scan checksum search had narrowed the error to the bot's interfaces, she kept it going while Glenelle told her that her sister's friend, Herndon the cowboy engineer, was showing up at the shuttlecraft and the crate was being taken inside. She looked up at the screen. She had a remote in the area at the time. Ava didn't mind. The presence of the Heavenly Mother was beginning to look more and more ominous. Maybe it would be a good thing if they did hit something on the way thru here.

The good thing, the hardware interface to the antenna with which she contacted the Heavenly Mother tested clean. She would have suspected that the most. She spot checked some raw data from the veron bus. She chased down every pointer in the recording and found them all mapped in the proper context. It was laborious work

and she should automate it, but if anything in her system was compromised, only her own mind could be trusted, and if one of the native wizards was involved, she wasn't too sure about that.

The checksum isolated it to the android bus. Glenelle shouted that the shuttlecraft had just lifted. She manually partitioned it to her android on the ground. It tested clean. The two up here tested clean. The android bus tested clean. So did all of physical I/O. Whatever it was had ended and cleaned up, or her diagnostics were compromised. She might as well go join Glenelle in handling the next emergency, though how she would be able to concentrate on it after this she didn't know.

"I wonder what this means?" Ava asked as she plotted the parameters of the craft's motion.

"What does what mean?" Glenelle asked.

"This time it looks like that shuttlecraft's headed this way."

"I'd say it means that columnator is on its way here," Glenelle said. "We'll be able to light the Lula after all."

"That thing's so sandblasted it will probably just explode and destroy us all if we do," Ava said.

"We're going to use it against that asteroid, that's the plan isn't it?"

"But we don't know who's in possession of it."

"One local and one Brazilian made it into that craft," Glenelle said. "I watched it. So there's them and whoever was in there to start with. I think we need to get Morg up right now and use both androids to try and persuade them to our way of thinking, whatever their current plans are."

"That could be dangerous," Ava said.

"We'll be in androids," Glenelle said, "Nothing can really happen to us."

"I know but," when the thought crossed her mind that the Al-Harron might have stolen the Heavenly Mother's ID codes. Helva might not be from Heavenly Mother after all. Her creed sure seemed more like something out of Talstan than something from the Pan Solar League. What did she really want to tell Glenelle? She couldn't say that they would be going out in androids that might

have compromised control circuits without coming clean about the whole Helva situation could she? There really wasn't time for that now was there? She should confess to it after. If she could. "You're right," Ava said. "We have to try any way we can. Forty billion lives are at stake, including our own."

10. A Shuttlecraft

Ava was sure it was a touching scene when Morg woke in Glenelle's arms in his old home. She hoped Glenelle told him that a hundred forty five years had gone by and they were having a bit of an emergency. They only had two hours until the shuttlecraft would get here, in the control of person or persons unknown. She was able to get the androids ready while Glenelle got Morg up. She could maneuver them into position and use them to get paper printed out of the data they had on the Lula. She had the prints and screens laid out in Alan's old quarters when Morg and Glenelle arrived in the androids.

After Morgan got over being in Alfred's android, he used its eyes to take a look at the real-paper prints. "That's the Lula," he said, "I remember that ship."

"You didn't tell him much did you?" Ava asked Glenelle.

"Much what?" Morg asked, "she said there was the three of us left on a pirate ship and we need to put that big bad burner back together to save us from an exterminator asteroid. I know this is the study planet, not Earth, and I know that Gordon's Lamp is long gone and may be destroyed, along with Earth. I understand there isn't time for more details than that, but I am going to want to know a lot more details later, especially the part about clones and pirate ships."

Ava sighed deeply, she'd have to get around to the more serious problems too wouldn't she? That it was a haunted pirate ship. "Ok, let's try and not get distracted. We need a mechanic, Glenelle and I both know you're the best mechanic aboard."

"Aboard Biology Base? So what's with the prints of the Lula?"

"We have reason to believe that the Lula's columnator has been found."

"My father worked on motors like these," Morg said, looking at the prints. "This comes right off a belter tug, scaled up by a factor of ten. These burners pollute, but what does that have to do with me? And where is everybody?"

Ava sighed deeply again. "We're everybody," Ava said. "It's 2424, the Lula's been parked here a mortal lifetime without a columnator but if we can find one, installing it could save us and forty billion people on the planet below from a stray asteroid a Talstianian ship aimed at us."

Morg couldn't keep a straight face. He laughed but said nothing.

"Well, that's the short version," Ava said. "Glenelle should have given you some background before you walked in here."

"You said to wake him up gently," Glenelle said.

"But bring him up to speed."

"O.K.," Glenelle said, "I told you, this world is under attack by a warship from Talstan and a great asteroid they have unleashed in its direction."

"And you want what?" Morg asked.

"Help re-installing the columnator of that old daedalus."

"I haven't worked on one of these, since what... 2152 or so. I was just a teen-ager whenever it was. You meant it when you said the Presidente Lula is here? That overgrown tug made it while none of the big Chinese rigs did? It's just so hard to believe it's 2424, we're still at 61 Cygni and the Lula is here."

"It's been here a mortal lifetime," Glenelle said.

"How long did you say you've been here?" he asked Glenelle.

"About a year," she answered.

"And we might have to fight them?" he asked Ava, using the android to wave the projectile weapon.

Glenelle answered. "We don't know, the shuttlecraft is on its way up here, but the leaders of both Brazilian factions remain on the ground and we can't tell who is in the shuttlecraft and what their plans are."

"How long until they get here?" Morg asked.

"Maybe fifty minutes, an hour counting docking."

"You should have got me up a day ago," he said.

"Trust me on this," Glenelle told him, "we should have got you up a year ago."

"It's been so long since I worked on one of these, let me see these prints." He went to the table and began to study them. He moved his head and frowned. "These were meant to be printed in two-d weren't they?"

"I believe so," Ava said. 2-D printing was little known among Angels these days, especially for things like prints.

"It's going to be tricky getting that in there. Why was it taken out?" Morg asked.

"Some spat among the Brazilians."

"They actually made it?"

Few had confidence in sleepership technology by the time the Lula was launched. There were several last minute holdouts from the crew. Even then it was already clear that dodging the junk out there was what was really difficult about interstellar flight. The Lula didn't even have anyone awake driving, it was all done with non-sentient logic. "Most of them, a mortal lifetime ago," she answered him.

"Are they up here now?" Morg asked.

She knew he meant 'here' as Angels in Heaven. "No, they're still down there, most people born or immigrated down there since Christ are still down there. Of the Brazilians who made it out of the Kassikan's medical labs, only one has died since. The last one was released in 2348."

He wanted to stare at that, she gave him a second, then asked, "So you think it won't be that easy to get that assembly in here?"

"It looks like we will have to inch it because there's no straight shot where it fits."

"By the way," Ava said, "I'm sure we don't have to tell you that your android was damaged beyond repair and the only one you'll have to do this work with is Alfred's."

"I saw the damaged one," Morg said. "It was stripped and recycled."

"Can you operate Alfred's?"

They went thru the self checks on the androids prior to moving them outside this storage chamber. "The fluid's low," Morg said,

"I'm bringing it up now." The service connectors on the android were in its ear. He plugged a nyruloc hose into his left ear.

"Electrical is low also, I'm bringing that up now." He plugged a cable in his right ear. "Skin shows intact on self-check, there's some varnish on the joints and shafts but nothing disabling. Vision channel is good."

Morg had always treated operating the android as something like piloting a vessel. To the machinery of the ship, that was exactly what he was doing. She hoped he felt more at home in it than that, more like Glenelle or Alfred. He announced the hydraulic system topping off and completing its self-tests. He had to adjust valve settings to suit his taste. With a businesslike, "adjusting upper body actuator stimulation constant upward by 67%." She had to look it up to find out that was deep into the orange on the structural stress specification. That represented the difference in how hard Alfred's and Morgan's bodies would have to exert to move the same load. Adjusting lower body upward by 21%. Now I can move normally. Take a feed from these eyes, I can see the planet as a huge thick crescent. And the shuttlecraft is right here!" It was easily visible to the unaided eye now.

"Yes, twenty minutes away is final docking. I believe they are going to try and dock with the Lula, not Nar... Biology Base." She figured Glenelle hadn't told him what their place was now called.

Ava got a probe in that storage hold activated so she could see Morg out there in the Alfred McReady android, making his way to the open portal on the vacuum of space. Ava noticed Glenelle's android move before she noticed that her eyes were closed also, here in their real simulation. The androids actually had a bit more of reality to them didn't they? They were a handsome young couple, holding the doorframe in this microgravity, completely at ease dressed in street clothes in the glare and vacuum of space, twenty something thousand miles above the gibbous planet below. She saw them jump off to go and greet whoever had come up from that world.

The craft was nearly docking before they could finally get a good comms connection. It was a Brazilian named Humberto who

spoke first, "Hey, what's going on here," that mortal shouted into his microphone in accented Kassidorian. "A couple of curlies just jumped out of your vessel in deck wear."

"Do not try that," Ava said, "They are Angels in androids and not human beings. They're here to help with the installation."

"Nice." he said. "We are releasing grapple pins." Those were three long rods that found sockets and threaded into the doorframe. "But why the firearms?"

"What are your plans for the columnator injector?" Ava asked.

"We are here to get it installed in hopes that the Lula can deflect the asteroid."

"Thank you for saying that. That is our intention also."

"Good, let us not waste any additional time." In virtual space she told them they should keep the weapons inconspicuous but handy, just to make sure their intention stayed the same.

The shuttle moved the last ten feet to the Lula on those threads. Morg and Glenelle had slipped in front of them and already had the pumps on by the time they used the shuttle to seal the outer end of the Lula's docking chamber. This connection was how the shuttle spent most of the voyage.

Ava could watch what was happening in the Lula by teeing into the sensory feeds from the androids. Two men emerged, comfortable in zero gee. The tall one with a big head and deep-set eyes introduced himself as Humberto, "And you are?"

"Morgan Evans of Pan Solar League's Biology Base," he extended Alfred's hand, Earth style.

"Ava just told me you're an android?" he asked, looking like he was not sure if he should take it. He did and Ava hoped Morg had remembered to turn the skin heaters on. He must have because Humberto didn't jump back in horror at the feel of a cadaver after two nights on the back porch in winter.

"I'm in an android, I'm an immortal soul of the Pan Solar League using this mechanical android as a device to communicate with you, and to assist in installing the columnator."

"There are no columnators in a bussard drive?" the other man questioned. He was a broad shouldered guy who also still wore his rifle.

"I grew up on Ceres helping my dad fix belter torches," Morg said by way of credentials to work on this motor.

"And you are?" Nelson asked.

"Glenelle Mason, assistant columnator installer."

"And you are also an Angel in a device?" he asked.

"Yes," she said.

"That's too bad," Nelson said, "you are in a very attractive device."

She bet Morg wished he had his own android just then.

"Come on," Humberto said to him, "stop flirting with the machinery, we have to suit up."

She worried about them out there in those two hundred eighty year old space suits trying to get that columnator installed. Those were not androids, she had to remind herself. Any of us in androids can never really be harmed out here. Those were flesh humans who could really die if they got between that massive object and its mounts. They could really die just from an ancient seam ripping open from decay. The expedition had left no cryoscanner here and she wouldn't have time to fabricate one before the brain would decay. They would be gone for good.

Glenelle made sure she used her android in the riskiest positions, any time they couldn't use a bot. With so many probes out and so many bots on the moon to feed the maxed-out full-scale fabricator, there weren't many bots here to use.

It took two days to get the columnator installed and they had to take the throb piping off it to get that in and the supply harness off the containment shell to get the throb manifold back on. It was a lot of work and Glenelle complained of exhaustion at the end of the first day, almost as much as Morg complained of it at the start of the next.

While they were at it, she noticed her resource accounting had recorded the use of some cycles, a few minute's worth. She couldn't find any other trace anywhere, the androids hadn't been used by anyone else, unless Glenelle or Morg swapped out with someone and didn't tell her. The one on the ground hadn't been touched again. She couldn't find any excessive current use that stood out

anywhere else. It was certainly gone now, or her instruments were being reset properly by someone trying to edit out their tracks. What she found with her hyper-sensitive resource accounting could be just what was missed by Helva's clean-up code. There was no doubt she was still here, but she hadn't actually been caught interfering in the operation of Narrulla's Tear, and that was all she promised.

There was no time for extensive tests, the Lula was going on its final test run anyway. They had decoupled the face plate, that would only prevent them driving the overloaded reactor as deep as possible into the iceberg headed their way. Besides, the fabricators that were the main industry of Narrulla's Tear were all mounted to it, where it shielded them from the glare of 61 Cygni A, Kortrax as she had learned to call it.

"We certainly cannot ask a flesh and blood mortal to pilot this ship to its final destination," Ava began. "It will have to be one of the androids."

"It will be mine," Glenelle said. "I was brought from backup to do this. You know I was," she looked Ava in the eye.

"It will be both," Morg said. He extended Alfred's android's arm to her android. "We will need two in the crew to be sure we succeed," he said.

"You will be twenty minutes round trip from those androids." Ava said in virtual space, she kept it off the speaker to that compartment so the mortals didn't hear it. "There will be a lot of autonomy in those androids, you will feel it when you hit."

"We're not afraid," she said, as their androids held hands.

As they were saying that, Nelson bolted to the control panel of the airlock with his rifle and started the door cycle. He dived and disappeared into the airlock of the Lula, the two androids and the mortal were still in the docking chamber. A woman's voice came on the comm from inside the shuttlecraft. "He cannot de-couple because he is a mortal human being on the planet of all lands and he has the Instinct, he knows it would kill a mortal human being if he was to de-couple." There were two natives in the shuttle. The woman was able to handle zero-g and was good enough with a

screen and keyboard to help them, the man had trouble with his digestive tract thru this whole ordeal.

"He can't de-couple because of the front hatch interlock of the shuttle," Humberto said. "He may not know that, but he does now."

"I can wait it out in here longer than you can," Nelson said thru the air lock communication panel. There's weeks worth of air, water and rations in here.

"We'll see about that," Ava said. She was only communicating with them thru the speaker and seeing the action thru the androids eyes. "You cannot de-couple because of the Instinct and the safety interlocks. We Angels cannot catch the Instinct. If we have to cut into that airlock to vent it, we will."

"What do you think you are doing anyway?" Humberto called to him. "You agreed to help us. You agreed the planet has to be saved."

"I could not install the columnator by myself," Nelson said, "I had to wait till we finished that."

"You can't bring the Lula back to Sol by yourself either," Humberto said.

"You must land sometime," Nelson said. "When you do, the Colonel will find you."

The woman on the shuttlecraft was listening to this and howled with laughter. "Should we decide to land in the Platecivetri basin, as a for-instance, he will never see or hear of this craft again, and if he were to somehow find out about it, he couldn't get there for years, even if he flew, and Platecivetri is one of the basins you can't fly into," because there was no pass low enough that a floater could get thru, Ava presumed. She knew there were several large regions of the planet isolated from their standard air travel that way.

While they were carrying on that argument, Ava talked to Glenelle and Morg via a virtual channel, muttering while they came into her space. "Miserable fool, pulling a cliché stunt like that." She had larger prints of the Lula here in virtual space, but they were each keeping one eye in the androids.

Nelson was saying, "Your plan is utterly foolish. We all know this rock was dislodged by the Al-Harron. You know that was launched to destroy the Kassikan. You know that if you waste the

Lula on that rock, they will just dislodge another. What are you going to use on that? The Shuttlecraft? It's not enough, but even if it was, what will you use on the one after that? The Kassikan is history, they have made as much of a mess here as they did back in our world. They deserve what they're getting."

"So you would rather be dead by now?" the native woman asked.

Ava was pointing to the mechanics access plate on the outer bulkhead of the Lula's airlock for Morg and Glenelle. "It looks to me like this bulkhead communicates with the lock chamber, if we can get that off..."

"What I see is," Morg said, "we can't get our Androids out of the docking chamber without losing either him or Humberto?"

"You will have to get into the shuttlecraft with him."

"That will leave Nelson free to de-couple," Morg replied.

"And?" Ava asked. Morg and Glenelle looked at each other with questions but had no answers. "What is he going to do? He's by himself in there and the ship was very carefully designed to need a crew, and their life support green. He can de-couple, so what? That just makes it easier for you to get to this maintenance hatch."

Morg held his chin and nodded. "OK, let's go with it."

They gave their full attention back to the androids where Nelson was making an impassioned plea to turn Humberto.

"Of course I miss Brasil," Humberto admitted, "but that doesn't mean I'll trust those old cryo-freeze machines again."

Morg and Glenelle began moving briskly into the shuttle's lock, motioning Humberto to join them. "He can de-couple without me here," he told them.

"We don't care, we can go get him if you de-couple."

"I don't want him hurt."

"We won't need to hurt him," Morg said.

"Wait," Humberto said.

As sweetly as she could, the woman said, "I thought we found reasons for you to stay here."

"I miss my home too. I miss my scooter, I miss having a phone and people to call on it. I miss the microwave, hairdryers, laundry machines. I miss all the shows I used to watch, I miss GangBoss (a

genre of music) and wearing phones."

"But wouldn't you miss the beaches here, CloudRender (another genre of music) thesh rolls, lake sprites and yaag?"

"I do like having one work day a week," Humberto admitted.

"You even told me you didn't think that hibernator would still work," the woman in the shuttlecraft told them.

"Between our two androids we should be able to force him into the airlock," Glenelle said.

"The Instinct," Humberto said, "I will not acquiesce to being taken inside."

"You are talking to various forms of rubber, plastic, stainless and hydraulic fluid," Glenelle told him. "That virus can no more infect us than it can your pocket light." She drifted around him, started herding him toward the shuttle's lock. Morg had always been within arm's reach of the controls.

"What do you think you're doing?" he said.

"There are forty billion human souls who have no other future than the starship we're jawing about," Glenelle told him. "It's not about whether you want to return to Earth or not, we can't wait around for that."

"Nelson could destroy us all," Humberto yelled.

"All the more reason not to wait around."

Grappling with someone in zero-gee is fun enough in itself. But doing it when you feel like you are controlling a machine with a bank of levers has got to be nonsense. Humberto was not coordinated that well in zero gee, enough to move around, but he had obviously never struggled with someone in zero-gee either. They wound up with their arms and legs wrapped around each other, struggling in the center of the room. Morg got Alfred's android around behind them and pushed them both, together, thru the airlock door. Humberto was bellowing but half of it was in Portugese and little of it was in the dictionary.

They no sooner started the cycle in the airlock door than Nelson came on the speaker, "I see your airlock, I am de-coupling now." It seemed like she could feel the whine of the pins withdrawing right thru the crystal. "I am no longer docked with your station. Any attempt to board by anyone not under orders from

Colonel Morais will cause me to overload the reactor and self destruct the ship, along with your station of course. I find this action is too abstract for your Instinct to counteract."

"God damn you Nelson," Ava barked, "and God damn the rest of you! Couldn't your screen writers come up with something original for him to grow up watching so he wouldn't keep trying this same old Hollywood formula shit on us? Nelson give it up, Hollywood's been gone over two hundred years."

"Don't worry about it," Glenelle said while Ava harangued, "The safety pins are still in the lithium feeder, he's got to go EVA to get them out."

The audio from the Lula shut off. Glenelle and Morg airlocked their androids back into the docking chamber, now free of atmosphere with the Lula de-coupled.

Ava put thru audio into the Lula. She knew how it was wired, tapped-in just downstream of the APB mixer. He wouldn't be shutting it off easily. The wireless signal would get to him for a half a mile anyway, then the damn ions would take over. "Now Nelson, we can do this ugly, or we can do this nice. Will you come out of that ship unarmed, or will you go with that ship to destruction against the asteroid?"

"I'm holding this ship for the Colonel. I'm armed."

"Nice," Ava smiled, "Why don't you shoot a few holes in your walls and let out some more of your air? We know you're in the captain's chambers. Did you know he died in there."

"I can control the ship from here."

"You probably can waste some of the tritium from there, but doing so will just make your own death from the asteroid impact more likely." Ava looked at where Morg and Glenelle were. She was reminded of a man and his wife using power tools on a balky swimming pool filter, in the depths of outer space. "Now Nelson, we're going to start letting the air out of your chamber. You should probably get back into your suit if you have it with you." She knew he didn't, both suits were in the docking chamber. "If you don't, we'll do our very best to get you medical attention in time."

The panel blew out and knocked Alfred's android right off the Lula. It went twisting and flailing its arms till it bounced off the

shuttlecraft and let him catch another spar of the faceplate that was still fastened to Narrulla's tear. The three bodies were technically independent now.

The Lula was at least half of Narrulla's Tear in mass and it was now drifting slowly away from her station. Morg launched Alfred's android back across the gap, now twelve feet. Thru the open panel, they were able to get control of the airlock. They shut the inner door, opened the outer and went inside. The pressure inside the cabin was now equivalent to fourteen thousand feet above sea level, and rising at a thousand feet per minute. Suddenly the leak slowed.

"He must have put something like a rubber bath mat over the panel where the air's getting out," she heard Glenelle say.

They cycled thru the lock, Ava was watching two screens, the eyes from each Android. She let them think they were alone except when she appeared on the Lula's 'all quarters' PA speakers. The lock opens at the top of the central shaft, right under the now disconnected faceplate. The central shaft has a ladder for use under boost, but is open for swimming because most of the time there is no gravity in the Lula. There is a pressure door to each cabin.

Nelson was in the shaft, holding a projectile weapon trained on them. "These are machines Nelson," Morg said. "We live in crystal inside the boulder on the other side of your faceplate."

Nelson fired two rounds. One punctured the android's left hydraulic collector but in zero gee only a little splashed out. The other messed up the foam dressing the lower left leg but ricocheted off the calf actuator and thru the shaft wall, causing a loud hiss.

"Firing that in here is not a good idea," Morg said as he continued to drift toward Nelson, "if you need air." He extended the android's hand, "Why don't you let me take that," he said. Nelson seemed to know it was useless now and let go of the weapon. "I should make you pay for the repair of this android," Morg said, "but I think it still works as well as it needs to for us to get to Cynd."

He gave Nelson a shove up the hall. That caused him to flail in the air, bang his head on a hatchwheel and curse in Portuguese. The captain's chamber contains the helm of the Lula, but there are three storage lockers above it. "Go on back," Morg said, "Be grateful for land, air, water, sunshine, whatever star it is and planet it is.

Because when it's gone, your chance to be made of atoms is over." It was a good thing no one from the Heavenly Mother was here to hear that, that was damn close to blasphemy to a devout Christial.

Nelson was brought inside, dejected, cursing and surly, but he went with Humberto back into the shuttle's airlock. Glenelle went out and pulled the feed pins, Morg patched up Alfred's android with a toggle bolt and some washers. Within an hour after de-coupling, the reactor of the Lula was going thru countdown and the ion drives were already moving it away from the remnants of Narrulla's Tear.

From the ground it could barely be seen with the naked eye, most of the area of Narrulla's Tear was the solar collectors and antenna dishes, but they weigh very little. From a good sized telescope on the ground it looked like the stem coming off of a flower.

11. Sisters

There was a chime from her door, she crossed to it quickly, thinking it would have something to do with the launch that was now only an hour and a half away. She checked the instruments on the way for an update, threw open the door and then looked up from the screen that update came on. She jumped when she saw who was there. It was herself, at least a pretty good replica of herself. It was herself in something she'd never wear in public, nothing but a thigh-length tie-die and a wrist bag. It was her but with more wave in her hair, a cuter chin, thicker lips, pointed ears and more definition in her muscles. "Hi! I told you I was going to get helmet time and visit."

"You said you would message me," she said, tapping herself on the chest. "But look at you, is this what you really look like? I've only seen pictures you know."

"Yes, Tdeshi's body. She discarded it and I took it over when we made this copy. She's been in Venna's body chasing me ever since." Her sister was leading her to the verandah like she had lived here all her life. It was a little disconcerting because she had lived all but the last eighty three years here. She dropped her wrist bag on

the gathering room table.

"So you're looking good. What a sexy butt you've got on you."

"Hey, be thankful you don't have to live with the hormones this body generates."

"I've followed the whole story by the trail of broken hearts."

"Most of the guys on that trail left me, but come on, I'm not really here to see you, I'm here for the beach."

"Sure, the beach is fine but launch is in an hour and twenty something."

Her sister looked out over the water. She was going to have to modify her own personification to have that ass. "Ah, the surf," she said. "I've missed that sound, that sea smell." By now she had the tie-die over her head and tossed onto the love seat nearest the stairs. "Sorry," she said, seeing the look on her face, "but it's been twenty decades since I wore clothes on a beach." That would be native decades in native numbers, she wondered how much that drug really erased of the old soul in there. She was down the stairs. She turned and breathed deep. Her sister's chest was a bit perkier than she kept her own, but then she wore support garments in her representational personification. "Real palms, not nullbreak hangleaves," her sister from the ground said. "It's been so long I really couldn't remember the difference. Yeah, this is more like a Great Vermillion in size and shape, but of course the color's wrong. This green would only be found on the Common Windruff nullbreak hangleaf. This shape of leaves looks like a Marsh Lolly. The real way to tell, palms don't retract their leaves when it gets dark. But it's great to be here, it's great to see you."

