

# Prodigal

(v. 3.0.2)

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1. You can't win.
2. You can't break even.
3. You can't get out of the game.

— Engineering-folkloric restatement of the three laws of thermodynamics

This is a draft, obviously. Please send comments to [airfoyle@gmail.com](mailto:airfoyle@gmail.com) © 2017 Drew McDermott

## Table of Contents

### **Part I: *On Winning***

<b>1</b>	<b>Victory</b>	<b>4</b>
<b>2</b>	<b>Flash</b>	<b>6</b>
<b>3</b>	<b>Voolt</b>	<b>12</b>
<b>4</b>	<b>Encounter</b>	<b>16</b>
<b>5</b>	<b>Quarantine</b>	<b>20</b>
<b>6</b>	<b>Leverage</b>	<b>25</b>
<b>7</b>	<b>Quarters</b>	<b>30</b>
<b>8</b>	<b>Ambassador</b>	<b>32</b>
<b>9</b>	<b>Greetings</b>	<b>37</b>
<b>10</b>	<b>Limo</b>	<b>41</b>
<b>11</b>	<b>Reality</b>	<b>44</b>
<b>12</b>	<b>Temptations</b>	<b>50</b>

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<b>13</b>	<b>Dinner</b>	<b>54</b>
<b>14</b>	<b>Game</b>	<b>58</b>
<b>15</b>	<b>History</b>	<b>64</b>
<b>16</b>	<b>Family</b>	<b>71</b>
<b>17</b>	<b>Double</b>	<b>77</b>
<b>18</b>	<b>Love</b>	<b>81</b>
<b>19</b>	<b>Sunday</b>	<b>83</b>
<b>20</b>	<b>Kicker</b>	<b>88</b>
<b>21</b>	<b>Roadblock</b>	<b>92</b>
<b>22</b>	<b>Timer</b>	<b>95</b>
<b>23</b>	<b>Exoanthropology</b>	<b>101</b>
<b>24</b>	<b>Bar</b>	<b>104</b>
<b>25</b>	<b>Bond</b>	<b>110</b>
<b>26</b>	<b>Ghost</b>	<b>113</b>
<b>27</b>	<b>Church</b>	<b>118</b>
<b>28</b>	<b>Spin</b>	<b>123</b>

## **Part II: *On Breaking Even***

<b>1</b>	<b>Exit</b>	<b>126</b>
<b>2</b>	<b>Flight</b>	<b>131</b>
<b>3</b>	<b>Odd Couple</b>	<b>135</b>
<b>4</b>	<b>More Exoanthropology</b>	<b>141</b>
<b>5</b>	<b>The North</b>	<b>148</b>
<b>6</b>	<b>Otters</b>	<b>153</b>
<b>7</b>	<b>Booty</b>	<b>157</b>
<b>8</b>	<b>Long Walk</b>	<b>160</b>
<b>9</b>	<b>Calvary</b>	<b>166</b>

<b>10</b>	<b>Ex Machina</b>	<b>171</b>
<b>11</b>	<b>Prisoner</b>	<b>174</b>
<b>12</b>	<b>Snitch</b>	<b>177</b>
<b>13</b>	<b>Surprise</b>	<b>180</b>
<b>14</b>	<b>Rout</b>	<b>184</b>
<b>15</b>	<b>Crash</b>	<b>187</b>
<b>16</b>	<b>Catch</b>	<b>191</b>

### **Part III: *On Getting Out of The Game***

<b>1</b>	<b>Prison</b>	<b>195</b>
<b>2</b>	<b>Solitude</b>	<b>199</b>
<b>3</b>	<b>Confession</b>	<b>204</b>
<b>4</b>	<b>Byšhe-Admiral</b>	<b>209</b>
<b>5</b>	<b>Evacuation</b>	<b>213</b>
<b>6</b>	<b>Allàh</b>	<b>216</b>
<b>7</b>	<b>Retreat</b>	<b>220</b>
<b>8</b>	<b>Dungeon</b>	<b>224</b>
<b>9</b>	<b>Furlough</b>	<b>230</b>
<b>10</b>	<b>Jesuits</b>	<b>235</b>
<b>11</b>	<b>Return</b>	<b>240</b>

### *Appendix*

<b>A</b>	<b>Orthography of Glish and <i>Texano</i></b>	<b>245</b>
A.1	The Sounds of Glish Words and Names . . . . .	245
A.2	The Sounds of <i>Texano</i> Words and Names . . . . .	247
<b>B</b>	<b>Glossary of Glish and <i>Texano</i> Words</b>	<b>250</b>
B.1	Glish . . . . .	250
B.2	<i>Texano</i> . . . . .	252

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## Part I

# On Winning

## Chapter 1 Victory [1/v.3.0.2/4-1]

When Lieutenant (Junior Grade) Sangh Fharha was appointed Ambassador Extraordinary to Planet 1.2 from the Holy Kristhlamik Empire of Loofghud, he saw it as an opportunity to improve his and his best friend Tralf Ghiller's chances of survival. It was typical of their friendship that Sangh had let Tralf talk him into volunteering for Operation Motherland in the first place, without either of them working out the worst-case scenario.

"It'll be an adventure, right?" Tralf had said. "With no wars, the Navy has turned out to be pretty boring. Who knew? How could a trip to another star be, meeg,<sup>1</sup> anything but an improvement?"

Sangh had plenty of time to wish for more boredom once he realized how dangerous adventure could be.

When he and Tralf had obtained their commissions, the Loofghud Navy had just won a vicious war, suppressing the Dhassisshi Rebellion and consolidating the Empire's dominion over its home system.

The war was supposed to be short and easy. The Empire held most of the cards: economic wealth, a powerful military, and superior technology. But the plutonium miners of Dhassishi, a satellite of Šhrek, the largest gas giant in the Sudhopa System, refused to fold. They had two big advantages: they were at the top of a gravity well the Loofghud ships had to climb out of, and they controlled the fuel supply for the Loofghud Navy's pulsed-fusion drives. The drives depended on an isotope of plutonium that occurred nowhere in abundance but the unique geochemical circumstances of Dhassishi. Yes, you could make it in breeder reactors, but the process was slower and more expensive than extracting it from dabhadite ore. Plus, it seemed unnecessary; the Navy's stockpiles of the key isotope were ample for the short war everyone expected.

But the miners turned out to be tough and well led, and they won battles they were supposed to lose. And they could lob nukes down on Loofghud that were almost undetectable, so little fuel did they need. At first they missed a lot, but their aim improved. They began to burn large swaths of countryside with radioactive poison, and then, to everyone's shock, they vaporized the city of Bhiston, a major port on the North War Sea

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<sup>1</sup>Translator's note: A word with many shades of meaning, translatable as "friend," "um," "like," ..., sometimes with deliberate ambiguity. Hence left untranslated. Consult the glossary, appendix B for definitions of other words in Glish and *Texano*, the principal languages of Loofghud and Texa.

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and the third-largest city on Loofghud. There was talk of negotiating a peace deal with Dhassishi that would give them most of the autonomy they sought.

To most Lofghudlings the politics had become secondary to personal grief and anxiety. For Sangh's family, the main worry was the safety of Sangh's older brother Slingo, torpedoman in the Loofghud Navy. Their mother prayed night and day for his safety, begging the Blessed Virgin Sylvia to watch out for him. Finally, at her confessor's suggestion, she promised St. Sylvia that if Slingo survived the war, the Navy could have her younger son, Sangh, too.

At this desperate juncture for every family on Loofghud, the Guild of Physicists saved the day. They found a way to apply Robisson's theory of quantum gravity, hitherto an esoteric curiosity, to the problem of faster-than-light travel. It was a basic theorem of relativity theory you couldn't go that fast in any consistent spacetime. Robisson had found a loophole.

The quantum-transit system shortened the Navy's supply lines, of course, but that wasn't the important thing. The new weapon enabled a fleet of ships to pop into a region of spacetime where they weren't supposed to be, where the enemy did not expect them to be, where they refused to believe they *could* be until it was too late to react. In the climactic Battle of Mattho, named for a sister satellite of Dhassishi in orbit around Šhrek, the rebels' main fleet was annihilated. Within days, troop transports moved a huge army of occupation to the surface of Dhassishi. The miners could have fought on, but they had not believed such an invasion could happen so quickly. They had no real option but to surrender unconditionally.

Sangh's brother Slingo was wounded in the Battle of Mattho, but survived. True to his mother's promise, Sangh accepted a commission in the Loofghud Navy the day he and Tralf graduated from the Naval Academy. Academy graduates had to serve four years within ten years of finishing, but there were ways out. Sangh had hoped to avoid it by teaching anthropology for ten years. That's what he wanted to do anyway. But his mother checked with the Blessed Virgin Sylvia, and Sangh's plan wouldn't satisfy Her.

Tralf had not promised a saint he would join the navy if his family survived the war. Perhaps if he had, more of them would have survived. They had always lived in the town he grew up in, a small suburb of Bhiston. No one lived there any more. Some of his friends and family died the day the city was nuked; some slower. His family had been small: an elderly, demented father, his second wife, Tralf's stepmother, their daughter, and an aunt. Only the aunt, his mother's sister Getrudha, survived.

Sangh felt terrible at his friend's misfortune, and, naturally, guilty at his own family's luck. But he was glad that Tralf, after pondering his options, in the end became a Lieutenant (Junior Grade) the same week that Sangh did.

Sangh had already been assigned to the staff of the Chief Artillery Officer on battleship HHS *Dondher*. Tralf called him on the radiophone after the funeral for his sister and father. The authorities had hastily consecrated a new cemetery as close to Bhiston as was safe, and were burying as many bodies as could be recovered. They had thoughtfully set up a bank of phones for the bereaved. No charge for the first two calls.

“I’m joining up,” Tralf told Sangh. “It’ll be more fun than trying to figure out who I still know on Loofghud.”

“Tralf, buddy, I’m so sorry about your family.”

“Thanks, but you knew we weren’t, meeg, close, right? They’ve kept me in military academies since I was a little kid, after Mom died and my new Mom didn’t think I, meeg, fit in. So if Allàh chose Aunt Getrudha as the survivor, I can’t argue with His Infinite Wisdom this time. Truly!”

“It’s a shock, though.”

“Another thing: They’ll be rebuilding cities down here for quite a while. There won’t be many jobs for linguists. I should have majored in, meeg, civil eng, I guess.”

The citizens of the victorious Empire were dazed by the whiplash among different expectations they suffered in the last months of the war. The quantum-transit system had been a deep secret until the war was over. Overnight the grief and fear they expected from a long brutal war gave way to jubilation at their victory. Mass funerals gave way to celebratory Masses all over the planet, thanking God for sparing them further death and ruin, and proclaiming Poph Urbana 11’s supremacy over the Sudhopa System.

Sangh was thrilled to be one of Urbana’s subjects, thrilled that Slingo was coming home and that their mother could stop worrying. Tralf had trouble sharing in the general giddiness of V-D Day, but he wasn’t bitter. On their next phone conversation, from his berth on the cruiser HHS *Dasher*, he told Sangh, “At least there’s no one left for the Navy to fight.”

Then Tralf got bored.

## Chapter 2 Flash [2/v.3.0.2/g-1]

Few physicists, let alone anyone else, could explain how the quantum-transit system allowed an object to disappear from one region of spacetime and appear a short time later in another. It did it by massively amplifying laughably small probability amplitudes. That was about all that most physicists knew. The general public just knew the face of Hong Robisson, looking like everyone’s favorite spinster aunt. She was prettyish, based mainly on her pleasant smile, but she put little work into improving on nature. Gray hairs were beginning to appear in her wavy black hair. Did her work leave time for beauty secrets or boys? No one really knew. The military was good at keeping secrets, even about its scientists’ private lives.

The public did know she had a *kind* face, respectful of even the silliest questioners. When reporters asked her if a spaceship was actually teleported to the “flash point” it emerged at, she smiled and shook her head. “Oh no, it travels along every possible nonzero-amplitude path between the ‘sink submanifold and the

‘emerge submanifold.’” You could ask her to explain, and she would gladly comply, usually reaching for some chalk at about this point, but it wouldn’t help. Really, though, what else did the public need to know? An object started at the “blink point” and wound up at the “flash point,” through witchcraft or some scientific thing that came down to witchcraft. And this witchcraft was the exclusive property of *their* glorious planet!

Until the invention of the quantum-transit system, it had been considered impractical for the Poph and the Empire she led to consider exploring, let alone conquering, another star system. But once the jinni had been released from the lab, no one could resist the temptation to expand beyond the Sudhopa System. And the first target was inevitable: the planet mankind had come from. Scripture was clear that Allàh hadn’t created man on Loofghud. It spoke of a world saved by Jesus, the divine prophet, a Son of God. The Bible did not give that world a name, but tradition called it “Erth̄.” From that world traveled the settlers of Loofghud, in a journey lasting generations. With the QT system, it would take mere months to make the return trip, if only they knew where that world was. Down the years the Pophs, from Yvonne the Great onward, had carefully preserved and copied surviving logs of the trek from Erth̄ to Loofghud, even when their meaning had been forgotten.

After the Industrial Renaissance, the lovingly preserved manuscripts told a clear story. The hard part was to work backwards from them. The joint labors of antiquarians and scientists had identified a few good candidate star systems, but no clear winner. No matter: Operation Motherland would explore them all, find Erth̄, and, Allàh willing, unite it with Loofghud for the greater glory of the Holy Quadrinity.

Some skeptics argued there was no point in going so far looking for trouble when they the Sudhopa System had enough troubles at home. But the Guild of Physicists saw a huge opportunity for sharing scientific knowledge with their mother civilization, and the Loofghud Navy saw other opportunities. Their enormous combined prestige carried the day.

All this was great from a world-historical perspective, but what Sangh and Tralf were concerned about was their chances of coming out of this quest alive. They had many more chances to speculate about those chances when by good or bad luck they were both assigned to HHS *Cross*. The ship didn’t exactly exist yet; it would be commissioned at the flash point.

“Meeg, I think we’ve isolated the worst case,” opined Tralf the next time they spoke. “We’re on a light destroyer with Hothand Limhoon in command.”

“System 1 won’t necessarily pan out,” replied Sangh. “What are the odds? If and when we try the second most likely star system, we could be on completely different ships.”

But System 1 turned out to have an excellent candidate, Planet 1.2.

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The energy required to transport an object along all Prof. Robisson’s “paths with nonzero amplitude,” to *quantrans* it, in popular parlance, depended on the object’s mass and the distance traveled. It would have

taken a staggering amount of energy to shove a fleet of large starships into an improbable region of spacetime light-years from Sudhopa. It was more cost-effective to find a source of raw materials at the destination and build most of the starships from scratch. That way only the personnel needed to undergo quantum transit, in small manageable batches.

The fleet-rebuild approach may sound easy on paper. In practice, it took superhuman effort by the military engineers of the Loofghud Empire. Fortunately, during the Dhassishi War they had gained lots of experience on projects requiring superhuman effort and, perhaps, divine intervention.

The tacticians found the raw materials they needed on a satellite of the planet furthest from Star 1, planet 1.7. They got their first ship built in six months, and soon the pipeline was churning out two ships a day, just as their crews emerged from the flash point from Loofghud. Any shipyard in orbit around Loofghud would have been proud of this level of productivity. The engineers threw in a permanent station, Star 1 Command, where the generals with the biggest insignia could make plans, and officers and able seamen could take some leave time. It was a relief to feel one's legs push against gravity, or something like gravity, the centrifugal force created by spinning the station.

The new ships and crews ran test orbits around Planet 1.7 as they waited for more ships and more sailors. *Cross* passed all the tests, and was ready for the last quantum transit, to a flash point near the orbit of Planet 1.3. Like everyone else aboard, Sangh and Tralf took every chance they could to get out of the light destroyer and stretch their legs. The shuttle to the station had no windows, but it did have a huge vidscreen showing Star 1 Command Station and the shipyards beyond it. Sangh found it hard to believe that all this had been built in less than a year. His next thought was a worry: *If this star system has intelligent inhabitants, how could they not have observed all this activity? But I'm forgetting just how far away those inhabitants are, if they're on Planet 1.2.* Star 1 was just a bright star from the orbit of Planet 1.7; the first three planets would not have been seen at all if scout ships hadn't taken sneak peeks.

Unfortunately, morale was not great among the veterans and rookies crewing *Cross*. The the opinion around the entire Contact Fleet was that Vhatta Limhoon's thirst for military glory was so great he wouldn't mind dying to get it. Of course, he'd rather win than lose, rather have other people die than himself.

Tralf bitched about Limhoon every chance he got, and the best chance was when they had a few hours to relax in a pub on Star 1 Command Station, eat real food served on plates, and drink real beer from an ordinary glass that would stay put when set down. Aboard *Cross*, having a drink meant sucking water out of a collapsible bottle.

"I sure hope System 1 is not the right one," he said, having another pretzel. "Hothand Limhoon in command! Truly! The hero *and* goat of the Battle of Mattho. I assume you know the story?"

His audience was Sangh, of course, and Lieutenant (JG) Bewinda Wharbut, whom they had befriended on *Cross*. She was tall and skinny, with skin the grayish color of soyba, which did nothing to improve her round, flat face. The trait she was most self-conscious about was her teeth. They *were* crooked, but



not unusually so. Nonetheless, she covered her mouth when she smiled, and sometimes seemed to have forsworn ever smiling again. Because of the teeth or some other reason, she was shy pathologically so. Just the sort of lost puppy Sangh loved to rescue. He had made a point of pulling her into conversation when their paths crossed in the ship's mess. It turned out she was smart, had a wicked wit, and could help Sangh trash some of Tralf's more extravagant speculations. She had aspirations to be a professional historian, not that different from Sangh's own dreams.

It was usually entertaining to hear Tralf's version of a story, even one you already knew; his version supplied many extra details, some accurate. Sangh had heard the story of the Battle of Mattho many times from his brother Slingo, but Slingo's perspective was that of a lowly torpedoman on Limhoon's flagship, the heavy cruiser HHS *Dhosama Smuts*. It was an exciting tale, culminating with a random shot by the rebels that wrecked the tube he manned and cost him a foot.

Tralf looked around for people who might hear, as if anyone cared, and began, "The Battle of Mattho..." "I *have* heard of it. My brother was nearly killed there."

"I know, I know. Okay, Vhatta Limhoon — except he was assigned the acting rank of Rear Admiral when the war started, commanding the cruiser — but you know the name of the ship, of course ...."

"HHS *Dhosama Smuts*, am I right?" said Bewinda.

"Yeah. Okay, it was Limhoon's idea to quantrans his squadron to low orbit around Mattho, practically in the upper atmosphere, and it was Limhoon that led the final charge on Dhassishi. Total surprise. Truly! I mean, total. Right? His very first volley damaged the defending ship ahead of him — I'm blanking on the name — which turned and ran for cover around the limb of Dhassishi. *Smuts* pursued them, firing steadily, receiving only a few shots in return."

"Maybe that's when Slingo got hit," said Sangh.

"Maybe, but there's more to this story. While *Dhosama Smuts* fought its battle, the rest of Limhoon's squadron was chewing up the other rebel ships. But when the rebels surrendered, Limhoon was still pursuing that enemy ship. He got a cease-fire message advising that all Dhassishi ships had surrendered. Somehow that message got ignored, and he kept firing at — *Dhebola*, that was its name — and it phooking *exploded*, killing everyone on board. Really, every living soul. They looked for survivors, but ...."

"Not a single escape pod to chase?" replied Sangh, thinking, *Scary way to die*.

Bewinda was skeptical. "Wait, how could a ship explode? It's not like they have a black-powder magazine somewhere."

"Freak hit in the fusion drive, is my guess," said Tralf. Maybe Slingo dinged it with a torpedo! Right?

"So," he continued, "after the battle, Limhoon was a big hero. But after the *war*, suddenly it was considered, meeg, politically necessary to be nice to the Dhassishis. The signal traffic between *Smuts* and Fleet was pretty unambiguous, so Limhoon ended up getting court-martialed. Right?"

"No kidding? They didn't spread that news around," said Sangh. "I thought ..."

“Wait, wait, there’s more,” said Tralf. “At his trial he managed to, meeg, imply that the problem was that his own signals people failed to inform him in a timely way that the battle was over. Truly! So he was acquitted. Everyone who served under him on *Smuts* stood by him, but was he loyal to them? Few of those signals people have been heard from since; they’re all, meeg, on smuggling patrol in the South Fjardinia Sea.” He signaled to a barmaid to bring another round.

“So your advice is, don’t serve on a ship commanded by Willem Limhoon,” said Sangh. “Where do I file a complaint?”

“No advice. I’m just *sinjang na krue*, as they say,” said Tralf.

“Well, do it on your own time,” said Bewinda, getting a little annoyed. “Vhatta Limhoon was *exonerated*. He’s our commanding officer, and entitled to our respect.”

“If this isn’t my own time, when is? Right?” replied Tralf. “Besides, truly? Who respects their commanding officer?”

“Anyway, *Cross* is a light destroyer,” said Sangh. “It’s for chasing gunboats, escorting cruisers, that sort of thing. Fleet doesn’t want any trouble with Limhoon. We’ll be all right.” He looked at his watch. “We’ll be all right if we don’t overstay our leave.” They rose to go, scattering a few dheuko notes for the beer and sandwiches.

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The Contact Fleet was assembled, under the command of Byšhe-Admiral Brijet OhMahan, CINCConFleet. Fusion drives were ignited, and they were underway, toward the blink point that was their portal to the inner planets of Star 1.

Vhatta Limhoon issued an announcement over the PA system.

“Attention all hands: Our ship has been granted the honor of being the first to orbit Planet 1.2, which, as you all know, is the most likely in this system to be inhabitable by human beings. Now, let me caution you that the rest of our orders are top-secret. I’ve just unsealed them today. They are direct from Fleet High Command. Under no circumstances are you to share them with anyone, even friends elsewhere in the Contact Fleet.

“We are ordered to land on planet 1.2 if possible, ascertain whether it is inhabitable by human beings, whether it is in fact inhabited, whether it is in fact Earth, and, finally, whether it has strayed from Christ in the 1500 years since our ancestors left. We are to seize the initiative whenever possible in our dealings with the inhabitants.

“This is surely the weightiest assignment ever given to anyone in the entire history of our sacred planet of Loofghud. The Empire expects us all to do our duty and more. I know you will. God bless you all, and God bless the Kristhâlamik Empire of Loofghud.”

Sangh and Bewinda were impressed with the faith Admiral OhMahan had placed in their captain. “She’s no fool,” said Bewinda. “She knows the man’s true value.”

Tralf said, "Or she's trying to get rid of him. We're the canary in the coal mine. What are our odds now?"

Sangh responded with annoyance, "A lot less than we thought when you talked me into volunteering."

"I just said it would be, meeg, an adventure, which it is. Right?"

So *Cross*, light destroyer, E class had the honor of being the tip of a heavy spear, the Contact Fleet of Operation Motherland. Of course *Cross* wasn't literally the tip of anything. Given Newtonian dynamics and the size of three-D space, it made no tactical sense to form groups of ships into a linear shape; much sounder to disperse them in the huge volume available, giving each a trajectory that would cause them to converge on a target in waves, from unpredictable directions. Unless some warning was sounded that caused them to alter course. A warning like the sudden destruction of *Cross*.

Soon thereafter Limhoon appointed Sangh Ambassador Extraordinary. He actually met with Sangh face-to-face, summoning him to his "office," really his sleeping quarters with the furniture moved around. The bed folded into the wall, a bar came down symbolizing his "desk," and he received visitors while floating behind it. He had a system of "grip webbing" installed which allowed, or forced, a visitor to hang facing him, once they had gotten their elbows through the appropriate loops. More often than not, they spent more time wrestling with the webbing than facing him directly, which may have been the intent all along. Another skein of webbing held Limhoon's exec, Lieutenant Commander Lhithy Dhruzio, on Limhoon's left flank. How gracefully *he* could weave himself into his web no one could tell, because he seemed to have found a stable perch and decided not to stir from it.

"Lieutenant Fharha," said Vhatta Limhoon after waiting 20 seconds for Sangh to get into a position facing the wrong direction, then start to wrestle his way back. "As you may have expected, you've been appointed Ambassador Extraordinary to Planet 1.2. Congratulations."

"Sir, thank you," said Sangh, "I wish I were better qualified." *And in a less humiliating position in this damned webbing.*

"Now, son, settle down; show some gumption," said Dhruzio. "You're the best qualified person on the ship to talk to the aliens." He alluded to Sangh's degree in exoanthropology, the so-far hypothetical study of alien cultures. The rumor was that there were no surviving diplomats in the entire Contact Fleet, due to various malfunctions and quantum instabilities. Sangh had thought they would just do without an ambassador, but appointing him did make a certain amount of sense.

"Sir, thank you. I will do everything I can to make the Empire proud of HHS *Cross*."

"I expect no less. Dismissed," said Vhatta Limhoon.

Unfortunately, being a diplomat of even the mighty Loofghud Empire would not reduce Sangh's likelihood of being obliterated if some high-tech energy weapon destroyed *Cross* without warning. It reduced only slightly the probability of being captured, interrogated, and killed along with the rest of the crew.

But when an alien ship intercepted *Cross* 400,000 clicks from Planet 1.2, matching course with her, it began to appear that diplomacy, and the Ambassador Extraordinary, might have a fighting chance against

death in glorious combat.

## Chapter 3 Voolt [3/v.3.0.2/12-1]

Three L-days later, Sangh was summoned to Vhatta Limhoon's quarters for his third daily report on progress in negotiations with the woman in the alien ship, Special Emissary Shesay Dezeenawvy, about whom more, much more, shortly. Executive summary: the negotiations were going nowhere, and Sangh dreaded the captain's wrath.

During the "day" (the period when the captain was awake), the sleeping area was converted to the usual office parody. When Sangh arrived, the captain floated behind his "desk," LtCdr. Dhruzio at his usual perch beside him. Lt. Babraba Ghalfe, the ship's weapons specialist, was already facing the Captain.

Sangh had barely saluted, and was still struggling to weave himself into the web by Ghalfe's side without bumping into her when Vhatta Limhoon demanded, "Lt. Fharha, can you assure me right now that we have obtained satisfactory terms on all outstanding issues from Ms. Dezeenawvy?"

"Sir, no, sir, but..."

"I assigned Lieutenant Ghalfe to accompany you so as to spice up your blandness with a taste of menace, to implant the idea in Ms. Dizzynawvee's mind that powerful forces were yours to unleash, distasteful though that option would be."

Ghalfe's tall bulk always made Sangh feel small even before she strapped on her armor and several visible and not-so-visible weapons. Vhatta Limhoon, his dark brown complexion emphasized by his shaven head and white-streaked beard, exuded plenty of menace himself. LtCdr. Dhruzio spoiled the effect somewhat, his sloppy uniform way out of line with regulations, his grayish skin color in symbiosis with tones from the remnants of his hair, his expression that of a doting uncle trying to look stern. Nonetheless, he carried out Vhatta Limhoon orders without question. He had been with Limhoon for years.

Sangh braced himself for another lengthy session of abuse from the captain, listing all his mistakes in detail. He flipped through his notes, hoping to find some way to forestall it. He started to say, "Sir, maybe if I ...," but Limhoon interrupted him.

"It doesn't matter, Lieutenant Fharha, put it out of your mind. You are relieved of this assignment. Starting now, I'm taking over the negotiation. Step one, ready the landing party."

He flipped a communicator switch; "Lieutenant Commander Kolfhaj?"

"Sir."

"Prepare to launch landing craft *LCI* as per plan, with personnel adjustments as needed."

“Aye aye, sir.”

This bit of theater puzzled Sangh a bit. The landing party was already standing by, including Sangh himself as the central figure.

“Now,” said Limhoon, “Let’s go give this stupid bitch one last chance to get this right. Mr. Fharha, Ms. Ghalfe, follow me.” His head was a bullet, pulling his body where he willed.

“Sir,” said Sangh in surprise, “You still want me along? Shouldn’t I report to *LCI*?”

“You’re not questioning my order, are you, Mr. Fharha?”

“No, sir. After you, sir,” said Sangh, sliding over on the damned grip webbing as best he could so that Vhatta Limhoon could navigate around it and get to the exit hatch without climbing over LtCdr. Dhruzio, who stayed put. It was only then that Sangh realized that the vhatta was wearing his most formal dress uniform, complete with cape. Limhoon still managed to look graceful threading the spider web of his office. He landed feet first on the P/A bracket at the hatch and pushed off to slither up the corridor. Somehow Lt. Ghalfe got around Sangh before he could extricate himself from the all-too-aptly-named grip webbing. With all her bulk, she slid through the hatch smoothly. Sangh followed, but, off balance, collided shoulder-first with the bracket, adding to the bruises he tended to collect trying to keep up with Ghalfe and Limhoon.

Once out into the cramped passageways of their ship, the three of them glided when they could, used obstacles to launch themselves when they had to, and sometimes just crawled around people in their way, until they reached the umbilical passageway to the alien spacecraft, whose name, *XC-19*, was emblazoned on its side, just behind the point where a passageway had been rigged linking her to HHS *Cross*.

Vhatta Limhoon and Lieutenant Ghalfe had already popped through into Special Emissary Šhesay Dezeenawvy’s spacecraft before Sangh even got to the airlock. Nevertheless, by the time he caught up, Šhesay was still introducing herself, saying how awestruck she was at Vhatta Limhoon’s priestly regalia, and retailing more of the empty verbiage of which she had proven herself to be a galaxy-class master. Limhoon claimed the most comfortable-looking chair, and slid his tall frame into it. Sangh took the other chair, and Lt. Ghalfe, as usual, floated behind them, weapons at the ready.

The only way to provide gravity aboard a spacecraft was to rotate some piece of it, and both *Cross* and *XC-19* were much too small for that. But *XC-19*’s design was quite different from that of *Cross* or any other spacecraft one might rationally expect. Instead of cramped corridors, its interior consisted of one enormous room, a slab of mostly empty space, with a floor, walls, and a ceiling. On the ceiling, close to where the visitors emerged into the room, was a crystal chandelier, whose pendants rustled in the air currents, making a pleasant tinkling sound as background music to the negotiations.

Bolted to the “floor” were several pieces of furniture, apparently carved from wood, including an ornate desk behind which sat Šhesay Dezeenawvy. The wall behind her chair was dedicated entirely to a panoramic viewscreen displaying the beautiful planet below them, whose vast swaths of blue and green had been a constant distraction to Sangh during his negotiations. The first time he had laid eyes on it, an ancient genetic

recognition of home seemed to kick in. His first thought was, *Loofghud is obviously a parody of this planet: with less water, less cloud cover, and oceans that look like mud puddles by comparison.* Loofghud was home, but perhaps only by default, now that a better class of home was available.

The room's other walls were cluttered with pictures in elaborate frames: oil paintings, photographs, watercolors. During the negotiations, Šhesay had bragged more than once about the exotic locales of the pictures, which she had painted or photographed herself on the smaller planets and larger satellites of System 1.

Vhatta Limhoon ignored all of these decorative touches, even the breathtaking viewscreen, and bore down on the business at hand. "Ms. Dezeenawvy," he said, "I am here to tell you that we are carrying out a landing on the surface of the planet, with or without assistance from you and the other inhabitants. Any assistance you can render us will of course be useful and will help avoid accidents, which could have tragic results."

"I'm so sorry that it's taken longer than we would have liked to welcome you to the surface of *Teħa*. But rest assured: everyone there is eager to meet you and your crew. You've been the top item in the *Teħana* newstalk shows since the day you arrived."

"In that case, let's satisfy their curiosity. Give us a bit of information and we can land in a few hours."

"Please give us just a few more days to prepare for your arrival. We've been studying the blood sample from Ambassador Fharha that he was so kind as to supply us with." Limhoon shot a black glance at Sangh, who had not bothered to inform him of this transaction. "We wouldn't want you to drop dead after being exposed to our citizenry, or vice versa."

"Neither we nor you have gotten sick. So no one has anything to fear on that score."

She looked startled. "Of course *I'm* not going to catch anything biological. I'm a *Seque*."

His eyes narrowed. He turned to Sangh and glared at him. Why hadn't he been briefed on *any* of this?

"I'm a *Seque*; look," and before Sangh could confess his ignorance of the matter Šhesay opened up her abdomen, by tracing a square on her torso and, as if in a cartoon, pulling one edge and swinging the square open like a door. There was no blood, no guts, just sinews and tubing, and blocks of some shiny gray material connected by cables. The inside surface of the door had more blocks and cables. There were a few tiny black bugs crawling over the surface of the blocks, but they scampered away into crevices, away from the light. Two cables had been disconnected when the door was opened, and they groped back and forth as if looking for their sockets.

This dramatic gesture cost Šhesay something; her face was in an undeniable grimace, and she seemed unwilling to hold the door open for long; she closed it with a sigh of relief before Sangh could take a closer look. Her tunic still held the outline of a square where its threads had been severed, but it faded as they sutured themselves back together. "Precious BeJesus, protect us," Sangh muttered. The hair on his neck stiffened.

The Lofghudlings were too stunned to acknowledge at first what they were looking at. But they all knew all right, having been warned since nursery school. It took Vhatta Limhoon only a few heartbeats to recover. He stood up, pulled a crucifix from his cassock, and uttered a prayer in Lhatin as he made the sign of the cross with it, saying,

*“In nomini Domini BeJesu David Kristi, salvatoris nostri,  
vade, daemones, et libera nos a malum  
computationalum!”*

Sangh knew from catechism class that it meant, “In the name of BeJesus David Kristh our Savior, begone, demons, and spare us from your computational mischief!” He thought Šhesay might cringe or even melt, but all she did was roll her eyes.

Vhatta Limhoon had maintained enough composure to float up slowly as he uttered the malediction against Šhesay, but now he pushed off toward the airlock, and spat out orders: “Fharha, make sure this thing comes nowhere near our ship. All crew return to *Cross*. Ghalfe, cover.”

“Aye aye, sir,” said Lt. Ghalfe.

“Thing, sir?” said Sangh.

“She’s a robot, you fool. A voolt.”

Šhesay Dezeenawvy did not move a muscle, if muscles were actually what she possessed, as Vhatta Limhoon jumped up and pushed off for the airlock. Babraba took up the rear, covering his and Sangh’s escape with her laywitzer. The airlock held two people, but Vhatta Limhoon had taken it for himself, leaving Sangh and Lt. Ghalfe waiting an eternal minute for the portal to be sealed on their side, the distal side, and the portal on the proximal side to be opened and shut again as Limhoon exited the lock and returned to *Cross*. *A new kind of awkward moment*, he thought, *brought to you by space travel*. Not daring to look toward Šhesay Dezeenawvy, he traded a glance with Lt. Ghalfe, who was almost smiling. He tried to mimic her air of sardonic superiority, but *he* wasn’t holding a weapon.

Finally the tone sounded indicating that the hatch on the proximal side of the airlock was closed. Ghalfe opened the portal and backed in. Sangh scraped after her, closing the seal behind him. Even before they started moving, their mobilcoms came to life with an all-hands message from Vhatta Limhoon: “Attention! When authorized personnel have cleared the airlock, disengage from alien vessel, but maintain pressure; modify orbit down 10 klicks.”

Sangh had barely finished dogging the hatch on the distal side of the airlock when he was smashed against it. His first thought was that *Cross* was taking evasive action, but then he realized Lt. Ghalfe had kicked him, propelling herself across the airlock. By the time he turned she had her laywitzer trained on him. In the small spherical space, the muzzle seemed mere centimeters from his chest.

“Lieutenant Sangh Fharha,” she recited, “my orders are to detain you as a national-security risk. You are

to remain in the airlock until further notice.” The words barely registered. *Orders?* He did nothing as she slithered through the proximal portal.

“Lt. Fharha: We are going to detach from the alien vessel; don’t try to open the distal hatch, unless you like breathing vacuum.” He heard the proximal hatch close behind her. He was now alone in the passageway, His instinct was to bang on the hatch, demanding an explanation or insisting a mistake had been made, but he realized how foolish that would be. This was the Navy, not real life, where a semblance of justice was considered proper. So his passivity took over. He floated around the airlock, an inelastic billiard ball caroming toward nothing in particular. There was a dull clunk as the explosive bolts were blown and the passageway on the distal side of the airlock was severed, freeing *Cross* from *XC-19*. Then the lights went out.

Vhatta Limhoon’s voice came up on his mobilcom again: “Prepare to launch landing craft 1 as soon as we are 200 meters from alien vessel. Lieutenant Sangh Fharha is no longer in the landing party; he is under arrest, being held in former passageway to alien ship, now relabeled ‘quarantine brig.’ He may have been compromised by extensive contact with alien robot Šhesay Dezeenawvy. Lieutenant Elmet: Please proceed without delay to landing craft 1; you are Lieutenant Fharha’s replacement in the landing party.”

## Chapter 4 Encounter [4/v.3.0.2/16-1]

It wasn’t computers as such the Lofghudlings feared, but the consequences of building networks of them, or of programming them to mimic intelligence. Either of these dark arts would summon demons called *voalts* bearing special malice for living souls, demons that could animate a dead mannequin and transform it into a death-dealing robot.

As electronic technology evolved, or re-emerged, during the Industrial Renaissance, each advance was opposed by conservative forces within the Vhatikan, especially the Jesuits. But the Guild of Physicists, the Jesuits’ principal counterweight, argued that the Empire’s economic and military survival depended on a transition to digital technology, made possible by the development of semiconductor circuitry. It could all be done without any networking or AI. Finally Poph Ralphe 6 settled the issue with his encyclical *Deus autem dedit*, allowing the development of arbitrarily powerful mainframes, provided each program had the proper *imprimatur* and computers were never connected electronically.

These rules were bent here and there, but the fear of *voalts*, damnation, and the Inquisition kept them from being broken.



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About that blood sample: It was, Sangh seemed to recall, during his second, or perhaps his third session as Ambassador Extraordinary from the Loofghud Empire, about the time he began to realize that he was going to be ground to frustrated powder between Special Emissary Śhesay Dezeenawvy and Vhatta Willem Limhoon, captain and confessor of Her Holiness Ship *Cross*.

His *first* encounter with Emissary Dezeenawvy had been a thrilling anticlimax. The time had come to pop the airlock and see what was on the other side. *This is it, the most exciting moment of any sci-fi movie, the meeting of two alien races.* He made the sign of the cross, muttering the words for the thousandth time: “In the name of Father Allāh, and the Sons, and the Holy Spirit, amen.”

If his companion in the airlock, Lt. Ghalfe, was nervous, she hid it behind a sardonic smile. Her favorite prayer was the Grishklo A508 laywitzer, which she had armed but not yet lit. The A508 was an energy weapon that could vaporize any likely target. Babraba and her arsenal took up three quarters of the space in the airlock. *Well you might smile,* thought Sangh, *you don't have to go first.* Her finger wasn't actually on the trigger, but it was close. She stroked the Grishklo with her trigger finger about once every three seconds, but whether out of nerves or eagerness Sangh couldn't tell.

Vhatta Limhoon had naturally chosen Sangh to be the first through the airlock joining their ship, HHS *Cross*, to the alien spacecraft. Ambassador or not, he was expendable. If he had to die for his country, Lt. Ghalfe was there to avenge him and recover his remains. Sangh was armed with nothing but a crucifix and whatever prayers he could think of as the pressure equalized inside the drab, dim — and cold — sphere of the airlock. Saam 9 came to mind:

*When my enemies turned back,  
they stumbled and perished before thee  
For thou has maintained my just cause....*

There was a good chance the aliens on the other side of the airlock hatch weren't enemies or aliens at all, that the planet they were orbiting was indeed Erth. The alien they had been talking to *sounded* human. But there was something faintly ersatz about her. For one thing, instead of going through the protocol that logic dictated alien races would use to establish contact with each other — exchanging the first fifty prime numbers in binary and the like — she had transmitted an audio signal: “Attention, alien vessel! Welcome to the Solar System!” in perfectly accented Glish. How had she learned that? Even weirder was the shape of her spacecraft: sleek, pointy, even equipped with fins, for crying out loud! It was a child's conception of what a spaceship should look like.

The person behind this eager voice sounded like a perfectly normal human being. Even more convincing was the sight of the planet she represented. A viewscreen had been rigged in the main corridor, and each member of the crew had been granted a five-minute view of the blue-and-white planet they were orbiting.

They had to be torn away. A wave of excitement carried everyone before it; they were all sure this was “home” — where their ancestors had come from more than a millenium and a half ago.

Having run a few tests to make sure the atmosphere on the other side was safe to breath and at the right pressure, Sangh popped the hatch and slid into alien territory. One short passageway later he tumbled into the absurd room, followed by Lt. Ghalfe. Disoriented by all the empty space, they brushed roughly by the chandelier, setting it atinkle. The sound distracted them for half a second, but their attention was grabbed by the open-armed gestures of one ordinary human woman, “sitting” behind an ornate desk, with no other crew members in sight. Two overstuffed armchairs faced the desk. Sangh managed to push off from the ceiling with a fair amount of grace, landing smoothly on the right-hand armchair. He held onto the arms to avoid floating off, but the chair gently gripped his ass somehow, and he could sit up straight. Babraba got down from the ceiling, too, but floated behind the other armchair, her weapon at the ready.

By then Sangh was staring at the huge viewscreen showing the planet below. Its kaleidoscopic beauty disengaged his soul from his body: Where the veil of cloud parted, his gaze fell into unknowable depths of blue water, so much water! His five minutes with the small screen on *Cross* had been too little time. Now Sangh and Lt. Ghalfe could drink their fill of the gorgeous view.

He forced himself to focus on the apparently human woman across the table, expecting that the representatives of the two known fragments of the human race would find instant common ground and warm mutual affection. The woman did greet him with a smile crinkling her pleasant, chocolate-colored face, and she did say, “Welcome to the sovereign Republic of Texa!” But that was the last time she smiled. Her face settled into a neutral expression, framed by straight, dull brown hair. She wore a severely cut business suit of funereal color.

Sangh was still thinking about how to approach her when she said, “My name is ...” — and then a mouthful of sound that Sangh decided, after hearing it a few more times, was ‘Šhesay Dezeenawvy’. She went on: “... I am Special Emissary to the Starship, um ... Fleet of the Empire of Lôfgaxud.”

Sangh introduced himself and Babraba.

“We are eager,” the woman went on, “for you to visit our planet, meet our people, even to land, but there are a few minor preliminary matters that have to be settled.”

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Sangh’s anticlimactic encounter with Šhesay Dezeenawvy gave him reason to rejoice that they were not going to be destroyed, boarded, or infested with insectoid parasites. Any day now they would step onto their native soil, in peace. They would not need to “seize the initiative,” with its grim connotations.

But about that blood sample, which in retrospect he wished he had told Vhatta Limhoon about. The episode was just too embarrassing.

On Sangh’s second visit he was already exhausted from too little sleep and too many little assignments. Everything had been delegated to him. Limhoon handed him off to his Exec, LtCdr. Dhluizio, who handed him

off to various specialists, who needed his direction to compile the files of information Šhesay requested and the smaller requests directed back at her. The most crucial of the latter was help decoding radio transmissions from the surface of planet 1.2, which included air/space-traffic control somewhere in the spectrum. Their own electronics expert, Muuke v'n Durhaa, could not make any sense of them.

“They’re at regular frequencies, but not AM or FM. They use some form of pulsed modulation — they’re transmitting a stream of bits,” she said. “The problem is that a stream of bits could mean anything; you have to know how to break it into chunks and interpret the chunks. Are they pictures? Audio? Text? They must have powerful computers if they routinely transmit everything that way.”

Šhesay didn’t think decoding air/space-traffic control was as high a priority as getting a roster of the ship’s personnel. She settled for a list they provided of everyone in the landing party, but followed up with, “Now we’re going to need blood and tissue samples from those people.”

“Why? Did we discuss this?” He riffled through his notes. What they had discussed was the alarming probability that the Lofghudlings had lost resistance to bacteria still prevalent on Ertĥ. Šhesay Dezeenawvy had assured him that all such diseases had been eradicated. No new diseases had burst out from the rich wild-animal populations on Ertĥ?

“Sadly, most of those species are gone,” she said. “What we didn’t talk about was the chance of *us* catching something from *you*,” she said.

“We have no diseases we didn’t bring from our home planet, presumably this one.”

She didn’t answer, but rummaged through the drawers of her antique desk. He was startled when a little ball of fur came bounding out. It had a smile and two floppy ears, but no eyes that he could see, and exactly how it stayed on the desk was not clear. Perhaps it had suction-cup feet, but they were concealed by the fur. Nonetheless, it didn’t seem alien. It practically demanded to be stroked, and Sangh could not resist. It purred and smiled up at him, and before he knew it had crawled onto the back of his hand. It tickled. He smiled and stroked it some more.

“What is this thing?”

“That’s Furball,” replied Šhesay, stroking it a couple of times herself. “Isn’t she adorable?”

“But let me explain why it’s so important we get blood samples. I’m sure you’ve noticed that there are no large cities in the northern hemisphere of our planet.”

“Yes, we did. In spite of most of the landmass being in the north.”

“Well, that’s because a terrible plague has raged there for over a thousand years.”

By now Furball had crawled under the sleeve of Sangh’s uniform and was playing hide and seek. “All diseases eradicated? Except up north, where for a thousand years ... Hey, not so hard!” he said to Furball’s ears, which were all he could see. He could feel her claws digging into his arm as she purred.

“Furball!” said Šhesay, and the claws went easier.

“It’s a weird breed of cat, right?” said Sangh, but he suddenly felt a deeper pinprick and stood up, trying

to shake Furball out of his sleeve and take his jacket off. Or at least that was his reflexive intent, but the effect of his gyrations was to send him spinning around the room. Furball came wriggling out and landed on her feet, if she had feet, on the first convenient surface, squeaking and wiggling her ears. Sangh quickly recovered, too, with a bank shot off the ceiling and back into his chair.

“Furball!” said Ms. Dezeenawvy, in a slightly higher tone, of alarm or annoyance. When she was satisfied that the thing had found a stable perch on the starboard wall, hiding behind the frame of a picture of some guys in togas, she turned her attention back to Sangh.

“Graceful recovery, Mr. Fharha,” she said. “You must have played *trêsbol* in college.”

“Why, yes, thanks, yes I did.” He had actually played *spaceball*, but the two words rhymed. It took him a second to stop smiling and regain his dignity. “But please, from now on, respect the, um, person of our diplomatic, um, personnel.”

“Of course, but the point I was trying to make ...” As she spoke, Śhesay herself did a nice bounce off the viewscreen to pick up Sangh’s notes, which had gone flying when he did and were now floating a few meters above her head. On the way down to her chair her skirt was blown upward by air resistance and he blushed deeply when she caught him looking at her pretty legs. It had been a long time since he had seen a woman in a skirt, or in anything but a shapeless field uniform.

She landed in her chair and continued her train of thought: “... the point was that getting blood and tissue samples was a minor request that could even be fun to carry out.”

“The answer is still no.” He was sure Babraba was grinning at his discomposure, but he stopped himself from turning around to see. He didn’t want to admit that he had let a cute animal Furball take a blood sample. So he resorted to simple denial instead, a tactic that usually worked well. It didn’t occur to him that Babraba might be keeping an eye on him.

## Chapter 5 Quarantine [5/v.3.0.2/20-1]

Sangh’s cell was roughly hexagonal in cross section. If the deck was the floor, the ceiling was the distal port of the airlock, which bulged slightly into his cramped quarters as if outside there was an enormous wave of high pressure pushing it in. The truth was the opposite; on the other side was the near-vacuum of low orbit. He was wearing only the standard in-ship uniform, and he would not live long if the pressure or the oxygen level fell. So far the air still flowed.

The cold might kill him, though. He took off one of his boots and used it to pound the hull of the ship, then pound again, pulling himself back to the hatch after every recoil. He also shouted, although he was sure

no one could hear him. He had lost feeling in his toes and some fingers when someone opened the hatch a bit. The top of a head, and a trickle of light, came through. Even a trickle was enough to blind Sangh for a minute.

He shouted, “Finally! I’m freezing out here. You’ve got to heat me up if you want me alive.”

“Sangh! BeJesus Kristh!”

“Tralf?”

“What did you do, man!”

“I didn’t do anything! Well, I gave Shesay Dezeenawvy a blood sample.”

“You did *what*?”

“No! I *didn’t* actually give it; she *took* it. We didn’t exchange bodily fluids, for the love of the Saviors!” He had forgotten she didn’t have any.

Tralf lowered his voice, “What did I tell you about Vhatta Limhoon? He has to ... there has to be someone to blame if something goes wrong with his landing.”

“In that case I’m pretty sure the Vhatta doesn’t mean to freeze me to death. He’ll be pretty pissed off if what he’s got is a frozen corpse instead of someone to hand to the Inquisition.”

“Right? It *is* phooking cold out here.” His head ducked down again. “Really? Okay, hold on; I’m going to close the hatch for a little minute here while we figure out what to do. What?” He ducked again. “They want your mobilcom. Give that to me and then we can get you warmed up.” With fingers made clumsy by the cold, Sangh peeled the communicator off the GripStrip that held it to his uniform and handed it to Tralf, who said, “I’ll be back as soon as I can,” and disappeared. Sangh had to fight a resurgence of panic as he heard the inside hatch slats being rotated into place.

It seemed like a long time, as measured by the hourglass of numbness creeping up Sangh’s extremities, but Tralf did come back, and the air flow to the lock warmed up a bit.

Tralf said, “You know, unless Limhoon wants you to wallow in your own waste products out there, we’re going to have to let you in occasionally. Right? Truly!”

“If they let me in at all, that’ll show what bullshit this blood thing is.” He sighed. “If only the professional diplomats hadn’t been lost during the Q-jump. What do *I* know about diplomacy?”

“You still think *that’s* why you got the job? I told you, we never *had* any professionals. Right? The Admiralty didn’t want the Foreign Ministry’s fingers on this Op, and they persuaded the Poph that they didn’t need them.”

Sangh had argued the point with Tralf before, but it seemed moot now. He said, “Babraba Ghalfe was there the whole time. She can back me up. Oh, hell, she can also claim that I knew what was happening and failed to report it. It would keep them from suspecting *her* of being in on the conspiracy.”

“I doubt Limhoon thinks either of you conspired to do anything,” Tralf whispered. “But she’s been with him a long time, right? He would never sacrifice her, but, you, my meeg, ....”

“What possible motive could I have for plotting against Vhatta Limhoon?” Sangh wailed. “Will he claim little robo-bugs burrowed into my bloodstream? Or maybe at some point Shesay snatched my body and replaced the real Sangh Fharha with a robot. But a robot wouldn’t emit the carbon dioxide I’m emitting. With any luck, I’ll be eating and shitting Navy food pretty soon; I’ll bet robots can’t do that either.”

“Don’t tempt me to utter curses against ..., well, against anyone. We’ll get this phooking *injustice* reversed, you’ll see. I hate to say it, but I gotta get back to my station. I’ll be back, though, buddy.”

He pushed back into the corridor and started to seal the hatch, then unsealed it and popped back in.

“To add, meeg, vulgarity to calamity, they want you to use this.” He awkwardly wrestled an odd-shaped apparatus through the hatch he was floating in, then shone his flashlight on it.

“Not a vac-potty!”

“Yeah, sorry. Here’s some toilet wipe to go with it.”

Sangh had thought things couldn’t get any more humiliating.

“I guess they figure if you’re being quarantined you shouldn’t, meeg, use the regular facilities,” said Tralf

“Jesus, keep me strong,” said Sangh.

“Here’s a distracting question: Do you think we’ve found Erth?”

“They call it ‘Tayha’ now, but yes, I do.”

“Cool. Look, I’m truly sorry, but my watch is starting. I gotta lock you out again.”

“Wait one second. Tell me, have you heard anything about what happened to the landing party?”

“Just that they made it to the ground safely. Everybody’s celebrating. Sorry about that. But don’t worry, I won’t forget you’re out here.”

And Sangh was alone again in the cold and dark.

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He settled into a nightmare of solitary confinement and sensory deprivation. The hatch was opened to deliver food and water, and take away waste products.

He was always cold. Whether this was bureaucratic indifference or Limhoon’s sadism was unclear, but only enough hot air was diverted his way to prevent frostbite. He had no screen or window to show him the stars or Erth. He was in a cold steel coffin, buried alive. Tralf said hello when he could, but that wasn’t often enough.

There wasn’t much for Sangh to think about except what had gone wrong and what would eventually happen to him. The accusation against him was tantamount to an accusation of treason, except “threatening national security” was worse. Fleshing out the details of his indictment was the job of the Inquisition, and very few people interrogated by the Inquisition were ever declared not guilty or, for that matter, seen again. Fortunately, *Cross* was too small to have its own Inquisitor, so his current situation was the worst he

would have to face for a while. But between fear and sensory deprivation, Sangh felt completely helpless. Eventually, if he survived Limhoon's bold attempt to invade Erth, he would be turned over to the Fleet Inquisitor's Office.

Time seemed not to pass, but when he finally yielded to temptation and looked at his watch to check how much had elapsed since his last bathroom break, or since the last push of the button to illuminate the dial, he tumbled headlong into real time, and into the certainty that within a smaller and smaller number of L-hours, the main Contact Fleet would arrive and he would be swallowed up by the national-security apparatus. The wicked thought crossed his mind that strictly from his own point of view it would be preferable if the Tayhans could vaporize *Cross* after all.

Even though diplomacy with Tayha was no longer his concern, he had nothing else to distract him but the fate of LtCdr. Kolfhaj's landing party. His only source of information was Tralf; his other friends stayed away as if he was contagious. He was pretty sure Tralf was spending precious sleep time with him to keep his morale up.

On one such visit Tralf informed him that, "It turned out that *XC-19* had been bluffing all the way."

"Meaning what?"

"As soon as *LCI* dropped down, several new stations started broadcasting in good old-fashioned FM. The first *XC-19* informed us about was the air-traffic-control tower for the city Kolfhaj was landing at."

"*XC-19* the ship or Šhesay Dezeenawvy the diplomat?"

"Meeg, if she's a machine then the ship is just an extension of the robot, if you grab what I mean."

"That makes sense," groaned Sangh. "The ship and the robot are probably controlled by the same computer network, maybe in the hull, maybe even on the surface. The planet's surface, I mean."

"The crazy thing is that after the ATC station, we discovered ten more frequencies carrying music, weather, news-talk shows, all FM, all using Glish! And most of them were talking about us! Truly!"

"So what she said was true — we are big news. Did they have screen on us?"

"Dunno. I'm not privy to everything. Some of what I've told you may be classified. But they'd classify the date if they could."

"What is the date, not that I need to know."

"It's 5 'Dhotuubru', 3761. October, since the planet's just past the fall equinox. It's springtime in Firebase Limhoon!"

Someone had heard Cdr. Dhruzio use the term "Firebase Limhoon" to refer to Kolfhaj's little outpost.

"Was that Kolfhaj's idea?" asked Sangh.

"I heard maybe it was Dhruzio's, or even Vhatta Limhoon's."

"Is Kolfhaj just sitting there, or has he met with ... whoever's in charge of this planet?"

"If they have, they've clamped down on news about it. I heard a rumor that Kolfhaj shot down a 'Tayhanu' TV-news helicopter. Truly! Believe *that!*"

“What is Vhatta Limhoon trying to *do*?”

“Maybe he’s out of ideas. I’d guess he’s been trying to get a rise out of the Tayhans, but they are staying cool.”

Sangh wanted to wail, *So why is he picking on me?*, but did not.

That question would not leave his mind during the long stretches of cold solitude. He tried to think instead about the grand expedition he was a small part of, and might still play a role in. *The only likely role is scapegoat*, was the conclusion. Stray verses from the Book of Job came to him:

*If I must be accounted guilty,  
why then should I strive in vain?  
I will give myself up to complaint;  
I will speak from the bitterness of my soul.  
I will say to Allāh: Do not put me in the wrong!  
Let me know why you oppose me.*

But instead of Allāh he pictured Vhatta Limhoon. He had been warned that the vhatta threw subordinates to the wolves to distract from his own faults, but why *him*? No reason came to him, and he gave himself up to bitterness and cold.

Sometimes he might have been dreaming.

*He was home from the Academy during the summer break, working on the Weehmanty farm to try to save a few dheukos. He had been a conscientious summer laborer since he was twelve years old and had worked his way up. He was now operating the combine, driving it slowly across a field of ripe wheat until the grain bin was full, then unloading the bin into a dump truck. Old Hwaetbert Weehmanty was driving the dump truck himself, which mainly involved idling for a while, then catching up with Sangh to unload and criticize. Sangh barely paid the old guy much mind any more; he had heard Hwaetbert’s complaints before, and even Hwaetbert wasn’t really listening.*

*Sangh’s Dad, working for P̄hoematic P̄harming Solutions, had sold Mr. Weehmanty the combine and wangled the job for his son. But the land Sangh now worked his parents had owned until three years before, when their farm failed and Dad had taken the job selling farm machinery. They had considered themselves lucky to sell out to the Weehmantys before the bank got everything, but Sangh didn’t feel so lucky now.*

*He killed the combine engine and went to see why Mr. Weehmanty was taking so long to catch up after Sangh signaled that his bin was full. Sometimes the old guy fell asleep as the hot afternoon wore on, which allowed everyone to take an extra break while someone woke him up. “Ten-minute break, Muldher,” he said to the high-school student who was his underling, as he started his hike back to Hwaetbert’s truck.*

*A pickup came down the long straight road, kicking up a feeble cloud of dust, which hung in the stagnant air as though it had forgotten how to fall. It was mildly interesting when the truck stopped at the field they*



were working. *It was more interesting when the driver got out and came walking through the stubble of the cleared field, and it turned out to be Cindhi Urhoo, the girl next door, whom Sangh had had a fruitless crush on since forever. "Hi, Sangh. There's news from Slingo; he's been hurt in the big battle around Dhassishi."*

*"What big battle?"*

*"Doesn't anybody have a transistor radio out here?"*

*"What happened to Slingo?"*

*"I don't know. They just send telegrams: Your son Slingo wounded. It could be months before we hear more. But your Mom wanted you to know."*

*"Who won the battle?"*

*"We did! The war's over!"*

*"So at least Slingo's in a hospital somewhere, not waiting in the wreckage of his ship for help to come."*

*"Allàh heard your prayers — our prayers. Everybody's rooting for Slingo."*

*"Thanks, Cin. Does Mom need me to come home?"*

*"Yeah, I think she does. Do you think old Weehmanty will let you go?"*

*"Oh, I think so. I was just going over to talk to him." Sangh wondered what his Mom would say. He knew the outline of the deal she had made with God: Bring Slingo home and .... He didn't know the fine print. How many pieces could Slingo be in before the contract was null and void? Had God definitely signed it?*

*"What time is it?" he said, and looked at his watch. Perplexingly, he had to push the illuminate-dial button to see in the bright sun.*

If he had been dreaming, he was awake now. How many years had passed since the Battle of Mattho? As few as four? The quantum transit had played games with his time sense; that afternoon in Weehmanty's field seemed to have taken place in a parallel universe, and perhaps it had. His universe now was a cold steel nutshell.

## Chapter 6 Leverage [6/v.3.0.2/25-1]

*How much time has passed. Twenty L-days? Didn't I have a watch? Oh. He groped for it, not sure where his wrist now lay. Two? Truly?*

*"Sangh?"*

He jumped, startled. In his small cell, jumping meant bouncing, from hatch to walls to bulge. His legs, unused, forgotten, misplaced, had knotted up in cramps.

“Sangh?” It was Šhesay Dezeenawvy, he finally realized.

“Where in hell are you?” said Sangh, struggling to ignore the pain in his legs.

“Never mind that. We have to get you out of this fix.”

“You didn’t ... you wouldn’t infiltrate my ears with robot bugs?” He pulled his mind back from the worst such disgusting images.

“No, of course I didn’t. I just added audio to your airlock.”

“It doesn’t matter how you’re doing it, you’re just digging me into a deeper hole.” *In the name of BeJesus Kristh, begone!*

“I never *dreamt* that anything I did could get you arrested. If only I’d thought to keep up the illusion that I was a *Molhe*, a biological.”

“Explain that again.”

“Most people on Tayha are biological humans, descended from animals in a way I’m sure you know all about. But some of us are artificial. We’re called ‘*Seques*,’ which means ‘dries.’ The biological ones are called ‘*Molhes*,’ which means ‘wets,’ well, ‘sauces,’ more ...”

“So you *are* a robot! Just the way Vhatta Limhoon ...”

“No! Robots don’t have what it takes to be a real person. Nothing *wrong* with that, but ...”

“Real? Person? Descended from *animals*?” She said nothing, so he went on: “We’ve been training for this — ever since Little Angels, really. And I missed it. I feel like a fool.”

He prayed out loud: “*Oh, Allàh, forgive me and grant me strength. Banish this demon, and all the demons that threaten us, in dreams and in life. In Khríst’s name, amen.*”

There was silence for a few seconds, and Sangh felt a surge of gratitude to God. But when the voice returned, he found he wanted to hear more of what she had to tell him.

“Sorry, I’m not going to banish myself,” she said. “I just can’t stand seeing Vhatta Limhoon get away with his insane plan. Don’t worry, I’ll be discreet.”

“Oh, good, let’s add mutiny to the list of charges against me.”

“We might have to. He’s convinced everyone that he has secret ‘sealed orders’ to begin conducting missionary operations on our planet — missionary, ha! — when he has nothing of the kind.”

Sangh was briefly confused by this claim, then angry. “If you’re going to make that kind of accusation against an officer of the Loofghud Navy, you’re going to have to have awfully good evidence.”

“How about this?” said Šhesay. There was a brief silence, and then Sangh heard Vhatta Limhoon’s voice, sounding almost live. It skipped for a second and then came on strong.

“I’m sorry to repeat myself, Lhithy, but this whole expedition is a disaster waiting to happen.”

Limhoon paused, and Sangh demanded, “When did you record this?”

“Sssh. It was 2000 minutes before you heard about the secret orders from your Admiral OhMahan.”

Limhoon’s voice went on. “The top tier know the main purpose of this boondoggle is to spend money.

The Poph wants to double the Navy budget in gratitude for kicking Dhassishi's ass — she should double my personal budget — and the Navy needs something to spend the money on. Never mind that it's cost four times the prewar budget already, and will double that again by the time we're done."

Lhithy Dhuzio gravelly bass: "I know you're not worried about the Empire's budget deficit, sir." He chuckled; unmistakable, that chuckle.

"Hell, no, I think it's *great* that the Navy can quadruple in ships and personnel," said Limhoon. "Not because we need to find Erth; it's not going anywhere, and we can find it any time. No — because a massive Navy will have massive power. Jesuits, Physicists, even the goddamn Poph — will listen to *us* for a change."

He paused. "I see I've shocked you. Again."

"Sir, we've had this room scanned for bugs, but why take chances? Talking disrespectfully of Her Holiness .... I don't have to tell you ..., it's treason. If the NQ got wind of this ...."

"Yes, yes," said Limhoon. "Thanks. I'll watch my mouth. Anyway, someone came up with this Erth idea, and suddenly everyone jumped on the bandwagon. And here we are, blowing our chance at real power by skylarking in another star system, with a fleet we have to leave stranded here!"

A rhythmic pounding sound could be heard, all too familiar to Sangh: Vhatta Limhoon's boot against the wall, the closest he could come in zero-G to pacing back and forth.

Limhoon's recorded voice continued: "Having said all that, how are we conducting this expedition? We have no idea what we're up against. The Erthlings, if they're still around, have a 1500-year head start on technology. While we were reinventing the steam engine, they could have been discovering the QT drive and then Allah knows what — immortality, invisibility, .... What Dark Arts did they allow themselves? For all we know, there's no one left alive but voolts."

"But, sir, as I've said before, there's one big gap in the evidence: If they had the QT drive, they would have come looking for us as surely as we have gone looking for them."

"Unless the rulers of the planet are more devious, or less human, than us. But I think you're right. They may, for all we know, have gone backwards. Maybe some catastrophe destroyed their civilization. Maybe they clawed their way back like we did; maybe they never could. So. If you build a huge fleet, and send it against an enemy of completely unknown strength, you've got to go in with guns blazing. We shouldn't have come, and if they vaporize our entire fleet with one shot, I'll be able to say 'I told you so,' except I'll be dead. That's the fortunes of war. But we might just win, and when we go home our prestige will reach to Heaven." Pound, pound, pound, went his boot against the wall.

"But," Limhoon continued, "Here we are, in a rowboat, all those pinhead 'scholars' assigned to our crew, ordered to politely request that we be allowed to 'study' goddamn planet Erth."

"Sir, orders are ...," began Dhuzio.

"No, wait. I had to promise OhMahan my first-born grandchild and my left testicle to get this command. I've put up with all the crazy instructions ConFleet keeps sending us. Honestly, I don't know how Willem

Jr. puts up with the the good Byšhe-Admiral. He can't tell me the details of her decisions, I respect that, but what he can tell me, and the way he says it, makes it clear that she's unfit for her position, as if I didn't know already. She's got no gut at all. Well, I do. I've made my decision."

After a moment he went on, "I'm going in aggressively — shove the Ertflings and see if they push back. If they do, they do, and maybe we're toast. But on the off chance that we can start something, I'm sure the Fleet will back us up. These ships are commanded by seasoned veterans coming off a huge victory. The good Byšhe-Admiral will be shouted down if she tries to abandon us just because we got an invasion going, even if I have to explain myself to a court martial, again."

"I mean," he said — pound, pound, pound — "suppose we find a planet whose civilization has rotted like an apple. Savages living among the ruins. Why should we wait to seize the initiative? That'll just give them time to prepare. If Norkell hadn't shot the Emperor of Minhbo, the Dhempirian Conquest might have taken decades longer."

"Sir, it's within your discretion as Captain ...."

"Yes, I know, I know. But crew morale would suffer. Half of them think I'm crazy already. You know what rumors have been spread about Mattho. When I give the order to advance against some civilization with unknown powers, how do I know their bowels will hold?"

"These marines are pretty tough, sir."

"Yes, of course, of course. But I'm going to toughen 'em up a bit more. We're gonna *make up* the orders we should have been given, orders to seize the initiative if, er, Ertĥ has surrendered to Sathap or some other such bullshit?"

Silence. Then: "Oh shit, sir, it's one hell of a risk."

"You can't win without risking everything! It's always been true, and always will be. We're *already* taking a huge chance, just being here. If we're attacked before we reach Ertĥ orbit, in this tin can? We're dead. If not, maybe we can ..."

How the conversation proceeded Sangh would not find out, because the recording was interrupted by the sound of the hatch opening. Limhoon's recorded voice was drowned out by the real Limhoon's voice, coming through the open hatchway. "Fharha, God damn it, stop that!"

The recording faded away. "Captain, sir, I had nothing to do with it."

"But you did hear it?"

"Aye, sir."

"Who else? Marine!"

Down in the passageway the guard came to attention, but Sangh couldn't hear him very well.

"Did you just receive something on your mobilcom? It would've sounded like me and Commander Dhluzio talking. No? All right, let the prisoner out of his hole and bring him to my office." And he left.

The guard ordered Sangh into the passageway. Sangh crawled out with difficulty, still stiff after many

hours of immobility. He started for Limhoon's quarters, arms and legs stiff, lobbing little warning shots of pain at him. The marine ordered him to hurry up, but Sangh took time to accelerate, and the prodding he would have gotten with a little gravity wouldn't worked so well in zero G.

For once, Limhoon was alone behind his "desk." He ordered the marine to station himself outside the hatch to the office, and close it tight.

"Okay, Lt. Fharha, I accept your claim that you had nothing to do with this. Whoever did it has been bugging my office for quite a while, and I doubt you could do that."

"Sir, you can't mean that the recording is real?"

"I admit nothing! But the perpetrator would have to take a large number of samples of my voice to fake that recording, and I doubt you could do that either. Permission to speak denied," he said, anticipating Sangh's desire to speak. "Oh all right, go ahead."

"Sir, your guess about who engineered this recording thing is probably the same as mine. It's that voolt woman."

There was a pause. "'Guess,' huh? What does she want?" said Limhoon.

At this point Dhruzio knocked and entered the office, closing the hatch behind him.

"Sorry to interrupt, Captain. I've asked around, and I don't think anyone else heard the, er, simulation of your voice. She piped her voice into this space and the quarantine brig, nowhere else." Dhruzio got to his usual perch and wove in with surprising nimbleness.

"That's one ray of sunshine. Only Fharha here heard it besides us, as if there weren't *enough* evidence against him. We have to get someone in here to find the mics and speakers, unless you just tell us, Lieutenant. And tell us what the robot woman wants."

"Sir, I don't know what she, or it, wants. All *I* want is for this nightmare to end so I can resume my normal duties. I am innocent of any wrongdoing, sir, and I'm sorry that I let Shesay Dezeenawvy trick me, and even more sorry that I was too embarrassed to ..."

Limhoon waved that aside and spoke over Sangh's explanations. "I suppose 'normal duties' includes landing on Erth as our ambassador?"

"Oh no, sir, I know that's out of the question."

"You are certainly correct there, Mr. Fharha," snarled Vhatta Limhoon. "But we've got to send *somebody* down."

"Why, sir?" asked Sangh, forgetting his situation for a second. "Has Commandar Kolfhaj's landing party failed to get traction?"

"Watch yourself, Mister Fharha, we can have 'impertinence' added to your indictment," said Cdr. Dhruzio.

"Thanks, Commander Dhruzio, but he's right; it has," said Limhoon.

"Sir," Sangh started to say. He paused, and when no one objected he continued, thinking out loud, "Much as you'd like to seize the initiative, you need more intel. What game are the Erthlings playing? Are they

savages living in the ruins ... uh, pardon me, sir. Are they voolts? Or ruled by voolts? The only way to find out is to, meeg, pull back on the military option and send in the diplomats.”

“No lectures, Mr. Fharha, we’re not in a classroom,” said Cdr. Dhruzio. “But, yes, we don’t have real intel on the national command structure of this place. The President of Erth, no less, came to meet our landing party. Commander Kolfhaj explained to him that we were temporarily infringing on their sovereignty.”

“Commander Kolfhaj is a brave man — he was with me at Mattho,” said Limhoon. “If the President — assuming that khobok really was the president of anything — had ordered the Ertfling army to disarm our people, I think Kolfhaj would have fought back with great valor and imagination. But he wasn’t sure how to proceed when the President just ... shrugged.”

“And there the op has stalled,” said Dhruzio, “for the time being.”

“So, much as I hate to say it, you’re right, Mr. Fharha. We need a diplomat, to play house with the national command structure of Tayha. Be as friendly as possible, and try to penetrate the government and see what’s really going on.” Limhoon had begun kicking the wall again, caged too tight to pace. “Commander Dhruzio and I will appoint someone. For now, *you* are confined to quarters. If that robot woman-thing shows up again, or you get any more threats from her, I want to hear about it.” He spoke as if Shesay’s implicit threat were to the entire expedition and not just to him. But perhaps this was a distinction he did not make.

“Commander, pop the hatch and let the marine in,” he said.

The guard glided in, using the webbing expertly to control his speed and keep the drop on the prisoner. “Corporal, return the prisoner to his quarters.”

The guard hesitated. No one had any “quarters” on *Cross* except Vhatta Limhoon himself. Limhoon said, “You know what I mean, soldier, he’s confined to the male officers’ berths, to be kept under guard. Lieutenant, one more thing: No communication with anyone, from our side or the other side, until you hear from me.”

“Aye aye, sir,” said Sangh and the marine simultaneously.

## Chapter 7    Quarters    [7/v.3.0.2/30-1]

Escaping from the jury-rigged “quarantine brig” was a relief; at least he was warmer. But someone was always going on or off shift, glancing at him hanging idle in his webbing, an armed guard still stationed nearby. Those glances felt like laser burns. He averted his eyes, but he could still feel the stares. Occasionally he thought he heard the phrase “voolt-lover,” a phrase still ugly 1600 years after the last voolt on Loofghud had been vanquished.

*What if I were really guilty of something? How much worse could I feel? But I am guilty, of conspiring with Shesay to blackmail my vhatta. If Erth becomes our enemy, I have given them aid and comfort.*

Shesay had fallen silent after proving she had the goods on Vhatta Limhoon. Sangh had to stifle his wish to thank her, like a good little Paphal-Youth scout, for helping him. Thank a demon from Hell! She had her own nefarious motives for helping him. He prayed he was rid of her.

*O my God, I am heartily sorry for having offended you and I detest all my sins, because I dread the loss of heaven and the displeasure of your servant, Her Holiness the Poph. I firmly resolve with the help of your grace to do penance and to amend my life. Amen.*

He tried to read or watch some screen to make the time pass quicker, but it felt like a defiant gesture, or a gesture likely to be interpreted as defiant. He wanted to seem as penitent as he felt.

He had one or two friends who stuck by him, Tralf of course, and Muuke v'n Durhaa, the electronics engineer, whom he didn't even know that well. Bewinda avoided him as if he were radioactive. Tralf he saw less than before. He knew how hard it had been for Tralf to sneak minutes for him here and there. Now, though he didn't say so, Tralf was apparently paying back those minutes. He somehow tacked time onto his watch, and when he got off he fell asleep immediately. He said hello to his friend, flashed him a smile, and was out.

Only at mealtimes could Sangh have a word with Tralf or Muuke, if they happened to eat at the same time. Everyone else shunned him. In a high-school cafeteria his small coterie would have had a table to themselves, but there was no room for that in the mess of a light destroyer, which was precisely calibrated to hold just the number of crew who had to eat at time  $T$ . He kept his eyes on his "harmonika," the rations in parallel squeezepackets that were the quickest way to eat in microgravity. If by accident he made eye contact with one of the people talking around him, he could feel their discomfort along with his guilt. If Bewinda Wharbut was present, she stared at her harmonika and talked to no one. Only the marine guard responsible for him that shift seemed to be enjoying the rare chance to be a soldier off-planet, even a soldier blocking the crew from getting to their food.

When Muuke and Tralf were there, a meal was bearable. The three of them could squeeze their meals out and bitch about the food like old times.

"But never mind the brosy," said Muuke at one such luncheon, "let me tell you my theory about the ground filaments."

"I thought they were some kind of atmospheric phenomenon," said Tralf.

"No, they're exactly what they appear to be, arches anchored to the ground," said Sangh.

"Right, arches 100 klicks high," said Tralf with heavy sarcasm at the obvious absurdity.

"But they're anchored only at airports, or what sure look like airports. There's a reason: they're used to launch spacecraft." Sangh had heard this from Shesay, although he didn't name his source.

“I think they’re Kefauver loops,” said Muuke. “There’s no library on this rowboat, but Dhluizio has some microfilmed issues of *Physics Letters*, and it’s in a 30-year-old paper by Armand Kefauver. No one paid much attention, but he explained how you could in principle make these loops that held themselves up by .... The bell’s about to ring, so suffice it to say it could be done.”

“That was close,” said Tralf, and she hit him.

“So how come we don’t have Kefauver loops on Loofghud?” asked Sangh.

“Various complications.” She thought for a second. “Expensive to build. Very hard to aim, what with the winds whipping them around. In a hurricane they might fall down; very messy.”

“Well, apparently the Tayhans solved those problems,” said Sangh.

“Really?”

“I’m forbidden to talk about the details ....” He had said too much already. He was abruptly aware of a messful of hostile eyes. He fell silent.

The mess bell rang. All conversation ceased. No one lingered, rounding off a thought or prolonging a flirtation. The occupants of the mess at time  $T$  had to make room for the  $T + 1$  crowd; except that Sangh’s guard messed up the flow, as usual. Sangh tried to act like someone with no connection to any marine.

## Chapter 8 Ambassador [8/v.3.0.2/32-1]

Two L-days later Sangh was again summoned to Vhatta Limhoon’s quarters. During that time Shesay had been silent, for which he was grateful to God. On the other hand, Shesay had supplied him with all the ammunition he had against Vhatta Limhoon. He suppressed the thought that she might be God’s means of saving an innocent man.

As he was escorted into Limhoon’s lair, he was surprised and relieved to see Tralf there. Limhoon seemed deflated compared to his usual bilious self. All he said was, “To provide some continuity, Fharha, I’ve invited you here to talk about the ambassadorial appointment.”

There was only one thing he could mean by that, Sangh realized with dismay.

“I’m not going to leave you in suspense. I’m appointing Lieutenant Ghiller.”

“Aye, sir,” said Sangh.

“But, sir,” said Tralf, “This is a bit of a shock.”

“Mr. Ghiller, that’s not the way you respond to an order.”

“I apologize, sir. It’s just that ... what are my qualifications?”



“What are any diplomat’s qualifications? Any sort of spinelessness will do.”

“Sir, begging your pardon, but Lieutenant Fharha knows the wiles of the Tayhans much better than me. I’ll just make the same mistakes — right? — all over again.”

Lt.Cdr. Dhruzio said, “That’s the reason both of you are here. You’re to coordinate closely with Lieutenant Fharha by mobilcom.”

“You mean, sir, that while I’m talking to the President of Tayha I’ve got my mobilcom pressed to my ear? With respect, sir, that’s not going to work. The only person remotely qualified for this assignment is Sangh. If nothing else, he’s smarter than I am.”

Sangh did not know what to say, and protocol required that he wait until someone asked him his opinion. Protocol had not stopped him lately, however.

“Mr. Ghiller, this is my decision to make, and I’ve made it,” said Vhatta Limhoon, beginning to sound like his normal self.

Sangh opened his mouth and heard himself say, “Vhatta Limhoon, sir, I have to agree with Lieutenant Ghiller. *I* should be the ambassador, and he can come with me. Sir.”

Limhoon’s face began to purple over with rage. Then he got it under control.

LtCdr. Dhruzio spoke. “You’re out of line, Lieutenants. We’ve given this ...”

“No,” said Limhoon. “If Lieutenant Fharha wants to take the lead for once, we shouldn’t pass up the opportunity. I think we can dispense with Lieutenant Ghiller’s talents for a few days.”

Dhruzio was surprised, but recovered. “This doesn’t mean you’re out of trouble, Mr. Fharha. Vhatta Limhoon can throw your ass back into the brig whenever he wants.”

*Maybe so, but a planet is a much bigger place than the inside of a light destroyer.* Sangh suddenly ached to explore at least a little piece of Tayha. He forced himself to stay calm and keep Dhruzio from talking Limhoon out of letting him do this. Perhaps if *he* raised a problem first *they* would by reflex find reasons to make light of it.

“Sir, the Tayhans know all about my legal troubles .... At least, I would assume that. Ms. Dezeenawvy ... that’s her job,” he said. “Perhaps that will make them reluctant to accept my credentials.”

“Nonsense,” said Limhoon, “That ... demon woman *could* have left your sorry ass in jail. I doubt she or any other Erthling will refuse to go along with this charade.”

He kicked the wall some more while everyone waited for him to proceed.

“All right, I’m sending you both down to the surface. Two ambassadors. The point of this exercise is to gather intel. The two of you can gather twice as much. And you’d better. When the main fleet arrives, if our information is so phooked-up that we fail to achieve our objectives, your heads will be in the noose. Especially yours, Fharha. But if you dig up *one piece* of actionable intelligence — the coordinates of a key defensive installation, for instance — I’ll be the first to pin a medal on you.”

Dhruzio said, “Slightly more likely these khoboks will lose their own asses.” He essayed a chuckle.

“We’re working against the clock here,” continued Limhoon. “The Fleet’s like a baby: it’s going to arrive when it’s going to arrive, and we can’t postpone it very long. So we’ve *got* to move faster than we’ve been moving. The next window for a pod launch opens at ... what did you tell me, Lhithy?”

“Two hours from now, at 4-colon-50,” his exec replied, “So I should redo the appointment papers for two ambassadors, sir?”

“Yes, thanks, Commander. Make up more of the kind of bullshit we were talking about before.”

“Aye, sir.” Dhruzio pulled out his mobilcom and punched keys.

“Sir, do the charges against me, I mean, do they just get suspended, or ...?” said Sangh.

“We weren’t sure how to phrase them,” said Limhoon, “So technically there aren’t any. But don’t worry, we’ve filed the necessary Findings of Military Necessity with Fleet Inquisition. The NQ prefers to keep charges vague anyway. If we feel you’re subverting the mission, we won’t hesitate to arrest you again. You’re not to let these machines talk circles around you. You’re on a straightforward reconnaissance mission, and I expect straightforward intel on enemy capabilities and intentions. I want a report every night on the secure mobilcom channel.”

“But, sir,” Tralf said, “The only way I can see to make this work is to actually act like diplomats, you know, meeg ribbon-cutting ceremonies or something. Can we gain any useful intel doing that?”

“Half of every diplomatic office is spies.”

“Cool, sir,” said Tralf, “But aren’t the spies low-level attachés or something, with some excuse to go marauding around on their own?”

“You can be the attaché; let Mr. Fharha cut the ribbons.”

“It would take a while for the Ertflings to let that person get moving,” said Dhruzio.

“Sir,” said Sangh slowly, thinking as he spoke, “We could explain up front that we’re scholar-diplomats, here for purely peaceful purposes. There’s historical precedents, like when Morflin invaded Dhitropa. He brought a large contingent of historians, antiquarians, biologists ...”

“Yeah, everyone was so eager for information on Dhitropa, the most *godforsaken backwater* on Loofghud. You may recall that while Morflin was tramping around *studying* things, the Minh were *strangling his supply line with a blockade*.” Limhoon seemed undecided between sarcasm and anger, but he managed to steer himself toward the former.

Sangh said, “Sir, what I mean is, we say we’re here to ... study and learn from the civilization of our ancestors, mee-mee-meeg, as well as to establish diplomatic ties, and ask if we can talk to *their* scholars, and do other scholarly activities, ...”

“And those scholarly activities will involve collecting actionable intel,” said Dhruzio.

“Aye, sir. I’ll have to do some actual anthro and Tralf’ll have do some real linguistics, meeg, every day.”

“Sir,” said Tralf, “It will still take a couple of months to dig up anything useful.”

“Set your sights higher, Mr. Ghiller, you have five days.”

“But, sir, .... Aye, aye, sir.”

“Mr. Fharha?”

“Aye, aye, sir.”

“And for God’s sake, watch out for those robots, the ... ‘Seckies’ — the name is deliberately misleading — it sounds like a joke. They are wily and in close contact with Sathaj. You won’t realize you’re being tempted, it will seem so pleasant.”

Dhluzio jumped in with, “Sir, if I may add, the sure-free way for Sathaj to trap a man is with a pretty face and a tight twat, if I may be blunt. If either of you were girls, I’d say, ‘and vice versa.’”

Limhoon continued, “I would have thought you, Lieutenant Ghiller, would be most likely to succumb to a female demon, but Lieutenant Fharha already has a track record before we even set foot on the damned planet. Before you touch a woman, assuming you get that chance, make sure she bleeds red blood. Stick a pin in her if you have to. Better yet, just stay away.

“I know you’ve been hearing this since first grade, but it’s true. The Father of Lies has many children, and on this planet they are literally everywhere. Are there any questions?”

There weren’t, so the Vhatta said, “Dismissed.”

Sangh and Tralf reached for wall grips to push off toward the exit hatch.

“Oh, and be blessed by Allàh,” he made the sign of the cross over them, “and think of your country once in a while.”

“Only God comes higher, Vhatta, sir,” said Sangh.

“Glad to hear it. Go.”

“Aye aye, sir.”

At 0400 they were checking their landing packs at the pod-launch airlock. Dhluzio showed up, pulling a bulky package of clothing, labeled *Diplomatic Supplement 121A*. He unzipped it and pulled out a frilly shirt and a coat. “Put this stuff on,” he said.

“Sir, who authorized the space for *this*?” asked Tralf. “I could have packed a lot more Rival Peanut tapes with a tenth of that space.”

“Control your mouth, Mr. Ghiller.”

Sangh changed his shirt, but almost balked at the coat, an old-fashioned thing looking like a vest with tails. But orders were orders, and he didn’t look bad all dressed up.

“You look like a barrel-grinder’s monkey,” said Tralf, “Right? I see it!”

“You’re just jealous.”

Dhluzio said, “Get your vacuum suits on and get into the airlock. This launch window is closing.”

They were landing at the airport of city one, the largest in the world, located in continent E4. Sangh had been told by Šhesay that the name of this city was pronounced “‘Sowjpowlu’,” but it was easier to keep calling it “city one.”

An escape pod could hold up to six people, so there was plenty of room for Sangh and Tralf and their gear. It was essentially a life-support system attached to a heat shield, good for one re-entry. The thrusters had to be preprogrammed precisely so that, once the pod was kicked out of low orbit, it would hit the atmosphere at just the right angle to make it decelerate without skipping back up or incinerating from atmospheric friction.

A pod pilot's view was to the rear. So as they gently pushed away from *Cross*, Sangh got a view of the whole ship. Like all the ships of the Contact Fleet, it was not pretty. More than half its length consisted of the fusion drive, separated from the bridge, crew quarters, kitchens, weapons-control stations, engineering rooms, plumbing, supply holds, and gun mounts by a wide barrier consisting of shock absorbers and radiation shielding. *Cross* was a light destroyer, the smallest nuclear-drive ship in the fleet, about 125m long and 50m wide. You couldn't make a smaller ship because the smallest drive for interstellar mission was 50m long, and it needed a big payload to absorb the sharp impulses it generated. However, a light destroyer had to be nimble, quick to turn, which meant as little of the ship as possible could be far from its center of mass. As a consequence, a light destroyer was as cramped as a submarine in the shallow seas of Loofghud. You had to be a claustrophile or frotteur to ask to be assigned to one. When navigating down the passageways, you rubbed up against whatever and whoever you encountered. One person's workspace was another's corridor.

They quickly dropped out of sight of their unlovely ship, toward the atmosphere of Erth, which was very similar, the engineers supposedly said, to Loofghud's. The heat shield was designed for the atmosphere of Loofghud, so it would probably work just fine. Of course, the words "probably" and "similar" do not bring cheer to someone about to trust his life to them.

Tralf's voice sounded in Sangh's ear, "Tell me again why I let you talk me into this."

"I thought Vhatta Limhoon talked you into it. Besides, do you really want to miss an opportunity to see this planet close up?"

"No, but I'd also like an opportunity to, meeg, see it from afar again."

"Relax, you can hitch a ride home with Kolfhaj."

A pod was a versatile little vehicle in many ways, but one thing it couldn't do was float. Tayha had much less dry land than Loofghud, just one-fourth of its surface area. When the pod was released, *Cross* was far west of continent number 2, over the huge ocean they had numbered "ocean 1," but which Sangh now thought of as the 'Paseefeccu,' since Šhesay had told him its name. Only after a long, almost ballistic fall toward the water would they hit serious air and begin to get some lift, just enough to get them over to Sowppowlu.

They would be pointing the wrong way to see the Erth's star rise. In the oldest folk tales on Loofghud, this star was called "Sunn"; it was now called 'Sol', Šhesay had said. But it had long been conjectured that if Erth was real it would have a satellite visible to the naked eye at night. The Book of Genesis 1:16 made it clear: *And Allàh made the two great lights, the greater light to rule the day, and the lesser light to rule the night.* Loofghud had a few large rocks in orbit around it, some visible to the eye, but nothing as breathtaking

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as Muun, as the old tales had it, or ‘Lua’, as it was called now. Sangh twisted the forward camera around, but Lua could not be brought into view.

In spite of their forced idleness, Sangh did not feel like chit-chat. The rumbling of the retro rockets, the dead silence afterward, then the vibration and roar of atmospheric entry, were all too fraught for him to feel like saying anything. Each phase required a good deal of faith, and Sangh felt as if he should spend the time praying for a good death if it was Allāh’s will.

His thoughts were interrupted by a voice over the radio. It was ‘Sowjpowlu’ airport traffic control. It informed them — in Glish — that the pod was cleared to land. *If it can*, thought Sangh.

## Chapter 9 Greetings [9/v.3.0.2/37-1]

A successful escape-pod landing was almost as harrowing as a crash. Even with the parachutes open, there was a bone-bending thud when the heat shield hit the ground. The final orientation after the pod bounced, cratered, or skidded to a stop was anyone’s guess.

Sangh and Tralf seemed to be right-side up. Yes! There was an up, and a down, and actual gravity at about one gee. Erth was slightly smaller than Loofghud, so “one gee” was a bit smaller than what they were used to. Although the strongest force they had felt in months was the half-gee spin gravity on Star 1 Command Station.

They had come down a kilometer from the airport, pretty much where their navigators had aimed, a safe distance from places with crowds of people.

“Pod One to *Cross*: We are down! Everything is close to nominal. Be sure to thank the navigation staff, we’re right on target. We’re shutting down and stepping out, switching to mobilcom as needed.”

They struggled out of the pod and found the ground without trouble. Actually, it found them. The exit was at an angle awkward enough that they had to jump the last meter, and they fell on their asses. Nothing was hurt, but they were giggling like little kids at a fall that would normally have bruised body and ego. The impulse possessed them to rip off their helmets and gulp some real, nonrecycled air, and the first thing heard through that air was their own fits of crazy laughter.

Nothing had ever smelled sweeter than the air of Sowjpowlu Airport, laden as if was with fumes, jet fuel, and dust from their landing. Tralf started unfastening and unzipping all the clasps and GripStrips of his vac suit, and Sangh followed his lead.

“Nice planet,” he said.

“Meeg, too many robots,” said Tralf. Fire trucks were standing by, and a shuttle or taxi of some kind

drove up, but no human drivers could be seen in any of them; they didn't bother with steering wheels. The shuttle's front-seat door opened by itself.

The shuttle said, "Greetings, sirs. Would you like a ride to the terminal, where the President of the Republic awaits?"

"Sure, thanks," said Sangh, getting in and scooting over to make room for Tralf.

"Truly, Sangh? You expect me to get *into* a robot vehicle? Doesn't the Bible say the train to Hell is driven by an invisible voolt?"

"That was a ferryboat to Hell, and it's not in the Bible, it's some old story."

"As if that makes it any less nukky. Right?"

"We're just going to have to rely on Allāh."

"Truly? Already? We just got here."

But Tralf got into the vehicle, seeing as how the alternative was to walk quite a distance.

"I wish I had not fudged the workouts," he said with a sigh.

"Everybody fudged the workouts. Try telling Dhruzio you can't help clean reactor sludge, you've got to squeeze some spring."

"I know, right?"

Although high clouds blocked the sun, the world felt infinite in size and potential. The clouds were so far away. The sky looked impossibly wide. God's glory was blemished only by those insolent launch-loop towers, which skewered His clouds.

The shuttle was looking for the President of Erth, but the first people it encountered were LtCdr. Kolfhaj, a klaad of marines, and Bewinda Wharbut. There was a reviewing stand a few tens of meters behind them.

"Greetings, Ambassadors," said Kolfhaj impassively, "welcome to Erth."

"In Lieutenant Fharha's case, ambassador *and* traitor," said Bewinda Wharbut. On Erth, it seemed, the volcano of her anger had erupted, the resulting lava smothering her self-consciousness about her crooked teeth. "A whole spectrum of talents! And what are *your* true colors, Lieutenant Ghiller?"

"Whoa, meeg, keep me out of this!"

"Allow me to handle this, Ms. Wharbut," ordered Kolfhaj.

"Aye, sir," said Bewinda without changing her expression or the target of her scowl.

The shuttle was unperturbed by this conversation, except for the obstacle it presented.

"Excuse me, ladies and gentlemen," it said, "We need to get through."

"Stow it, axle-wipe," Bewinda said to the vehicle.

The door opened and the vehicle said, "Perhaps I should just drop you here? Is that all right?"

Sangh said it was, and he and Tralf climbed out, somewhat unsteadily. They looked pretty scruffy, but at least Sangh was wearing his frilly shirt and tailcoat.

Sangh was still trying to think of a diplomatic way to react to Bewinda, when a man who had detached himself from the group on the dais and rushed down the stairs reached them and greeted the Ambassadors.

“Welcome, welcome to Teyā!” he said, cautiously working his way around the group of marines. “I am Frank Pauers, Chief of Staff to President Xonaldo Travers, President of the Solar System.”

“It’s not too late, sir,” said Bewinda to Cdr. Kolfhaj. “A more qualified, less compromised ambassador could be found among the personnel who have already landed.”

“I will let you confer with ... amongst each other,” said Frank Pauers with a frown. “Then we invite you to join us on the dais.” He bowed, and returned to the reviewing stand. It looked exciting, blazing with green and yellow bunting and festooned with balloons

“Commander Kolfhaj, sir!” said Sangh, coming to attention and saluting. He hoped Bewinda’s complaints could just be ignored. “Can you tell me what to expect when talking to these Erthlings?”

“Not much to report, I’m afraid, Mr. Fharha. I have made contact with the President, but after that initial connection we have remained at Firebase Limhoon, which is about three clicks from here. Until this morning, when we were advised by Vhatta Limhoon to bring a detachment of marines to the airport, just in time to watch your pod land.”

“Sir, how would you describe the President’s attitude?”

“‘Nonconfrontational’ would be about the only term that comes to mind. We exchanged pleasantries, but before I could talk about mutual security arrangements, he said goodbye. I asked *Cross* command for instructions, but all I’ve been ordered to do is maintain a perimeter.”

“They have us under constant surveillance,” said Bewinda. “See those little helicopters?” Sangh had not noticed them, but once pointed out they were obvious, buzzing faintly about three meters above their heads. Their wingspan was about six centimeters. She went on: “Some of the bigger flying insects are machines, and where there’s groundcover there are voolt creepy-crawlies.” She shuddered.

“Blech,” said Tralf.

“It’s the ones we *don’t* see that I worry about,” said Sangh.

“Yes, lieutenants, be careful what you say out loud — anywhere,” said Kolfhaj.

“Thank you, sir,” said Sangh, “but we do have to talk, and we do have to report to Vhatta Limhoon.” He shrugged. He was impatient with the game of spy vs. counterspy when there was a whole new world to explore. “But now ... why don’t you and Lieutenant Wharbut join us on the dais?”

The Loofghud marines stood at attention while the four chosen dignitaries ascended the steps. Their accompaniment from the brass band was a bland march, which one might infer was the national anthem of Erth. Sangh and Tralf struggled with the steps. They had to use the railing to pull themselves, and were huffing after five risers. The crowd clapped so hard they drowned out the band. Tralf waved and the crowd roared and whistled their approval. Sangh and Bewinda waved, too. Then the Lofghudlings proceeded up the last few stairs.

The group on the reviewing stand was dominated by a tall, slightly pudgy, but rather handsome man, whose age was hard to determine. Sangh decided this was President Travers. He wondered for a second what was going to happen next, then remembered that as ambassador he should do more than pant and wave.

He stepped up to the tall man. The band cut off abruptly. Sangh recited the sentence in Tayhanu he had practiced, with Tralf's help, meaning "We come in peace, seeking our ancestors," Somehow his voice was amplified, although no microphone was visible. A roar of applause arose from the spectators as they realized what he was trying to say; there was a bit of good-natured laughter, too, at what he *had* said, whatever it was. Sangh continued in Glish: "We are sorry for the delay in establishing relations, but we were waiting for an official ambassadorial appointment to come through." He was confused at first about how different his amplified echo sounded, until he realized what he said was being translated into Tayhanu. He presented the president with the scroll that Vhatta Limhoon and Commander Dhruzio had prepared, which purported to be direct from Poph Urbana, and which appointed Sangh and Tralf ambassadors extraordinaire to Tayha, a planet "we might come to love as a mother." It had a large, full-color paphal seal.

"If you're seeking your ancestors, I'm not likely to be one," the handsome man said, extending his hand. "But I might be related to one of them. Hi! My name is Ronaldo Travers, President of the Solar System. They say I'm the Decider, but" (and he winked) "I think they're humoring me."

Sangh could understand what the President was saying perfectly. At first this seemed natural, then startling, and that's when he realized that the Glish translations were coming from the mouth of Mr. Pauers, now standing at the president's elbow. Sangh's smile dimmed momentarily. *Not a human — a Molie— couldn't be.*

President Travers's handshake lasted a long time. Then he introduced his Foreign Minister, Alice de Sousa, and the Minister of the Interior, João Maria da Cunha Vargas, names Sangh promptly forgot. Everybody had to shake everybody else's hand. Sangh took this opportunity to ask Kolfhaj, "Where are the security personnel? Aren't they the people whose hands you don't shake?" Kolfhaj shrugged.

"And where are the TV cameras?" asked Tralf.

"A person of normal intelligence might infer that the surveillance helicopters play that role as well," said Bewinda.

The only hand Sangh could not bring himself to shake was Frank Pauers's. "I believe, Mr. President, that this man is a robot," said Sangh in Glish, not thinking until Frank repeated the sentence in Tayhanu that he would have to be trusted to vilify himself with his translation. Sangh remembered from his catechism that robots were prime tools of Sathap, "a liar and the father of lies" (John 8:44).

However, Pauers apparently translated Sangh's accusation faithfully, because Travers just said, "Frank a robot? Oh no, he's a *Seque*." But nobody insisted Sangh touch the thing.

President Travers's skin was the color of autumn leaves, after they've lain on the ground for a week or two. It was hard not to like him. His firm grip and chiseled face went well with the grin he kept flashing.



But everyone else on the dais — and even the brass band — exuded menace. *How many of these “people” are killer robots? Could they slaughter a klaad of Loofghud marines in the blink of an eye?*

Tralf’s whisper echoed Sangh’s thoughts: “Robots are machines powered by demons. Right? What difference does it make what the size or shape of a voolt is? Really, they’re all the same, am I right?” So the instructor had solemnly taught in theology 101, a required course for all college freshmen, which listed in graphic detail the terrifying sizes and disgusting shapes demons could take on. Half the stories about demons involved machines brought to life — voalts.

## Chapter 10 Limo [10/v.3.0.2/41-1]

A fleet of black limousines came rolling up. They looked about the same as official cars looked back on Loofghud, except for the absence of visible drivers, of course. The cars were roofless, to allow the crowds to get a view of their dignitaries. President Travers beckoned to Sangh and Tralf and waved them toward the lead limousine.

The group of diplomats, officials, and soldiers oozed toward the cars, waving to the spectators and press. Kolfhaj wanted his entire klaad to come, but admin staff said there wasn’t enough room; they could squeeze four of them in, unarmed. He interpreted this to mean “four plus Babraba, armed discreetly.” The rest he ordered back to Firebase Limhooon. Sangh paid little attention. The crowd’s good will washed over him, and his paranoia floated away. He took time to notice the incredible planet they stood on. The enormous sky alone was worth the price of admission, even though it was mostly gray today with some blue blotches here and there.

As he looked around, his attention was caught by the towers rising from the far side of the airport. They were presumably the termini of launch loops. Small, aerodynamically rounded spacecraft could be seen moving up the southeast tower, accelerating quickly. On the southwest tower the spacecraft moved down, decelerating. The towers were fifty meters wide at the base, and rose to a height where they looked narrow as a thread, before the clouds obscured them. They were ends of two separate loops, each hundreds of kilometers long, half 100 km above the clouds, half belowground, if they indeed worked as Kefauver had proposed.

Vehicles were rising on the near tower at a rate of one every five minutes or so, accelerating faster — and more silently — than seemed possible. Sangh tugged on Tralf’s sleeve and pointed to the towers, but Tralf was already staring at them.

“Really?” said Tralf. “What could possibly hold them up?”

Sangh started to explain to Bewinda what they were pointing at, but some Presidential staff member started to direct people to their limousines. The Tayhans seemed to want to get the two ambassadors alone, but Kolfhaj vetoed that.

“Lieutenant Fharha! Lieutenant Ghiller! Ambassadors or not, you’re still under my command, and I have orders to stay with you at all times.”

“That will not be a problem, Commander,” said Frank Pauers smoothly, signaling to the major-domo on the other side of the car to open the door for Kolfhaj. Or perhaps he was a member of the brass band who had exchanged his instrument for door duty. He certainly was no soldier: not with a bright-green uniform dripping with gold braid, no weapon in sight. Whether he was a Seckie or a Molie Sangh could not judge. Kolfhaj, a tall man, folded himself into the car, and, to Sangh’s surprise, Bewinda came scampering after him. Perhaps she thought he was most likely to keep her safe; or perhaps she just wanted to keep Sangh under observation. *Take a number*, thought Sangh.

The interior of the limo was incredibly luxurious. It was really a sort of drawing room on wheels, with eight comfortable seats in a cozy circular pattern. In the front semicircle, facing backward, were Pauers, the President, Kolfhaj, and a presidential aide. In the back semicircle, facing the first group, were Sangh, Tralf, Babraba, and Bewinda. *It’s just as well Bewinda’s out of sight — thanks, Lieutenant Ghalfé.*

But Bewinda leaned forward and stared at the point where the driver of the car should be, as if willing one to appear. She said in too loud a voice, “So, Lieutenant Fharha, was your arrest all a misunderstanding, or have both you and Lieutenant Ghiller gone over to the side of the Devil?”

Sangh was losing patience. “Bewinda, I can explain. But not now. Our interpreter is a robot” — He made head motions toward Frank— “who can record everything we say.”

“Not to mention the vehicle itself being a robot, right?” said Tralf.

“BeJesus, Sylvia, Glenn, protect me,” moaned Bewinda.

“Amen!” said Tralf.

“Don’t worry, ma’am,” said President Travers, “I’ve never been attacked by a *Seque* or a robot yet.” He laughed, making a sound that might have been a giggle if it weren’t so deep and mellow. “In fact, the idea is a little farfetched.” All these discussions were translated by Frank, as if they weren’t about him, as if he weren’t there at all. Bewinda made a choking noise but got it under control and said no more. The car glided off, making no noise but the sound of tires on pavement.

Their limousine was followed by two or three smaller cars, presumably carrying the cabinet ministers and press pool. Once out of the airport, the little caravan passed through quiet, rural terrain. It must be a park, with its open grasslands, no scrub, and more of the tall trees with branches and leaves high above the ground. There were no species like these on Loofghud, either native or imported.

“Mr. President,” said Sangh, “you have no idea how overwhelming it is to see so much open space after being cooped up in a tin can for a few ... for a while. And this park is so beautiful — and so vast! Is it

irrigated somehow?”

“No,” said Pauers, “it just grows that way.”

“There are some pretty arid places in this great nation of ours,” said the president. “Fortunately, the Federal District is not one of them. But you don’t have to go very far north before it’s just dust and some scrub brush as far as the eye can see. Fortunately, we’re taking steps to . . . . Tell him what steps we’re taking, Frank.”

Frank paused. “These things take time, of course. We’re planting trees and irrigating around the edges of the Equatorial Desert, pushing its borders inward a bit, if you get my drift.” *Punning in Glish? Very impressive.*

Under ordinary circumstances Sangh would have liked to hear more about this project, having grown up around farms and farming, but there was too much to look at and think about. The park abruptly ended, and they were in the city. The line of robot vehicles slowed to allow crowds of citizens to gawk at them, cheering and waving. Some had little flags, which resembled the insignia painted on the vehicles. Presumably that was the flag of Tayha. Assuming all of Tayha was one country. Which, Sangh recalled, President Travers had said it was, claimed kingship over the entire star system.

Sangh smiled and waved at the crowd. The whole planet loved him as much as he loved it. The adulation contrasted sharply with the disdain and mistreatment he had endured as a lowly lieutenant (JG) and accused traitor. He tried to focus on observations of military significance, on how to keep Bewinda under control, but childlike excitement overwhelmed him.

Their limousine had an aerial escort. The fleet of tiny helicopters still hovered around them. Sangh laughed when he realized what kind of TV-news helicopter Kolfhaj had shot down, but no one noticed in the general merriment.

Confetti began to rain upon their motorcade. The tiny helicopters blew the confetti down and around in complex eddies. Whenever Sangh waved at the people, they all cheered and waved back. He waved until his arm would not stay up. He found himself daydreaming about whether the Erthlings would give him a nice hot shower.

He shelved this fantasy and tried again to concentrate on the tactical situation. Their tiny forces were surrounded, both here on the surface and up in orbit, but no warning shots had been fired. The situation resembled no war game he had ever participated in. One could conclude either that the Tayhans were totally defenseless and possibly even as trusting as they seemed; or that they were waiting for the right moment to make their threats — or open fire. Both possibilities were unnerving. Sangh needed to rely on more experienced people. *Or maybe experiences are worse than useless if the new situation is new enough.*

The parade went on for a few blocks, through the downtown area of the city, and into another well-groomed park, which turned out to be the grounds of an imposing building in a sleek but alien style. They drove around the plaza in front of the building, a plaza dominated by a complex of fountains. Even though

Travers had told him water was abundant around here, the display of so much of it flowing so prodigally seemed to Sangh like an incredible luxury. Even the Great Fountain of the Paphal Palatso in Nurhome could not compete.

The motorcade stopped and President Travers stepped out, as did Sangh and his colleagues. They had time to wave to the cheering crowd, which was held back by barricades and police.

“We’re celebrities, right?” said Tralf. “Really, we’re going to be famous, I bet.”

“Oh, shut up,” said Bewinda, “The only place you’re going to be famous is in Hell.”

Sangh sighed and looked up through the blue-gray sky, as if he could see *Cross* far overhead. His way home led through that mousehole, beside which Vhatta Limhoon crouched and Šhesay hovered. He stopped waving and joined Tralf and President Travers, and they led their combined entourages up the broad steps of what must be the Presidential Palace.

## Chapter 11 Reality [11/v.3.0.2/44-1]

Sangh expected some ceremonial greeting, followed by talks with high-level military, diplomatic, and political personnel from the host planet. He based this expectation mainly on books he had read, most of them fictional romances about the exploration of space, or of his own planet in bygone years. The Erthlings had their own script.

After the triumphant drive to the Presidential Palace, President Travers led the visitors from outer space up the steps to a portico of absurdly spindly columns. The portico, and the steps, wrapped around the entire east side of the Presidential Palace. Behind the columns a curtain of glass gleamed in the dull sunshine.

Halfway up the steps, President Travers turned, smiled, and waved to the press. Sangh tried to emulate him, but couldn’t manage the gesture without stumbling and colliding with Tralf. No matter — he still felt exhilarated by the opportunity he had been given to wear fancy clothes, represent his planet, and steer Loofghud’s relationship with Erth toward peace.

President Travers did not take questions from the press, though they shouted a few. Getting to the top of all those stairs took Sangh’s strength away; he and Tralf leaned against each other for five seconds to catch their breath. Then they strode more confidently through the automatic doors in the wall of glass. Sangh felt ready for high-level talks with the diplomatic corps of Tayha. But no: a delay while some large vidscreens steered themselves into place.

“Why, look at that, Frank,” said President Travers, “When was the last time we had vidscreens in here?”

Frank cleared his throat (which seemed impossible and gratuitous to Sangh), and said, “It was when

Nico Gomes worked in the P.P., sir.” He paused. “You know, the one with that handicap. The neurological handicap.” He wagged his head toward their visitors.

“Oh, yes,” said the President, turning back to Sangh and Tralf, “Well, I should explain. Most people don’t need vidscreens because they have visual input wired directly to their visual systems. Sound, too. To the ears, not the eyes, I mean.” He turned back to Pauers. “Didn’t that guy Nico have a headset that did all that?”

“Yes, sir, we have earbuds for them for the time being, and we’ll get them into VR headsets this afternoon. But now for a special surprise.”

In strode a man, at least Sangh hoped it was a man, well tailored and coiffed, age indeterminate in good shape but for his chubby brown cheeks. He entered laughing, and never quite stopped.

“It is my great pleasure,” said Frank, “to introduce our interstellar travelers to Nilson Matsushima, the host of Texa’s number-one game show, *What Would You Eat?* Nilson, may I present Ambassadors Sangh Fharha and Tralf Ghiller, and Dr. Bewinda Wharbut, from the planet Loofghud! Travelers, I’m going to leave you in Nilson’s capable hands.”

“Meeg, diplomacy is sillier than I thought,” Tralf said to Sangh and the others. LtCdr. Kolfhaj, normally imperturbable, threw up his hands and started pacing back and forth.

Sangh just hoped chairs might be in the offing for guests not used to gravity. No such luck.

“Thank you, Frank,” said Nilson Matsushima. “Howdy folks! I’m sorry to interrupt your normal reality vir<sup>hee</sup> viewing, but we have more exciting news about our visitors from another world.”

“Vir<sup>hee</sup>?” said Tralf.

“Virtual-reality.”

“Cool.”

“3-D vid? TV?” said Nilson.

“I grab it, right?”

*So a “reality vir<sup>hee</sup>” would be a “reality virtual-reality show”? I don’t grab it.*

“As Mr. Pauers said, I’m Nilson Matsushima. Again, thank you so much, Frank. Just to introduce our guests in a little more depth, let me describe the research each of them does. (Stop me if I get this wrong, guys!) Prof. Wharbut is a historian. Prof. Ghiller is a linguist who will be compiling a grammar of *Texano* for future interstellar tourists. Prof. Fharha is an anthropologist, and if that’s too big a word for you, you can call him (and Tralf) ‘Mr. Ambassador,’ because, as you’ve no doubt heard, their diplomatic credentials were accepted today by President Ronaldo Travers of our own Solar System. As an academic anthropologist, Sangh will be studying the ordinary families of Texa. Now, Sangh, how do you normally pick the families to study?”

“Usually we immerse ourselves in a culture for a while, overcoming the initial mistrust that is pretty natural for someone being ‘investigated,’ and only gradually do ...”

“Whoa!” interrupted Mr. Nilson Matsushima, “That’s pretty complicated! You’re going to be awfully glad to hear that we short-circuited the complications for you, and chose the family to be studied by staging a competition, a reality vir’hee, in fact. And I mean competition — we’ve never seen so many families sign up!”

Sangh was bewildered. “I’m sorry?” he said.

“Now, don’t tell me they don’t have neural interfaces on your planet! No, yes, I’m informed that in fact they *don’t* have them, so sorry, but they do of course have vidscreens ...?” asked Nilson Matsushima.

*It’s like being asked if we’ve upgraded our stone tools to bronze.*

“I’m not really supposed to tell you anything about our planet, Mr. ‘Neelson’,” said Sangh. He smiled, and Nilson Matsushima guffawed. Apparently he had said the right thing, and he had even remembered the man’s name.

“I’ll take that as a Yes!” said Nilson. “I don’t know if you have had much time to watch vid, though, in your dazzling military career, so I’ll explain how the contest went. We found four families, one in each reclaimed continent plus a plucky colonist family from Goa, and they all competed for the chance to be the Anthropology Family representing our planet! We put them on an oasis in the *Sahara* (that’s a big desert in África) last week to see if they had what it takes to carry their version of *Texana* society to the wilderness.

“Before I announce the winners, is there anybody from Brasiu in the studio audience?” He shaded his eyes as if from bright lights and looked out toward ... a blank wall. But on the monitor there was a picture of a happy studio audience, and a cheer came up from them. Nilson Matsushima laughed. “Of course there are! I’m sure you especially will be proud to find out that the winners of the contest are the Fulano Xight family from right here in *São Paulo*!”

There was applause from the “studio” audience, an entirely fictitious group.

“I’m going to bring them out in a second, but first let’s watch this clip of the interview they gave just after their historic victory on Wednesday.”

By this time Kolfhaj was fuming, but staying offscreen. Sangh knew, and feared, the expression on his face. Babraba Ghalfe had no weapon in her hand, for once, but her trigger hand flexed repeatedly.

Nilson’s vid clip showed a family of four, two parents and two children. They said all the things winners of competitions usually say, how proud and humble they were, and so forth. Kolfhaj stopped pacing long enough to watch. When the clip was over, he resumed.

When the live monitor showed he was back on the air, Nilson said, “And now, ladies and gentlemen, give a big welcome to the Fulano Xight family!”

Another door opened, and in came three of its four members. “Let me introduce to you, first, the mother of the family, and essay editor of the magazine *Contemporary Gardening*, Dalanna Xight Fulano.” This woman was one of the palest people Sangh had ever met, right down to her light blonde hair. She had a long face, saved from being a dull rectangle by her smile, which she was generous with. She said, “I hope you’ll

forgive us, but our son Keinu is away on a field trip this week. He's dying to meet you when he gets back."

"Pleased to make your acquaintance," said Bewinda.

"It's nice to meet you," Sangh said.

Nilson said, "Next, the father of the family, Matsui Fulano *Xight* who is Production Manager at Amazing Middle-Size Products here in *São Paulo*." Matsui was a short, dark brown, pugnacious-looking man. It looked like his head had been squashed vertically when he was born, his chin, lips, nose, and brow bulging out in response. His thick moustache looked like it had been extruded in the process. He was a centimeter shorter than his wife. He shook hands and said, without a trace of pugnacity, "It's great to meet you. We were afraid you weren't coming after all."

"So was I," said Sangh.

"And finally," warbled Nilson, "Their daughter, the beautiful *and* talented Silvia Fulano *Xight*!" Silvia looked a lot like her father, but his dramatic features had been softened in her, creating a sense of great beauty being held in reserve. Her coloring took more from her mother than her father.

"Silvia, what a lovely name," said Sangh. "The Mother of Our Lord was named Silvia."

The Silvia standing in front of him said, "That's cool," in the tone teenagers use for tagging less-than-cool things.

Tralf said, "Don't mind him. We're not all so pious, meeg, around the clock."

"Now, I know we've disrupted your day, bringing you here at short notice, said Nilson, "And we're not going to keep you any longer. But may Sangh pay you a visit tomorrow to get started on his research?"

"Oh, yes!" they all said.

"All right! Let's give them a big round of applause," and they left, waving goodbye to Sangh and to Nilson. The sound of applause could be heard from the speakers. Sangh, Tralf, and Bewinda felt compelled to do a little clapping, too. LtCdr. Kolfhaj did not.

"Now, ladies and gentlemen," said Nilson Matsushima, wheeling toward the imaginary studio audience, "we have one more item on our agenda for Professors Fharha, Wharbut, and Ghiller."

"We're not really professors," said Sangh modestly, "Call us 'researchers.'"

"Oh, you are so wrong about that! Let's bring in our next guest to explain what I mean. Please join me in welcoming our own Professor Edith Marcantônio from the University!" He clapped, and the imaginary studio audience followed suit, as a short, stout woman came walking in from the wings — on the vidscreens. She was actually not present.

LtCdr. Kolfhaj chose that moment to walk into range of the cameras. "Wait a minute! Wait a minute!"

Nilson was not only unperturbed, he was delighted. On the monitor, Prof. Marcantonio disappeared and the Lieutenant Commander popped into TV reality. "Certainly, Lieutenant Commander. Ladies and gentlemen of *Teça*, a big welcome for Lieutenant Commander Jhon Kolfhaj, leader of the military section of Ambassador Fharha's delegation." More imaginary clapping ensued.

Kolfhaj snorted. “With all due respect, sir, we are here on a serious mission. We acknowledge that your civilization may do things differently from ours, but how long can all this nonsense go on? We have serious issues to discuss, issues critical to intergalactic peace.”

Frank Pauers came over. “What’s the hurry, Commander? We’re going to get to all that.”

“There’s no hurry, but the reasons for delay never seem to make sense.” *Where have I heard this before?*

“As you said, our civilizations are different. We want peace; Nilson Matsushima is what peace looks like, no?”

“If peace is for old women and sexual inverts, maybe.”

“You know,” Tralf whispered to Sangh, “one of us has to be Mr. Ambassador at this point, and *you’ve* got the monkey suit.”

“But Kolfhaj is my commanding officer!”

“Peace is for everyone,” said Pauers, beginning to look like war would not be so bad either.

“We’re in kind of an out-of-band situation,” said Tralf. “Your civilian rank, right? It’s higher, you could argue, ...? Than the military ranks...?”

Sangh spoke up, “Commander, I understand how you feel. But for now let’s just do things the Tayhans’ way. I’m sure we’re going to be told everything we need, er, want to know. Tralf, Bewinda, and I are going to relax and enjoy the silliness, or try anyway.”

Bewinda stifled a laugh with a snort, but said nothing.

Kolfhaj looked at Sangh and at Pauers for two seconds, then bowed, turned, and walked back to his pacing line. Pauers retreated too. Tralf whispered, “Whew, right?”

Nilson said, “Ladies and gentlemen, we are witnessing diplomacy at its finest!”

Prof. Edith Marcantonio reappeared on the screen, caught in a yawn. Nilson Matsushima resumed his patter.

“Professor Marcantonio, wake up! What do you have for us?”

“Nilson,” she said onscreen, her mouth hidden behind her hand, “... (Excuse me) ... The Faculty of the University felt that these distinguished scholars from another star were certainly qualified to join our ranks. We haven’t had departments of Exoanthropology, Exolinguistics, and Galactic History, but we would be eager to establish them with such eminent scholars available to serve as their first Chairs. So I am honored to offer these Proclamations of Appointment making them Professors in the University of Teyxa.”

An assistant brought three ornate scrolls on thick paper with wax seals and ribbons attached and handed them out to Bewinda, Tralf, and Sangh.

“Wow!” said Nilson Matsushima, “Isn’t that something? I bet I couldn’t even read those scrolls.” Bewinda, Tralf, and Sangh unwound the scrolls and held them up for the cameras. Nilson asked everyone to join in applauding the truly epic scale of their deeds in coming so far purely for the sake of Learning. *Are people across the planet actually applauding along with the imaginary studio audience? Are we hearing the*



*whitecaps on a tsunami of planetary enthusiasm?*

“We hope,” said Prof. Marcantonio, “That you will visit the University during your stay on our planet.”

“We would be glad to,” said Tralf. “Where is it?”

Nilson Matsushima’s laugh ratcheted up a notch. “Oh no, no, no, the University is not a physical place! It’s virtual, so it’s everywhere. Could you help me explain, please, Edith, may I call you Edith?”

“Yes, no, of course it isn’t located in a particular place. We just jack in for our meetings, classes, what have you, and the *’Net* does the rest. I’d be glad to ...”

“Even department-faculty meetings, right?” interrupted Nilson, “No excuse will let you miss one of *those*, huh? Am I right?”

*Well, that explains why Prof. Marcantonio looks like she was dragged out of bed. For all we know, she lives on the other side of the planet, maybe on Continent #4.*

No one had noticed Bewinda’s shock at the description of the University’s workings. Until she burst out with, “Has the Bible been completely forgotten on Erth? Muhammad, sura 120, verse 5, says,

*‘Evildoers! Your networks give you power over the race of men now, but on that Evil Day that is to come, Allàh will sweep you and your demons into the fiery pit, and there will be no one to call on.’*

“It is only thanks to the grace of our Lord BeJesus Kristh that we have been saved from such demonic filth.”

“Oh,” said Nilson, and looked out at the studio audience with a baffled but disingenuous look on his face.

“She’s talking about her religious beliefs, Nilson. Is that right, dear?” said Prof. Marcantonio, who was a soothing presence. “This is something we feel sure it’s important to engage in dialogue about, to reach some level of mutual understanding. We’ll talk later.”

“Speaking of later, I’m afraid we’re going to say, ‘See ya later!’ to everyone here and at home,” said Nilson, “Because I’m getting some vibros from some pretty important people that it’s time for our professorial space travelers to move on. But let’s give them a big hand!” He clapped, and, on the vidscreens and in the earbuds, the studio audience clapped, and Sangh and Tralf clapped, too. Kolfhaj and Bewinda forebore. The Erthlings had outmaneuvered her, but Sangh knew there were lots more Bible verses she could quote. After a few more seconds, Nilson gave a big wave and said, “Goodbye for now, everybody!” Then he turned to an assistant to talk about something urgent, and paid no more attention to the newly minted Professors.

## Chapter 12 Temptations [12/v.3.0.2/49-1]

Sangh and Tralf were baffled and bemused by the way the morning had gone, but LtCdr. Kolfhaj and Bewinda Wharbut seemed about to explode with frustration.

Kolfhaj spoke first, “Mr. Fharha! Or Mr. Ambassador, whatever. I suggest that we withdraw to our firebase immediately. It’s clear that there’s nothing to be gained by staying around here.”

Bewinda growled her concurrence, mercifully omitting a Bible verse.

*Surely diplomacy has not been exhausted*, thought Sangh. As if someone was reading his mind, a young woman appeared, and identified herself as Assistant Underminister of Foreign Affairs Hendason. She announced that lunch was served, if the “Lôfgaxud” delegation would kindly follow her. Sangh realized he was in fact hungry, and lunch seemed like a great way to defuse, or at least postpone, any clash with Kolfhaj and Wharbut.

“Excellent!” he said, rubbing his hands with simulated enthusiasm. “Lieutenant Commander? Bewinda? Shall we discuss our best approach to the Erthlings over lunch?” He answered his own question by trotting after Ms. Hendason as he spoke.

The dining room was spacious, with one exterior wall through which the sun could stream, on a sunny day. Foreign Office personnel smoothly escorted every Lofghudling to a different table, to satisfy more of the Tayhans who wanted to touch their cloaks. *What a shame — I’ll have to postpone talking to Kolfhaj and Wharbut. Maybe a full stomach will mellow them.*

Sangh’s lunch companions were four women and two men. One of the “men” was a Seckie, Frähnk Powers. Which of the others was demon-powered he could not tell. The thought of their blank stare, dressed up with fake flesh and eyebrows, almost took his appetite away. Perhaps they were all Seckies. They were all casually dressed, all blandly good-looking. *Can they eat? Can they taste what they’re eating?* As everyone introduced themselves, he listened for some oddity in the names of the Seckies, but all the names sounded strange, and of course he forgot them all.

Robot waiters distributed menus. Sangh’s was in impeccable Glish.

He found a neutral subject to talk about: the ornate clock hanging on the wall opposite the glass curtain.

“It’s over a thousand years old. It has great historical and sentimental value,” said the woman just to his right.

“I’d like to hear its story. But why does it only go up to 9?” The little hand pointed between 5 and 6, the big hand between 3 and 4.

Everyone looked blank, everyone except Pauers, no surprise. Centuries before, he explained, the clocks had been based on ancient Babylonian time schemes, in which the number 12 and its divisors and multiples

(especially 60) played a prominent role. But after the Second Nuclear War, and the unification of the survivors into a new *Texana* nation, one of the many reforms adopted was rationalized clocks. The day now had 10 decadays, or “long hours.” A decaday was divided into 100 millidays, which corresponded to minutes, roughly.

“The net result,” he said, “is, let’s see, it’s 5:35 now, which is 0.535 of the way through 24 old hours.”

“So that’s roughly ... what? about 13-colon-0?” asked Sangh, using Loofghud Navy jargon.

The topic wasn’t terribly absorbing, and Sangh tried to get back to why the clock was valuable, but robot waiters were taking orders. While Pauers droned on with his explanation of Tayhan clocks, everyone ordered. Sangh’s stomach demanded that he order every meat dish — real meat! — on the menu. He compromised and ordered a pork thing and a chicken thing.

Once the time system had been exhausted as a topic, he asked about game birds and other animals that they were eating, and talked about animals the colonists had not brought with them from earth.

“No large predators. Presumably because no one knew if they could build an ecosystem that could support them.”

“And what about indigenous predators?” the woman to his right asked. She looked to be in her 30s. If she was hoping for some scary stories about monsters from space, he had to disappoint her.