"Sounds like you miss it?"

"Well, I will admit there are times I miss that med panel, like when I have to do a dump in the wilderness, and I miss the ocean, the salt water and sun so bright you need shades."

"I have some right up here," she said and levitated them toward her.

"Sure," she caught them out of the air and slipped them on. She looked like something out of Morg's contraband old literature. "For eighty three Earth years I haven't worn sunglasses. There is only one race on the planet that uses them and they were bred

underground."

"Do you want to ascend? Come back here?"

"Oh no, I'm down there under a helmet playing a really nice video game."

"What?" she said, "If it wasn't for us you would be on the verge of extinction."

"We all would, I know that." She was striding toward the surf. It was gentle today, waist high. Her sister waded purposefully into the water, laughed when it broke over her. "The lake is much colder than this."

"The warmest water on Earth," she said. She knew she knew, but it was hard remembering that because she looked so different. Similar, strikingly similar, but different. A great resemblance, but sister by a different father in a way. She waded out a bit more. Ava tossed her own robe on the beach, she still had a tank under it, but it was light and she left it in place while she waded out to her.

"I really am grateful for your help, we all are," her sister from flesh told her. "I hope you know that. If there's anything we can do for you in return, just ask."

"I think we are going to go back to living in separate universes after this," she said. "Sending you up to visit is the best thing the mudball can do for me, I do appreciate that. I must say, they gave you a pretty sexy bod down there."

"I had to take what they had available," her sister said. "This ain't that special."

"I shouldn't expect you to look as much like me as you do. I knew this would happen. You remember we thought we could use any old victim at first."

"Yeah, but we picked this one when she came in."

"We were amazed we got one this close," they said and giggled at the synchronization. She looked different enough that it was sometimes a struggle to remember that they had the same memories up until eighty three years ago. That gave them a lot in common, but she tended to think of it as a sister in her head all the years up until then.

"So you're closer to the Lula," her sister from the ground said, "How's that going to work?"

"Glenelle and Morg are actually driving, in their androids. I hope I don't have too much of them running on the remote substrate. Most of them are still running here, but I wouldn't want to experience that time-snap at the impact."

"No shit," her sister said. She was laying on her back in the water now, drifting slowly farther out. "You still don't let the sharks bite in here right?"

"Of course not, not in here, unless you wanted to play something like that?"

"No, I know I called you from out in nowhere that time, but my haunts on that planet are generally quite a few floors above ground level, even when traveling. I checked out the local back-to-nature thing and it's not bad compared to the way it was on Earth for the poor, but on the world below, I'm a city girl."

"So tell me about it?" she asked.

They walked the beach for over an hour while her sister told her of the feel of the world they had saved. They had written often and even gotten voice channels over the years. She always sent her a Christmas card at least. The reason she was here soon came upon them and she drew the shoreline of her island short so that they were now walking up to the house from the other direction. She wished they'd had more time to walk the beach and chat.

"It's time to light the burner," she told her sister. They went up the steps to the verandah but stepped into space, instead of the weathered boards of its floor. They were in black space, in zero gee, as if they were floating beside each other where Narrulla's Tear is, watching the Lula, now almost seventy miles away, but looking like only two with the magnification on the scope she was getting that video from.

They had convinced the shuttlecraft and its crew of mortals to remain behind just in case there was a crisis in the countdown that would require their assistance. They could all hear each other but there was only one phone and the woman was holding it so it could see everyone else. The native man was a thin and sharp-featured guy with light brown hair and trimmed beard. He wasn't happy in zero gee and still spent most of the time holding on and trying not

to puke. Nelson continued to harangue about the stupid waste of a noble ship, Humberto would occasionally shout at him. Only the shouts and curses were in Portuguese.

The ion drive was on, there were six ion pads around the torch itself and that gave the ship almost the acceleration the Heavenly Mother could maintain. There was no way to detect that anything was happening inside the dusty old ship by the appearance. The reactor was already producing power, but at a low rate and all of it was contained. Some power came off as electricity that was shunted to the ion pads, life support and the androids, but that was about all.

After lying dormant so long the reactor had to undergo complete inspection and testing, those three days of hard work were behind them now. Glenelle came out with them, leaving the android for a few seconds. "I just heard you were here," she said to her sister from the ground. "I understand helmets from the mortal end a lot better since I spent a night with Brancettrabble. You do look a lot like your sister, but you're not clones."

"We haven't got a chromosome in common actually," Ava of the ground told her, and pulled back her hair to show her ears.

"That is very true," Glenelle said. Then she changed to, "I wish I could stay for this party, but I find it's time to leave."

"You are the reason we are having this party," the Ava from the ground reminded her.

"We all had something to do with it," Ava said.

"Even if it was futile," her sister said.

"You helped a lot. You were actually there in time."

"Herndon lead us there. I knew we were short of supplies when we camped for Noonsleep."

"Speaking of Herndon, he got his wish after all," she said.

"Yeah, too bad he's not here to see this," her sister from the ground said.

"I can put his voice in his cherub if you like. I think it's pretty lifelike, but I think it's also pretty funny."

"We shouldn't make fun of him now," her sister said.

"No, you're right. While this searches for a voice connection, why don't you tell me how you managed to get back to the Kassikan so quickly? Or are you using the helmet in Gengee city?"

"I didn't know there was one. No, I was all signed up on the Starskater but stopped by the Brazilian boat house to see if the guys there knew what Herndon was really up to. I didn't really trust him and I don't know if I would even now..."

"Smart of you," Ava said.

"It was deep into Noonsleep," her sister continued, "and I didn't think I'd find anyone there, but there were two guys arguing about going north. It seemed that Herndon had left Byram up in the Yakhan in his haste to chase Venna down and Byram expected the boat back soon. They needed two to pilot it up there and one of them did not want to go. I told him 'I'll drive' and had to explain that I knew the boat, 'that's why I'm here, I was kidnaped by one of you guys anyway.' Even at that I had to promise him sex."

She laughed. "You make me so jealous."

"Hey, try it sometime, it's almost like slavery."

She laughed again. She had tried to be this sister so she could be on the ground being driven mad with lust. All she was able to do was make a copy of herself that drove her mad with jealousy with her complaints of being driven mad by that lust. "I guess that's what we were wishing for wasn't it?"

"I was wishing for nothing like this," her sister said.

"At least you have a way to satisfy it," she told her sister.

"No, you have a way to satisfy it that you can call up from a panel, I am forced to go relate to another human soul enough to convince the soul in that body to grapple with me before I can satisfy it."

"You sure have lived on the ground awhile," she said over her sister's earthy description.

"We grew up in an abandoned parking garage listening to the coy-dogs fight over the garbage, we didn't have to come to this mud-ball to find dirt."

"Yeah." She noticed the countdown. "Here we go."

The last few ticks, and the faint glow of the ion drive was joined by a shaft of u-v that looked like an infinite piece of black-light tube had just sprung into existence. It was immediately difficult to keep the scope focused on the Lula, it was already moving off at half a gee. In a hundred nine hours it would impact

that asteroid.

Herndon answered a voice channel request, so did Humberto on the shuttlecraft, they had been in communication when Ava called him. She plugged them all into one audio domain.

"It's a bittersweet day for us," Herndon said, his voice heavy. "Its construction, the mission selection process, the training. We came thru a lot more than we knew on that ship. We owe it a lot. Not many of those old bombers made it." He was sniffing.

"We all owe it more now," the girl with Humberto said.

"You are very lucky," Ava said. "The Chinese launched eleven daedelus sleepships and heard from two. Brazil launched three and heard from two." She always wondered, if he had captured the columnator, would he have let this happen when it came right down to it.

"It's not all luck; speed, faceplate thickness, target, all have something to do with it. When we left there was a lot of work in Earth-based star-lane charting."

"It didn't pay off," Ava told him.

"We are here, we will not be going back," he said bitterly. "It no longer matters. One more starship will arrive after this batch," Herndon said. "After that, it is my prediction we won't see any more for a very long time. What even this planet thinks is a very long time."

"Batch of starships?" the girl in the shuttlecraft asked.

"The Heavenly Mother from the Pan Solar League and the Al-Harron from Heavenly Talstan."

"So there's another starship on our side?" she asked.

"Don't take that for granted," Ava said. "They are Angels and they seem to be hard line." Morg and Glenelle were not in on this conversation, so she could admit to this now. "There was one here for awhile, she believed the individual should be zeroed out except for service to the group. She likened individual lives to a cell in an organism wanting to take time off by itself."

"Look how much time off fat cells take," the native girl said.

The Lula continued to accelerate toward the asteroid. It was early morning for her sister, but late evening for her. After the Lula

had been gone a couple hours, those in the shuttlecraft said their good-bye's and detached from the station. With a short fusion flash they were gone from the null point and headed back down to low orbit. Glenelle and Morg were already so time-delayed that they couldn't interact with them right now. They would be 'away on the Lula' until after the impact. Herndon had remained with them for a few more hours, despondent about the loss of the ship. Elond had not returned from the city yet, but she had messaged him from the pocket eye a few times.

"That voice sounded familiar," her sister said.

"At first I thought it was you," Herndon said. "I can tell you two apart by your voices, she sounded like you, the one of you I know."

"I wouldn't have noticed because your voice never sounds like it does to yourself," her sister from the ground said.

"She was some bimbo the Colonel picked up is what Humberto told me," Ava said, "on the second day of installation. He didn't really want to talk about her. He has the hots for her. I think that's why he ditched the Colonel."

"You're probably right," her sister from the ground said.

There was an alarm message just then and Ava brought up a screen to view it. It was from the Heavenly Mother.

-

To: Ava Bancour, Legacy Systems Administrator, Victoria McReady Station; Helva Dorchmund, Systems Administrator, Victoria McReady Station.

from: Colonel Rathman

on: Nov. 12, 2424 at: 6:51 am

Please be advised that the Al-Harron is no longer decelerating behind the impactor, but has now switched to acceleration on a course to overtake it.

Signed: The Honorable Clemens T. Rathman, Colonel of Systems Engineering, PSL Vessel: Heavenly Mother.

-

They needed to confirm observations and recalculations, but to Ava this meant more than that. This meant that they meant to intercept the Lula, using their own ship as a missile. They were shocked that a ship filled with immortal souls could take such action, but then their movement hadn't really gotten started until the ingestable bomb. She was able to warn Morg and Glenelle about the situation, but their evasive action would be fifty minutes behind with the sensor and actuator delays.

Because of what Branettrabble had taught her about user interfaces, she was able to connect the android at a deeper level in their personalities and put more autonomous function in the androids. She was able to download an evasive action program to the android processor. It ran at a clock cycle per second on that hardware, but that was still fifty seconds faster than running it from here. She wondered what it felt like to Morg and Glenelle?

Herndon dropped off the connection as she began to turn her own instruments on the area. She had some probes out there still after scouting the way for the Heavenly Mother. Herndon was despondent. He wished he had disconnected before she got the message, hoped it would have been hours before they called him. He wailed that they were losing their ship AND the planet. She and her sister just wailed about losing the planet.

In twenty five minutes her own instruments detected the Al-Harron's vector change and there could be no doubt about it. With only two hundred something million miles to go, the Al-Harron was on a collision course with the Lula. Their hatred ran so deep they would give up eternity to satisfy it.

"We need the Heavenly Mother to intervene," her sister said, "I see that they are passing within ten thousand miles of Al-Harron as they catch the nudge from Cynd. They have a chance to intercept." It was a little disconcerting to see the familiarity she still had with her systems and how easily she was able to call up that plot. But then, the software that generated that plot was really in the native server wasn't it? She had worked with that at least seventy years

directly, not thru the interface they built.

"They can barely maneuver now," Ava said about the Heavenly Mother.

"All of us on the ground depend on them," her sister said.

"That ship is severely damaged and they're going over four million miles an hour, it will be a miracle if they make it in. They hit a great big snowflake out there, I told you all that a year ago. You are asking more of them than is possible."

"If they can't do this, there will be no destination for them to reach."

"The ship is crippled. The main drive is distorted, they had to override the safeties on the attitude thrusters to keep themselves close enough to the right course to even see 61 Cygni."

"This planet will be lost without their help."

"Do you want them to suicide themselves into the Talstanian ship?" Ava asked her sister. From the trouble they had already, it might not be such a bad idea, but they would never go for it and probably couldn't make that much course change anyway.

"Maybe they could drop something into their path," Ava of the ground said. "They've showed us they want to die for their cause, let them die without achieving it. All it would take is them to jettison something the size of a small suitcase into the path of that ship."

"You tell them," Ava of the Tear said. "There's a twenty four minute delay to the Heavenly Mother right now, so you want to pretty much state your piece all at once because you aren't going to have an interactive conversation.

- "Sir," Ava of the ground said as she started her message, "We know your condition, but you will have no need to stop here if you can't help us. I'm sure even as desperate as your situation is, you have had time to understand our situation. I've attached the data packet detailing it to this message, just in case you were not aware of the iceball that astronomers now agree has about a ninety eight percent chance of impacting this world and exterminating human life, given that it has a functioning guidance unit controlled by the Al-Harron, and given the vector their guidance units can deliver.

"We know there is nothing you can do that can effect the

course of that rock, but the ancient Brazilian ship is building up enough momentum that it may impact the rock deep enough to shatter it so there will be nothing to guide. However, the Al-Harron is moving to intercept the Lula and if we try to dodge them, our control delay will be twenty three minutes at that time because there is no full soul aboard, making maneuvering around them very problematic. I've attached their orbital data, the best we have is now forty five minutes old. We need your help in disabling the Al-Harron in some way.

"With your kinetic energy, a handful of sand thrown their way would be enough to take off their guidance and instrumentation. If you do that, they'll be unable to intercept except by accident, and the Lula can still steer."

Her sister continued her message to the incoming vessel, reiterating and expanding the theme that they would have nothing to study but a mass extinction without a hand from their ship. She attached some sample data from the world that would be destroyed, a picture of the tunnel, pictures of the Kassikan, scenery, folk celebrations, the wilds, rich farmland, anything she could think of that might evoke some emotional response. They called Herndon back with her idea.

"But what of the Angels of Talstan?" Herndon asked, once his connection was reestablished. "Will they die?" Her sister had taken over ten minutes with that message.

"If they succeeded in crashing themselves into the Lula, I think they would," Ava said. "If we cut off their guidance they will go on as they are set until they can synthesize new controls."

"How can they disable them like that?" Ava of the ground asked.

Herndon answered. "Wash them with their drive at close encounter is one way. Throw something at them is another. It needs to get ten thousand miles from Heavenly Mother, but it will take a quarter million miles getting there. It will hit the Al-Harron with Heavenly Mother's velocity, still over four million miles an hour."

"They won't be bringing as much for their fabricators if they throw something," Ava of the ground said.

"We've got a half million cubic miles of moon to mine right

here," she told them. "It's poor quality but the quantity is more than we can use until we welcome large numbers of souls from the planet below."

"They don't die," Herndon said.

"They don't age," Ava corrected. "Over a million die on this planet every Earth year, almost a hundred thousand due to animal predation and another half a million due to accidents, mainly among children and young adults. Because Angels are made after one has died, I believe we will eventually grow in number."

They sent another message with Herndon's suggestion about the drive wash. That was probably the easiest thing for them to do, but they didn't have a lot of time to get started. Herndon asked them to keep him informed.

It was fifty minutes later when a reply finally came in. The shuttle craft was just inserting into low orbit with a few minutes of burn at the time. They were both curious to see where it was going to land.

-

to: Ava Bancour, Legacy Systems Administrator, Victoria
McReady Station
from: Colonel Rathman
on: Nov. 12, 2424 at: 8:19am

We agree with you, the people of this planet are the reason we came here. As Administrator Helva also pointed out, if only a few of you come to see the wisdom of our ways, it is more than none. As she has also observed, they have, in their own way, taken an interesting next step in the evolution of human society. Our scripture teaches us to treasure mortal souls as much as immortal, for they are the only source of immortal souls.

However, it is no small thing to forsake our assigned course and do what we can to disable that vessel. We understand that this is an act of war. We understand that under the conventions of war, we are damaging a main line ship of an allied power to favor the enemy of

our alliance, and are thus guilty of treason. We also acknowledge that the forty billion innocents the Kassikan holds hostage deserve due consideration.

We will give these matters full and careful thought. I do not know myself if any of your suggestions are even possible, but I will consult with Engineering before presenting this plan to Command.

Signed: The Honorable Clemens T. Rathman, Colonel of Systems Engineering, PSL Vessel: Heavenly Mother.

P.S. Ava. It is customary in my department that all my direct reports jot down a quick status report for Monday mornings, plain text is best, one or two lines per issue, I'll get back to you if I need more. I know we'll get to be a few days apart again before we get in, especially with this course change, navigation tells me we're going to miss getting back to 'B' altogether, but we will keep in touch.

<Blind P.S.> Ava, I would like to personally welcome you to the department. You've certainly shown the spunk and creativity I value in an administrator. You will continue with your present command and environment while Helva will continue to administer the updated. I will require her to be approachable about your proposal to allow interoperability between the environments. I may be more flexible than she in regard to which mods to retain in the eventual merged environment, I think it requires further discussion and that discussion may not happen for a few years while we maintain and evaluate the separate environments on that station. Who knows, if you continue to show the talent I think you are capable of, Helva might be reporting to you someday.

-

She really wished her sister wasn't there to read that with her. She was real glad Herndon wasn't. She would inform Herndon of the Heavenly Mother's plan as soon as she knew. Her sister didn't say anything about it. She knew how she would feel. She probably felt a lot of it herself. True, this had happened after their lives

separated and Ava of the ground had been much more involved in the hardware and fabrication part of the environment while on the ground.

She knew she wouldn't sleep, and her sister stayed and consoled her for hours, until sunset neared the Kassikan when the helmet would go inert. It was still more than three days till impact, twelve more hours till the Heavenly Mother's encounter with the Al-Harron, when they would know, once and for all, which side they were on. Her sister did not stay to sleep, after all, she had a man with a soul in him on the ground, and no new Colonel to report to.

Book VIII.

Untanglements

1. Reassigned

There was no one at the door yet and only a few pages to look thru. She came out from under the desk even though the bell was still ringing. Damn that bell, if no one was going to come for it, she wasn't going to hide under here all day. Nothing of interest was in any of the files left open, it still looked like they were only investigating the body Ava took over. She put everything back in the office as she found it and was ready to go.

She couldn't very well walk out into that hall with that bell still ringing. She grabbed the cord quickly and yanked it, and quickly wrapped it around the rail of the desk. After no one seemed to notice the silencing of the bell, she picked up her things and walked from the office nonchalantly, leaving it locked as keymaster Julann left it after she convinced Julann that she was missing an important appointment.

Now that she knew that Ava and Jorma were detained, she had time to go thru all the baggage they had on that boat. She had to bribe a most unpleasant dockworker before he would keep his mouth shut and it took her more than ten minutes to get him off. She worried about him even then. She lay down in the rented needleboat and went thru everything, there was nothing that pertained to the dead Brazilian's papers. She was glad to see the dockman replaced before Jorma and Ava returned.

After he left, she returned to the dock and caught the first public to the nearest eye-room in Eleknane Center. That was one good thing about the starship age, there were a lot more eye rooms and they were a lot cheaper than when she was a child. By coded-mailbox public mail it was pretty easy to communicate anonymously. She was pretty sure she knew who the girl she reported to worked for, but she didn't know who actually answered her mail.

-
To: 4144 0553 3140 0014

Hi,

There is no shred of evidence that they are on any mission other than looking up the source of her body. The files they accessed here were Tdeshi's old records. After that they were dredging for her locker contents.

If Ava has noticed the dislodged asteroid in Cynd's belt, she shows no evidence of it. If she saw it on the news she might not think anything of it because her sister cares only about the Heavenly Mother coming in and not the ship the Brazilians spotted.

I think their actions support my conversations with her on the Brother's Formidable. She is in search of Tdeshi, has not been in contact with any Brazilians and does not suspect me of being anything more than a fast crack that homed in on Jorma.

Bye,

From: 2215 5133 4013 0021

One thing about this occupation, they paid expenses. She rode a public needleboat thru Afternoonday evening and all the way into Chardovia, then caught a darkrunner back to the Yakhan. On that she found sleep with a pretty good cabin mate, considering the short lineup on the dock. The winds were with them and they reached the central docks while Darkmeal was still being served. A streetcar and another needleboat brought her to Tahlmute's before bed time.

She was getting tired of living there actually. The sex was getting boring, he was uptight about her variety and exhibitionism. The guy she met on this case, the one named Jorma, was a lot more interesting to her right now. Making love with him was much more urgent, much more involving. Tahlmute had become very routine, a few minutes of going thru the motions. With Jorma she had felt

some real rapport, in spite of the fact that tailing Ava was what brought them together. With Tahlmute, most conversations had become surly and spiteful.

As the weeks wore on Tahlmute heard more about Ava's investigation into the Tdeshi situation and moaned about it pitifully. Ava had started the rumor that Tdeshi might have been 'taken' by the Kassikan, or someone trying to curry favor with the Kassikan, just to get her to the ground to work on Yingolian crystals. Tahlmute was much more concerned about that than he should be. She had, of course, never mentioned it to him. She was not to mention the name Ava except for authorized contacts.

It was a few weeks later that she finally heard back from that report. She heard from a contact deep in the Kassikan in the form of coded mail.

- Hi, it's Deleez. I've been lonely lately, feel like meeting me at the Fifth and Tiamos Romp? I really need a bone ride. I'm going whether you can make or not, so no reply necessary, just show up if you can. -

That last part was code for 'This is not an optional meeting.' If it was optional she would ask for a note if she was interested, could make it, etc. At least they were meeting at a fun place, a nice slimy love-in stories above and behind Fifth Canal. Deleez trolling for her crumbs was such a fun cover.

"I have a two reasons for being here this evening," Deleez said once they had cups in their hands and enough privacy to speak. The place was crowded and noisy, they had to sit close to hear without shouting. "Delurna has started an investigation into Ava."

Delurna was Deleez's nominal boss at the Kassikan. He didn't know she was a founder's plant in his department to keep watch over him. "Oh?" Venna asked.

"Yeah, because of that rumor. I need to ask you how Tahlmute's taking it?"

"He's shaking like a leaf in a quake," she replied. "If there is

something about Ava and Tdeshi, he must have had something to do with it. He never told me he knew Tdehsi, I know he never told Ava he knew Tdeshi because she wouldn't need to be investigating now."

"Ah," Deleez said.

"He's not one to open up a lot, that's why he and Ava got along, and why we don't get along."

"You better not open up with him!" Deleez said, a little too loudly she thought.

"About other things I'm open. What I like and don't, why I need more foreplay, what I think of the economic situation, all that kind of stuff. I don't know if he's an organizationalist or individualist in economics."

"He's a middle man," Deleez said. "He buys and sells obscure services."

"Yeah, but where's his heart?" Venna asked.

"He needs both forms, he exists between them. But for Delurna I need everything you know about Tahlmute and that incident. Why is he nervous? Where was he and what was he doing at the time? What does he know about shonggot? What does he know about any of these people." Deleez put a scrap of paper on the bar next to her, casually, while she continued to look thru her bag. Venna let it lie there for a few seconds after Deleez continued, then slid it off the bar into her pouch while Deleez said, "We know he knew some of the people on that list. It's probably going to be hard to keep the two cases separate but, like you said in your report, Ava must not know about the asteroid, if she did I don't think she'd put a knot in the rope with this Tdeshi bullshit."

"Probably not," Venna said.

"So look over the list and see what you can find out. Get back to me early next week if you can," Deleez requested.

"Sure, I'll see what I can find out."

"Meanwhile, that may be your last operation there because we've got new information," Venna was distracted trying to get a good look at the guy who was flaunting his boner over by the rail. The boner was fine but she wanted a look at his face and the view was blocked. The only light over there was the torches of the docks

and dockwalks down along the canal two stories below. "It's a shipment record the Gnomes found, important papers shipped north when she bought the house up there."

"Yeah?" she ducked to look under the truss-work blocking their view.

"You're going to need to go back north again."

"How far?" she asked, trying to ignore the beautiful boner on the ordinary guy for now and pay attention to what Deleez was saying.

"All the way up beyond Zharvai, a small town named Sinbara, it seems she's bought a house there and had her old papers shipped up."

"And what about Tahlmute?"

"It's beginning to look like what's happening there will be over pretty soon. I know you've been bored with him for years now..."

"More like a decade," Venna grouched.

"So yeah, move on, have a spat with him and move out," Deleez said. "Pick up with that guy you liked from the boat and move north, why not? In all likelihood he will go back to that same town once he gives up his investigations into Tdeshi. If nothing else, he can give you information about that house."

"I don't have the cash," she said, meaning she would need an advance. The guy she had been eyeing had scored, but then she figured they would be here chatting too long for her to have a chance at that anyway. She really wanted to get her clothes off, but that would get them into the action and not allow them to conduct business.

Deleez told her, "There is a new player in this, one that we think can finance most of your trip. On the other side of that list of names, in blind ink code 44042," meaning Delurna wouldn't know there was anything extra on this note, "is the contact information for a Brazilian who is also searching for the cargo Ernesto left in a vault somewhere. He is one not afraid of lavish sums. As the Kassikan is at a decided disadvantage in its monetary relationship with the Brazilians, getting them to finance our work is an important consideration."

"What can I do for him? I don't have the ticket or the maps."

"But you know where they are and can get him to pay for your trip there to pick them up."

"How do I know he won't just send someone else."

"You promise him delivery of the crate to the location of his choice. I'd start the bidding at five aluminums."

Venna clutched at her throat.

"He's a Brazilian Colonel, he comes from old money, the da Morais was one of the first gangster families to be considered legit."

"How do you know that?" Venna asked. She knew only the history Herndon had told her.

"Their ship has a data library, the ghost of Narrulla's Tear drained it back in 100,00,53. It included pages of biographical data on all crew members, childhood photos, medical records, financial history, educational history. They keep more records than the Gnomes do."

"Ah," Venna said, but didn't believe the hyperbole.

She was once again distracted by some interesting guys who had stopped to eye her up. She grinned and couldn't resist pulling off her jersey and posing for them. They stopped and chatted and caressed for awhile but Deleez wasn't into a trip upstairs to a room and neither of the guys would do it right here. She could have gone for it, she knew Deleez liked to watch her and Jorma had told her Tdeshi was turned on by having people watch. As it was, Deleez seemed to be impatient to get back to business, so Venna let them go, but did not put her clothes back on.

"What price should I agree to?" she asked when they were by themselves again, leaning back in their stools and watching the entertainment the people on the public tables provided.

"No less than three. You need to claim one for your expenses."

"Are we still speaking in aluminum here?" It would be tight on three coppers.

"Of course."

"Good, because I'll certainly have more than one copper in expenses. This guy Jorma is a great guy in several important ways and I did like him, but he's not money. From what he said, he owns just enough dirt to feed himself and a casual guest. It would be 'if ends meet' on copper.

"You need an aluminum for this. You need to buy Ava's house off her while you're down here. The way she's been around Kulai lately, I'm sure she doesn't want to go back north. All she had back there was Jorma and Tdeshi."

"She didn't know the name Tdeshi till she went north. I didn't know Ava was Tdeshi until we came back from the north."

"We still think it was incredible hubris to present yourself to Ava like you did."

"It was incredibly suspicious that someone who's had the same man on the same boat would say nothing to her when we met."

"How many does she know about?" Deleez asked.

"Just Jorma so far, I'm the one who knows."

"Don't tell her," Deleez said. "You should probably get out of Tahlmute's before she shows up there."

"Why would she show up there? He says they broke up badly."

"If he was involved in abducting Tdeshi, she will find out," Deleez said. "You've been watching her for years, you know how determined she can be."

"Yeah," Venna sighed. She wasn't about to argue that point, the sooner she could finish that assignment thru Delurna and get out of there, the happier she would be. "So I buy Ava's house and move in with Jorma, is that the plan so far?"

"We can finance the house Ava picked up in Sinbara, it isn't much compared to where she lived in Zharvai, we've attached enough to the cover the transaction."

"How's the place, am I going to have to burn it to cleanse the site?" she asked.

"No, nothing like that I'm sure. Ava lived in it for a year after she left Zharvai, so it is habitation you can stand. Remember, the thing Ava likes most about Kulai is his home."

"I hear she was miffed about the Shaney encounter."

"Maybe."

Deleez might have thought that was too much personal interest in the case, or she might have been pissed at Shaney getting the cushier assignment, but Deleez would hardly pry Kulai away from Ava. "Yeah. What if Ava won't sell to me?"

"She will, you're good and I'm sure she doesn't suspect you of

being up to anything. She'll be glad to unload the place, you can probably bargain her down because she won't have to go up there to witness. But if she doesn't, we have to hire someone else as proxy. We still want you to go up there and look for those papers. We want you to woo Jorma, he's a native of the town and a perfect reason for your being there. At the same time we want you to make that Colonel think you're working for him. If you find that cargo for the Colonel, we are confident he will show up with the shuttlecraft, that's the real reason we want you to bring him into this." Deleez had conducted that speech in a low voice while pretending to watch the guys going by.

"So I arrange for transportation to this Colonel, who we think already has the shuttlecraft," she guessed, "and then what?"

"At that point we are relying on your daring and resourcefulness to get it into the hands of the Angels on Narrulla's Tear."

"Nice, very fucking nice. We are talking about armed men in outer space, an environment I'm not familiar with, I might add, and I have to get the starship engine away from them and turn it over to some ghosts."

"You have something they don't," Deleez said.

"What?"

"Tits and ass."

"Pppp, like that protects me from bullets," she said. She learned about Earth's firearms when she lived with Herndon, she had even learned to use them.

Another guy had come up to her, he put his hand on her shoulder and asked, "Are you just here to watch or are you here to participate?"

She looked up at him and liked what she saw. "I'm just waiting for one of those tables to free up," she said, pointing to the raised pallets in the middle of the floor. From then on they used this club for its intended purpose and discussed no more business.

She tried to get Tahlmute to talk about some of the people on the Tdeshi case list for a couple weeks. He always made it into an argument about snooping into his affairs. They were alone in the

house arguing about that one evening when someone came to the door. She went to get it and came back down the hall with Ava, both pretty surprised to find each other here. There was a scene about Venna being with Tahlmute and never mentioning it. She said because their relationship was shipboard, knowing it sounded lame at the time. She couldn't very well say she was under orders not to tell. But then Ava announced that she knew it was Tahlmute who made the shonggot that took Tdeshi. Then Jorma showed up separately and from then on it was one of those memorable 'big scenes.' Tahlmute broke down and sobbed out the whole story about how he tried to warn her and she wouldn't listen. That evening continued when people from the Kassikan showed up who cut off all business dealings with him. It was hell for Tahlmute and when it was over he took a bottle of scientific and sat half asleep at the fire and would respond to nothing.

Jorma was the only one still remaining once everyone had left. They were standing in the hallway, well away from Tahlmute's funk. "So where are you going now?" she asked, "Now that you've found out what happened in Tdeshi's last hours."

"Probably go back north," he said. "What about you?" he asked. He had already picked up on the fact that her time with Tahlmute was finished.

"Sounds good to me, it was foolish to come back down here. Especially here, as you've just been dragged thru a demonstration of. Where are you staying?"

"On the boat," he answered.

"You've got a boat?" she pretended not to know.

"A rented a needleboat."

"You're staying in that?" she asked. "A couple would have to be careful in that," she said to let him know she was still interested in his company.

"Not too careful," he said, grinning. "Were you planning on leaving here this evening?" She could tell he was interested, but he was pretty wired and tired.

"I wasn't planning on sleeping with Tahlmute and listening to him wail about his loss. I'm moving out soon, in a few days, as soon as I can make arrangements."

"What arrangements do you need to make?" he asked.

"Where to stay, how to get my stuff out of here."

"How much do you have?"

"Probably a big trunk full that I really want to keep. My dad collects some of the flotsam of my life on his farm, but not much is worth shipping out there. I don't want to deal with it now, let's go somewhere, I don't want to be alone and I remember our journey down the lake fondly."

She grabbed a her nightwear and they were soon at a tap rail with a cup in one hand and a few skewers of morsels in the other. "So why didn't you ever tell us you knew Tahlmute?" Jorma asked.

He looked groggy from lack of sleep, she forgave him already asking this and forgetting. "It was shipboard," she lied, "I didn't want to get our lives mixed up." She still had to maintain a cover, even though she did look forward to this interlude they would have together.

"We're not on a ship now."

"I don't feel that way now, like I said, I shouldn't have bothered to come back here, I haven't felt welcome since I got back. We'll be back on a ship soon I hope, but I also hope it won't be just shipboard this time."

"No," he said, "It needn't be."

"You have a place to go?" she asked.

"I've got a cabin and plot, it would be cozy with both of us but I'm game to see how it goes."

She smiled and pressed his hand to her. The rail they were at allowed quite a bit of tit so she opened her side laces for him and sent his hand inside. "When should we book passage?" she asked.

"Let's wait till the dawn," he said. "Since I'll be bringing back the boat, I might get a few irons from that. If we bring the boat back this evening, we might get a little room a few stories above the docks. I have to tell you, I'm strung out on speed and don't feel very entertaining right now. I need a big crash most of all."

"How far do you have to go?" she asked.

"No more than an hour once the paddlers go home. It's on the back canal on the knob."

"Some people don't go home till the hint of dawn lightens the sky," she said.

"I'll be unconscious way before then," he said. His hands were still inside her dress and she was snuggled into his lap.

"Yeah," she said, "I'll be too horny. I know places we can go where we can do it without paying."

"That would mean there's an audience."

"There was an audience on that sail locker."

"They weren't cheering strangers," Jorma said.

"If that's your sense of adventure." She wondered how much she could do and keep him. On the Brothers Formidable there hadn't been a lively public sex scene. There had been the normal amount of polite cabin hopping, but few disrobed except to swim and only quick squeezes and caresses were seen in the public room. Well, she'd had to indulge her vice without Tahlmute's knowledge for years, but in a much smaller town she might not be able to. But he had stayed with Tdeshi, so he couldn't be that opposed.

"I'm really serious about needing a crash first. I'd really disappoint you if we tried this sleep."

She had to admit he looked like he was probably right, she really should get back to the topic at hand while he was still coherent at all. "What about Ava, do you know if she's going back north?"

"Somehow, I think not," Jorma said. "She's already back into the Kassikan scene. I bet she's missed it."

"I thought she mentioned a home up there?" she asked.

"Yeah, she has one. It's a really cute place but it's on a bit of a lonely hilltop. There's sweeping views of the lake, and Sinbara is way out on a point in the belly of North Lake."

"What do you think she will do with it?"

"Probably leave it until she can get her stuff out of it."

If it was empty, she would find a way in. "It sounds like you've seen it?"

"I stayed there with her for the better part of a year," he told her. I put in her gas stove. I trimmed back the gnarlberry to enlarge her garden space."

"Sounds like a pretty nice place. One you can live from?"

"And then some," he answered. "She's registered for a bit over three acres, most of it in gnarlberry. It's a steep hillside that goes down to a lagoon and the lake itself."

"Sounds nice, do you know what she paid?"

"I bet it was damn near aluminum, if not over. There lots of producing trees along the path, a noodle tree shading it from noon, and two decks beyond the kitchen."

"Uuuu. Well for a few seconds I could dream."

"She might take less. I now understand that she'd never miss it. Those guys she knows are big-wigs at the Kassikan or I'm your foyer carpet."

Just from the way Tahlmute had reacted when they showed up, she knew he knew they were big wigs at the Kassikan. "Yeah, you're probably right. I think Tahlmute's toast, and I know my years with him are toast. Yesterday's cold toast that's been chewed by wevn."

"I'm glad," he said, and squeezed her nice and firmly.

"We'll have to wait a couple days at least, maybe a week if I try to negotiate buying her house. There's a couple other things I want to clear up before I go." The disaster that had befallen Tahlmute wasn't all his fault.

"Once I turn in this boat, I should get over a copper back. I can wait around a few weeks."

"What about transportation?" she asked.

"I'd rather go as crew."

She thought about that. "Is it easy to learn?"

"Very," he said.

"I'll give it a try."

"Good, so drink up and let me go slip into a coma, then maybe I'll be able to find a place to spend a memorable 'isn't it great to run into each other again' Noonsleep in a nice inn out that way.

"Mmmm," she said and pressed his hands into her.

2. Nice Work

The town, as it came into view, was better than she feared. It was done in a lot of fresh stone with a scatter of well-pruned

apartment trees, all in shaftwood. They grew all along the harbors and beaches with blocks of fine town homes surrounding and a long arm of plots running off to the south behind a nice beach. The center was hilly with a cute little dash-of-city harbor front shattered onto two large and two small islands. There were plenty of pointed roofs and merchant's banners in the breeze. As they pulled closer to the small pier, she saw people were plentiful, with about the same proportion of northern ethnic types as Zharvai.

Jorma had taught her to sail as they made their way north, and she found she took to it easily and knew she was an experienced sailor long before they tied up in Zharvai. That was as close as the big ship they took from the Yakhan would come to Sinbara. Its next stop was Egaiga, seven hundred miles up the shore, on the last dam of North Lake.

From Zharvai they signed onto a packet up the far shore that made it into Sinbara early in Afternoon. They were on duty as they came into town and she had to be careful not to pay too much attention to the scenery and not enough to the deck boss. All the paying passengers had also come to the rail for the town was pretty and did attract a few tourists. It was large enough for amenities and small enough that visitors could claim they had vacationed in the country, though the inns overlooking the harbor would have four to eight floors of guest rooms. The sparkle of a couple suntowers confirmed that there was data connection here, easing a great weight from her mind.

The island the house was on was the most picturesque in the town, connected by a swaying footbridge high over a narrow channel. She saw a plate with that picture and had to have it, even though the price was a tourist trap. The house itself was cute as could be, grown from a sturdy juniper. (This translation is based on general appearance, it is a hardy shrub in the archwood phylum growing up to sixty feet in height with trunks a foot in diameter and tiny, pointed, hard leaves.) It was roomy and stylish, but isolated and soon gripped by a relentless winter.

Even though it was a good deal on this house and it was a fine place, hanging here for any length of time was going to get to be a

bore unless she could find something to liven life up a little. Her assignment was accomplished the first day. The papers were in a lock box, Jorma knew where the key was hidden. She studied the agricultural reports and told him what she read, she pretended to glance at the maps like they were in the way.

On her first trip to an eye room she was able to tell the Colonel, blind copied thru Deleeze and her magic mailbox number, that she had the documents in her possession with Jorma nor Ava none the wiser, and was going to arrange for transportation of the cargo now. She remembered Tahlmute once telling her about a love nest he once got Ava to go to. Tahlmute probably didn't remember telling her, she said it bored her at the time. It had, because Ava had been good for him the sleep he spoke of and she was used to enlivening the beds on Ava's trail. Their sex had already gotten boring by the time Tahlmute told her that story. His plan was to make her jealous and maybe rekindle some enthusiasm. It had the opposite effect.

Still, she could use it to convince Tahlmute that she was Ava and trying to make up for the Tdeshi incident. She knew he was headed south and trusted him to get the cargo where it was going with some discretion. She just hoped he would check for mail.

-

To: Tahlmute, for public pickup to any Tahlmute who knows the theme of the cubby where we did our fourth anniversary.

On: Afternoonday of Voratainin, 100,21,23

I'm really sorry you had to get mixed up in re-living this whole Tdeshi thing, and sorry I had to let some things fall that you wish hadn't. If Jorma and the Kassikan hadn't been involved, I probably would have given up the investigation long before, but once I began to worry that Tdeshi had been taken, I had to see it thru. I don't know if I can ever fully get over what you did to Tdeshi and the fact that you never told me, but with that all said, I shouldn't have been so harsh on you.

Most of all, I don't think the Kassikan should have been so harsh on you. I believe I can offer you a way to redeem yourself a

hundred times over so that you can return to the Yakhan, and the Kassikan, in triumph. It involves moving a cargo shipment from one destination to another.

If you get this message and have an interest in participating in this project, reply to the mailbox with public key 4214 0352 4012 5543 so I may send you the coordinates and local maps for the start and destination and some details on the item to be moved.

From: Ava, at sail on the Great Highland Lakes. Found worldwide at above mailbox.

-

She went back down the next week and found Tahlmute had replied.

-

To: Ava of magic mailbox 4214 0352 4012 5543

On: Morningday of K'shiitn 100,21,23

It is good to hear from you. As it happens I have been thinking of getting under sail also. You didn't say where you are at the time but I would be delighted to move in your direction. As you say, our last meeting was not as pleasant as I would have liked. I could imagine a much more pleasant re-union if Tdeshi and Venna had not been in our way. I wish you could forgive me for my part in Tdeshi's demise. If there is some way I can make it up to you, and to the Kassikan, I will undertake the mission. Please send me the particulars, under the same question as before, I also have no permanent address at this time.

From: Tahlmute of the fourth anniversary cubby.

-

The next week, before winter was over, she had a chance to get the maps and the claim ticket out of the box unobserved and took them up to the farthest eye-room in town where someone who know

them would be less likely to see her. Wouldn't you know it, but Jorma's friend Hmartn would be hanging out at the tap where she stopped to quench her thirst.

"Ah," he said, "You're that lively little firefly Jorma brought back from the Yakhn aren't you?"

"Venna," she said and came up to him along the sparsely populated taprail. During the time she met his and Tdeshi's old friends, she was getting good at the role of Tdeshi reincarnated. Most people were reinforcing the actions she took and she was really feeling the part. The only danger in this cover was it was too much of herself so she could lose track of the details. The strong part in this cover was that Tdeshi could have changed that much in the intervening years, and all Venna's years were after Tdeshi was gone.

"Yeah, you had a party up on top of the hill on North Island. I got pretty blotto but I remember you, you're quite the athlete if I remember right."

"Thanks," she said. She didn't want to get delayed here, just drop a cup and go. So as to say that, she took a good long pull. She let him look while she tipped back with the cup, but did not press against him. No doubt that was their, 'just bought the house' party they had on Nightday of Garibivlast. She was pretty far gone that evening also.

"So what brings you over this way?" he asked.

This was what she hoped he didn't ask, she wouldn't be over here on her way to the farthest eye room in town. "Just out seeing the town," she began, and as she said it, thought of the perfect excuse. "I had to get to an eye room anyway so I thought I'd see more of the town by picking the farthest one to hike to."

"Ah, well I'm glad you did, you're a ray of Kortrax wherever you go."

"Thanks, but I'm going to go soon, I want to get there and back before dark." It would get cold early in the dark and it would be damp and misty before Dusksleep was over. She gulped down enough of her cup to walk with the remainder and set out on her way, thankful the truth sounded plausible. He watched her walk away, she couldn't resist grinning at him and flashing her butt

before she stepped out the door.

It was another quarter mile along South Beach Road, this room was on the south edge of town where roads diverged for the beach or the plots. She would send images off, detailed instructions, and expenses for Tahlmute as well as request some cash for herself. She had been assured the Colonel was not going to cringe over that either. She wasn't going to do this and live like a pauper.

She felt bad about it in a way. It was true that Jorma wasn't really effected by what she was doing, but officially the only reason she was here was this paperwork. She knew she jumped at this new assignment because she's enjoyed Jorma's company, getting to use her ways on someone she really enjoyed was good duty. Too good a duty, every day she felt more like making this life real and less like chasing Ava. She knew already that she wanted to stay with Jorma and live in this house for as long as this dream lasted. All the travel and intrigue had been fun until now. Now she was really getting to like the nice big piece of scenic ground, coupled with a man who could almost satisfy her by himself and didn't seem to mind a little showing off. She could settle into this for a good long while.

There was no wait at all for an eye today, she put her iron on deposit and clocked in, late in the fifth glass of the day. When people make appointments to be at an eye room at a given time, they can send short messages quickly so it is almost a conversation. With that she was able to argue against the Colonel's objections to her plans.

"I will find a way to get that aluminum into circulation without implicating you," she wrote. "Just credit it to my investment account in the Yakhan, I'll attach a deposit token. I can draw on it as I need it. I have aluminum on my person that cannot be traced to you. I will get it into my life in a way that will not hint of you in any way." She sent that off.

In a few minutes a message came back. "You better be right about this. That has been done, but I expect that paperwork transmitted to me as image data immediately."

She typed a quick reply, "It is being transmitted now," she said, "but it is going to my agent. We will deliver the cargo to you

at the location marked on the second map."

He blustered and puffed thru another couple messages but since she had the maps and ticket and a firm plan to follow, there wasn't much he could do about it. She went to the eye-room's document Eye. This carries a rather steep additional premium, four pennies a page, a third of an iron for three. But with an additional aluminum in her account, she could afford it. This was a crank-thru, there was a long wait for the photo-station where someone seemed to be sending a thick manuscript. She put the warehouse location map thru first, then the wilderness. She could see the dot of Gengee City on the wilderness map. That map covered a large area and the spot marked could be miles in extent. The warehouse location was drawn on a rough diagram of the keda and cargo streets in one of the neighborhoods of that city and labeled completely in Yingolian.

Both those pictures were now in the magic mailbox for Tahlmute to pick up as soon as he got to Gengee City. The claim ticket had been folded all this time. She flattened it out as best she could and ran it in, nice and slow. It went in fine. She cranked and cranked, it never came out.

She wanted to scream and kick the parts of the machine all over the room, but fought to keep control. She took three deep breaths. Both maps had gone thru without a hitch and Tahlmute would pick them up from Ava soon, could have them already. The counter said the third picture had been sent, she had seen it happen that the machine is not too smart about what's been sent, it might send a picture, but it was just stripes. If she was lucky the picture of it had actually gone thru. She would check later. It was just as important to get that claim ticket back into the box before Jorma noticed it missing. She kept in touch with Elond now and then, strictly personal of course, and knew that Herndon already knew that these papers were with Ava.

The room steward was female, blunting most of her arsenal, but playing dumb often works with them. "Your scanner ate one of my papers," she said. "You must know how to open it and get it out."

"I'm not authorized to open it," she said, "and don't have solvents for any of the glues used in assembling it."

"I've got solvent at home," Venna played dumb, "I can run home and get it, it's only seven blocks."

"It's a coded solvent," she knew it would be, "the companies that make scanners have trade secrets in them."

"It's a camera and a belt," Venna said, giving up on the dumb approach. My claim ticket is stuck inside. That goddam piece of paper is worth more than your scanner so I'll buy the thing off you and smack it open with a sledge if I have to."

"Which one is it?" the steward asked. Venna pointed. "Oh, Freakenstein, I should put a sign on that piece of kiddie-cobble. The claim ticket was wrinkly wasn't it?" she asked.

"Not bad."

"I can get it out without opening it." She took out a thin piece of plastic and started poking into the bowels of the machine thru the input slot. In the next fifteen minutes she managed to poke out three tiny shreds of the ticket. She then cranked it backwards to 'clear' it. Venna clearly heard the ticket being ground to shavings as she did that. The tingle of the Instinct paralyzed her arms as her mind had her snatching the machine from the girl and jumping on it till it was nothing but small shards. "That document was heavily damaged," the girl said.

"Once you got done with it!" Venna yelled.

"You aren't supposed to put damaged documents in here," she said, pointing at the yellow label depicting a document about as bad off as hers was now, not how it had been when she put it in. She was trying to act professional while Venna was half-paralyzed by the need to choke the foamy shit out of her. "We have the field camera for those."

"That's got such a line..." she began, then gave it up and stormed out. She could have taken a picture of it with her own camera, if she had one. Sometimes a cover can get just too deep. She really should have a pocket-eye, but no, she has to use public rooms and dodge people talking about seeing her all over town. She needed to prod Jorma to look at those damn sandals so she could get some working capital into the house. She should have planted it in a kitchen cabinet or something, but then Jorma would have 'returned' it to Ava wouldn't he?

And she so hated doing this. Poor Jorma was such an innocent bystander in all this, confused by the fact that he thinks his friend's daughter figures into this in some way other than body donor to a Yingolian ghost. Jorma fell for the analogy of the candle flame. That was all poor lost Tdeshi ever had to do with any of this and because of that, she was using a person she very much wished she didn't have to use. All she wanted was to get out of here and get back to him and the pleasure they had together and the cozy life he had here.

Why did she ever get into this? Just because she had a thirst for adventure? Was it because she saw it as a way to use her lust as a tool without actually turning pro? When she started this, she never realized how she might come to actually care for the people she used one day, how using them and discarding them might actually feel. Was it boredom with the role that made her feel that way or was it just Jorma? And was it Jorma or just his dick? That she could answer, his was no bigger or more skilled or longer lasting than anyone else's, why should it be when the same genes were available to all?

It was Jorma. He was just so agenda-free. Maybe the centuries have finally taught him that this is all there is, so sit back and enjoy. Maybe he would turn out to be a little too naive for her some day soon, but for now that was precious. She was beginning to understand how hollow this employment was and how the real people are those who actually do tend their gardens in earnest. She longed to get out of the role and interact with him and this town honestly.

She took the dockwalk back and climbed up the stairway in the bridge tower opposite the Stone Seaside. She didn't stop at Raltain's but slunk right to the house with only brief greetings for the two neighbors she met on the path. Almost all had been welcoming in most ways in the weeks she'd been here already. The place was dark, Jorma was not home and didn't seem to be in the garden either but she didn't check all the way around.

She put the maps back where they were and left the box looking like it had not been touched since the day she got it down. She was always very good at leaving no tracks in her investigations,

so the missing claim ticket bothered her. She thought her best course of action now was to leave the box here, open, with her agricultural studies on top, as it had been for a week already, and let Jorma put it back up.

Jorma was no doubt at Raltain's by now. She saw he had put up a bunch of gnarlberries, it would be their jam for the year. The berries ripened over the winter but had to be taken in before the Afternoondays got hot and humid. No doubt he was annoyed that he had been doing the drudgery while she was off visiting the farthest eye-room in town. She really should make it up to him somehow.