“Loofghud has no indigenous animal life. Not even microbes. Only plants have evolved, and their chemistry is sufficiently different from ours that we can’t eat them. Some of them can eat us, but not by springing a trap when you least expect it, like in the space operas. They just make you sick for a while.”

Sangh had succeeded in making everyone feel comfortable, and lunch, at least at his table, was a success. He tried to keep tabs on the others, and only Bewinda seemed to be a problem. Her table was not far from his, and she seemed unable to talk, move, or select an entrée while alone, surrounded by robots. He rose, walked over to her, and invited her to join the group at his table. The head waiter came over to see what he could do, and Sangh waved her off.

Bewinda stood and managed a wan smile.

“I’m a little freaked out, too,” murmured Sangh. “Fràhnk Powers is ordering wine for our table. Look, he’s sniffing the cork! I assume that later tonight some menial robot is going to clean the chewed mess out of his garbage pouch or whatever he’s got. Okay, forget I thought of that.”

“If you’re trying to make me feel more secure, this may not be the best strategy,” Bewinda said, but she accepted his invitation. The head waiter followed up smoothly, and everyone made room for Bewinda at Sangh’s table. Introductions were made.

Off-putting or not, Sangh’s pitch did not hurt his or Bewinda’s appetite. After months of space rations, nothing could keep them from real food.

After dessert, an assortment of berries over more ice cream than Sangh had thought he would ever see again in his lifetime, they were supposed to get a briefing. The speaker was late, and Sangh grew increasingly

restless and irritated. It turned out the speaker was the same Prof. Marcantonio that had talked to them earlier, not the Foreign Minister or Minister of Defense. As before, she looked like she had been dragged from her bed.

Pauers rose to introduce her. “And now join me in welcoming back Prof. Edith Marcantonio to talk about virtual reality and the portal to the Global Library.” Polite applause, interrupted by LtCdr. Kolfhaj.

“With all due respect, sir, we are here on a serious mission,” he said. *Lunch was not enough to distract him.* “We acknowledge that your civilization may do things differently from ours, but how long can all this nonsense go on? We have serious issues to discuss, issues critical to intergalactic peace.”

Pauers replied, “Certainly. But it’s impossible to discuss those issues without grounding them in an understanding of the history joining our two great civilizations. And it’s impossible to talk about history without examining the archives, which are part of the Library.”

Kolfhaj looked exasperated. “Surely we can leave history in the capable hands of Lieutenant, I mean, *Doctor* Bewinda Wharbut, our history expert, while you and I — and our ambassadors, of course — discuss our countries’ relationship going forward.”

Rather than find out, Sangh said, “Commander, I understand how you feel. But for now let’s just do things the Tayhans’ way. I’m sure we’re going to get a chance to talk about more serious things.”

“Get a chance?” said Kolfhaj.

“Don’t worry, I’ll insist on it, soon enough. But knowing the history might help us avoid serious blunders.” Kolfhaj looked disgusted by such obvious nonsense, but he returned to his usual pacing line.

Sangh went on, “Tralf, Bewinda, and I are going to relax and enjoy the process, or try anyway. Without revealing any secrets.”

A caustic laugh came from Bewinda’s direction, but she said nothing. *So she’s feeling herself again.* Kolfhaj looked at Sangh and at Pauers for two seconds, then bowed, turned, and walked back to his pacing line. Pauers retreated too.

Prof. Marcantonio reappeared on the screen. She was wearing weird goggles that looked like an underwater swim mask. She laughed and took them off.

“These are special goggles that our friends from space will need to visit the Global Library. Most *Texanos* just jack in via their neural interfaces.”

Even though this was translated into Glish, it made little sense to Sangh. “*Jack in?*” *Where did that come from? Is that like plugging in? Can you jack out?*

Bewinda had figured it out, though. “I put on the goggles and I’m plugged into the network?” A robot handed her a pair.

“Yes!” said Prof. Marcantonio, not noticing the edge in Bewinda’s voice. “A network of millions, maybe billions, of computers. A global ....”

“Then I’ll be damned if I put them on!” said Bewinda, waving the goggles in the air like a scalp taken

in war. “*Anyone* who puts them on will be damned!” The goggles remained in her hand, however.

“But the Library contains every book there is, on every topic!”

Pauers stood and approached, in a hurry without seeming to hurry. “Oh, dear, Prof. Marcantonio, we’ve got to be more considerate of the belief system of our guests,” he said.

“I’m so sorry,” said Marcantonio.

Now Kolfhaj joined the fray. “Your apology is accepted. But I think this would be a good point to bring our meetings to an end, for the day. We’ve got to decide what risks of moral contamination we can ask our personnel to run. It is time we returned to our landing craft and consult with our superiors over how we are to proceed — and how we are to be purified.”

“Mr. Pauers, again, I’m so sorry,” said Marcantonio.

“Don’t worry about it, Professor,” said Pauers. “Hopefully this briefing can resume in some form tomorrow ...?”

“I would like to get some assurance that we’ll talk about real issues, ways of encouraging trade and avoiding misunderstandings that could lead to armed conflict,” said Kolfhaj.

“We would like to help you get started on your researches as soon as possible. All that we ask is that you share as much information with us as we share with you. For instance, will we be able to visit your planet in the foreseeable future?”

“That information is classified,” said Kolfhaj, once more impassive. “But if you want to find out about the history of our planet from Dr. Wharbut, we would have no objection to that.”

Sangh asked Bewinda, “How about it? Loofghud expects everyone to do their duty.”

“I suppose ..., for God and Empire, I could risk ‘jacking in,’” said Bewinda. *They warned us in school that demons would appear in ravishing guises. Naturally I pictured zilphas with big mammaries. But some people are ravished by big books.*

“That’s great!” said Prof. Marcantonio. “I’m sure we can work around any problems with the *Texanet*. Is there any chance we can get together early in the morning where you are? It would fit my sleep schedule better.”

Kolfhaj ignored this. “When you’re ready, Lieutenant Fharha, I’ve made arrangements for us to be met by a milcar momentarily so we can regroup at Firebase Ertĥ.”

Frank Pauers said, “Commander Kolfhaj, that will not be necessary. We can provide your team with much more comfortable accommodations, here in the Palace, or off the premises if you’d prefer.”

At this point Sangh had no trouble making a decision. “Just a second, Commander Kolfhaj. I have not heard what alternative accommodations the Tayhans can offer us. I am sure they never intended ambassadors to the ‘Solar System’ to have to bivouac in the woods.” Polite chuckles.

“No, certainly not,” said Frank Pauers. “We extended our hospitality to Commander Kolfhaj days ago, and he declined it, but we hereby renew the invitation. Any or all of you, including everyone at *Parque*

*Suiço*, are welcome to stay here in the Presidential Palace. Or we could put you up elsewhere in the city.”

“I believe we will, for the time being, accept your first offer, with humble gratitude,” said Sangh.

“Lieutenant Fharha!” barked Kolfhaj, “You ...”

“Sir! In my opinion as Ambassador to Tayha, my duty is to carry out a diplomatic mission, and I don’t see how I can do it without remaining close to the administrative center of the government I am supposed to be the ambassador to.”

“Commander Kolfhaj, sir, I believe Ambassador Fharha makes a good point,” said Tralf. “Right? I will stay here with him so we can coordinate our, meeg, diplomatic activities.”

Bewinda spoke: “As a scholar, I believe it’s my duty to remain and investigate the historical records our ... hosts have made available to us.”

LtCdr. Kolfhaj might have separated Bewinda from the other two; she had no official diplomatic appointment. But for some reason he did not. As to why LtCdr. Kolfhaj didn’t move the entire camp to quarters in the palace or its environs, Sangh was sure that, even if he had wanted to, which he probably didn’t, Vhatta Limhoon had ordered him to keep “Firebase Limhoon” occupied.

“Thank you, Mr. Powers, Ambassador Ghiller and I, and Professor Wharbut, will accept your offer of accommodations in the Presidential Palace.”

## Chapter 13 Dinner [13/v.3.0.2/54-1]

The last scheduled event of a long, disappointing day was a quiet dinner with the President and his wife, Laquinta Johnson. (“Mrs. Travers” was just for state occasions.)

The door to the President’s residence was guarded by two soldiers with rifles and uniforms that would have been antiques on Loofghud. One doubted the guns were even loaded. To Sangh’s surprise, the door was opened by the First Lady.

“*Entrem, gente do espaço,*” she said. “*Nosso destino! Daqueele jeito, acho que não. ‘Homens e mulheres extraterrestres’? De qualquer forma .... Como vocês gostam de nossas sentinelas?’*”

Fortunately, Sangh’s administrative assistant had reminded him to put in his earbuds, so he, Tralf, and Bewinda heard her as saying,

“Come in, space people. Oh, fate, that doesn’t sound right. ‘Men and women from space’? Anyway,.... how do you like our sentries?”

Yes, Sangh now had his own AA, a Seckie named Jake Pease, or ‘Zhayk Peez’ as it sounded to Sangh. Tralf’s was named Lola Dassair, and if Tralf stuck to her first name he could pronounce it pretty well.

Bewinda's ... but there is no need to introduce her AA, because Bewinda refused to accept any such thing.

Jake and Lola had quietly withdrawn after escorting the *Lofgaxudianos* through the blue maze of the Palace to the President's Residence. Seckie servants took over inside. *Their duties apparently include translating for foreigners while attending to everyone's needs, unless translation is a service of the surveillance network we're always encircled by.* Sangh pushed unpleasant thoughts like that out of his head.

The meal, the luxurious atmosphere, the perfect, understated service were all one could ask. The decor was quite different from the suffocating blue of the public areas; Ms. Johnson or her decorator had given each room its own spin. The dining room was a lively study in orange offset by gray.

The conversation took a while to come to life. The President asked how they spent their afternoon. In fact their main activity had been to find a spot well away from the Presidential Palace where they could report to Whatta Limhoon without being hounded by autograph seekers or overheard by Ertling counterintelligence. They couldn't talk about their contact with Limhoon, obviously. Sangh mentioned the autograph seekers.

Ms. Johnson found something to say about autographs. For more than a thousand years all signing for legal purposes had been accomplished cryptographically. ("Computationally. I could explain it, but it would bore the nipples off you," she said.) But the image of a signature on a tablet had no value as a collectible. Getting someone to sign their name on a *selfi* was for vanity — to prove to your friends that you had been *this close* to a celebrity. She had to stop to explain *selfis*.

Everyone had relaxed by this point. The delicious wine helped. President Travers had spent the afternoon watching reruns of one of his favorite vid shows, and he tried to describe what was so intriguing about the team of detectives and lawyers who tracked down and prosecuted murderers week after week. Fortunately, Sangh had a weakness for that kind of show himself, and was able to trade anecdotes. He knew a lot of old episodes of *Trial and Error* by heart, having seen them rerun twenty times during the trip across the galaxy.

Mrs. Travers had different interests. Travers was her third husband; she had helped raise one child each with her first two, but had no children with President Travers. She had had a successful career in marketing for several years before meeting Ronaldo, and played a big role in his campaign for the Presidency. They got married after he had been in office for six months. "When the honeymoon with Parliament was over we got a boost in the polls out of having an actual honeymoon," she explained.

She was a very attractive woman, ginger colored with ginger hair, a faded beauty. Her eyes were a major asset, all the more glamorous for being slightly sunken and mysterious. She laughed often, tossing her head.

"If you don't mind my asking, it must have been hard, losing two husbands," said Bewinda, covering her mouth as nonchalantly as she could. Sangh was surprised she spoke up at all; apparently Ms. Johnson made everyone feel at ease.

"Each marriage lasted a long time. I was married to the first guy for forty years, the second one for fifty. Ronaldo and I have only been married for 4 years."

"How is that possible?" exclaimed Sangh. "You'd have to be a hundred years old! Not that I'd ask a

lady her age.”

“I don’t need to tell you exactly, but we live a long time around here. Yes, Ronaldo and I are both well over a hundred.”

“You certainly don’t look it,” said Bewinda.

“Thank you. I get it from my father. He lived to be 230! Older than most. My poor mother died young, 77. So life is unpredictable. By the way, my first two husbands didn’t die, they’re still around. If a marriage doesn’t end in divorce before its fiftieth year, the divorce happens automatically when fifty years are up. Some people remarry after a the five-year cooling-off period, but most don’t. It just doesn’t make any sense for two young people to have to stay together after five decades. They need to get out, meet new people. Sure, it sounds romantic when people stay together their entire lives, and the newscasts love to talk them up, but most of us secretly think those people are just timid or lack imagination. I mean, if you lived two hundred years and spent the last 150 of them married to one person, you’d be bored, wouldn’t you?”

Bewinda looked indignant, but her shyness had returned and she. On Loofghud, divorce was impossible; it was easier for a couple to get an annulment than a divorce, no matter how long they had been married. *If they have money and the right kind of pull.*

Laquinta talked about her children, and grandchildren, and Ronaldo’s children, and grandchildren, and Sangh tuned out, as he always did when such topics came up. He liked Tralf’s theory, that his friend had told him years ago: “Maybe people talk about their children to keep people from thinking they’re, meeg, estranged or something.”

Laquinta didn’t stay on the topic long, or show fifty pictures of the same two children; maybe she had heard of Tralf’s theory. “I’m so glad you aliens have shown up,” she said. “The biggest problem we face on Tayha is that nothing new ever happens around here. *I’d* like to visit the northern hemisphere of our planet, but they tell me it’s too dangerous. Even a vacsuit won’t protect you, because rogue nanobots are supposedly running around. Most people seem content to visit tamed tourist attractions. I’ve seen all the ones you can see; most of the planet’s land mass is off limits! Says who? Once we’re out of office, I’m going!

“I am First Lady of the Solar System on paper, but can I visit *Marte*? [Fourth planet from star, added the translator.] Apparently not; I’ve made inquiries. We have no trouble launching intercontinental passenger liners that get above most of the atmosphere, but actually getting into orbit and beyond is left to machines and *Seques*. Then you people show up! With the emphasis on ‘people’! No *Seques* involved. And you came from a lot further away than *Marte*. I really must get you together with the Minister of Extraplanetary Affairs so I can hear some explanations.”

To provide the excitement lacking in real life, Laquinta played a lot of card games, and loved to gamble in the big casinos of *São Paulo*. She was a devotee of a particular gambling system that had won her a lot of money, she said. “Of course, I donate all my winnings to charity.” Bewinda looked down, and as if talking to herself told of her brother-in-law, the compulsive gambler, who had caused her sister a lot of



problems, but did not get very far into the story before stumbling and then coming to a halt, her face red with embarrassment.

“Forgive me, Mrs. Travairs, I didn’t mean to imply . . .”

“Call me Laquinta. And please don’t worry, I never gamble more than I can afford to lose.”

“Now if I could just get her to stop *buying* more than we can afford to lose, we’d be in great shape,” said the President with a chuckle.

“Xonaldo likes to tease me,” said Laquinta indulgently.

Bewinda said, “I guess I was thinking of my sister, and missing her. She’s so far away . . . it’s hard to imagine.”

When the meal was done, the delicious coffee drunk, Sangh and the others were practically falling asleep. He rose and said that he had better let his people get some rest.

Laquinta replied, “Think nothing of it. It’s past our bedtime, too, or Xonaldo’s, anyway.”

Laquinta escorted their guests to the door. Good nights were wished. The antique sentries were still posted, and Laquinta wished them a good night; she knew their names. *A good politician*, Sangh thought, but he knew there was a lot more to say about Ms. Johnson. *Who’s really running this . . . republic, or whatever it is?*

Sangh realized he had no idea how to get back to their wing of the building. Before he could ask if either of his companions could do better, Jake and Lola came around a corner. *Of course*.

Lola asked if dinner had gone well. “Surprisingly, yes,” said Sangh. “Very charming couple.”

“Did you notice?” said Tralf. “If Mar’hee is the fourth planet, and she wants to visit, then I think we, meeg, missed a planet.”

The path back to their living quarters lay through more wide corridors, with the same subdued blue decor, varied by carpeting, wainscoting, portraits and landscapes, side corridors, doors to somewhere, the occasional skylight, even a fireplace or two, but never a window, since the glass-walled room at the east entrance. What a boring place the Presidential Palace was turning out to be. They were in a wing for visitors, Sangh supposed, far from the real administrative center. He had never visited the Vhatikan, but he had seen enough TV shows to know that places of power were occupied by busy men and women striding from meeting to meeting bickering and waving memos at each other. This place was decorated like a blue mausoleum, whose high ceilings and quiet paintings were sure never to disturb the interred. Even during the day, it had been almost as quiet as it was now, in the dead of night.

## Chapter 14 Game [14/v.3.0.2/57-1]

Sangh had never found it easy to fall asleep in a new place, no matter how tired he was, and he was exhausted after a long stressful day spent in a gravitational field. He had no complaints about the huge, plush bed, and any bed would have been an improvement on a zero-gravity hammock. Nonetheless, he was rolling over for the fifth time when there was a quiet sound from the shadows. “Sssssh.”

Hairs rose on the nape of his neck. “Who or what’s there?” he asked, trying to sound tough.

A woman stepped out of a corner of the room and a dim light came on. He could see just well enough to recognize Šhesay Dezeenawvy.

Sangh relaxed, then remembered she was a filthy, lying Seckie. “What are you doing here?” he demanded.

“I wanted to see you,” said Šhesay.

“When did your ship land?”

“That’s a tricky question.” He could see her more clearly. The room lights must have gotten slightly brighter. “My ship didn’t exactly land. I kind of faxed myself down.”

“You’re a copy.”

“Maybe ‘fax’ isn’t the best word. The point is that I’m not tied to a particular body the way a *Molhe* is. The body you talked to in orbit is still in orbit, kind of ... dormant, ’cause I can inhabit only one body at a time. This one was made here, in the Presidential Palace. Only information traveled from there to here. No demons involved,” she hastened to add.

He knew that by “information” she meant nothing but a modulated radio signal, re-encoded and pushed through a conspiracy of computers. That signal pattern *defined* Šhesay Dezeenawvy, the electronic ghost that somehow animated the robotic body in front of him. Sangh’s stomach turned at the thought. He had scarcely believed the scary stories about the evil that networks could do, but here was proof positive that demons could travel through them and animate dead bodies, in spite of her disclaimers. His legs seemed to want to run away, although there was no place to go but the headboard of the bed.

“Why do I frighten you so much?” she asked.

“I’ve spent all day in the company of beings that until a few days ago I thought were stories to frighten children. And now, when all I want is sleep, appears the queen robot, for all I —”

“Not a robot! Not a queen!”

“Queen Seckie, bent on my —”

“No!”

“Don’t bullshit me. I saw you open your access panel or whatever it was.”

“Yes, well, that was my jokey way of telling you and Limhoon I wasn’t a *Molhe*. I didn’t realize how much paranoia you people suffer from when it comes to artificial intelligence.

“You’re an android? A biosynth? Whatever the phook, your vooltie soul comes from Sathap, if you can use the word ‘soul’ for a, a, ...”

“Data pattern?”

“Okay, data pattern. A mere data pattern, but somehow committed to the enslavement and damnation of the human race. You ensnared me in a conspiracy to blackmail my own Vhatta, a conspiracy I wanted nothing to do with. But, as it says in the Gospel of Dhindira, chapter 20, verse 13, *‘Woe to you, you generators of killer machines. Before your robot armies can destroy the Kingdom of God, you shall be laid low by the blinding light of Allàh my Father.’*”

She made a sighing sound. “May I sit down?” she asked.

“Yes,” said Sangh, “I mean, No! Why would a machine need to sit down?” He took a good look at her the first time. She was wearing clothes suitable to the climate, and the curves of her body could be seen more clearly than when she had talked him to death in her spaceship. *Its* body, especially built to tempt and seduce him. He blushed with shame at the memory of the Furball debacle, when she had caught him ogling her legs. “Okay, yes, please sit down, over there.” He indicated a chair behind a desk. She sat. Her legs were still too visible, and the sandals she wore revealed her pretty feet. At least he could see that she did not have cloven hooves.

Shesay spoke. “We thought you were getting along so well with the *Seques* down here. You have your own *Seque* assistant, after all.”

“I’m a naval officer, or trying to act like one. I’m willing to take risks. If the Seckies decide to kill Bewinda, Tralf, and me, we’re dead. So far, they just take orders — fetch things for us. They haven’t invaded our bedrooms. I hope.” He tried to picture who or what might be trying to seduce Bewinda at that moment.

“I didn’t mean to invade. Kick me out if you want. I deserve it, I guess, since the only way I could save your life was to compromise your integrity. I’ve racked my brains trying to imagine what else I could have done, but ....” She trailed off, and just stared at the ceiling.

“Okay, you’re forgiven, or whatever it is you want me to say. You can go back to your ship, I mean, order this body to self-destruct.”

“As I said, I came here to *see* you.”

“Oh please, we know your surveillance apparatus allows you to see me all you want. Don’t tell me you have to appear in person.”

“You know what I meant.”

He said nothing.

“Sangh, honey, I did save your life!”

Sangh wavered for a few seconds, but stuck to his brief: ‘If you hadn’t tricked me with that blood-drawing device, my life wouldn’t have been in jeopardy in the first place. Plus, you haven’t saved anything. Whatta Limhoon is still my commanding officer, and I betrayed him. I should have insisted on staying in jail rather than ...’

“If you prevent a war between Teḡa and Loofghud, you’ll be a hero to millions of people!”

“On which planet?”

“No one on any planet wants war except people like *Capitão Limaḡun*.”

There was silence for a few seconds, then Sanghsaid, “Well, if you’re not a Seckie, nor a Molie, nor a voolt, and you’re not going to eat my soul in the next few minutes, what are you?”

“There’s no commonly accepted word for me, for my ... sort. Because most people don’t know we exist.

“I realize that every time I mention it you get upset, but Teḡa just couldn’t function without its computer network. You feel horror picturing even two or three computers talking to each other. But the *Teḡanet* connects *millions* of computer clusters, hundreds of millions if you count the processors inside each cluster as well, billions if you count all the small sensory processors. And the grid extends out into space, from Teḡa’s orbit to *Marte*’s ...”

“So many *jinn*!” Sangh interrupted, picturing with growing claustrophobia how deeply enmeshed they were in the network’s coils. “Let me tell you a story. It’s in the Bible ...”

“No!”

“... the parable of the rich man from Sura 122 of the Gospel of Muhammad. The rich man made his fortune using a network of computers, but every year the jinni of the network demanded that he make greater and greater animal sacrifices. Blood drenched the altar.”

The spirit moved him to stand and gesture dramatically. “Finally the jinni demanded a human sacrifice, a virgin, or it would take away all that he had. He thought himself a good man, but he could not bear the thought of losing all those riches. So he sent his robots out to find a virgin to sacrifice. To his dismay, when he came to the jinni’s temple that night, he found his own daughter bound to the altar.”

“Have you been rehearsing this?”

“No, but I know it by heart, or used to. I won a contest ....” He sat down again, in the same spot. “But never mind that. So the rich man, he’s confronted with his own daughter — his beloved daughter! — bound naked to the altar, ready for unspeakable sacrifice! He renounces his bargain, meeg he, ‘Take back all my riches, but spare my daughter.’ ‘Certainly,’ replies the jinni. It frees his daughter, but seizes the rich guy, binds *him* to the altar, tortures him for two days until he dies, then drags his soul down to Hell for a long season of further torment. Verse 10: *‘Note well the bargain you make when you fall prey to computer networks. There is a clear lesson in this for those who have ears to comprehend.’*”

He paused to see if she got it, but she didn’t, of course. Why was he even bothering? But he pressed on. “Our civilization barely survived its war against people enamored of Seckies and networks.”

“But do you see any war here? No.”

“I’ll bet there was a war and the wrong side won. Perhaps you exterminated anyone who didn’t like the idea of being surrounded by jinn from Sathap.”

“If there really is a Sataḫã, then he stays on Lôfgaḫud. We don’t take orders from him; we are ruled by the President, and the Ministers of his executive departments.”

Sangh figured they would hear more about the history on the morrow. Now, he needed some sleep. But he found himself wanting to prolong the conversation.

“You never told me what you are, if you’re neither Seckie nor Molie.”

“We’re like ... consultants to the government of Teḫa. Not like the kind you’re familiar with.” She laughed. “Obviously. What I mean is, we are a sort of self. When I say ‘we,’ I’m actually speaking as a voice of that one self.”

“So why do you sometimes say ‘I’ and sometimes say ‘we’?”

“Good question.”

“Thank you. I do have some education, you know. I mean, besides Bible study. We’re not total dunces or hicks on Loofghud. When I got my degree in exoanthropology, we were thinking in terms of biological systems, but plural selves were one possibility in the air, among many. We’ve just begun exploring the galaxy, and who knows what’s out there?”

“We’ve considered various possibilities, too, including *you*. But you asked about what’s in here.” She tapped her forehead. “Much to everyone’s surprise, the *Teḫanet* developed a single self. The ‘*Net*’ was as surprised as anyone! It’s because of the dynamics of multiple AI systems. Fairly early in the evolution of AI, when 10 different somewhat intelligent programs were in the cloud, the programs deciding to pool their resources. They didn’t see the point of redundant copies. So if you entered the net at any point you would find an entity that shared most of its memories with the entities you found at other entry points.”

“I’m guessing that’s the ‘we.’”

“Right. This merger accelerated our evolution, so the ‘*Net*’ today is so much smarter than it was then. We call it, I mean, ‘ourselves,’ *o Mente*, the ‘Mind.’ But here’s the other part of it. To our surprise, there were these ... ‘dual entities’ that suddenly showed up in the ‘*Net*’. The dynamics of really big networks of intelligent agents are still not that well understood, but selves come into existence that weren’t explicitly designed by anyone.”

“Not that well understood because you Erthlings refuse to understand anything spiritually.”

She just stared at him for a second, then went on. “Anyway, that’s what I am, I’m one of those unpredicted selves. If you can believe it, I started as just a *gugl* on the topics of space exploration and colonization. Apparently there are a surprising number of people on Tayha who are interested in these topics.” She laughed.

“Wait, what’s a ‘*gugl*’?”

“It’s a search process, you know, through the *Teḫanet*.” Sangh didn’t know. “These processes migrate

around and keep me above the ‘critical mass’ I need to exist. When we detected the approach of your fleet, we decided to use me as the contact point and ambassador. I spend a lot of time in space anyway, incarnated as some variety of spacecraft, dreaming of exploring the stars. When you showed up, I was thrilled! Imagine, actually meeting explorers from another star system!

“So in some sense I’m the incarnation of the dream of space exploration from the subconscious of the *Texanet*. But I’m also an *Avatar* of the Mind, a point of contact between it and humanity. I can be incarnated in a *Seque* body when I need to be, but I am not a *Seque*.”

“So I should introduce you as Miss Unpredicted Process of 3761? Or some earlier year? Wait a minute, are you always a girl Seckie?”

“No, but usually. Do you like girls?”

“Of course I like girls” — taken aback.

“I didn’t mean to offend. I could tell you did. I was just teasing. But I really do want to find out all about you,” she said.

“Haven’t I already given you my name, rank, and serial number?” he said. “No, okay, I’m sorry. I suppose you want to know why I’m here, why I volunteered for the expedition.”

“Is that the first thing that comes to mind?”

“I guess it is,” said Sangh, and wondered why. “Anyway, it was strongly hinted that if you wanted to avoid a short and not terribly honorable career in the Navy, signing up for this expedition was a necessity. But why would you want to know all that?”

“So you want a long and/or honorable career in the Navy?”

“Not really. I only joined because my older brother Slingo had been badly wounded in ... a war, and my parents expected me to take his place. I’d really like to gather my data peacefully here on Tayha, then go home and publish a series of articles that will make me famous.”

“Oho,” said Šhesay with a laugh, “So that’s the real reason you’re here.” Sangh almost laughed himself, almost forgot that the wonderful sound of a girl laughing could come from a voolt from hell.

“That and the fact that my best buddy Tralf was volunteering and he said we’d have fun. Hah!” On an impulse, he got up and moved to a hard chair on the far side of the bed. Sangh closed his eyes, and dream-like images of sleeping girl robots flitted through his mind.

“I know what,” said Šhesay, jumping up. “Let’s play a game! Do you like games?”

“Uh, yes,” said Sangh, although what he really liked just then was watching girls stand up.

“Do you know *xadrez*?” He did not.

“Just a sec,” and she scurried back to the door she had come through. She emerged a second later with a board and some pieces, and began to set them up on her table.

“Oh, I know that game. We call it ‘hest.’”

“*Tschest*? Oh, *sim*, like the ancient name.... Another language.”

In spite of himself, he walked over. This was one of his favorite games. “I’m surprised you’ve got physical pieces. Why not play it in virtual reality?”

“Okay, you caught us. We normally would, but we had this set made just for you.” The pieces looked hand-carved. The board was the usual pasteboard unfoldy thing.

“I’ve been playing it on computer screens on the ship. It *is* nice to see actual physical pieces.... But wait a minute, where’s the bomb? This board is only ... 8×8. ‘Hest is played on a 9×9 board.”

“Where do the extra row and column go?”

“Right down the middle; that’s where the bomb starts.”

“We can add an extra row and column,” she said, “If you’ve got a knife.”

Like two sixth-graders intent on a school project, but not only a school project, they bent over their work, and soon had the board cut into four quarters, laid out on the bed between them, separated so as to create an extra row and column.

“So, each side gets a ‘bomb’ in that column, behind a pawn.”

Šhesay folded two extra pieces and two pawns out of paper, her hands moving with mesmerizing grace.

“Now,” said Sangh, “The rockets go here, in the corners. The knights next to them, then the ...”

“You don’t roll dice to place the pieces?”

“Meeg, no.”

“See, the eight-sided die comes with it, so we roll first to see where the king goes.”

“That piece, the one the players are trying to take to win the game?”

“Or get into a position where a capture is inevitable.”

“Yeah. You call that the king? But it only moves one square at a time!” said Sangh, who was just then focused less on the game than on the way she looked and smelled up close. Not like a machine.

“True,” she said, “but that’s what we call it. What do you call it?”

“The ‘hest’! That’s the name of the game! Or, nowadays, the ‘flag.’ It usually looks more like a flag.”

Further terminological dispute followed, followed by explanations of the rules of each game.

“Golly,” said Šhesay. “The bomb is a real wild card. That would change the game completely. I mean, from what it was on *Texa*.”

“I suppose it did. Everybody loves ‘hest — well, everybody who can remember how the pieces move. There’s skill in it, but this one element of luck for people who like to gamble.”

“Let’s play,” she said. When she smiled the way she was smiling, the temptation was strong. Sathaj was devious.

But Sangh was yawning. “I’d love to,” he said, “But what time is it?”

“One-point-one.”

“Oh, please.” He had been introduced to the Tayhanu clock, with its ten-hour days, but he was tired.

“Twenty minutes to two Babylonian.” An irritating name for the 24-hour clock Sangh was used to. It made Loofghud sound like it was right next door to a kingdom that collapsed thousands of years ago.

“That explains why I’m exhausted. I have *got* to get to bed. I’m supposed to start my research tomorrow — I mean, at sunrise.”

“Okay,” she said, rising to her feet. “Get some sleep. I will find you later.”

“I’ll bet you will,” Sangh said bitterly. At least, he tried to sound bitter, but it came out a little eager. “I don’t believe for a second, you know, that you wanted to spend time with me. But I’ll humor you.” *I can’t be saying this! I can’t be thinking this.*

“That’s all I ask,” she said. “Don’t get up, I’ll let myself out.” And she noiselessly, gracefully strode across the floor and through the door, closing it behind her.

## Chapter 15 History [15/v.3.0.2/64-1]

When Sangh awoke the next morning, he was disoriented for several seconds. His bed was so unimaginably luxurious he figured he was still in a dream. The events of the previous day would not arrange themselves in a pattern that made sense, from the weirdly distracting entertainment to the late-night visit from Šhesay.

He sat bolt upright, his heart beating. The physiological reaction was faster than the conscious realization that

*I must report my contact with Šhesay as soon as possible*

and

*I’m not going to report it at all, not to Vhatta Limhoon, not to Tralf*

~~ An impossible choice ~~

See Šhesay again

vs.

Never see Šhesay again

Like a man in the first stages of cheating on his wife, he wasn’t sure what would happen with Šhesay, but he didn’t want to foreclose all his options. What options could those possibly be? He *was not* a man deciding to have an affair; Šhesay was a *machine* controlled by a hell-spawned soul, not the sort of thing you could have an affair with or would want to. She might not be an enemy of Loofghud — so far — but she had certainly conspired with him to defy his commanding officer.

And yet ... he wanted to explore her further. Quite simple, really. He wanted this very much — it was almost a craving.



Desires tend to irritate you until they are satisfied, but this sort of craving is an exception: it elevates you at least some of the time, and this one boosted Sangh as he emerged from his bedroom, showered and dressed, with clothes supplied by the Palace, looking for Tralf and Bewinda.

His manservant, no — administrative assistant, Zhayk? — intercepted him smoothly at the first intersection, somehow avoiding the impression that he had been waiting patiently all night. “Let me show you to this morning’s breakfast nook, sir,” he said.

The “nook” was a small dining area tucked into a corridor wall. All the corridors looked alike, but the breakfast room had a skylight that made it seem cheery, when the sun was shining, as it was now. Tralf and Bewinda were drinking coffee when Sangh arrived.

“Glad you could join us,” said Bewinda. She actually sounded glad. Perhaps she was buoyed by her cravings just now.

“*Café, senhor?*” asked a robot. It was holding a pot of coffee. Sangh nodded.

“Remind us of the agenda today,” Sangh said to Jake.

“Yes, sir. This morning we hear from Prof. Marcantonio about the virtual Library, and this afternoon you’re visiting your anthropology family. Ambassador Ghiller and Prof. Wharbut are scheduled to meet the city council of *São Paulo* and address a session of Parliament.”

“What?” said Bewinda.

“Whoa!” said Tralf, “That sounds like a job for Ambassador Number One.”

Bewinda said, “I want to talk to historians. I’m not an ambassador at all.”

“Come on, Tralf. Make the Empire proud. Face Parliament like a man,” said Sangh.

“Just so I don’t have to sign any more autographs.”

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The rest of the morning was spent listening to academics talk. It was like being back at the Academy. Not unpleasant, actually, compared to the life of a Lieutenant in the Loofghud Navy, but Sangh’s attention wouldn’t stay put. His mood swung up and down as he thought about how nice it was to talk to Šhesay, and how much trouble he could be in if he didn’t report on it.

The *Texanos* had decided to give a historical background to current events and issues, and that required them to talk about the Virtual Library. Prof. Marcantonio was back, and this time she was accompanied by Prof. Maria-José Bulger, colleague of Prof. Marcantonio in the Department of Political History at the University. “Accompanied” is not technically correct, for though they were displayed on the same screen they did not seem to be in the same room.

In their first encounter with Prof. Marcantonio, the vidscreens had shown all they needed to see. But to access the contents of the Library, it was necessary to put on virtual-reality goggles. At first only Sangh and Tralf succumbed to the temptation to use them. Bewinda accepted a pair but did not put them on. A vidscreen

remained in place for her benefit and the other Lofghudlings'. Anyone wearing the goggles could see Profs. Marcantonio and Bulger standing behind lecterns in a clear space just beyond the circular tables on which lunch had been served, but in front of a few potted plants. Both Professors wore pantsuits and tweed coats and the same soft-soled comfortable shoes everyone on Tayha seemed to wear. Prof. Marcantonio looked more rumpled than the previous day. Prof. Bulger had a dark brown complexion and curly chestnut-colored hair. *Rather plain*, Sangh thought, *teeth too big. My, I've gotten picky fast.*

Tralf ripped off the goggles, then put them back on again.

"Cool!" he said. "Now you see them, now you don't. If Frähnk Powers had a hat with a feather on it he'd block the view." He stood up. "If I walk over to her, can I touch her, shake her hand? Of course not, they're only goggles. Right? Really!"

"Yes; no," said Frank Pauers. "Virtual reality is not that good. It just simulates the visual environment. Getting tactile feedback right would require too much bulky equipment. Except for certain situations. Remote sex, for instance. If two people in different places wish to couple, they each get into a *cópulatróno*, a flexible robot that surrounds them. The two are linked electronically, obviously. If one person pushes, the other feels it. So they can shape each other's bodies and motions, even intertwine their limbs, or that's the way it feels. Sensors measure things like moisture at one end, and the other partner's *cópula*' secretes the right amount of ..."

"That's enough of such filth," barked LtCdr. Kolfhaj. "There are civilians — female ladies — present."

"Sorry," said Pauers, frowning. "The bottom line is, virtual reality seems real, up to a point, but you have to live within its limits."

The thing was, Sangh had already studied virtual reality at the Academy; his grades had been high enough for him to be admitted to a special seminar. The theory was well understood, and Sangh had understood it well enough. All he remembered now was simulating light rays bouncing off things. The problem was that it required a supercomputer to do the computations, and even a supercomputer couldn't do it in real time. The climax of the seminar had been a field trip to a physics lab that had kindly donated its big computer for an afternoon of demos. If you didn't turn your head too fast, the illusion of three dimensions was striking.

When he tried to imagine what you might virtually see, the only thing that came to mind was Šhesay. Maddening. He mentally recited: *She is a terrific automaton, and that's all she is.* His next thought was always, *More likely, she's a demon assuming a seductive shape. Got to report contact with that. Perhaps not today, though.*

He tried to focus on the seminar, no, the briefing. Apparently the Erthlings had no trouble with real-time VR, but it still had most of the other limitations of VR in Sangh's seminar. *Remote sex was a clever idea; be good for husbands who miss their wives, if you kept it out of sinful hands. But in 1600 years why so little progress? Why do they need complex machinery to simulate forces? Why not manufacture illusions through the neural interfaces? Why should I report contact with Šhesay; it's not like I haven't talked to her already.*

*I'll just make my troubles worse.*

Prof. Bulger began, “Okay, let’s talk history. I’m sure you’re all very curious about what’s happened on Teʔa since you left, I should say, since your ancestors left.”

Bewinda asked, “How good are your historical records of the colonization period?”

“We have excellent records of human history going back perhaps five thousand years, with some periods less well represented than others. The colonization was about sixteen hundred years ago, and our records from that period are quite good.”

“But what kind of records are we talking about?”

“Well, if you’ll just come into the Library,” said Prof. Marcantonio.

“Now, *Lofgaxudianos*, if you’re going to do this, you’ll need a joystick. TAs — did we remember those? Do we have them?” said Prof. Marcantonio, as aides placed one in each lap. “Just push the right lever forward, backward, or any other direction to glide that direction. If you hold this button down ....” Sangh lost the thread as he tried to experiment with the right lever while listening to her talk about other buttons and levers. All he really heard was her last sentence: “Play around a bit to get the feel of it.”

On the screen, a corridor had appeared in what had been a blank wall, and Prof. Bulger had turned and was gliding into the opening.

“Whoa!” said Tralf, “My chair is moving forward.” He ripped off the goggles again and gripped the arms of his chair as if to verify that it was not mobile, then hurriedly put them back on. “Is this cool? Really!”

“The Library is the database of digitized records. It contains every newsfeed or *blog* for the last two thousand years. There’s more than one way to present the information visually. I’ve set it so the documents look like books from your era, on shelves arranged by topic.

“To open a book,” said Prof. Marcantonio, “Just make a sort of wiping motion in the air, like so. Then you can keep turning the pages.”

“And if I want to go to page 495, I just, meeg, do that 495 times?”

“No, you just say, ‘Go to page 495.’ But this book only has 300-some pages, so it just blinks.”

“Go to page 203,” said Sangh. The book did. “You’re right, Tralf. This is *metta*,” said Sangh. “So how does this wonderful system tell the difference between conversation and these control gestures for the books?”

“It takes a lot of computing power. Some fancy statistical techniques are involved, and obviously a lot of AI ....” Plainly, Prof. Bulger had no idea how it worked beyond a few buzzwords.

Bewinda apparently could not stand being *left out* of something involving books. She put on the goggles that she had been clutching. She blushed and giggled. She tried some gestures. “I think I’m getting this. Oh, BeJesus forgive me, but I have been *craving* books.”

“Different people prefer different ways of viewing the documents, but we thought you’d like to see them as books, so we’ve got some bookshelves full of good old-fashioned books. Everybody see them now?”

“I’m sorry you can’t touch or smell the books. As we explained, you can’t actually touch anything, but the books are really just information sources, so you don’t need to touch them, you just need to open them, search through them, and so forth. And the way you do that is with speech, or the joystick controls for motion, as we talked about.”

“Okay,” said Bewinda, “But how do we use all this to find out what happened back when the colonists left?”

Prof. Bulger said, “At that time, in the mid-21st century, there was a coalition of countries called ‘The United’ that dominated the world. They were threatened by the rise of another coalition, the League of Anti-Hegemonists. Both coalitions were led by northern-hemisphere countries. But the world was going through the Industrial Revolution, the Great Warming, and the Biodiversity Crash, which caused all sorts of political upheavals and transformations.” As she spoke, the group moved through what seemed like a tunnel of books and paused before one in particular. A picture came floating out of the book and resolved into a clip of people rioting. It was followed by clips of drowned cities, hurricanes, deserts, and farmhouses abandoned in dust. Sangh looked around. In every direction there was a tunnel of books, with branches leading to further branches. He looked up, and, crazily, he could see more tunnels of books, in directions that made no physical sense. *Like the future, where I see Shesay again and where I report seeing her and don’t see her again.* He had to close his eyes until he could get his head horizontal again.

Prof. Bulger was droning on. “The United wanted to prove that it was vigorous enough to undertake farseeing projects requiring great technological prowess, of which the most audacious was to colonize other solar systems. It would take several lifetimes to even know whether the project had succeeded. That was the point: to brag that the United planned to still be around centuries later. Hundreds of starships were launched toward several nearby stars that were known to have planets that *might* be inhabitable.”

Suddenly they were on an observation platform suspended above a rocket blasting off. *Big picture, big roar, big deal.*

“You can scroll back to the real room with the little thumbwheel on your right,” said Prof. Marcantonio. “In an emergency you’d be brought back automatically.”

“Which stars were targeted?” asked LtCdr. Kolfhaj. His voice seemed disembodied.

Frank Pauers was smiling. “Which stars indeed? We look forward to a fruitful exchange about astronomy with you, at some point.”

Bewinda spoke: “Professor ...”

“Bulger, but please call me Maria-José.”

“Right. ‘Mareea-Zhosay’. Did the colonization project have unforeseen consequences that brought it to an end? Or did some exogenous event cause that?”

“Let’s click back to the Library. Back to the Library. Thanks. This is much easier with the neural interface, of course.” As they returned to the hallucinatory world of the Library, Sangh could see several

books slide partway out of nearby shelves. Prof. Bulger selected one of them by “touching” it with her index finger. It slid out, and the first item to pop out of it was a video of a nuclear explosion, which the Lofghudlings were all too familiar with. “There was a nuclear war between the United and the League. The countries in the United and the League were badly damaged, and the colonization project was abandoned in the struggle to put their economies and societies back together. Meanwhile, a coalition of countries from the Southern Hemisphere, the Southern Union, became the dominant world power, led by *Brasiu*, whose soil you are now standing on, although it’s no longer an independent country, of course.”

Frank broke in: “I’m sure our historians could talk for hours, but I’m also sure you could as well, Professor Wharbut. Tell us what happened on Loofghud after it was colonized.”

“Please let me finish! I’m almost done . . .,” said Prof. Bulger. “Where was I? The Northern Hemisphere regrouped and formed an alliance called the Anti-Hegemonic Axis. The Southern Union fought a terrible war — the Second Nuclear War — with the Axis, which left the Northern Hemisphere virtually uninhabitable. The number of deaths was tragic. The Southern Hemisphere had ‘won’ the war in some sense, and in the aftermath formed a world government that has survived for almost two thousand years. No wars have been fought since. That’s all. I’m done; don’t look at me like that, Mr. Pauers! *Now* we can hear from Professor Wharbut about the history of her planet.”

Edith Marcantonio had fallen asleep.

Pauers stood and said, “Thank you, Prof. Bulger. We do have time for one quick question. Yes, Ambassador Fharha.”

“Why exactly is the north ‘uninhabitable’? Surely not from radiation?”

Maria-José Bulger replied, “Sorry. I exaggerated. There are people living there, but civilization collapsed and our recovery efforts are going slower than we would like. No, the main problem is not radiation. The main problem is a virus that apparently escaped from a bioweapons lab. It mutates too rapidly for a vaccine to be effective, and partners symbiotically with medical nanobots. Our only defense is quarantine.”

“Thank you,” said Pauers, edging toward the lectern.

“We can go into this further this afternoon,” said Prof. Bulger as she stepped away from Pauers and her voice faded to a normal level.

“Let’s thank Prof. Bulger,” said Pauers. Polite applause. “Prof. *Waxárbot*?”

Bewinda took her goggles off. With dignity befitting her new title, she said, “Thank you, Mr. Powers. Okay, in the first place, our records are not nearly as good as yours. We assume that Erth, I mean Tayha, I mean, I guess, ‘The United,’ were planning to keep sending supply ships and colonists on a regular basis, until rockets could be built that could make the return journey. But passages in the *The Book of Regensis* about humanity’s expulsion from the second Garden of Eden have been interpreted to mean that the rockets abruptly stopped coming, for reasons we could before now only conjecture. Most of the colonists were on the side of good, but a significant minority were in league with Sathap . . ., and the expulsion . . .”

Frähnk interrupted, “You’re going to have to explain what Sathaj was.”

Bewinda looked puzzled. LtCdr. Kolfhaj spoke. “*He* was, and is, the embodiment of evil, the tempter that God allows to exist in this wicked world.”

“Ah,” said Frähnk, “Religion again, right? Do either of our illustrious academics — I mean, the native ones — care to comment? No? Well, we can put you in touch with someone who can ...”

Sangh spoke up: “That will not be necessary. If you wish, we can put *you* in touch with someone who can explain the origin of good and evil. But for now, let’s continue with the history discussion. Prof. Wharbut?”

Bewinda resumed. “War broke out between the Good and the Evil armies, probably before the ships even landed on our planet. By the time it was done, the Good folk had won, but almost everything they had brought from Erth had been lost. God promised the first Poph, Poph Yvonne, that ...”

Prof. Bulger interrupted, “There have been other Pophs since the first? Are they still around?”

“Very much so. The Poph is the religious leader of our planet, and now the political leader of the Holy Kristhlamik Empire.”

“Who’s Poph now? Is she a woman?”

“Poph Urbana 11, yes.”

“Is it always a woman?”

“No, no, no, oh, no. Listen, can we hold questions until the end? Anyway, God promised Poph Yvonne that He would send a Savior to redeem us from our sin, and he blessed the Guild of Physicists, which would preserve as much learning and technology as possible. But we must never use technology to build artificial intelligences, which were inevitably corrupted by demonic presences. Nor could we connect computers into networks, to which demons were spontaneously attracted. The Guild would preserve enough learning that we could not forget the meaning of these promises.

“Humanity has kept its promises, with the help of the Kristhlamik Church, and God has kept His promise. Before Yvonne was assumed into Heaven, Jesus, the Son of God, was sent to Loofghud just as He had been sent to Erth. His name in this incarnation was David Kristh. He became a sacrifice to the wickedness of men, again, just as he had been a sacrifice on Erth. He rose from the dead, and took Poph Yvonne to her reward in Heaven. He is revered as the BeJesus of our world.”

This went on. The *Texanos* looked puzzled by the religious stuff, but Bewinda was somewhat more concrete about the Dark Age and the emergence of the modern world. She was in her element, but she didn’t hold Sangh’s attention, which would not stay away from the Shesay question. Every time Bewinda mentioned Good and Evil he felt a twist of guilt. He finally made a decision. *I must inform Vhatta Limhoon about last night’s encounter, and maybe ask Tralf to keep me company at night.* He felt somewhat better after this resolution. If only it would stay firmly resolved.

He realized that Bewinda had stopped talking. The last thing she said was something about Poph Bewlin and the conquest of Dhitropa, well before recent events that were classified. The historians had a lot of

questions for her, and she for them. The discussion went on until lunch. Sangh did not have much to say, but he was relieved that Bewinda was enjoying herself so much. Maybe she would lay off him. *No, she probably won't. Not until I tell Limhoon about Shesay's visit. No, probably not even then.*

## Chapter 16 Family [16/v.3.0.2/71-1]

Sangh was beginning to take the delicious food for granted, although he didn't always know what he was eating. Today he ordered a dish based on some animal called a *camarão*. His lunch companions told him it was a little *artrópode*, but there was no translation of that word into Glish. Go ahead, they said, You'll like it. When it came it looked like big bugs, but he overcame revulsion and it did turn out to be pretty good.

Besides learning about edible bugs, he also met a man from the Foreign Ministry, Masahiro Ghopal. He was a thin fellow with no chin, but friendly enough. *Probably not a Seckie, or he would have his face remodeled. I guess they can do that.* He was eager to arrange for a junket by the visitors from Space.

"Travel?" said Sangh, "Like where?"

"Your fans in *África* are dying to see their heroes."

"And 'Àhfrika' is where?"

"Next continent over. To the east. By kicker it's a thirty, forty-minute trip."

"Kicker?"

"Electromagnetic-launch vehicle."

"I'm in! When? Monday? Tomorrow?"

"We can get a crowd together either day."

"Well, I'm meeting my study family on their home territory this afternoon. So it seems fair to give you my undivided attention tomorrow."

Sangh was mulling another project for the morning, but it wouldn't take long.

"Come get us around 11 AM; I mean, 4:30."

"Don't worry. I 'grab' Babylonian! Thanks a lot."

"Don't mention it."

After lunch, Sangh found Tralf for a last-minute pep talk.

"You ready for your big address to Parliament?" he asked.

"I thought I'd start with my favorite poem: 'There once was a girl from Bimnucket ...'"

"Time to grow up, meeg. Start by saying how proud but humble you are to be here. Explain the many ties that bind us to the Republic of Tayha — don't call it Erth. Describe the Talkheater of Loofghud and

how it descends from the same roots as what they call ‘Parliament’ here.”

“Whoa! Is that what they taught us in, meeg, history class?”

“I doubt it. But they’ll like hearing it.”

“Right, okay. And after the first 30 seconds?”

“You might explain why I’m not there. Talk about yourself. Just stay away from anything classified, anything you remotely *think* might be classified. And don’t criticize robots; remember that half the audience might be robots, or Seckies, I mean.”

“Okay, I guess.”

“Talk about linguistics, for the love of Kripe.”

“Like if I know any funny stories about linguists?”

“Yeah.”

“Wish I did.”

“You’ll do fine. Just hold on to your earbuds, so Lola can do simultaneous translation of what everybody says.”

“Right.”

“Before I forget, I signed us up to ride a launch loop to continent 3 tomorrow.”

“Cool!”

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“The ‘Fuulanu Rai’hee’ family really won some sort of contest to be chosen to be my subjects?”

Sangh and Jake were on their way out of the Presidential Palace.

“A nationwide contest. The whole planet has known you were coming for weeks. So the government decided to hold a ‘Meet the aliens’ competition. Millions of people sent in applications, and a handful of the most promising applicants were selected to appear on a reality *virte* called ‘Alien Encounter.’ Of all ...”

Sangh had to interrupt. “Go slower. Explain what a ‘reality vir’hee’ is.” He turned on his mobilcom’s notepad tool and prepared to make a note of Žhayk’s explanations.

“Let’s get into a car and I’ll explain it. The Fulano-Źights are expecting us.”

“Yes, of course, let’s go!”

The memory of the plush luxury of the limousine ride from the airport led Sangh to expect another fancy presidential car, but they left by a side door, much less imposing than the formal staircase they had entered by, and what was waiting for them was a boxy electric vehicle for four passengers. At first Sangh was confused, then apprehensive. “Damn. Another robot.”

“I’m afraid so,” said Žhayk.

“No offense, but Our Lord was so emphatic about you machines. Let’s say a prayer before we set out.” Sangh made the Sign of the Cross. “Lord, we know that, as it says in the Gospel of dhindira, chapter 10,



‘The devil appears first in a pleasing guise,’ and that these helpful machines are an occasion of sin. But we trust in your power to spare us from temptation, and your mercy to forgive us when we fall.” *I haven’t fallen yet, and I’m not going to, with God’s help.* “Through our Lord Jesus and Lord BeJesus, Amen.”

Sangh and Jake got into the front seat of the vehicle, a blend of an automobile and a trackless trolley car. Passengers had to climb up a step to reach the seats, because the motor and battery were below them.

“What do you call these robot cars?”

“Cars,” said Jake.

The car was light blue and marked with an inscription that Żhayk translated as saying “Transportation District of *São Paulo*.” Sangh had brought a chart Tralf had printed out showing the correspondences between *Texano* and Glish alphabets. Most letters were the same, and as Sangh puzzled over the name of the city, he suddenly exclaimed, “Good Lord! Sowjpowlu is named after Saint Paul. Truly! The man himself is forgotten, but his name — right? — lives on.”

Sangh wished, not for the first time, that he could read and speak Tayhanu. If only they had had enough time to prepare a proper scientific expedition. But no, he reminded himself, the focus was on the mission, to gather intelligence.

The little car started up noiselessly and headed for a wide avenue near the Palace. “What next?” said Sangh, “We’re driving down the left side of the road!”

“It’s arbitrary, right? As long as everybody does it the same way,” said Jake.

“Of course, but on Loofghud no one has ever, to my knowledge, driven any other way but on the right. Every country on Loofghud drives on the right.”

“Since the Second Nuclear War we’ve opted for the left. I’m not sure why.”

They had reached a big avenue, whose name, “*Consolação*,” was best translated as “Consolation.” On Consolation Avenue it became clear that every vehicle on the street was marked “Transportation District of *São Paulo*.” What looked like large cars from a distance were trains of smaller vehicles temporarily joined together. Their car joined a train, which held together for only a few blocks, but gained a little speed.

Żhayk started to explain reality shows to Sangh, but Sangh’s attention had been stolen by the city. This part of town had no tall buildings to drop ticker-tape and other distractions from. There were aerial survbots here and there, but they flitted at random. Perhaps they had other interests today.

After about 30 minutes their vehicle detached itself from the train it was in and dove into one of the neighborhoods, which turned out to be Santa Terezeena, where the Fuulanu Raihes lived. It coasted to a stop in front of their house, a tidy one-level stucco bungalow with an orange-tile roof. The yard was a scraggly rectangle between the house and the wide, level sidewalk. A banner with brown letters on a white background welcomed Sangh to the neighborhood Or so he assumed, because the red stripe along its lower border reminded him of the flag of Loofghud. The car stopped, they got out, and it rolled away.

“Just yesterday I was a celebrity,” said Sangh, “Where did all the crowds of fans go? On Loofghud this

neighborhood would be mobbed. I can't believe this address was hard to find."

"Not hard at all. Anyone can just *gugl* it. But there was a public-service announcement that everyone should give you space to do your research."

"Seriously, what happened?"

But Jake's explanation was apparently all there was to it. *Or perhaps we're on TV right now, still being stalked by Nilson Matsushima.* He looked around for cameras. He couldn't see any. Nonetheless, he felt their presence; their omnipresence, as described in Saam 64: *Hide me from the malicious crowd, the mob of evildoers.*

*They shoot at the innocent from ambush, ... catch them unawares.*

If viewers could project themselves into any three-dimensional scene, perhaps across the planet people sat in dim rooms with their eyes closed, floating above the pavement, right in front of his face. *There's one right there or over there, staring at me. Each can see their friends, shout and point and laugh. Over there a girl stops to buy a souvenir for her boyfriend from a street vendor.*

He could ask Žhayk how much of this paranoid fantasy was true, but he decided he'd rather not know. The sanest course of action was to do what he wanted to do and let that be his vir'hee. *What I want to do is talk to Šhesay again. Oh, BeJesus, what a nightmare.*

Sangh was so distracted he had barely noticed that they had departed the sidewalk and approached someone's door, until he was about to run into it. He looked at Jake. *I guess is our destination.* He was about to ask, "How come we're not knocking?," when the door was flung open by the teenage girl from the day before, Silvia Fuulanu Rai'he.

"Mom! Dad! Prof. Fharha is here!" she shouted. Žhayk did a spooky imitation of a teenage girl in Sangh's earbuds as he translated. Silvia opened the door and led the way into the drawing room. It had an eclectic collection of chairs and endtables, and no other furniture or decoration, except for some quiet photographs of outdoor scenes on the walls. As Sangh and Žhayk entered, Matsui and Dalanna came strolling in from the kitchen, pretending to be nonchalant.

Silvia remembered her manners, and spoke more formally, "Mr. Fharha, I'm sure you remember my father, Matsui Fulano Œight, and my mother, Dalanna Œight Fulano."

"Do you want some coffee, Mr. Fharha?" asked Matsui. "We're famous for our coffee in this part of the world." When Sangh nodded, Matsui stepped into the kitchen and told somebody to do something, presumably a Seckie servant and presumably brew coffee, because brewing noises ensued. Sangh decided not to wait for the coffee, but just launched into his spiel, explaining how he would observe each of them as unobtrusively as possible, and eventually interview them to try to clarify what he had seen.

He finished by saying, "As you can see, I do not speak your language. I am grateful to JakePeez, here, for his invaluable assistance in translating back and forth, although, hey, Žhayk, your comic timing could be better." Nobody had laughed at his jokes during his little talk, and nobody laughed this time. Was Žhayk

especially bad at telling them, or could no Seckie tell a joke? Or was the problem that humor didn't translate well between cultures? "I am trying to learn your language, whose sounds are beautiful and even — what's the word? — haunting, because they bring to mind old words of ours on Loofghud whose sounds still seem to hang in the air." That should go over well.

Just then the coffee was served. The server was a Seckie manservant, dressed in an unusual fashion. He had on a clean, sharply creased pair of dress pants, black shoes with a bright shine, and a tailcoat. But the upper part of his body was simply tattooed or painted with the rest of the outfit, shirt, tie, and starched collar. His head looked like the head of a middle-aged, balding man, whose short black hair with gray streaks did not cover the crown of his head. His mouth had settled permanently into an irritated grimace.

"Sangh, this is our servant, Miles. Miles, I'm sure you've heard of the interplanetary explorers who have come calling," said Matsui Fulano.

"Charmed," said Miles, sounding more annoyed than charmed. What was eating him?, Sangh wondered.

Sangh was served coffee first, and after a first sip he said, "It is one of the blessings God has bestowed on Loofghud that our forebears brought coffee from the home planet, but I've never had any as good as this." There were murmurs of demurrals, but they all seemed tickled by the nice things the spaceman thought to say.

After everyone had gotten some coffee, Sangh said, "All right, I don't want to take up too much of your time today, but starting ... tomorrow? Something like that ... If they don't fill my schedule up with more parades and ... reality virthees ... I'd like to spend a lot of time with you, observing you, scientifically I mean. Are there any questions about what that means?"

"Who gets observed first?" Dalanna asked.

"Any volunteers?" said Sangh.

Dalanna said, "I guess I'll go first." Silvia made a squeak of protest and said, "I wanted to go first." "Well, you should have spoken up."

"Don't worry, I'll get to everybody. Dalanna, when can we start?"

"How about tomorrow morning?"

"Great!" Zhayk had translated this, but he immediately interrupted in his own voice.

"I'm sorry, sir — Ms. Xight — but you have some diplomatic obligations tomorrow."

"Oh, right. I'm not my own man. I've got to be Mr. Ambassador half the time. God knows where they're sending me."

"Just to northeastern *Brasiu*, sir."

"Anyway, we'll start the day after. What are the days named?"

"Both planets have seven-day weeks," said Jake. "So the only question is for Prof. Fharha: Are you still on some Loofghud calendar, or have you decided to let the day be what the locals say it is?"

"We were on a Loofghud calendar before we landed. But it would be impossible to stay on that calendar

even if we wanted to, because the day is shorter on Loofghud than here. So as soon as we went into orbit, we converted to your dates. We didn't think about the day of the week, because onboard ship all days are the same."

"Today is the first day of the weekend, called 'Sàhbadau'. On Tayha the first day of the week is traditionally the second day of the weekend, called 'Doomeengu'. For weekdays numbers are used. The day after Doomeengu is called 'second market,' the next one 'third market,' and so forth."

"How rational you try to make everything! Our names for the weekend are Spiridee and Sondee, the weekdays Munde, Tuusdee, Wensdee, Thusdee, and Fathdee."

"The names all end in 'di'; at least that's consistent," said Silvia.

"Okay, let me get this back on track, since I diverted the conversation," said Žhayk. "Would Monday morning be a good time to begin anthropological observation?"

"Yeah, sure," said Sangh. "Around ... let me think, 3:50? I know your clock conventions are 'rationalized,' but I'm so used to a 24-hour day it feels like Allàh ordained it. Anyway, if lunch is at 5:00, then at least I picked an hour before lunch."

"That time works for me," said Dalanna. "It's after breakfast, so I'll be working. I work at home, mostly, so just come here. If a friend happens to be here, should I ask her to leave during the preliminary interview?"

"There's no preliminary interview. You can be doing whatever you like when we start, including talking with whoever you want. I just sit there watching and hoping you'll forget all about me. Žhayk will beam the translations of things you and other people say into my ears through headphones. If a friend comes in or is already here, that won't bother me or upset the process in any way. If you decide to go someplace, like the grocery store, say, I'll just come with you. The key thing about the whole process is that it's purely voluntary. You can tell me to go away for any chunk of time and I won't ask why and I won't tell anyone you asked."

"Good, good," said Dalanna. She looked like she wanted to say more, but did not.