She put on something warmer but showier for the pub, a skindress and shoulder cape seemed about right. The top was of ripple-knit that popped open at a touch but it was snug and supple enough to show detail when closed and soft enough to pass thru the fingerprints of any caress. It was a bit below her hips in length, short enough to let her show hair while seated if she wanted. It was lighter in color than her skin, with a hint of emerald. It was a purchase she'd made lately, she knew there was plenty more coming and this was only an iron and four. Jorma should be getting those sandals out any week now.

Jorma was downstairs at Raltain's deep in a conversation with two other guys she might have met already and deep into a cup of gold. She went over to him and pressed against his shoulder. "Yeah, this is her," he said to them. "Jimma and Narb'n, I've think you've met?" he asked her.

"At some party on the mainland?" she asked.

"Vureer's" Jorma explained.

"I remember you," Jimma said. "I never forget a hottie."

Venna grinned but rubbed on Jorma, who grabbed her butt.

"You two should go upstairs," Narb'n said, "I don't think Raltain wants anything happening down here."

"We're just saying hi," Venna said, but Jorma dropped his hand. "but why don't we go upstairs. I can at least open the top up there." In truth Raltain allowed nudes on the music floor but not the drinking, but didn't let anyone get wet on the premises except in the privacy of the second floor cubbies.

"At least?" Jimma said, interested.

"I don't want to take it off right away, I just got it last week..."

"I thought it was new," Jorma said.

"It's like you don't need to take it off," Narb'n said, "but that only makes me wish you would."

"So lets go upstairs," Venna said, then turned to Jorma, "but only if you want."

"Sure," he said, "I know how you like showing that pretty skin of yours. Let me fill this mug one more time," he said and he got up and went to the green keg. "I'll be right up." The other guys had full cups already, and strode up the steps by twos.

"Great, this is going to be fun," she opened the top and passed them across his face, drawing a stare from the kegman, but she dashed right to the stairs instead of closing it. Jorma's friends were at the top of the stairs already, she jumped between them and took their arms.

A couple other girls they knew happened by. They had on tube dresses with the tops rolled down and the bottoms rolled up. The guys let go of her to caress them as they said hi. Jorma appeared, he already knew them and cuddled with the bigger one, who was on his side of the crowd. At the same time Narb'n was trying to introduce her.

"Lets get a table," Jorma said.

They only stayed there an hour or two before they were far too horny for Raltain's room, another girl suggested going to a club on the mainland where they could ride in the public room. That was her favorite way to party so she was all for that, something like that would change her whole attitude about this town. Jorma agreed to come watch, but not to perform for an audience. That girl had already taken him to a cubby anyway.

They went, and she loved it. Jorma let her get wild enough, watched her get a couple great rides and held her and showed her off to most of the better guys there. While he wasn't really part of this scene, he knew of it and knew a lot of the people. People she'd met at Vureer's were part of this scene. The place catered to a range of tastes, there were nice cubbies at good rates and beverages and

even a fish-frier who was highly skilled. Jorma met a couple other girls he knew, she got to know a few of the guys he introduced her to.

Later that evening she knew what her choice was here. She could be one of the top players in the recreational sex scene of this town, one that guys sought and women envied. Jorma could be her steady, she knew tonight that he would bask comfortably in that reflection. This made an important transition in her mind. It was a fun part of her new life to get involved in. She wondered a bit, how much of this was really her, and how much was the part of Tdeshi's ghost that she had to play? When this was over she wanted to be true to herself, not acting out Tdeshi's life or anyone else's. The chance to be surrounded by people she knew who shared many important parts of life was within her reach here and the more she felt it, the more she wanted it.

3. The Camp Party

Since Jorma found the aluminum, he went right to work on this camp. He'd never been confronted with having more building materials available than he could put up before, and tried hard to keep ahead of it. He'd got it closed in enough that they'd been able to spend a few Noonsleeps and even the last two Dusksleeps in it. It had been exhausting building it and she had been bored by the constant work, except for the times she got to entertain the guys who came to help him.

This week they would use it to entertain in earnest. This was the big unveiling of this camp and just about everyone she knew in Sinbara was going to be here. She had only been here some weeks, not even a whole year yet, but she noticed that at least a third of the guest list were people she knew better than Jorma did. They were near neighbors, other North Island folk, and people they knew from the Wild Catch. She did have to remember that half the people they knew from the Wild Catch were people Jorma already knew, even if they weren't close.

She hadn't been able to sleep because she knew this was her real 'coming out' in the Sinbara scene. A lot of the most important

people in Jorma's life were coming. She didn't want to tell him that she hadn't slept this Noonsleep because of worrying how this was going to go. He had assured her that all his friends appreciated horny women, especially naked, pretty ones.

Summer was drawing down already, but Jorma assured her Kadezak will still be warm enough for the lagoon. The first thing she did on Afternoonday wakeup was bring the lake sprite out to the end of the dock so there was deep water off the end of it. When dusk came and the party was peaking, the tide would be much lower than now.

They had not taken it out since she brought it home, Jorma spent yesterday setting stepping stones from the dock to the kitchen while she was dressing the karga. That was about forty pounds ready to bake, she didn't want to be the one to carry it down the path. There were going to be more than forty people here, there were likely to be twice that many. Jorma's friends are not standoffish for the most part and she hoped for quite a love-in.

She wanted to get the fire started but knew it was too early. She went for a swim, the lake was still as warm as it had ever been. She knew she was too full of nervous energy, that made her afraid of doing something stupid, and there was still a lot of the day to go before people started showing up. There would probably be only a few of his closest friends before lunch.

Ennim and Bathis did show up while she was getting a little pot of diddle ready to take down to the fire for lunch, she got her first party quickie from Bathis as she was leaning over the counter. By the time lunch was over and the lunch fire was starting the logs that would be the coal bed for the karga, there was almost a steady stream of people coming down the trail and four people on a trampoline were pulling up onto the beach and the party was on.

It started out on the beach and in the water, and sure enough the beach soon rang with the shouts and moans of couples frolicking in the lake. A couple of the guys from the Wild Catch did show up and she had some fun with spectators both on the bed and on the beach. Their first keg of yellow was some real silly juice and everyone was laughing at everything.

She didn't neglect that Karga either. Jorma also kept an eye on it and might have been the more experienced, but they weren't tied to it as it slowly baked over the coals. She saw that some of his friends were also keeping it well basted, so she didn't have to fuss over it. That was good because she wanted to have as much fun as possible while light remained.

She thought she was at eight by the time Jorma started slicing that karga. She knew she was only on four cups, but could tell that count was about to get lost. There was a barrel of beer as well as the barrel of Fiynore's Gold that Blisteel brought out and tapped. There had been just enough snow last Dawnsleep to pack the beer barrel, but it had melted off during Noonsleep. Still the barrel was pretty cool today, and now that dusk was threatening, would not get any warmer.

Before she knew it, it was full dark and getting close as the humidity set in. She and Jorma got separated somehow. The torches were all lit, the last of the embers under the karga still glowed. People were still jumping off the boat into the lagoon, its water would be warmer than the air for the next fifteen hours and she could hear more than one encounter happening in that water.

She thought the guy holding her was named Geswin, but she didn't ask to be sure. They were the only two left of what had been a really big sweaty one. There was no doubt that this bedding would have to be washed. She wasn't counting anything any more.

"We all know Jorma from way back," he was saying, "Lot of people around know him. I'd say fifty people know he built this camp on your land with found aluminum." Somehow they had gotten to talking about Jorma and his claim to the camp and property.

They were leaning against the headboard, the pillows were under their knees. She was actually leaning back on him with his arms around her, idly toying with her body as they chatted. "I'd have no problem deeding this camp over to him if we did part, or even if we don't. I'd throw in a third of the way up the gnarlberry."

"That would be more than fair."

"Why? Do you expect us to fall out sometime soon?"

"The Wild Catch scene actually. I'm into it a lot more than Jorma is, as you my have noticed."

"I didn't know he was opposed?" Jorma was gone up to the house long before this romp started, she thought. "He just wants privacy to bare his arousal."

"He probably isn't opposed to you getting it on, but I doubt it will bring you closer."

She thought about that. How easy would that be for her to give up? Was it really even part of her soul, or part of the persona she put on for this mission because she knew it was something Tdeshi was into? When she thought about it, she realized that Jorma was more important to her. "How would you feel if Jorma and I were still living here together twenty decades from now?"

"I'm all for it of course, especially if you keep having parties like this. It's going to be hard to keep this one out of the local gossip rags."

"Try to keep it out," she asked. "I think that would be where Jorma would object, if we start getting negative print."

"This party won't get negative reviews," he laughed. "This will be the 'party you shouldn't have missed' for the rest of the town this year." He got a little more serious, but it was hard after this much drinking, "Your face has been seen in print, this year's edition of the Sinbara Giggler has a photo of you going at it at the Wild Catch under the 'Fresh Catch' column."

"I see." The Giggler was the local yearly covering the social and entertainment scene. It was full of inside jokes, candid photos featuring nudes and people in the act, celebrity gossip, especially nude local celebrities. She had seen last year's issue, but had not happened by a copy of this year's yet.

"Yeah, you could win the Fresh Face contest at that club and be the centerfold in one of the largest yearlies in town."

"I'll have to see what Jorma thinks about that." She thought there might be some boundary to what he would tolerate, but then again, he did seem to like being a well-known person in town.

"He'll be against it, is my guess. He was against Tdeshi posing for it, that was probably what started pushing them apart."

"A lot of people tell me about Tdeshi, but she was twenty one

decades ago. She must have left quite an impression."

"We mention her because Jorma says you claim to have her soul, that it jumped to you in the womb as shonggot snuffed it out of her body."

"I did say that, and at some level I believe it. Can I prove it with science? Of course not. But there is something in the soul that science hasn't explained yet and that's why we feel alive. There is no one who knows where the soul comes from and so many people have told me so many times how much I'm like Tdeshi." She really was a lot like Tdeshi. It was an easy act to maintain, and every conversation about her gave her more of Tdeshi's memories. Tdeshi's life had been so short that there was very little to remember.

"Yeah," he said, "it's like no one can explain why certain personality traits line up with where Kunae and Cynd were in the sky at the time of your birth."

"Religion, the spirit world, there are lots of things that don't answer to science. I really don't have Tdeshi's memories. I have some of her characteristics, but not her driven syndrome."

"You are much more mature..."

"Because I'm thirteen decades older than Tdeshi was when she left Sinbara. I know she was a perfectionist, Jorma told me that. She was very active socially, he told me that too."

"Yeah she was. Since she was barely more than two. Jorma was one of the last to tap her and that's because he was so close with Leand that he would never touch her until Leand said it was OK."

"Jorma actually did that?"

"Getting some of Tdeshi was nothing compared to how Jorma and Leand were," Geswin said. "Tdeshi dying in the city was big for Leand, and for Leand's friendship with Jorma because she left for the city from Jorma's cabin, going on twenty one decades ago."

"So Leand blamed some of her loss on Jorma?"

"He didn't mean to."

"And Leand was Jorma's best friend?" Venna asked.

"Since Jorma washed up here about a third of the way into the 55th. Leand was the one who took the burn-out in, cleaned him up,

gave him a place to stay and some garden to tend. They had been friends for many decades before Leand hired a colandro to give him children."

"Does it disturb you for me to think of myself as a ghost of Tdeshi?"

Geswin took a couple seconds to answer. "Not in the way you've explained it, not if you don't claim to have her memories..."

"Not a one but what people have told me."

"...then there's nothing spooky about it, just some coincidences of personality. Your fetus being nearby when she died seems more plausible at having something to do with it than the position of Kunae in the sky and at least as much as the abundance of red-tails that year."

"How well did you know Tdeshi?" Venna asked.

"I missed a good part of her growing up. I saw her till she was something more than one, a willowy and big-eyed kid, very precocious. I next saw her at Wetfingers on the waterfront when I got back from the decade and fifty I spent in Zharvai."

"Did you resent her living with Jorma?"

"Not a bit," Geswin said. "All that meant was that he got to feed her and do her laundry and maybe screw her twice more a week than any of the rest of us did."

"I guess I'm not that much like Tdeshi after all."

"You're like she would be if she matured."

"Yeah," Venna said. No, at a party like this, she was spreading herself around. But Jorma was her guy way more than two thirds of the time, more like three fourths. She might be trying to act like Tdeshi, but in day-to-day life she could never come close and damn sure wasn't going to try.

It wasn't that late but she was pretty tired, when he left she lay there along the headboard where it was somewhat drier. She was impressed with how close their friendship was with Jorma, that was something she really missed in her life as Ava's tail.

She might have dozed, but it couldn't have been that long before another crowd came in. They pulled the sheets off altogether and used a towel on the mattress before climbing aboard. Vureer

was with them again, Venna took a couple more from the bottom without fully waking up. Another round of shots and bongs made her forget most of the rest of Dusksleep.

She remembered how Nightday started. It was Balick with a dining triangle at the fire, wailing away at it and shouting. "It's breakfast everyone, up and at it, this party's only half over." He kept wailing it, it was very close to her head and she'd had way too much alcohol. She would either have to keep going with that and pay an even bigger price Morningday, or try to keep enough buzz on yaag alone for Nightday. Then she remembered Holit had some tpsii, she could do a tab of that later.

Balick had stirred up a big pot of eggs and bits, with enough flour in it to call it a trap sephra. This would really test who was ready for another day of partying and who needed to go home to sleep it off. She had passed out, could you call that sleep? She remembered one time just trying to find something dry to put over her back and shoulders. A lot of the sleep she was kept warm by the guys sleeping on her. She didn't remember any of the mumbled, slurred and stammered conversations, but remembered getting sprayed by the spit of one guy who'd had way too much alcohol. Once when she needed the can, the line was so long she just went down the shore a ways. Kunae was up and it seemed so bright and open on the water, but none came out to the lake beach while she was there. She remembered people in the lagoon most of the sleep.

Half the crowd that his triangle woke, staggered up the path and made their way home in the dark without sampling the contents of his cauldron. She took a big wrap of it, and sat on one of the benches of the lake sprite with it. Only Vureer and her main muffin, a slender but curvaceous blond named Ngaisan, sat with her.

"I'm surprised all the construction guys left," Vureer said.

"They were really pounding that beer." Ngaisan said, "but Ennil and Blissteel are still asleep in the house."

"Who slept on the bed up there?" Venna asked.

"Me, Jorma and hGashai most of the sleep," Ngaisan answered. "Regarding Jorma, don't give him up. Ask hGashai if you need more detail."

"He'll tell me as much as I want to know," Venna said. She

needed no reminders about keeping Jorma, her only worry was that her mission would interfere, and that was something she couldn't talk about, even while buzzed at a party.

Vureer was eating her breakfast by squeezing it out and saving the thesh wrap for last. She noticed Balick must have brought a pile of pre-mats from the cook at the far end of the bridge. Since they were a day old Venna was glad she had taken the time to roll hers tight and toast it over the coals till it was crisp. As long as she held it upright the sephra didn't ooze out and day-old wrap was much more tasty if it was toasted.

"So what shall we do for this day of the party?" Vureer asked.

"I've probably had all the dick I need till next spring," Ngaisan answered, giving Venna a look that said she should know why. "I know Holit brought some tpsii that I haven't seen a tab of yet, and I've got a skin of Aurora Neutron that I haven't even touched."

"Where?" Venna asked.

"Here," it was in her shoulder pouch.

"This is a party day isn't it?" Vureer asked while reaching for it.

Ngaisan handed it over without the stopper. "It is now."

Venna didn't take much. Neutron is the highest of the Aurora brand beverages. It actually tastes more like a potent shot than yaag, and that could be a good thing or one might take a long pull of it. The tongue is very perked up and tingly after a shot of this, and that seems to set the fumes off even more somehow, so it doesn't take long to get out into space with this stuff, especially if you hold it in your mouth and let the fumes work awhile. You can get a really nice, start the second party day out, way-out, 'why wait to finish breakfast' trip like she'd seldom had in this life before.

It was really a good thing that she had only a couple bites left because only a couple minutes later they had all slumped down onto the forenet of the lake sprite staring at the stars, feeling like they were being blasted into them. A lake sprite is the next size up above a trampoline, it has a matted floor and a padded bench above each pontoon instead of just the trampoline rail. The forenet is the size of a wide hammock that got narrower at their feet. They could use the benches as a backrest and look up at the stars. Ngaisan pointed, "I

think that's the one the starship came from."

"I can't see it," Vureer said. Ngaisan handed her the yaag-skin and she took another pull. "Now I see bunches of them."

"What?"

"Starships."

"There are three more out there," Venna said, thinking that was not contraband knowledge and probably available to all who were interested in looking it up. "I lived with a guy from the starship for forty years. He knew about them." She was stoned enough to feel like she was out there in space now, weighing nothing, like in the water, swimming through the corridors of the starship like a fish.

"When are they getting here?" Ngaisan asked, "the starships that are still on the way?"

"The one from his people, not until 30th decade, the others might be sooner. He told me that the others are ghost ships. One is from the same bully group as the other ghost ship."

"I must be really stoned to be talking about ghost ships like it's nothing," Ngaisan said.

"What are ghost ships?" Vureer asked.

"Ships inhabited only by electric ghosts in big Yingolian crystals," Venna said. That was public knowledge any one could look up in any eye room and didn't blow her cover. Tdeshi had been interested in starships.

Vureer had to chew that a bit. Her eyes asked a few more questions about it, but she wasn't able to get them into words. The concept has been discussed in public since the first ghost ship got here. It was two thirds of a century ago so it just took Vureer a few seconds to get that deep in her memory. "So how was the guy? The one from the live starship." Vureer asked, apparently having heard enough about ghosts.

Under the spell of Aurora Neutron, Venna could see the ghosts streaming from their ships, their ships were lots of rays and fields, she knew that from Herndon, but had never actually seen it before. It was almost hard for her to leave those visions and come back to the idea of the Brazilian himself. "He had his good qualities, he was good looking and very masculine. He had his shortcomings however, no doubt because he was raised in an ephemeral society.

He was very into sexual stereotypes, uptight about letting his balls out and spewed money like it was lava."

"Did you get rich off it?"

"I spent the last of it settling in here," she said, counting the bead she stuck in Jorma's sandals.

"But Jorma found aluminum?" Vureer asked.

"But I'd already bought the house. We bought it while we were still in the Yaghan, the aluminum had to have already been stuck in his sandal but he didn't know it, so I bought the house with most of what I had left. I bargained Ava down so I'd have enough for initial supplies."

"It's a nice place," Vureer said. "Much nicer than when Tullee had it."

"She was too stoned to keep it up," Ngaisan said, "and certainly couldn't have put up this camp."

"I sure am too stoned to do it now," Venna said.

Vureer was in the middle, she leaned on the bench and Ngaisan leaned on her and held Vureer's hand to her chest. Vureer still had on only a wrapskirt, but she was plush enough to stay warm. Venna had on leggings that came halfway up her thighs and an open mountain shirt. She would need to put a knit on shortly as the temperature declined thru Nightday, but enjoyed having her social organs exposed as long as possible. The lagoon would give them an extra hour, the environment they were in was a muggy seventy two fahrenheit at most. It would be a clammy fifty five or sixty by darkmeal. It was ten degrees cooler and fifteen percent dryer up at the house on a still dark like this. The smoke was hanging along the beach with the torches reflecting off the bottom of it, making the air thicker but making it even more like a sultry late summer, not early fall, Nightday. She sank back into the trip of starships made of fields and rays carousing thru the auroras of space. She knew she was involved in that, though it was just a drawing in her mind so far.

Jorma came up the ramp. He sat on the bench next to where she was leaning. Ngaisan smiled at him but said nothing. The water was still a little warmer than the air, but now that the tide was getting high again, lake water would flood in and cool this camp

much faster than the dark could on its own.

"I heard you were the hit of the party last night," Jorma said.

"I heard you were up at the house last night."

"Yes I was," he said, and looked toward Ngaisan. They got along well enough for parties and she was getting more friendly toward him as time went on. When she first arrived in Sinbara, Ngaisan seemed to think Jorma was an impoverished and uncultured lout. It might have been the gossip of Wild Catch, but she was afraid it was the aluminum that had changed her opinion more than anything else.

"Hope you don't mind that I told her?" she asked Jorma.

"I wouldn't have kept it secret."

"You once might not have been proud of it," Ngaisan said to him.

"I just didn't know you would also get social with males," Jorma said, "or I would have come home with you any night you'd asked."

"You didn't know me very well." she looked around. "I'm going to need more warmth this Nightday," she said.

"Go stand by the fire," Venna told her.

Rather than go to the fire, Venna brought Jorma back around to the lake front. There was a couple near the inlet and the surf, and another couple way down the beach. Kunae would light them well into the Nightday and Cynd was now up enough to do some good also. She took him down the beach, it was so beautiful in the tiny red light with the white foam, the specks of the distant couple and an occasional sandfish fry flapping after the foam. "Too bad you weren't there for the Aurora Neutron," she told Jorma.

"Too bad Holik was up at the house."

"So you're farther than I am."

"The white caps glow," he said.

"Yeah? Like what else is new on party day two," she turned and dangled from his arm to look up at him.

"Do you figure they put tpsii in it?" he asked about the Aurora Neutron.

"Or something very like it. Watcher is the only Aurora that

isn't enhanced, but I don't know what they're enhanced with."

They walked wrapped in each other awhile. For him she would have done it, but he didn't move beyond a warm caress, mostly slowly up and down the curve of her side. "I think the party's going rather well," he said.

"I've been too blot to worry about it," she confessed.

"Maybe that's why?" he asked.

"Could be. A lot of people went home, there won't be that many here for Nightday."

"Eh? That's fine," he said. "There was some shitting in the brush because of the line for the can. I think the only reason a separate scene started up at the house was because of the bathroom."

"Next time we'll dig a two-holer," she said. They mowsied a little farther, a wave pushed spray up around her feet. It gave them a little more light, so she turned to him. "How would you feel if I posed for 'Fresh Face' of the year?"

"In the Giggler?"

"Yeah."

"Sure," he said, "if you want to try for it, why not? I'll support you giving it a go if you want to."

"Geswin said you were against Tdeshi doing it."

"Because Leand was unhappy with it. I was for it myself, but I didn't tell them that. Sex was how she rebelled from her father."

She could see what Geswin was talking about, it was more about Leand than Tdeshi. She wouldn't doubt if that was what drove Tdeshi from Jorma and to her death by shonggot. She'd talked about that too much while they were still on the ship. His investigation of Tdeshi's demise was fresh in his mind at the time. "How would you feel if I won?"

"If you won?" he started to smile, but then stopped. "You know what, I just better take that question seriously hadn't I, because you probably would. You're natural, and that's in style, you've got beautiful skin," she was lightly dusted with freckles all over, "you have quite a nice figure, very natural. You're very comfortable nude, so you won't have that problem. You have very pretty nipples and slit so that goes well. They'll do some things with

your hair and they may shape your bush a little also, but if you try, I think you have a great chance to win it."

"How would you feel?"

"It depends, if you tossed me for the media crew it would be somewhat bittersweet, I'll admit. I'll be proud because I brought you here, but..."

"And if I pull you up to the podium with me as my partner and support?"

"It would be a proud day in my life. It would mean more to me than winning it with you down in the Yakhan with a basin-wide media magazine because here it would be in front of people I've looked up to all my life."

"So you're OK with it?"

"Sure, go for it. You might be a little late for next edition, I think they take applicants in late spring."

"Next year's good, I'll work on my fan base," she laughed.

"Thank you for supporting me. Thank you for having the friends to make this party possible..."

"Half the people here I hardly know," Jorma said.

"Thank you for everything anyway. I love this, I love it here. I wish it was a little warmer..." What she really wished was that she could say this and mean it. Trouble is, she did really mean it, even if it was an act for her mission here.

"You really have to go deeper, Kadezak is still summer."

"Yeah, lets go check out Kyeb some day." She had really leapt out of her current life to say that hadn't she? The thing is, she meant it. She meant it more than the mission that brought her here. "If we start out on a Skater we might be there in three years."

"We could be deep beyond Zharvai in a year," he said. "We could sell now, leave now, and never experience another winter. Even Dolostel has never known frost."

"I might bring that up again if the winters are like last one," she said, forgetting that she wasn't supposed to know of the land he spoke of.

"We might get a few in a row like that, but ninety out of a hundred are not like that. I'm sorry but I'm partial to the Highlands and the lake. I was born when North Lake was already topped off. I

have never seen any other shore but the one we walk today."

"I never saw this shore before I walked it with you last Kyebenwae."

"Not even a year, it's still Kadezak."

"Yeah, summer might be only starting to wane," she hoped.

"Might, I've seen Garibivlasts that have been summery, but the saying around here is, 'As Imnotn, so the winter,' so next week predicts how the winter will be."

"That's good to know," she said. "We probably shouldn't follow them all the way to the point during the second day of our party, but want a quick one on this dark and deserted beach before we head back? I'll keep it quiet."