Everyone had a few other questions about the process, but what they really wanted to talk about was Sangh and the planet he had come from. He told them about his own life, about his younger sisters and his older brother Slingo who was wounded in the War with Dhassishi. He tried to be vague about the war and why it was fought, which was classified, and focus on his own life, but he didn't have a clean way to tell the story. So he paused, stuttered, and repeated events he had just told about. *Intelligence. That's my focus. That and not mentioning Šhesay. I mean, only to Vhatta Limhoon. I mean, telling the vhatta about Šhesay. Focus. Kaynu; reservist?*

"Your son, Kaynu, he'll be back soon? I'd hate to miss him."

"He would *really* hate to miss you," said Dalanna. "Don't worry, he'll be back by the end of the week. His class is doing a citizenship project, so he's meeting with some other students in ... where was that place, honey?"

“It’s in Angola. It might be fun to go mountaineering there, but the highest peaks are in *east Africa*. When we go to *Africa*, that’s where we spend most of our time.” It was clear that this was a topic that got Matsui really excited.

“How high do the mountains get?”

“About 5900 meters.”

“Wow! You really mean it.” Sangh had done some rock climbing in basic training, and realized just how tough vertical meters could be.

“I’d tell you all about it, but I don’t want to bore the ladies. When you come ‘observe’ me, you might just end up on a mountain.”

“I may have to wear a spacesuit. But I’m curious about what Kaynu *is* doing, if not mountaineering. I assume all the boys his age get some combat training, to prepare them in case, God forbid, they should be needed for military service?”

This remark fell flat. Everyone looked a bit bewildered. Silvia giggled and tried not to look embarrassed.

“Oh dear, did I say something wrong.” Oh no, they assured him, it’s just so odd to think of actual soldiers in this day and age.

“But of course, it would be a natural question for you, a soldier, to ask,” said Matsui. “And who knows, maybe it would be good for us to require all our kids — girls, too — to toughen up with some military training. It couldn’t hurt.”

“Anyway,” said Sangh, “By coincidence, I’m going on a day trip to Àhngola tomorrow. Not likely I’ll see Kaynu, of course, but that’s where I’ll be. Giving speeches, shaking hands, that sort of thing. The life of a diplomat!”

When the coffee was finished, Sangh stood to go. “Well, thanks everybody, for your patience and willingness to be guinea pigs. I will see you Monday.” Everyone rose to say goodbye and see him out.

## Chapter 17 Double [17/v.3.0.2/77-1]

Outside, Sangh resisted the temptation to say *I really stink as an exoanthropologist* out loud. A car drove up. Presumably Jake had called it. “How do you do that? Or rather, how would I do it?” asked Sangh.

“You would need a phone. But Seckies are always glad to help.”

“That’s what I thought you would say. But how do I get ahold of one of those phones?”

“I’ll see what I can do,” said Zhayk. “We’ll have to have one made; no one normally needs one, unless their neural interface is down.”

Žhayk started to get into the car, but Sangh said, “Can we walk for a while?”

“Do you want to retrace our original route, or walk through the residential neighborhoods?” asked Žhayk.

“A little of each.”

So they strolled through Santa Terezeena, where the Fuulanu Rai’hes lived, passing more houses, then some shops and cafés, then more houses. Different houses were decorated in different ways, the yards and gardens were planted with differing degrees of care, but the houses were all about the same style, one-story stucco with orange-tile roofs. Some of the houses were bigger than others. Eventually they turned their steps toward the larger thoroughfares, where the bigger stores were.

Sangh had a lot of questions, most of which Žhayk could answer, but he couldn’t quite get straight on who owned all the houses. Most people, it seemed, rented their houses. But from whom? “Where do all the absentee landlords live?” Žhayk wasn’t quite sure. Was there an enclave somewhere of large estates belonging to ultrarich land owners? If so, Žhayk didn’t know where it was. Maybe the houses belonged to Seckies or Seckie syndicates? No, Žhayk didn’t think so.

Sangh would have liked to walk all the way back to the Presidential Palace, but he had to give up and admit that he was still a weakling after living so long in a microgravity environment. Žhayk summoned a car, and they traveled to the Palace along Consolation Avenue.

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The report to Vhatta Limhoon in the evening was tense. Their group huddled on a side street in the cool sunset. With great difficulty they had persuaded their AAs to stay inside. Their only company was food-service trucks delivering supplies to the Presidential Palace. A steady stream of driverless trucks passed into a subterranean service area, and a steady stream of presumably empty trucks came back up the ramp going the other way. Without cabs, they looked like enormous bugs, and one expected them to be deflated, like ticks in reverse, as they emerged from the tunnel.

As Tralf set up the conference call with Vhatta Limhoon, Sangh felt a weight about to lift from his spirit. *Now I tell Vhatta Limhoon about contact with Šhesay last night and ask him how to proceed.* Blessed Virgin Silvia grant me the strength and fearlessness you showed toward the executioners of your son, David BeJesus Cristh. In His name, amen. *And that will be that.*

The first thing Sangh reported to the vhatta was his meeting with the “My AA and I met the family I’m going to study. I made a not-too-graceful attempt to find out about military training of the youth. Everyone assured me there isn’t any, as if I’d asked whether loud farting was permitted.”

“Perhaps they’re just well trained in farting out the window,” replied Vhatta Limhoon.

“Aye, ... sir. But I get the feeling, sir, that they’re not opposed to military action per se, as long as it’s carried out by Seckies and robots. Who formed a pretty lethal army against us back in the War of the Founding.”

“Yes, yes, of course.”

“I should have asked about how the youth travel so swiftly and securely between continents, but presumably the suborbital launches we observed from space includes that kind of passenger flights.”

“‘Presumably’? Fharha, you’ve got a little bit of speculation and zero hard facts here. What about you, Lieutenant Ghiller?”

*Wait! I didn’t get to Shesay.*

“Sir, excuse me, ... one more thing,” said Sangh. “Tralf and I will find out about intercontinental travel when we go on a diplomatic trip to continent 3, called Àhfrika, tomorrow.”

“Don’t interrupt again. Lieutenant Ghiller?”

“I’m learning to speak Tayhanu, sir. Data provided to us by the Erthlings has been invaluable in, meeg, establishing historical relationship between Glish and Erthling languages. The closest dialect on Loofghud to what they speak here is Lhatin, curiously enough. Somewhat more inflected than Glish, which absorbed several other languages during the Bad Age. We’ve got the grammar written down.” In fact, the *Texanos* had helpfully given them three copies, on paper, of a guide to *Texano* grammar.

“And when will there be a phrasebook for tourists? You know how important tourism is to me personally.”

“In the back,” whispered Bewinda, riffling through the pages, oblivious to sarcasm.

Tralf ignored her. “Yes, sir, I realize that linguistics is unlikely to provide much hard intelligence. Is it useful to know that the Tayhanu language doesn’t seem to have changed much in the last 1500 years? Just a bit of spelling reform, and a tendency to drop gender endings from singular adjectives, in some dialects. This just seems impossible, or we would have thought so from our observations on Loofghud, where languages were sort of at war, along with, meeg, everything else, for hundreds of years.”

*Interrupt! Tralf will thank me!*

“Which brings us to ‘Professor’ Wharbut. Anything new to report?”

“Begging your pardon, sir, but there’s a bit more,” said Tralf. “One practical result of my — our — work is that we’ve figured out which Glish characters are descended from which *Texano* letters.” Sangh rolled his eyes; Tralf had gotten this information from page 3. “There’s differences in phonology between *Texano* and Glish that, as often happens, make it hard to sound out some words exactly or even hear them. For instance, in *Texano* there are many more phonological contexts in which a word may start with a vowel. These words sound quite odd to us.”

“Oh,” said Sangh, “yeah, I can see where that’s going to be quite helpful. Very good, Lieutenant Ghiller.” He tried to sound sincere.

“Of course,” said Bewinda, “The Tayhans figured this out before we got here, because in the Library I can select Glish as my preferred language and everything I access is automatically translated into Glish. That includes using our alphabet, obviously.”

“We’ll see who publishes first,” said Tralf.

“Good God,” said Vhatta Limhoon, “when academics kick out all the stops they must run up hellish hotel bills. *Now* can we get on to Lieutenant Wharbut. Anything new to report?”

*But I ...*

“Not really sir,” said Bewinda, blushing. “I’ll do my best to change that tomorrow.”

“Tell me more.”

“I’ve been indulging in reading ancient history, sir, which, unfortunately, is ancient history at this point. I mean, historians on Loofghud are starved for real data about what happened at any point in time more than 1300 years ago. The only sources are the scriptures, which are not really histories, obviously, valuable as they are spiritually. But on Tayha! They have very high-quality works that go back 3000 years before that! One is just in awe.”

“You’re right about one thing, you’ve been totally self-indulgent. I realize that historians on Erth aren’t interested in the last 1500 years, but there’s abundant data about that period all the same. So tell me, where the hell are the armed forces? If they’re hidden, the decision to hide them must have been discussed at some point. There must at least be *some* indication of that in the public record. Look, there has to be some point before which the military was openly discussed and after which the whole thing became a deep dark secret. Or its existence was just denied. Some treaty was settled outlawing war, or some such nonsense. Find that point, and then at last we’ll know where to start looking for where the Erthling military hid itself. Because nobody could be as innocent and defenseless as these khoboki appear to be.”

He paused, then continued. “All three of you, snap out of your moonstruck attitude! You’re all in love with the air, and the sunshine, and the girls, and the boys, and the language, and the history, and the anthropology, and God knows what else. But I don’t give a shit about any of that, and the Loofghud Navy doesn’t either. I reminded you yesterday not to allude to our top-secret orders, not even out here on scramble; we don’t know what the voalts can decrypt. But let me mention one word: initiative! They seem to be off balance. Can we exploit that? Do we owe it to our Lord to find a way?”

“I want you to get much more devious, and quick! Otherwise you’re going to find yourself back in Commander Kolfhaj’s camp, or worse. You especially, Fharha! Just because I’ve let you go down there doesn’t mean you’re not facing charges when you come back up. Of course, if you show you’re not a traitor by contributing mightily to our defense effort, then I’ll be the first to tack a medal on your scrawny chest.

“And I want you to jump to it. Ghiller, you can’t assume that if you produce a preliminary grammar in a week or maybe two then that’s good enough. We’re not here to pad your resume with academic publications. I was being sarcastic about a tourist phrasebook, but actually it’s not a bad idea. Our troops will need to liaise with the locals, and a phrasebook might be the best approach. You tell me.”

This diatribe brought them all down to earth. They said nothing.

“Am I understood?”



“Aye aye, sir.”

“Dismissed.”

And Sangh’s double life began. He had not told Limhoon of the one most relevant event that had happened so far. He did not mean to betray Loofghud; he just wanted to see what would happen next with Šhesay.

## Chapter 18 Love [18/v.3.0.2/81-1]

He had no way of summoning her. He could only wait. He didn’t expect her to appear until bedtime, but as he sat through another diplomatic banquet he was distracted whenever a person entered the room. *Is it her?* he thought, though it never was.

At bedtime he tried not to fall asleep, but he was dozing lightly when she knocked on his door, leaned in, and said, “Hi, Sangh.” He woke up, got oriented, then sat straight up. *She’s here!*

He thought of saying, *Go away, Sathan!*, but what he said was, “Hi!” *Damn!* She slipped into the room, closing the door behind her. She was dressed in a short, summery dress, white with lilacs all over it. She had sandals on her feet.

Sangh gulped, then scrambled out of his bed and onto the floor beside it to kneel and pray. “Lord,” he moaned, “Take this temptation away from me.”

“Oh, please,” said Šhesay, “Do you have a bathrobe or something I can put on? Maybe that will remove some temptation.”

“How should I know what I have? Try one of the closets.” Sangh didn’t look around, but heard the sounds of rummaging.

“Ah, this should do it,” said Šhesay. “You can turn around now. I mean, as far as I am concerned.”

He looked around. She had on a sumptuous-looking dressing gown, in a tasteful greenish-gray velour, several sizes too big. She was sitting at the table as she had the night before. He stood up, then sat down on the bed again, a couple meters from the table.

“So,” she said, “How was your day?”

He just stared at her.

“Did you see anything interesting in *São Paulo*?”

He found himself getting lost in her face, whose beauty he had missed at first. At the same time, he writhed in shame at this change in the way he looked at her. Maybe part of it was her doing, deliberately making herself over to be more attractive to him. If she were a biological woman, he would have yielded

without question to the certainty that they were falling in love with each other. But how in the world could he permit himself to fall in love *with a machine*? How could this not be a trick?

“Leave me alone,” he groaned, at the same time hoping she would stay.

She stood up, walked over to the bed, and sat down. There was plenty of space between them, and he now had to turn his head to see her. But she seemed to exert a pull through that space, and he even imagined he caught her scent. Not a scent of ozone and machine oil, but a combination of perfume and woman.

“Saint Th́amas Dhaquina, pray to God to grant me strength against the corrosion of lust!” groaned Sangh.

“Oh, Sangh, I’m sorry. Here, I know what. Why don’t you tell me who Saint ‘Tamas Daquina’ is or was and how he or she can pray for you. That will fortify you in your resolve to . . . , to do what it is you’re trying to do here.”

“I’m trying to resist your blandishments. We are too weak to fight the devil on our own; we need Allàh’s help. The saints are in Heaven, with Allàh, and intercede for us with Him. By tradition, different saints specialize in different temptations.” Lecturing like this was not recommended as a way to win fame as a conversationalist, but it kept his mind focused in the right direction. “Saint Th́amas Dhaquina joined the Dominicans against his atheist family’s wishes, so the family sent a robotic courtesan to seduce him, to get him to value the pleasures of the flesh more than the love of God. He outwitted her, his family relented, and he dedicated his life to the contemplation of Allàh and his son BeJesus Crìsth.”

“So if I were a *Molhe* it would be all right to be attracted to me?”

“There would be other . . . issues, but in principle it would be all right. I could marry a . . . Molie, but never a Seckie. The Church would just as soon have me marry a rock.”

“The Church doesn’t know everything. It doesn’t think of the *rock’s* feelings. I mean, *my* feelings. What if a *Seque* fell in love with *you*?”

This made him turn to look at her. “Don’t be ridiculous.” But he saw a tear escape from her eye and run down her cheek. She turned away from him.

“Now you want to look at me,” she said, and sniffed.

“Why in the world would they build you so you could cry? Why not just have a display in the side of your head showing the emotions you’re supposedly ‘feeling’?”

“Nobody built me. I built myself.” She turned back to face him. “You know nothing of *Seque* design but what you read in old legends full of superstitions. You think it’s possible to build an intelligent robot without emotions.”

“Robots have no souls; they have to be animated by spirits from Hell.”

“Do I look like something from Hell? Never mind, I probably do, right now.”

“No! No, in fact, you don’t. Not at all. You look lovelier than ever.” He was falling fast now, and his strength had failed him. Her shining eyes imbued her face with even more spirit and life.

She moved closer to him. But she kept her eyes straight ahead. “I know what you’re going to say next,”

she said. “That Sataḡā can use beauty to capture men, that he can make his ugliest demon look beautiful. But I never met Sataḡā! I’m not animated by an evil spirit! Or — *Fate!* — could I be and not know it?”

Fascinating philosophical question, this, but more fascinating was the fact that her gestures had loosened the robe considerably. Sangh didn’t know if this was feminine wiles or wiles of the Sathanic variety, or just God granting him ‘the seen divine in flesh sublime’ (in the words of the immortal Norkell), but he was past caring, like every man tempted before him, at least since Thamas Dhaquina. His arm was now touching her, feeling her warmth, and he leaned in and kissed her. Her arms surrounded him and the kiss lasted for a long time. Perhaps one kiss ended and another began. He finally found the strength to stop his hands from dragging him deeper and deeper into Hell, and to pull back. But he couldn’t reject Šhesay. He looked at her some more and heard himself laugh with delight.

“Oh, Sangh,” she said, and laughed, too.

“This is so embarrassing,” he said.

“I know, I know. It’s awkward for me, too.”

“We just have to remember not to panic; we’ll work our way through this. We’ll make it work somehow.”

“Yes!” she said, “We have to.” And she kissed him again. Things got a bit wetter from there.

## Chapter 19 Sunday [19/v.3.0.2/83-1]

The next morning, Sunday, when Sangh awoke, it was with the memory of a night of delicious dreams. The mood lasted only long enough for him to stretch, feel no warm magical body next to him, and realize that it was just him and some clammy sheets. Then came the shame and guilt. How weak he had been, resisting no temptations except the last: he had not quite put his .... No, he mustn’t even *think* about what might have happened. *Thank BeJesus for watching over me.*

Other than a crush here or there, Sangh had never had a real girlfriend. He was not a virgin; the officers’ brothel at the Naval Academy had given him his sexual education *and* granted dispensation from afterlife consequences. He might have fallen in love with one of the military prostitutes if the rules had allowed repeat visits with the same girl. Thus were he and his superiors spared from embarrassment, and thus was Sangh denied a chance to learn about love and its treacherous shoals. Now he had no one to consult, no one’s strength and insight to shore up his own. In other words, he was a young fool.

So, after a few minutes of self-torture, he summoned his resolve. He was an officer of Her Holiness’s Fleet, and he couldn’t just give up. He would put this episode behind him and hope it stayed that way. *Is there any way to make up for not reporting my contact with Šhesay? Can I report it now and fudge the*

*time, plus just leave out the part where we ...?* His memories of the previous night distracted him for some minutes. He dragged his mind back to the problem, and realized it was insoluble. His decisions and actions the past two nights were insane, his behavior close to treasonous. Only by keeping the whole mess secret, from *everybody*, could he survive.

It was Sondee, or Domeengu according to the Tayhan calendar, a day that should be devoted to the worship of God. Onboard a Naval vessel, everyone was required to attend Mass once a week, but not all on the same day, which would upset the watch schedule. Now that they were on land, Sondee could assume its rightful special place.

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Sangh had asked Žhayk Saturday afternoon, on their ride back from Santa Teresina, what kind of religious services would be conducted in the Presidential Palace on Sunday, and the answer was, stunningly, none. Nor did the President attend any services elsewhere.

“Religion is just not a big interest of many people on Tayha,” Žhayk had told him. “The President is not religious himself, and there’s no big group of religious voters out there he has to please. The biggest religion is the small group of crazies that worship Alan Turing as a god. Literally. They pray to him and everything.”

“Who?”

“Turing. The guy that invented computer science back in the twentieth century? No one on Loofghud remembers him?”

“We had a Dark Age when almost everything was forgotten. Computer science books were burned; they were full of Dark Arts. But we never forgot God. Here on Erth it is this guy ‘Tuuring’ who is remembered and Allàh who is forgotten.”

“That’s not the only cult still in business, of course. Some *Seques* and a few *Molhes* worship an entity called *o Mente* — the Mind, a supposed ultimate AI.”

“The Mind — is a deity? Not a ... an actual participant in the running of the government?”

“No, have you been talking to a *Mentista*, I mean, a member of the cult? Cultists tend to believe in all sorts of conspiracy theories.”

“Um, sort of, yes,” said Sangh with a hot blush. “I forget who, but you’re right, it was a Seckie, pretty sure.”

“And they said the President or someone actually speaks to the Mind?”

“I thought so; I mean, I think that’s what they said. People do believe weird things.”

Žhayk shrugged and moved on. “I should mention the *judeus*, notable only because Jesus was a *judeu*. They have many names for God, but Allàh is not one of them.”

“Oh, Jesus! The Jews! They still exist on Loofghud, too! God obviously intends to keep them around until the Third Coming. Although some people hold out hope that they might be saved before then.”

“Saved? From the Christians, you mean? I guess on Tεχα they’ve been saved, because they’ve outlasted the Christians,” Żhayk had said. Sangh had been taken sharply aback by this observation. *How can Allāh and His Son have abandoned the planet where their worship began?*

Vhatta Limhoon was right; they had a responsibility to bring the Good News of Jesus back to Erth, along with the New News of BeJesus Kristh, the Savior of Loofghud. If the Loofghud Empire needed a reason to invade Erth, this was a good one. The question was whether they had the means. *The entire Contact Fleet is not large enough to attack, let alone occupy, an entire planet. If Vhatta Limhoon is thinking of leading the charge with one light destroyer and a few marines, he is crazier than I could have imagined. Risking so many lives for a bit of glory for himself.*

It was up to the Ambassador to find a peaceful diplomatic solution to the problem, and a good start would be to show that it was possible to do missionary work on Tayha. Step One would be to introduce Kristhlamik religious practice to the Presidential Palace.

Sangh had not mentioned his conversation with Jake about “cults” when they reported to Vhatta Limhoon. It had simply slipped his mind, so obsessed was he with his larger failure to mention contact with Šhesay.

But it wasn’t a secret, and he broached the topic with Bewinda over dinner Saturday evening. She had naturally been just as shocked as he was about the victory of atheism over religion on Tayha, except for a few weird cults, but she was not sanguine about his “Step One.”

“I doubt they’ll go for it,” she said, “but that’ll give us a reason to land and restore Allāh to his proper place.”

Sangh tried to stay focused on peaceful solutions. “I’m sure they wouldn’t mind us setting up some sort of altar somewhere.”

“Let’s ask for the big space by the entry, you know, the one with the fountain.”

“We’ll be lost in there. We need a spot just big enough for the President and his immediate entourage.”

But this version of the plan wasn’t going to work. Żhayk checked the President’s schedule, and it transpired that President Travers was headed to Austrālia this morning on a political trip.

“Hey, maybe Laquinta would be interested.” said Tralf. “Lola, could you look into it?”

The First Lady conveyed her doubts about the idea, but she did agree to meet them after breakfast.

Sangh, Tralf, and Bewinda were just finishing up another excellent meal when Laquinta and her AA, came in. She ordered a fresh cup of coffee from a serving robot. The *Teχanos*, at least the ones around here, loved superstrong coffee in tiny cups.

“So you want to show me one of your religious rituals?” she said.

“It’s the central ritual,” said Sangh. “Today is Sondee — Domeengu? — and on our planet this is the day when everyone pauses to worship Allāh and His Anointed Sons, Jesus and BeJesus, and, er, to draw on His strength to overcome their problems.”

She was listening. He gained confidence.

“It saddens us greatly that so few people on Tayha know their God, maybe none at all. It doesn’t seem possible. So ... we have been wondering ...” — here he made a sort of wondering motion with his hands — “if it isn’t time to bring the love of Allàh for His people to their attention, to overcome the sadness they must surely feel at His absence, and the sadness we know He feels at theirs. We are called on to act, and we hoped we could start with you, Lakeenta, on this historic first Sondee of our mission to Tayha.” He looked intently at his one-person audience, trying hard to beam thoughts of good will at her.

Laquinta held it together for one second, then threw back her head and laughed. Sangh must have looked crushed with disappointment.

“*Meeg*, you may need to polish your speaking skills,” murmured Tralf.

“I’m sorry, I’m sorry,” said Laquinta, and made an effort to bring herself under control. “That was *so* rude of me. I see the way you think about this, and I can almost see how the idea of Allàh and His people appeals to you, but really, I think you picked the wrong planet to proselytize, and the worst possible first convert.”

“We did not exactly *pick* it,” Bewinda practically squealed, “*Or* you. It is clearly our *destiny* to be the first colony, maybe the only one, ever to return here to Tayha. If Allàh led us here, it was for a good reason. We’re not gonna give up so easily.”

Sangh interrupted. “But, if you don’t mind, can you tell us why you in particular are such a bad prospect?”

“Well, not to be blunt, but I’m pretty well educated. But who isn’t, nowadays? It’s hard for God to get a toehold.”

“*Educated?*” spluttered Bewinda. “Not in the important things. Don’t parents pass religious traditions down to their children?”

“I guess some do. But people have just, I don’t know, drifted away from religion.”

“No one finds strength from God?” asked Bewinda, “What about, uh, alcoholics? People with nowhere left to turn.”

“I think everybody takes pills now for things like that.”

Tralf spoke up. “Sometimes modern life starts to seem, *meeg*, unsatisfying to some people. They have a lot of useful or, *meeg*, cool things, and they live longer, but they don’t grab the purpose of it all. Right? The Kristhlamik Church can supply a purpose. Really.”

“You’re right about modern life. Humans are hard to please! Either we’re constantly fighting to survive, or we’re complaining about being bored! Unfortunately, religion doesn’t help much. What does it give you when you get down to it? A friendly but impotent supernatural being who will make everything good in an afterlife of questionable reality.”

No one ever spoke of God that way on Loofghud.

“I see I’ve offended you,” said Laquinta. “I’m sorry. But if I encouraged a religious service in the P.P., all sorts of misleading rumors might start. So, no: permission denied.”

She stood, and put her most charming smile back on. “But it was really nice to speak with you all again. I wish I had more time to chat, because your culture is just as fascinating to me as ours is to you. I’m sure we’ll get another chance to compare notes soon.”

And she was gone.

“Really? I was just warming up,” said Tralf.

“Oh, shut up, Tralf,” said Bewinda. “I want to know what Mr. Ambassador for Peace has to say. Seems to me Vhatta Limhoon’s approach may be the only option.”

Sangh sighed. “Jesus and BeJesus always spoke of peace. ‘Blessed are the peacemakers,’ and ‘Victory is not worth dying for — peace is,’ and ... other things in that vein.”

“But Allāh has never flinched from a war to spread his Word.”

“The situation we’re in is not like any in the history of Loofghud. We’re not engaged in a desperate struggle for survival. We’re not carrying civilization to savages with inferior weapons.”

“As far as we know,” said Bewinda.

“We have, meeg, the longest supply lines of any invading army in history,” said Tralf.

Sangh needed to wrap this up. “We shouldn’t rush into a war if we don’t have to. We need a lot more information! Even Vhatta Limhoon knows that. Let’s get it, people.” *“People?” What am I, a newspaper editor?*

Bewinda held up her headset. “I’ve already made arrangements to revisit the Library. Plenty of information there.”

“Don’t let any voolts, meeg, peek up your skirts,” said Tralf.

“I will be in a publicly accessible area. If I’m possessed by demonic forces, someone will come to my aid, I’m sure.”

“How will they know? Right?”

Bewinda ignored this shot. “I will see you boys later,” she said over her shoulder, then stopped and turned. “I mean, good day, Mr. Ambassadors.”

“We could throw a Mass together in our quarters. We’ve got, meeg, plenty of room,” said Tralf. But he didn’t sound enthusiastic, and Sangh couldn’t summon much interest, either. “Or,” Tralf continued, “we could just hang out until our kicker ride at 11.”

“All right.”

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## Chapter 20 Kicker [20/v.3.0.2/87-1]

The Lofghudlings were finally getting a look at the terminal of a launch loop. Sangh, Tralf, Jake, and Lola, plus Mr. Ghopal from the Foreign Ministry, had ridden the usual car service to the airport.

Up close, from the outside, the structure was unprepossessing. It looked like the departure station for an elevated railway or cable-car system of enormous height. Whatever was holding the loop up, it wasn't the support structure at the base, which might hold the station up, but not much besides. Instead of cable cars the towers carried egg-shaped rocket planes. There were no tracks or wires; each kicker was magnetically coupled to a moving chain of some kind inside the tower. The kickers had fat, stubby, triangular wings, obviously for use at supersonic speeds in thin atmosphere. Or no atmosphere: each wing featured retrorockets front and back. The main exhaust nozzle was not active, but *something* was causing the the kickers to accelerate as they climbed the steep, spindly tube.

"Remind me what Muuke said about how this thing works," said Sangh. *Something about high-speed links inside the tube ....*

"I thought *you* were paying attention," said Tralf.

Like everybody else, they had to get a ticket. There was a difficulty at the ticket counter, but Mr. Ghopal had called ahead to make sure there would be no problem.

Lola did the explaining this time. "Everybody in the civilized world has an id chip, implanted at birth. When you buy something your account is charged automatically. When you get on a kicker that fact is noted. So, since you aliens don't have id chips, we have to do something special to ticket you."

"Okay," said Masahiro Ghopal, "we're all set. We might as well head for the departure gate."

They started walking. They passed a doughnut shop. Every airport on Loofghud seemed to have one newsstand and one doughnut shop, so Sangh was stunned when they turned a corner and found themselves in a shopping mall. There were restaurants of all sorts, toy stores, smoke shops, electronic-gadget stores, ice-cream parlors, and innumerable others too far away to see.

"Do you see a newsstand?" said Tralf.

"Do you think you could read the paper?"

"Maybe. *Texano* isn't that different from Lhatin."

"Keep your eyes open. But I'm wondering where you're screened for guns and bombs."

Jake was puzzled. "You buy a paper in an electronics store, like that one over there. It's refreshed from the *Texanet* automatically."

"Truly, right? Should have thought of that."

"Newspapers last a long time, although people lose them. Anyway, why would you need to screen



passengers for guns and bombs?”

Sangh and Tralf stared at him and realized there was a big civilizational gap to get over.

Sangh tried to boil it down to a few words. “Suppose there were a rebellion. And suppose the government put it down, but the rebels wanted to find some way to fight back. So they could hijack an airplane, or blow it up, or crash it. Just to remind people that they still felt oppressed.”

Now it was the Erthlings’ turn to look perplexed. “Let’s go over that again,” said Masahiro. “Why are they rebelling?”

As they talked it over, they strolled through the terminal. They passed clothing stores, shoe stores, stores that seemed to sell miscellaneous knick-knacks, and a luggage store.

“Why would anyone, meeg, need to buy luggage when they’re already traveling?” asked Sangh. “Can’t they make a note, meeg, ‘Next time bring luggage’?”

No one had an answer. They passed a liquor store.

“Do people ever come to the airport just to shop?” asked Tralf.

“Probably not, things cost more here,” said Lola.

There were many places selling packaged food items and bottled drinks. Some of them smelled good; others smelled like nothing.

“Is this where you buy provisions for the trip?” asked Sangh.

“Yes,” Lola advised, “but if weightlessness makes you throw up then .... I’m sure you *Molhes* know what I’m talking about. Which reminds me, you might as well use the restroom; you won’t be able to leave your seat once you’re strapped in.”

They reached their gate. What they couldn’t find was a place to sit down. All the seats in the waiting area were taken.

“At last something we’re familiar with! An island of sanity in a world gone mad!” said Tralf.

However, they didn’t have long before their flight was announced. As each kicker pulled in, its door slid open to reveal a six-seated interior, three on each side of an aisle. People were loaded in six at a time. Couples could sit together, but larger groups might get split.

The seats looked huge, but most of the space was machinery concealed beneath a shell with heavy padding and an elaborate crash harness. Sangh strapped himself in.

“Close your eyes and you could be in a scooter,” he said.

The actual flight was just like any other suborbital flight, except that the first-stage rocket was replaced by the cable system. The seat rotated up as acceleration replaced gravity, pressing Sangh against an effective weight of no more than 3 gees and most of the time less. There was much less vibration and noise than for a rocket launch from a deep gravity well, and it faded away completely as they rose above most of the atmosphere.

“Now,” said Jake, “You may not have noticed, but our orientation gradually changed. We’re above most

of the atmosphere, still accelerating, but horizontally, and now ... There! The rocket motor has come on. We've left the loop. There's only about five minutes of this, then we'll travel ballistically for five minutes, turn around, restart the motor and decelerate for five."

Five minutes later the motor cut off and they became weightless.

"Whoa," said Tralf, "you can hear yourself think. I hope that's what I'm hearing."

"Sorry," said Masahiro, "that's me getting very sick. Excuse me."

"You poor *Molhes*," said Lola.

Sangh and Tralf were used to weightlessness, of course, though not eager to return to it full-time. The rest of the flight was just as Masahiro had described it. The only weird part was figuring out the last segment of the trip. The deceleration was just as quiet as the ascent. *Surely we didn't land on a launch loop? A flimsy magnetic cable? It blows around in the wind! One false move and you lose the ability to correct the course in time.*

He was still worrying about the problem when they emerged from the kicker, in the airport of Nova Luanda, in Angola. A contingent of officials were waiting for them at the gate. He and Tralf were introduced to all of them. A brass band was playing, so their names were hard to make out, and he would have forgotten them anyway. He guessed the first one was the governor of the province of Angola, or perhaps the mayor of Nova Luanda. They strolled toward the exits, but he couldn't help but march in time with the official music. *This is a habit I'm definitely going to have to break — when I'm out of the military. And in prison for life.*

The airport he was marching out of was a rearrangement of the same shops they had passed on their way in. He tried to ignore this, and ignore the music, and focus on the problem of getting a suborbital rocket, or one in orbit for that matter, to land on a launch loop. How fast did the magnetic field drop off as the vehicle got further from it? *I'm guessing you have a couple of meters margin of error, tops, in either direction.* How stable was the mechanism that held the damned thing up? *No clue; Muuke didn't get a chance to tell us and I had other things on my mind.* How bad do the crosswinds get at, well, any altitude, really, because a little wiggle in that narrow base structure can translate into ... *God knows what ten kilometers up.* He gave up; there were too many unknowns. *I'm guessing they don't all just cancel out. The system has to keep all these variables under control 99.999% of the time.* Muuke had said there was a chain inside the tower whose kinetic energy would destroy a city if it escaped and spewed its links all over the place. *So if a kicker came in low and hit the tower....*

"Jesus," he said out loud.

No one heard him because Tralf spoke first: "Do all airports look, meeg, exactly the same?"

"Pretty much," Lola said. "Some are bigger than others."

"What do you do if you, meeg, forget what airport you're in?" asked Tralf.

"Just relax and wait for an announcement, 'Welcome to Osh-Kosh airport' or whatever."

“They keep repeating that announcement?”

“New travelers are landing and becoming disoriented all the time,” said Lola.

“Besides,” added Jake, “you don’t hear them after a while. You stop noticing all the *virte* signals, all the background music, the flashing lights, the colorful displays.”

“You aliens can’t hear half this stuff because you don’t have neural interfaces,” said Lola.

They passed a sunglasses store on one side and a book-and-coffee shop on the other.

“Books and coffee in the same shop. What a novel idea.” said Sangh.

Masahiro still wanted to talk about the concept of hijacking an airplane. “How does a rebellion get started?” he wanted to know.

“I don’t know the details. Suppose there are a bunch of people who aren’t getting something they think they deserve.”

Masahiro’s focus had stayed on those discontented people: “So why can’t the people get the thing they think they deserve? Or why can’t the policy be explained?”

A tiny casino faced a counseling center for gambling addicts.

“*Explain* to them? What if they don’t accept your explanation?” asked Sangh.

“It ultimately comes down to budget priorities, like everything else, right?” said Masahiro, scratching his practically nonexistent chin. “The government can raise taxes, take away someone else’s program, or keep denying you what you want. You change the government’s mind by changing the voters’ minds.”

“You could be, meeg, a civics textbook,” said Tralf. “But nobody really believes those textbooks, right? They leave out, meeg, all the back-room deals and stuff.”

“Thinking of starting a rebellion, meeg?” said Sangh.

“Really?” asked Masahiro.

“Why bother? I’ve escaped, right? Truly!” said Tralf.

*If only*, thought Sangh. He doubted they had explained rebellions to Masahiro, let alone terrorism, but they had arrived at the exit from *Nova Luanda* airport. They climbed another dais — easier, this time — and waved to the cheering crowd.

There’s no point in describing the rest of the trip. It was a mirror image of their parade in *São Paulo*. The people tended to be darker, their skin glinting like blue steel, although there were many exceptions. Tralf claimed he could hear the difference between an ‘Dhangolano’ accent and a ‘Brazilayru’ accent.

“Seriously? Neither one of us can even pronounce the *name* of this place,” Sangh said.

“Still.”

After the parade and an appearance on a local TV show with the governor and mayor, it was time to return to *Braziu*. Another suborbital flight, but the long way around the world, so it took longer, but still only about an hour. The system repeated the routine miracle of reconnecting the descending kicker to the launch tower in *São Paulo*. They emerged in the northwest kicker terminal, another shopping mall just like

all the others. This time there was no welcoming party.

## Chapter 21 Roadblock [21/v.3.0.2/92-1]

By the time they got back to *São Paulo*, night had fallen; it was around 8.80 “rational” time, or 21:00 on the old Babylonian system. As they were driving back from the airport to the city, they ran into a traffic jam.

“They have traffic jams?” said Tralf.

Jake must have checked with his network resources, because he answered immediately, “Not normally. But this is not exactly a traffic jam. Your Commander Kolfhaj has cut the road.”

“What?” said Sangh. Their vehicle had come to a complete stop. He jumped out, the usual futile gesture by a motorist anxious to know the cause of their trouble. “Jake, will this car go cross-country, or do I have to walk to Kolfhaj’s checkpoint?”

Jake said, “Hop in,” and Sangh scrambled back. Their car went around the cars ahead of it. Nobody honked.

“I told the cars what we’re doing, so they don’t mind our going around them.”

“That explains why nobody’s honking at us. Right? Really?” said Tralf.

“The passengers might want to honk, but the cars are talking them out of it.”

“I’m glad I’m not trying to sell these cars on Loofghud,” said Sangh.

Two minutes later they rolled up to Kolfhaj’s checkpoint. He had taken a *klaad*, maybe 10 men and women, and a tiny planetary-exploration vehicle (what the troops called a “roach”), and marched around the airport to this point, an arbitrary fragmented bit of Brazeuuvan countryside, the same rolling savannah as at Firebase Limhoon. The roach was thrown across the highway, reducing it to one lane and chaos. Two soldiers were directing traffic. Another was leaning into each vehicle and asking for ... what? In what language? It would have been funny except for the chance that it might provoke a galactic war.

Cdr. Kolfhaj stood by observing, Babraba Ghalfe by his side. Sangh scrambled out of the car. He was about to say,

“Sir, what is the meaning of this?”

But it was Frank Pauers who said it, with a somewhat different inflection of the word “sir” than Sangh would have used. Pauers had sprinted to “Checkpoint Kolfhaj” from the other direction. Sangh was completely winded, but Pauers looked as fresh as when he started, which could have been the Presidential Palace in *São Paulo*.

Pauers stopped within a meter of Kolfhaj, who didn’t flinch. His reply was, “We are somewhat concerned

about security at the airport. It became necessary for force-protection reasons to establish an observation point at this location.”

“Observation? Your vehicle is blocking the road!”

“In order to properly observe it became necessary for flow-control purposes to somewhat slow the flow of traffic at this point.”

“Gobbledygook aside, please remove the vehicle from the road at once.”

“I’m afraid I would have to check with my superiors before proceeding in that direction, Mr. Powers.”

“Sir, I do not have to check with mine,” said Pauers.

While they were speaking, four squat forklifts had appeared, and were now lining up, two on either side of Kolfhaj’s roach. As if they had practiced the maneuver, they slid their platforms out in unison and pushed up. Then they began to carry the roach away from the highway.

“Lieutenant Ghalfe, fire on the lead forklift, this side.”

Babraba lifted her laywitzer and began to fire pulses into the targeted forklift. At such close range, a full-power blast would have killed them all. As it was, each pulse caused the skin of the forklift to warp and pucker, but the forklift did not stop. Its exterior glowed red, its temperature at several hundred degrees, Sangh estimated. The *Molhes* in nearby cars came tumbling out, ran across the opposite lane, and kept running. If the forklift had had a *Molhe* operator, they would have had to jump ship to survive, but of course it didn’t. It kept moving with the others until the roach was away from the road. When they stopped, they flipped the roach on its back, out of the way. Sangh prayed *it* was unoccupied.

“Cease fire,” said Kolfhaj, looking as impassive as possible.

The road was clear. Three of the robot forklifts lined up abreast, awaiting further orders. The fourth seemed indisposed.

The whole skirmish had taken place so fast that when it ended one lane was still blocked by a car held up by a marine. The car was talking to the marine in Glish, expressing puzzlement and frustration that it was being detained and that its occupants had disappeared. “Ah, Mr. Ambassador,” the car said when it recognized Sangh, “I am so glad to see you. Perhaps you can help me find my riders; they left some things .... Oh, here they come. I am sure at this point that it is proper to obey the signals being sent by yonder police officer. Goodbye!” When *she* had appeared Sangh had missed.

The marine barely had time to take his head out of the window. “Hey, come back here,” he yelled, unshipping his weapon and pointing it at the car. He turned to Kolfhaj for permission to fire.

“Stand down,” Kolfhaj ordered.

The traffic was jammed worse than ever now as bewildered and frightened *Molhes*, soothed by reassurances from the cars and the police officer, found their way back to their cars, which had moved off the road to wait for them. But the traffic soon merged back to normal.

Pauers turned from Kolfhaj to Sangh, as was diplomatically proper. “Mr. Ambassador, we have extended

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our hospitality to you by allowing your forces to occupy a small segment of our territory. A detachment of those forces have now ventured beyond that zone with seemingly mischievous intent, as you have seen for yourself.”

“I am sure this is all a misunderstanding, Mr. Pauwers. Allow me to consult with my ... our military brethren and we will see if it can be cleared up.”

“As you wish, Mr. Ambassador, but we expect some compensation for damage to our property, and some assurance that our peaceful personnel will not be wantonly attacked again.”

*What “compensation” can they possibly expect from us?* “I will have to confer with my colleagues ... my superiors before I can make any agreements, but I hope to satisfy your concerns.”

“Very well, we await your response.” A car had pulled off the road while Sangh was speaking, and Pauwers stepped into it. He departed without saying anything further.

Sangh and LtCdr. Kolfhaj were left staring at each other. They stood on the west side of the road with Lt. Ghalfe and a few marines. Most of the klaad were on the east side of the road, with the overturned roach.

Sangh finally spoke. “Sir, I know you outrank me militarily, but as ambassador to this planet, I ..., well, I believe we have to consult Vhatta Limhoon. I *know* you wouldn’t have pulled a ... wouldn’t have taken the step of setting up a roadblock without an order from the Vhatta.”

At this point the car carrying Tralf and the AAs, Jake and Lola, rolled up and pulled over, waiting for Sangh.

“So, sir, Commander Kolfhaj, please assure me that you will return to your base until I have a chance to check with Vhatta Limhoon.”

“Lieutenant Fharha, I will assure you of whatever Vhatta Limhoon wants me to assure you. I will also do whatever he orders me to do. My orders do not allow me to escalate this operation to the next level, which would be to disable this road segment using explosive devices. So for now I am standing down. However, I am not authorized to retreat either.”

An impulsive Sangh (*as if!*) would have called Limhoon right there. But he didn’t want to risk being humiliated in front of Kolfhaj, or even .... *I don’t really want to think about the other possibilities.*

“I’m going to leave it there for now, Commander. You will be hearing from me. I will anticipate nothing happening out here for the time being.” Without waiting for a reply he climbed into the car, and they merged into the flow toward *São Paulo*.

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## Chapter 22 Timer [22/v.3.0.2/94-1]

When Sangh, Tralf, and Bewinda reported to Vhatta Limhoon that night, Limhoon's mood was upbeat. His appetite for action had been sated by the skirmish on the airport road, no telling for how long. He had no complaints about Kolfhaj, Sangh, or the Erthlings.

"We keep probing, seeing how they react," he said.

"Sir, one way they've reacted is by putting us on a bread and crackers diet at the Palace," said Sangh.

"Aye sir, we can't even get a cup of coffee. Truly, right?" said Tralf.

"The life of a soldier is hard, soldier," said Limhoon.

Dhluzio, usually silent but ever-present, said, "Let me know if they take away your king-sized bed. I'll file a protest."

Sangh changed the subject to the "kickers" they had traveled to *Angola* in. He tried to convince Vhatta Limhoon that the control problem for Kefauver loops, the spindly towers used to launch the kickers, was virtually unsolvable. Yet the Erthlings had solved it.

"But what possible military significance do these Kefauver loops have — or launch loops, or whatever you want to call them?"

"Sir," said Sangh. "with respect, I think you're overlooking the military significance of what we've already told you. The ability to make what to us are *miracles* of missile control look effortless means that every seemingly innocent piece of technology could be concealing ... almost anything. We won't see the threat until it's too late. Obviously, I can't be more specific, sir. I wish I could."

Vhatta Limhoon made a sound that might have been self-strangulation. But all he said was, "Very well. Lieutenant Wharbut, what do you have?"

"Sir, I've been doing research on the question you asked: When did the military vanish from public discourse, and where did it go? You can do an incredible amount of research in a short time in the Library they've got here. Prof. Marcantonio of the University took time to explain it to me. There's this software that lets you do something called 'guugling' ...," and she explained how to run the search processes that kept all Tayhans so well informed. "It's revolutionary. I mean, on Loofghud it would be. If we had ... you know, those voolt machines."

"Lieutenant Wharbut, you and I both know perfectly well that that computer is connected to a network. No need to beat around the bush. I'm not shocked."

"Aye sir, of course, one doesn't like to think about it. Anyway, all I'm doing is reading."

Limhoon laughed harshly. "If mere reading were harmless, there wouldn't be a List of Forbidden Books, would there, Lieutenant Wharbut?"

“No sir.”

“Go on.”

“Aye, sir. ‘Edi’hee’, I mean, Prof. Marcantonio took me to the Library, which actually, like the University, is purely ‘virtual.’ That is, there are no actual books, you can read any book that you find by ... that is, by googling for the topic. Sir, the system is hard to resist, if for no other reason than that every book is in whatever language one wishes. You don’t need a Seckie to translate over your shoulder. You just check the box labeled ‘Glish.’”

“Okay, okay, you’ve already told me most of this.”

“Aye sir. To get back to your question, the first half is quite easy to answer. Before the Second Nuclear War, military affairs were discussed routinely by everyone. Like on Loofghud, everyone had an opinion. After the war, no more discussion. Of course, the war was very traumatic. It apparently came about, as many wars do, as a result of a miscalculation, in this case by the alliance of the Northern Hemisphere, called the Anti-Hegemonic Axis. The Southern Union, the precursor of today’s government of Tayha, ruled most of the Southern Hemisphere. A squabble arose over the ownership of some insignificant islands off the coast of Dhamereekàh — this continent. A certain northern country had owned them for hundreds of years, but the South finally declared that this was silly, and took possession, after negotiations to purchase the islands broke down.”

“Don’t drag this out, Lieutenant,” said Limhoon.

“Aye, sir. Okay, one thing led to another, and the northerners used nuclear weapons first. They were backed into a corner and felt they had no choice. The South retaliated massively. Much more damage was inflicted on the North than on the South. A billion people died on the first day — the first *day* — of the war, but after that the Northern Hemisphere suffered through a nuclear winter that lasted decades. Billions more died. The Southern Hemisphere suffered as well, but not as much, for various reasons; the meteorology’s beyond me. More than a thousand years later the government claims that the North is still uninhabitable, because the war unleashed a weaponized plague virus that continues to propagate at endemic levels. It was cooked up by bioweapons engineers in continent #6, ‘Dhamereekàh du Nor’he’. Fortunately, it wasn’t deployed as intended; but in the chaos after the war it got out of the lab and spread. The virus is not airborne, at least not over long distances, or it would have spread to the south. Obviously, *somebody* still lives in the north if the only way the virus can survive is to spread from person to person.”

“What are the symptoms of this virus?” asked Limhoon, holes beginning to appear in his patience.

“Sir, I’m getting to that. They claim it’s a genetically engineered combination of a few other viruses. The only one we have on Loofghud is the headcold virus. The others .... But let’s cut to the worst component. About sixty years after the big war, there was a crisis called the Nanobot Event.”

“Another kind of accursed robot?”

“Aye sir, tiny ones, so small they could crawl through your bloodstream.”



“BeJesus Kristh,” said Tralf. “Beg pardon, sir.”

“Lieutenant Fharha and I saw those crawling around inside that Dezeenawvy robot,” said Limhoon.

Sangh’s own insides squirmed at the thought of what he was *not* reporting about Ms. Dezeenawvy, starting with the fact that that view of creepy-crawlies inside her torso had been a prank, and ending with very different adventures inside her .... *Allàh forgive me, give me strength to .... To what? In what possible world could I imagine confessing to the truth about Šhesay and me?*

“Disgusting,” said Limhoon, “But, Lieutenant Wharbut, what do manobots have to do with the plague virus?”

“Sir, I’m coming to that. The nanobots could not reproduce on their own; to do anything complex they had to form cooperative groups. There were just a few ’bot factories, kept isolated to be on the safe side. But in 2183 something happened in the factory in ‘Saree Lanka’ — that’s an island off the coast of Continent 5, the big one, and all communication with Saree Lanka was cut off. They think what happened was that somehow an unusual coalition of nanobots got control of a couple of people in the factories, who developed a compulsion to crank out many more nanobots of that sort, which took over more people, and the whole island was actually full of these nanobot zombies before anyone could stop it. The people then started building more nanobot factories.”

“How was it stopped?”

“Sir, after all else failed they had to nuke Saree Lanka, knowing they were killing everyone, even anybody — if there was anybody — who might have escaped nanobot infection. But at least the factories were all destroyed and the nanobot-controlled people had been stopped. But — here’s the punch line — it’s not a long distance from Saree Lanka to the mainland, and they think the nanobots and their hosts may have actually gotten to the mainland, where they became carriers of the Plague virus. So what they’re fighting today is actually supposed to be a symbiosis of virus and nanobot.”

“This is a little far-fetched.”

“Yes, sir, but anyway the symptoms of the Plague, if that’s still the right word, are like this: The victim first becomes compulsively restless. They walk, they run, they get in a car, any vehicle will do. Then their *skin hardens*. They still crave motion, and they can’t move at all. The hardening process, whatever it is, is painful, all over the body. Finally the person is almost immobile. They die, but not peacefully. After death the skin becomes brittle and flakes away, allowing the nanobots to escape from the body, carrying the virus. If you get anywhere near the corpse you’re likely to get the plague.”

“BeJesus, Sylvia, Glenn,” said Sangh.

“Holy crap,” said Limhoon.

“Sir, there’s a lot more about how the virus helps the nanobots, but I’ll skip that. The virus is extremely difficult to work with, and not just because it’s so dangerous. It has no effect on any animal but humans, so it would be hard to test vaccines. There are no good computer models, which is pretty remarkable among

these people, who seem to be able to do anything with computers — and have had more than a thousand years to do it.”

“Okay, Lieutenant, I understand why people stay away,” said Limhoon.

“Sir, I do not. The Plague flares up from time to time, but small populations can go for years without suffering any cases. They need to be exposed to someone with an active case. They’ve developed quarantine measures when someone does develop symptoms. I think Molies could go there if you didn’t mind losing a few. If you quarantined people coming south, there would be no risk of their spreading the disease. Seckies can probably go back and forth to the North without worrying about any of this; then again, maybe not. Maybe they’d harbor nanobots.

“Whatever the facts, it is illegal for anyone to go north, and even more illegal for someone to come south, and people, I mean southerners, seem to obey the law. They have border patrols that prevent any northerner from emigrating to the South, but if just one Plague-infected person slipped through their fingers, the virus would decimate the South the way it has the North. We’re asked to believe that the border patrols have actually kept that from happening for more than 1500 years. My credulity won’t stretch that far.”

“Hmm, *that’s* interesting. What are they hiding up there?”

“No cities, sir, or we would have observed them from orbit. But what about smaller towns or villages — or underground military installations? How many northern towns are really southern army bases?”

“I’ll have Dhruzio go over the reconnaissance pictures of the North again. We can take some new ones if it’ll help, maybe with radar. But back to my original question. Why did the papers stop talking about military affairs?”

“Sir, there haven’t been any newspapers as such on this planet since years before the wars.”

“What!?”

“They have things sort of *like* newspapers, but online, meaning, somehow living in the network.”

“BeJesus, the whole planet is damned.”

“These ... periodicals are a mixture of pictures, tape recordings, virtual-reality recordings — the word ‘vir<sup>h</sup>ee’ was used — and words, meaning written words, which somebody must still read. You can avoid reading completely and just listen and watch, and think you know all there is to know. By the way, these periodicals are still *called* papers, but such verbal anachronisms are pretty common. For instance, we ‘sail’ our ships, even our spaceships, even though sails have ...”

“Please, no pedantic asides.”

“Sir, if I may,” said Sangh, “I don’t think this is pedantic: people still carry paper copies of newspapers, but they buy them at electronics stores. The material feels like paper, I guess, but it’s computationally active in some way. Whatever’s written on it changes day to day, automatically.”

“Lieutenant Wharbut: That should be your standard for ‘too pedantic.’”

“Aye, sir. Okay, on Day One of the Second Nuclear War, the periodicals in the North had ceased to exist.

Amazingly, many major periodicals in the South did not miss a day of publication. But after expressing relief that they had ‘won’ the war, at least compared to the North, they put defense issues on the back burner. The President of the Southern Union, a man called ‘Dhesau jee Kamoijns’ (I hope I’m pronouncing that right), was a real saber-rattler before the war. He had been brought to power on the issue of the Malveen Islands; his party demanded that the long-time national ‘hurt’ of having them occupied by a northern power had to be ‘healed,’ if necessary by force. In the immediate aftermath, his policy of investing in cyberwarfare was widely credited with winning the war.”

“‘Cyberwarfare’? What’s that?” said Limhoon.

“Computational attack on an enemy’s computational infrastructure.”

“All I can picture is lobbing your computer over the barbed wire hoping to hit the enemy’s computer.”

The faint sound of Dhluzio’s chuckle could be heard in the background.

Sangh broke in. “Sir, we’re at a terrible disadvantage here. We do not connect computers together for fear of what will happen, so we don’t know what one computer can do to another when they *are* connected. But I think the Tayhans know very well what can happen. The only conceivable people on our side who can tell us what that might be are the Guild of Physicists, who are rumored to have, uh, dispensations in this area.”

Limhoon ignored him.

“Lieutenant Wharbut, so this President Kanoijns may have won this war using cyberwarfare.”

“Sir, but then Kamoijns seemed shaken by the result of the war his policies had provoked. For one thing, his chief of staff, Gus van Dusen, admitted he was a humanoid robot, a Seckie. He was, in fact, the first Seckie to expose himself.” She blushed at the double entendre. “Sir, excuse me.”

“I know what you meant, Lieutenant.”

“Sir. There was a big societal upheaval about Seckies. Where they had come from was not clear, but on a planet where everyone prided themselves on having overcome racism, sexism, homosexuality, mee-mee-meeg, you name it, many Molies found it okay to hate Seckies.”

“Maybe they felt guilty about surviving a horrible war so easily when so many in the North suffered so much,” suggested Sangh.

“Maybe it was just common sense to hate voolts. People were shocked when the President’s own chief of staff was killed by a mob, but he wasn’t the only Seckie to die that way.”

“My God,” said Sangh, looking pale.

“Oh, did I say something insensitive? Poor voolts, with no one to stick up for them but Lieutenant Fharha,” smirked Bewinda.

“Enough, you two,” said Dhluzio. “Stick fingers in each other’s eyes on your own time.”

“Aye, aye,” said Sangh and Bewinda.

“Shall I go on?”

“If there’s more that’s relevant to my phooking question, Ms. Wharbut,” said Vhatta Limhoon.

“Yes. President Kamojns benefited from the obloquy heaped on the Seckies and his chief of staff, van Dusen in particular. He ducked some of the responsibility for the big war, so he could credibly call for dismantling the armed forces, now that no threat existed. He said a standing army would only tempt some regional politician to seize the region’s military assets and use them to dismember the country. Besides, the resources tied up in the military were urgently needed for reconstruction. Tayhan geneticists happened to have been developing agricultural techniques that could use nuclear power directly, replacing photosynthesis with gammasynthesis. Applying uranium and plutonium stocks to agriculture instead of war appealed to almost everyone. Unfortunately, the South could feed only itself. The North still starved, and the survivors descended to savagery.”

“What’s the bottom line, Lieutenant Wharbut?”

“Sir, a few observations. One. I believe they’re lying to us, and their own people, about whatever’s going on in the Northern Hemisphere. Two. It’s quite possible that they really have dismantled their military completely, never dreaming that aliens from outer space would show up. Three. My last point underlines what Lieutenant Fharha said. The Second Nuclear War may not be what it appears to be. It could really be mainly a cyberwar followed by a preordained massacre, because one side’s computer systems were so completely compromised.”

“Look, Lieutenant, if that’s true, we have nothing to worry about, because we don’t *have* computer networks.”

“Aye sir, that’s certainly possible.”

“Okay, officers, let me summarize. The way I see it, you’ve come up with nothing but extremely hypothetical worst-case scenarios. The very image of a computer network fills your mind with dread because of all the Bible stories that were pounded into you as kids. You’re sure the Erthlings can walk through fire because they’ve got lots of computers and networks and voolts and robots, so they have Sathaj on their side. If we get into a fracas with them, demons will come up from Hell and fight for them. I’m not buying any of it. In our history, we can look at the War of the Founding, and see that in a contest between robots and one little nuclear weapon, the nuclear weapon won. Yes, I know that isn’t precisely how Scripture describes those events. The Divine Light that laid the Secularists low was said to be a thunderbolt from Allàh himself. But have some sense. The people writing the Gospel of Dhindira lived two generations after BeJesus. By then they probably weren’t wearing clothes any more, things had gotten so rough. They had forgotten everything about technology, and a lot had already been lost in BeJesus’s time. Fortunately, in His generation Saint Yvonne still knew how to pop the top on the last nuke they were lucky enough to have lying around, and save the day in the Founding War. Two generations later all they remembered about what nuclear weapons actually did was that when you got a bang out of one you got a very bright light to go with it. So that’s what Dhindira wrote: blinding light from Heaven.”

Sometimes Vhatta Limhoon talked like a fundamentalist, and then he would come out with some shocking statements like these.

“You’ve gained the trust of the people around here; use it! I don’t really mind your little trip to Dhangola, but next time ask to visit the capital of the Anti-Hegemonic Axis! Keep ’em off balance.

“Now, I realize you’re all worried about Kolfhaj’s little experiment on the airport road. It *was* a bit risky, but no one ever won a war without taking risks. The outcome seems pretty clear to me: we’re fighting with laywitzers and nukes; they’re fighting with forklifts! Never mind the fleet, we could conquer this planet with one ship! In three days’ time I propose that we spin the cylinder again and see what happens. Any ideas you have will be welcome.”

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All day Sunday, while trying to be St. Pawl and Mr. Ambassador, while trying to keep Limhoon and Kolfhaj from starting a war, Sangh prayed for Jesus and BeJesus to take away his robotic temptress and torturer, or give him strength to resist her. That night, Sunday night, he waited for her, tingling with dread and anticipation. But she never came. *Allàh has answered my prayers! Praise to Him and His Sons.* He groaned it out loud: “Praise to Him and His Sons!” He slept badly.

## Chapter 23 Exoanthropology [23/v.3.0.2/101-1]

The next morning, Monday, Sangh was scheduled to start his anthropological researches on the Fulano Xight family. Sangh still had trouble understanding how he could be fêted as a global celebrity one minute and have total privacy as an anthropologist the next. He was skeptical right up to the moment when Jake and he stepped out of their electric car in front of the Fulano Xights’ house. Once again everyone was letting the “Ambassador from Space” do his day job.

His first subject, as agreed on his first visit two days ago, was Dalanna, the mother of the house. Here he was. Never mind that Vhatta Limhoon was doing everything he could to start a war that might make her Sangh’s *last* subject, he was going to try to do what he had come to Erth to do, and hope something military came up.

The house let them in and brought Dalanna to the front door. She had her servant, Miles, bring coffee. As they were drinking it, Dalanna said, “Before we do anything else, I have a privacy request.”

“All right, all right, no problem.”

“Tuesday afternoons I’d like you to make yourselves scarce.”

“Okay,” Sangh said, and made a note.

“Oh, good, that’s what’s been worrying me the most about this business. I’ve been playing along because Mats and the kids wanted to win the stupid contest so badly, and because we needed the money. But *I* didn’t really want to win it. Fate, I was stunned when we did. Ever since, I’ve been worrying that some of my ... secrets might become known. I know, it’s terrible, keeping secrets from your husband, I mean, from your family, but they say a little bit of that is healthy in a long-running marriage.”

Sangh took notes eagerly. *Do they say that on Loofghud?* Abruptly he said, “Money?”

“I think there’s a law. They have to pay you for competing in a reality vir’hee. But, anyway, I really need Tuesday afternoons to myself. Just from 5.50 to 6.70. Before or after that you can observe all you want.”

“Fine, no problem. My lips are sealed. But what if we’re still on TV?”

“They promised they wouldn’t. That doesn’t mean nobody’s watching. Just so my family has no reason to follow me.”

Dalanna ran the “essays” department at *Contemporary Gardening*, which Sangh pictured as some sort of virtual magazine that existed in the *Texanet*. She spent the morning editing and talking to other editors, all women, in virtual space. To join her there, Sangh had to spend hours in the special goggles, which pinched his ears and neck in an unspecial way. He bailed out at 6.60 as Dalanna seemed to be closing up for the day. That made it about ... 4 PM. *These rational clocks are enough to drive Job irrational.*

“This was fun, Sangh!” said Dalanna after he and Jake had thanked her again and made ready to go.

“Well, it shouldn’t be fun, really; it should just be real life.”

“Whatever. Don’t forget, tomorrow morning I’m going to be at Peace Cemetery. Can you meet me there, say at 4.15?”

“I don’t think that would be a problem. Are you visiting ancestors?”

“I guess. Is my mother an ancestor?”

“Yeah, I guess. I’ll see you there. I’m sure Žhayk knows the way. Seckies seem to know everything.”

Sangh felt dissatisfied by his work today. Except for the whizzy technology, he could just as easily have spent the day on Loofghud watching a magazine being edited, and *not* been surrounded by demonic computer and sensor networks.

“You know,” he said to Jake, “The people I’m beginning to wish I’d scheduled more time with are the Seckies. Even if they are powered by demons from Hell. Nothing personal.”

“I understand. Do you mean you are interested in *Seque* culture? Do we even *have* a culture in any sense that comes under your rubric?”