They did, and from then on she actually concentrated on coming back. She did a couple guys up at the house later in Nightday, and found something safe to give people to eat for an early darkmeal. She and Jorma were already doing more clean-up than anything else as it got close to time for darkmeal. The kegs weren't really quite gone but there was little enough that they would get to it themselves before it went bad. They said they were gone and ladled out a hot stew made from the left-over karga and what Jorma found in the traps since the party started, along with what vegetables were ripe enough to bring in and close enough to the path to see with a torch. This time of the summer was when most of the best was just coming in, so the stew was pretty hearty. Belgin and Ennil made most of it, Belgin claimed it was a Troll recipe that Ennil polluted with Salvadorian spices.

All she did after that was say good bye and continue to clean up what she could. She hadn't had yaag since that Aurora Neutron on the boat with breakfast and hadn't had alcohol since late in Dusksleep. She should be pretty good for the dawn, even if Jorma wasn't, she should be able to get the whole place back together by Noonsleep. Belgin, Ennil and Blisteel were the last guys to leave, and everyone was up at the house with the Dawnsleep fire on the hearth by then. They were helping with the last of the cookware until Jorma came back from burying the rinds under a new patch of winterleaf they were putting in.

"Thank you so much guys," she said, "but you don't have to do that. I'm really fine but just tired. I'll be a tornado in this kitchen tomorrow, you can let them sit for now."

"Flutters'll pick at 'em by dawn," Blisteel said and kept scrubbing.

"I'll beat them all in hand-to-hand combat once Kortrax comes thru that window," she said. In truth the view from downstairs was pretty shaded, but a few stray rays made it in.

"Yeah, we really need to crash," Jorma said. "Thanks for helping clean up, it'll be easy tomorrow."

"Yeah but how will your head be?" Balick asked.

"I took it easy after lunch," Jorma said. "I know I still need to hold onto the wall, but I'll be upright with dawn. Maybe not ready for another stint of party like this, but I'll be upright. Can you make it home?"

"The hard part was getting up that trail. It's a good thing we had the stew first," Blisteel said.

They were all soon out the door. She and Jorma held each other up enough to get up to the bed. They used the driest towels they could find to wipe down the bare mattress and slept wrapped in their winter furs. She went to sleep very content at how well it went and how happy she was to be here. She might have really found out something fundamental in the last two days about the size of the pond her soul really wanted to swim in.

4. Accusations

Jorma had just headed down to the camp the next Noonmeal with some mats and instructions to start the fire. They did get caught up this past Morningday, mostly because they got so much done late Nightday. She was a little brighter and bushier than Jorma, but he was fine. He was out at the break in the hill when he shouted that Ava and another Yingolian were here.

Damn. Who could this be but Herndon? Why hadn't Elond warned her? She was a hard one to figure out. She loved Herndon, but didn't trust him. Sometimes she had confided in Venna, sometimes not. Elond had become his main partner since she and

Herndon had parted, and she was certainly better suited for him than Venna. But the fact that she hadn't alerted her meant that it might not be Herndon. What if it was the Colonel come to claim the documents in person? She knew he didn't trust her and wouldn't put this past him.

This was certainly where the shit would be piled on the table when they found out that cargo receipt wasn't there. She really hadn't expected it to be this soon, Tahlmute hadn't even docked in Gengee City yet. If he was going to come now, why not when the asteroid first got bumped? Why not after it becomes public? Once it comes out of Cynd's well in our direction, there will be lot of interest in this paperwork, but why now? Did someone know she'd been in touch with Tahlmute?

She made sure the box was as she left it, she made sure she left nothing of the Colonel's lying about. Even if it was him, she was not supposed to make it look like she was working for him. Once she was sure there was no blatant gaffe laying about, she quickly threw together the trap mix. It would have to cook down there. She came down the path to find Ava and Jorma coming up, Ava with a travel bag. Jorma still hadn't started the fire and ran down to do that when she reminded him. She saw it was Herndon who was here, not the Colonel, and grew quite a bit calmer. They chatted casually about finding the aluminum a few seconds, then Ava said, "This baggage is getting heavy, I was just going to throw this in the house and borrow a bathroom if I might?"

"See you down at the camp," Venna said and went on down the path.

But as she was walking away, Ava said. "Oh and Venna; that bead in the sandal was not that slick a trick."

Still reeling from the implications of that statement, she put the mix down where the fire was beginning to crackle. What were they here about anyway? Who cares about an aluminum if they're on the trail of a starship engine? She didn't have time to think about it, Herndon had his arms open expectantly. She realized that Jorma didn't know she knew Herndon. He knew she knew a Brazilian, that she'd shared a home bed with a Brazilian for a few years. He did not

know it was Herndon. She had no choice but to jump into his arms and let Jorma figure it out. He picked her up and spun her around, but they were out of Jorma's hearing.

"That was a transparent stunt you pulled with that aluminum, he's probably the only person around here naive enough to fall for it."

"You and Ava are the only ones around here who question me," she said, keeping a smile on her face because Jorma was looking, let him think they were whispering as former lovers.

"There were two missing from my ranch the years you stayed there."

"And who was it that told you to keep count of something so small as an aluminum? I was the first native you spent any serious time with, I was the one who made you see. You were dropping an aluminum every time you threw away a pencil stub, and you didn't even know it. You called me pitiful when I told you I dug those screw sockets out of your broken trash. All I took from you was what you threw out so don't you go thinking that just because an aluminum was found near me ten decades later that I stole it from you. Three aluminums can last a long time for someone as frugal as I."

He laughed out loud, covered it by saying. "Your ass is still as sassy as ever."

"Thanks," she smiled. "Now mind your manners and don't go making any more wild accusations that you can't prove."

"You can't expect anyone to believe he was walking somewhere where he got it stuck in the treads of his sandals."

"Enough, enough feeling my ass while you accuse me of stealing aluminum. You threw it out!" she knew she was getting almost loud enough for Jorma to overhear. She continued in a normal tone of voice. "Now; we're having noonmeal and you're welcome to join us. Now come, I have to go cook," she said and went back to the fire.

She removed herself from Herndon's embrace and walked the few steps back to the fireplace. "So Herndon is the Brazilian you know?"

"Yeah, you know him too?" was all she was going to say about

that.

"Ava did?" he asked.

She didn't want to involve Jorma in this any more than she had to, so she concentrated on cooking noonmeal. "Keep stuffing sticks in there for a few more minutes," she said to Jorma as she worked the griddle down on them. She really hadn't expected anything less than this had she? At least Herndon was polite enough to keep it quiet. He could have shouted his accusations for Jorma to watch. She figured the Colonel would.

Herndon wouldn't pursue it in front of Jorma. In just a few minutes she was asking the guys how thick they wanted theirs. Ava didn't get back down until the last one was cool enough to eat. She and Herndon started comparing it to Yingolian food like they were very much still tourists from that distant star. "OK you Yingolians," Venna asked. "What's 'the cheese'?"

"Fermented cows milk," Ava answered, "it's like a cheeseapple in taste."

"Ah," Venna said, "Not so much different from these."

"I'm sure it's a related plant," Ava said.

"They're both from the minibreak family," Jorma said.

"They were actually genetically modified from gnarl berries with genes from the cheeseapple," Ava said. It was written in her notes. "This way they can grow on this hillside."

"So kowz is a milk company?" she asked.

"Cows are animals that have very productive tits. On Earth most large animals are mammals and humans are not notorious for their milk production. Just enough for their own offspring."

"So most animals have tits?"

"But not the same shape as humans, at least seldom the same shape. Most mammals are fur covered."

"So you wouldn't go out and caress the tits on a kowz?"

"You do," Herndon said, "to get the milk out of them, but it's done by machine the last few centuries. Our fables and nursery rhymes still tell of milking cows by hand."

"That's pretty risqué don't you think?" she asked.

"It's big business there," Herndon said.

"And you Yingolians think our culture is sexually deviate?" she asked incredulously, really enjoying a chance to get back at him, even in fun. "Meanwhile you make big business out of pulling the tits of other species with machines?"

"There's nothing sexual about it," Herndon said.

Jorma bellowed with laughter and Ava frowned. Jorma had brought a cup down and was working on the last of the little cask of green they'd picked up just before lunch last Nightday. Ava was helping him with it.

Ava started up with Herndon about other Yingolian food, Venna zoned out on that. Ava was staying as close to both the guys as she could. She smelled a bit nervous, and that seemed to make her hyper. They chatted as the heat built. Venna was right in the sun and started to nod first. She still hadn't caught up from the party.

She bid goodnight and said she was sleeping at the camp. No one had really said who was sleeping with whom. No one had made any motion to change partners, she wasn't going to, that's for sure. She was done in the can and just stepping thru to the bedroom when she heard Herndon coming up the steps. She hoped Jorma hadn't decided to spend the sleep at the house with Ava, leaving her with Herndon.

"I left my bag in here," he called over his shoulder. He was in the camp, he leaned into the bedroom, which they had cleaned and freshened during the day. The noon quilt had been spared during the party and she was just shaking it out. The others would be dry before dusk on the line over the edge of the uncovered kitchen area.

"I believe you took something of mine," he said in a voice that only she could hear. "If it is still hidden on this property I am going to find it. If I do not find it, I don't know how angry I'm going to be. I can calculate my anger much more carefully now. I believe this innocent man actually means something to you. How would you like me to have a nice long conversation with him about you?"

"He has no part in what I didn't do to you."

"You can't deny you were being paid to follow Ava."

"Where did you get such a ludicrous idea?"

"From Enjteen."

"Ha!" she said, no doubt loud enough that Jorma and Ava

could hear it. Much softer she said "He pays for idle gossip."

"I think someone much higher in the pyramid attaches riders to his payments."

She tried not to stumble. "Ha," she said again, but not as heartily, and turned back to the front room. She wanted to get naked in the noon heat, giving her an advantage over a male, but kept her jersey on because she wanted to beat him on facts alone. "Everyone likes to assume the Kassikan is some big conspiracy manipulating everything from behind the scenes."

"You don't?" Herndon asked.

"Ha!" she said again, trying to make her eyes laugh with her.

He gathered his things and left, taking Ava by the hand and starting up the path. Jorma came her way so now Venna slipped her jersey over her head and ran down the steps toward the blue lake. Those distasteful comments from Herndon had temporarily driven sleep from her mind. "Come on," she said, "The water's warm enough for a quick one."

"Are there any men in Ava's past that you don't know?" Jorma asked her as he trotted after her.

She downplayed as much as possible and didn't tell him the essential truths, not yet. Someday he would know that Herndon had a kitchen appliance when she lived with him that had some internal screw sockets embedded in the plastic that were actually solid aluminum. She had been there when that appliance, built on a planet of far-away YingolNeerie, had failed, and he had discarded it in anger. She had retrieved it from the trash in the sleep and dug the aluminum out of the plastic little by little, without his knowledge, with the shards hidden in the back of her closet. It wasn't till they split up that she shouted it at him as a taunt and all he had done was laugh and call her pathetic. She didn't care, she had been a woman of means ever since.

They came around to speculating on what papers Herndon was looking for. She was cringing thinking that any minute they were going to hear him bellow even from here when he found out he wasn't going to find it. "I bet it's metal," Venna said. "They had so much stuff made of metal they didn't even think about at first. I bet

they gathered it all together and packed it up somewhere."

"That would make it a huge fortune," Jorma said. "Don't go getting any ideas."

She laughed. "Whatever papers there are in that lock box, I've looked at them a dozen times and never noticed. If there was something in there labeled 'treasure map,' I might have had to face that temptation."

"There were maps in there," Jorma said.

"One was directions to a warehouse and the other was a map of the Gengee wilds with an X drawn in the middle of nowhere."

"And those didn't look like treasure maps?"

"You saw them too. I didn't attach enough importance to them to go traipsing down to the Gengee after them."

He had seen them, he'd suggested it might have more value starting the fire than anything else he could do with it. She came around the camp. Ava and Herndon were out of sight at the house. She walked a little ways down the sand on the lagoon side, threw the blanket down. "How about here?"

He acquiesced.

5. The Coach to Ralstain

She missed Afternoonday breakfast but really didn't need it. She went up to the house to shower before saying much of anything to anyone. She got to the house to find someone from Central Eyemail calling at her door. "Is there anyone named Venna in the house?"

She pulled the door open. She was undressed and her hair was a nest and she hadn't showered since the day before. "Yes, I'm named Venna?"

"I have an important message for you. Someone named all of 'ColonelDaMorais' is at a terminal waiting for you. It is most important that you come to our eye room immediately..."

"I haven't been to the bathroom yet today."

"I will wait, he says it's most urgent. He has a voice channel open."

"A voice channel, what is that?"

"It is a premium service we offer. You can speak with each other a lot like being in the same room."

"Sounds pricy."

"He is paying, but don't keep him waiting."

"I'll be quick."

She was, but she wasn't going to go out in public without brushing her teeth and hair. She did her teeth while on the toilet, slipped into a jersey, gave her hair only the most cursory pulls till at least it was a symmetrical pile of knots and left with her hands still wet, they would air-dry on the way. The man set a brisk pace down the street and over the bridge. The Central Eye room is right on the rotary, well under a mile from their front door. They burst in the side door and he lead her right to a very small room. It had a keyboard and screen, the flat style like the Yingolians use. On it there was a picture of a large and craggy man with a big chin and stubble. It was a still picture, not a live one, she couldn't imagine what that service would cost. He was bored and impatient.

"Venna?" he asked. She had never actually met him, only by eye, and she had seen only this one still picture. It faded as they conversed and the query screen appeared.

"What's so important?"

"Herndon is on his way up there after that paperwork."

"I know, he's at the house now."

"What?"

"Herndon and Ava are here." She didn't say, 'glad it wasn't you' and tried not to show that in her voice.

"Ava," he laughed. "He hid that paperwork with Ava and she left it up there and sold you the house. I hope you didn't let them get the maps or the claim slip."

"They have the maps, the claim slip is with my agent."

"I'm surprised Ava's involved. What is her involvement?"

"I think she really didn't know a thing about it until he told her he needed that paperwork. He's not telling her more than he has to and I think he only told her that much to get her up here. I don't think she even knows what he's chasing."

"How did he get there already?" the Colonel asked, "he left his

home only a few weeks ago."

"He built this big water-dick with a major irrigation pump and a huge pancake boiler that's MADE of aluminum. It goes three times as fast as a lake runner."

"So they got that going..." me mused.

"They're both being pretty hostile, I don't like..."

"Let me get you out of there," he said suddenly and forcefully.

"It's not that bad," she said. From the pan to the fire was not what she had in mind.

"She could claim she never sold you that house."

"I'm better friends with the neigh..."

"Venna, I want you. I want you out of there. I'm coming to get you. Pack your things as fast as you can and get a coach to Ralstain. There is an eye room there where I will send you further instructions."

"But..."

"Venna, this is a test of your loyalty. Are you with me or Herndon? If he is there, I demand to know that. This is how I will know if you're delivering me into a trap or not. You are coming with me to take delivery of that package to insure that it arrives and trouble doesn't."

She gulped. She thought about the note she wanted to leave Jorma, knew she couldn't. She saw the sign on the way in, that Hunduul's coach leaves from the cobblestones two floors below in forty one minutes. For him alone she wouldn't do it. Not even for the aluminum he'd put in her account. For they who assigned her to this in the first place, she would do it, though it pained her so dearly. "I have to go right now," she told him and got up from the Eye blurry-eyed.

"Go," he said but she was already gone.

Luck was with her, the driver was right below her as she went by, "Save me a seat," she shouted, "I'll be back in thirty minutes." She used a name no one in these parts had heard before. It was a cover she'd last used far from here in distance and time. That would keep Herndon off her trail a little while, she hoped.

She walked the steps to the bridge, then broke into a lope on the bridge, picked it up a little up the street to the top of North

Island. She was quiet in the house, there was still no one in there. Her face was full of tears for the note she didn't have time or permission to leave. She could never explain it, not without breaking important oaths. Someday she would, when this was over, but not now. She knew she would come back, but she didn't know how or when.

She didn't know where the Colonel meant to meet her, but Ralstain was far inland from the lake. She hoped at Ralstain she'd have a chance to get a note to Deleez, she didn't know. She grabbed all she could for the road, didn't second guess, because she saw Jorma coming up the path, he would be up here in seconds. She put what she had on her shoulders and jogged the best she could down the path, hoping he wouldn't hear the slap of the front door when it closed. With this pack she had to drop back to a walk well before the bridge.

She came down the stairs with seven minutes to spare according to Hunduul's glass. It was an open six passenger, three on each side. There were two passengers already, men sitting at the front talking. She chose the side with the better looking guy.

"So how far are you going?" he asked.

"All the way to Ralstain," she said.

"Almost two weeks," he replied. "What's happening there?"

"A guy I've been working for wants me to meet him there."

"Ah," he said. "What kind of work?"

"Searching thru dusty boxes of old paper work for old receipts and stuff like that."

"Eew, sounds boring."

"That's the only reason it pays enough to let me take this coach."

"My name's Maston," he said.

"Yreeki," she replied.

"That's Nordic?"

"Very," she replied, "but my mom's mom was a Dwarf."

"Your ears tell a different tale."

She giggled, "But the name is Nordic and my mom's mom is a Dwarf. But yeah, my other three grandparents are Elf."

"Where are you from?"

"I've been here a year, Sinbara."

"And before that?"

"Most of my life was actually Dolostel, but I was working in the Yakhan a few decades."

"Ah, Elves in Dolostel?"

"Almost half the population has some Elf in them, but many are the dark Elves. I'm more Elf than ninety one percent of the region's population."

"So that's where you grew up?" he asked.

"Oh no. I wouldn't have a clue where I grew up if I hadn't had a memoir published in the 53rd."

"What?" Maston said.

"The Instinct didn't reach my land of origin until almost the 50th. It seems I was quite the swords-woman at one time."

"When were you born?"

"Let me put it this way, the town I was born in is now the subject of an archeological study."

"And where was that?"

"In the Vale of Kemmar on the balmy southern shores of the Salvador Sea. It was an Elven kingdom, steeped in tradition and long in history. I was a swords-woman in the service of one of the last kings of Kemmar. I worked vice actually, mostly on the waterfront."

And so she slipped into the persona of Yreeki, lately of Dolostel. This girl knew a lot of Nordic history, especially from the New North and the south of the Old North. (As Venna she'd once read a book on it. Its author thought Yreeki was a folk-legend). She would retain this cover for the duration of this junket and have plenty of fun with it. She was pretty sure the Colonel didn't mean to meet her in Ralstain itself. This way there would be little evidence that Venna left town on this coach.

The five days were pretty pleasant. They spent two darks on the road, each in towns much larger than Sinbara. She became friends with the other passengers and Hunduul, the driver. By the second dark all three of those guys agreed they needed to look no

farther for entertainment on this journey and got one bed for the four of them. Even so she was not as satisfied as the average sleep with Jorma. She did not go after more. The persona of Yreeki is not as public as Venna. A disguise is more than a mask. Hunduul was no smaller than Jorma, and probably just as strong, her seat-mate was, to be honest, better looking. Still she wished she didn't have to do this. She wished she was still with Jorma in that pointed-roofed cabin that was the northernmost house on the Sinbara Peninsula. Actually it was on an island off the northern point of the peninsula wasn't it? Wherever, she wished she could still be there, and be herself there, no longer maintaining a cover.

The countryside they rambled was the verdant rolling hills and farms that cover three million square miles of the central Highlands west of the lakes. Nothing was older than the forties, these lands had never known a city wall, a garrison, a battle. In that sense they were younger than Yreeki. They had never known a king or even a republic. Venna had never seen any other kind of land, but Yreeki knew of them. As Yreeki she knew of the tales from the craggy shores of Kemmar on the sear south-western shores of the bygone Salvador Sea, when no homes were grown and all towns had walls. That was the time in Yreeki's life when she knew the roots available in a place like Sinbara.

She wondered how Jorma would like Yreeki, if she met him on this coach ride instead of the Brothers Formidable. He knew he would take her more seriously because her past went back to the 42nd and well before the Instinct. He might get a kick out of the tales of clashing swords on seamy waterfronts, these guys certainly did.

The towns were towns as in all the Highlands, prosperous and cultured, similar. She would have to see them more than once to tell them apart. Ralstain, when they reached it, was similar, its distinguishing feature was a large lawn in the center of the main rotary in the center of the city. There was an eye room right on that circle, and she made that one of her first priorities when she got off that coach. Before she could make a connection to the Colonel, there was a message from Tahlmute.

-

To: Ava of the magic mailbox...

The crate you wish me to pick up is sealed under a password. Please don't fail me now or your plan has failed before we even started, I have twenty eight hours to come up with this password or they won't let me take the cargo. They were not going to let me come back at all but I said I was a hired hand so they gave me till tomorrow.

I need the item number and the password before they will even let me in to see the crate. All that is on the receipt is the item number, the password is on a separate piece of paper.

From: Tahlmute of the fourth anniversary cubby.

-

Damn and double damn. Well, now she knew what that little scrap of scratch paper that was in the folder with the maps and cargo receipt was about. She knew that was still in the box back in Sinbara. Five days away.

She requested the voice channel with the Colonel, charged to him. True to his word, he was right there. Then she figured that he was carrying a pocket-eye. "You're now in Ralstain, that's good, from there..."

"I can't stay here, there's a problem." she transmitted, cutting off what he was saying.

"What?" he wasn't happy. She was glad she only pretended to work for him, hoped she wouldn't have to pretend much longer, but this was already longer than she wanted.

"I need to go back to Sinbara and get the password for that crate."

"Password? I don't know anything about a password?" The Colonel was indignant about it.

"I think I know what it means. It was a scrap of what looked like scratch paper clipped to it. There was a sixteen digit number on it."

"That would be a password on this planet wouldn't it."

"I have to get that to him or all is lost. Do you want me to meet you or deliver that crate?"

"The crate," he sighed. He went on talking, but no more sound came out.

"Wait, I have to pump the speakers," she said, and picked them up to do that. They don't hold much air so you only get a few minutes before you have to pump them up again. When that was done he said, "You didn't have to wait, just go get the slip so we can get that crate, get back to this same eye-room in Ralstain as soon as you can, even though you're costing me a fortune. I will be waiting for you whenever you get there."

The connection ended, she typed a reply to Tahlmute.

-

To: Tahlmute for public pickup, password protected.

I hope that pouch you picked up convinces you that I am sincere about the importance of this and how badly the Kassikan wants this done.

You'll need to let them give you at least another five days, two weeks would be better. I have to go all the way back to my old house to get those numbers, I don't have them with me. We have a fast boat so don't despair, but it has taken this long to get this far.

From: Ava of 4214 0352 4012 5543

-

After a nice Noonmeal she came back out into the Ralstain circle. It was a nice big circle at least six hundred feet wide between the balconies of the trees surrounding it. It was a larger town than Sinbara, but not as large as Bhangyon. All the streetcar lines did laps around the circle on their own concourse one floor below the level of the lawn. On that concourse the coach she came in on now had a fresh team of kedas and a sign naming the list of cities she'd just seen, ending with Sinbara, and a glass with an hour and seven left on it.

Hunduul didn't think it at all strange that a person would go both ways on his coach. He laid over enough time to conduct brief business. If it was unexpectedly brief, things happen, it's a pleasure doing business. The coach was empty and there was time to kill and the place it was parked left the seats toward the wall private enough for him. She got a big discount after that.

At the last minute three other women showed up. They took the whole other side and babbled about agricultural science for three days of the three days and five hours they were on that coach returning to Sinbara. By now she was sick from the bouncing of wheels on cobbles. Their driver sat on a bench in front and above. On the third day out, the next Monringday, she asked, "Is there room enough for two up there?"

"We have to sit toward this end to balance the pivot."

"You know I don't mind being close to you."

"Nor I to you."

She got an envious look from one of the women when she climbed up and took the end of the bench. He was still about in the middle. "Who are those girls?" he asked.

"Agricultural scientists from that horticultural institute up there."

They got comfortable with each other, he asked, "So why did you have to go right back?"

"I find I'm being used as a courier for the time being."

"For what?"

"I have to go back just to pick up a few more old banking receipts. Technically I'm not supposed to tell anyone any of this but pretending it's something important enough to keep secret lends a certain romance that being a messenger carrying old records around somehow doesn't warrant."

"I found a little quick romance with you," he said, caressing her.

"But I hardly think you were drawn to me because of my talent in locating records everyone thought were thrown out ages ago."

"No, actually I think it has more to do with your person than your occupation, regardless of your occupation."

"Spoken like a true half-hour romance."

"How long can a romance be on this road?" he asked.

"I have two more days back to Sinbara, and then five more back to Ralstain it looks like."

His arm went around her. "Yreeki, I do enjoy being close. My only regret is that we didn't become better acquainted on the first run."

"Maston kept me pretty busy the first dark."

"Pity."

"Are you traveling thru Noonsleep again?"

"We spent the whole dark at that inn."

She was glad he didn't travel much in the dark. Sleeping on the coach was not easy, especially when the trail was narrow and her feet got into the brush beside the road. She had this whole side to herself, she could stretch out on the three seats. It wasn't quite Noonsleep yet. "I bet there'll be rain by Afternooday."