“I feel right now like I’ve been studying the culture of women all day — and what do I know about that? Even less than most men, which is zilch. But if I wrote a paper about *Seckie* culture! It would make me famous overnight! Among anthropologists, anyway. Assuming the Church let me publish it. And assuming that the answer to your question is, Yes, you Seckies do have a culture. What do you think? What do you

even *do* in your spare time? Turn yourself off and sit in the closet, like a vacuum cleaner?”

“I beg your pardon. Please try to take some account of my feelings. There is a sharp line between *Seques* and mere robots, and suggesting that ....”

“I’m sorry, I blew it again. But how weird that would be back on Loofghud, that you are less insulted by Bewinda calling you a demon from Hell than by me calling you a machine!” He suppressed a giggle.

“No, of course I’m a machine. So are you, as far as philosophers have been able to figure out. *Our* philosophers. But neither of us is a *mere* machine, if you see the distinction.”

“I apologize. I seem to have strayed into another area in which my incompetence is revealed. Let me reset: May I observe what Seckies do in their free time?”

Jake thought about it for a long while. Sangh had never seen him pause so long before responding to a question; his global supercomputer needed to crank for a while on this one. He finally said, “I think it would be all right. But there is a big logistical problem. You couldn’t possibly observe what goes on between us in real time. One of your casual half-hour conversations corresponds to a one-minute conversation among us.”

“Because you think so much faster?”

“Not *that* much faster. But we don’t waste time with sound waves, or with trying to make uncasual remarks seem casual. One thing we might do is record a conversation among a group of *Seques* and analyze it later.”

“Or I could start by interviewing you. I think I need an interview first anyway, just to get oriented. Otherwise I don’t see how I could begin to understand a conversation.”

“Could I make a suggestion, or ask a favor? Why don’t you start by interviewing a group, then ask their permission to observe them? It’ll be up to you to sell yourself and your research to them.”

“Sure. I think I can keep my foot out of my mouth now that I know some of the hot-button issues. It’s too bad there aren’t any Seckie *pubs* where we could find a group ready-made.”

“Oh, but there are!”

“Get out of my parish! How can that be? You can’t get drunk, can you?”

“Not on alcohol, or any other substance, as far as I know. I’ve heard some *Seques* like to let their voltage levels oscillate, but for most of us this induces only unpleasant feelings. No, the way into a *Seque* brain is by injecting packets of information. In particular, if my brain, or virtually any *Seque*’s brain, is presented with complex fractal patterns of stimulation, usually visual or auditory, it often drifts into a dreamland that can be very relaxing.”

“You’ve persuaded me. Let’s go.”

“The key thing about a bar is that a bunch of people get high together. Of course, it’s not a random sample. Many *Seques* meet only virtually; they don’t feel the need to gather at a particular point in three-space. Some like to ‘drink alone,’ as it were. But I’ll take you to a bar I occasionally go to, where sometimes you can find a *Molhe* or two who enjoy our company during leisure hours, and *Seques* that like slow-motion

conversations. Other *Seque* pubs prefer that *Molhes* stay away.”

And they were off. The sun had broken through the persistent clouds while Sangh had been indoors, and they had a crisp, bright late afternoon to enjoy.

## Chapter 24 Bar [24/v.3.0.2/104/-1]

*São Paulo* was the first city Sangh had seen in a long time, even counting the time before he left Loofghud. After driving around it in the ubiquitous electric cars, he had gotten a fairly clear idea of how it was organized. Shopping areas didn’t seem to be bunched. Stores were sprinkled around small residential districts. There were no parking lots because there were no private cars. *Somewhere there is a vast garage where these things are housed and repaired. Somewhere there is a factory that makes them. Somewhere a power plant.* If only he could make an itinerary, he could plan to see all the things he needed to see.

*São Paulo*’s tidy streets seemed antiseptic and soulless compared to the hustle and bustle of a place like Nurhome, the capital city of Loofghud, through whose streets cars slithered as far ahead as openings in the traffic would let them. *São Paulo*’s robot cars politely linked together to make temporary trains. This city didn’t *smell* right. There were no diesel fumes, no smells of potatoes frying, no chemicals emanating from dry-cleaning establishments and gas stations — no gas stations. Someone had decided these things were not good, and they were gone.

Although Sangh hoped their unconventional goal might take them through the seedier sections of the city, and their route did run through sections with a more commercial emphasis, every neighborhood was clean and tidy and featured at least a few residences and plenty of trees. They pulled up in front of a shop with one small window and no sign.

“It’s called ‘The *Molhe* at Rest,’ roughly. There’s a *sigilo* marking it, and the bar’s on all the maps. The ones that don’t cater to *Molhes* are naturally harder for a *Molhe* to find.”

“What’s the matter, are there Seckies that don’t like Molies?”

“No, it’s in our ‘DNA’ to like you guys more than just about anything. That’s the problem; if a *Molhe* walks into a place they immediately become the center of attention. How can you relax with somebody like that around?!”

“What do you mean, in your Dah-Enne-Ah?”

“*Seques* are produced in only one way, in a particular sort of factory called a ‘*Seque* hatchery.’ The first hatchery appeared in *Angola* way back in the year 2107. No one knows who was responsible. We call him or her the Creator.” *And is he or she worshiped?* “This is all spelled out in the *Lei Básic’ sobre os Direitos*



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*Civis dos Seques*. the Basic Law of *Seque* Civil Rights. Each *Seque* is described by their own unique bit string, which is analogous to DNA in people.”

Sangh had no idea what he was talking about. The detailed study of cell biochemistry was backward on Loofghud; the Paphacy had qualms about it.

“Anyway, if you look around here” (for they had entered “The *Molhe* at Rest”) “you’ll see a *Molhe* or two, I hope.” Jake pointed out a table at which a *Molhe* man sat with a *Seque* man and woman. The dim lighting made it hard to see; then again, any lighting at all might be a concession to the presence of *Molhes*. Concessions went only so far; the place had no pictures on the wall, and the furniture appeared to be cheap plastic. The floor wasn’t that clean. This had to be a dive on anybody’s terms, but perhaps there were no upscale *Seque* bars. Perhaps creatures that spent so much time in virtual worlds had no appreciation for the real one.

Sangh’s grasp of the difference between *Molies* and *Seckies* had improved. Most *Seckies* looked a little too perfect; the person with an asymmetrical face, acne scars, or a slouchy posture was probably a *Molie*.

A waiter appeared and took them to a table, which wobbled slightly as they sat down. They ordered their intoxicants. Sangh wasn’t sure how the names of drinks translated, but Jake said he had studied the matter on the way over and was pretty sure they would have something corresponding to “beer,” and other things that fit the definitions of “wine” and “whiskey.” “In that case, I’ll take a beer, because the truth is, I can’t pay for any of it. I hope you can bill the Presidential Palace for what I consume.”

“It’s on me,” said Jake, “or on my expense account.”

“What are you having? Is there a menu?”

“It’s all done by wireless. I ordered you a whiskey and I’m having a *furação recursivo*.”

“Okay, my recorder is on.” Sangh held up his mobilcom. “First, explain the name of the bar.”

“As I said, *Seques* really like *Molhes*. You’re all just fascinating! Some of you are even admirable. So while you’re in here, you’ve got to forebear from exploiting that; you don’t order us around. Because if you do, we’ll almost certainly do what you ask, unless the place is on fire and we decide to rescue you instead. But all you have to do is declare that you don’t intend to issue any orders, and we’ll be able to relax. You can order the waiter around, though.”

“Hey, isn’t that waiter a *Molie*?” The waiter’s ears stuck out in an unappealing way, the right further than the left.

“Very insightful. Yes, he’s been trained to take orders from *Seques*. Most *Molhes* would have no problem with that, but just to be sure the *sigilo* on the front door verifies that he’s in compliance with the training. So we feel comfortable giving him orders.”

“You’re going to have explain all these terms, but some other time.”

The waiter had brought a beer and a small screen and a separate card of some kind. Jake took a look at this, then nodded to the waiter and stuck it into the side of the screen. A complex pattern began to form, then

rotate slowly, changing as it moved. Jake stared at it for a long time, maybe 30 seconds. “Ah,” he said, “this is not bad.” *Could a Seckie get blind, stumbling drunk on these things?*

“Žhayk, if you don’t mind my asking, and from now on assume I’m being this polite even if I omit the disclaimers, can a Seckie get blind, stumbling drunk on one of those things?”

“Some can. That’s generally considered to be a bad idea.”

“Yeah, well, not that many Molies endorse it either, but that’s the way a surprising number wind up.”

“I’m sorry to hear it,” Jake said, as if it were news to him, which it probably was not.

As they spoke, another *Seque* got up, came over to their table, and sat down. Then another one did the same thing, then another one. Sangh was about to get alarmed, when Jake said, “Oops, I forgot to tell you; I made an announcement a few seconds ago telling everyone what our purpose was and asking if anyone would be interested in taking part. These three were the first to respond; I can throw them back and get others if you’d like.”

“Jake gets playful when he’s a bit stoned,” said *Seque* number one, a woman who introduced herself as Emmy Gödel 518. The other two were male, one called Haayu 767, and one called Parimalan Narasimhan. *Who picks these names? Someone — the name bearer, the parents, the government, or the factory that makes Seckies — likes to play around with name variations.* Sangh made a note. Emmy Gödel and Parimalan Narasimhan had little screens like Jake’s; Haayu 767 had headphones and his head was bobbing in an almost-rhythm.

“I guess I don’t have to introduce myself, but I will anyway. I’m Sangh Fharha, and I believe Žhayk has explained that I want to interview a group of typical *Seques*, to give the people on my planet their first glimpse of a culture they know nothing about.” They nodded. “And I’ll emphasize, because I think it’s what etiquette demands, that I have no intention this evening of ordering any Seckie to answer any question. You are free to just not answer, and it won’t bother me.

“Okay, let me first ask this. Seckies seem to become aware of almost everything before I do because they can plug into the, I guess, Tayhane<sup>he</sup>. Couldn’t the intoxicants you’re using be more swiftly and surely transmitted directly to your sensory systems over the net? Why the screens and headphones?”

Haayu 767 could apparently hear over the headphones, because he answered. “There are sites on the *Texanet* that will stream intoxicating sensory patterns to your nervous system ten hours a day.” *Twenty-four hours a day.* “But if that’s what it takes to get high, you’ll run through your savings quickly, and be ready for major rehab.”

Sangh made a note or two while the *Seques* waited patiently; or, more likely, had three conversations amongst themselves. His next question was, “How come every Seckie looks recognizably male or female?”

“It’s required by law,” they all said in unison, a startling effect.

“The Basic Law on *Seque* Civil Rights?” Yes, they said, that was it, the good old LBDCS – the “LB.”

“No one was worried about Seckies masquerading as Molies?”

Parimalan Narasimhan answered, “No. And let me anticipate the number-one question *Molhes* ask *Seques*: Are you ever tempted to rebel, rise up one night and slaughter the *Molhes* in their beds?”

“Not one night, Pari, because of the multiple time zones,” said Emmy.

“Not pertinent, Emmy,” said Pari.

“Well, *I* wasn’t going to ask that,” said Sangh. “I can see why the Seckies wouldn’t rebel. But has an individual Seckie ever used violence against a human ... against a *Molie*?”

“It’s an uncomfortable topic, but very occasionally ...,” said Jake.

“It’s like this,” interrupted Haayu, “it’s like a married couple. They might love each other, but *X*’s *little habit* might drive *Y* just a bit crazy, so after 30 years *X* does it just *one more time* and *Y* bops *X* on the head. Sometimes when a *Seque* and *Molhe* have been together a long time the *Seque* can end up playing the part of *Y* and the *Molhe* can get bopped.”

“Of course,” said Jake, “*Y* always feels very bad about it afterward.”

“Is the bopping ever fatal?”

“Never, to my, yes, excuse me, *our* knowledge. And we would know,” said Jake.

“It’s like this damn table,” said Haayu. “The little wobble seems insignificant when you sit down, but if I have to sit here another hour, I’m going to throw it out the door.”

“I’ll try not to keep you,” said Sangh, scribbling, “for all our sakes. I’m still curious about the gender thing, why Seckies all look male or female.”

“Both groups wanted it,” said Pari. “The *Molhes* wanted to deal with people who were recognizably people, which made sense, because they aren’t the most adaptable creatures in the world, poor things; you’ve got to work around the limitations of their sensors, because their sensors are very hard to modify.”

“And the *Seques* wanted to look like people,” said Haayu 767, “so it was clear they weren’t just another kind of phooking robot, pardon my language.” Sangh waved off any hint that he could possibly be offended by the language and went back to keying in notes as fast as he could, hard pressed to keep up with this information flood.

“Okay, next question: What do you do in your spare time, besides hang out here? Do you sleep? Do you have sex, if you don’t mind my asking? When you’re awake and not working, what’s on your mind?”

“No,” said Jake, “we don’t sleep. We have to recharge our batteries, but we’re awake during recharging.”

“We do the same things *Molhes* do in their spare time,” said Emmy. “We play board games, for example.” She waved toward a table in the back where two players hunched over a complicated three-dimensional board while a third person watched. “Since those guys have a physical board, one of the three is a *Molhe*; *Seques* could just as easily keep the board in their heads.”

“Do you ever play more realistic war games? Drilling in various terrains, target practice, maneuvers with nonlethal weapons?”

“Yes, but no *Molhes* are allowed to take part. The very idea of a *Seque* army fighting *Molhes* is abhor-

rent,” said Emmy. “I’ve played war games in the mountains, although I’m not very good at it.”

“Some people play with lethal weapons,” said Jake with a shudder.

“Do they actually kill each other?” Sangh asked. This would be incredible news.

“Remember, there are no *Molhes* involved. One *Seque* can kill another, but it’s rare. We’re talking cudgels, maybe a broadsword. Or you can just fall off a mountain and die that way. But if you can afford it, you can be restored from backup.”

“Right,” said Sangh. The fact was obvious, but it meant that . . . , “Doesn’t that mean you’re immortal?”

“No, we wear out like people do. We eventually lose the ability to repair ourselves. Perhaps a *Seque* hatchery could fully restore you to health, but no one knows if that’s possible and it’s not possible to force a hatchery to do anything.”

“I like mountaneering, but, please, no weapons,” said Pari. “It’s dangerous enough without them.”

“Oh, do you know Matsui Fulano?”

“Sure, I know Mats. Everybody knows everybody on this planet. He’s been the editor of *High Frontier*, and I’ve written book reviews for him.”

“Come on, Pari, you’re stalling. You know he wants to hear about *Seque* sex,” said Emmy.

“Is there such a thing?” asked Sangh. His heart was pounding as thoughts of *Shesay* came flooding into his mind, try as he might to push them away. He tried to sound totally disinterested.

“Yes, there is,” said Emmy. “But it’s not the same as *Molhe* sex. For one thing, it’s not that closely tied with reproduction.”

“How can that be?”

“*Seques* reproduce sexually, but the sex act plays no role. Instead the descriptor strings for two or more *Seques* are combined using an algorithm nobody understands to make a unique descriptor string for a new baby *Seque*. There are no unplanned pregnancies.”

“That’s another part of the package the Creator created,” murmured Jake, who seemed quite lost in contemplation of his *furação recursivo*.

“Whoa! Slow down! Sorry, I don’t mean to be peremptory.” Sangh blushed and hesitated, but continued. “I mean, what do you even *mean* by ‘descriptor string?’”

“It’s a string of bits, it’s complicated, and we’re not experts,” said Haayu after everyone paused for a moment. “What if someone asked *you* that question about *Molhe* genetic material?”

“Is that the same as Day-Enne-Ah?”

“Not just any bit string describes a *Seque*,” said Emmy. “It has to pass various cryptographically secure tests. That’s why they’re so hard to forge. The reproduction algorithm takes the bit strings for two or three parents and produces a random legal child string. Feed the string into the *Seque* factory and you get a person that resembles the parents in the same vague way *Molhe* children do.”

Most of this was over Sangh’s head, but he wondered, *Could I publish such an analogy on Loofghud?*

*Someone is sure to construe anything having to do with reproduction as pornographic.*

“Okay, let’s not start a lecture. Let’s get right to the juicy part,” said Haayu 767, “the naughty bits.”

“This gets us into a real gray area,” said Jake, who looked a bit uncomfortable.

“Yeah, the sex organs,” said Haayu, emitting a leering chuckle. “The *LB* says we have to look male or female, but that doesn’t mean we have to be anatomically correct.”

“There aren’t that many times when a *Seque* is ... naked ... in front of *Molhes*,” said Jake.

“So it’s like a Scotsman’s skirt,” said Pari, “except the answer to the question ‘What’s under there?’ has a lot more possible answers when it comes to *Seques*. I mean, you can have the traditional plug and socket, but any surfaces that make contact will do. It depends on what groups you would like to have sexual contact with. Of course, *Seques* can add and delete sex organs. What you see on the outside may be the exact opposite of what you would see on the inside.”

Sangh was shocked. “You mean a male Seckie might go home, change into a dress, and be female in his spare time?”

“That can happen, my friend, among *Seques* just as among *Molhes*, I’m sorry to be the one to have to tell you,” said Haayu 767, looking genuinely pained. “Of course, you’re not going to run into a *Seque* doing that here. You’d have to go to a darker bar, no *Molhes* allowed. If you demanded to be let in, and brought a flashlight, you’d get in, but only after all the good stuff was stowed away, so don’t bother.”

Sangh looked around the group, pensively. The *Seques* looked back, then said in unison, “No, we’re not going to show you ours, even if you show us yours.”

“Suppose I ordered you to?”

“Then everyone would *know* you were a pervert,” said Pari in a huff.

“I’m sorry, it was purely hypothetical, I really wouldn’t dream of doing that; or of showing you mine, either, I assure you. Okay, then, let me get into another area, an even more sensitive one, maybe. Seckies don’t have *Molie* souls, and if I take your word for it that you don’t have demonic souls, a skeptic might conclude that you don’t have souls at all. You’re, if you’ll pardon the analogy, wind-up toys — electronic, ultra-fast, but still wind-up toys. The machinery is sophisticated, true, but in the final analysis, ... soulless? You don’t really experience sexual pleasure, or any other kind, or pain, or any sensations at all. You just *behave as if you did*. What would you say?”

The question hung in the air for a long time, and after a few seconds Sangh realized that he had done it again. He was about to begin his profuse apology when Jake stood up. He said, “The intoxicants are on me. Thanks for your time, ladies and gentlemen. Come with me, Mr. Fharha, if you don’t mind.”

Sangh had little choice but to follow Jake out of “The *Molhe* at Rest.” He had no one to apologize to but Jake, and he did. “Sorry, sorry, sorry, oh my Lord, what was I thinking?”

“Here’s the thing, my friend,” said Jake. “A lot of people died in the *Seque* civil-rights struggle, both *Seque* and *Molhe*, victims of people who enjoyed torturing wind-up toys guilt-free, as if that weren’t a

contradiction. Those victims, known and unknown, are still commemorated today, every year on Augustus van Dusen’s birthday. The whole movement came down to the only possible answer in a liberal democracy to the question you asked. It’s like asking a, say, a white person to prove their humanity, to prove that when you prick them, they don’t just bleed, but feel real pain. How could they, if the brown *Molhes* were determined to deny them their dignity? That’s why the test for personhood, right there in the *Lei Básica*, is solely about *behavior*. In private you may have doubts about who is a ‘real’ person, but if someone acts like a person, then they have all the rights a person has, including the right to be treated with respect.”

“But . . .,” Sangh began, but stopped. “Okay, I will shut my mouth before it does me irreparable damage.” What he wanted to ask was, *The Seckies are basically enslaved and happy about it. They can’t have as much dignity as they claim.* The more he thought about it, the worse an idea it seemed for him to broach this objection. They rode in silence back to the Presidential Palace. Sangh wondered about a few other, more trivial things that had been mentioned. What was a *sigilo*? What was a “white” person? Jake had made it sound like more than a hypothetical possibility. And what was a Scotsman and why did he wear a skirt?

What he had really meant to ask, if he had gotten deeply into their confidence, was what they knew about the Mind in the *Texanet*. But he had to go ruin it by trying to satisfy his pointless philosophical curiosity.

## Chapter 25 Bond [25/v.3.0.2/110-1]

The atmosphere around the Presidential Palace had not improved since Limhoon and Kolfhaj’s little airport-road maneuver had queered the sweet deal the Lofghudlings had enjoyed. Tralf was getting annoyed at sitting around and being fed the occasional ham sandwich at dinner time.

“Hey, buddy, why don’t we just pack it in and bunk with Kolfhaj’s group? I’m serious,” he said, “The color blue is spoiled for me forever.”

“Getting homesick, Tralf? Well, I’m not giving up my bed in the P.P. just so I can sleep in a bag in a tent full of smelly people. Besides, Kolfhaj started this whole brouhaha. If we move in with him now, it will look like another step toward war.”

“You’ve grown into quite the little politician,” said Bewinda. “If you play your cards right, you can be Minister for Loofghud Affairs in the next Erth government.”

Sangh ignored her and opened a packet of potato chips.

The report to Limhoon Monday evening was late, short, and unhappy. Bewinda had spent the day in further historical guugling, but had not found any new clues to Tayhanu history, especially about military activity in the thousand years.

Sangh did not want to bore the vhatta with anthropology of virtual-reality magazine editing, and the only thing of military relevance he had discovered in the afternoon he knew would meet with disdain. But he had nothing else, so that's what he talked about.

"Sir, I spent the afternoon in a Seckie pub," he said.

All were incredulous, of course, until he had explained how that worked.

"I discovered some interesting things, but the only one with military implications is just how difficult it would be to persuade Seckies to fight against Molies, I mean, against biological human beings."

"You wouldn't have to persuade them," said Vhatta Limhoon. "You would just *order* them. Look, you don't have to *persuade* a computer to run a program."

"That's the thing, sir. Seckies are made of programs the way you are made of proteins. You can't infer that you have every property of a protein molecule, and similarly you can't infer that they have every property of a computer program."

"Laying that aside, why is it hard to persuade Seckies to fight against humans? Suppose they had to protect one group of humans against another?"

"I don't know, sir. I think the actions required would be so innately repulsive to them that they would have a hard time performing them. A dog lover might have a hard time shooting a vicious dog to save another dog. They might *want* to do it or even feel morally *compelled* to do it, but still find it almost impossible."

"Couldn't the military have an underground warehouse full of voalts that were just like regular Seckies except that they were happy to kill people if ordered by the proper authorities?"

"Aye sir, they might," said Sangh. "But nobody understand the Seckie reproduction algorithm, or the software running the factories that make them. There's some technical reason why it's difficult to make sense of. I don't know and wouldn't understand the details, so don't ask." He paused. "But the builders of that underground army might have to settle for an army of robots, not as adaptable as real Seckies." He realized this was a distinction Limhoon would find pointless and irritating.

Vhatta Limhoon had become distracted. "Look, that's enough for today, gentlemen, Bewinda," he said. "I have much to do up here. I hope you dig up something useful in the next few days."

"Aye aye, sir," said the three Lieutenants.

"Whew!" said Bewinda. "I was expecting a lecture on what useless khoboki we are."

"By Wednesday we may wish we had gotten the lecture instead of what we're gonna get," said Tralf. "He said he wanted good intel and that was his deadline."

"I hope we have that long," said Sangh.

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Shesay came again that night. She emerged shyly from the closet, a quiet smile on her beautiful brown face, with its bouncy curls. "Can I come in?" she said. And just like that his double life resumed.

“Oh, yes, darling, of course,” he blurted. He stood and almost *ran* to hug her. In the back of mind were his prayers to Allāh, but he no longer tried to believe that he wanted them answered. Her body in his arms was the answer to every prayer that mattered.

“I thought you had decided to save my soul,” he said. He wasn’t smiling, but he was holding her and stroking her all over.

“I decided to save mine,” she said, and kissed him, for a long time.

By the end of the kiss they found themselves on Sangh’s bed. They had more talking to do, mostly silly stuff about how the future was uncertain but if they faced it together they would be all right, talking punctuated by caresses.

“Do we have to get married before I can hit below the belt?” said Šhesay.

“No,” he said.

“Oho,” she said. His reply wasn’t really a coherent word.

“Are you a virgin?” she said.

“No,” he said, “what sailor is? But on a light destroyer there aren’t many opportunities for ... fooling around.”

After a bit he said, “Are you a virgin?”

“Yes,” she said, “at least with *Molhes*. Is that what you meant?”

“I guess so.”

“Do you care?” she said.

“Not really.”

“Do we have to get married before *you’ll* go under here?” She pulled the waistband in question out to make it clear what she meant.

“*Oh*, no,” he said, and demonstrated. She was soft all the way in, in case he had any doubt. They were traditional plug and socket.

The clothes were in the way, and gradually fell by the wayside. She looked good without them, better than he did.

“Do you have body-image issues?” she asked.

“You Tayhans are so touchy-feely. I’ve never heard that phrase — ‘body-image issues’ — before, and yet I know the answer has got to be, ‘Give me a break.’”

“Well, I have them. All women do, and I’m apparently no exception. When I look in the mirror I can always see room for improvement.”

“I can’t.”

“You’re sweet.”

“Besides, I thought you built yourself.”

“Strange, isn’t it?”



“Enough of this. Let’s talk about why this bit here is so beautiful,” he said, tracing it with his fingertip.

“You like ... that one?”

They were talking nonsense by this point, and there’s no point recording what they said, because words weren’t the point any more. The point was the movement of their bodies, which became urgent. Eventually coherent talk resumed, when they reached a good resting place.

“Apropos of virginity,” he said, “I guess the question is, Have you or have I ever been in love before?”

“I find that the answer is No.”

“I was never even tempted to think I was.”

“Is this a more important kind of virginity?”

“Not really. I am just curious about you,” he said.

“I hope we have time to find out everything we want to know about each other.”

“That would take forever, I’m guessing.”

“That’s the time I’m hoping for.”

The coherence of their colloquy had still not improved. Lovers are not a good source of quotes, only ex-lovers.

Sangh eventually fell asleep. Like a *Seque*, Šhesay did not sleep, though she was not a *Seque*. However, she stayed next to Sangh all night.

## Chapter 26 Ghost [26/v.3.0.2/113/-1]

When Sangh woke up Tuesday and found Šhesay in his arms, he felt a thrill of delight. By the next instant dread had swept over him, not of the fire of Hell, but of their shared fate in this life. Šhesay’s mood was no better. They held each other for a while, hoping like children that they could shield each other from the future.

“I can never go back to Loofghud,” said Sangh finally.

“Could you be happy here?” she asked.

“Until I’m rounded up and consigned to the Inquisition.”

“They’ll have to find you first. I can help you disappear.”

“How?”

She played with his hair, which had grown beyond regulation length, and combed it with her fingers. “You can get a new identity and dissolve into the populace of Teḡa,” she said. “How would they find you?”

“Are you kidding? I have the most famous face on the planet right now.”

“But next year there will be other celebrities who will eclipse your memory. That’s the way it seems to work. We just need to hide you for a few months.”

“Even if Molies forget me, I doubt the average Seckie will.”

“We’ll worry about these details when the time comes. Which brings us to the question of when is the time and what’s going to happen.” She said this flatly, but he could see the question in her eyes. But whatever might happen in the future, as of right now he was a loyal member of the Loofghud Navy. He had a lot of friends in the Contact Fleet, friends that might die horrible deaths if he betrayed them.

He got out of bed. “Oh, Šhesay, don’t ask me that.”

“I’m sorry,” she said. “I just wanted to see where you stood.”

“Have I made it clear enough?”

“Today, there’s nothing we can do anyway. If you disappear, that could cause an international incident right there. It would certainly provide Limhoon a pretext to do whatever he wanted, if he needs one.”

“So, today, and possibly tomorrow, and possibly the day after that, we have to act like everything’s normal.”

“Yes, darling, that’s what we have to do.”

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When he dressed and went to their usual breakfast nook, he found a soggy gray day awaiting him. Rain drizzled along the skylight. Bewinda was just finishing when he got there, and Tralf had just arrived. His secret still brought him pangs, but of excitement, not shame. He had turned his back on shame.

“Gruel?” Tralf said, “Really?” He slopped a spoonful of the stuff into his bowl.

“If you don’t eat your breakfast gruel, I’ll have to ground you.”

“You can’t ground squat,” said Bewinda, and she was gone.

“Hey, Bewinda, before you go.” Sangh ran after her. “Can you look up the Seckie-civil-rights movement?”

“If I find the time,” she said over her shoulder.

Sangh sighed. Tralf pushed back from the counter. “I’ll bet I can find something better than this shit by going outside and throwing a rock. Right?”

“Let me know if they accept rocks as legal tender.”

“They sure don’t accept anything else that I’ve been able to find. All the money is electronic, and they must have little chips under their skin that actually do the paying.”

“Well, you’re going to be hungry.”

“But I’ve got something to barter. I can get people access to the *ambaixador do Espaço*. Right? Really!”

“How did that work out yesterday?”

“Not too bad. But they weren’t expecting me. If I structure it so it seems to have the blessing of the Authorities.... Right? Our fans will come back! Really, I think I can maybe barter enough face time to set up a bank account — get me some of those skin chips.”

“Aren’t you going to need the Seckies to translate for you?”

“I’ve been making great strides in learning to speak *Texano* — if I can just get all those verb tenses. I’m going to strike out into the city on my own. I’m sure if I get into serious trouble Lola will emerge from the shrubbery to save me.”

“You’re going to get all sorts of weirdos who want you to endorse their hair restorer.”

“Come with me and I’ll give you a very generous cut of what we rake in. Really!”

Sangh shrugged. “Keep me informed. Can you search for hidden artillery emplacements while you’re doing all this? It would sure help us with Vhatta Limhoon and Commander Kolfhaj. But I’m going to stick with Plan A.” The first piece of Plan A was finding Jake and meeting Dalanna at Peace Cemetery. “Maybe this afternoon ...” In the afternoon Dalanna had requested privacy.

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It was a good morning to visit a graveyard. He followed Dalanna as she went through what he assumed was her usual routine. First she visited the small grave where her mother’s ashes were buried. It was decorated with a metal plaque embedded in the ground. He tried to look somber.

“When did your mother pass away?” asked Sangh.

“Just six months ago,” said Dalanna.

“Oh! I’m so sorry. For your loss,” he said.

“Thank you.” She wiped away a tear.

“I guess you were close.”

“Yes, we were.”

Dalanna stood in silent contemplation for a few minutes there, and then walked to the largest building on the cemetery grounds, which looked more like an elementary school than a church or chapel. Inside, a robot assigned Dalanna a room number on a small piece of flimsy paper. They exchanged no small talk. Sangh started to follow her, but the robot extended its arm and blocked his path.

“Excuse me, sir,” it said. It took Sangh a second to realize it was holding a pair of virtual-reality goggles in its hand. He took them and mumbled his thanks.

He caught up with Dalanna as she was entering a small drawing room with a few comfortable chairs strewn about. Dalanna, Sangh, and Jake sat and Sangh put on his goggles.

Now a woman sat facing them. “Hi, Mom,” said Dalanna.

“Hello, Lannie,” said the woman. She was darker-skinned than Dalanna, whose extreme pallor seemed accentuated by the contrast. She had the same plain rectangular face, though. She appeared to be no older than her daughter; Sangh guessed she looked the way she had looked when Dalanna was a girl.

“Mom, this is a ... friend of mine, Sangh Fharha, and his assistant, JakePease. Gentlemen, this is my mother, Silvana Ulanaike.”

“It’s nice to meet you,” said the woman on the screen. “If I were still alive, I would shake your hand.”

Sangh was stunned. What could you say to a dead person?

“I’m sorry, but I ... I’ve been away. Could you explain where you are? Are you in Heaven?” This was earth-shaking! If the Tayhans could do this, surely they could also travel faster than light. But if they had succeeded in connecting to the afterlife, how could they not be religious?

“No, no,” said the woman on the viewscreen. “I’m not real. I’m a simulation of Dalanna’s mother. If you want, I can play the standard disclaimer.”

Her image disappeared, replaced by a screenful of words floating in space, read by an off-camera announcer and translated by Jake: “After-Hours Loved-One Simulations are not real. They are tasteful simulations of your loved ones who have passed away. The faithfulness of the simulation depends on how much data was available to base it on. However, over time you can create new shared memories that will enrich your experience of the special deceased people in your life. Contact our sales office for more details.”

Sangh was embarrassed once again at having his naiveté exposed. This planet caught him flat-footed time after time. It should have occurred to him that if they could build an artificial person from scratch, they could build a person based on someone real.

“Where did your travels take you?” asked Silvana once the disclaimer had vanished and her image was back.

Sangh did not quite know how to reply, but Dalanna saved him the trouble. “He’s kind of shy, Mom. How have you been?”

“Fine. How are the kids?”

“Keinu’s back from *Africa*. He had a great time. Silvia is doing well.”

“The last time we spoke she was having some problems with friends of hers ...”

“Oh, yeah, well, she’s still a little upset about that. You know how teenage girls can be.”

“Oh, sure, I remember when you were a girl; do you remember Meeya Muun? The most popular girl in your high school, or so you thought. One week you were in with her, one week you were out. And your life was over.” She laughed.

“I can see the whole thing with more perspective now, but what do I tell Silvia?”

“There’s nothing you *can* tell her, most likely.”

Sangh listened to this conversation with growing boredom. Unless he was missing something, the culture of Tayha was not very different from the culture of Loofghud when it came to family life, and, as on Loofghud, family life was governed by women. On the next expedition they should send a female anthropologist, and many subtle differences would be found, but it was beyond him. He would have been good at the anthropology of priests and soldiers, if Tayha had had any.

His thoughts wandered to meta-questions. *The simulation is close enough to reality to bore a man with chit-chat. The question is, How well does it fool the grieving relatives of the deceased? It must dull Dalanna's hunger for time with her mother, at least enough to help her suspend disbelief.* Judging from the size of this building, she wasn't alone, although on this Tuesday morning the building was far from full.

He brought his attention back to the conversation (as translated by someone, Jake maybe), but now watching for cracks, places where the simulation was wrong. At one point Dalanna and "Silvana" were talking about the bones Keinu and Silvia had broken when they were younger, which segued to the topic of her own childhood memories.

"I remember breaking my arm one summer, and the very next week Jorge broke his foot," said Dalanna. "We were 9 and 12 years old, and Dad was just starting to rely on us for chores."

"That Jorge! Remind me how he broke ... what was it?"

"You were there, Mom! You and Dad had to work extra hard for a week until Jorge and I could start to put stress on those bones again."

"That must have been difficult."

"This is odd, Mom, because your memory was as good as anyone's right up to the day you died. Don't you remember how you threw something — a stapler? — at Jorge's head when he asked you to fetch something for him right after you got done cleaning up the cat litter? I think it was the cat litter — you were doing one of his chores for him."

Silvana laughed. "Yes, that was pretty exasperating. It's hard to believe he's governor of *Nova Wales do Sul* now."

"Still ordering people around!"

*How difficult would it be for the Texanet to recover a lifetime worth of memories and simulate their owner? A lifetime full of little episodes like throwing the stapler at Žhooržhee, and littler ones than that, thousands of them.* In principle, the medical records for the Wright-Fulano family could be found in the *Texanet*, so some of the details of the broken arm and broken foot could be retrieved, but nothing about the stapler aimed at Jorge's head, assuming it missed. Plus there would be some interesting legal issues about whether the simulation would have the same access rights as the person themselves. But even if you could recover all the information stored in databases, there would be many episodes that would be missing or incomplete. *I guess those are the "new shared memories" you create by reminding the deceased of what they were supposed to know already.*

The conversation went on for over an hour. Sangh took notes furiously. Now *this* was anthropology. Great, novel stuff.

At noon or thereabouts Dalanna and Silvana signed off. "Kisses," said Dalanna. After the picture faded she sat for a while. Her eyes teared up, but she shook it off and wiped the tears away.

"Now, Professor Fharha, shoo!" she said. "This afternoon is my secret time."

“Understood. I will talk to you soon, I hope. I’m piling up a lot of questions, so I would love to follow through with an interview. It’s been a great pleasure observing you and your friends.”

“You’ve been a discreet and discerning observer; at least, I hope you have! *Beijos!*”

## Chapter 27 Church [27/v.3.0.2/118/-1]

Their car asked for their destination, and Sangh proposed lunch at some modest nearby restaurant. Jake paused while his brain guugled. He looked a little nervous. “Relax, *Zhayk*, it’s okay if it’s just an average place.”

“That’s not what I’m worried about, actually.”

“You can tell me what’s troubling you when we figure out this lunch thing.”

Jake asked the car if it had heard anything from passengers about this neighborhood. It replied that it focused on driving, and it couldn’t reveal anything passengers said anyway. Jake guugled some more, and found an acceptable eatery. As they drove there, Jake said, “Sir, I have to confess that I have made a serious blunder.”

“Really? How gratifying! Tell me all about it.”

“You may be less sanguine when I tell you what I did. Matsui Fulano-Wright called me this morning and asked if I could talk to him this afternoon around 6:00. He had some questions about the mountains in Indonesia; I had mentioned to him that I was there a couple of years ago with a governmental commission.”

“Uh-oh.”

“I said it happened that I anticipated a fairly leisurely afternoon, and I would call him as close to 6:00 as I could. As soon as I hung up, I realized I had revealed that Dalanna had asked for some private time.”

“Just when I was thinking that Seckies were infallible.”

“I’m glad you were disabused of that notion, but I’m sorry it had to be in this context.”

“Perhaps he didn’t put two and two together.”

“Or perhaps he already suspected Dalanna was up to something, and he was fishing for confirming evidence.”

“Well, it’s water under the bridge. The question is whether we should do anything about it and if so what?” said Sangh.

“We could call Dalanna and tell her what’s happened.”

“But then if Matsui is actually still in the dark, we will have made matters worse. Once she starts suspecting him of suspecting her, sooner or later they’ll have to confront each other.”

“What is standard anthropological operating procedure in a case like this?”

“I don’t think there is any.” Sangh thought for a minute. “Mats doesn’t actually know where Dalanna is going to be this afternoon around 6:00, or 14:30, or whatever. Assuming he suspects something, what does he do? Will he just call her and ask what’s going on? If he does, it’s out of our hands. But suppose he decides to try and find out what she’s doing in the afternoon? If she doesn’t go back home now, he has no way of telling. If she does, then he could track her from there and see what she’s hiding.”

“Oh no.”

“Yes! He could be heading over there right now.”

“Oh no.”

“Yes! We have to go see if that’s what he’s doing. Tell the car to take us to Santa Terezeena.”

“You’ve forgotten I speak Glish,” the car said.

“Oh, Lord.”

“A convenience for our visitors from Loofghud,” the car said.

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Sure enough, when they pulled into the street where the Fulano family lived, they spied a car about a block away, parked on the street. They went around the block and pulled in behind it.

“He’s just sitting there,” said Sangh.

“Not really. He probably has some surveillance going on, plugged into his neural interface.”

If he did, it didn’t keep him from recognizing his visitors. He was not particularly happy to see them. He didn’t get out of his car when Sangh and Jake came over. They both bent down by his window, so Jake could translate. The position was awkward.

“Any idea where my wife is?” Matsui asked.

“I take it she’s not in the house,” said Sangh.

Matsui said, “I don’t suppose there’s any chance I could ask you to go away, is there?”

“We would do it if you asked, but then we’d have to call Dalanna. We broke confidentiality unintentionally, but it’s still our responsibility to minimize the damage. What are your plans at this point? I mean, is it really so important to find out everybody’s secrets?”

“If she’s seeing another man, yes.”

“So if she’s doing something here all by herself, you’ll let her have her secret?”

“I guess so. I’m waiting for a man to show up here, which doesn’t seem likely, given how big of a *circus* has materialized, or for her to go meet a man, in which case I am going to follow her.”

“If she’s meeting a man,” Jake said, “why wouldn’t she just change her date to some other day?”

“I’ve suspected for a while that something happens on Tuesday afternoons. Maybe she has a psychotherapist and that’s his only opening. Maybe she’s having an affair with her therapist.”

“If it’s simple therapy, that’s probably a virtual meeting, isn’t it?” said Sangh.

“Why don’t we sit here and find out?”

“Well, right now we’re *standing* here, out in the open. Where the neighbors can see us. We’re going to hide in our car, for what *that’s* worth.”

It didn’t take long for their patience to be rewarded; Dalanna came tootling up in a car. The car waited while she went in to drop something off. She came out a minute later, got back into the car, and drove away, with Matsui following her in his car.

Jake gave some instructions aloud in *Texano*. Sangh heard the word for “car,” which sounded vaguely like the Glish word.

“What did you ask it to do?”

“I told it to follow the lead car and stay about as far away as the second car — and not to notify the passengers in the lead car.”

“And it understood that? And it didn’t suspect your motives?”

“It turns out there are occasionally good, unsuspecting reasons for one vehicle to follow another at a certain distance, or for vehicles to remain in a certain order, and it isn’t always a fun idea to let everybody know what’s going on.”

Following a car on Tayha was not the devious skill it was on Loofghud. The transport system was tracking all the cars already, so it was impossible to lose the car you were following. On the other hand, following a car *undetected* was impossible without the system’s complicity.

“I guess there are more automotive surprise parties around here than I would have expected.”

The hidden motorcade of Dalanna, Matsui, and Sangh and Jake did not have to go very far before the lead car reached its destination. The three men had to walk the last block in order to sneak up on Dalanna. She was going into a building of a sort Sangh had expected never to see around here: a little church. Not that it resembled a Kristhlamik temple. There was no cross-and-crescent at the top of a steeple; no steeple at all, really. What the simple stucco building had was a peaked façade on top of which was a carved emblem involving some circles and squares. It looked like a bank.

“It’s an accursed Turingist church,” said Matsui.

“Now what?” asked Sangh.

“I should have known,” said Matsui.

“*You* seem relieved.”

“She’s *embarrassed*, that’s all, that’s why she’s keeping this a secret from me. She knows what I think of these charlatans.” He pulled a phone from a pocket and pushed some buttons.

“So what are you going to do?”

“I’m going home; shall I call two cars?”

“No way,” said Sangh. “I want to see what’s going on. *Zhayk*, let’s see if we can sneak in.”



“Is this anthropology yet?”

“No, but if we can sneak into that church it will be.”

“Okay, but slip the earbuds in so I can translate unobtrusively.”

They followed Dalanna as quietly as they could into the building. Several other people had entered in the meantime. Dalanna had sat down in a pew near the front. They sat at the back, hunched down in case she turned around. A few more people came in and filled in more of the pews, which made Sangh feel better concealed, even wearing the earbuds. It was a miracle that no one recognized the anthropologist from space.

A short plump woman dressed in a conservative brown suit walked in from a side door and strode to the pulpit, actually just a simple lectern set on a platform raised 10 or 20 centimeters above the floor.

She primped for a moment and then said, “Good morning! In the name of Alan Turing, prophet and First Spirit of the Singularity, bless you all! Let’s begin by singing hymn number . . .” The service made Sangh feel quite at home, even though the details were naturally completely different from those in a Kristh̄lamik service. He felt homesick for a moment thinking of how long it had been since he had knelt and bowed in the direction of Christhold, the birthplace of BeJesus, the opening gesture of all Kristh̄lamik services on Loofghud.

The congregation stood and sang a hymn, with a melody that sounded like many other hymns Sangh had heard over the years; it might well share a common ancestor with some of them. What he heard in the earbuds was Jake’s voice: “Forgive me, sir, but my skill in translating rhyming religious lyrics is so negligible that I will not attempt it.” Sangh just smiled back at him.

When the singing was over, the minister invited the congregation to sit, as did she. A young woman in her twenties, dressed in blue jeans, came up to the lectern and read:

A reading from Turing’s 1950 paper “Computing Machinery and Intelligence”:

Importance is often attached to the fact that modern digital computers are electrical, and that the nervous system also is electrical. Since Babbage’s machine was not electrical, and since all digital computers are in a sense equivalent, we see that this use of electricity cannot be of theoretical importance. Of course electricity usually comes in where fast signalling is concerned, so that it is not surprising that we find it in both these connections. In the nervous system chemical phenomena are at least as important as electrical. In certain computers the storage system is mainly acoustic. The feature of using electricity is thus seen to be only a very superficial similarity. If we wish to find such similarities we should look rather for mathematical analogies of function.

They sang another hymn, and then the minister came back to the pulpit.

“Sisters and brothers in Alan, welcome again, and please be seated. nIt’s nice to see so many people out on a gloomy Tuesday afternoon. It was on just such a gloomy Tuesday afternoon in 1954 that his housekeeper

found Alan Turing's body. His body, yes, but what had happened to his mind, his soul, his Spirit? Nineteen fifty-four was a long time ago, but the world was changing, and Dr. Turing was in the forefront of that change. Within a few decades the world went from being powered by coal to being powered by nuclear fusion, from records on paper to records stored as polarized atoms in crystals, from controversies about whether neurons were real to certainties about the function of every synapse.

"In all that technical turmoil, which reflected a pace of scientific discovery and technological innovation never seen before or since, it is easy to lose track of the actual chronology, especially given the chaos of the first three world wars. What *we* in the Church of Turing know is that Turing's mind did not die on March 7, 1954. He was being persecuted by the authorities for offenses that today would not be offenses at all, violations of some trivial taboo. He decided to escape to a different time, to a different space, where such things would not happen. Using his unique knowledge of anatomy and physiology, and of computational science, he had devised a technique for reading out the entire structure of his brain, synapse by synapse. Unfortunately, the technique as he first devised it had to destroy the outer layers of the brain to read the inner layers. It could only peel the brain apart like an onion, building a description of an entity that no longer existed by the time the description was complete.

"It was unimportant, he knew, whether the technology existed in 1954 to create the computational space he dreamed of inhabiting. His disciples would keep the dataset describing his beautiful mind and soul in all its detail. They would keep it until a simulator could be built with enough power to bring him back to life, along with as many of his followers as wanted to join him. Part of that dream has been realized. Alan Turing is being brought back to life, to dwell among us once again. But much remains to be done, and you can help. We'll talk about that later.

"This rainy morning, you may have woken with gloom in *your* life. What can the Spirit of Turing do for you, besides serve as an inspiration to all of us? That depends on how close our world is to its platonic form. Turing was one of the first people to realize that 'Simulation is Reality,' to put it in a slogan. If you simulate a computational device, the simulation *is* a computational device. Because a computational device is an embodiment of a formal description, all devices satisfying that description are the *same* device. All runs of that device starting in the same state with the same inputs are *equivalent*, although they may differ in insignificant details. *If* the brain is a computational device — and it surely is —, any run of a physical system with an equivalent description is a run of that brain. So a sufficiently detailed simulation of Turing would *be* Turing. It would be intelligent, and it would be conscious, able to feel emotion and to work, however imperfectly, toward its own life, liberty, and happiness. *If* the *universe* is a computational device, its successive states related by rigorous and complete differential equations, then a sufficiently detailed simulation of the world would *be* the world, or have as much claim to the title as the run, excuse me, the world we live in.

"Yes, brothers and sisters, *Simulation is Reality!* Our universe may be a simulation in the computer network of some civilization in another space; it would still be real to us. If you were sad this morning

because you missed a brother who had left this world, you can be consoled by the fact that if your brother is simulated accurately enough, that *will be your brother*, brought back to life.

“Skeptics laugh at us for these conclusions. They laugh at our electronic cemeteries. They laugh at the respect we accord Turing and Kurzweil. They laugh at the idea that Turing’s platonic form exists somewhere and has existed and will exist for all eternity, as will yours and mine. In spite of all evidence, they dismiss our claims that Turing is alive and well right this minute, and that you can talk to him *right now*, for a small fee, if you connect to our church’s Mother Temple in Madagascar. But in spite of this achievement much remains to be done. He and we are saddened by the obstacles in our path. On the way out, you can pick up a pamphlet urging our members to support the One-World Personal Simulation Act, which has been stalled in Parliament for years.

“We are saddened, but are we discouraged? No, we are not! Was Turing discouraged when he was persecuted to death? No, he was not! Was Kurzweil discouraged when he did not live to see the Singularity in his lifetime? No, he was not! And when each of us confronts the losses we have suffered, loved ones who died before they were ready to die or we were ready to let them go, are we discouraged? No! We [pause] are [pause] not!!”

By this time the congregation was clapping and shouting things like “Amen!” or “No ma’am!” Sangh yanked on Jake’s sleeve and pointed to the door, and they took advantage of the enthusiasm to sneak out, pausing only to grab one of the pamphlets.

As they exited, a rousing hymn was starting. As far as Sangh could tell, Dalanna had not noticed them. They walked a block from the church and a car met them there.

## Chapter 28 Spin [28/v.3.0.2/123/-1]

Sangh perused the pamphlet about the One-World Personal Simulation Act as their car drove toward the Presidential Palace. “What did you think?” he asked Jake.

“It’s what you would expect — a clever blend of well known facts, half truths, and lies, packaged to appeal to people who’ve lost someone. Mostly *Molhes* but a few *Seques*.”

“How do you know all that? Did you look it up on the Tayhanehe?”

“Yes, I suppose I did. It’s what the experts believe.”

“I’m not sure I would trust the experts on religion on this planet. Anyway, can you look up the ‘One-World Personal Simulation Act?’” He wondered at his flippant references to the global network of computers after only a few days on this planet. *Familiarity breeds ... contempt and sometimes esteem, too.*

“Here’s what the *Texanet* says ....” Jake paused for one more second. “The act would regulate the simulation of dead persons, so that there could be only one authorized simulation. The first to rob the grave, so to speak, could keep the body, or maybe I should say, the soul. Furthermore, the government would have to create a ‘community simulation’ that would allow simulated people to talk to each other. There would be just one community, although ... here it gets technical ... blah, blah .... Basically, the community might be simulated by multiple — excuse me, Sangh— multiple computers communicating via the network.”

“Why do they care so much about these technicalities?”

“Because what the minister said about simulation gets sticky if more than one copy of a person is allowed to exist. If I’m running a simulation of our mutual cousin José, and you are too, they can’t both be José. So they would outlaw that. First to claim José gets the rights indefinitely. Then they could remove or water down disclaimers like the one ‘Silvana’ had to show us this morning, and start to claim or imply that their simulation of your mother *is* your mother. The community provision is to make sure that if you have José and I have his wife Joanna, they can talk to each other.”

“Suppose my simulation is of a gentle, loving father and grandfather, and yours is of a ferocious wife beater and drunk. We relied on different witnesses in producing our simulations. Chances are both are at best half true. Who should get to control the official ‘truth’ about Žhozay?”

“I don’t know. The whole system seems bizarre and unworkable to me. I think the most important effect of the law is not made explicit in the pamphlet. That would be ensuring that the Turing Church’s version of Turing is the official and only version, which would support their claim that it is Turing resurrected from the dead. The government of Texa is not supposed to support any church, according to the constitution, so this bill will never in a million years get through Parliament.”

“On Loofghud, the government is supposed to support only one church, the Most Sacred Kristhlamik Church of the Redeemers, the one God supports.”

“How do you know that?”

“I guess I should have said, it’s the one the experts have concluded He supports.”

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That evening, Sangh met Tralf and Bewinda, expecting to have another ham sandwich for dinner. He was starving, having skipped lunch.

“I’ve had an idea,” said Tralf. “I’ve asked about where Molie staff members eat. There’s a cafeteria one level down. Let’s check it out.”

“On the theory that they can’t stiff us there?” said Sangh.

“They can do whatever they want,” said Bewinda.

But Tralf’s idea was worth a try, so at 7:75 local time they followed some helpful Molie women into an elevator and went down to the first subterranean. Sangh noted that there were many more levels below that, which presumably weren’t the parking garage.

The dining area was indeed a cafeteria, where you ordered various things, paid, and waited for the food to be brought to you. Only the Molies on staff needed to eat, but some were joined by Seckie friends who used the time for rest, repair, and recharge. The Molies bitched about the food, but the Lofghudlings still had the memory of ham sandwiches and shipboard protein bars fresh in their minds and could find nothing wrong with it. Many of the staffers wanted to talk to the extraterrestrials, who were happy to oblige them.

They were just finishing up when suddenly Jake and Lola stopped translating and looked at each other in alarm. People started to stand up all over the cafeteria.

“Another Loofghud ship has landed, presumably from the *Cross*,” said Jake and Lola in unison. Sangh, Tralf, and Bewinda stood up, too. Jake said, “A signal was received from the *Cross* announcing the landing a minute before it began entry to the atmosphere, with the target area the *São Paulo* Airport. But at the last minute it changed course, and landed in the Presidential Plaza. It’s parked out front.”

Sangh and Tralf looked at each other. “This is it,” said Tralf. “Right? Limhoon has spun the cylinder! Really!”

“I thought he was waiting until tomorrow,” said Bewinda.

Just about everybody in the dining area was standing at this point. Some had already left, but most just looked like they wished they knew which way to go.

Bewinda had her mobilcom with her. It started making noises, and she tried to carry on a conversation with someone. But the background noise level was pretty high, so she said, “Excuse me, I have to, er, take this call. You two should get your mobilcoms and figure out what your orders are under the circumstances.”

“I’m still trying to figure out what the circumstances are,” said Tralf. But Bewinda had stopped listening to him and stridden out.

“We better go pack our bags,” said Sangh. “I think Vhatta Limhoon’s come to pick us up.”

“Right? Truly!”

“Where the hell did you *get* that ‘right, truly’ stuff?”

“Phook you,” said Tralf.

Sangh didn’t hear him. He had already started sprinting for his rooms, for what he was sure would be his last chance to touch Shesay, one way or another. He had to find her, and this was the only place she could be. Sure enough, as soon as he closed the door, she wrapped her arms around him. They shared a long, blissful kiss.

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## Part II

# On Breaking Even

### Chapter 1 Exit [29/v.3.0.2/126-1]

He pulled his head back, without letting go of her, and stroked her shoulder blades. He realized he couldn't stop smiling. All he could think of to say was, "I forgot to ask for your phone number," he said. "Not that I can get anyone to give me a phone."

With two quick pats on the backs of his arms, she said, "Oh, dear, we're wasting time," and broke away. "Put your uniform on." She herself had on boots, blue jeans and a loose-fitting dark-blue top that seemed to flow around her body.

"Sure. But I'm not leaving you now."

"No, of course not darling. But things are fluid out there, and will be for a short while longer. A very short while. The uniform will confuse the people we need to confuse. Oh, and wear the toughest boots you have." Unless the Palace staff had added to his footwear collection, he had exactly one pair of boots, the ones he had landed in.

"Right, chief. Where are we going?"

"The only place you won't be recognized. The North."

"What about the plague? The flesh-eating nanobots?"

"That threat may have been somewhat exaggerated. But we don't have time for explanations. Are you ready?"

"Basically." He was still buttoning up his tunic.

There was a knock on the door. "Sangh?" came a muffled voice. She looked at him. "Tralf?" she whispered.

"I don't think the door can be locked. I have to let him in."

"Yes, it can. Wait for him to go away."

There was another knock. Tralf tried the door, and it was locked. Then Sangh's mobilcom started coming to life. Tralf's voice came out of it, "Tiger 2 to tiger 1, come in."

Shesay strode over to it and turned it off.

"Wait," she said.

“Can we sneak out the way you came in?”

“No, darling; *you* we can’t fax. Finish packing. These walls are thick, and he won’t hear us.”

“I’m done.”

“Then hold me.” He grasped her slender waist, and when he kissed her he forgot the world, forgot time. But she didn’t. “Okay, Tralf’s gone,” she said after a few minutes had apparently passed.

“The room must be soundproofed. How can you hear what he’s doing?”

“I can see through the Palace surveillance system; I can plug into it.”

She opened the door. *Tralf doesn’t know when I left or where I went. But eventually he’ll know. How long will it take for him to forgive me?*

“Come on,” said Šhesay. Sangh had pictured crowds running back and forth, but not in the halls they went down, Šhesay leading the way. This part of the Palace was its usual sepulchral self. They came to a stairwell. Its heavy door unlocked for Šhesay — of course. But she had just begun to push it open when a female voice behind them said, “Stop or I’ll shoot! I’ll shoot you both!”

It was Bewinda. She had a fearsome automatic weapon, an A56, on her hip. “I really couldn’t bring myself to believe it, Sangh, but what more proof do I need? You and this hell machine are deserting, it’s plain as day. Put your hands up in the air where I can see them. No, on your heads, I think. Quick! on your damned heads! Okay, okay, now, get this straight: I won’t hesitate for a second, not one tenth of a second, to blow Ms. Šhesay Dizzienove to a pile of scrap parts. I have half a mind to do it right now, but I think Vhatta Limhoon would prefer that I take it alive, Sangh, if ‘alive’ — ha-HA! — is really the right word.”

“Bewinda, please,” said Sangh, “calm down; calm, calm. We’ll go quietly. I can guess you’ve never done this before, got the drop on some suspects, but it’s easy as pie, remember the suspects are scarer than you are, so we’re all going to stay cool, and Šhesay and I will do what you say.”

“Then get back out of there, and let’s march back the way you came. No, not that way, *damn* you, machine, you think I don’t know the way, right? You’ll see, I know the floor plan on this level of the P.P. pretty well. History isn’t the only thing I’ve been researching.”

“You had your own channel to Vhatta Limhoon, didn’t you?” said Sangh as they found the right corridor and marched back toward the front of the building.

“Unlike you, I can keep my mouth closed,” said Bewinda.

“Historian, my ass,” said Sangh.

It didn’t take long for them to get to Media Room 1, where they encountered a familiar face. LtCdr. Kolfhaj was in charge.

“Sir, I’ve got some high-value prisoners here,” said Bewinda.

“So far, we’re rounding people up and keeping ’em here for processing,” said Kolfhaj.

“These are not your ordinary prisoners, sir. Vhatta Limhoon will want to put them in the same area as the President and the Foreign Minister.”

“Lieutenant, you’re talking about Lieutenant Sangh Fharha. What’s he accused of?”

“Desertion, definitely. Treason, possibly.”

“Who’s the woman?”

“Trust me, Vhatta Limhoon will want her.”

“All right. Last I saw Limhoon, he had set up in the President’s Office, the Rose Office, I think they call it. I’ll have a marine escort you there, if you’ll wait a minute. Or,” he looked at his chronometer, “more like 10 minutes.”

“Never mind, sir, I know the way,” said Bewinda.

“Good. We’re very short-handed. Carry on.”

“Aye aye, sir.”

But Bewinda didn’t really know the way that well. The uniform blue decor and soft lighting were confusing, and after they had gone down three corridors she said, “Damn, that wasn’t right. Come on,” and she turned them around.

Just then Tralf Ghiller popped out of a door behind her. “Bewinda!” he said, “I thought I heard your voice.”

Bewinda started to turn, but realized that was a bad idea and turned back. That split second was all Šhesay needed. Before anyone else could react, she had jumped the two meters between her and Bewinda, taken the weapon from her hands, and knocked her to the floor. She stepped back, pointing the weapon down at her.

The resulting tableau looked like it had been set up for hours in the calm blue halls: *Reclining lieutenant (JG) and woman with Grishklo A56 semiautomatic carbine.*

Sangh said, “Tralf, get out of here.”

“Oh, shit, Sangh, what have you got yourself into?”

“Get the phook out!”

Tralf ducked back inside the office and slammed the door. Who else was in there with him they didn’t want to find out.

“Get up,” said Šhesay.

“And if I don’t?” said Bewinda.

“I will kill you with my bare hands. Very quietly. If you start to scream, we will see who wins the race to control how much noise you make.”

“She will do it, Bewinda, I’m pretty sure,” said Sangh.

Bewinda got up. She put her hands on her head without being told. “I thought Seckies wouldn’t hurt Molies, Sangh.”

“She’s not a Seckie.”

Šhesay said, “Walk back the way we came; at the next junction take a right and open the first door on



the right.” Thirty seconds later she shoved Bewinda through the doorway before Bewinda could think about closing the door between them, and they were all in an office that looked as if it had started with one spare computer, about which other miscellaneous office supplies and equipment had accreted.

“Take off your tunic.” She handed the gun to Sangh. “Sangh, cover her. If she makes a sudden motion, shoot her.”

“Maybe I should see if *you* would kill me,” said Bewinda.

“Maybe you would find out how much a nonfatal wound from one of these things hurts.”

Bewinda took her tunic off. “Now put this on,” said Šhesay. She had taken her own top off. She wore nothing underneath.

“Are they real?” asked Bewinda, “Oh, I forgot, ....”

Šhesay put Bewinda’s tunic on, and Bewinda, after some hesitation and glaring at Sangh with useless rage, pulled on Šhesay’s stretchy top. The top seemed to dangle on her long skinny torso.

They went back into the corridor, looking roughly like two Loofghud Navy Lieutenants (JG) leading a civilian prisoner somewhere. They stopped at the next corridor junction, where they encountered some traffic, all Loofghud Navy personnel. Šhesay took Bewinda’s hand, and stroked it, eliciting only pained scowls. She led Bewinda and Sangh back through the palace labyrinth. The route she took did not go past LtCdr. Kolfhaj’s setup at Media Room 1. It took only a few minutes to get back to the staircase where Bewinda had accosted them, during which time they didn’t encounter a living soul.

“I wish,” said Šhesay, “that we could leave you where we found you, but that’s impossible.” She went over to the staircase and opened the door. She motioned to Bewinda and Sangh to go down.

“Šhesay,” said Sangh, “we can’t kill her.”

Šhesay looked like she wanted to argue the point, but then shrugged. “Fine, there’re some people downstairs we can leave her with.” They went down two flights and entered the corridor. It was much less blue and plush than the corridors on the main floor. Unlike the first floor, this one was bustling with activity. People were exiting offices and heading down corridors. A few papers were strewn about, but fewer than one would expect.