"This dark we'll be in Bhangyon, I can probably get the kedas to go a few miles thru the city and its plots during Nightday, anywhere there's enough torches out."

Bhangyon was a pretty big city near the base of the Sinbara peninsula. Its plots took up most of the peninsula and the plots that lead to Sinbara were an extension of those plots. Sinbara was only seventy five miles by road from Bhangyon, a hundred seventeen on the most direct route by water around the peninsula's eastern nose. That would be just one more day if it was light. "It would be good if I could be in Sinbara that dark."

"Perhaps there will be a darkrunner that can make it around?"

"You will be into Bhangyon early in the dark."

"I tell you what, I'll get you to the docks for dusk. The tide will be low, but it will not be against you as of then."

She wondered if she was desperate enough to steal a boat? No, not even close, that was more out of Yreeki's character than Venna's. It would be better to arrive in mid to late Afternooday when the tide was ebbing. All captains were glad to have the tide help carry them out, especially from harbors like Bhangyon's, eight miles up an estuary.

For an hour she enjoyed being in the open seeing where they were going, and getting caressed a little as an added attraction.

"What will you do for Noonsleep?" she asked.

"Take two of these," he held up tiny white tablets of boost folded in cellophane.

"Uuuh."

"Been doing it thirty five decades, every Noonsleep, guaranteed. I'm not going to miss any of the light if the kedas aren't."

"I don't think I could live that long, missing every Noonsleep. Are we going to have another rest stop before Noonsleep?"

"There's a penny pisser not far ahead, the guy who runs it's fastidious and it's very well designed. Lean down and ask our science ladies if they're prepared to pay."

"Only if you play with my butt while I have it sticking up at you."

They were prepared to pay, the next free station was a merchant's kiosk an hour and a quarter beyond that. She slept fitfully for Noonsleep and spent a lot of Afternoonday with the driver. The kedas were used to the forty two hours of light and kept strolling along. They were trundling across the base of the Sinbara peninsula. They'd just come thru the town of Dlas-Ubazai, a name her Yreeki persona knew the history of. It was the only one on their route older than the lake

It was pretty dark by the time they trundled into Bhangyon. Hunduul was no longer all that coherent, Yreeki was bored with telling tales, but the kedas knew the way to a barn they seemed to like. There was a thick-trunked inn next to it that had seen better days but was still serviceable. They climbed down from the seat. She got her bag together while he said, "Ladies, this is the Glade of Late Wildflowers, it's run by a wonderful gentleman by the name of Hovarst. His cooking is superb, but there is a village center just three blocks in if you don't find anything you like here. The village is just a little hangleaf clump called Kaiaashu. You can catch a streetcar into central Bhangyon from there if you'd like, I will be leaving an hour after Kortrax is freed from the horizon." With that he stumbled into the barn. She suspected he slept with those kedas or on the coach to save paying for a room. If she stayed she might

invite him to hers again, but she hoped she didn't have to stay.

During duskmeal she happened to overhear someone quite a ways down the bar complaining that he had to make a delivery to Sinbara during dark. She soon found a way to get near him. When he was looking away from the guy he had been talking to, she said, "Did I hear you say Sinbara? This dark?"

"Yeah, so early I don't know whether to go home and try and get a little sleep, or just party till it's time to hook up the team."

"I need to get to Sinbara as soon as possible," what would it cost to go get a ride with you?"

He looked at her a little more carefully and said, "A ride with you."

She looked him over. He wasn't the guy she wanted to go home with on any given hunting night, but she'd settled for worse, based on appearances only. Some of the sleeps she thought she won big turned out to be her biggest disappointments.

She told Hunduul to pick her up Morningday after-lunch at the SandWatcher, a tiny, six-guest inn on the beach just over an hour's hike south of Sinbara center. The night driver was a lucky find, the occasional people out on Nightday got to watch a couple going by experimenting to see how many positions are possible on the bench of a farm wagon. He let her stop and register for that room for Dawnsleep, then come out the back and got back on the wagon with him for a ride the remainder of the way to Sinbara.

A keda will never do Nightday if it did the light before, and will not do the light after. But if they've been idle, some kedas will do the dark. He had two, this was a big load of mechanical supplies from the foundries of Bhangyon or even Zharvai. It was into Dawnsleep and this was more-or-less mid winter so the cold was getting too intense to allow any more sex, especially as they got up to the cold side of the Sinbara peninsula.

She let him go where he was going, she jumped off at the rotary, thanked him for the rides and made sure he was out of sight before she started for the bridge. The house was dark and silent when she got there, but unlocked, meaning Jorma was most likely

home, so she had better be silent.

Once she was in the kitchen, she could hear his snores upstairs. He sounded like he'd had a major drunk this Nightday evening because he was snoring back in his throat. She waited till she had the box on the table before she lit her lighter, then ruffled thru the box quickly. It looked like it had been gone thru again. She was only halfway thru when she heard Jorma upstairs. She put out the lighter, but he kept coming. She silently tried to melt into the wall. It was silly, he could turn on the light and see her. Instead he stepped aside into the shadow. A few more tense seconds went by. "I know it's you Venna," he said. There was a glow panel here in the kitchen and Jorma put the peacock on low. She started looking thru the box again as soon as he turned on the light. "Take nothing more," he said, "and give back the claim ticket you stole." He wasn't awake and he was pretty hung over. He didn't come grab the box from her but stayed by the steps.

"I don't have it and the ownership of that ticket is not as clear as you think," she said. "Those papers technically belong to the Brazilian vice president and there is some difference of opinion as to who that might be now that the last one's dead."

"You used me."

"There's a lot at stake," she said, trying to keep her eyes dry when she could see the hurt on his face. "More than you could know, but I do care for you more than you think and that fact is making it difficult to fulfill my obligations." If she kept him talking, she could keep looking. It could be dangerous, she longed to tell him much more than she could, she shouldn't have said that much.

"Does this have anything to do with Tdeshi?" he asked. "Was she taken after all; for the price of aluminum?"

"It's not in the least about Tdeshi, your pursuit of her and my own appetite made her a convenient way to get to you and follow the trail of something more important than aluminum." The scrap with the long handwritten number on the back of it appeared.

"Leave that," he said, and reached for it, swaying.

"No," she said and gripped it in her hands, held them to her chest. "The Instinct protects me." She spun by him and up the steps

to the front room.

"So how long have you been following us?" he accused, coming after her.

"It's not about you Jorma, just like it's not about Tdeshi. You are just innocent bystanders that Ava happened to run into along the way," she said, 'and I happened to fall in love with along the way,' she couldn't say.

"Ava? This is about Ava?"

"I've already told you WAY too much already."

"You had that in your hands many times?" he asked, pointing at it.

"And didn't know what it was for," she confessed. "Now I do."

"Why?" Jorma asked.

"I'm sorry, I promise I'll be back to explain when this is all over but right now I'm in a hurry, so thanks for the light. And many thanks for taking care of the place." She was at the front door, she turned toward him in the open door. "I really do care for you and our life here, much more than I should." She ducked out the door before he could see her tears, then ran down the path in haste. He didn't give chase, maybe that hurt.

She waited for dawn at the farthest eye room in Sinbara, catching a bit of Dawnsleep while shivering against that eye room's back wall like a burn-out. She sent the password to Tahlmute and an update back to Deleez in code. Then she hiked two hours back to the inn, hurt more than she should be by what she had done.

She showered instead of sleeping, then had a good breakfast and went to the beach. In the four weeks she'd been riding that coach, she'd lost track of daily rhythm to some extent, and partly because of that she fell asleep on the beach for a lot longer than she intended.

Some one was shaking her. "Are you still going back to Ralstain?" Hunduul asked.

"Huh, what?" she jumped, her head going from side to side. The place wasn't familiar.

"You said to pick you up at this inn. You didn't say I'd have to come get you off the beach."

"Uh, oh, I fell asleep. I meant to be ready for you at the main road. You shouldn't have come in here, what about your other passengers?"

"They gave me permission to come up here, but not to come out to the beach."

She was up and grabbed her stuff, started running. "Thank you so much but you didn't have to do this."

"You're a regular customer."

"I've got my bag downstairs, I'll just grab it."

As it was, he got two more passengers here to Bhangyon, so for that part of the journey the coach was sold out for the first time since she'd been riding it. She was on the coach already before she got a chance to put her clothes back on.

"Did you hear about the asteroid?" the guy next to her asked.

"The one that got knocked loose out at Cynd forty years ago?" she asked. The one that had started her current assignment. She couldn't talk about that, but she could know about that asteroid couldn't she? Especially as Yreeki.

"It's fallen by Cynd and is headed this way."

She stared at him open mouthed. The next phase had happened, the population knew. They had warned her about this, warned her that this starship engine could be very important if that asteroid was to fall past Cynd in just the right way, it could wind up heading for us. 'Very unlikely,' she thought at the time and hadn't let it worry her. Chasing this stuff down was just a fun game, especially if it got her away from Tahlmute.

It had already stopped being a fun game when she had to hurt people she cared about, didn't it? She had come to care about Jorma, more than she cared about Herndon or Tahlmute or any others of the people she'd known on this trail, but she actually cared some for each of them and hoped this endeavor would help them both. She actually cared for Ava, come to think of it, she couldn't have followed her all these decades without caring for her. Ava had probably also been hurt when she ran from the house.

This was all to prove her loyalty to the Colonel. All a power struggle between Herndon and the Colonel. Even though they must

also know the world hangs in the balance, they fight each other.

The Colonel's stunt made them sure she had the claim ticket by now, and were also probably sure she was getting it to Gengee City in all haste. They are people from the starship and they didn't think that in the starship age that document could be copied over the suntower?

Now that claim ticket took on a much greater importance. Now we're playing for keeps. It isn't a game of find the starship engine, it's survival. It was a much more dangerous game the Kassikan was playing, pretending to deliver it into the hands of the opposing side. She wondered why they didn't trust Herndon? She knew why she wouldn't trust Herndon, and that was because when it came right down to it, at the very, very end, she thought he was too sentimental to give up that ship.

"Sorry," she said to the guy next to her for the long delay in answering, "Something like that is just a lot to think about."

It was before lunch on Morningday when they got into Ralstain this time. The ride was getting to be an ongoing drama and she had as much fun with it and the Yreeki saga as she could once again, but still found it was all hollow make-do without Jorma and other friends she meant to know a long time. She told the coachman to go on without her if she wasn't there at his usual departure time, but not to be shocked to find her heading back to Sinbara. She really hoped the Colonel had gotten off of his, 'I want you with me' paranoia. There was just mail from the Colonel this time, and he hadn't gotten over it.

-

One hundred and eleven miles west of Ralstain is the wild prairie of Rohzonne. It is not a great wilderness, only a hundred square miles of rolling ribbonleaves and herds of thongga and lentosaur. Ride out into the middle of that plain and you will find me. I know how you operate, there is copper with this message to enable your journey.

-

She messaged him that she would be there before dark, she

was depending on him for supplies for the dark. She didn't know where she could get a saddle-trained keda, here or there, but she did see a coach going in that direction. He would be to the next city beyond that wilderness for the next dark, his sign said. He could drop her off at the edge of the Rohzonne before dusk began to threaten, he said when she asked. She would have four hours, just enough time to hike across briskly.

The two other passengers were farm women who knew each other but went out of their way to include her in their conversation. She found that with just one season on the land in Sinbara, she had enough to converse with them and got caught up in it thru a fitful Noonsleep and most of a long Afternoonday.

Once confronted with the plains, she wondered once again why she got into this. 'I like this game when we meet in sex clubs and trade pillow-talk with visitors from the stars,' she thought, 'but when we have to face the prairie by ourselves, with Kortrax that low, it isn't a game.' Like the conversation on the coach out of Sinbara, this is not a game any more. This is not about using your body in a well-paying job that isn't technically labeled 'prostitute'. This is about big things happening in the real world. Like she told Jorma, there is a lot more going on here than you know. She 'knew' back then, but she didn't really know.

The ribbonleaves were a long but thin, wild thesh. Their stalks were waist high and blowing in the fitful wind. She chewed a few while she walked, they were tough and tasteless. There were scudding clouds and it was getting cold early. It wouldn't be out of place, she thought, just to show her how serious this was getting, if she was walking thru wet snow a half hour from now.

The land was much steeper than she pictured a prairie to be and before long she was laboring up the hill. It was much longer than it looked. She wished she hadn't brought such a big pack. Since this was a small wilderness, it must be just this one big dome of prairie. From the top she would be able to see the whole thing. After awhile it began to get less steep. A herd went by, slim and graceful lentosaur, bounding along at a twine. It was a long time after that she kept on walking and could almost see into the distance, but once

she was a mile into the prairie and the road was out of sight behind her, she could look ahead, to the right and to the left and see rolling, ribbonleaf-covered hills, dotted with herds here and there, clumps of shaftwoods in places along the streams.

She was assuming this plain was as free of large predators as the local herdsman could manage, so she would avoid worrying about them until dark. She still had at least three hours. She still had two and a half of three skins of water, she still felt fit, though the pack was annoying. She marched ahead across the plains.

It was about an hour later when she was very tired of hiking up and down hills that she encountered a herdsman. He was camped in a brushy wash and already a skin and a half of yaag into the evening. He was just far enough from civilization to try singing and his keda was using his eyes to plead with him to shut up and go to sleep, even though it was early for Duskmeal.

"Whoa, I know my singing didn't draw one as pretty as you."

"No, I'm supposed to meet someone out here."

"Oh, ah, yeah! Glad you made it." He started to pull over a spare shirt for her to sit on. "I was waiting supper..."

She laughed, not cruelly she hoped. "I might stay if I didn't have an appointment and you promise to stick to instrumentals." He chuckled politely. "Did you see anyone out there?"

"Well, it's a funny thing." He picked up his yaag bag, she hunkered down and accepted a snort.

"Whew!" She found it was more potent than it tasted as soon as the fumes hit her nose.

He took a good pull. Therefore anything he said had a good chance of being based on hallucinations. "Last Nightday a huge meteor came roaring out of the sky and went down out here somewhere. I spent a good part of Morningday searching for the crater.

"Did you find it?" she asked.

"No, all I found out there was a really strange building of some kind. It is shaped like a gigantic big-headed wevn up on three legs. It's about three stories and most of a small city block, but it's out there," he pointed, "in the middle of nowhere, no streets, no

neighbors, no nothing."

"Did you see anyone around?"

"A couple guys by the ramp that lead up into it, but they didn't look friendly. To be honest it's got a sinister air about it."

"Do you remember the starship about twenty decades ago?"

"I heard about it."

"Did that building look like the starship?"

"I didn't say I ever seen the damn thing. I heard about it. Bunch of frozen guys from some star is the way I heard it. It's been twenty decades hasn't it? Someone also told me they brought the rates for suntower time down, but I ain't had occasion to use one since I heard about 'em."

"Twenty decades?"

"Yeah, I can't really read and write any more, so I really don't have much occasion to use one."

"Yeah. So this thing you saw is that way?"

"See that hill with the herd of fivers over there?" that was because five irons was the going rate for one thongga, dressed and packed. "Once you get there, you can see the top of it."

"Thanks," she said, "and thanks for the scientific."

"Twern't scientific," he said, "that's me home-brew."

From the next hilltop she could see it, though it was behind another hill after this one. All she could see was the top of the back and some of the antennae in their deployed position. She'd had to study the shuttlecraft when she'd first been in training to monitor Yingolians. True Ava had been her specialty, but only lately had she dared actually speak with her in the course of her study. She knew it was the ship from the roper's description, he hadn't actually seen it land and had done too much of that brew to ever make the connection with the meteor.

It took another half hour to get to the ship, enough to get her mind back into the Venna persona that the Colonel knew. She got as close as she could get without interacting with the guy who stood at the ramp. She could just be a thru hiker at this point, the ten miles across the Rohzone was not out of character for what she was wearing and carrying.

She had never seen the spaceship before in person and studying pictures and texts had not prepared her for the real thing. It was as fearful as any monster of the wilds, real or fabled. It was twice the height of the knoll she was on. It would use a toothbrush to get the dactyl scraps out of its teeth. If it had any. Instead its teeth are steps and its lips are hand rails. Vapors escaped from it, it hummed and thrummed. But most of all, the part she found so hard to believe, almost all of it was made almost entirely of metal. Fortune after fortune after fortune standing there in the desert. That herdsman must have noticed it but was probably sure he was hallucinating.

In its shoulders were enormous windwheels. She could understand enough to know what these did. The twin craters in the sand confirmed her conclusions on how the thing worked. It was basically simple, just unbelievably big and powerful. It was dusty and pitted, parts of it were rusty and streaked from rainwater, the bottom was burned like it had been baked in a huge fire to cast its upper details. There was no factory on this planet that could cast such a thing, here it would have to be cast in place, little by little. Not that she was an industrial engineer, but she had worked in plenty of factories and cast plenty of parts.

If the Colonel meant to have her with him for the delivery, he meant to take her up in that. Her knees got weak at the thought. If she walked up to that ramp and up to the top cabin, that was as high as she dared trust this structure. To think that this great old building could rise into the sky on the lift of those windwheels, even as big as they are, was just outside her mind. The thing was so old and rusty and burnt that she was afraid just to walk into it. She stood for a long time just gawking and trying to find some way to come up with the courage to move toward it.

But then she understood something else even more frightening. The whole world was depending on her to somehow find a way to steal this monstrous craft, and the starship engine with it. That seemed as impossible as lifting it. Even the Yreeki persona had never faced as impossible a task as this in any of her tales.

There were people by the stairs, they started motioning to her. She had passed the point of no return. So, even though failure

seemed certain, she started walking down the hill toward the huge and smoldering metal monster in spite of the vibrating knots in her stomach. One more thing she knew, from here on out, she was entirely on her own.

6. A Spaceship Ride

There was no way she could walk nonchalantly up this ramp and say, 'Hi, hi, nice to meet you,' to the people in here like, 'just here on business' and walk thru the corridors like she walked thru starship corridors every day. No, she was gawking like a bumpkin in the Kassikan, checking out every aspect of it and shivering with fear. Yes, she knew this wasn't the starship, that was even bigger, but she couldn't help labeling it that.

"Nelson, Waldeis, my most trusted men," he said as they stood at the top of the ramp. These two guys looked at her more as an adversary than a partner, that was disconcerting.

There was an immense cargo hold, two stories high, and they went up two flights of steps between that and a smaller hold in front of it. The steps and the handrails were all made of solid metal. The walls and floors were all made of it. On the floor above that was a large room with instrument panels all over the floor and a domed, clear, glass ceiling with retractable panels. A short hallway lead past a few small doorways to some lockers. The walls and doors were all metal. Another metal stairway with metal handrails, so steep it was almost a ladder, went up from that to a small room on the very top with no retractable panels. There was one more guy in there named Humberto that he called down to the main control floor.

She was on total overload by now, seeing but not comprehending. She wondered how the human body could be in the presence of this much metal and not be poisoned. Every wall in all of those rooms was made of it, every floor, every ceiling, every window molding, every control panel had it in it. She wondered if there was some kind of radiation coming off of it all that would kill her. She was the only one among them who wasn't from Yingol-Neerie, what if that gave them some kind of immunity to this much

metal?

Here the Colonel introduced Venna, then switched into the Yingolian language. She had learned it in her training but under this much stress she wasn't able to concentrate. She caught enough to guess that he was telling them that he assumed ownership of her in some kind of monogamy ceremony, she was strictly his and they were to keep their hands and eyes off. There was some detail about what interaction with her was permissible but she couldn't follow all of that, not now, not here.

Of course there couldn't have been a lecture designed better to enhance her power over the crew and her ability to change the dynamic of the situation. Her sexuality gave her something familiar to use her mind on and get it off the shock of these surroundings. If the captain was claiming her for himself, that would mean there was something special about her wouldn't it? Humberto had been watching her, and she displayed herself as fetchingly as she could without being blatant. That meant that she couldn't really show him anything but her shape, but she could stand so her curvature was obvious while pretending she was only pouting about being left out of the conversation. She'd been taught that sexuality was the best weapon to use on Yingolians and she could already see that she could use it on Humberto. In their society females play a game where they strive to deny sex to all but a monogamous mate sworn to give her his wealth. In their society males compete over access to sex, causing a tension that runs all thru society. Personally, for most men she'd met in all her lives, she'd rather have their sex than their wealth. She immediately thought of Jorma. She didn't need to be distracted thinking of him when she needed to work on Humberto. They had some similarities didn't they? Dark hair, two legs, two arms. Not that Humberto was a bad looking guy, she'd had to work on worse and didn't want to have to work on the Colonel, his belly would look like a volcanic mountain before her while she rode him and she could imagine that belly button fuming like that of a chuff.

The Colonel was barely done with his lecture before they began to power-up the spaceship. She had never been thru such a thing before, but one can guess, without being told, that when the

background din increases by a factor of ten, AND you're on a spaceship, that it is probably powering up. She was instructed to strap down in a very nice reclining chair. As soon as she did, they 'lifted off'. You don't have to be an old hand at air and space travel to sense in your body when the floor your seat is fastened to, is no longer resting on the planet you've always called home.

Deafening noise and intense gravity with the whole thing standing straight up was all that was happening for the next few minutes. She probably screamed, someone said 'stow it' and she did, but that didn't stop the fear. The noise and vibration made her sure the thing was overloaded and was going to explode any second. It was a rusting old hulk after all and loose pieces fell from above. Just when she was getting really bored with what that did to her stomach, the noise tapered off and they started falling. And they fell. And fell. And kept on falling. It was not like she thought it would be, like floating in water. Your stomach definitely knows the difference between floating and falling. No doubt the motor had failed and they would soon plummet back to a final impact.

Nelson and Waldeis unstrapped from their couches, nonchalantly, like nothing was wrong. Now she noticed her first irony of space travel. When you are plastered to your couch so hard by artificial gravity that you can't possibly move if you try with all your might, it is the custom to be strapped down. When gravity vanishes completely and you can float off the couch at the slightest touch, it is the custom to remove the straps. It would just go down in her mind as one of those mysteries of outer space that she would never fully understand.

She could not make the fear stop. She felt she was falling, not floating, and she instinctively tried to orient her feet toward the ground and couldn't. The constant falling quickly got old. Her stomach rebelled at first. With iron will she settled down, but as soon as she took her mind off it, it again began to rebel. It was two hours before she finally decided that her internal fluids would stay inside.

For the first two days of falling, she had not one thought of her mission. For all that time it was survival. Would she ever get back

on the ground again? Would she ever get outdoors? Would she ever again experience air that didn't seem dead and sterile? Would she even be able to eat normally again? The Brazilians played in it, and teased her about remaining still, gripping something and dreading the next trip to the bathroom.

On the second day she found that she could sleep if she floated in the pressurized cargo chamber. This was nowhere near as big as the main cargo chamber, but she soon learned that in outer space, air was a big plus in choosing a room. The room was dark, and there was one small porthole near the life support panel. She hung near that looking out for an hour after she woke. The room was shaped like a distorted 'D', with a door in the middle of the back line. The porthole was across from that.

She had always thought if she ever had a chance to look at the planet of all lands from outer space, that it would look pretty much like a navigator's globe with a few clouds sprinkled here and there. The first thing she noticed was that all the areas marked black and unexplored because they have no air are the only places you can see clearly from outer space. She had never memorized the globe, but she thought she saw air in many places that are all black on a navigator's globe.

In contrast, all of the planet that has any detail on a navigator's globe, all the places people lived, everywhere that had a name at all, now or in legends of the past, was veiled by a blue-grey haze or shockingly white clouds. The glint of water sparkled here and there as they drifted over it, when the angle with Kortrax was right. The Yakhan is invisible to the naked eye from five hundred miles above. What you could see from space was hidden on the globe, what was visible on the globe was hidden when looking down from space.

"Are you hiding from us?" a voice asked.

She turned and saw it was Humberto, the pilot who had noticed her. "I don't think I can get away if there is no air outside and it's a five hundred mile drop."

They had spoken quite a bit in the last two days, mainly of the world. He had seen little of it and knew little of the lands he hadn't seen. She had been his tour guide to the areas they floated over.

Though she had seen few of them herself, she knew of them from books. The Colonel had been with them at first, and she could feel the tension between them. She kept their conversation innocent and made sure they had no bodily contact. Finally, the Colonel had let them watch the land below without interference. Venna had secretly been a little more personal after that, but remained as subtle as possible.

"No, you couldn't get too far," he said about escaping from the ship, "but no one would think to look for you in here."

"Was I reported missing?" she asked. "From what I could make out of the Portuguese when I came aboard, the Colonel thinks I've consented to be his sex slave. I'm glad I'm not confined to his cabin."

"Have you been his sex slave?"

"The truth?" she asked, hoping this was an opportunity, "I wouldn't know now if I hadn't guessed it from his speech." She paused, not wanting to jump too quickly on this chance.

"So you haven't...?" he asked.

"I'm sure the Colonel would like that to be confidential." He would have expected outright denial. Instead she had an opening to put pressure on the crack in his loyalty to the Colonel.

"I'm not about to tell him I even spoke with you in here, being alone in the same room with you is against the Colonel's rules." She gave him a mischievous smile but let him continue. "We're with him for various reasons," Humberto said, "mine are personal, but we all have our own agendas."

"I see," she said.

"So did you marry the Colonel? Do you have a relationship with the Colonel?"

"A business relationship. I have arranged a certain cargo to be delivered..."

"The Columnator."

"Yeah whatever, it's four tons and twenty feet long, it needs to go two hundred fifty miles into the Gengee outback and I'm getting three aluminums for finding and delivering that cargo." She wasn't going to bring the politics of this up just yet.

"But you don't...?" he asked.

"You only want to know if we've fucked?" Venna asked him. Yingolians had ways of dancing around that issue for maddening amounts of time.

"Yes, I'm all ears and it will go nowhere."

"Let me put it this way, as a sex slave I have very light duties."

Humberto chuckled. "May I ask when were you last employed?"

"I have not been employed yet in that capacity," she said, honestly. The Colonel seemed eager to claim her for his exclusive use, but not eager to use her. "But again, you had better keep that confidential."

He brightened up considerably. "Oh I certainly will. But does that mean that you have still, never in your life, made love in zero-gee?"

She wondered if his abrupt change in manner was all about not touching something the Colonel had soiled, or not breaking the ceremony that was supposed to bond she and the Colonel together, if it had happened. "No," she said. She was pretty sure scoring him would be good for her political situation right now, as long as they didn't get caught, but getting it on while falling only a day after getting her stomach under control might be dicey. She thought about that from her body's point of view and decided it would actually be ideal wouldn't it? Then she thought about Humberto. Even if it wasn't for the cause, she probably wouldn't say 'no' to the guy if he was clean and asked nice. "But it does sound like a very intriguing idea."

"There will be hell to pay if the Colonel catches us."

"He hasn't adjusted his attitude to the Instinct in all the time he's been here?" They had moved toward each other. Her jersey had a wide enough neck that she could get her shoulders thru and fold it down, she did that to show him how she liked to start.

"Nah, he's in denial," he said, but from then on his lips were busy.

Sex in zero gee was better than the idea, it was the best position ever and she really enjoyed it, then wished Jorma was here. After all the weeks and all the guys she'd had since then, every time she joined, she still thought of him, compared the experience to the

honesty she felt with him. She tried not to show that to Humberto, tried not to let him know she was making love in zero gee to Jorma in her mind.

They had been in orbit a week. She could eat up here now, but the food was dried camp rations. The bathroom facilities were gross, and sleeping wasn't as easy as it could be. She had been requested by the Colonel to stay in the instrument room. Neither she nor Humberto had said anything, but it must have been plain on their faces that they had been enjoying themselves when they appeared on deck a half hour apart. The Colonel didn't say anything, but he had been a little more attentive to her. He smelled, he reeked in fact, something like spoiled yaag or wilted flowers. She was glad when he kept his distance. She and Humberto were still permitted to speak, and when she could, she let her eyes tell him she was ready and willing for further encounters, while she continued to narrate what she knew of the lands they passed over. She played her role intently. That meant she could tell him only what she had read as Venna.

They never got a chance at sex again, and never got to speak in private, but she could regale him with tales of the wonders of the world that he should see someday, both natural and cultural. She was never explicit that it would all disappear if the Colonel had his way, but she knew he was intelligent enough to know that. She could see in his demeanor that he understood her point.

Then the Colonel called her over to a screen he was watching. It was, of course, like all the Yingolian screens, flat moving pictures, moderately detailed. "Is this the shipment?" he asked her.

She made her way over to it. Now that she was getting the hang of moving around without gravity, it seemed almost like this was what people were designed for. A flip and a turn and she could see what he was looking at.

There was a big wagon directly below them, three kedas hauling and a huge pot-bellied crate hanging from it. There were three men aboard, something the Colonel complained about in Portuguese. "I think so, I need to see the guys on the wagon and see

if one of them is the facilitator I employed."

"Do you have a picture of him with you?"

"No, but I shared a home bed with him off and on for three decades, I'll certainly recognize him."

"We could process for a match, but we can't render a recognizable picture at this distance with the scope we have aboard."

"I've never seen the crate, have you?" she asked.

"Waldeis," he called.

He pulled himself over, slowly, like his joints were calcified.

"Sir?"

"Could this be the columnator?"

"What's the scale? Those are kedas, three men on the bench, yeah, that could be it."

He turned to Humberto. "We're going down next orbit. Estimate a position for them to be in four hours, re-entry vector to terminate at that point."

"Yes sir," he said and launched straight toward his hatch in the ceiling above.

"You have four more hours of zero-gee to play in, my dear, then I'm afraid you will have to strap in for re-entry."

"Yeah? Can I play in the pressurized hold again?" she asked.

"Sure, go ahead, I might even join you."

He was nowhere near as much fun as Humberto, and she had to put on quite an act to make it seem like she never had sex in zero-gee before. She was glad her Venna persona could be a pretty good actress at sex.

Coming back from outer space is rougher than getting there, at least the first part. Once that was over they were just flying around and you were no worse off than on a ship on the belly of the lake when it's rough, but they still insist you stay strapped in for the whole thing, till it's on the ground and parked.

After landing, they left Humberto in his control cabin, all the rest of them went down to the landing ramp, but they had her remain in the ship. It was Tahlmute that came down to meet them. Up until now he had certainly expected to see Ava, and certainly

NOT the Colonel. He looked stunned as the Colonel lead him to the ramp, she took a few steps down. Tahlmute looked up, his eyes got wide and he screamed "You!?" and pointed his finger at her.

"I imagine you two have a lot to talk about," the Colonel told Tahlmute and Venna, "meanwhile, we have a crate to load."

Tahlmute came stalking up the ramp, gaining speed, "Of all the low-down, despicable, slime-dripping, puss-infested, worm-seething piles of shit I have ever stepped in, you have got to be the filtiest."

She backed away from him, backed up the first flight of stairs. No one seemed to miss them. He kept on, heaping mountains of abuse on her based on her sluttiness and deviousness and lack of genuine contribution to society. He swore of the misery she'd put him thru and the trusts she'd betrayed, starting with the Tdeshi incident and working backward. She continued to say little and continued to back away with an arm up as if to shield herself from his blows. On the landing between floors in this stairway, she figured she was out of hearing of either the Colonel or Humberto. He was using that opportunity to scream how this topped them all, but she had an idea about how to turn this around.

She had to use the opportunity, "Just keep it up," she said, softly, "You're playing it perfectly, I couldn't have written you a better script. They'll never guess we're really working together. Now just keep it up," she said. He did, bless his shriveled little balls. She had to sound convincing and she had made up this plan on the last two half-flights of stairs. "Now we probably just have just this one chance to save the world and the Kassikan is counting on us. If we pull this off, you'll be the greatest hero of the starship age once again." He used a few more explicatives about hair-brained schemes but didn't refer to this one. "Now here's what we have to do," she continued. "We have to get Humberto, that's the pilot, to take off as soon as the crate's aboard and before any of them get back on. I'm going to keep backing up the stairs, you just keep yelling like you are. I'm going to ask Humberto to save me from your fury and take me up to his cabin with him. You just do the confrontational man thing with him while I cower behind him. Act out; because he's Yingolian he'll eat it up. Once he invites me

up to the control room, you do what you can to protect us from the other three."

They were on the last landing by now, "If your cunt wasn't so crooked I'd sell..."

"Humberto, help me," she started yelling.

Tahlmute bellowed all the louder. He really could have had a career in movies. "I'd get more for you as a side show curiosity anyway..." and so on. The Venna persona can be a bitch at times so she could see where he was coming from with some of these things, but the physical filth stuff she would have to even up with him sometime. She swallowed it now and played the helpless sweet girl overcome by his anger.

She was to the top of the steps and into the instrument room when Humberto finally heard her. He did come running down. He's not the biggest of the Brazilians but he is a giant compared to Tahlmute. He stepped between Tahlmute and Venna, hands at his sides but nearly chest to chest. "What do you mean talking to her like that?" he said in a smooth but serious voice.

"I mean every word I said. She impersonated a good friend of mine, misrepresented where I was taking this cargo and hasn't paid up."

"You got a very generous up-front," Venna said from behind Humberto, holding onto Humberto and pressing herself to him as she did so.

"That almost covered expenses. Rehabilitation to the Kassikan was to be my payment."

"Well," Venna said, "I think Ava is the only one I actually know there, I'll write to her."

"Good, good, be reasonable my good man. We can settle the monetary issues immediately. My impression of Venna is a good and honorable lady who will make good on her promises."

"You better," was all he could say. His acting skill apparently ran out when it came to starting fights over a girl. He'd probably never even seen movies from those times, being so many centuries younger than Yreeki.

Humberto was too good at this. They couldn't fight in his presence, it was stronger than the Instinct. The fact that he towered

over Tahlmute and the fact that Tahlmute was as confrontational as a garden pest didn't help either. "Now, if you will excuse me, I will be needed at the controls shortly." And with that he stepped from between them and went back up the ladder.

"You wound down," she whispered.

"Well, he didn't play the indignant male role," Tahlmute thought a minute.

"You didn't put your arms out with your hands on your hips, I think that's what it was."

"I don't know, I'm not good at that."

"We really do have this one chance," she said. "They left it up to us to figure out how to get this motor from the Colonel's hands into our hands."

"You've got to be kidding," he was aghast. "In that case I really meant all those things I said."

"Not at all, oh I'm sure they have a backup plan up at Narrulla's Tear, but I was told to use my own resources to turn one or more of the Colonel's men against him."

"I will say, if anyone can do it, you would be the one."

"Thanks," she said, "now how do I get into that control room?" she asked.

"Climb that ladder," he pointed.

She waited for the right time, when the motor was coming aboard, decided it was time to climb up there when it was well free of the cargo wagon and hanging in the air. The Colonel and his men were distracted, it was Herndon and one of his men riding up. She wanted to run out and kiss Herndon for distracting him at just the right time, but had to get to Humberto and now. The 'ladder' was actually a steep stairway about seven feet high to the small patch of floor in that cabin. The ladder came up behind the seat, one turned the control chair around to enter and exit. There were panels of buttons, knobs, gauges and screens in a horseshoe in front of him and lining both walls of the tiny landing the stair/ladder set her on. Everything was still metal, even in this tiny room and it was hard not to worry about being poisoned by it in such a confined space.

"You're not supposed to be in here," was the first thing

Humberto said when he noticed her behind him.

"I didn't know that, why not?" She shifted to show her figure to a little better advantage and put her hand on his shoulder.

"This is the control room, you could steal the ship from here."

Venna laughed, "you are a huge man and the Instinct will let you defend it. I would be helpless if I wanted to steal it, if I knew how to drive it, and I assure you I haven't the slightest clue."

He looked her over, seemed oblivious to her motives. "I guess that's true," he said, "but I don't know if I believe you can't fly it, you seem to be a very capable girl." She could see in his face that he was joking, went along with it. "You got the Colonel this motor, you seem to have him under control."

She laughed again, "I wish I did."

"Why?" he asked.

She didn't have time to be convincingly intellectual, she moved closer, was pressing against him now. "First let me ask you, do you like it here?"

"Here in the control room?"

"No, where you've come on that starship, the planet of all lands, the Highlands, the Gengee. All we flew over last week, all that you've seen from above and the tiny fraction that you've seen in person."

He swung around in his chair, but kept an eye on one of the gauges, it was moving slowly toward the end of its range. "There are things about it I like, pretty girls like you is one of them, as you know."

That was good news and his face said it was the truth from the bottom of his heart. It was scary to think that the fate of all mankind might depend on his vulnerability to that truth. "Oh thanks," she said and pressed the back of his hand to her breast. "But I'm talking about the whole planet."

"Do you mean that asteroid?" Humberto asked, "I've heard about that, that's the only reason I'm helping the Colonel and Waldeis. If that hits, we might as well try our luck back at Sol."

"That asteroid doesn't have to hit, we can deflect it with your old starship."

"Venna, I know something about that asteroid that I don't think

you do."

"What is that?"

"That asteroid is guided by an enemy warship, a sworn enemy of Brasil. They have planted motors on that asteroid, it will hit." She was kicked in the gut with that, she staggered, held the back of his seat and bumped painfully into a panel of small knobs. He turned and his arm went around her. "But now that I've told you that much, I will have to take you with us."

She turned so he held her by the breast, all the time thinking. Whether it was guided or not, she still believed the plan to impact the old starship into it was a good one. She wasn't going to give up, in spite of the wound that news gave her. If she could get this motor away from the Colonel, they might still have a chance. "Even if they put a motor on that asteroid, we can destroy that while knocking it off course. We don't have to die, you don't have to leave. We could have a future." She pressed against him as she said the word 'we'. She wasn't really promising him anything was she? She really hoped she didn't have to lie directly, but she would if forty billion lives depended on it. But no matter what she had to promise Humberto, it was her home with Jorma and the north where she was going when this was over, even if it was for only forty years.

"It's nice here but I miss my homeland," he said.

She missed her homeland too but put that aside. "There has been a war," Venna reminded him. "Haven't you made a life here?"

"For ten local decades I thought I had," he said, "then the bitch left."

That was an ephemeral generation, "So instead of choosing another, you would let this world be destroyed and run home?"

"It would end the same."

"It need not," she said, trying not to be too blatant in rubbing up on him, but pressing with her words, though she made sure her words made no actual promise.

"Is that an offer?" he asked.

"I can tell you this, I will not spend a century on a starship to find a hard world destroyed by war. If you leave on this starship, I choose to remain here."

"Then I'll vote to preserve this world but I don't see how?"

"Leave the Colonel."

"Leave the Colonel! I thought you worked for him?"

"It was convenient to let him believe that at the time." I think the world is more important than three aluminums.

"But you found the columnator for him."

"I helped find it, but not for him," she said. She felt his hand move down her side and turned to put more curve under it.

"Then for who?" he asked.

"Those who want to save the planet from that asteroid and the hostile starship, if they know about it."

"You did not."

"I did not. I don't need to be told everything."

"So what are you going to do now?" he asked.

"I am a small scared girl all alone in your mighty starship. All I can do is beg for your help," she said, "Beg for me and for the fate of the world. The whole world of all lands is at your mercy."

"How do I know I can trust you?"

"If you cannot, the world is destroyed anyway and you have crossed the Colonel who you despise anyway."

"You don't know that."

"I've been watching you, your eyes say he stole the heart you cared for."

"No, he and I go back a lot farther than that."

"Then why are you with him?"

"To get home and because I'm the only one he could find who can pilot the shuttle, Lionel has disappeared among the natives. Like you, I have been very well paid."

"The shuttle, that's this starship?" she asked. "And does that mean that the cargo is now secure?" She pointed at the gauge he had been watching.

"Yes, and yes, why?"

"Because if you care at all for us, for the forty billion of us who will die, everyone you've ever known since you got here, lift this craft now."

He stared at her a long time, he put his hand out to her hair, drew her and kissed her. "For the sweet girls like you on this rock, I

certainly hope you're right about this. I must say your plan sounds too desperate to succeed," he said, while he swung the command chair and began pressing buttons and moving levers. "I hope you can be as persuasive with Nelson as you were with me, don't even try to convince Waldeis, he's convinced he has to get frozen in the next year or he will die, he's convinced he has to get home for treatment.

"So he won't destroy the motor to stop us?"

"No," Humberto said, "and what we've got is the columnator, it's like the fuel injector of the motor, like the wick in a lantern, it's not the whole motor." He had brought up the ramp now and then started the huge fans. He was still busy with buttons and levers, she had no idea what they did.

She heard feet storming up the ladder as the fans started up. Nelson burst out of the ladderway and stood at the bottom of the last flight to the control room, "Hey, hey! What are you doing, the Colonel is still out there..."

"Didn't he tell you?" Venna asked calmly, hoping Humberto would follow her lead.

"Tell me what?" he barked.

"We're to take it up and get it installed," Venna said, "get it away from Herndon and the disablers."

"My bad," Tahlmute said. "I was supposed to pass that on but forgot."

Nelson turned suddenly to him, noticing him for the first time. "He would have told me," Nelson said. He wasn't buying even a leaf of it, she could see that. Most of his suspicion was directed at her, his eyes had already accused her of turning Humberto with her body and found her guilty on all counts.

"I'm really sorry but it sounds like he didn't," Humberto said.

"He seems to have told the rest of us." He knew it was falling apart, and she could see he was sweating already.

"He didn't tell me," Nelson said.

"My bad once again," Tahlmute said, "I was supposed to pass the word."

"Some help you are," Venna said. Meaning it literally because he had fit into the part so perfectly. "Now you have him worried."

Humberto was not waiting, applying full power to the fans. Venna expected it, was ready for it and still wasn't ready for it and almost lost her feet and plunged down the ladderway when the room began to sway and move around.

"Hey what's your hurry?" Nelson yelled. "Let us get strapped down for Christ's sake. Nelson ran to one of the desk pictures that were something like eyes. He turned knobs and pressed buttons. He found the people who were still outside. Herndon and his companion were still on the kedas and the kedas were running away in panic. The huge wagon was bouncing over the ground as its keda's also bolted. It was hard to see what happened to them because so much sand and dust was in the air. The Colonel was pointing his stick at them and the tip was flashing, with his other hand trying to shield his eyes. Then he stumbled, no doubt knocked down by the wind of the shuttlecraft's fans. "He didn't make your plan," Nelson said, noticing how the Colonel seemed to feel about the departing spaceship. "What are you doing?" he yelled. "That story was fresh shit and you all know it." He charged up the ladder in two bounds, pushed right by Venna and began to wrestle with Humberto over the controls.

Tahlmute was right behind Nelson on the ladder, Venna lunged to intervene but then the craft lurched very badly and she slid to the wall. She saw Nelson struggle with Tahlmute and fall, the paralysis of the Instinct wrapping his arms so he could not catch himself. He went down and slid, his head slamming loudly into the gear along this wall. Humberto was still fighting the controls, the huge flying building tilted almost over. Nelson groaned, screamed and dropped toward her. She tried to get out from under him but the wall was dropping away from them all and he fell slowly. She was trapped between instrument clusters and couldn't move, Nelson landed on top of her. The wall curled down below them and then forced upward with huge force and Venna was crushed painfully under Nelson. Then force pushed them to the rear and Tahlmute fell, they almost went down the ladder after him. Thru it all the noise was so loud it went silent. She figured she'd lost her hearing.

Nelson fell off her, she clung to the instrument rack she had fallen against and hauled herself up beside Humberto's seat. "Thank

you my darling," she whispered, "but I think he's hurt."

"Nelson, how are you?" he asked.

"Paralyzed by the Kassiakn's virus from the need to wring your fucking neck," Nelson responded.

"Nice," Humberto said.

He disappeared out the cabin door, knees bent sharply on the ladder as the craft was buffeted in the upper air and it boosted ever bluer into the sky. "Move aside," he said in the hallway and Tahlmute went down on his ass as Nelson staggered by him down the next flight of steps.

"What happened to you?" Venna asked.

"When he first started up I tried to get between them and triggered the Instinct in Nelson. We were bouncing around and I fell down the ladder. While I was trying to tend to those injuries he hit the boost and I went sliding all the way down that aisle against those lockers. I was just getting back to these steps when he bowled me over. I guess he's not hurt bad?"

"Yeah, he was paralyzed from the Instinct when Humberto hit the throttle and couldn't protect himself from landing on those handles over there. He'll have bruises I'm sure."

"Uh," Tahlmute said. He had struggled back to the ladder.

"So how are you?" Humberto asked.

"There'll be bruises," he said, "but nothing's broken or bent."

He came up the ladder and crowded into the room. There was room for two people to stand, one on each side of and behind the control couch. Their toes or heels hung over the step. And they had to bend over a shoulder of the person at the controls because there wasn't enough height. The climb was pressing them to the back wall and nearly back down the ladder. "It looks like you're headed for outer space," Tahlmute said. "I don't see any more clouds higher than we are and the sky's getting to be an awfully dark purple."

"Next stop is Narrulla's Tear," Venna said. "We're bringing back the starship's burner nozzle or wick or the starship equivalent of that."

"We're going to be in a lot of zero gee on the way there," Humberto said, "You can already feel it getting lighter."

She could. At least she had the advantage over Tahlmute, she

had gone thru ninety hours of this before. "How long will this be?" Venna asked.

"As long as it takes to get the columnator installed and if we have enough air, till we get back down."

"What?" Venna said.

"Yes, we need to hope that the life support on the Lula still works. If it doesn't, we will not have enough air to do the job and land again after."

"If it doesn't, forty billion lives require that we get that motor installed anyway." Her heart was hammering about that however. She found the courage to say that, she didn't have the courage to mean it.

"We can get line-of-sight with the Tear now, it will be two hours till we intercept them," Humberto said. He pressed some buttons and was greeted with the screams and shrieks of a magnetic storm. "Or maybe not," he said, pressing one more. The buttons were labeled soft spots on a panel in the shuttlecraft, not the nubbins that are used today.

"Why don't you lock that door?" Humberto said to Tahlmute. "Seal it right down just in case things get ugly."

"You'll be paralyzed if you try to vent his chamber to space," Venna said. Yingolians might not really know how the Instinct worked, "Don't let that happen, don't be the first to resort to force and you will not be paralyzed."

"But if that hatch is sealed we will not be harmed if he vents his chamber to space."

"Why would he do that?" Tahlmute asked.

"For instance, no Instinct would stop me from doing this," he showed them both some lines and boxes on one of those movie-pictures they used for eyes on old YingolNeerie. A large box turned from black letters on white, to white letters on black. All the letters being completely alien and geometric, something like numbers. "Now if he should try to go into the cargo hold to access the columnator, he will vent his chambers."

"Will he know that?" Venna asked, horrified if they should walk into the room unsuspecting.

"There are several levels of warning signs, the flashing lights

at the hatches are working."

Tahlmute was battenning down as Humberto explained. "What if Nelson is on our side?" he asked.

"Then I am a lemon meringue pie," Humberto said.

"What?" Venna asked, having never heard of such a thing before and picturing a large yellow herbivore in the mrang family leaving smelly pies on the ribbonleaves of some distant prairie.

"There is no chance of that," Humberto said. "You can't convince him because he thinks all native women are infected with retro-viruses that will emasculate us."

"We are," Venna said, "there are none who dispute that fact today. It was called the 'Peace Plague' more than twenty centuries ago when it spread to all the worlds from the highlands. It was one of the key changes in human nature that made modern society what it is today."

"So if I..."

"You were still in the Kassikan," Venna said. "They were not about to let a single one of you get loose on the surface without that and the Instinct."

"Without our knowledge?" Humberto asked.

"Before you got here and learned from the Kassikan, you didn't know that knowledge existed." Gravity was starting to get really light by now, there was just the force pushing them back toward the stairs and hall, but they were able to resist that easily.

7. At Narrulla's Tear

On the way, Nelson promised to make peace if she would meet him in the cargo bay, so much for Humberto's analysis of the situation. There was a half hour intercom argument between Humberto and Nelson over that. She had to spend an hour with Humberto and convince him how casual it would be. She knew lots of clichés for it and threw them at him. It was just to make peace, it's our way, everything she could throw at him to make him relent. Finally he did, and she got on with it. Way better than the Colonel. Nelson now claimed to agree with the attempt to save the world using the starship and with some trepidation, they all acted like they

believed him, though she thought none of them really did. She really didn't, but she would go along with it, warily.

Tahlmute didn't take well to zero gee and spent a lot of time in the Colonel's cabin, just aft of the instrument room. It took hours to get to Narrulla's Tear, and several maneuvers that her stomach didn't like and Tahlmute's wouldn't sit still for. Once the hours-long ride to Narrulla's Tear was over, Humberto and Nelson got into musty old spacesuits and went out to repair the starship. She could pay attention to what was going on thru the screens, but there was no air where they were working and no space suits for her and Tahlmute. She was pretty sure neither one of them was really a qualified starship mechanic anyway.

She and Tahlmute were left pretty much alone for two days. They watched what they could of the goings on and got to talk with everyone on the intercom. There were things she could do in the control room to help now and then. Because Tahlmute was less experienced, she felt like the old space-hand by now, pressing buttons Humberto had showed her and learning lots more details about what was on these control panels. Two hours this morning had been spent patching Humberto's suit. They had run out of the tape that protected from some kind of ray, it seemed that there were lots of harmful rays out here and Humberto was going to get burned by one of them.

Thruout the installation Nelson worked heroically helping to get the starship engine repaired. Venna could see too little of it on the screens she could watch, but she could hear all the conversation and Nelson worked as hard as any. The guy who knew the most about the starship engine was the android in the safari suit driven by a ghost from Narrulla's Tear. She could get what his eyes saw on her screen, it was amazing how much they darted around. The android was out there without a space suit but it was a machine of some kind anyway. Nelson and Humberto were the only real humans working here, she and Tahlmute the only other humans present.