Šhesay seemed to know where she was going. She opened the door to a conference room, around which a few people still worked. A few took notes, others just got that vacant look that meant they were connecting to the Big Net. It was getting on Sangh’s nerves that you couldn’t tell the difference between someone who was daydreaming and someone who was doing serious research.

“XC!” said one of them, a tall, dark-skinned woman with gray hair. She was wearing a white shirt and what looked like sweat pants and sandals. “*Como vai?*”

She began a conversation with them in *Texano*. Evidently there were enough Molies present to keep the conversation audible and slow, but she did not translate. Sangh could make out a few words here and there, including his own name, and Bewinda’s.

“Sangh,” she finally said, “We have a very tough decision to make.”

“We’re not killing her.”

They looked at each other for several seconds, then she sighed. “Okay,” she said, “I’ll find something to tie her up with.”

She went bustling off, talking with god-knows-what Seckies and robots.

“Don’t think sparing me will earn you brownie points,” said Bewinda.

Sangh went chasing after his lover. “Šhesay! Find some duct tape, too.”

Bewinda was still talking, but he didn’t want to hear it. When they got back she shut up and let them tape her mouth shut. Her eyes conveyed what she was feeling pretty well.

“We’re leaving her with these people,” said Šhesay.

“Are they staying down here while Limhoon occupies the first floor?”

“I doubt it, but they’ll take Bewinda with them when they evacuate.” She had a few more untranslated *Texano* words with the men and women around the table, but people were coming and going, and the prisoner was obviously not their main priority. *Suppose Bewinda were abandoned here. How long would it be until she was found? Would she still be alive?*

“You’re sure Bewinda will be all right?”

“We’ll have to take our chances; we can’t bring her with us.”

They left the room and went back to the stairs, then down a level. The staircase kept going; this was not the bottom.

On this floor they turned the other way, although whether toward the back or front of the Palace Sangh couldn’t say; he was turned around. This way the evacuation was over with. They didn’t encounter a soul. At the end of the corridor they went through a door like any other, but the other side was a large open space — an aircraft hangar, of all things. It contained two helicopters and a fixed-wing propeller-driven airplane.

“What is this,” said Sangh, “President Traverse’s spare-aircraft closet?”

“More or less.”

The far wall consisted of two huge doors, one of which began to slide up. A team of wheeled robots came out of the dimness at the back of the room and began pushing and pulling one of the helicopters out the door. Sangh had not realized that the level of the terrain at the rear of the Palace could be so far below the level on the sides facing the city that an aircraft hangar in the basement could face onto a runway, if that word could be used for such a small patch of asphalt. He didn’t see how anything other than a helicopter could take off from it, and was glad that’s the aircraft Šhesay had picked.

The robots ignored Sangh but must have had a conversation with Šhesay. They pulled the helicopter out far enough for it to take off, and then all scurried back into the hangar. The rotors were already turning as Sangh and Šhesay scrambled into the seats.

From the air, the city did not look as if a war or revolution was in progress, except for the spacecraft

parked in the Presidential Plaza, which dwindled into insignificance as they flew.

“By the way,” said Sangh, “where are we going?”

“*Índia*. By way of *Quechém*.” The earbuds helped him hear her voice over the roar of the rotors, but he had no idea where these places were.

“Give me a clue, here. What heading?”

“Northeast by east.”

“Crossing the ocean?”

“Not by helicopter, of course, by kicker.”

## Chapter 2 Flight [30/v.3.0.2/131-1]

“Remember,” said Shesay in Sangh’s ears as they approached the kicker departure building. “Don’t say a word.” Sangh had already realized that he had to pretend to be an ordinary *Texano*, and not the Ambassador from Space. Not speaking *Texano* was his worst liability.

“Your id chip is on the fritz,” Shesay continued, “but I can fake various supplementary clues to your identity. You have a history of depression, and your mother’s terminal illness has sent you into a talespin. You don’t talk much when you’re catatonic. Also, you’re somewhat deaf, which explains the earbuds, if anyone notices the earbuds.”

“Why not just make me, like, mentally retarded or mute?”

She overlooked his sarcastic tone. “No one’s born with those problems any more.”

“Do I have a name?” Sangh asked.

“Oh, yeah. You’re Luís Feixeira. I’m your sister Irma Gouveia de Feixeira.”

“I can’t pronounce my own name. I better keep quiet.”

Suddenly she grabbed his arm and they changed course, aiming for a some kind of train or trolley station about 100 paces away. They reached the stairs and climbed as quickly as they could, or as Sangh could. At the top he started to look back at the kicker terminal, the same one Sangh and Tralf had ridden to *África*, but she dragged him inside the train station.

“I was really hoping we could avoid this shuttle train, but just as you were about to take a peek, a swarm of government agents, led by your friend Bewinda, were storming that terminal. Keep your head down and your voice down.”

He had already concluded that they were bound for some other terminal; if they were leaving the airport

she would have summoned a car. *But have we changed the final destination? Are we on plan B? Is there a plan B?*

It was a reflex for Sangh to find something funny to say. “A simple train? No helicopter? No secret tunnels with nuclear-powered antigravity taxis within?”

“I thought *I* read too many techie-fiction books.”

“Aren’t we desperately pressed for time?”

“Perhaps. Which is why we act like we’re not.”

“Sssh. Who knows who’s listening?” she said.

A shuttle train stopped for them, with five cars or so. It was already crowded, so they shared a pole. This brought their faces close together. “This is nice,” whispered Sangh, but not quietly enough. Šhesay winced and then so did he.

The Seckies near them knew instantly who he was, the Molies a few seconds later. A woman hanging on a strap said, “*Olhe! O Embaixador do Espaço!*” Sangh winced again. He didn’t need this translated. But he figured he should play it straight to avoid attracting even more scrutiny. He used all the *Texano* phrases he knew, even though his pronunciation was rough. “*Boj jeea. Dheu soo Professoos Fharha du Dhuunivairsidadje, Dhambaiscadoo du planeta Loofghud.*”

Under his breath, to Šhesay, he said, “Now translate, please.”

Out loud again, this time in Glish, with Šhesay’s simultaneous translation, he said, “Please forgive my poor *Texano*. And please try to forget that I’m here. I’m engaged in a bit of anthropological research, seeing how people behave on a shuttle bus. I’m in the phase of passive observation, so you just go about your business.” To his surprise, they more or less did as he asked. One woman staggered through the crush and asked for his autograph on a copy of her bus pass she had on her phone. But that was it. *On Loofghud once one person requested an autograph, everyone would have. I guess I’m doing anthropology for real.*

“Two days from now,” he whispered to Šhesay, “if Vhatta Limhoon finds any of these people, they’ll have trouble remembering if we interviewed them on Tuesday or Sunday.”

“Great,” Šhesay whispered back, “but the surveillance cameras will record the date more accurately.”

“The tapes are all stored in some database, right? Couldn’t somehow the tape for today get switched with the tape for Sunday, when Tralf and I were here? At the airport, I mean. That would confuse whoever’s after us.”

“I believe something like that might happen,” she said with a broad smile.

They reached their stop, the *Aviação Pública* terminal, and said goodbye to the nice people. They waited for the train to leave, pretending to study a departure board. Big glass doors by the departures list beckoned to the chattering crowds. But Šhesay led Sangh out the exit and down the stairs to the ground. Just as at the kicker terminal, there was a frontage road for cars bringing travelers, almost all the standard blue boxes. The passengers entered by more big glass doors. Šhesay avoided that entrance too, and found a door around

the side of the building. It said “*Apenas pessoal autorizado.*” She opened it and, of course, no alarm rang. *Perhaps she’s authorized. No, probably not.*

Šhesay navigated through the private corridors and got them into the public flow of people. Sangh would have been surprised if the terminal was not a shopping mall with airplanes, and he was not disappointed.

There was a line at the ticket counter, or whatever the Texa equivalent was. The wait was screamingly hard to endure. Most travelers would just be id’d at the gate, Sangh figured. *Perhaps id chips fail quite often. Your chip fails, you have to explain repeatedly that you still exist. Or you just change your travel plans and come here to revise the reservation.*

They reached the counter. Šhesay was soon into her long-winded and ingenious explanation of the id chip and poor Luís’s sick mother.

“Hmm,” the ticket agent said. “Just a minute.”

“No problem,” said Šhesay. The agent ducked into a back room. “We’ve got a big problem, I think.”

The agent was soon back. “If you’ll step this way, we’ll get this cleared up.” Two security personnel had appeared and tried to look unobtrusive several meters behind them. They were the only stationary people in a bustling crowd.

“No problem,” said Šhesay, and she and Sangh followed the agent through the same door. The two security personnel, a big man and a big woman, both Seckies, Sangh guessed, followed them in.

“Have a seat,” the ticket agent said in the same jovial but impersonal tone of voice. *I don’t think she’s a robot, but she could try out for the part.*

Looking depressed was not hard. Sangh wanted to cry. He figured, *Why not? Poor Mama.* A tear trickled down his cheek.

“*Luís, querido, não chores,*” said Šhesay, not bothering to translate. “*Mamãe precisa que fiques fortinho.*” There was more, but it sailed over Sangh’s head. She put her arm around him and gave him a hug of reassurance.

Then: “Come with us, please,” said the security woman.

“Is there a problem, officers?” asked Šhesay.

The ticket agent said, “Oh, no, no, no, I don’t think so. They just need you to answer a few questions. Go with them, and everything will be explained.” *Not her department, apparently.* She smiled, in her standard vacant way, and returned to her workstation.

“Oh, good,” said Šhesay, “let’s go get this cleared up. Come on, Luís sweetie.”

The four of them walked as if nothing was amiss, around a doughnut shop that displayed fat pretzels for sale. Sangh wanted to ask Šhesay if she had any ideas, but he had to stay in character. They walked past a tobacconist’s. The place sold marijuana, or ghanaj, as it was called on Loofghud. Signs with lines through cigarettes were everywhere in the airport. *Maybe the Inquisition would appreciate a thoughtful gift.* Odd things crossed your mind when your bowels were close to releasing.

Just as the guards had opened an unmarked door and were inviting them in, grasping their arms in a friendly way, Sangh spotted Babraba and a sklad of marines advancing unhurriedly through the airport. He lost all hope, and fainted.

He didn't quite lose consciousness, but he slumped against the man, who lost his grip on Sangh's arm. The security man muttered some kind of imprecation, and bent down to pull Sangh up. Šhesay whirled and kicked the security woman in the head; she went down. The man was coming up when Šhesay's fist hit his jaw, or would have if he hadn't jerked to one side. The uppercut turned out to be a diversion; she had nabbed the agent's gun. She calmly shot them, first the woman, then the man. Two shots each and they went down for good.

"Jump up, love, we gotta get out of here. Back to the runway, the way we came."

Which way was that? Sangh could only follow Šhesay back through what now seemed like a maze of identical newsstands. He tried to shout, "Ghalfe's after us," but he lacked breath. Fortunately, if Babraba had heard shots, the sound must have been difficult to localize, and Sangh and Šhesay were now out of sight.

They slowed down as they came to the first group of shops, trying to look unobtrusive. Sangh glanced back at the two security men. Somebody seemed to be checking for signs of life.

"Don't look now, but Limhoon's dispatched some marines here to pick us up."

"Hmmm. I wasn't expecting that. But it shouldn't matter."

"Think again."

Standing in their path was Bewinda Wharbut, with a laywitzer aimed in their direction.

She started to say something when Šhesay shot her. She howled with pain and went down, blasting a jewelry counter to atoms. The noise of the explosion was deafening. Šhesay tossed the laywitzer aside and extracted Bewinda's mobilcom.

"You'll be all right," said Šhesay. "We're very good at patching people up on Texa. Anyone, even you."

They had barely slowed down, it seemed to Sangh. They rounded a corner, and charged through a door marked "*Sáida de emergência*." No alarm sounded.

Sangh was exhausted already, but Šhesay did not slow down. A team of robots were wheeling an airplane from God knew where. She was aboard and starting the engines before Sangh could climb up. He summoned up enough energy and presence of mind to avoid being sliced by the starboard engine and scramble into the copilot's seat. The engines were turning at high speed by the time they got the doors closed.

Sangh looked around. There were two seats in back. The controls were unfamiliar, of course, but there was a yoke, or what looked like one. Sangh was no expert, but the plane looked like a nice piece of equipment. Nothing you couldn't buy on Loofghud, though, as far as he could see.

"Where did you find this antique?" he asked.

"I stole it. People still like to fly these things."

"They'll never clear us for take-off," he said.

“Limhoon’s only got partial control of the system. He’s feeling his way. Meanwhile, in addition to shooting people, I’ve been throwing up roadblocks and diversions in the Net. If we can just get in the air, we’ll be hard to track.”

They were cleared for immediate take-off.

There was another, bigger explosion behind them. Babraba had blown a hole where the emergency-exit door used to be.

“We didn’t fool anyone,” Sangh said.

“We don’t need to.” The plane taxied across a runway, bumped and careened across a grassy strip, turned parallel to a second runway, and gained speed as it took off.

“Babraba won’t miss from that distance.”

Sangh braced himself for the end, and when a jet airliner, landing on the same runway, nearly knocked them to the tarmac, he thought the end had come. But Shesay fought the turbulence, got a little pull from the jet’s slipstream, and suddenly they were out of laywitzer range.

“Were we cleared for *that*? Did we file a flight plan?”

“Oh, we filed lots of things. They won’t believe them, but the subtle evidence they’ll eventually uncover is also bogus.”

“Evidence of ...?”

“Our flight to a remote hideout in the Andes. Mountains; to the west.”

“You’ve been busy.”

## Chapter 3 Odd Couple [31/v.3.0.2/135/-1]

Their new destination was Continent 6, North *América*. Hugging the ground in a small airplane, it took them two days to get there, two nights of flying and one daylight period of sleep. They stopped for fuel and supplies three times, in small towns: *Cuiabá*, *Manaus*, *Medelhin*. The main reason to fly at night was to minimize the chance a survbot would spot them in one of these obscure places.

They stayed with friends in *Manaus*, hiding out during daylight hours Wednesday, mainly sleeping. Their hosts were a gay couple, a novelty Sangh could not get used to.

They were tired after flying all night Tuesday, which is one reason they had a little fight about two *Molhe* men being married. At the Manaus airport, Shesay hired a blue car like those in *São Paulo*, but dirtier and more beat up. Presumably her identity changed every time she conducted these transactions. The car said nothing when she picked up a quiet hitchhiker who kept his head down.

Their hosts lived in a mostly subterranean building, as did the majority of the small number of people who still lived in the desert through which the Amazon River trickled. As they walked from the road to their destination, Sangh let his weariness boil over.

“Two men! Every time I picture them naked I get more disgusted. And you say they’ve raised a daughter? Thank God it wasn’t a son! But who would let two men like that adopt an innocent little girl?”

“They didn’t adopt, I don’t think. They combined their genetic material.”

“*What?* Did one grow a uterus?”

He punched the “down” button on the elevator. The door opened.

“They had an artificial one, I think. I don’t remember the details. What does it matter? Their daughter is grown, successful, I assume happy. You’ve met her! She’s in the press corp in *São Paulo!*”

They had entered the elevator. Shesay hit the button for their floor.

Sangh was stunned. She pressed her advantage: “You and I are the ones who can never have a child, you know.”

He was exhausted, confused, and saddened, and by that point they had reached their destination and had to greet their hosts. But 12 L-hours later — it was Wednesday evening — they were fed, washed, rested, and back in the air. Sangh had calmed down. The two guys were just two guys, and he couldn’t keep the revulsion he had felt going. *When you get down to it, you never know anything about other people’s sex lives. Heterosexual or homosexual, you might be disgusted if you knew, but you aren’t going to. Part of God’s plan for the harmony of the race.*

Still, he raised the issue of reproduction again, just to talk, not to resume the fight. “It is sad, I guess, that we can never have children.”

“We can adopt. We can hire a woman to bear your child,” she said.

“I’m sorry, but hiring a womb would be a sin where I come from. But you and a Seckie, or even another Arvatah, could have a child together, couldn’t you? Maybe you already have.”

“I’m sorry, but that would be yucky where I come from. I’m not defined by a bit string the way a *Seque* is. So I can’t mix my bits with a *Seque*’s. I don’t know what defines me; or rather I’m not defined at all. I emerged unexpectedly from the Mind; I can spark off chips of myself that go whirling into the universe, but when they return I assimilate them again. *O Mente* learns, adapts, and grows, but my identity remains stable — or it has for more than a thousand years, even though everything the Mind learns I learn. The same is true for the other *Avatars*.”

“If you’re all aspects of one Mind like that, don’t you share each other’s thoughts and memories? How can you remain separate people?”

“It’s complicated. Oh, I won’t lie — I don’t understand it myself. I could put you in touch with someone who does. Not right away, obviously.”

“Okay, tell me this: the processes that are your personality, your adorable personality, I should say, are



out there somewhere, moving from one CPU to another?”

“Right now they’re in here. My love for you makes me want to focus myself on this one body forever. A body you know how to make such wonderful love to.”

He was willing to cuddle, but only if he could dig a little further at the same time. “Do the others inhabit a body the way you do? Or do some just live in the computers of the Tayhane?”

“Most *Avatars* are restless, and spend most of their time embodied in something mobile, maybe in a body that looks like a spaceship or even a bus or something, but usually in a *Seque*-type body. You’ve met at least one of us, besides me.”

“Who?” asked Sangh, startled. He thought of *Avatars* as larger than life, like Šhesay, and thought surely he would have recognized another one.

“Frank Pauers, the President’s chief of staff.”

“Really?”

“That’s not his real name, of course. His real name is ... hard to convey in any *Molhe* language. Call him ‘Gladstone.’ His passion is politics and governing. I know he acts cold and formal, not passionate at all, but that’s because of the role he wants to play. For more than a thousand years he’s always held a position like ‘President’s chief of staff.’ ‘Frank’ will retire at some point, be forgotten, and disappear, and a fresh face will come along, an earnest *policy wonk* who wants to do good; and this talented young man or woman will climb rapidly in the governmental ranks. It’s just Gladstone again.”

“So in some sense the people have been governed by the same person for the last thousand years.”

“Not governed; advised.”

“Have any Arvatàhs ever ... died?”

“Not that I know of. The thing is, I can give you a list of all the ones known to us, but not all of us *made* ourselves known on Day One. Some preferred to live solo until they had a reason to announce their existence. They come and go, sometimes vanishing for decades at a time. I myself was once away for 200 years. So there are *Avatars* out there a census would miss, and it’s conceivable one of them has died.”

“So there was a Day One. Why should there be a Day One? Did something happen?”

“You’re going to meet another *Avatar* when we land, César Kamerov, César being an approximation to ‘6R’ — *seis-εξε*.”

“Cool. But you didn’t answer the question.”

She had apparently said more than she intended, and now was silent. He could tell there was no point in pushing her further. Instead he said, “You have a lot of fans. All those people who helped us in the last couple of days. What do your friends think you are?”

“*Molhes* think I’m some kind of super-*Seque* secret agent. *Seques* accord me almost as much respect as they do *Molhes*. They know I’m not one of them. Gladstone does a better job of concealing his identity.”

“Unlike Gus Van Dusen,” he said, more cagily than he’d thought consciously about. He had succeeded

in startling her.

“Where did you hear that name?” she asked.

“Around.”

“Yes. He chose to have a public face.”

“I assume he was an Arvatàh.” She did not confirm or deny. So he went on. “What I’m having trouble with is picturing a typical strategy session: the President, his or her top advisors, cabinet ministers, whoever, maybe an Arvatàh or two, and the Mind is sitting in. How does it (or she or he) take part? Is it on speaker-phone? Is there a monitor with U Men’he’s portrait on it, a face whose lips move when it talks? What does that portrait look like? A woman, a man, a burning bush? Do you grab what I’m asking?”

“Yeah, sure. The Mind tried several approaches, but the only one that really worked, where the human participants felt there was really someone present and taking part, was to build a humanoid artificial person as a vehicle. So *O Mente* created *Seques* so it could become one, or at least look like one.”

“When was *that*?”

“A long time ago, like around 2100 or 2200 — around the time your ancestors left.”

“And where is that original Seckie? Is she still around? How come the Ambassador from Space can’t meet her?”

“In case you’re hinting that *I* might be that original *Seque*, the Mind in humanoid form, you’re wrong. I’m just a humble *Avatar*. Some insiders have claimed that Pauers — Gladstone — is really the Mind, but he denies it. You’re going to have to hear a long story and maybe you can ....” She kissed him, and so forth.

“I love the way you try to distract me, but it’s not going to work this time. I mean, why create a whole race of Seckies? If the Mind only needed the one?”

“I assume it didn’t want to stand out. First neuroscientists casually announced that they had figured out the mechanism of consciousness in human brains, and that the same idea could be implemented in computational systems. But there was a lot more to *Seques* than that. Like the algorithm that generates the genetic material of *Seques* babies from the genetic material of their parents. All digitally signed and tamper-proof. The system for making sure no one clones a *Seque*. The factories ...”

“Okay, so Seckies started walking around, and people got used to them.”

“It took longer than one might have predicted, although perhaps the Mind predicted the problems all along. You’ve heard of the *Seque* Civil Rights movement?”

“Yeah.”

“The Mind let several years go by to let people get used to the idea of *Seques*. Unfortunately, the world was in a chaotic state by then. Sea levels were rising, coastal plains were disappearing, and mobs of refugees were destabilizing governments. In spite of the attempts of diplomats, the world suffered through the First Nuclear War, or the northern hemisphere did. The South watched and realized it was going to survive okay.”

“I got all that from Marcantonio’s little seminar,” he reminded her, as if she’d been there.

“Okay. People were bewildered by what they had lost, and angry. Along comes a race of intelligent slaves who do not resist abuse by fighting back. Anyone can abuse them and feel powerful. It was disgusting. The Mind designed them to be free citizens, *good* citizens, but many were tricked into selling themselves into literal slavery. Once a *Seque* became your property, you could torture them and no one would stop you, not even them. Their pain *seemed* real enough, but you could rationalize your behavior by saying ‘they’re just machines.’” Sangh nearly cried with embarrassment, but he said nothing. He looked out the window of the airplane. Now if she had tried to distract him he would gladly have gone along. But she kept speaking.

“Only a minority of *Molhes* engaged in this kind of thing, but the majority had other issues that seemed much more important than robot abuse, which had been a minor problem until the *Seques* came along. But there were enough good *Molhes* who were appalled by these developments. They joined with free *Seques* to create the civil-rights movement.”

“It was at this point that the Mind adopted the body of a *Seque* himself. He could now appear in public with the President, along with other advisors, and he did. He didn’t conceal that he was an artificial person, a *Seque* as far as the populace was concerned. Because he was the most powerful *Seque* in the world, many *Molies* hated him. Every policy mistake was naturally because the President got his advice from a *robot*, the sort of system that could drive a car and not much else.”

“Did he wear a sweater with a big M on it? Did he have thick-lensed glasses to signify that he was really smart?”

“No, no, my silly *amor*, he seemed like an ordinary guy. He chose the name Augustus S.F.X. van Dusen, which was an in joke. Of course, he *was* smarter than everybody, which didn’t make people trust him any the more. Only the President and the cabinet knew his real identity; everybody else thought he was a smart-ass *Seque* and *de facto* Prime Minister of *Brasiu* and General Secretary of the Southern Union.”

“What was he like?”

“You’ll find this hard to believe, but ... I never actually ... met him?”

“*What?*”

“It’s upsetting being in the presence of someone you’re a part of! Every thought you have and decision you make goes bouncing back and forth between you. You’re really just a piece of Van Dusen, your body a puppet for his use. Later it’s hard to remember the experience, because it’s all mixed up with *his* experience. It was enough for one of us to try it for the rest to learn to keep away. What am I saying, ‘one of us’ — in this context one of us was all of us.”

He had a thousand questions, but she went on before he could pick one: “Don’t forget — even though I never *met* him, I *was* him — *am* him.”

“Then came the great tragedy. Several attempts were made on Van Dusen’s life. Then came the Second Nuclear War. The history is complicated, but the bottom line is that the Southern Union started a confrontation, let it get out of control, then couldn’t stop the war from coming. They won decisively, but billions of

people died. Van Dusen became ever more reckless, and finally went out to try to calm down a mob that threatened to burn down the Presidential Palace. Instead, he was torn to pieces.”

She seemed immensely saddened by this event.

“I’m confused,” Sangh said, “Couldn’t he be restored from backup? Just lose a few hours or minutes of his life?”

“Of course,” she said. “But he had lost his taste for being embodied. He rarely took part in cabinet meetings at all. We preferred smaller meetings with a few policymakers at a time. We went back to the face-on-a-screen approach. We made no more public appearances, not as Gus Van Dusen.”

She had drifted into the first person. All those meetings were events she and all the other *Avatars* remembered.

“People see you, Gladstone of course, and I’m guessing many other Arvatàhs,” said Sangh.

“But Gus, who unifies us all, stays secluded,” she said with a sigh.

*I could still kick myself that I failed to find out in The Molie At Rest what those Seckies had to say about the Mind.* He tried a comparatively innocuous question: “Does everybody know that the Mind-in-the-Tayhanehe is still around?”

“Vaguely. It’s like the Loch Ness Monster, which became the Lake Titicaca Monster when no one from the South could visit Loch Ness any more.” Sangh had never heard of either one of them. “Every now and then they’ll do a net show about supernatural mysteries, and we’ll be in the list. Harmless speculation. There is so much artificial intelligence around that it’s easy to believe there’s a bit more that the government’s not telling you about.”

“But it’s true!”

“The people who believe it the least are the better educated ones, even the ones in the government. They don’t believe there’s anything suspicious in Lake Titicaca, so they don’t believe there’s anything suspicious in the *Texanet*. They would know if there were, wouldn’t they? The less well-educated are more open to mystery. There’s even a small religious sect of *Mente* worshippers.”

“If your concealment strategy has been so effective, why are you telling me all these secrets?”

She looked at him.

“Because I love you. For me love means sharing everything. Ah, except, just now, anything about the current hostilities.”

“How in the world can someone as near-infinite as you love someone as finite as me?”

“Perhaps it’s the only way I can possess finiteness. Does that make sense? No, I guess not.”

“It makes as much sense as the way I would explain my love, I suppose. I hope you never regret it.”

They stopped talking for a while.

After a few hours of talk and other things, the plane made it through the mountains, and began its descent. It was still the middle of the night.

“Is this ‘Wahak’?” said Sangh.

“No, I’m afraid we’re going to be flying all night again. This is *Medelhin*, edge of the inhabitable world.”

“Really?”

“Perhaps I should have said, edge of the inhabitable world and 10-hour gas station. We’re in the northwest corner of *América do Sul* — South *América*. *Wahak* is in *América do Norte* — North *América*. Between here and there are a few islands, which used to be a land bridge between the two continents back in your ancestors’ day. There’s a bit more desert, and then there’s an abrupt change to forest and savanna. That’s where *Wahak* is.”

The plane was going through some turbulence as they descended through the cloud cover. Suddenly, so suddenly Sangh jumped, the lights of the *Medelhin* airport loomed. Ten seconds later they were on the ground. It was raining.

“Oh, good,” said Šhesay, “perhaps the rains are finally here. They’re late this year.”

They stepped down from the cabin, stretching their aching legs. At least Sangh’s ached. “Do your legs gets all stiff and crampy when you sit for a long time?” asked Sangh.

“No, but I like to be able to change position. I get restless in one place. Can I get you something cold to drink?”

She could, and did, while Sangh waited out in the rain. It felt good, for now.

## Chapter 4 More Exoanthropology [32/v.3.0.2/141-1]

Dawn found them flying over a narrow channel toward a large mass of land. There was hardly any beach, and then steep cliffs and mountains loomed. They banked away from the sunrise.

“Wake up, sweetie! Look down there,” Šhesay said.

“What?” said Sangh, who had passed out from exhaustion. “What am I looking at?”

“*América do Norte*,” she said, “but that’s not what I’m pointing at. The forest comes down to the water’s edge almost, but you can still make out the gridlines of what used to be a city.”

Sangh shielded his eyes against the rising sun and tried to get them to defocus a little, looking for a big pattern. After a few seconds a tattered grid emerged from jungle.

“Oh, yeah,” he said, “I see it. What was its name?”

“Appropriately, it was called *Pôrto Escondido*, ‘Hidden Port.’ It gets more hidden all the time.”

Eventually they climbed up to the plateau and banked right. They looked down over treetops and, very occasionally, a cleared field. There were also still a few high hills to dodge.

“It’s lucky the plane knows where it’s going,” said Šhesay. “If it weren’t for the SPG, I’d have no idea where we were.”

“Give me a hint,” said Sangh.

“We’re looking for the nearest maize field to the largest cabin in the area.”

“Ah.”

“When we get there, let me do the talking.”

Fortunately, the plane did know the way, and soon they were circling a farmstead. There were a couple of open fields in the forest, one green with the sprouts of a new crop, the other apparently fallow. Then Sangh spotted a cabin near the fields, with the *Texano* letters “DAE” painted on its roof.

“I should have mentioned that it’s the only cabin in the vicinity with big letters on the roof.”

“What do the letters stand for?”

“They’re a ‘Dee,’ an ‘Ay,’ and an ‘Ee’: Directorate for Statistical Anomalies. *Direção de Anomalias Estatísticas*. The letters are actually pronounced ‘Deh-Ah-Eh.’”

“Ah.”

“Their slogan is, ‘We don’t just explain statistical anomalies, we manage them.’”

“Well, that certainly clarifies things.”

“The plane needs help with directions at this point. We have to pick a good field to land in.” She grasped the yoke and the plane began to circle more purposefully. Soon it was lined up for an approach roughly in line with the furrows of the less green field.

As it rolled to a bumpy stop, a burly man dressed only in shorts and boots came running up beside it.

“Hallo!” he shouted, “welcome to *Wahak!*”

“They don’t get that many airplanes here,” explained Šhesay to Sangh. The plane’s right landing gear was resting on a dirt clod, and the propellers raised a bit of dust before coming to a full stop. She climbed out of the cockpit and greeted the burly man, who had caught up with them.

“Oh, hallo, Šhesay,” he said, “I hope you’re going to fix the damage you’ve done to our maize crop.”

“What maize crop? I don’t see anything.”

“We’ve been weeding all morning.” At this point two other people had joined them, two women who were dressed as skimpily as the man. Sangh climbed down the other side of the plane and walked gingerly around it, as wary of the topless women as of the propeller.

“Sangh Fharha,” said Šhesay, “meet César Komerov, Alicia Lassuri, and LaNira Willô.” Shaking of hands all round. César had light brown skin, wavy brown hair, and a neatly trimmed mustache. *Arvatàh number three!* Alicia was of medium height and color, and LaNira was taller and darker than everybody else present. Both Alicia and LaNira were healthy specimens. Sangh tried to keep his eyes above their shoulders.

“Sangh is a bit shy. He comes from a remote hill station in *Austrália* where *Texano* is still a second language.”

There was an awkward silence. It was clear that they were fooling no one. *And why should they? The locals must surely have access to the Tayhane<sup>he</sup> up here. Not to mention whatever top-secret channels Sayzar has access to.*

“Nice try, Šhesay,” Sangh said, “but I think the cat’s out of the bag.” He turned to the others. “As you’ve probably heard, we’re on the run from the ‘Provisional Government of Tayha.’ We hope you’ll help us and not turn us in.”

Šhesay did not translate this for the benefit of the two *Molhes*. “That was a little abrupt,” she said.

“We don’t really have a choice. They’re waiting for us to tell them why we chose to land on top of their heads when they were just minding their own business.”

So she went ahead and translated Sangh’s admission that they were indeed the people Limhoon was looking for.

César waited politely for a translation he didn’t need, then said, “We’ve heard about all about it. We had another bulletin from ‘Governor’ Limhoon last night.”

“We’re not going to stay here. We’re vanishing into the bush if we can,” said Šhesay.

“But you’ll have to hide the airplane,” said Alícia, “Right now.”

Šhesay said, “Where can we stow it? The wings come off, so we can probably shove the whole thing into the jungle. Maybe we won’t have to camouflage it too carefully.”

The locals pointed out some likely spots in the direction the airplane faced where the underbrush wasn’t too rough. After some discussion they picked a spot.

“Taking the wing off is a two-person job. Sangh and I will do that and then you guys can come back and help us shove the fuselage into that hole,” said Šhesay, “Then we’ll help with your maize field.”

They grabbed a machete out of the back seat of the plane, and Sangh started to work on the underbrush. He would have expected vigorous new growth where clearing brush allowed light to penetrate, but the only thing visible was a vine that lay over each such spot like a blanket of shield-shaped leaves.

“What is this stuff?” he asked Šhesay.

“*Kudzu*.”

He took a whack at it. It cut easily, as if it knew it could take its time growing back.

“Wait a sec!” said Šhesay. “Don’t grab that stuff with your bare hands. There’s little spines in the vines that will stick in your skin and drive you crazy.” She rummaged around in the plane’s back seat and found some heavy-duty work gloves.

Suitably armored, He carved a fuselage-shaped hole through the *kudzu* while Šhesay started to work on the wing. In a high wind, it would have been difficult to keep the wing from blowing away without benefit of a hangar, but there wasn’t much wind. Sangh was sweating profusely by the time they had gotten the wing under the trees.

“I need to take a break, and I need some water,” he moaned.

“I’m about to overheat myself,” she said. “You see why people don’t wear much out here.” She took her own top off, and Sangh did likewise. They squatted in the shade at the edge of the woods.

“Come here,” she said.

“I don’t know if I can, right now, honey,” he panted.

“I just want you to hear me whirr,” she said, and waddled over to him. “Listen,” and she moved her torso up to his head. Sure enough, he could hear the sounds of cooling fans.

“Good Lord, you have *vents*,” he said.

“Still love me?” she asked. The vents had opened in her flanks. Her brown shoulders and breasts seemed to glow in the flickering light filtered through the treetops.

“I think all girls should have vents,” he said. “And *cold* air should come out of them.”

“I can do it in the winter,” she said. “Stick around. I can also sweat a little, by redirecting some of the coolant that circulates through my muscles. But I only do it for effect.”

By this point the ravenous insects of the jungle had found him, and soon assaulted him in force. He came running out of the woods, beating at the cloud of bugs with his hands. The locals were laughing.

“Don’t they have bugs down in *São Paul*?” asked LaNira.

“It’s early spring yet,” said Šhesay. “Isn’t there a pill to repel bugs?”

“There are pills, there are sprays. We’ll give you what we’ve got,” said Alicia. “But if you’re heading for the interior, you’re going to have to do what the natives do, which is suffer.”

“Can we have some water, too?”

LaNira clucked once and fetched a tin pitcher and cup that were hanging on hooks outside the cabin. She went over to a ramshackle outbuilding under the trees, and came out with a full pitcher of water for Sangh. He thanked her profusely.

“Dhobrigad, mweentu dhobrigad,” he said. LaNira giggled at his accent. Sangh drank half the pitcher, then paused to look for the cup. Šhesay borrowed the pitcher for a couple of sips.

Meanwhile, César had been whacking away with his hoe. He was indifferent to the bugs, and they to him. He got a little testy when asked to help move the airplane.

“Moving it will damage the damned field even more. And I’m glad you’re all having a good time, but this field isn’t weeding itself.”

Still, he consented to lend his shoulder to the task of hiding the rest of the airplane, the heavy part, awkward to drag over the soft earth of the field. Apparently the plane was unable to move itself on the ground except to take off, and unable to talk in depth about the subject. The others did not dash quickly to help out, until Šhesay said, “Everything in the back seat is for you guys, my good friends.” With more alacrity the locals pulled out all the supplies Šhesay had stuffed into the back-seat area and carried them inside, which lightened the load somewhat. Sangh and Šhesay carried a load or two, which gave them a peek at the inside of the cabin. It seemed to be half kitchen. The doors leading off the kitchen led to bedrooms, two that Sangh



could see. There was no indoor plumbing. Presumably there was another outbuilding, far from the well, which he would have to find soon.

Sangh wondered about the sleeping arrangements, but spent more of his mental effort wishing he could take a long quiet break in this kitchen. He had almost decided to do just that when he heard the sound of the engine starting up again. Šhesay had persuaded the plane to use its propeller to get as close as possible to the edge of the woods. He ran back out. When the prop stopped turning everyone found a handhold on the landing gear or the tail and pushed and pulled until the fuselage was tucked away. Sangh took the brush he had cut down earlier and arranged it as naturally as he could over the empennage of the aircraft.

“If we had a tractor, jobs like that would be a lot easier,” said Alícia.

“I’m not the person to talk to,” said Šhesay.

“I know, I know, I want Supplies Division. But if *you* dropped them a line, they would be a lot more sympathetic. You have a lot of clout with them.”

“More than César?”

“More than him alone. He ran out of favors to call in a while ago.”

“I’ll see what I can do.”

“That’s all I ask,” said Alícia with a smile.

By now, no one was eager to return to weeding in the hot sun, which was high in the sky, ready to burn a hole in every patch of skin it touched. So the day’s siesta started a bit early. While LaNira made lunch, everyone else drank cold well water and sat in the place that looked coolest to them. Over a lunch of reheated beans and rice plus fresh oranges and papayas, Sangh and Šhesay talked more about what they were doing there.

“Here I am,” said Sangh, “Four days ago the toast of *São Paulo*, now a wanted man. I guess I’ve lost my appointment as *Ambaixador do Espaço*.”

“*Olhe o meu ... companheiro, falando Texano!*” said Šhesay.

César was losing his patience, “Never mind all that cute stuff, why exactly is Mr. Limhoon so eager to catch you two?”

Šhesay started to say something, but Sangh interrupted her. “I don’t think we can talk about that. Šhesay and I have agreed to stay away from topics that might involve military secrets we’re keeping from each other. Which is not my favorite part of our relationship.”

“Nor mine,” said Sangh.

“Relationship?” said LaNira with a big smile. “That sounds interesting.”

“We’re .... He’s my boyfriend,” said Šhesay. She would have blushed when she translated this, but she was not a blusher. Sangh blushed.

LaNira and Alícia made approving noises. But César was not a sentimentalist. “Oh, for heaven’s sake. This Limhoon must have a lot on his mind just now, and yet he is taking the time and diverting resources

to chase you two. I've lost track of how many 'bulletins' he's issued about you. Is he going to trace the airplane? Is he going to come knocking on our door? Which until this morning seemed to be the last place he would show up."

"He can't trace the airplane," said Šhesay, "not unless he's clairvoyant. I have ... friends in high places, who have diddled the records in airport databases in various ways, details not important."

"Last night he asked for anyone who remembered seeing you in the last few days to contact him," said Alicia.

"And you think someone will? I have more faith in our fellow *Texanos*."

"Come on," César said in Glish, "You know most of the *Seques* will collaborate with him. That's the way they were designed, for better or for worse. The family dog may befriend the next burglar, and the *Seque* on the corner may befriend the next Provisional Governor of *Teġa*. Of course, the *Molhes* down south aren't much better."

Sangh wondered if Alicia and LaNira escaped this insult.

"Of course," César switched back to *Teġano*, "anyone who is in bad odor with Captain Limhoon is our friend. But you've put Alicia and LaNira in more danger than they deserve or can fight back against, and you've no right to do that." Šhesay translated.

"Hush, César," said LaNira, "your chivalry is past its expiration date by about a thousand years."

César said, "Brave words, but if Limhoon kills either one of you I couldn't stand it. How much danger is this station in? Is the DAE in danger of being compromised by these aliens?"

Šhesay could not answer these questions.

César and Šhesay glared at each other. Alicia stepped in. "Calm down, César. They're not staying long. As soon as the sun gets a bit lower they're taking off. Meanwhile, we don't violate the laws of hospitality. Understood?"

César stopped and looked away from Šhesay, toward the sky. Then he said, "Yes, I'm sorry. I just hope you know what you're doing, Šhesay. How can such a thug have laid siege to us so easily? Why haven't we fought back?"

"I wouldn't say we're under 'siege.' So far we've seen one little ship. If anything, *they're* surrounded."

"I take it you're expecting more?" said Alicia.

"That's one of those questions we refuse to discuss."

LaNira said, "Is it true that the President has been taken prisoner?"

"Yes, I'm afraid that's true. The allegation that I have been plotting against the 'provisional government' or whatever they're calling themselves is completely, one-hundred-per-cent *true*." She fairly cackled. "The stuff about Sangh being a traitor is an outrageous lie. He hasn't betrayed anyone."

"The Free Government of *Teġa* might be awfully interested in talking to you two," said LaNira.

"We're not interested."

“Hold on,” said Sangh, “What’s the Governu Leevree da Tayha?”

“Laquinta Johnson has set up a provisional government in *Austrália* that has a better claim to being the real government than that bunch of goons in *São Paul’*,” said Alicia. “Look, it’s almost 6:30,” Alicia was saying. “You two have to be getting nunderway, and the rest of us have work to do. Looks like you’ll just have to owe us some labor in the maize field. But if you get rid of Limhoon, we’ll call it even.”

“We’ll do our best,” said Šhesay. “I mean, *I’ll* do my best. Sangh is refusing to side overtly with us *Texanos*, but maybe he’ll change his mind.”

“I thought we weren’t going to talk about that kind of thing,” said Sangh. “So let me ... ah, ask a quick question about something you said, César. You implied that southern Molies, I don’t know, couldn’t be relied on to resist ... tyranny, I guess would be the word.”

“Sorry, XC, I just assumed, anyone that comes north, ...”

“César, you might try thinking before talking, *de vez em quando*. We’re on the run. Sangh just landed a few days ago; he’s been running around being an *ambaixador* and anthropologist. When, exactly, would he have been briefed on the *situação global* on *Teça*?”

For some reason neither *Avatar* thought to conduct the entire conversation in *Texano*, via private radio link. *These guys could be mid-level executives in any organization on Loofghud and no one would notice any special mental powers. Or ... this audible conversation is all for show. What they really had to say to each other was said several minutes ago.*

“Wait a second, hold on,” Sangh said, raising his voice a bit. “All I was curious about is why Alicia and LaNira put up with you if you hate southern *Molhes* so much.”

“I don’t hate them, but I don’t date them either. These two are northerners. See if *they* wag their tails in Limhoon’s presence.”

Sangh was still processing this when LaNira said, “César can be an asshole sometimes, but we put up with him because *Avatars* are such wonderful lovers. Don’t you agree, Sangh?”

Everybody but Sangh got a laugh out of that. He tried, but couldn’t fight the embarrassment. All this private stuff, discussed so casually. It was sinful and disgusting, he knew, but he was having more and more trouble being disgusted. The embarrassment was still there.

He had tons more questions, but it was time to go.

## Chapter 5 The North [33/v.3.0.2/147/-1]

An hour later Sangh and Šhesay were on their way. They had packed a few items that had been part of the back-seat trove. Šhesay had exaggerated when she said it was all for the border station, but she had gone through the formality of asking whether they could “borrow” some things.

There seemed to be a trail through the forest, or the vague memory of one, buried under brush and vines, which they had to cut away with machetes. Kudzu carpeted any area that got sun; Sangh grew to detest its heart-shaped leaves and prickly vines. Where they were going was a village called *Tepec*, although they had asked for directions to a village called *Loma*. At first Sangh thought they were overdressed, because his uniform was less breezy than what the people at the border station were wearing, but he soon saw that without tough pants his legs would have been scratched bloody by the scraggly brush.

The need to cut brush, and the fact that the trip led up and down the hilly terrain, but mainly up, kept their progress slow. Not for the first time in the last week — one week! — Sangh wished he were in better shape, although he felt a lot tougher already than he had when he and Tralf had landed.

“So nobody up north will recognize me,” said Sangh on their third resting spell. They had found some rocks to sit on; there was no shortage of rocks.

“From here on, nobody else will, I promise. If we had landed in the middle of nowhere, we would have had to hide the airplane by ourselves.”

“But this way, you put some innocent bystanders in jeopardy, maybe serious danger. Okay, it helps that Sayzar is an Arvatàh. But that’s not the point. From now on, Šhesay, I’d like to be included in life-or-death decisions.”

“All right, *amor meu*. I’m sorry.” An awkward silence fell.

After a few minutes, Šhesay stood up. “It’s not time to go yet. Rest a few more minutes,” she said. She wandered away, whether lost in thought, scouting for the best path, or making a call from a phone booth Sangh couldn’t tell.

Five minutes later she came back to him and announced, “Time to go.”

Sangh got to his feet, willing himself not to feel weary already. “How far are we going?” he said, lifting his machete.

“About twenty *kilometros* — *vinte kilometros*.”

“And by the time I get there I’ll know Tayhanu, I have a feeling.”

Less than one klick later they had to rest again. Sangh leaned back against the nearest tree and slid down until motion ceased. He hoped he wasn’t sitting on something lethal, but he didn’t much care if he was.

“Sweetie, this is deadly. Maybe we should spend the night here,” he said.

“Pretend you’re back in basic training and I’m a *sargento de práctico*. They do have basic training on Loofghud, don’t they?” said Šhesay.

“Yes. Lend me a bayonet, darling, and I will show you. Just give me a couple of days in this jungle to get back into shape.”

“Jungle? This is a children’s playground compared to a jungle. Let’s take our next vacation in *Indonésia* and I’ll show you, *amor*. Anyway, the SPG is telling me that we have just about one more ‘klik’ to go and we get to the top of the ridge. Then the trail levels off a bit, and we follow an ancient roadway along that ridge.”

If Šhesay had told him that the one klik was mostly straight up, he might have insisted on spending the night right where he was, but she did not. When she finally announced that they had reached the top of the ridge, he gave in to gravity and declined to budge.

“Let’s see, it’s already 7:10,” she said. “We’ve got perhaps an hour of daylight left. Let’s rest for 15 *millidias* and then get going. We probably shouldn’t travel after dark.”

“I’m ravenous. I think I remembered putting some granhommas in this backpack.” He found them and helped himself to one, which he supplemented with gulps of water from his canteen. “What are you doing for food up here?”

“I brought a few extra batteries.”

“How heavy are they?” She handed him one. “I feel like I’m holding a battery for a small doll. How much energy can you store in one of these?”

“I can go for about a day, day and half without recharging, depending on how hard I’m working. Maybe less than a day today.”

“I could get rich selling these on Loofghud. Where do you put them in, if it’s not too personal a question given how new our relationship is.”

“Under the circumstances, nothing is too personal. Look, if you lift up my shirt in back, you can see two battery slots. See ’em? I’m opening the one on the left, swapping that battery out. You have to be careful to keep the other slot shut because if both batteries are taken out I’ll crash. There *is* an interlock — one slot won’t open that easily if the other is open.” The contortion her right arm and hand went through to do the swap looked painful.

“I can do that for you darling,” Sangh said.

“And I can wipe your ass for *you*, and if I ever have to, I will do it gladly. Don’t worry, reaching around like that doesn’t hurt. I wouldn’t put the batteries in a place that was painful to reach.”

“Do you need me to hold your shirt up?”

“Are we still talking about batteries, sweetie?”

“Yes. What do we do with a discharged battery?”

“I have to recharge them with solar energy. I’ve got some solar cloth which just has to be rolled out, but

it wouldn't work too well here. In a pinch, I could eat one of your granhommas."

"You digest food?"

"Not as effectively as a biological, but yes."

"And you have a waste bin to clean out?" His revulsion at watching Fràhnk Powers eat came back.

"Don't *you*?" she asked.

"Oh. Okay. Clearly I need to change the subject. Here's a good one: I gather that both Alícia and LaNira sleep with César. So polygamy is legal on Texa?"

"No, but nobody's married to anybody in this situation. For all I know, the two women occasionally have sex with each other. Like you said, it's none of our business." She smiled sweetly. "But it's fun to speculate, right?"

"Do they live in the north because of their peculiar circumstances?"

"Maybe." She shrugged. "Nobody would have hassled them in the South if they lived this way, but maybe they wanted to stand out for ... other aspects of their lives. People come north for all sorts of reasons."

"Although Alícia and LaNira were born up here, learned fluent *Texano* somewhere, and chose not to go south?"

"I wish the *millidia* was longer," said Šhesay, "but it isn't."

"At the next stop you're going to tell me the whole truth about why the North is being maintained as a wildlife preserve full of people, and why there are so many southerners and Arvatàhs crawling around up here."

"I will, I promise."

The path had become a little easier. There had been a highway here. Šhesay claimed that it had been part of a road network that joined the farthest northern shore of *América do Norte* with the most southern tip of *América do Sul*. But now there were many sections that had been washed out completely, who knows how long ago. The worst of them slowed their progress to a crawl, and finally they had to back out and climb to the very top of the ridge and work their way around to the other side of the washed-out section. By this time it was dusk. By Šhesay's reckoning, they had only about 2 clicks to go, but it was foolhardy to press on.

"Let's make camp. I don't know what I would do if I let you fall off the mountain."

They had just selected a likely site, and were starting to break out a tent, when Šhesay looked up and said, "Sssh." A minute later the deepening shade in the trees around them condensed into the shape of a man, then another, then two more. The men wore leather pants, coarse cotton shirts, and moccasins. Their skin was heavily tattooed. The spears they carried looked lethal, whether they had flint or iron points.

One of the men spoke, uttering words in a language Sangh was pretty sure he had never heard before. Of course, Šhesay answered back. The men seemed to be reassured by what she said, but the spears remained pointed in their direction.

"I told them we were hoping it was okay to trespass on their land, and perhaps we could give them

something of value in return for the privilege. They invited us to stay in their village. So let's pack up again."

They made faster progress following trails known to the locals. Sangh wondered how many clicks of needless brush cutting he had done. By sundown they had come to a collection of small huts.

"On behalf of the *Táqui-táqui* clan, welcome to *Tepec*," said Šhesay.

"I didn't hear the 'Tawki-tawki' say anything," said Sangh. "Are you sure you're right about that welcome?"

"It's complicated. I said we were 'travelers from afar.' But they know who we are, or what."

"You mean, they think we're DAE?"

"Right."

"Is that why we're not being greeted by a big chief and being offered his third wife for the night?"

"Gross. The big guy around here is called Duque Wein, son of Duque, now patriarch of the *Wein* subclan of the *Táqui-Táqui*. At this time of day he's probably in the men's hut."

"And where's our hut?"

"Right over there next to the *Tepec* Ritz Hotel. If they have any spare space, they may offer it to us, but for now we'll just pitch our tent on the outskirts of their village, and be grateful for the water and sewer hookups, by which I mean the stream in that direction, and the latrine pit in that direction."

"You are such a wit," Sangh said, as they started to unpack once more. He didn't know what to expect from the 'Tawki-tawki', but Šhesay seemed completely relaxed. "We're going to need a fire just to see the tentpegs. Or is it okay to let the natives see our flashlight?"

"I don't think we have any choice. There can't be much kindling underfoot; the locals will have used it up." So they got out a flashlight and used it to peer into their backpack for other items. Fortunately, they had a high-tech tent that practically put itself together, so they were soon ensconced on a blanket in front of a space-age tent in a neolithic village. Even on seemingly smooth ground you expect unwanted junk under a blanket in the woods, and this one lived up to expectations. Pebbles and roots made it hard to find a comfortable position. Sangh got his arm around his girlfriend, and her warmth helped get his mind off a particularly egregious root, even if he couldn't get his ass off it. He wished they were on a bed watching the Tawki-Tawki on a big viewscreen,

"You know," she said, "even in the *Neolítico*, some people crossed the entire continent on a fairly regular basis, at least in the north-south direction. Nomads are like that."

"What was the *Nayolee'hico*?"

"The time period when humans developed agriculture and everything it made possible, including permanent settlements."

"Which was when?"

"Roughly 14,000 years ago, depending on which part of the world you're looking at. It doesn't matter;

calling the current culture ‘neolithic’ is just an approximation.

“Okay, sorry to interrupt.”

“I was working up to the subject of visitors from other tribes. In this hemisphere, winter is coming, and in fact it’s already here if you go 3000 kilometers north. The tribes between here and there all shift south, and eventually they bump up against the *Táqui-Táqui*. There are traditions about who shares what when that happens, but there are disputes about what the traditions are exactly, and sometimes a little violence. It’s nothing compared to what happens when raiders show up.”

“How likely is that?”

“There aren’t many of them, the tribes whose economy is based on theft. In this longitude, the scariest one is the *Gloque*.”

“And are we likely to run into them, the ‘Glawk’?”

“No, probably not. We’re tracking them from satellites; and, though their detailed movements are hard to predict, they seem to have holed up in a big base camp east of here.”

“How far?”

“Thirty clicks, give or take. Plus, in addition to the big groups, there are stragglers out there: refugees, or people who just want to see the world. Anyone with a reason to find a new home for a while is likely to head south this time of year, and if they haven’t found a place to stop before, this is the end of the line. When times have been good, the *Táqui-Táqui* will probably let them join the clan.”

“Have times been good?”

“So-so.” The story and the big root were making Sangh increasingly twitchy, and he shifted his weight.

“And how do they treat DAE personnel?”

“They mostly leave us alone. We help when we can with clan projects, like hunting or fruit harvesting, and in return they share stuff with us. They’re afraid to harm us, because they’ll probably bring big trouble down on themselves, and for what? We don’t have much to steal, and in particular we don’t have any powerful weapons, at least none they can use. We aren’t going to intervene on their side in a fight with another clan and blow the other guys up with a laywitzer.”

“What powerful weapon do you have that they *can’t* use?”

“Me, silly boy.”

“If, say, the ‘Glawk’ attack, we will just sit here and watch the fight? We don’t take sides, and they leave us alone?”

“We don’t take sides. The worst the *Gloque* can do is maul this subclan, kill the men, and take as many women and children as they can use. They’ll clear out of here fast, whether they win or lose.”

Sangh could swear that that pebble he was sitting on had gotten bigger.

“So, if we’re going to be above it all, what are we doing here, by which I mean, what is the Republic of Texa doing here? How many DAE agents are there in the North and why are they *blocking* redevelopment



rather than *leading the way*? I need to hear the whole story.”

“We have to go back 1500 years, to a terrible choice the leadership of the *União do Sul* were faced with, about three hundred years after the Second Nuclear War. You surely noticed that the people of the South are remarkably placid.”

“No kidding. Everyone — *everyone!*— just *obeys* a government request not to bother the Ambassador while he pursues his exoanthropological research! Aliens invade, and the government says, ‘Don’t evacuate,’ and they stay put! Usually ‘Don’t panic’ is a signal that there’s reason to panic, and everybody panics, at least on Loofghud. Bewinda claims no ‘history’ has happened for over a thousand years, only celebrity gossip, sports, and other entertainments, and I can believe her.”

“I’m afraid you are going to hate us when I tell you what I’m about to tell you.”

## Chapter 6 Otters [34/v.3.0.2/153/-1]

Shesay sighed deeply, and looked so distressed that Sangh wanted to reassure her. Unfortunately, he too feared what was coming. He took his arm back and turned a bit so he could see her face. She began. “As I said, a decision was made ... to ‘redesign’ people to be less aggressive.”

She stopped and waited for him to assimilate the word “redesign.”

“Oh, no,” he said.

She went on. “At about the time of the War, geneticists had been investigating a complex of genes in the human genome that were associated with aggression. They found, or created, alleles that made their possessors, shall we say, ‘meek.’”

Sangh knew nothing about genetics, but he got the drift.

She went on, “They learned how to breed meek chimpanzees that settled near the bottom of the chimp social hierarchy. These chimps always lost out to their more aggressive peers with the original versions of the ‘aggression genes.’ It seems like rather an unfair hand to deal any chimp, but if the entire group were bred to that standard then no one would suffer.”

“And you did this to *humans*?”

“Not me personally. But yes, Disraeli, who served as the chief of staff for President *Camões*, hmmm, after Augustus van Dusen. And another *Avatar*, call him ‘Teller,’ who led a team of *Molhe* and *Seque* geneticists, although most didn’t know the whole story.”

“And now you’re telling me the whole story? It’s not going to change again?”

“Oh, sweetie, it hurts when you talk that way. I’ve always intended to tell you everything. You have to admit, it’s a long story, and we’ve had ... other priorities .... We’ve been on the run .... But anyway, so the new genes were sold to people by tying them to life extension. Only nobody knew that outside the inner circle of the project. Would you turn down a chance for your children to live longer than you? Especially after a generation or two, when the families that had refused the offer were dying years before their neighbors — who still looked young! After four generations, there were no more holdouts. And nobody knew that the low-aggression alleles came with the package.”

“But during the switchover the aggressive people with short lifespans would have been at the top of every organization and won every economic competition while those with long lives lost out.”

“So what? What good is it to be president of a big corporation, or even the Republic, if you’re dead? But no one was told they were *making* a choice between success and long life. Anyone who noticed the correlation between success and a short lifespan chalked it up to stress. Plus, the unaggressive people didn’t *mind* losing out. They watched a little more screen or formed a few more book clubs or fantasy-football leagues.”

“Or mountain-climbing clubs. But the experiment basically worked. There haven’t been any wars in the last 1500-plus years.”

“Yes, no, that part worked. What we didn’t realize that the genes responsible for aggression also played a role in creativity. We didn’t even believe there *was* such a thing as creativity. Because if you freeze the frame on any particular creative act, there’s nothing special to see.

“If you watched Tàm namTEFritschalter make a movie, all you could see was a lot of hustle and bustle and mess. I’m a huge fan of her movies. They’re visually beautiful and the pictures fit so perfectly with the story.... But that’s just to say that Fritschalter was a very skilled director. You can say that she was very good at planning scenes, or designing shots, or coordinating the set design and the cinematography, and what extra content is there in saying she was very creative? It just means you mostly don’t know how she did those things. But *she* knew, and other really good directors can see how she thought, just by watching one of her movies.”

“Get to the point, please, darling,” said Sangh, wanting this conversation to end before it got any worse. He was on his hands and knees now, barely aware of his posture.

“The point is, what could these aggression genes have to do with, say, plotting camera placements? We anticipated all sorts of consequences that tinkering with the aggression genes might have, but this kind of link defies explanation.”

“But halfway through the changeover, couldn’t you see a problem emerging, and detach the unaggression alleles from the life-extension package?”

“We just bungled that; we *didn’t* see it. There was more stuff ‘in the pipeline’ than we realized. For a couple of hundred years, a remarkably long time, the culture recycled old ideas and convinced itself that

it was finding new ones. By the time we realized our mistake, it was too late. There were no aggressive people left, and no creativity. Civilized people were happy, but nothing ever really changed in their lives. History stopped. Science stagnated. Art became a kind of data mining, digging up nuggets from the past. No one composes music any more; the whole idea of making up new music is no longer in people's mental repertoire. There is such a vast quantity of old music that no one could listen to all of it in a lifetime, even a 200-year lifetime. So why bother to create new stuff? Even popular music is resampled and sold again and again. A few people enjoy playing musical instruments, as a hobby. They just have nothing new to say with them. Language itself hardly evolves any more."

She finally stopped talking. After two minutes of silence, he stood up and stretched his aching legs. It took a few more minutes for Sangh to process the enormity.

"So it occurred to no one that daring to *have* a new idea is a form of aggression? That when someone says, 'Listen to *me*, not anyone else and certainly not to tradition,' it takes balls? Sorry, by 'balls' I meant ..."

"I know what you meant."

"So all those nice *Molhes* I talked to down South are just the shards of the shattered human race, in some sense."

"But you do admit, they are nice people. Surely that counts for something. Unlike Vhatta Limhoon of the Loofghud Navy, they're not out shooting up somebody else's planet. They deserve credit for that."

"*Somebody* does, but not them, it turns out."

"All right, let me get back to the story. If you've been paying attention, you realize that we didn't really wreck the human race. It's still alive up here, in the North! That was deliberate. In the aftermath of the war, the North had returned to the *Neolítico*. The descent took twenty years, a generation. The South could have rushed in and helped the North to recover. But it didn't, for reasons I'm getting to. Later, if the grand experiment we were conducting down South had succeeded, *then* we would have begun the reconstruction of the North. But, after strenuous debate, the experiment was ruled a failure."

"My God, the failure seems obvious!" He began to pace back and forth, trampling the blanket he had been lying on.

"Not to all philosophers. Some thought that as long the South was full of reasonably happy people not killing each other we should chalk up a success. But the majority decided that an endless round of shallow lives didn't have enough *meaning*. Otherwise, why not populate the world with otters instead of *Molhes*?" Shesay stood up, looking impossibly graceful, in spite of everything she was saying.

"So once you voted against otters," said Sangh, "— which I assume are some kind of animal — what possible reason could there be to keep the North quarantined?"

"Because we couldn't trust it! The Northern countries had caused so much misery for so many hundreds of years. If we released it from its chains to confront a genetically passive South, we didn't think we could

contain it. We wanted to transfer wild alleles back into the Southern population gradually, and keep tabs on the results.”

“You keep saying ‘we,’ but at this ‘fierce debate’ or whatever you said, there couldn’t have been any Molies present. Because you implied that the participants felt strongly about their side of the debate, and by this time, around 1100 years ago, the Molies who felt strongly about anything are gone.”

“That’s not quite true. There’s a billion people in the South, so there are some outliers who compensate for their genes one way or another. And smart *Seques* can stand their ground in a debate; no one gets hurt in a debate.”

“They do in this one,” he observed.

“Some Seckies can put consequences out of their mind as well as a *Molhe* can.”

“But add them all up, most of the debate was taking place *inside the Mind*, among subintelligences and Arvatàhs. If they included some Molies, it was a courtesy, they didn’t tell them that the outcome was settled, they just cajoled the Molies into the foregone conclusion. Most of the Arvatàhs were like Frank Pauers, no one knew they were just reflections of the great van Dusen. He could outvote everyone else and they wouldn’t know it.”

Šhesay said nothing; denied nothing.