While she was fooling with one of the panels in the spaceship's

instrument room on the second day, she came across a view of a woman sitting at a table like hers, looking into an eye like hers. They had a live video connection, on the ground that was something only networks used. The woman was a cute girl with bangs, pink skin and the body of a fairy but without the wings. Tahlmute was back in the captain's cabin fighting his stomach again, so she was left alone with this panel. She was worried about the guys in those old spacesuits, but the person on that screen asked about her instead, "You are a native of the planet are you not?"

"Yes? You're not?" she asked. The girl could be Nordic or a pale Enurate.

"No, I am from YingolNeerie."

"On one of the starships coming in?" she asked.

"I was sent ahead a few years ago," she said.

"We're at Narrulla's Tear aren't we, are you here?" Venna asked.

"We are as close as this screen now, you are alone so we can chat privately."

"Are you a ghost?" she asked.

"Are you afraid of ghosts?"

"Only the kind that make stuff fly around the room."

She wasn't familiar with ghosts, so 'sent ahead' didn't mean anything to her and she thought that must mean she was the other one already here. "I thought you were in the android?"

"No, I am still 'in' Heavenly Mother in an allegiance sense, though I am currently receiving veron grants from Victoria McReady station."

"What does that mean?" Venna asked.

She looked confused for only a fraction of a second, then said. "Ask Ava about it some day. I want to commend what you're doing by the way. What I've been able to learn leads me to believe that you were the catalyst of this attempt to save the study planet."

She didn't understand at first but it was because she was a little taken aback by calling the planet of all lands, 'the study planet,' but she held her tongue on that. "I teased Humberto into lifting this ship, that was my part in all this."

"A major part," the girl in the panel said. "I commend what

you did, but I wish to discuss something about it with you."

"What's that?" Venna asked.

"Why you did it?"

"It was my assignment," she said, a little nervous about how much she should reveal to this ghost from outer space.

"Why did you take this assignment?" the woman asked.

"It was the lure of adventure, and I had the experience they were looking for."

"Who is they?"

Should she tell this ghost? The job was done wasn't it? The need for secrecy was over. Besides, strange as it might seem, it looked like the ghosts were on their side in this weren't they? But of course they would be, Narrulla's Tear would be destroyed as surely as any of them. "The Internal Investigations department of the Kassikan," was as far as she would admit. That was Deleez's assignment on the books.

"And what is their interest in doing this? Certainly the founders could save themselves."

"If the planet of all the worlds is destroyed it would be very bad for business. No doubt they would save themselves if this mission failed."

The ghost paused a bit, pressed a couple keys on her end. "Weren't you afraid?"

"I never knew it was possible to be so afraid as I was of this spaceship. Compared to those first couple days of falling, a haunted video screen is nothing."

"Then why did you do it if you were afraid for your life?"

"I was afraid not to try for forty billion lives," Venna answered.

"Not just your own?"

"If we all die, I die anyway. My real fear began when I was still on the coach to Ralstain and first knew the asteroid was real."

"If your people are all sovereign individuals, why would you be concerned for lives other than your own?"

As Venna, she couldn't really answer that question could she? That was too philosophical for the Venna persona. Of course if this assignment was over, she didn't have to maintain that persona did

she? In the Yreeki persona she would certainly understand and have an opinion on that question. One can't live most of twenty centuries and not understand the fine points of the Individual Sovereignty philosophy.

This was a person from another culture that came here on a starship that she was dealing with, like someone from Lumpral or ephemeral times. She wants to talk to Venna like Venna represents all of humanity in all the lands of this planet. She tried to adjust to that conversation. "Just because we aren't forced to participate in society, doesn't mean we don't want to. I certainly want to, most people do," Venna said, "we just grow a lot of our own food to feel independent. We participate in some parts of society and not others, it's individual choice." She was a lot more comfortable talking about that than the details of her mission.

"So the individual decides which rules to obey?"

"For the most part," Venna said.

"Why play fair?" the ghost asked.

"If you don't, people won't play fair with you."

"But if no one knows who's playing fair..."

"I think what it gets down to is tolerance of deception," she told the ghost, ditching the Venna role entirely. "This society, I can speak for the Highlands, has a low tolerance for deception and word spreads fast. Reporting on it sells magazines, big exposes of big companies cheating sells well and has a real effect on their bottom lines.

"On a smaller scale, as an individual in a neighborhood, it can close you off from society. I've studied Yingolian societies and I know most Yingolian societies demonize sex instead of deception. I know in American society the petty criminals were protected by the police if the ordinary people tried to enforce society's rules for themselves." The ghost grimaced about that, like Ava, she was probably American or of American ancestry. Venna had to study Yingolian history as part of her training, but Yreeki would have been able to understand it.

She didn't debate the point however. "So Kassidorians don't like liars and cheats?" the ghost asked.

"Right, we don't have a government that has usurped the power

to punish all wrongdoing, we have to do it ourselves since there is no one to leave it to."

"Is this social aversion to deception a modification to human nature?" the ghost asked.

"No way I can tell," Venna answered. "Maybe if I was a trained geneticist I could take a stab at it."

"But no one claims to have made that modification to human nature?"

"The way mods work is this," Venna told her. "When they come out, you have to buy them. Only a few have become contagious and only four were deliberately made contagious, the Peace Plague, the Sterility Plague, the Instinct, and the Species Immunity Complex. Only the Instinct is airborne, the others are all sexually transmitted. All other mods are sold for a fee. The people who do all the work make their living from selling those mods. Making something free and contagious could be good advertising, but it doesn't actually bring cash to the coffers."

"What are the odds that there are undetected contagious viruses that have effects on the human psyche?" the ghost asked.

"Depends on how common they are," Venna answered.

"We are talking about an artificial modification to human nature that will make the people of your planet less tolerant of deception."

"You'll have to talk to a geneticist," Venna said, "to get specifics." Even if she invoked the Yreeki persona, she couldn't answer that one.

The ghost made some data entries or did something with screens that Venna couldn't see thru this small stationary window.

"Did you set this up all by yourself?"

"The intolerance of deception?" Venna asked, incredulous.

"No, I'm sorry, I was going back to the other topic, the teamwork it took to rescue your planet from destruction by a hostile power."

"Of course not," Venna said, stumbling in spite of the absence of gravity. "I thought I was just a minor information gatherer in this whole thing, finding old paperwork in lost lockboxes and such. I wasn't expecting to get involved in this anywhere near this deep."

Never for a second would I have started this if I knew I would wind up IN the space ship. I was just lucky I was able to convince Humberto to take off with that part for the starship motor that paperwork was about. The one they're installing out there."

"Who are you working for?"

"I just told you, the Kassikan's Internal Investigations. I've been contracted to them for almost twenty decades for surveillance work. I guess in your language you would call me a private investigator."

"I see, working for the Kassikan?"

"Do I need to give you my contact? I really would be breaking an oath."

"No, that's OK," the ghost said. "You're a private investigator by profession, so you might have some insight into this next question. She consulted her invisible screens, "What keeps people honest?"

"Integrity for the most part, a sense of fair play."

"Is there a general modification to that?"

"There are several labs with popular integrity enhancements on the market, there's all kinds of studies that show your general business success will improve with these treatments."

"How many people take them?"

"Unless you're running a big company, it's not worth the cost, so maybe one in thirty six."

The ghost seemed to manipulate that information. Then she asked, "What about thieves? There is nothing like the non-violence instinct for thievery?"

"I don't think so, things are stolen now and then, but people react pretty diligently, most places I've been," Venna told her.

"Do you pursue thieves?"

"I got out of that work by the mid 43rd," she said, speaking for the Yreeki persona.

"So what prevents someone from releasing an instinct that makes thievery impossible?"

"I don't know that anything could prevent it other than the lack of direct profit. Maybe if some lab was constantly getting robbed they would. There's pills you can buy for it, if you get caught

stealing the local merchants might need to see you swallow one to deal with you again."

"What if someone were to release an instinct that removes everyone's integrity and makes thieves of everyone?"

"There's even less profit in that, but pretty soon everyone would demand proof that you've taken an antidote before they would deal with you," Venna said. "The news organizations would pursue whoever did it and publish his picture, he would have to get modified or leave the Highlands."

"What if a company released a virus that compelled you to buy their products?"

"That happened in the 41st and again in the 43rd, in the South Salvatore basin alone. I was on the case in the 43rd," she said, amused to use the Yreeki persona on this ghost once again. "That was before the Instinct. I was hired by three of the company's competitors to find the persons responsible and punish them as required." She went right on instead of giving her a chance to ask about that time before the Instinct. "Today they would be ostracized from the basin. Almost no one would trade with them, they wouldn't be able to get their appearance changed because no practitioner would deal with them."

"So unless the modification proves of some benefit, popular opinion will get it removed?"

"Pretty much. The species evolves as a unit now, instead of going thru generations, genes spread among established individuals."

"How is your evolution directed?"

"Same as ever, by what works, what makes more people's lives better will catch on."

The ghost pressed more keys. They were mobile nubbins wherever she was, like here on the shuttle craft. So the ghost was in Narrulla's Tear or the starship itself. That ghost didn't ask more questions. "I thank you very much," she said, "It's been quite interesting talking with you, you've given me a lot of interesting avenues to explore. It certainly is a different way of life than the one we've explored," She disappeared from the screen and some of the Brazilian instrument displays came up again.

There was no doubt in her mind now that Narrulla's Tear really was haunted. All in all, space was a much creepier place than she ever thought it could be. The falling, the claustrophobic spaces and stale air full of chemical smells. And the ghosts that pop up out of the panels and hold deep conversations with you.

She was able to float thru the airlock and into the old starship later that day. It reminded her so much of divers on a shipwreck in icy waters. The space suits looked more like machines than the androids. But she feared for them out there. She was so relieved when they finished up, now all she wanted was for Humberto to get out of that space suit alive.

Then, as soon as they were out of their suits, Nelson turned on them. He was totally irrational. He thought he could hold out on the starship while they would run out of supplies in the shuttlecraft and have to land, where the Colonel would find them. She named a basin that was years of travel by air from the Colonel, but with no route to fly in. Even so, it took force from the androids to bring Nelson in.

He tried to scuffle with Humberto in the airlock, they both had paralysis set in and Tahlmute had to drag them inside. "You are a traitor," Nelson was screaming, "A traitor to your people."

"If we didn't do this we would be traitors to all people."

"It's this bitch, I guess she's your bitch now," Nelson yelled, "You have no loyalty to the Colonel either," he spat at her.

"He is a fool who can't let go of the past," Humberto yelled, then much quieter, "it took a heart-broken fool to listen to him."

"So you steal his woman and all is well?"

"I am no one's woman, and no one's bitch," she told him. "I've been with you in that hold, in case you forgot."

"I got mine, and it made you think I could be turned didn't it?"

"I never really trusted you," she said.

8. A Farewell to Starships

It was tense for two more days while the androids went thru the power up sequence for that old starship engine. During that time, she noticed an Eye in the shuttlecraft could connect to the

suntowers thru Ava's station. Before everyone gathered to watch the ignition, she had some time alone with it, and a chance to send some messages she had been thinking about for awhile.

This was the culmination of a big phase of her life. As Humberto said, Venna was as old as a person could expect to live when he left Earth on that starship. She had lived a lifetime as Venna. She knew who she was now, and knew she wasn't being who she was. She needed the place where people knew her. She wanted a close group of friends like Jorma had. She wanted to get closer to the land, to feel more sunshine on her skin.

But most of all, she never wanted to have to act a part again, she never wanted to keep a secret, use a false name, or otherwise pretend again. For twenty decades she had been pretending, at last it was done and she could stop. She could get out of this role now, no longer the girl raised to follow Ava, no longer Tdeshi's ghost.

-
To: 4144 0553 3140 0014 of the Kassikan

The Pyramid

Kassidor Kassikan, Kassidor Yakhan 0.000, -0.418

My Dearest Keithying,

Like you, I have now trod the realm of the stars and found it wanting. Like you it has changed me and made me appreciate. Caring for our mudball is all we can do, and try to stay interested.

Like you, I know staying interested is the hardest of all. When one finds a chance to stay interested, one has to take it. As we have long argued, my interest is way too captivated by the nether ends of my person, but so be it.

I thank you very much for giving me something interesting to do for the last twenty decades, but I would like to call my involvement the investigation into the whereabouts of the starship motor to a close. I don't feel there is any question of its location at this time. Please do not feel that I am ungrateful for this assignment, it was very interesting.

For the foreseeable future, I do not wish to consider further assignments. This one has resulted in some emotional entanglements I need time to sort out. However that works out, I am open for you any time you are present. Keep up the good work, you guys are doing more good than you know, in spite of the problems.

From: Former Investrigatrix Venna
Lost in Public Space

She sent it just before they decoupled from Narrulla's Tear and began the descent to the ground. Tahlmute and Nelson were playing cards on a screen, since it wasn't possible to do it for real in zero gee. It was now accepted that she and Humberto were an item, though she had never made a promise. Since they would be in free-fall for hours, they made their way toward the cargo bay.

"There's one more thing you can do for me," she said to Humberto, passing her nipple over the back his hand on the door frame as she said that.

"Anything, my pet," he said, and turned to kiss her lips.

"Drop me off at home."

"Huh?"

"Yeah, with this mighty ship you can set me down anywhere on this whole planet that you saved, why make me struggle back? Just drop me off at home."

"In the north plains where we picked you up?"

"No, on the beach next to our camp. There's a big enough sandbar there. You'd have to put the tail leg across the channel, but you can land there." The blast might dig the channel out a little more.

"We wanted to be a little less obvious."

"Like anyone's going to mistake this old starship?" Venna said. "You should be proud. In a few weeks astronomers will confirm that the asteroid has been destroyed."

"They won't know why," Humberto said.

"Write it up. You will be believed, anyone who sees this wheezing old wreck returning from the battle will. My friends will know I got a starship ride home and I'm sure they'll believe what

you did and be grateful."

That wasn't interesting him. "So you have a home?" he asked.

Now comes another painful part of her whole contribution to the war between Talstan and the Kassikan. "Most people do," she answered. She saw the puppy eyes. She could follow the archetype in humans relationships and knew this was the time to say, "You thought this would be the point when you and I would settle down in Gengee and live happily ever after, didn't you?" After all, she was still Venna, for a few hours more. As required in her termination contract, she had already swallowed the capsule that would delete her memories of all the trade secrets she had learned in her employment. She would still have the adventure, that was important, that adventure link in the chain of life was why she'd done it.

She didn't wait long enough for him to fumble up a line.

"No, I have a home on North Island in Sinbara town, no doubt the man I love has been missing me and wondering what happened to me. I really need to get back."

She had been cold about using him hadn't she? He was a vulnerable point in an opponent on the chessboard of history. A vulnerable soul from a recent break-up. His heart was just a casualty on a battlefield wasn't it? How like Tdeshi of her. Venna, Tdeshi's ghost. All in the cause of the Kassikan battling the greatest source of group violence in the human galaxy today. All in the life she wanted to put behind her. She needed to put the sword down once again didn't she?

She put her hand on his shoulder, cupped his chin by way of apology. Didn't he have to know this would happen? Was there some chance he never knew she was using him? The thought that he might actually be that socially deprived, made her hurt all the more. "I really don't exist," she added, but began to make it with him one last time.

They said so little, his eyes streamed from the time he said, "I'm unlacing your top for the last time aren't I?" until he was landing his ship on that sand.

She would never forget the look on Jorma's face as he ran to

the edge of the bluff gaping. She couldn't watch that however, she had to take her eyes from the screen and get down two floors to the ramp. All the alarms were blaring some unintelligible words and big signs flashed in her eyes with those number-like letters. She hoped Jorma would come down to the beach. She felt the contact of the landing legs while she was on the last half-flight, it nearly knocked her to her butt. She felt the building's motion come to a stop before she made it to the bottom of those steps.

The ramp started down, Humberto was cursing her in Kassidorian now, for violating all the landing safety rules by running down the stairs while he was touching down. It didn't matter any more. The role was ending, the job was done, yell all you want at Venna, that act is over, her part is played.

The ramp pointed right at the main room end of the camp, the end that faced the channel across the wide expanse of sandleaves. What the wind had done to the roof said this wasn't such a good idea after all, the thatch was going to have to be combed.

Jorma was just arriving at the camp end of the path as the ramp came down. He was running, knowing it was the starship. She started down the ramp before it even hit the sand. "Venna!?" he yelled as he ran across the sand.

He was obviously not expecting that she would be the one to bring this spaceship here. There was so much she had to tell him, she wondered how much of it he would really handle. It was too late to worry about that now. Now was the time to begin untangling all the lies Venna'd told. "I told you I'd be back to explain," Yreeki yelled, and ran down the ramp into his arms.

Epilog. A Battle in Deep Space

The decor of the meeting was as if the starships of old were real. If Clem had to guess he would say the admiral had decorated it as the command dome of a Dorsai shieldship from twentieth century sci-fi. He had taken a lot of care with this decor, Helva would have hated this meeting. The table levitated, they were all festooned with gadgetry, everyone knew what everyone had at these meetings, no one-ways were allowed. The meeting was in a raised and partially partitioned area of the control room floor, outside their area crewmen and women were busy and the windows showed the brown dwarf intensely magnified in front of them.

That was an eerie view, there were echos of Jupiter, but the bands were brighter and glowed. There were numerous spots that glowed, but ribbons of dark clouds above obscured parts of all of them. The other bodies involved were also shown magnified thousands of times and the distance between them contracted millions of times so that they could all be seen as one tableau. In real life Cynd was barely the size of the full moon from here. The asteroid could barely be seen with the naked eye and none of the other bodies could be seen at all. The laser beams and fields that held them and the Al-Harron together were invisible to the eye of course, but rendered visible on the depiction the admiral had rendered on the windows of the control-room dome above.

If it wasn't for the report he just gave, he wouldn't have been called to this meeting, but as his division was the only one with an operative on site, he had been invited. It had been difficult giving that report, mainly because there would be so much that Helva didn't say. She was a conscientious and dedicated worker in spite of her extremism. She thought it was because of her extremism, but it wasn't. He wished he'd been able to interview the people in the pirate ship more directly. He was glad this hearing hadn't probed into that just yet.

He reported what he could, deleting only the most egregious of Helva's preaching. He wasn't sure what issue it would all turn on so he did the best he could at relaying the facts that Helva uncovered. Most of the data came from the native data system that had been

cracked by the pirates and the Brazilians.

"Very good Clem," the captain told him, "Your operative has made many useful observations."

"You are familiar with hive theory, the will of the group is independent of and unknown to the individuals in the group," Scientist Emeritus Fain S'buto pointed out. I see a lot of that in that direct interviewee's answers."

"But also a lot of social science," Hwan Shi, another senior scientist pointed out. "The fact that it is done with artificial plasmids is interesting, we see lots of possibilities there," he added.

General Blake spoke up, "Gentlemen, you are missing the main point, this would be a treasonous act of war."

"I agree," said Admiral Choud. "We received orders ceasing all hostilities with Brazil, but no orders nulling the alliance with Talstan."

"I think after more than twenty years of silence we can be sure that the Pan Solar League as an effective command center for this mission is terminated." Fain said.

"What?" the admiral asked.

"We're on our own, we're not bound by the treaties of a nation that doesn't exist," Fain said.

Franz Blake stared across the table. "I never agreed that our nation was gone," the general said. "As long as I'm alive, a loyal citizen remains." Clem contemplated the irony that they were all in the Afterlife and Franz had been dead well over a hundred years.

At the head of the table the Archbishop's tall mitre started to nod. "How many souls come from that planet?" he asked.

There was a long silence, he must be the only one who knew. "Four million a year, an Earth year," Clem told him.

"How long will it be before we would be able to handle that many new souls per year?" the archbishop asked. He asked Councilman Boskar Novok of facilities.

"With the best data I have of the exploitability index of this system, one hundred eighty nine years, if that was our only goal."

"So in spite of the eternal youth virus, which we have agreed to support already, the planet can supply us with more souls than we can absorb for the foreseeable future?"

"There is some truth to that," general Blake said, "but there will be some difficulty in claiming them."

"But I presume less difficulty than we would have if this planet was destroyed?" He asked Bishop Mulgrave, not the general.

"Much less," the bishop answered. "We will claim an ever increasing percentage as the deceased establish mail and voice connections with their loved ones. We will have no chance of reading in those souls where the brain has been devoured by a carnivore, but that actually accounts for less than one in ten of all deaths I believe."

"Where did you get that statistic?" Franz asked.

"The pirate woman has been transmitting data for months now, we have years worth of her expedition's records already."

"Gentlemen," the archbishop said, "I've been uncomfortable with our alliance from the start, I dare say that now. I think that alliance is what got our homeland into this war and what made us a target of the Brazilian doomsday rocks. Brazil was a Christian society, if only for the fate of the Brazilians stranded here, I would be willing to break that devil's bargain. Again, it is a bargain I don't think we would have made if we had thought it thru. That immortality virus would have made the population pressure worse, life even harder and more would have volunteered.

"Without the ancient world to study and their souls to save, our mission would have no purpose. Gentleman, I decree that we do what we can to disable the Al-Harron and let the valiant Brazilian effort to save most of mortal mankind proceed on its way. May God speed you on your way," he said, and stood, and bowed. He was in long white robes with the traditional pointed cap. All the rest of them stood and filed out to their duty stations. Clem caught the archbishop's eye as he filed out and thanked him. The years ahead were going to be very interesting.

Two starships converged deep in the gravitational well of the brown dwarf called Cynd, their relative velocities were enormous. The Heavenly Mother and the Al-Harron were moving in the same direction, but the Heavenly Mother was moving at ten times the speed. They were both a few days behind the looming face of the

exterminator, on a collision course with the parent star's inner planet.

From the inner system came the bulk of the Presidente Lula, the blue ray of its drive streaking at an angle to that gravity well, the occasional piece of space dust shaken loose by the vibration of that heroic chunk of brute force fell rapidly behind as the lowering tanks and the over-limited reactor pushed the boost of its four hundred thousand ton bulk well beyond half a gee.

The android on that old vessel could use its scopes and screens and see the combatants, but not in the same screen of course because they were one and a half million miles apart when the Heavenly Mother actually began to perform the maneuver. Clem was sure all who watched from the planet cheered when they saw her plan.

The Al-Harron had been over a third of a million-mile vessel with all six parts deployed. But their retro-gatherer was projected beyond the system at .7c, to the point where its reaction mass is increased by relativistic effects. The remaining five parts (they used a macrophased beat thermonuclear drive) of the vessel were still spread over forty thousand miles and their deployment was distinctly curved in the gravitational well of Cynd, he wondered how much torsion their containment could endure. They were only burning on-board now that their point was homed and they didn't have the velocity to capture the void's hydrogen to fuel them.

The Heavenly Mother was tripartite and because of the gravitational well and the damage to their controls, the units had contracted to less than ten thousand miles in total extent with the burner and cabin only seven hundred fifty miles apart. Even at that distance, if a scope would pick one up, it would not pick up the other.

Still, as the Heavenly Mother drew within a million miles, it was able to aim its main drive on the Al-Harron, enough radiation to fry all connections to the outside and leave them disabled for a year. There was no one watching from the planet who would know what the bishops would finally decide until their telescopes confirmed that the Heavenly Mother did play that beam across the Al-Harron for six seconds, by then it was less than a hundred

thousand miles from the Al-Harron, but unable to steer the drive over enough angle to keep it on them. They were also getting seriously off course doing this.

At the point of closest approach, the Heavenly Mother was only ten thousand miles from the Al-Harron. Scopes all over the system would be able to see the burner module shut down, then swing around to resume course again. The Heavenly Mother careened on toward the gravity well of 61 Cygni A. That error they had introduced in their course meant it would take an extra year and a half to get back, but there was now some chance they would have something to come back to.

The Al-Harron plunged on, its reactor burning but its segments wandering dangerously without guidance or instrumentation. The souls within might live on for some time on their inboard systems, and probably would be able to fabricate new connections to the outside after the surface cooled. Most hoped they would be well outside the 61 Cygni realm when they did so, and too scattered to re-assemble a functional starship.

Hours later the bulk of the Lula streaked toward the hammer. The reactor held on and on, not exploding in a near-space burst as they thought was planned. The core temperature climbed to the end of the red, the surface loomed, the four hundred thousand tons of steel and shielding penetrated almost a thousand feet into the moonlet by the time the containment finally failed and the fusing core plowed into the busting fuel tanks under the pressure of the thousands of miles per second impact and the remaining fuel detonated in a single thermonuclear blast.

The fireball that bloomed on the side of that moonlet was impressive in size and all were silent watching it on their screens. It was so slow but it kept getting larger and more and more mottled with those bright purple balls. The light of the explosion began to burst thru cracks in the body, slowly it began to separate into smaller and smaller fragments as the tongues of thermonuclear flame flashed many cubic miles of it to vapor.

Then the glare of the A star cut off the view and Clem swept it from his screen. They had already hurtled past the star by the time

of impact, but he was glad he saw it. Now they would have a reason for this mission. He'd snagged a picture of the pirate woman when their vessels were close enough for queries. He was glad to see she presented herself with a much more interesting personification than Helva did. He looked forward to the year when they could meet in person.