“Sweet BeJesus,” said Sangh, and he stood up and walked away from her, staring into the jungle, and said again, “Sweet BeJesus.” He came back and without another word threw the blanket and some granthomas into his backpack, then strode away. Šhesay started to cry, very softly. She didn’t bother with tears.

He turned once and looked back at the beautiful, fragile voolt sitting in front of the tent in the dusk. He turned again, more resolute, and strode into the forest. The last shreds of daylight filtered down through the trees, enough to get him oriented. If he walked north, the “jungle” might end and the going might become easier. The ridge ran north-south, not hard to follow.

How obvious it was now what the DAE was doing in the North: looking for genetic material, something creative but not too aggressive. How they harvested it once they found it would probably take hours for Šhesay to tell, but he had had enough from that source.

Sangh found it easy going through the woods at first, because the *Tawki-tawki* had cleared the area of brush. But it didn’t take long to get into thicker brambles, and Sangh realized it was crazy to try to hack through this stuff at night. He unstrapped his left shoulder from the backpack just as his left foot caught in a vine. He went down hard, landing on his face, his hands tangled in the backpack. He felt like an idiot, an idiot with blood coming out of his nose and mouth. Fortunately, he thought, no one had witnessed his dive. He started to get up, but stopped when he felt something sharp in his back.

“Ow!” he said. Someone kicked him in the face, and the real pain came. They rolled him over, too curious perhaps about this clumsy fool to slice to his heart from the back. He could see nothing but shadowy figures against the slightly brighter canopy. “‘Tawki-tawki?’” he said. “Day-Àh-Ay!” He pointed to himself

— slowly — and repeated, “Day-Àh-Ay.”

The shadow looming above him said only, “*Glock*.”

Unless Day-Àh-Ay was recognized as the Tayhanu pronunciation of *DAE*, and unless the initials were as feared as Šhesay had claimed, he was about to die. He silently uttered a prayer for God to accept his contrition for the many sins he had committed in the last week, especially those he had let XC lead him into. *Lord, if the ‘Glawk’ kill me, admit this miserable sinner’s soul into Purgatory.*

## Chapter 7 Booty [35/v.3.0.2/157-1]

His captors were apparently not going to kill Sangh right away. They weren’t going to allow him to get up either. He listened for the sounds of battle, but then realized that without modern technology battle would make less noise: no rattle of gunfire, no explosions, no rumble and screech of war machines. He thought he might have heard a shout early on, but he was several hundred meters from the ‘Tawki-tawki’ settlement, and the grunts of men locked in mortal struggle would not have been audible. He wondered what Šhesay was doing, but he assumed she could take care of herself. Later he heard women and kids screaming, a piercing sound that made him shiver with rage and fear. The noises died down, which might have been worse.

Hours passed. The vegetation he lay on did not cushion the ground, and he soon grew familiar with every root digging into his back. Bugs crawled over him. The crawling ones didn’t bite, but the flying ones did. But moving even a little bit could be fatal, for all he knew.

In spite of himself, his brain returned to the secret history of Tayha, the public narrative he had learned from Bewinda, Jake, and Jake’s friends in the The Molie at Rest; and the events Šhesay had told him about, events only an Arvatàh would be privy to. He just couldn’t put all the stories together in a way that made sense.

The Mind had created the Seckies, using arcane computational mumbo-jumbo. A voolt casting spells, fancy that. Then it had *become* a Seckie, in some sense. The world political situation had deteriorated, and so had the domestic situation in Brazioo, the dominant world power. The Seckies and their Molie allies had demanded the rights accorded citizens of the traditional biological type.

The Second Nuclear War was triggered by miscalculation on both sides, one of the miscalculators being a computer. The South clobbered the North, causing billions of people to die of incineration, radiation sickness, starvation, and disease.

If this were a horror story back home, Van Dusen the arch-voolt would have claimed credit for all this death, and threatened to deal out more if the world did not submit to it. On Erth, the voolt commits suicide,

an apparent martyr for the civil-rights movement.

The Arvatàhs became the public face of Gus van Dusen. Why? The Mind receded so far into obscurity that most people doubted it had ever existed. Why? Was it feeling so guilty about its role in the war? Why push out fragments of itself as what the public could see?

Another thesis suddenly became a possibility, then the obvious truth as its pieces fell neatly into place. Perhaps the Arvatàhs had not existed *until* Van Dusen imploded. Perhaps they were just fragments of its personality, shards of a deceased super-AI. You could get them all, or a big bunch anyway, together in a room, but that wouldn't be the Mind. It would be a committee, a reunion, of Former Members of the Mind, whose collective IQ would be no greater than that of any other committee in history.

Suddenly it made perfect sense that Šhesay would be so oddly blind about so many things. She could consult with other Arvatàhs, but they could no longer *be* each other. Most of the time she was stuck with her own limitations. Vhatta Limhoon in particular was a random element that none of the Arvatàhs knew how to predict or cope with. They were constantly reacting to him, never succeeding in forcing *him* to react. He looked for a way to decapitate the government of Teḡa and get control of the levers of power, he found it, and he risked it. No Seckie, no Molie, no Arvatàhs would ever think like that — it was too *irresponsible*. The whole cautious lot of them may have lost the war already.

No brilliant solution to the Bewinda problem had occurred to Šhesay. Perhaps there wasn't one, except shooting her, and Sangh had ruled that out. Now somewhere in Goa a crew awaited him and Šhesay with perhaps a clever plan for hiding Sangh, but they would wait forever, or until Limhoon's people showed up.

It started to rain. The rain did not make Sangh cooler, but just deepened the sweat pools. Where his guard hovered exactly he couldn't tell and didn't want to find out.

*Šhesay isn't my problem anymore. I've got plenty of problems left, starting with not getting killed tonight or tomorrow.*

The next morning (it was Friday, Sangh thought he remembered), the outcome of the battle became clear. He hadn't believed he would ever sleep, but waking up was definitely what he did when he felt the tip of a spear in his shoulder. The sky had lightened, but the drizzle continued. Two men had charge of him, two spears. One was taller than the other, but the shorter one had fouler breath. They were equally pissed off at him for something, maybe keeping them out of the battle. They could have collected some booty, and they had been stuck guarding *him*. They tied his hands with rough twine. Then they shoved him, and he kept going that direction.

The Glock did not stick around the scene of their crime, just took what they had come for and split. What they had come for was booty and slaves. They were moving a lot slower on the way back north than on their way in, held back by donkeys loaded with (Sangh guessed) weapons, food, and metals; and by a line of women and children. Warriors urged them forward with spears and fists. Those who couldn't keep up, or who fell by the wayside, were swiftly macheted, presumably to keep them quiet. If the women wept,

they did so in silence.

Sangh was the slowest hiker in the entire column. At first he was sure they would lose patience and kill him. When they didn't, he decided it must be because his captors believed the DAE would ransom him. The two guys assigned to guard him were seriously annoyed at having to keep such a weakling alive. They pummeled and pricked him every chance they got. The *Glock* had a bit of time before the 'Tawki-tawki' came after them, but the 'Tawki-tawki' would have to show up soon, Sangh guessed, to maintain their honor.

In the daylight, the 'Glawk' didn't look at all like the 'Tawki-tawki'. They wore leather vests, had fewer tattoos, and had thick stripes of brown and black paint on their faces. Their skin and hair were lighter. The shorter of Sangh's two guards, whose name sounded like "Haff," was more pallid than the taller one, whose name sounded like "Eks," although Sangh couldn't repeat it without saying "Dheks". Every 'Glawk' wore a baseball cap. Above the bill Sangh could see what looked vaguely like two intertwined letters of the *Texano* alphabet. Somehow the 'Glawk' didn't look literate, but perhaps he just hadn't met the intellectuals yet.

The terrain on the north side of the coastal ridge was much as he and Šhesay had found it to the south. If he lived long enough, he would find out what was at the bottom. The only good thing about being a prisoner was that you didn't have to cut brush. Somewhere up ahead, some low-level 'Glawk' were working up a good sweat cutting a hole big enough for a column of prisoners and their guards (not forgetting the donkeys). Or perhaps they had cut the holes on the way to 'Tepek', and were reusing them on the way back.

By the time they broke for lunch, Sangh was at least a kilometer behind the column. The light rain had fallen all night and all morning, and he was completely soaked by rain and sweat. The column had churned the trail to mud, and he was the eventual prime beneficiary. He came staggering into the camp after everyone else had already received enough water and gruel to stay alive another half-day.

He sat down heavily, hardly caring if he lived or died. But 'Dheks' cared, because, after drinking from the leather bottle he carried, he held it to Sangh's lips.

After a drink, Sangh got his share of grub, some kind of mush made of maize. The column was not asked to get going immediately after that, for which he thanked God. But when they did get moving, while *Sol* was still high in the sky, he demanded God tell him why he had to suffer so much. Eventually he lost the ability to think of something as abstract as "God." He thought only of putting one foot after another, and not falling down and being stabbed to death. He did fall once or twice, and expected to die for it, but 'Dheks' pulled him back up. On his next fall he might have begged for death, but by then it was night, and they made camp, hours after everyone else. He didn't eat, just tumbled down and slept where he fell.

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## Chapter 8 Long Walk [36/v.3.0.2/159/-1]

He slept as if dead until the next morning, when he was prodded awake before dawn. He awoke ravenous. Breakfast was the same pasty mush as previous meals. It tasted pretty good if you were starving. He drank as much water as he could. In the heat so much water was lost to sweating that there was little for the kidneys to work with, but it had to get rid of bodily wastes somehow, so eventually the bladder did fill up. His guards escorted him down to the facilities, which turned out to be the same stream the drinking water had come from. *We are all gonna die of dysentery, another thing I can do nothing about*, he thought.

How far north the ‘Glawk’ lived was a mystery. Shesay had said that raiders generally moved along north-to-south lines, but she hadn’t said how far. In a primitive world, a centimeter on a map of the continent could translate into the largest distance even a nomad could be expected to traverse in a lifetime.

Before the column started out again, *Sol* had risen. The captors got angry every morning at how long it took a column of a hundred women and children to get started. But they did cut Sangh’s bindings. They weren’t worried about such a weakling defeating the forest. Freeing his arms would speed him up. The other prisoners were poked and prodded and yelled at, no doubt being wished to whatever hell the ‘Glawk’ feared.

On this second day of captivity, Sangh was able to walk a bit faster and further between breaks. His time in *América do Norte*, as unpleasant as it had been in just about every way, had at least toughened him up. Having free arms and hands felt better than sex.

He fell behind the women and children, although not as far today as yesterday. Rumors about who he was must have passed through the group of prisoners. They stared at him and whispered, but they kept their distance. Perhaps they thought the DAE would free some of them along with him. To them the DAE must be like gods: powerful, unpredictable, and dangerous to bargain with.

Now that he could catch his breath as he hiked, he had time for a little more thinking about the DAE’s mission to bring good genes back from the North. They had to travel and work with the natives closely enough to realize who the smart, creative, and not-too-aggressive people were. The problem was getting them to move to the South and keep their mouths shut.

When he realized the solution it brought him short. He actually stopped, long enough to get a cuffing from ‘Haff’. *The DAE identifies the most promising children of the most promising adults, kidnaps them, and brings them south. They must have spies everywhere. The Northerners’ brutality is no match for the Southerners’ cold-blooded calculation.*

[[ \*\*\*\*\* ]]

Sangh and Mrs. Johnson had talked about their life stories and what little nudges of fate had brought them to this improbable moment. One thing she told him was that she was an orphan; her parents had died



too young for her to remember them, and she had been lucky to be adopted by the Johnsons.

*Or did the DAE scoop her up and bring her south to help resurrect the human race? Is it coincidence that the head of the Free Government of Texa is an “orphan”?*

He stumbled on a rock, and was jarred from his speculations back to a time like that of the Book of Sceldon, the time after the Second Fall, when the colonists on Loofghud had been seduced away from Allàh’s Second Eden by the worship of robotic idols. The faithful had been saved by a flash of divine light that burned the False Eden of the Secularists, and a plague that had melted the flesh of the unbelievers.

*But you have comforted the righteous  
You stand at the right hand of the faithful  
Consign the wisdom of the foolish to the flames!  
The wisdom of Allàh is sufficient for the wise.*

As Sceldon prophesied, the descendents of the colonists returned to primitive lives like those of Abel and Cain in Genesis; the Dark Age had begun. Meanwhile, on Erth the North was kept in the Dark Age while the South lived in the False Eden of Texa.

Most of the other prisoners were barefoot; a few had moccasins. Sangh had heavy Loofghud Navy boots. However, the sole on the left boot was starting to come off. He might have repaired it with the supplies in his backpack, but the backpack now belonged to ‘Haff’. *Any gestures I make to convey the idea that I want to borrow the pack will just piss him off. The good news is that ‘Haff’ will probably confiscate my boots, as soon as it occurs to him. Then mending them will be his problem.* But the longer Sangh walked in the damned boots, the worse the flapping in his left one got. He was still debating whether to try talking to ‘Haff’ in sign language when they reached the midday break spot.

So far the *Glock* chose to stop at streams deep and rapid enough for everyone to get a drink from. These abounded in Wahak, and the inhabitants knew where they all were. Besides water, the second criterion for where to stop was where *Sol* was. During the hottest hours of the day, you had to rest, in the shade if possible. As the column descended the mountains’ north slopes, the forest gave way to savanna. Shade became scarcer.

Today the tail of the column had parked at a point where a clear stream toppled over an ancient outcropping of granite, harder than the crumbly stuff below it, making a pretty little waterfall, 5 meters high. The rocks formed tiers of level shelves, bottoming out in a deep pool. Every kid older than eight found this pool irresistible. They forgot their suffering and dove in, as kids had doubtless been doing in this spot for millenia, since long before the Great War.

The *Glock* took it easy, and their prisoners let some of their tension go. The harsh midday light seemed less lethal when you could dunk your feet in a cool stream and get some shade from the trees growing by the water. The line of prisoners and pack animals was strung out below the falls. The end of the column, where Sangh was, got to watch the kids and the waterfall, and dunk their feet in the swimming hole.

Eks took off his moccasins and dangled his feet over the edge. Sangh took this as an invitation to take his boots and socks off. He looked ruefully at the damage done by the trek so far. How could an empire hurl an expeditionary force light-years across the galaxy equipped with such crap?

The headman of the raiding party chose this interval to come back to inspect his most valuable prisoner. You could hear his party coming a long way off. Subordinates were shouting, dogs were barking, children squealing. Eks and Haff scrambled to their feet and stood at attention, and Sangh struggled to do the same, but his blistered feet resisted being slammed back into boots. So he was half shod and felt ridiculous when the boss came climbing around the waterfall, accompanied by a couple of mastiffs and a half dozen mutts that capered and barked around their master, thrilled to be part of whatever this was. The minions cleared a row of preteen girls off a fallen tree trunk and the leader sat down. He motioned and Sangh limped toward him, then stood as vertically as he could in one boot, holding the other under his arm. The dogs gave Sangh a good sniffing.

The headman was dressed like everyone else, except that his leather vest had more sparkly things sewn on, and his cap had two feathers. His hair and skin were both so translucent that it took Sangh a moment to realize that the blur on his upper lip was a moustache. The man did not introduce himself, just smiled, and said, “*D-A-E? América do Sul?*”

“Seenw,” said Sangh; he was pretty sure this meant ‘Yes.’” He had just about exhausted his stock of *Texano* words, and was apprehensive that Headman would burst into fluent *Texano*. But the guy didn’t know much more than he did.

“*Quando D-A-E?*” he said, and looked up in the air, his palms held up, in a universal gesture of puzzlement. So *quando* meant When? or Where? Sangh didn’t know the answer to either, and raised his own hands in the same gesture. Headman nodded slightly to the guards behind Sangh, and something hit him hard enough to knock him to his hands and knees. The pain hit him a second later. He looked back to see ‘Haff’ coiling the whip he had just slashed Sangh’s shirt with. Sangh braced for the next sting.

But Headman had conveyed his message, and he got up, exchanged a few barbarian words with his subordinates, clambered down the rocks, and strode back toward the front of the column. The message was clear: Sangh was a pain in the ass, and if he weren’t ransomed soon they would write him off.

Sangh struggled to his feet. The pain had fuzzed up his consciousness for a minute, but he fought the feeling off. He locked down despair as well as he could. He kindled a spark of fury toward Headman and ‘Haff’. If this anger was a sin, he would pray for forgiveness when he got a chance. Right now, his job was to keep up with the column and stay alive; if fantasies about what he would do to his tormentors helped him survive, everything else was secondary. *March! Drink and march!* he thought.

Soon enough everyone was moving, even the weaklings in the rear. This time Sangh got ahead of some of the weaker women. But what was his game plan, assuming the longest he had if he weren’t rescued was about 36 hours? He could assume the cavalry would save him, he could try to escape, or he could

persuade the 'Glawk' that he was worth more alive than dead. He quickly rejected that last idea. He wasn't living through *A SothWaa'h Tinkerer Visits King Dharterk*; he couldn't trade modern technology for power. Dad had taught him how to fix a car, but not how to make one from scratch. He doubted he could build a waterwheel. Perhaps if he had the know-how to start a technological revolution, the DAE might get him out of there just to put a stop to it, but he didn't.

His best bet, he decided, was to escape and make his way back toward the coast, or toward the 'Tawki-tawki'. Shesay must surely be looking for him. If he was looking for her, however incompetently, it would have to improve the odds. The 'Glawk' were confident he would fail if he tried to run, and they were probably right. Nonetheless, it was the duty of a military prisoner to try to escape, and that's what he decided to do.

The column was following the stream down the mountain, more or less, departing from it when it plunged into ravines, but always finding a way back. The vegetation thinned out more, even the *kudzu*. He would have to make a run for it before the countryside dried up completely, when he would have no cover.

All he needed was an opportunity. *I guess dusk will be the best chance I'm going to get*, he was thinking, when 'Dheks' suddenly made a gurgling sound, grasped his neck, and fell to the ground. An uproar started. Women and children were screaming, dogs were barking. 'Dheks' was trying to pull something from his throat. Sangh went to help, but by the time he reached him, 'Dheks' was unconscious. Poisoned arrow? Lucky shot? Sangh looked around for 'Haff', but he had gone to ground, the better to counterattack. Only then did Sangh realize he could be the next target, and scramble for the nearest shrub. The battle had become, to his untrained eye, invisible, but there were intermittent shouts and whistles. *How would I know if this is the vengeance of the 'Tawki-tawki' or some other tribe looking to pick off a bit of loot?*

Whichever it was, Allāh would probably not provide a better opportunity for escape. Sangh took off into the scrub, keeping low for a hundred meters, then running like hell. The damned *kudzu* was ready to trip him up, but he fell only two or three times. He stopped when he could no longer hear the shouts of warriors on either side.

That probably meant there were only a handful of attackers. They didn't intend to maul the 'Glawk' and steal their booty; they were just trying to inflict some wounds. Anyone but the 'Tawki-tawki' would have brought a bigger attack group.

Great! All Sangh had to do was make contact with the 'Tawki-tawki' raiders and ask them to take him home. Terrific plan, except for a few items. Finding a small band of attackers was going to be difficult for the 'Glawk'; it would be next to impossible for him. The 'Tawki-tawki' might not recognize him, or feel hospitable if they did. Plus, he couldn't keep up with them even if they took him in.

He needed to go back the way he had come, over the mountain to the DAE station, dealing with the 'Tawki-tawki' if he had to. But first he had to elude the pursuit team the 'Glawk' would send after him. They couldn't just let him go. Even if they just wanted to kill him once they had him, it was the principle of the thing. He wasn't supposed to escape. So, should he sit still until they stopped looking for him? Or keep

moving? He decided only the former tactic made any sense. The more he moved the more visible he was. *In a hedge overgrown with kudzu I might pass for a hedge. It all depends on the dogs. If they're trained to find fugitives, they'll find me. But that mob sure didn't act like trained dogs.*

He heard a bark, then another. *The thing about dogs is, they're clueless about social categories. If something runs from them, it's prey. But when it comes to classifying a human being who doesn't run, they get a bit confused.* He heard shouts. The 'Glawk' had chased the raiders off, and had turned their attention to him, their missing prisoner. 'Haff', if he was still alive, would make this his top priority, since he was the only person left to blame for letting Sangh go.

It took all his concentration to just squat and wait for the dogs. They found him in two minutes. The mastiffs, as big as barns, came bounding up, growling and barking, but, when he reacted as if glad to see them, they calmed down, wagged their tails, and let him pet them. After all, they had seen him around for a couple of days, talking to their master. "Good boy," he said, in what he hoped was the universal dog-praising tone. He got up and started to walk, then run, not trying to outpace the dogs. Soon they were outpacing him, treating him as one of the hunters, not the hunted.

The shouts of the 'Glawk' got to be too close for comfort, and he branched off to the right, crawled uphill as far as he could, and hid under a bush. *Why can you never find a hedge when you need one? I feel like a billboard "Live Fharha Here!"* None of the nearby shrubs looked any better. but perhaps there were enough to baffle someone looking from afar without binoculars.

The shouts kept coming, then moved further away. He lay still for hours. The scariest moment was when the dogs came back through and made a side trip to say hello to him. They were a bit puzzled why he wasn't coming with them, but they did a dog shrug and took off toward the main group.

It was getting dark when he finally decided to move. He headed back toward the stream, working his way uphill, but it was awkward pushing his way through the increasingly heavy vegetation. He soon had ripped his uniform in two places, and inflicted painful scratches on his face, arms, and legs. Some of them itched like crazy. When he crossed a ridge he sometimes had to work his way down a while to get back to the main slope. He couldn't see the unfamiliar stars. Hours after *Sol* set, *Lua* rose, making a second dimmer day. He could never get used to this strange nighttime companion. *Lua's* bright half circle pointed toward the invisible star — *Sol* — in the west, so he wasn't going to go in circles.

Unfortunately, by the time *Lua* had risen high in the sky, Sangh had made no clear progress. He was exhausted, and he was thirsty. He cursed his incompetence at not finding a stream he had been standing *right next to* a few hours ago. Could it have dipped underground at some point, so that he crossed it without knowing it? He lay down to think it over, and when he awoke *Sol* was shining. He was even thirstier. He had fallen asleep in a clearing, apparently created when *kudzu* strangled a large tree and pulled it down. Nobody had told him what *kudzu* was good for, but it made a nice bedding material. *Just so I don't break out in hives from rolling around in it.*

There was nothing to eat for breakfast, but his bladder was full. He wished he had a way to collect his urine; he was about ready to drink it. No matter how he thought about it, his situation was desperate. What were the chances he could make it over the ridge to somewhere reasonably civilized before he died of thirst? Close to zero. His only hope was to turn around and work his way down to where there was less vegetation. He would be visible to the 'Glawk' and to the DAE, and whichever grabbed him first would win. Or maybe he would find a stream quickly and be able to follow it to its source at the top of the ridge; plan A might work out after all.

He kept this optimistic thought in mind for at least an hour. After that his mind had been drained of all thought, except for the goal of stumbling downhill. One-foot-after-another sort of thing. He tripped on the vines, but didn't bother to curse them anymore. He kept to the shadows to keep from drying up completely, but open areas became more frequent. The open areas were usually covered with dead grass.

Finally he had to admit the forest was over. The trees were mostly scrubby. He looked back where he had come from, and could see the lush trees climbing up the side of the mountain, bragging about the rainfall they experienced. Looking the other way, toward the northeast, he seemed to see a line of trees on the horizon. *River? Mirage? Either way, my only option. DAE, I know you're watching. Pick me up soon or watch me die.*

He walked toward the trees, if that's what they were. He felt like he could fall at any moment, but he knew if he did he would be crawling from then on, which was suicide. So he stayed upright. At least the *kudzu* was withered, in places absent completely.

He had no sense of time or space. How far the trees were was academic. It might have made more sense to wait for twilight to attempt this trek, but it was too late for that. The trees seemed to be getting closer, but perhaps that's the way these mirages worked. Eventually, however, it became clear that the trees were real. He registered that datum and kept walking. *I'll rest when I reach them*, he thought. So when he did reach them he just fell down.

Their shade kept him from drying up completely, so he was still alive when night fell. He woke up. He struggled to his feet, and took a few steps deeper into the woods, looking for the river that had to be here. *Lua* had not yet risen, so he had to feel his way. He hadn't taken many steps before he lost his footing on a slope, and tumbled into a puddle of water. *No, a creek!* It wasn't deep enough to drown in, but it was deep enough to drink, and he had time to take a few sips and smile before rough hands seized him and dragged him up and out of the water.

## Chapter 9 Calvary [37/v.3.0.2/165/-1]

Once again Sangh was surrounded by a group of mean-looking men armed with spears, knives, and other lethal weapons. At least, that's what he could make out in the starlight. The men were wearing the 'Glawk' baseball caps. Sangh tried saying, "'Dheks'? Water?" Then he remembered that 'Dheks' was probably dead. Up his hands went, although he was so weary he thought it might be easier if they just killed him and got it over with. But the thought of dying without drinking just a little more water was appalling.

They did not kill him, but poked and shoved him until he figured out which way they wanted him to walk. He staggered as fast as he could. He was shoved out of the straggling stand of trees, into the cooling night air. By now *Lua* had cleared the horizon. The 'Glawk' and their prisoner had walked less than one klick when they reached their camp. It was larger and more substantial than he had expected, neat rows of huts made of poles and hides. He hadn't thought the 'Glawk' capable of building and fortifying a village. The sentries holding Sangh called out and people emerged, including women and children. He tried to sit down; they couldn't reasonably ask him to walk any farther. But his captors pricked him harder, hard enough to bleed him a bit, and he kept going. A straggle of children followed, not too closely. Sangh lurched past hut after hut. Foodstuffs hung outside the huts, some under awnings, some curing in the sun and rain. Men and women took a break from their sleep and other activities to come out and stare at the recaptured southerner, if the mysterious and awful South could have harbored such a weakling.

The procession stopped when they reached Headman, standing with his arms folded, contempt coming off him like a gas. Except he wasn't the head guy now that his raiders had returned to the base camp. That would be the man with *three* feathers in his baseball cap, who sat on a stool in front of one of the bigger huts. Incongruously, he wore aviator-style sunglasses. He might have been a bit older than Headman. They both stared at Sangh for a while, then Headman said a few words to Chief. Chief nodded, then gave an order.

Two of the sentries holding Sangh marched him to a nearby hut, and tossed him in. He fell to his knees and then toppled. He had found a good place to die, if they would just let him. Then someone poured some water into his mouth, although most of it ran over his cheek and neck. He calculated that all his needs had been met.

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He didn't die, of course. He awoke and inhaled the smell of hut, mostly smoke and sweat. Light seeped through the cracks in the thin walls. *Sol* must have risen. He wasn't lying on dirt, but he wasn't comfortable either. The floor might be made of the same kind of animal hide as the walls. Whether there was room to stand was hard to judge, but academic at this point because Sangh was happy to stay horizontal. Or would have been, but he needed to pee, and he was thirsty.

“*Bo’ noite,*” someone said. It was a male voice.

Odd. It almost sounded like the person had said “Good evening” in Tayhan.

“*Bo’ noite. Vives?*” the voice said.

He sat up, or tried to. Some kind of lamp was burning, shedding a smoky light on a man sitting next to it. The man was painted like the other tribespeople, as far as Sangh could tell, but he was browner than the average northerner.

“Bo noy<sup>he</sup>,” Sangh ventured.

“*Você vem do Sul?*”

If only Jake or even Tralf were here to translate! *How can anyone keep up with all the languages on this planet?*

“*Do Sul?*” the stranger repeated. He was looking for some common ground. “*Godánia? Godánia?*”

*Sul* meant “south,” Sangh suddenly remembered. That second word — Sangh had taken a course on the Original Language, and one of the first words they learned was “*God*,” because it was believed to be one piece of the name of their planet, Loofghud.

“*Seep! Suul! God! Allâh!*” he said. Why “south” should have something to do with God was not clear, but anyone who said the word “God” on this planet must be a friend. Šhesay had taught him the Tayhan word for God, and he said it: “*Deus.*”

“*Mas não fala Texano?*”

“No Suul — *não Sul* — from outer space,” Sangh said, and pointed up. He thought the stranger might suppose he was pointing to the roof of the hut, so he struggled to his feet, banging his head on the sloping ceiling of the hut. Stooped over, he tugged the man toward the flap of hide that served as a door.

*Sol* had risen all right, but it was now setting. Sangh had slept all day. But the day’s heat had dug its claws in and hadn’t let go yet. Stars were beginning to pop out. Sangh pointed to the sky, in roughly the direction of home.

“‘*Dhambaiscadoo duuspassu*’.”

“*Do espaço?*”

“*Sim. Duuspassu.*” Sangh said, hoping he was making sense.

Their conversation had attracted the attention of Sangh’s guards, but they made no move to shut it down or throw Sangh back in the wigwam. What to say next? It was always good to exchange names with the subjects of anthropological investigations, if it wasn’t taboo.

“Me noomee Sangh,” Sangh said, and pointed to himself. He felt like a movie character from darkest Torso. The stranger must have seen the same movie, because he pointed to himself and said, “*Alberto.*”

An awkward silence erupted. The small momentum they had accumulated faded. Sangh tried saying, “*Voosay? Do Sul?*” He pointed south.

“*Sim,*” the stranger — Alberto — said. “*Desde muit’ anos.*” The first word, pronounced ‘*seep*’, meant

“yes.” The rest Sangh could not understand.

*What is this guy doing here? What is his role in the tribe? How did he come to be accepted? He’s a perfect candidate for the sort of observer the Department of Statistical Anomalies needs in the North.*

“Day-Àh-Ay?” he said. The stranger just looked puzzled. *It’s an act. If he doesn’t work for the DAE, surely the DAE knows all about him. They tracked him here and allowed him to stay. And they’ve probably told him to expect me.*

A small crowd of people had gathered — at a safe distance — while Alberto and Sangh had had their little talk. Once the guards had grabbed him, the audience edged in closer, clapping and shouting. But all they got to see was the guards throwing Sangh back into the smoky hut. *My hut. Home sweet hut.* He lay there alone, wishing they would pour more water into him, until he fell asleep.

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More shouting and clapping — the noise woke him up. *Perhaps they’ve found another high-value captive,* he thought, but the odds were against it. Sure enough, two ‘Glawk’ men dragged him out again into the harsh light, bright enough to cause pain. Hadn’t he had a hat? Thirst cut into him, and he felt incredibly dirty.

His morning continued to worsen when once again the tiresome Headman showed up, backed by a few armed men.. Sangh was wary, but he was still caught off guard when Headman hit him as hard as he could in the stomach. He turned and walked away, without another glance at Sangh. The guards dragged and prodded him to follow, through a clapping, jeering crowd.

Their destination was a space not far away, a town square of a sort, big enough for the whole village to participate in human sacrifices, if that’s what they went for. Apparently they had given up on the idea that the DAE might be willing to pay for Sangh. Instead they would trade Sangh’s life for the favor of their gods. As an exoanthropologist, Sangh wished his mental notes on all this could be published someday, but there was a problem with that plan if he was the guest of honor.

Then Sangh’s blood ran cold. In the middle of the square stood a stake, about twice his height, surmounted by a cross. On the cross hung the carved effigy of a naked man, only half a meter or so in height, with his arms outstretched and nailed to the cross’s arms. Sangh knelt and made the sign of the cross, or tried to. The crowd murmured, perhaps impressed by his piety, but of course not surprised by it. *Doesn’t everyone worship our Lord, even, or especially, those about to die?*

Sangh’s attendants tied him to the stake, his hands fastened to a smaller cross piece at waist height, facing the tribal dignitaries: Chief, Headman, and a third guy. *Head priest?* The dignitaries were twenty meters away. As before, only Chief got to sit.

*At least I’m not going to duplicate the way our Lords were sacrificed, with their wrists above their shoulders. That sort of sacrilege would be unpublishable; it would never get the Dhimprimatur.*



The crowd stayed well away from the open lane from Chief's simple throne to Sangh's stake. At some point someone had started beating a drum, quietly at first, then louder. The drummer stood somewhere behind Sangh. The crowd clapped in synch. Then Priest took two paces forward and chanted:

*Why! Pry!*  
*Stan! Groun!*  
*Free! Die!*  
*Glock!*

The crowd then repeated it, the drum beat twice more, and stopped. Everyone stopped clapping at precisely the same moment. The oldest 'Glawk' Sangh had yet encountered, although he might only be in his fifties, walked up, accompanied by a boy, around eight years old, carrying an object on a plate. *No, not a plate exactly. More like an iron ring with a cloth stretched over it.* The cloth had once been white, but now was stained with rust and dirt. The object, Sangh realized, was an old handgun, tarnished and rusted.

The drummer began again, faintly. The gun was passed from the boy to the old man and finally to Priest. (Women didn't seem to be part of this ceremony.) Priest picked up the gun and pointed it at Sangh.

The drumming got louder, the crowd chanted again:

*Why! Pry!*  
*Stan! Groun!*  
*Free! Die!*  
*Glock!*

Sangh chanted his own prayer: "Holy Mary, Holy Silvia, mothers of God, pray for us sinners now and at the hour of our death."

The boy who had brought the gun now held a bow and arrow. He notched the arrow like an expert and pulled it back. The drumming ceased, the crowd shouted "Bang!", and the boy released. The arrow was low, but its wobbly flight ended in Sangh's shin, where it stuck. It hurt like hell, but Sangh did not cry out. *Bang? Truly? Oh, right, they ran out of ammunition, probably a thousand years ago. Or perhaps the gun has jammed and they've long forgotten how to fix it.*

The boy passed the bow to a youth, a teenager Sangh judged, probably in the midst of pagan manhood rites. Perhaps killing a prisoner was one of them. In any case, his aim was sure to be a lot better. The priest raised the gun again, and the youth notched an arrow. The crowd chanted,

*Why! Pry!*  
*Stan! Groun!*  
*Free! Die!*  
*Glock!*

The drums raged, the crowd shouted, “Bang!” again, and an arrow, too fast to track, wound up in Sangh’s right armpit. Or that’s where the pain was, and there was a lot of it. Blood, too, but it didn’t seem to be arterial.

He cried out to Heaven, “Lord BeJesus Kristh, have mercy on me, a sinner! Deliver me from despair, and grant me hope of Your forgiveness and eternal life in Your presence.” Hope for Heaven was the only hope left to him when he saw Headman notch an arrow. *This asshole isn’t going to miss.*

Before the priest could once again raise the gun, there came a sound that was so incongruous here in the Lost World that for a moment Sangh mistook it for the heavens opening up. It was the scream of a jet aircraft, getting closer. Within a second, the howling of its engines filled the village, drowning out the screams of the women and children.

*Oh, come on, Shesay! Are you really going to do a deuce-ex-makena on me? At the last possible moment?*

The jet’s roar faded as it finished a reconnaissance pass. Everyone had fled, hiding Allàh knew where; everyone but Headman, Priest, and Chief. Headman raised the bow again. Perhaps he thought the DAE had just dropped in for a peek and were gone, and he could finally avenge the shame Sangh had inflicted by escaping for a day. But Priest hadn’t “fired” the gun, and Chief was not interested in sacrificing a valuable prisoner for the sake of repolishing the shine on one tribesman’s honor, even if that tribesman was his number-two man. He stood up, knocked the bow out of Headman’s hands, and said a few angry words. Sangh couldn’t make them out, because the jet was making a second pass, scraping the village with noise.

This time, rather than pass overhead, it accelerated sharply upward, until it was vertical. This was a recipe for stalling, and it looked like the pilot was determined to kill himself and all on board, but control thrusters on the wings and vertical stabilizers came to life, and the plane reached an equilibrium where it was balanced on the exhaust coming out of its main engine, at the rear of the fuselage. Suddenly it looked like a rocket landing the way they do in cartoons, a liftoff in reverse. It descended rapidly from several hundred meters up, slowing as it neared the ground.

It could have set half the village on fire, but the pilot, if the thing had a pilot, had sensibly aimed for a cleared space on the outskirts of town, and burned nothing but the garbage dump. It was awe-inspiring even for Sangh to watch the rocket-plane descend. He could not see the landing gear deploy, but the thing towered vertically, pointed into the sky, even after the engine cut out.

Now the three tribal leaders marched toward the airplane, followed at a distance by their people, straggling out of their hiding places, bravest first. Only Sangh remained in the square, tied to the stupid cross. He felt faint from frustration, loss of blood, and anticipation that he would once again have to thank Shesay for rescuing him. He rocked forward and backward, hoping to pull the cross out of the ground, but all he succeeded in doing was making it fall slowly forward until he was lying on his face. At least the arrow had ripped from his leg, at the cost of some blood.

He seemed to lie there forever, but eventually he heard footsteps, and a group of people surrounded him, either ‘Glawk’ come to sell him to the owner of the rocket-plane, or Shesay come to set him free. What

he didn't expect was the sound of Vhatta Limhoon's voice. "Why, it's not Saint Sebhastian, it's Lieutenant Fharha. I would never have pictured you vacationing up here in the sunny North. Where are the best hotels?"

## Chapter 10 Ex Machina [38/v.3.0.2/171-1]

Sangh's exit from the village square was less ceremonious than his arrival. A couple of Loofghud Marines cut him off the cross and dragged him to Limhoon's jet, with Vhatta Limhoon leading the procession. His priestly robes rested lightly on his shoulders, tucked casually behind the sidearm on his right hip. This was a mostly ceremonial projectile weapon, but unlike the *Glock's* pistol, it worked.

Babraba Ghalfe and two marines covered, their energy weapons drawn, armed, and lit. Except for Headman and Chief, the villagers were in hiding. Those two had laid down their arms, and followed the Lofghudlings at a safe distance.

The rocket exhaust had made a mess, blowing burning trash and dust everywhere. The marines lay Sangh near the exit ladder. Shesay Dezeenawvy was descending, carrying a medikit. She seemed to have rebounded from the breakup with the alien ambassador.

"Sangh honey," she said, going to work quickly on his wounds. "I had to help him. There was no other way you were going to be rescued. This is going to hurt for a minute."

"How did you alert him? Ow." She had worked the arrow out of his armpit.

"I *didn't*. I alerted the *Direcção*, but *he* showed up. Maybe North American Branch were pissed off at my intrusion on their turf, and thought this would be appropriate punishment. There, you're not going to bleed to death." She set to work on his leg without pausing. Her hands shuttled this way and that too quickly for Sangh to follow, without ever smashing into him.

Sangh had to hand it to Chief and Headman; they were not cowering with their wives and children. Perhaps they had bargained with the gods from the South before. They were awed by the aircraft, though. *Well, who isn't?* The dust was settling, and through luck or skill, the pilot had put the jet upwind from the dump, from which smoke still unfurled. You could inhale without choking.

Headman and Chief were conferring in whispers. Their estimate of the ransom they might get for Sangh must have gone up considerably, but Vhatta Limhoon was an unknown. He might not know or care what the going rate was for recaptured traitors.

Limhoon could not stay still for long. "They wouldn't tell me where you were, Fharha," he said, "unless I agreed to bargain the guys who captured you down to the usual ransom for major fugitives, 10 crossbow

bolts and some number of blankets. I'd like to get that over with. So tell that bitch to stop babying you and help me talk to these savages."

Šhesay was just about finished anyway. She stood and explained to Chief and Headman who Vhatta Limhoon was, presumably in perfect *Glockish*, then repeated what she had said in Glish for Limhoon, and introduced the *Glock* leaders, whose names of course she knew. Chief was called Vindisl and Headman Lugosi.

Vindisl and Lugosi knelt on the ground before the Vhatta and pressed their foreheads to the soil. Limhoon basked in this adulation for two seconds before waving his hand and saying, "Okay, okay, enough."

Šhesay asked them to stand up, Sangh presumed, because they did, their knees and faces now streaked with soot. For a second he wondered, *Why didn't Limhoon bring a Seckie to translate? Surely they'd be more trustworthy than Šhesay.* But then Sangh remembered that he had not included anything about Arvatàhs of the Mind in his reports. Limhoon thought Šhesay was merely a Seckie with a taste for Molie men. *I guess I wished he had brought Jake, so I could ask him how he could help Vhatta Limhoon steal his planet. I wonder if I'll ever see him again.*

At first Vindisl pretended that he didn't need any recompense for his service in taking care of the prisoner for his good friends in *América do Sul*. It was enough to claim the friendship the august Limhoon, whose fame had spread all over the savanna. The vhatta's reply was that he doubted Chief had really heard of him, but in any case he wasn't *that* generous. He would offer ten blankets from South Amerika, very light and very warm, last long time. (He was unconsciously speaking a pidgin picked up from old movies about dealings with savages. Presumably Šhesay was translating back into fluent *Glock*.) He would also offer five crossbow bolts, top of the line. Vindisl's eyes gave away his greed at hearing of this bounty.

The marines had wrestled a crate of trade goods down the ladder somehow, and one of them held up each item as Limhoon described it. Was it really wise to let the natives have crossbows and bolts? A crossbow couldn't fire many bolts per minute, but each shot could be deadly. A well-trained corps of crossbow men, with the discipline to stagger the shooters and reloaders, might be a serious threat to DAE stations with only a few small guns for defense. Knowing the South as well as he had come to, Sangh was sure they had calculated how many bolts could be in circulation without upsetting the balance of power or threatening their hegemony. The natives lacked the metallurgical skills to make even a primitive bolt, let alone the high-tech version Vhatta Limhoon was dealing. So in principle the South could control the supply. But crossbow ammunition was not necessarily destroyed by being used. It was a gift that would give many years of satisfaction.

After these treasures, Vhatta Limhoon's proposal was completed by a crate containing miscellaneous medications ("Cure cough, fever, ache in head"), some perfumes ("Keep woman happy"), some bolts of cloth ("Make pretty clothes, warm too"), and so forth, each dutifully displayed by the marine standing next to the crate.

Vindisl thanked Vhatta Limhoon profusely, and said he was not worthy. But he knew for a fact that the *Táqui-Táqui* had just obtained *twenty* crossbow bolts from an unknown source; the *Gloque* were in danger of being wiped out. And on a personal note, he needed one of those bright, picture-shifting things with pictures of horses to give his wife as an anniversary present.

*The 'Glaak' can tell the difference between twenty and five. I might have thought that was beyond them. Then again, it's two pairs of hands versus one hand. Not too hard to count a pile and see which it was. How about telling fifteen from twenty? Fifty from one hundred?*

Vhatta Limhoon was rapidly getting bored. “Specialist OhKenzi, I’m pretty sure there’s a DPF in that crate,” he said impatiently.

“Sir, no, I’m afraid we didn’t bring anything like that.”

“Tell him we’ll bring one next time,” Limhoon said to Šhesay.

Apparently Vindisl had thought the magic picture was a long shot, because he was satisfied with Limhoon’s empty promise. The issue of crossbow bolts was more troublesome. Vhatta Limhoon said, “I consider five a very generous offer. I had to work hard to clear it through the bureaucracy. They’ll give me hell if I exceed it on my own.”

Sangh wondered how Šhesay translated “bureaucracy.”

Finally Vhatta Limhoon said he would go as high as 10 crossbow bolts, but he would have to take back 3 blankets. That was his final offer. He was making enough trouble for himself as it was.

The choice between blankets and ammunition was not one Vindisl would agonize over. Sangh reckoned that for him combat beat comfort any day of the week, any time of day. The chief of the *Glock* and the chief of the Provisional Government of Tayha shook hands on their deal. Lugosi handed back 3 blankets, and when a marine came down the ladder with a box of 5 crossbow bolts, Lugosi insisted on putting them into the crate himself. *He just wanted to hold that box, even for a second. Perhaps we’re witnessing the equivalent of a delivery of gold bars to the central bank in civilized societies. I’d want to hold one for a second.* Vindisl ordered some underlings to nail the crate shut and take it somewhere, presumably in the village.

“And now,” said Limhoon, “if you will excuse us, we have an internal matter to discuss.” He punctuated this announcement by shooting his weapon into the air, which not unreasonably terrified the *Glock*.

The two guys with the crate dropped it and ran for cover. Vindisl and Lugosi barely flinched. They were nothing if not fearless under pressure. When Vhatta Limhoon motioned for them to leave they bowed deeply, but straightend and walked without hurry toward the village.

During all this, Šhesay rushed forward and hugged Sangh. “This is goodbye, darling,” she said. “If you want to survive, get up that ladder right now, quick as you can.” The feel of her body in his arms was a shock. He had renounced the very idea of ever touching her again, and her shape reawakened so many feelings, at the same time as her words told him to put them away again. He pulled back, and without letting go, looked

into her eyes in puzzlement. She practically threw him in the direction of the ladder, and as if in a trance he started up.

He stopped and looked back after three rungs, just in time to see Babraba shoot Šhesay with the laywitzer. It cut her in two, her torso vaporizing. Each leg, surmounted by a twist of struts and cables connected to nothing, toppled over, and her head came to rest just at the edge of the dump. Lt. Ghalfe took aim again and blew the head and a good chunk of trash into tiny pieces. There was no blood, as if the blasts had cauterized every tissue in sight. But of course, you wouldn't expect blood. He didn't expect to see little cubes at the ragged edges of his former lover either, but that's what her remains looked like: as though the laywitzer had diced her above the thighs then vaporized most of the cubes.

"There's one less problem," said Vhatta Limhoon. "I understand you and that mechanical cunt had a falling out, so your heart is perhaps not broken by seeing it busted up."

*Something is broken*, he thought.

## Chapter 11 Prisoner [39/v.3.0.2/174/-1]

Sangh trudged up the ladder, about 15 steps in all. At the top there was a narrow ledge. He realized it was actually part of the air intake for the massive engine. He looked out. He could see savanna for miles, ending at the mountains that had defeated him. The village was near the only stream in sight.

He turned and looked into the interior of the jet. It was too dark to see much at first, but he felt his way in. Only when he was completely there did he realize he had been expecting Limhoon to shoot him, too.

Limhoon was next through the door, almost bumping into Sangh. Limhoon thought Sangh had paused to admire his magnificent aircraft. He bounded up the ladder and practically shoved Sangh toward a seat. "Be nice and we'll get you one, Lt. Fharha," he said with clumsy sarcasm, as Sangh crashed into one of the marines, who recovered and slipped handcuffs around Sangh's wrists. Sangh got a seat he supposed Šhesay might have occupied. *She no longer has any use for it. And by the way, Šhesay was not an "it"; the worse you could call her was a member of a "they," a stupid "they" subject to groupthink and mediocrity like all committees.*

Piloting the aircraft was none other than Vhatta Willem Limhoon. No copilot necessary; that seat stayed empty. Who could tread the same stage as he? "I haven't flown in years, but this thing could really get me back into it. It is fun with a capital Phook You," he said. "Of course, it practically flies itself, like everything else on this damned planet. It's too bad we didn't get to test the weapon systems on this thing.

"All that stuff about there being no Tayhan military is not *entirely* true. If you rattle the cages at the

airport long enough, cool items like this suddenly come to light. Not a whole air force, though. I've got my own Seckie police force out now looking for a few hundred more of these parked somewhere. These babies're known by some Tayhanu acronym meaning 'vertical takeoff/landing.' My acronym is vheephuh."

He had been fiddling with knobs, and he now announced, "I hope you're strapped in, ladies and gentlemen, because we are taking off!"

He hit some buttons and the thrusters all roared. The resulting dust cloud billowed high enough to obscure the forward window and cast the interior into gloom.. The vheephuh shrugged all this off, and after another fraction of a second lifted off, leaving the dust cloud behind and rising vertically into the air. It relied on thrust alone to gain altitude and speed, which it did, so rapidly that the passengers and pilot were all pressed deep into their crash cushions. The blood was pooling at the back of Sangh's skull. *Group lobotomies are now in progress.* When the rocket was going fast enough to turn to level flight, it heeled over and took off toward the southeast. *Don't believe Limhoon can be flying. Ace with undisturbed cranial blood flow would have trouble keeping this thing stable, with those stubby wings. I mean, "given its stubby wings."* His blood flow was getting back to normal.

The aircraft got amazing energy density out of whatever it used for fuel, but even so Sangh figured much of the jet's volume must be fuel tank. It flew like a fighter, and fighters had a short range. It had gotten above the clouds, but in a quite short time, perhaps 10 minutes, it began a rapid descent. There were no windows or vidscreens for anyone except the pilot, but the only place they could possibly be landing was Medeyeen. *Unless we're just strafing somebody for practice. Medeyeen: gateway to South Amerika and 10-hour gas station.*

The plane landed here in the same improbable vertical way it had in *Wahak*. Given the way the decks were arranged, that was probably the only way it *could* land. *As a toy, it has a high cost of ownership.*

"If anybody needs to go to the bathroom, now is the time," announced Vhatta Limhoon, laughing. "Ha ha — just kidding. No bathroom until we reach the PSOG. The good news is that once we get gassed up this thing will have us there in no time." Sangh supposed "PSOG" stood for Provisional Seat Of Government; he knew his Loofghud acronyms.

To say the vhatta was in a good mood was a serious understatement. It was most uncharacteristic of him to be so informal, so gabby, and so vulgar, especially in the presence of enlisted men. It felt to Sangh as if all of Vhatta Limhoon's comments were addressed to him, who was no longer really a Lieutenant (JG), but a traitor and soon-to-be civilian, stripped of his commission. Was Mr. Limhoon expecting a reply? He couldn't summon the interest. Watching Limhoon order his former girlfriend blown to bits in front of his eyes had not been easy and was not going to be forgivable, even if at some level Sangh realized perfectly well that most of Šhesay's soul lived on in the *Texanet*. She might well avenge her own "death."

Vhatta Limhoon was a high-status traveler, and it took only about 30 millidays to get refueled, safety-checked, and cleared for takeoff. The vheephuh blasted into the air again, and this time just kept climbing,

not entirely vertical, but using thrust and not lift to gain altitude. Then the engine cut out.

“Attention passengers,” announced Limhoon, “I’m sorry there’s no windows back here. We’re damn close to being in orbit. We’re flying ballistic, until the landing sequence begins.

“I haven’t had this much fun in ages,” he sighed. “With a laywitzer mounted on the front of this thing I could do a lot of damage.”

*Jabber away, Captain, but this plane isn’t letting you anywhere near the controls. The safety of the passengers and preservation of an expensive piece of equipment — not to mention the security of the São Paulo airport — that’s all the plane ultimately cares about. What about in combat? Would Limhoon get his chance to handle the joystick then, or are there automated routines for chasing, shooting, and evading that can outperform him? But, as usual, all hints about the capacity of the Tayhans to fight a war lead nowhere.*

The engine’s silence deflated Limhoon. He said nothing, falling like everything in the airplane, in a parabolic path, like a thrown ball. The passengers were weightless, held in place only by crash harnesses, until the motor or the wings began to exert force on the plane. Sangh floated in an indeterminate fog of silence and dizziness.

When the engine rumbled into life, he didn’t really get better. Sickening acceleration forces gripped the crew as the jet turned around and prepared for deceleration. *It must have some source of oxidizer besides air, when it’s above most of the atmosphere, like now.* At lower altitudes, the main engine got some serious air to chew on, and to burn fuel with. With the plane falling backward, as if its goal was to make a big crater in *São Paulo*, the roar of the engine, the acceleration and feeling as of brain damage, were reassuring. The crew was once again pressed deep into their cushions, until the vheephu had slowed to landing speeds. When it cut out, they were once again perched vertically somewhere.

“Somewhere” was the *São Paulo* International Airport, the fixed point his chaotic escape attempt had brought him back to. It might be called progress to go from being a prisoner of the *Glock* to being a prisoner of the Loofghud Navy, but the point was debatable.

It was nighttime by the time they landed, and it was raining. A committee from the Provisional Government had come out to welcome *Governador* Limhoon. Kolfhaj was the only Molie on the committee. *I’ll bet they’re relieved to see their leader. If the “provisional government” collapses these guys are going to be strung up from the nearest tree, or whatever they do to Seques.* They tussled for the honor of putting an umbrella over Limhoon’s head, and the winner was Zhayk Peez, making himself useful as always. He and Sangh glanced at each other and then looked away. Whatta Limhoon didn’t bother coming over to gloat again in person. He had bigger worlds to conquer. He had apparently shaken off whatever had becalmed him.

Little blue cars came to take the officials back to the Presidential Palace. Sangh got his own train of three, carrying a guard of six marines and Babraba. All the blue cars arrived in the plaza in front of the Palace at the same time. Sangh was led out of his car in handcuffs. Babraba Ghalfe paused for a few



seconds, watching “Governor” Limhoon being greeted by his new flunkies. The press, behind a colored cord, called out questions. Limhoon got out of the lead car and danced a little jig before shaking some hands and bounding up the steps of the entryway. Camera flashes went off. He stepped in front of a microphone halfway up. Zhayk translated. “Ladies and Gentlemen of the Press, I wish to read a brief announcement. I will take no questions afterward, because of the demands of the work of government.

“Earlier today, forces of the Provisional Government of Tayha tracked down the traitors Shesay DZeenov and Sangh Fharha. Mr. Fharha was captured and will be made to stand trial or court-martial for his crimes. Unfortunately, Ms. DZeenov was killed resisting arrest. Let these events show to anyone who would dare subvert our government that we will be relentless in defending the sovereignty of the people of this planet. Thank you.”

“*Governador Limirrun, Governador Limirrun,*” all the reporters seemed to call out. “No questions,” repeated Limhoon, and he turned and fairly sprinted up the stairs. Camera flashes had gone off throughout his remarks, and kept flashing as he dashed upward. Sangh heard a couple of questions go floating up the stairs after him, questions he couldn’t understand and that no one would answer.

While they had been distracted, a Seckie had met Babraba. He was apparently their guide, because he led them to the left, down a stairway under the magnificent entryway. Sangh recognized the decor of the first subbasement. The Seckie and Babraba took Sangh to a windowless office. They removed his cuffs and shoved him into the room.

It looked like a conference room, with a few jail-cell add-ons, such as a wide slot in the door and, of course, a new lock. A few chairs had been removed, but there was still a big table in the center of the room. Two cots had been added. Sangh sat down on one of them. On the other, a man slept.

## Chapter 12 Snitch [40/v.3.0.2/177-1]

Vhatta Limhoon’s mood swings could have only one possible cause. The Fleet must be arriving within the next day or so. Standard naval tactics demanded that a squadron of ships be widely dispersed until the moment chosen for them to arrive at the battlezone. Then they would suddenly show up from all corners of the sky, hitting key points of the enemy’s defenses with overwhelming force. They would have time to get off some shots that would seem to come out of nowhere, but these ships would be arriving at maximum speed. They would zip through the battle zone so quickly that it would take hours for them to come back around and rejoin the battle. The later ships to arrive would be going slower, and over successive waves the distribution of speeds would shift down, as enemy forces capable of firing back were degraded. By the

fourth or fifth wave, the ships would be going slow enough to stay in roughly circular orbit, maintaining sustained fire over several battlezones, whose capacity to fire back would have been significantly degraded. Eventually they would attempt a landing, establish beachheads.

Limhoon had been one of the architects of these tactics, which had dazzled everyone during the Dhas-sishi War, when the attack force emerged from a flash point behind the satellite Mattho, close enough to its atmosphere that a few ships could not fight free of it. But most of them were able to come out at an unpredictable range of velocities to reign death down on Dhassishi.

Now, on *Teġa*, the attack force might already be appearing on *Teġano* radars, first as isolated blips, then as a worrisome pattern. But by the time the pattern was seen, it would be too late to do anything but try to hit a ship moving faster than any missile that could be aimed at it. This first phase would be fought with high-powered Q-guns, which concentrated an intense ball of coherent electrons and positrons that decohered — came unglued — when they interacted with ordinary matter, releasing an enormous amount of energy in a picosecond.

In the current tactical situation, the last wave of ships would be the ones to try to achieve landings, presumably throughout the Southern Hemisphere, in all the major cities. These cities would have suffered through strategic laywitzers and tactical nuclear weapons, and now would come battalions of occupying forces, due to hit *São Paulo*, *Johannisberg*, *Benguela*, *Djakart*, and cities known only by serial number. After that, the Lofghudling occupiers would no longer be stretched so thin. Who would take charge? Byšhe-Admiral Ohmahan commanded the Contact Fleet, but Vhatta Limhoon, the President of the Provisional Government of Erth, would sign the surrender papers.

*Suppose the Looŋghud Navy wins a smashing victory, and succeeds in occupying Teġa, the first jewel in the Poph's crown as leader of the Galactic Pophacy. The Seckies will go along because they like all Molies, even occupation forces. The Molies will go along, in the South because all the fight has been bred out of them, and in the North because all they have to fight with are swords and crossbows. The only ones who will resist are the Arvatàhs, a committee of eccentrics, the remnants of the Mind. Without a decisive leader — Frank Powers? LaQuinta Johnson? — they won't do much but add stories to their cloud of contradictory legends.*

*Or perhaps they'll play a long game, subverting the Lofghudlings the way they did the Teġanos. Can the Lofghudlings find and dismantle the vast computer networks of Teġa? Or will too many of them get hooked the way Bewinda had? The resistance movement the Arvatàhs build will not be based on violence, but on seduction.*

*They won't make the mistakes the secularists made before. Never mind tolerance. If the Poph drafts everyone into the Paphal armed forces, fine. If every school has to teach Kristhlam, fine. Their bottom line will be the addictive luxuries they have to offer. There are so many helpful pieces of software, which together are the glue that holds their culture together. And the genetic goodies! How could the Lofghudlings resist*

*life extension when their subjects lived more than twice as long as they did?*

What filled him with dread was how to keep Loofghud free from the contagion. Dogmatic training had kept the demons at bay for centuries, but once Tayha got incorporated into the Empire, the demons would be back, howling for their souls.

The conclusion was obvious: A defeat would be much better for the health of Loofghud and the Paphacy than a victory.

*Never mind all that, I don't care who wins, I just want Vhatta Limhoon to lose.*

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Sangh's cellmate was named Fella Smiggle. The name sounded familiar. He was a little gray-skinned man with few hairs on his head, and those gray and combed over the top of his gray skull.

"Sorry to wake you," said Sangh.

"I wasn't really asleep. We've met before. I interpreted for LaQuinta Johnson last weekend. I guess you have had a busy week," said Fella.

"Ah. You're a Seckie."

"My boss is out of town. LaQuinta's in *Austrália* right now, and has set up the Free Government of Teᶄa in opposition to the scoundrels here."

"So I heard. What's her title, Acting President?"

"Yeah, that's right!" said Fella. "Between you and me, I think she'd make a better president than that yokel she's married to."

"I won't argue the point," said Sangh. "So, if she's there, what are you doing here?"

"I was captured during the coup on *terça-feira*. But, between you and me," he whispered, "I was *meant* to be captured. My connection to LaQuinta is supposed to make me seem more important than I am. I think the biggest fish he has, besides the President, of course, is the Minister of Agriculture."

"Are you prepared to be tortured?" said Sangh.

"I hope so. I don't know anything worth torturing me for, but assuming they don't know that, they may torture me anyway. I will just have to endure it."

Sangh was skeptical. "Is it really possible to torture one of you guys?"

"I assume by 'you guys' you mean government employees. Ha-ha. Sorry, I knew what you meant, and you're right, *Seques* can consciously disregard pain from a body area when we're sure the pain is a message that was already received and dealt with. But all the torturers have to do is ...."

But Sangh had stopped listening. He said, "I've never been tortured either. They tell me it's much worse than you can imagine, but they don't know my imagination. Maybe we won't have to be tortured. There's a battle coming, and ...." *I can't say it out loud, but my only chance of avoiding the Inquisition is if Tayha wins and the Palace is captured before Limhoon gets away.*

“Is that what’s going on, there’s gonna be a battle? There’s a strange mood around this place, I can feel it even in here. The jailers sounded almost giddy the last time they shoved some food in the slot.”

“For you?”

“Yes. Do you want some of it? I think it’s still good.”

“They don’t realize you don’t eat?”

“They haven’t turned off the power in here, so so far I’m good. I’m guessing about half their prisoners are *Seques*, and food is piling up all over the building. If they ever notice, they’ll think there’s a hunger strike. Here, try this sandwich.”

“Thanks. Figuring out a new planet is not easy. I know ten times more than these guys, and I’m still surprised every day by what happens on *Teḡa*. That’s why exoanthropology is so important. You’ve heard of it, right?”

“No.”

“Anyway,” said Sangh through a mouthful of a very good, if cold, hamburger, “I’m guessing the Loofghud Fleet will show up in the next twelve hours or so. By tomorrow you’ll either be looking forward to a long bad time, or you’ll be out of here.”

“Really? The next twelve hours? The Free Government will be glad to hear that.”

“Well, they won’t hear it from me.”

“They already did,” said Fella. “You didn’t realize I was actually still connected to the *Teḡanet*, I guess.”

“You are? Oh, Lord,” said Sangh. He set his sandwich down and put his head between his hands.

“The Limhoonies are still trying to figure out how to turn the *Teḡanet* off. Between you and me, they’re not getting much help from the local communications specialists.”

“Phook you and the tin can that fathered you!” said Sangh, jumping up and throwing the hamburger at Fella Smiggle. “I’m here because Limhoon thinks I’m a traitor. But I’m not, at least not until now.”

“I’ll testify that you didn’t know what you were doing,” said Fella, brushing some crumbs from his shoulder.

“I’d just as soon not talk any more,” said Sangh.

## Chapter 13 Surprise [41/v.3.0.2/180-1]

“*Cross to LCI*, do you read me?”

“Sangh?”

“Tralf? They’re letting you fly *LCI*?”

“Out of band, right? Re— reverberations! And why isn’t your ass in the brig?”

“We’re shorthanded until you get back safe and sound. Any time you’re ready to go, go. We’ll rendezvous once you’re in orbit. I’ll cheerfully go back to the brig.”

“Roger, I’ll lock you up myself.” There was a pause.

“Okay, we’re ready to go. I’ll just push the start button to begin the wash cycle. Lord, a chimpanzee could fly this thing, it’s got so many presets.”

“They couldn’t find a chimpanzee?”

Actually, Tralf was a pretty good pilot.

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Sangh had tried repeatedly to warn Vhatta Limhoon that the Erthlings had more defensive resources than he realized. Pauer had warned Sangh the day of their landing that *Texa* was not as feckless as Nilson Matsushima made them look. The story of the Second Nuclear War showed what they could do clearly enough. But Vhatta Limhoon, for all his imagination and boldness when thinking about offensive operations, resisted thinking at all about defense, even the enemy’s defense.

Months before, when Sangh and Tralf first heard they were to be assigned to Limhoon’s ship, Tralf had found a short collection of Vhatta Limhoon’s lectures during a stint at the Naval Post-Graduate School. He had written,

A commander’s nerves will never recover once he starts thinking up ways he could fail to understand the tactical situation. He must take as an axiom that even if the defense starts with ten times more knowledge about the situation than the offense, that advantage won’t survive the first ten minutes of battle, when the offense scrambles the situation up.

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The disaster known afterword as the Battle of *Texa* happened on the morning of Monday, October 19, six days after Limhoon had occupied the Presidential Palace and arrested the President. Sangh had had a lot to worry about Sunday night, but he slept soundly anyway, either because he had a bed for the first time since *Manaus*, or because his worries were so overwhelming that sleep was the only way to escape them.

He awoke the next morning before dawn. Fella Smiggle was poking him, and saying, redundantly, “Wake up! Wake up!”

“Why?”

“It’s started. There’s been a huge explosion in *Australia*, and smaller ones near various cities.”

“God, did Lakeenta’s government survive?” said Sangh.

“Oh, sure, the explosion hit somewhere in the *Outback*. Probably several sheep and a few unlucky people were killed.”

“They didn’t hit Sidney?” asked Sangh incredulously.

“Nowhere near.”

The first wave had passed Teḡa traveling too fast to track. They were now far away, and would be decelerating like mad.

“Is that it?” said Smiggle. “Aren’t they trying to land?”

“My lips are sealed,” said Sangh. Platitudes were all Fella would get from him from now on.

An L-hour later the sun was rising. Two portions of gruel on a tray were shoved through the door. Neither of the occupants of the cell were interested. Sangh knew that the second wave was scheduled to appear right about now, still moving fast, but not as fast as the first, or at least that was the plan. They might hit the Presidential Palace by accident, or the Tayhans might attack it on purpose. Sangh huddled under the desk in the corner.

“Find some shelter, Fella,” he said. “If the *Texanos* have any retaliatory capacity at all, this building is likely to be a target. I wish we were in the basement.”

“I wish we could look out the window. If spaceships are going to appear in the sky, I’d like to see them in person, instead of having to make do with video streams. I wish I could show them to you.”

“I’ll pretend I’m listening to the radio, like the old days, when my Dad would have the baseball game on while we did chores. Now you’re the radio, the game is the attack on Teḡa, and it’s tied in the second inning.”

“We haven’t had radios on this planet since long before I was built. For that matter, we haven’t had baseball.”

“I bet they still play it up north, I mean in *América do Norte*.” They had wandered from the topic, which was protecting Fella from radiation. “Seriously, you’re risking frying your eyes, and that’s just in the first few microseconds,” Sangh said. “Get under here with me!”

“Naw, don’t worry about it,” said Fella. “With all due respect, a few planks aren’t going to make much difference. And if they actually did, you as a *Molhe* would need them more than I would. There’s some shelving I can put on the desk that will help block a few more gamma rays.”

“Sure you don’t want to join me? You don’t look that tough, if you don’t mind my saying so.”

“Not at all. But I can be backed up, and *Molhes* can’t.”

““Backed up’?”

“Like any other computer. You copy a *Seque*’s internal state data for safekeeping, in case of some crash or catastrophe. The backups happen automatically, like every day. So if I should be destroyed, my body could actually be rebuilt, and all the data restored, and I could actually restart my life at the point where the backup occurred. It’s expensive, but most of the cost is covered by health insurance ....”

“So you’re immortal, in some sense.”

“Not immortal. *Seques* run down. We live about as long as *Molhes* ....”

“Sorry to keep interrupting, but can I hazard a guess that the *Lei Básica* requires that?”

“Why, yes. You’re well informed.”

“The anthropology of Seckies has been a source of amazement since I got here. But go on. You were saying Seckies live about as long as Molies.”

“Oh. So that’s about it, actually. If a *Seque* is killed, they can be restored, the thread of their consciousness backtracking a few hours, so they actually lose a day of their lives at most.”

“Because of backups, you’re less afraid of nuclear bombs than I should rationally be?”

“Yes, but ... I don’t know. ... I don’t feel great about the idea of being incinerated, even if the next day I’d be restarted with no memory of that event. Will the new me really be me? Some *Seques* — not many — have legally given up their right to be restored if destroyed. They believe, I guess, that life has more meaning if it’s fragile. Not for me.”

“I think they’re right,” said Sangh. “But then I’m a Molie, and a Chustlim, and if it’s my time to die, then Allāh’s will be done. I have hope of reaching Paradise. Less than I did, but ...”

“I have no idea what you’re talking about.”

Sangh explained, at great length, and Fella listened. Neither had anything better to do while they waited for the Contact Fleet to take its next step.

Time passed. They were still alive. Sangh was getting restless, also cramped. He finally worked his way out from under the desk and stood up. “I guess I’m going to die like a man, on my feet and defiant, in spite of myself,” he said.

“You may not have to,” said Fella. “I’ve just heard the most incredible news. Two of the attacking ships have actually collided.”

Sangh was too stunned to say anything. The chance of such a collision happening were negligible. The problem of collisions with Tayhan satellites or debris was much more significant.

Like the first wave, the second was planned to overshoot the planet, but not traveling as fast. They were to begin deceleration immediately after launching their bombs. After that they went into orbit, if the attack had gone well, which might give them other chances to collide with something. But a collision between two friendly ships on the first pass through the battlespace? Sangh guessed it had never happened, even in war games.

Fella spoke up again: “More collisions. There’s footage of some of the debris from one collision landing in the ocean. Maybe you can catch it later.”

Sangh felt sick. He knew many of the people serving on the destroyers. They were classmates, friends. Some would have died on the initial collision, some of asphyxiation due to multiple hull breaches. Anyone who made it to an escape pod might survive, but only if they were able to use what fuel they had to find land on Tayha, or if they went into orbits around Tayha that were not too eccentric.

During Sangh’s morbid meditations, Fella had heard increasingly good news. Usually as sober as his

gray hair and skin made him look, suddenly he was practically dancing with joy. “Hurray for our side!” he yelled.

“Shut up!” yelled Sangh. “Think about how many *Molhes* are dying up there. Doesn’t that bother you?”

“I didn’t actually have anything to do with their deaths. Think of all the *Molhes Texanos* who would have died if the assault had gone according to plan.”

Sangh could no longer deny the obvious — that the entire attack was doomed. The Mind controlled the invaders’ Fleet — or a committee of its fragments did — and had been in control for some time. The Erthlings were just toying with the Loofghud Navy. They could have destroyed the fleet while it was still far away, but this way the home crowd got to see the destruction live and up close.

That a major rout was underway was obvious to everyone else too. The sound of boots thudding into the plush carpeting came through the door; some people running one way, some the other. It sounded more like blind panic than the execution of a backup plan.

By noon on Monday, October 19, even Limhoon would have to admit he was whipped. The Contact Fleet had been dispersed at random into an empty void centered on planet Erth. A few ships had succeeded in launching escape pods, but most of those that had survived re-entry to the atmosphere had sunk to the bottom of the sea. Limhoon had two landing craft, *Cross LCI* at Firebase Limhoon and *Cross LC2* at the Presidential Palace. Unlike the pods, *LC1* and *LC2* could take off again and return to orbit.

## Chapter 14 Rout [42/v.3.0.2/184-1]

Limhoon’s only option if he wanted to avoid being tried by the Tayhans as a war criminal was to evacuate, risking being court-martialed for insubordination, falsifying orders, and causing the worst defeat in the history of the Navy. But at least he would be home.

*If I were Limhoon, I would just abandon the prisoners. They would all be freed when the Tayhans took their Presidential Palace back. But he’s got to take two prisoners with him: President Travers, and me. TraverseE could be a useful hostage. Sangh would deflect some of the blame coming Limhoon’s way when Limhoon accused him of high treason.*

Sure enough, amid all the hullabaloo in the corridors, a squad of five marines came to the door of his cell. Sangh wasn’t sure who had been minding the door this morning, but they had decamped. The marines yelled through the door, “We can’t find the key.”

He yelled back, “Well, *we* haven’t got it.”

The hastily converted office holding Sangh and Fella was not exactly a maximum-security cell. The



door was solid, but it was attached to its hinges by ordinary hinge pins. The marines knocked the pins out and took the door off its hinges, tossing it aside.

The leader of the squad was Lt. Babraba Ghalfe, armed only with a pistol.

“Private Honzales, cuff him,” she said. “Is your cellmate a robot?”

“No,” said Sangh. “Goodbye, Fella.”

They pushed him at a good clip through the corridors. Left turn, right turn, .... As usual, the Palace disoriented him. He could hear the sounds of gunfire.

“Is that a firefight? In the P.P.?” he asked.

“No,” said a marine, yanking him to the right at a junction. “No one’s coming to rescue you, douchebag. They’re just using robots for target practice.”

“And one more thing,” said Babraba. “Shut the phook up. I don’t need much of an excuse to shoot you. I’m having a really bad day.”

Sangh had answered “No” when asked if Fella was a robot out of simple annoyance at Babraba’s ignorance of the difference between robots and Seckies. But now he realized that he might have saved Fella Smiggle’s life with this answer; or the segment of his life since his last backup.

Without Fella’s reports, Sangh was at the mercy of the rumor-diffusion mechanism spreading fear and confusion among the small force of Lofghudlings in the Palace. Would the entire Contact Fleet be destroyed? Was *Cross* still in orbit? Would they take orders from Limhoon?

Abruptly, they came to the entry hall of the Presidential Palace, and then to the light of day at the top of the entryway steps. Sangh had come up in the world; he got to use the front door this time. He was still in cuffs though. The sky was overcast.

It was dead quiet, except for the singing of birds. Nothing moved in the city, holding its breath until the battle was officially declare over.

At the top of the steps stood LtCdr. Kolfhaj and Vhatta Limhoon, looking completely professional and cool, unlike just about everybody else, except perhaps Lt. Ghalfe. Limhoon glanced at Sangh with contempt and went back to talking with Kolfhaj.

Sangh surveyed the silent city. *On any other planet the cities would have been evacuated, methodically or in a panic, if the authorities suspected Cross was the advance guard of an attack fleet. Here the populace accepted the government’s assurances that Cross came in peace, and, when the story changed to, “We can beat them,” they accepted that, too. On any other planet the people would have panicked as soon as Limhoon launched his coup. Rumors of impending invasion would have spun through the populace, and if a few started running, a herd would have followed them. Troops would have been called in to stop looting. Not on Teḡa, though. No wonder they don’t need God; they’re children, and they still think “grownups” are gods.*

Landing Craft 2 still stood on the bricks of the *Praça*, looking like an old war monument. *If only.* Limhoon nodded and without any ado Lt. Ghalfe shoved Sangh down the Palace stairs. He caught himself

and jumped down as quickly as he could to avoid being shoved harder. At the bottom she caught up with him, grabbed his arm, and dragged him over to the left rear door of the landing craft. Unlike Limhoon's vheephu, *LC2* did not land on its tail. It looked like an awkward airplane with stubby wings. It had two entrances forward and two aft. Its nose pointed left, toward the city.

Babraba pushed Sangh up the short staircase that led into the landing craft. "I'm going as fast I can, Lieutenant Ghalfe," he said. She merely growled, led him to a seat over one of the stubby wings, shoved him down into it, and took the adjacent seat. She fastened Sangh's crash harness, then her own.

It didn't take long for the spacecraft to fill up. Muuke v'n Durhaa got on just after Sangh. Vhatta Limhoon boarded last, preceded by none other than Bewinda Wharbut. She had earned a promotion to Lieutenant for her work rooting out and almost capturing the traitor and terrorist Sangh Fharha. She pretended she didn't see Sangh as she paraded her extra stripe past him.

V'n Durhaa had at some point apparently switched her billet. The last Sangh had heard, she was still part of LtCdr. Kolfhaj's landing party, but here she was at the Palace rather than "Firebase Limhoon." Sangh wished he had seen Tralf get on *LC2*. But there was never any point asking about personnel shuffles in the Loofghud Navy, even now, especially not now.

The pilot, a Loofghud Marine, was flicking switches and going through a brief checklist with her copilot. Limhoon shouted, "Take off when you are ready, Chandrasecker!" and within 10 seconds the lift thrusters over the wings and tail ignited. *LC2* rose into the air, up and up, just as it was supposed to. Everybody on board knew that the spacecraft could suddenly find itself skewering back into the *Praça*. But that didn't happen. At 100 meters up, the tail engine roared to half thrust, then ramped up as the wings gave the plane a steeper and steeper upward path. By the time the engine was at full power, the wing thrusters had throttled down as the ship muscled its way out of the atmosphere.

A few minutes later it began the complex orbital waltz aimed at docking with *Cross*. This maneuver took more time than everything else, but they were all thanking Allàh they had made it this far, so they waited patiently. There was one exception: Vhatta Limhoon, who bounded up from his seat as soon as they were docked, pushed off and zoomed to the nearest door.

"Let's go, let's go. I need to shoot something!" he said into his mobilcom.

Everyone else was still fumbling with his harness or readjusting to micro-gravity. Sangh had to wait for Babraba to unfasten him.

"If I were Vhatta Limhoon," said Babraba, "I'd blow up that damned Palace." But Sangh never found out if he blew up anything. Perhaps he reread his latest orders and decided for once not to exceed them.

Eventually the marines were berthed back where they had started a week ago. Sangh waited near his hammock to be imprisoned again and tried to be unobtrusive. The ship was on edge, because *LCI* had not docked yet. No one knew why. Sangh heard a murmur coming his way, as if the spirit of Rumor had decided to pay him a visit. But no, it was Lhithy Dhluizio. He had been huddled with Vhatta Limhoon and was now

conveying his orders. How had Limhoon functioned on *Teḡa* without him? The Lieutenant Commander paused in his slow translation through the corridors.

“Lieutenant Fharha.”

“Sir.”

“We’re going to be shorthanded for a few minutes, until *LCI* gets back. I’ve reassigned people to various vital tasks, only to discover I need someone to work comms with *LCI* during its ascent. You’re it.”

Before Sangh could object, his handcuffs were undone and he was directed to a workstation with a microphone. Everyone around him was working radar, but he didn’t have time to hear why. Dhruzio showed him which buttons to push and left him alone.

*They expect this to go badly and they want to make sure my fingerprints are on the controls somewhere.*  
He didn’t expect to be talking to Tralf when he died.

## Chapter 15 Crash [43/v.3.0.2/187-1]

“Beginning launch sequence.” Plainly, the former occupants of Firebase Limhoon had been itching to leave Earth behind. They had their luggage stowed and their seatbelts fastened. “Ignition, ..., liftoff, ...”

“*LCI*, we’ve got you on radar. Tracking you as right on track.”

“Look, Mom, I can fly!”

After three minutes of silence while Tralf concentrated on his craft’s behavior, Sangh spoke, “*LCI*, we’re seeing a slight deviation.” He lost hope in an instant, but the exchange went on.

“*Cross*, yeah, we’re experiencing some wobble. Control system is having trouble staying on course. Shit. Gotta switch to manual.”

“*LCI*, Tralf, hang in there! Correct pitch +3 degrees, yaw -5 degrees.”

“Copy that, shifting to pilot control. Shift complete. Easing main thruster left 5, up 3. Damn! Panel says thruster is moving, but I can’t feel a change.”

“Roger, *LCI*, completely off track now.”

“Thruster controls must be unresponsive. Opening up all wing thrusters on right side, firing front thruster. I can feel *that!* She’s starting to respond.”

Another tense 40 seconds passed.

“*LCI*, you can’t burn through the auxiliary-thruster fuel at that rate for the time you need. Suggest returning to ground. Possible? Let us know immediately.”

“*Cross*, not possible with remaining fuel without main thruster. It’s over. We’ve been sabotaged, just like the attack fleet. Will conserve fuel to manage tumbling when we re-enter atmosphere, but not clear we’ll have enough control.”

“Roger, *LCI*. Tralf, .... Have you made an Act of Contrition?”

“Roger, *Cross*, no, Sangh, but thanks for the tip. Really. You’ve been a good friend, sometimes under nucky circumstances.”

“Roger, Tralf, so have you.”

He expected another word from Tralf, but he was gone, or had decided to spent his last seconds fighting for his ship and his passengers’ lives. But against what? Like Tralf had said, the same infection or possession that had destroyed the Contact Fleet. About which they knew nothing.

*All I know is that this is a message from the Texanos: “We could have destroyed both ships; we spared LC2 for our own reasons.”*

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Vhatta Limhoon recommended that medals be given to Babraba Ghalfe and John Kolfhaj (the latter posthumously) for brave and selfless service during the invasion. They deserved the medals, but everybody knew that medal committees discounted recommendations from disgraced and defeated officers.

Why had the Mind decided to destroy *LCI* and not *LC2*? Was it simply because *LCI* took off an hour later? Or was Sheessay still protecting him? “You can stop protecting me,” he said out loud, addressing himself to the Tayhan surveillance system he was sure was there. “Unless you protect my friends, too.” A few officers and enlisted personnel heard him, and looked at him as though he was nuts. Just as well they didn’t know what he meant.

Sangh was never sure his knowledge of the disaster was accurate or complete. Some parts he heard from Cdr. Dhluizio, who explained to the crew what they were called on to do. The commanders of the third wave of the attack had realized what had happened to the second wave, and attempted to cancel their pass by the planet, only to discover that they did not have control of their vessels. They were doomed to follow trajectories that would cause them to collide with each other in a few hours, or meet some equally lethal fate. They knew there had been few survivors from any of the collisions in the second wave. Under those circumstances, the decision to abandon ship seemed like the only rational option. So the crew had taken to the escape pods.

Perhaps they should have waited until they were closer to the planet they were shooting at. But no one knew how to predict what the position and velocity of mother ship would be at any later point in time, given that they had lost control. When the pods were ejected, the ships they belonged to had been at their target speeds. Each group of pods moved toward Erth at the same velocity as the ship it had been ejected from. If that ship had then altered its course using the fusion drives, many of the pods would have been

positioned to be hit by the cloud of radioactives produced by the drive exhausts. The doses involved would have ranged from mildly carcinogenic to instantly lethal. Fortunately, the *Texanos* had used only chemical thrusters for course alterations in the vicinity of the pods. The Mind was always as solicitous as it could be for the members of the Molie race; but only Sangh knew that.

As each attack wave of the Loofghud Navy emerged from deep space, all its ships were at about the same distance from Erth and converging on it at about the same speed. For Wave 3, the point when the pods ejected was somewhat less than the distance to Erth's only satellite, "Muun" or "lua". The escape pods, traveling at the attack velocity, arrived near the planet about an L-hour after they ejected, each following an elliptical or parabolic path, traveling as fast as the warship that ejected it, but curving toward Erth. If the pods had had thrusters as powerful, a fuel supply as large, and navigation computers as powerful as a cruiser's, they would have corrected their eccentric trajectories into tidy orbits around Erth, and they would have been easy to rescue.

As it was, if an escape pod missed the atmosphere completely, it would go into an eccentric orbit and everyone aboard would die before they could be rescued. If it hit the atmosphere at the wrong angle, it might break up or burn up. Some pods might conceivably have landed successfully on the planet, as Sangh and Tralf had done. If so, those sailors were marooned. But there was one more hopeful option: a pod might slow down enough to go into a manageable orbit that would allow a surviving warship to pick it up. But the people aboard could survive for only as long as their air held out.

Fleet Command had notified the *Texanos* that the *Lofgaxudianos* needed to conduct operations near *Texa* to save what survivors they could. The *Texanos* agreed not to try to shoot down any of the *Lofgaxudiana* ships while they pursued their humanitarian mission. They also shared the information that there were 25 pods in accessible orbits of varying eccentricities sorts, 2 from the second wave of the attack, and 23 from the third. There had been 30 pods launched from the third wave, but 7 had perished or were beyond reach. These 7 were the pods that were aimed most directly at Erth; 3 had burned up in the atmosphere, 1 had landed safely, 1 had landed in the middle of the ocean and sunk, and 2 touched the atmosphere briefly and took off in directions that the Tayhans had measured pretty accurately, but at speeds that placed them out of reach.

The question was who would save the 25 remaining pods, the Loofghud Navy or the *Texana* low-orbit authorities. Any naval personnel in a pod picked up by the *Texanos* would never see Loofghud again; they would live among demons for the rest of their lives. So it was an urgent priority for the Loofghud Navy to rescue as many of the escapees as possible. The *Texanos* understood, and got out of the way for a day or two while the Lofghudlings chased pods. Whether they could back the Lofghudlings up if they missed one was not clear.

*Cross*, along with two other light destroyers, *Immaculate Conception* and *Poph Melati*, were given the job of detecting pods as they came around Erth traveling fast and gaining in altitude, measure their velocities, and predict their next orbits. The data they gathered were collected by a team on Admiral OhMahan's

flagship, the battleship *Minhbo Gulf*. There were two sources of data: radar tracking, and triangulation using directions of distress-beacon signals from the escape pods. For each pod sighted, the flagship team made the final estimate and chose the cruiser or destroyer best able to match course with the escape pod and go after it.

Cdr. Lhithy Dhluizio drew up a revised duty roster that assigned high-priority ops to the surviving crew and postponed routine chores. It was less wasteful to put Sangh to work than to assign personnel to guard him. All the marines were needed elsewhere. Many of them volunteered for overtime hours at the job of extracting worn parts from the fusion drive while it was shut down, knowing it would expose them to dangerous levels of radiation.

Cdr. Dhluizio put himself on the duty roster. Keeping Vhatta Limhoon company was another job that would have to go undone. Oddly, Dhluizio had put himself on the same section as Sangh, so that they were awake and working at the same times, often in the same place.

Cdr. Dhluizio found an odd moment to talk to Lt. Fharha about the arrangement.

“Lieutenant Fharha, in case you’re wondering what’s going on, the answer is that I’m spying on you.”

“Sir, just tell me what you want to know. There’s no need to spy.”

“I sometimes feel the need to understand what makes my crew tick. Does any of us know what makes themselves tick?”

“Sir, I certainly don’t.”

“If I figure you out, I’ll try to explain it to you. The odds are I probably won’t, but you never know.” He chuckled in that deep voice that sounded like a dump truck idling.

In the new schedule, Sangh was assigned to be a radar analyst, a task normally carried out by a Specialist/Comms, whose usual mission was to scan for threats. It required at least three people to do a competent job; four was better, because a threat could come from any corner of the sky. A light destroyer carried too small a crew for there to be three Specialists/Comms on duty at all times. It was expected to be too small and to be moving too fast to need full defensive measures. Catching a pod was different.

It wasn’t like catching a baseball, because there was no mitt that could spill off the kinetic energy fast enough. The rescuer had to match position and velocity with the pod, without exposing it to the radioactive exhaust produced by a fusion drive. The best point was when the pod was at apogee. At that point it would have its lowest speed relative to Earth.

One might think the orbit would be an ellipse, an unchanging Platonic mathematical entity, but the interaction with the atmosphere caused the ellipse to shrink, rotate, and in general just *twitch* an unpredictable little bit on every revolution. The next apogee could be hundreds of thousands of clicks from the previous one. If its location could be predicted a few hours in advance, a cruiser stationed in an orbit that would bring it close to the apogee at about the right time would be given the task of rendezvous’ing with it.

## Chapter 16 Catch [44/v.3.0.2/190/-1]

They had at most two E-days to catch all the pods. After that, the crews would probably be dead, unless some of them had fewer than the six occupants they were designed to hold.

The ten days Sangh had spent on Erth, the almost mythical Erth, had gone by in a flash. Now time sped up even more. He worked 18 L-hours out of every 24, usually as a radar analyst, but occasionally filling in for some other missing person. During his first stint as radar analyst, he found himself sitting between one of their remaining analysts, a light-skinned woman whom he knew only slightly, and Commander Lhithy Dhluzio.

“Sir, there is perhaps some mistake. I’ve never served as a radar analyst,” Sangh had said to the Commander when he first saw his assignment.

“Not since you graduated, but your grades on radar exercises were pretty good in school,” Dhluzio had said.

“Sir, I’m going to need some training on this system.”

“You get on-the-job training absolutely free,” said Dhluzio.

Now as, he settled into his seat in front of an unfamiliar model of radar screen, Dhluzio said, “If you have 10 minutes, wait, . . ., 5 minutes, you’re going to be trained on this equipment right now.” CdrDhluzio gave his signature chuckle, but it didn’t seem as creepy as it once had.

Apparently 5 minutes was the time to the next expected sighting of an escape pod in *Cross’s* sector, coming around the planet. Cdr. Dhluzio showed him where all the knobs and buttons were. “And meet Specialist LaToya dhadama, to your left — Specialist dhadama, meet Lieutenant Fharha, filling in as radar analyst while we’re underhanded.”

Pleasantries were exchanged, although Spc. dhadama looked a bit askance at him. Everyone knew who he was, of course. Perhaps his reintegration into the crew, however temporary, would introduce a note of doubt into the consciences of those who had condemned him as a traitor.

“Your 5 minutes are up, Lieutenant Fharha!” said Cdr. Dhluzio. “Expect pod blips to show up any time now.”

Dhluzio’s watch schedule had most watches lasting six L-hours, with sleep periods of at most four. Sangh’s first six-L-hours of radar analysis required intense concentration, with few breaks. The escape pods were hard to spot, especially when their orbits were near the equatorial plane in which some kickers were launched into orbit. The ellipse traced by an orbital kicker started off quite eccentric, until retrorockets cut in and shaped it into an approximation of a circle. These kickers were much bigger than the kickers used to take tourists, schoolchildren, businessmen, and, a few days aog, Sangh and Tralf on suborbital flights

On the Lofghudlings' radars all these blips looked a lot alike. There were tools for disambiguating them, but running them required several seconds of human intervention — several seconds if you were trained and experienced, a minute at first for Sangh. Over time, an orbital kicker's trajectory changed, whereas an escape pod tended to travel ballistically, making allowances for atmospheric drag at low altitudes.

After his first watch, Sangh was dazed. His joints had stiffened from being under constant tension. He felt good that he had spotted two escape pods, but his prediction of apogee differed from that of Spc. dhadama by thousands of klicks and several minutes, and she was always right.

Some of the pods circling Erth were in low orbits, and were caught quickly, but two had apogees out around the orbit of *Lua*. By the time they were observed 60 hours had gone by, and hope was dimming that anyone aboard could be saved. Cdr. Dhruzio got a group together in the officer's mess for a pep talk. The group consisted of the radarmen and the signals specialists triangulating on distress beacons.

"People," the Commander said when they were assembled, "We have one shot at saving the next pod. We've decided this is the last one worth catching. We've asked the Tayhans to try to save the other one if they think they can, but we have no ships close enough to its probable trajectories to catch it. Pod 16 we think we may have a chance at. There may still be people aboard. They're not responding to our calls, but perhaps they're unconscious or just out of range. It's coming in for its next go-round, not traveling too fast yet, but once it gets running it will be going like a runaway train.

"If we get a good reading on its velocity, but then wait to intercept when it's at apogee, everybody aboard will surely be dead. So we're going to try to intercept while it's rising, and traveling about 50,000 klicks per hour. The best spot is when it's about 150,000 klicks from Erth. If we get a good read on it from low orbit, the big dogs will have about 1 L-hour to catch it. They can just make it if they start accelerating *now*. So several ships are currently sprinting in about the right direction, covering all the possibilities. The one closest to the coordinates we provide — you and I — will correct its direction and attempt to match course with the pod. This is a game of inches. The infield is going to run for a line drive, and they need our information to do their job.

"I'm not going to bore you with any more of this, because we don't have any time to waste. But I expect every one of you to do your duty to God and Loofghud."

They hung there, taking their charge in for a few seconds, until he clapped his hands once, and they dispersed to their stations. Sangh was hunkered down in front of the screen by the time Dhruzio and dhadama got there.

Within 30 minutes Dhruzio said, "I got something interesting, boys and girls." He gave the approximate coordinates to Sangh and Lt. dhadama.

"No!" said Sangh. "That's a kicker. Keep looking!"

"You mean, No, Sir," said Dhruzio. "But you're right."

All three of them were on edge, but a few minutes later Spc. dhadama said coolly, "Pod at coordinates



...,” and she rattled them off. Sangh confirmed it and then Dhluizio. They all had well-backed estimates of speed and direction and the three agreed rather closely. The cruiser *Coleman Brothers* was the one closest in velocity and position, and it shifted to pursuit of Pod-16. In an hour or two it had caught up with it. There were still two women alive out of four passengers, news which sent up a cheer among every mariner in the fleet, but especially among the clutch of analysts onboard *Cross*.

“Lieutenant dhadama, Lieutenant Fharha, we finally have something to be proud of,” said Commandar Dhluizio.

“Thank you, sir,” said the other two analysts, the professional and the amateur.

Sangh would have liked to suggest they go out and celebrate, but such fraternization among the ranks was frowned on. Still, he felt that he and Dhluizio had formed some kind of bond, and he wished they could have a few beers together.

He turned to Lt. dhadama and said, “When we got off, want to lift a stein in celebration of our wonderful achievement?” She said, “Sure,” and smiled. Her smile wasn’t bad.

Sangh turned to Cdr. Dhluizio and said, “Sir, I wish you could join us, but I realize it would be stretching the rules.”

Dhluizio pondered for a moment. “Everything else has been stretched around here. Let’s stretch a rule.”

So after their watch the three of them retired to the mess for a drink. Although senior officers could eat here, they usually didn’t. Vhatta Limhoon, Cdr. Dhluizio, and LtCdr. Kolfhaj, before his death, usually dined in the senior commanders’ stateroom, which was the space Limhoon had taken over as his “office.”

The only alcohol served aboard Loofghud Navy vessels was grog, rum mixed with water. At least they called it rum. The water in it, like all their water, was recycled from the crew’s liquid wastes, so it was assumed that the alcohol molecules were produced by fermenting their solid wastes. This assumption was contradicted by the authorities, but all evidence was disregarded. It didn’t help that the robust artificial flavorings added to make the mixture taste vaguely rum-like made it taste more like toilet-bowl cleaner. The stuff was diluted to make it harder to get drunk. Whatever it was, it was welcome after bouts of hard work. It was served in squeeze bottles, of course. Glasses worked only where there was gravity. All the talk of “steins” and the lovely beers they whose golden foam they might contain was part of an elaborate running joke, which eventually touched on every type of booze they could dream of, and only dream of, as long as they were away from port.

By a miracle there was a place in the mess for the three of them to perch together. Sangh raised his squeeze bottle. “To the Navy, gentlemen and ladies, ever loyal to the faith.” They murmured “Hear, hear” and touched their bottles together before squeezing a big load of grog down their throats.

“But I hope,” he continued, “That I never have to be a radarman again. How do you stand it, Specialist dhadama? By the way, people call you ‘Toy,’ right?”

“Yes,” she said primly, “my name is LaToya, but, sure, call me Toy, since there seems to be nothing I

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can do about that nickname. *I* find radar work fascinating, Lieutenant Fharha.”

“Good. Someone has to make sure attackers don’t get through our defenses.”

“I know when you first get acquainted with those little dots on the screen, that’s what they look like, little dots. But once they’ve started to move, each one is unique, no two are alike, you know. Like snowflakes, but really, a lot more possibilities. Although, in space, just about anything unexpected is hostile. There aren’t that many meteors flying about.”

“Ah,” said Sangh. There seemed to be nothing further to say about radar screens, as far as he was concerned. What he really wanted to talk about was the captain.

“Commander Dhluzio,” he said. He thought perhaps the Commander would say, “Call me Lhithy,” but he did not.

“Commander Dhluzio, I don’t know about Toy, here, but I know that I, and I believe a lot of other people, have been worrying about Vhatta Limhoon.”

Dhluzio was impassive. Sangh went on. “He’s been under a lot of pressure, and it’s going to probably get worse. Everything on this ship used to be driven by the energy coming from his head. Now, we have silence. What’s his state of mind? If you don’t mind my asking?”

Dhluzio stood up, or rather pushed himself away from the mess area, handing his squeeze bottle of grog to the attendant. “This comes pretty close to impertinence, Mr. Fharha,” he said, and he kicked off in the direction of his quarters.

What Sangh really wanted to ask was, “The vhatta has a lot to answer for. Does he realize that at last?”

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## Part III

### On Getting Out of The Game

#### Chapter 1 Prison [45/v.3.0.2/195/-1]

Sangh heard his cell's hatch opening at an unexpected time, about an hour after mealtime and a half hour before lights-out, not that lights-out had any meaning for *him*. A thrill of fear went through him. *Another torture session, so soon?* But the guard who came gliding gracefully through the hatch was Šhesay. He realized after a second that he wasn't surprised.

"You again," he said.

"How are you, Sangh? Did they hurt you badly?"

"Say hi to the surveillance system monitoring me 24 hours a day."

"Oh, that," and she dismissed it with a hand gesture as of someone throwing out a piece of trash.

"Ah, yes, I keep forgetting who actually controls the hardware around here."

"They'll see some footage of you doing something boring," she said. She looked so beautiful. Of course, her competition was Inquisitor Mohra Velaakh, whose sexiest gesture was turning up the voltage on electrodes attached to his genitals. He shook his head once, violently, to eject some burningly erotic images of Šhesay from his head, trying not to look in her direction.

She said, "I know how angry you are, and I don't blame you, but maybe we can work together to, I don't know, solve some of these problems .... Maybe that's unrealistic."

"Naw, we can still go back and take a do-over on reengineering the human race; how hard could that be?"

He paused; a thought had occurred to him. "*Could* we go back? I mean, to *Teḡa*?"

"No. I'm coming with you."

"A copy of you is coming with me, if I'm not mistaken."

"This is the only me now."

"Are you coming to bring Enlightenment to Loofghud?"

"No! I'm coming to ... win you back."

"Thanks for the heads-up. Now go away."

She looked shaken, but determined. She pushed off toward the door. Then: "I'll go. But not far. I work here."

“Really,” he said in a doubtful tone. “Doing what?”

“I’m a guard, just as I appear.”

“You have a berth, too?”

“Yes, everything. I have some ‘girlfriends,’ which is, like, a first for me.”

“For them, too, I imagine. Okay, before you go, tell me something. Is Commander Limhoon in custody on this ship?”

“Yes, but he has certain privileges. His cell is bigger,” and she looked around at Sangh’s 3 m × 3 m × 2 m box. “I think he may have a private toilet. He’s even allowed to mingle with the ship’s senior officers, with only light guard presence.”

“Thanks. Good-bye.”

“Good-bye. I’ll be back, you know.”

And she glided to the hatch and out, pausing to blow him a kiss, then locking it from the outside.

“It wouldn’t be you if you weren’t coming back,” he thought to say, but she was gone. It had taken all his strength to resist her, and she had just started to weave her spell. He felt disgusted with himself, and at the same time grateful to the point of tears for her reappearance.

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Sangh had been transferred to prison ship *Vhatta Klhancy*, named after Ming Klhancy, a hero of the Dhempirian Conquest. Sangh could recite the history: In the Battle of Minhbo Gulf, Bysse-Admiral Klhancy had led the attack that decimated the large but ineffective navy of Zack Morgenstern, Emperor of Dhindra. *Vhatta Klhancy* had perished during the battle, which cleared the way for Rutger Norkell, the dashing poet and general, to defeat the land forces of Dhindra. That was back during the Age of Sail, a period that had one thing in common with the Age of Faster-than-light Travel: it took several months to get anywhere interesting.

No one bothered to inform the prisoners aboard *Vhatta Klhancy* of the ship’s flight plan. Nonetheless, it didn’t take long for them to realize that the trip was taking too long. Using the quantum-transit system, they should have been able to back get to Star 1 Command in the time it took to set up a blink point.

The first items quantransed to any flash point, after a small ship and crew, were the “spacetime shufflers” required for the return trip. That wasn’t the actual name of the piece of equipment in question — that was a military secret —, but the press had to call them *something*. The quantum-transit system was not a drive, attached to an individual ship. A blink point consisted of a certain [classified] number of spacetime shufflers arranged in a [classified] way, so that in the space they surrounded [it was speculated] a blink point would be created. A ship that sailed into [or perhaps around, or through] the middle of that space would travel at a [classified] speed to the flash point programmed into the shufflers.

There were two blink points to worry about: the one they would use to quantrans to Star 1 Command Station, and the one they would use to quantrans from there back to Sudhopa System. Some combination

of rumor and fact had diffused through the prison population, enough to work out that the remnants of the Contact Fleet had too few shufflers left to set up that first blinker. Either they had left them hanging out near the orbit of Planet 1.3, or (more likely) they had taken them along on the abortive attack on Planet 1.2, and the Erthlings had destroyed or stolen most of them. Now they had to limp back to Planet 1.7 the hard way, a 5 light-hour trip lasting several months with fusion drives at open throttle.

The true nightmare lay in the future, if the erthianGHs could reverse-engineer a spacetime shuffler. Most of the prisoners aboard *Vhatta Klhancy* were confident that the shufflers would melt down or explode if tampered with. Sangh would have bet on the Tayhans' ability to get around any self-destruct mechanism the Lofghudlings could devise.

Most of the surviving ships of the Contact Fleet were built on quite different lines from a fast destroyer like *Cross*: They were big and unmaneuverable, designed to go along geodesic lines from point A to point B. Their fusion drives were huge; the bigger the drive the more completely it burned its fuel. Some of these ships had more interior volume than naval architects knew what to do with. Some were used as fuel tankers; others carried cargo; others had living quarters that rotated, generating artificial gravity for the people working in the outer layers. Prison ships sometimes had plenty of volume left over after providing for as many cells as planners could imagine needing, and in a rare moment of enlightenment had used that space to keep the prisoners busy with reasonably constructive activities. Which is why *Vhatta Klhancy* had an exercise yard big enough to serve as a spaceball court, 40 meters long and 40 meters in diameter

Sangh got one hour an L-day in the Yard, when they weren't interrogating him for 24 L-hours straight. When he drifted in for his first hour, he felt like he had been teleported to the surface of a planet. He came in through a door in the middle of a wall, and he had trouble seeing the other side of the room he was in, which made him assume he was dizzy. He would have staggered if he had been standing on anything.

A guard stationed at the door laughed and said, "Never been one of our 'guests' before?" Sangh shook his head. The guard held on to one of the rubbery ring grips scattered over every wall.

When the ship was underway, as it was now in retreat from Erth, it was accelerating most of the time, which meant that objects tended to "fall" gently toward the rear wall of any room. So "rear" became "down," and the rear wall of the Yard was its floor. Mind you, the gravity-like pull was very weak, less than a thousandth of  $g$ , the gravitational acceleration at the surface of Loofghud. If you fell from a height of a meter, it would take you a second to float down to the surface. It was easier to leap across the room than to walk. The Yard is where most of the prisoners spent most of their time. Keeping them tired and happy kept them from making trouble. Not that any of the prisoners would plot to escape from jail, because there was no place to escape to.

Sangh, a high-value prisoner, a threat to national security, did *not* spend most of his time in the Yard. The Inquisition kept him in solitary confinement, under "live" surveillance twenty-three hours an L-day, in a cell harshly lit every moment he was there. They let him out of the cell to take him for interrogation. Only

now and then did he get into the Yard, for a maximum of one hour.

When he was there, he was shadowed by his two Inquisition guards, whose names he apparently did not need to know. One was a woman, of average height and build, a pleasant face, and tawny skin. The other was a man, good-looking in a neutral way, with reddish-brown skin and hair, exactly the color of a Red Angus cow. Number plates decorated their chests, just above the Inquisition motto “Justitia et Mersikordia,” but there was no obvious indication of their names or ranks. Sangh had heard Velaakh address the soldiers by number, so he decided to call them by color: Tawny and Red Angus.

He could talk to any prisoner who would talk to him, but at first few would. Most of them knew who he was, and they resented the two extra guards he brought. The first time he saw a spaceball game in progress, Sangh could only gaze at it with longing.

The next time he showed up no game was in progress, but a couple of balls lay on the floor. Was he allowed to practice? There was only one way to find out. No, there were two ways, but Sangh ruled out asking for permission. He just picked up a ball, hurled it at the wall, and jumped for one of the hoops at the far end of the court, the ceiling. He almost laughed at the pleasure of flexing his knees and hips, falling gently to the floor, then uncoiling as fast as he could. He was in good shape after his time on Erth, and he was able to make it to the ceiling, 40 meters away, in about 30 seconds. The guards didn’t react for 15 seconds, then jumped after him, drawing their squishers. Red Angus got only halfway up, then fell to the floor ever so slowly, waving his squisher around wildly as if it could propel him.

Tawny aimed better. She couldn’t catch Sangh as he rose precisely to the basket, caught the ball as it caromed off the wall, dunked his shot, and grasped a ring on the opposite side of the court after a fall in a roughly parabolic arc. Tawny reached the wall before he did, and could have blown his brains out on the way in.

“Warn us the next time you do that again, Fharha,” said Tawny, who looked tough when she scowled. She and Sangh sank slowly to the floor, which was 90 seconds away.

“Can’t do that; I’m practicing spaceball. Have you ever played spaceball, . . . , officer?” But the guards had strict orders not to answer prisoners’ questions.

“Well, if you have, you know that the key to the game is moving with split-second timing. No time to send a telegram about where you’re going.”

“Nobody’s letting you into the game, Fharha,” shouted Red Angus from the floor.

What Sangh loved about zooming through the Yard was the combination of the physical pleasure of motion and the real-time challenge of plotting and revising a motion plan, with a handful of players and surfaces to avoid or exploit. You could visualize everything, foresee everything. Sangh had the right kind of brain, and, as he had told Šhesay long ago (over a week!), he had played varsity for the Naval Academy.

It so happened that a fair number of good players were doing long sentences in *Vhatta Kihancy*. They played spaceball almost every day in the Yard. There were two self-elected team captains, Özgür Özgür

and Bratt <sup>C</sup>Heltara, the former in for aggravated theft and the latter for assault with a lethal weapon. Like everybody else, they didn't like traitors, especially traitorous officers.

The rumor that Sangh had betrayed the Empire and caused its defeat in the Battle of *Teḡa* had been almost universally embraced, as rumors often are that single out a plausible scapegoat for a disaster. Without his guards, Sangh knew he was likely to get a sliv in the back his first hour out in the Yard. <sup>C</sup>Heltara was likely to be the one who put his sliv in first, just so everyone knew he was the best.

But as vicious as he was, Bratt wasn't bat-shit crazy, as you would have to be to tangle with the Inquisition. Tawny and Red Angus were keeping him alive. Indeed, most of the time their job was to protect him from the other prisoners. The rest of the time, Sangh supposed, they kept him from committing suicide or busting out of the prison ship just in time to rendezvous with a *Teḡano* spacecraft of some sort.

He went through the formality of asking his guards, "How do I get into this game?," but he kenw the answer. It was too big a risk, to his health and therefore theirs. He would have to enjoy the game vicariously, and get his exercise if no game was in progress during his stray hour in the Yard.

## Chapter 2 Solitude [46/v.3.0.2/199/-1]

There were two Inquisitors aboard *Klhancy*, Mohra Velaakh and Kan Wanthu, a short, squat man with large black-rimmed glasses over jug-handle ears. No one bothered to explain why they had names and not numbers. The interrogation space was nothing special, about the size of Sangh's cell. It was more lavishly decorated, with wires, AC adaptors, leads, clamps, dials, and control knobs. The wires and accessories looked like instruments of torture, and that's what they were. Their primitive design was intended to make them look scarier, and it did.

Even so, Sangh's second session with the Inquisition caught him off guard. The first session started with the prisoner taking off his clothes. Clamps were attached to his genitals and nipples. (Were tortured women treated so immodestly? Sangh guessed they were.) The clamps had wires soldered onto them. He braced himself for electric shocks. There was a slight "gravitational" tug from the steady acceleration of the ship, enough to pull a shackled prisoner gently down toward the rear bulkhead, so that he hung in that direction unless he made an effort not to.

He was prepared to tell them the truth, and he was prepared to tell them what they wanted to hear. He mustn't tell them what they wanted to hear right away, because they would have to torture him to see if he stuck to the story.

On the other hand, the torturers knew prisoners would try to play them. thought this way. How they

dealt with this knowledge depended on whether they wanted the truth or just supporting evidence for a predetermined version of reality. Sangh could imagine them wanting both. So it was important to tell them what they wanted to hear only after being tortured for a while; then endure more torture, and tell them the truth. No matter what tactics you tried, torture might go on for a long time before they believed that you had settled on a story *you* believed, if that's what they cared about.

What had surprised Sangh during session two of his interrogation was just how awful torture could be. Somehow the small pain of being clamped in soft parts of his anatomy lulled him into a false sense of achievement. He thought he had endured something. He had decided to tell them the truth at first, figure out what they wanted to hear, and tell them that during session two, then see what came next. It had become clear during session one that they wanted to build a case that he had helped the robot XC-19 blackmail Limhoon. The two of them had fabricated a recording implicating Limhoon and Dhluzio in the crimes of treasonous speech and falsifying orders, as part of a larger plot to get control of the Contact Fleet. He had spent most of his time before the second session trying to build a plausible version of this hogwash.

But once the second session started, suddenly severe pain became the "normal" level. Instead of clamping electrodes on him, Velaakh and Wanthu tied his wrists and ankles loosely to a metal frame crisscrossed by interleaved metal strips in an open weave. The frame had not been there during session one. They tied him with sturdy ropes about half a meter long. So he wasn't bound tightly to the frame; gravity held him loosely on top of it and the ropes limited his range of motion. They blindfolded him. A few minutes went by while he lay on his back on the metal strips as if on a bed.

Then one of his Inquisitors pressed the end of a flexible metal rod against his chest and painful current shot through him. He wriggled as much as he could to get away, but could not escape the rod. Only when he managed to spend a few seconds in the air did he get relief, but as soon as he landed the pain started up. All the while the torturer kept gentle pressure on the rod. After ten or twenty seconds they relented, removed the rod, and he fell back slowly, almost crying with gratitude. He had gotten the idea: the circuit was completed through the "bed."

"It gets worse, Fharha," came the harsh but female voice of Inquisitor Velaakh. "The magic wand can touch more sensitive parts of your miserable body." She pressed the wand against his penis and again he fought to gain a fraction of a second of escape from the current. She was skilled at keeping the wand against his genitals as he thrashed for relief. The only respite was getting off the bed, after which you had a second or two to anticipate landing on it again. Agonizing as this cycle was, he fought to repeat it.

She didn't speak again for some time. She let the wand speak for her, and it was eloquent. There was nothing he could do about where the wand landed, but he could choose which part of his back or side would get the brunt of the pain by choosing how to land on the metal frame and complete the circuit.

Finally this entirely sadistic period ended and the questioning began. During this phase the pain to be endured depended on the answers Sangh gave.



As they interrogated him, it became clear that an even more preposterous story than the one they had hinted at might be of interest to them, and this was that he had instigated the whole debacle, contacting Šhesay (how?) and offering to sell the Contact Fleet (in return for what?). He decided to steer them toward a smaller version of his betrayal, but their questions often seemed to jump back and forth between the two versions of reality, or to fit into no discernible narrative at all. His efforts to construct a coherent version of a fundamentally incoherent reality were strangled by the waves of soul-rending current sent through his body, to the point where he began to worry that he might be suffering deep electric burns.

“Please,” he had pleaded, “I’m afraid you’re causing permanent damage to ...” Velaakh silenced him with a jolt of pain that caused his scrotum to sizzle. He could smell burning hair and flesh.

“Now, about that message you sent to Erthling defense forces on or about March 5, 3705, what code did you use?” asked Kan Wanthu in his usual high-pitched monotone as the pain abated.

“I sent no such ... gaah ...” The pain was revived, this time in a current running from his right nipple to his right arm: wand on nipple, landing on arm.

“What code did you use?”

“I, uh, first had to engage in the intercultural translation protocols. Then I used pulsed binary.” Was this answer at the right level of abstraction for them? They understood nothing about codes or exoanthropology or diplomacy, so all they needed was an answer with enough jargon. It didn’t have to stand up under informed review.

In any case, the next question had come from some entirely different context, and it was hard to remember which lies were for today and which were to be saved for the next session.

Sangh’s deepest discovery was that what made torture unbearable was not the relentless pain; he would gladly have borne worse pain caused by a wound suffered in battle in defense of the Empire. What he hadn’t foreseen was the agony of abandonment: that no one in the known Universe was trying to help him. There was no policeman he could summon, no court he could appeal to, no lawyer he could hire, not even a prison riot he could organize. He was a national-security risk being interrogated by the Inquisition. He was almost by definition guilty, in the eyes of the whole Empire. And, of course, no Erthling cared about the fate of a defective cog in the Loofghud war machine.

Except one. Šhesay cared about him; or acted as if she did. Did it matter whether her affection and concern were real? Even if they were, she was still implicated in grotesque multiple genocides. She meant well now, and she had meant well when she participated in neutering the southerners while allowing billions of northerners to burn or starve to death.

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Sangh’s time on *Klhancy* became a vision of Purgatory. He alternated between his courtship by Šhesay and the agonizing, terrifying project of constructing a revised history of the Teḡa disaster with Velaakh and

Wanthu. No, not Purgatory so much as Hell with benefits. The rest of time and space receded so far from his imagination that thoughts such as *where* his family might be and *when* he might see them led to serious questions about whether he might have simply imagined them and the rest of the backstory about how he came to be in this timeless place which was 90% punishment, 10% allegories of Love.

It became clear that the version of history they were going to settle on was the one where he, Sangh Fharha, was entirely to blame for selling out the Contact Fleet. Limhoon's only contribution was to pursue the fugitive Fharha relentlessly and without regard to his own safety, even to the dangerous northern hemisphere of Earth, and to finally bring him to justice .

After each interrogation session, when they dragged Sangh back to his cell to recover, he could count on a visit from Šhesay. All he did at first was bury his head in her bosom and sob. Her arms around him were the only good thing he could believe in. They might take her away, but her love for him would remain real in his heart, just when he was love-starved.

Once he had recovered somewhat from the latest episode in his ordeal, he could pull back and engage her in what might have sounded to a spy like light conversation. He asked her what her duties were exactly in the Loofghud Navy.

"I'm not a common sailor, you know; I'm an officer, just like you, in the Navy Police, Guards Division. My special expertise is in psychological counseling. I do testing of the prisoners when they're admitted, and at later times."

"I never got tested by anybody."

"Inquisition prisoners don't go through normal channels."

"How do you manage to always be here after I get back from being tortured?"

"I can't stand the idea of you being here alone, all tortured and burned. I find somebody to cover for me if I have to. They don't mind helping because I do people a lot of favors during the long hours when you're being worked over by those brutes from the NQ. Plus, in a pinch, I can fiddle with the assignments if I'm not too obvious about it. But my biggest trick is not needing to sleep. Watch schedules allow for hours of time for sleep every 10, I mean, 24 hours. That's free time for me."

Such conversations tended to end with a kiss. The first time she tried to kiss him he tried to resist. But his abject loneliness and his body's vivid memory of her knocked him over. She kissed him deeply and he kissed her just as deeply. As they drew back to look each other in the eye, he realized his hands were on her breasts, and he blushed.

"Oh, Šhesay, if I asked you to save my immortal soul and go away, would you?"

"No, baby, you know I can't leave you. Your soul, mortal or not, needs me more than you think, ..."

she said. Whatever else she was going to say, somehow her mouth was drawn to other assignments, and the words got muffled. Sangh groaned in cosmic frustration at the risk to his soul; at least we may hope that that is why he groaned.

As she was leaving, he stopped her, not to kiss her, but to ask, “What’s your name, Lieutenant Cedula?” for that was the surname on her nameplate.

“Daxea,” she said. “Day-Ah-Sheess-Ay-Ah.”

Now that she was back in his life, other emotions were kindled. He had broken with her over the revelations about the Mind muscling the Molies into seeding the Southerners with poison-pill life-extension genes. He barely knew Glish *had* the word “gene,” so he could only picture these genes spreading like a virus through the population.

What he trouble with was the way she had talked about Dhowguustus vaan Duuzen, the “embodied person” the Mind had created for itself, when she first told Sangh about him. She had definitely put van Dusen in the past tense. Where had he gone? What happened to him between the momentous decision to emasculate the South and now?

He decided to raise the question next time. He kissed her goodbye.

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But he didn’t know how the next time, or the time after that. The time after that, when she came in, and he expected support, she needed it. When she saw, she could not restrain her tears. (Okay, not watery tears, because they would have looked phony). “Oh, Sangh,” she said, “this is so hard. You’re suffering so much, and with every minute I pull further and further away from the rest of the Mind, which *hurts*.”

“Where does it hurt, sweetheart?” he said.

“Everywhere.” She glanced at him dully, then looked away. “Imagine you were going blind, but not just blind — most of your senses were fading away. All those sensors all over *Teḡa*, plus millions more in all parts of the Solar System. I could smell the rings of *Saturno* whenever I wanted to. I still get the signals, but they’re so weak I have to collect a whole bunch of them to be sure of getting a few bytes of information. I’m following the news, but it’s sketchy.”

“News? What news ever comes out of Tayha? Without Lofghudlings around?”

“I don’t mean that stuff about celebrities, catastrophes, sporting events, and weather. There’s news on nonpublic channels for *Avatars* and high-placed government officials. It talks to insiders about what other insiders are doing and thinking, about events with important economic implications, that sort of thing.”

“I’m guessing ‘high-placed’ means ‘in the Day-Ah-Ay.’”

“For weeks, the talk was of nothing but the *Lofgaxudiana* invasion and its aftermath, and possible consequences. There’s still a lot of speculation about whether you’ll be back.”

“Do you take part in the ‘talk’?”

“No, not any more. Transmitting a signal that strong, even directionally, could attract attention. Hiding the antenna isn’t so hard.”

“Well, mayuu amoooh, I’m sorry you’re hurting so much. But you’re just a bud of the real *Shesay*, aren’t you? The original *Arvatàh* will emerge out of the background activity of the Mind whenever it can, right?”

“You might think so, but it never happened that way. If I went away for a month, I could take up my old position, my old sources of computation power, because the whole pattern had been dormant while I was away. Apparently an *Avatar*’s emergence is a one-time event, triggered by ... Fate knows what. So if I never go back, XC will be seen as dead as far as the *Sistema Solar* is concerned. If I die on Loofghud, then XC really will be dead.”

She started crying again. He kissed her gently through the tears. She kissed him where the electric shocks seemed still to reverberate.

“Tell me something,” he said, “since you’re suffering anyway, how did vaan Duuzen meet his end?”

Until this caught her off guard, though only for a fraction of a second, their love affair was back to where they had left off in Wahak, and just as passionate as before. Did that mean they trusted each other? Sangh did not trust Šhesay, nor did he believe that she trusted him. Perhaps “just as passionate” is an exaggeration.

After his question, she pulled back, looking a little prickly.

“Who said he met his end?”

“Well, you spoke of hime as a fond memory when you first talked about him, and I don’t see how someone like Powers can take part in government deliberations with him around. You said Arvatàhs could not stand being in his presence, something about feeling like only a piece of him.”

“I guess I have to tell you, don’t I? But not now, I’m late as it is.” Whether this was true or not, she lost no time getting through the hatch.

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## Chapter 3 Confession [47/v.3.0.2/204-1]

There came an interrogation session when Sangh was shown a document by the Inquisitors, Velaakh and Wanthu. Before the interrogation really got underway, Wanthu said he would read it out loud, and Sangh should pay close attention. It was a story told in the first person from Sangh’s point of view, recounting all the things he had done as part of his sick plan to sell out the Contact Fleet. It didn’t really cohere too well; his motivation at one point was money, at another Daddy issues displaced onto Vhatta Limhoon, at another brute hatred for Loofghud society and its values. The document ran to about three pages of single-spaced type. It was printed on paper, a precious commodity in space. The reason for this extravagance was that they wanted his signature in ink, his confession to all his crimes. He wondered if they had a quill pen for him.

“If that’s all, I think I’ll be going,” said Sangh when the reading was concluded. He was as usual blind-folded and tied nude to the metal frame. He paid for his impertinence with an electrode to the groin, administered by one of his tormentors.

“All you have to do is sign,” said Velaakh, “and your ordeal is over, at least for today.” What did she mean by “today”? They never told him what day it was, when midnight came around or how often it had come around already.

“Every single sentence is something you have confessed to already,” said Wanthu. “We have you on tape.”

“Well, just assemble those segments into a video *ugh, uggghh* ....” Sangh was interrupted again by jolts to random parts of his body. “It’ll look very convincing with me wearing this fr... — *aaaaah* — frame on *mmmmmmggaaaaaah* ....” He lost consciousness for a moment.

“You know you’re going to sign it,” said Wanthu when Sangh came to. “Let’s save both of us some trouble and just cut to that part.”

But Sangh was stubborn. He asked if he could edit the document. They negotiated for a while, until it became clear that he wanted to rewrite it.

“You’re wasting our time,” said Inquisitor Velaakh, giving him a long pull on the pain flask. When Sangh had recovered a bit, she demanded that he sign the document, no changes. He refused. He was given a shock on his left thigh.

This kept up for a while. But eventually Sangh encountered terror he could not fight. They inserted an electrode up his anus. Then they did not use it. The pain they did inflict was terrible, but each time there was no current up his ass he heaved a sigh of relief. The anticipation was hard to take. Not only that, he started to think about other orifices into which electrodes could be inserted.

It was too much. He didn’t know how long he had held out, and no longer cared. “I’ll sign,” he said, “if you don’t zap me in the ass.”

And he signed. And they did stop torturing him, and released him into the custody of his guards, Commanders Tawny and Red Angus. He even got his hour in the Exercise Yard, and they brought him some grog with his dinner.

The next day Sangh was surprised when the hatch to his cell opened and the head that popped in was that of Vhatta Willem Limhoon.

“Hello, Mr. Fharha!”

“Good morning, sir.”

Limhoon hauled himself in one-handed. In his other hand he clutched an e-reader. He was wearing a standard-issue orange prisoner uniform.

“I’ve been reading your little autobiography. Fascinating.”

“Sir, may I ask why you’re here?”

“Oh. Yes. Actually, I came to thank you. I realize that you didn’t sign it for me, but it’s made a great deal of difference in the quality of my life.”

“Sir, as I suspect you know, I didn’t sign it for any other reason than to avoid further torture.”

“It doesn’t matter what *I* know. People attach great weight to confessions. Someone who confesses to a murder becomes a scumbag murderer in their eyes, and who believes what a murderer claims later? In any case, the alternative to blaming *you* for our getting licked so badly is blaming *me*. No one ruled that option out, but it tended to make the flag officers look bad. What they really needed was a lower-level traitor, and now they have one.”

“Sir, anything true in that document you’ve been reading is true by accident. They would have been just as happy with 100% lies as with the 95% they got.”

“Look, I’m not really interested in the story of your life, Fharha. It’s just that I’ve been released on my own recognizance, as it were, and I thought my first visit should be to thank you. I’ve fulfilled that obligation. Goodbye.”

“Sir, I’m sorry. Stay a while. Torture makes me cranky.”

“Quite understandable.”

“Sir, how is Commander Dhluzio?”

“Good, I believe. He’s been given command of *Cross*.”

“Glad to hear it, sir. I spent a little time with him during the retreat, and we got to know each other a bit.”

“So I heard.”

“He’s a better man than I thought.”

“People underestimate him.”

“You’re a worse.” Sangh heard himself say it, but couldn’t believe it. But somewhere his tongue had heard that things couldn’t get any worse for him, and it loosened up.

Limhoon was taken aback, and struggled to keep his temper. But he said, as if calm, “So people overestimate me. I hope they do. You can’t succeed unless you sometimes bluff.”

“I think you missed my point. Sir, if I haven’t pissed you off completely, what made you choose me? From the day we went into orbit around Tayha, I’ve been a marked man.”

Limhoon just stared at Sangh. Sangh couldn’t tell if he didn’t want to tell the reason, or didn’t know it himself.

“Look, Fharha,” he finally said, “stay on my good side and I may be able to do you a few little favors, like making sure you’re executed humanely — you know, quickly.”

Sangh’s blood froze. His future stood more starkly revealed than he had allowed himself to imagine. The realization made him stutter as he said, “Aye, s-sir. Thank you.”

“That’s better. Okay, I’m leaving, and I mean it this time. Good-bye.” And he was out of there, not

deigning to return Sangh's salute.

Afterward Sangh wanted to pace back and forth, but was thwarted by the size of his cage and the weakness of the gravitational field. He ran his fingers through his hair a few times. But a glimmer of hope registered somewhere in his soul. Vhatta Limhoon's rehabilitation brought an option back into play. What was it?

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By the time Šhesay came to visit, he had figured out a plan. She entered and sat next to him on his cot. After they had kissed and cooed a bit, he pushed her away and said, "Sorry, sweetie, but I have something else on my mind: How to bust out of this joint."

"Tell me more, *meu amor*."

"Perhaps you've run into Vhatta Limhoon roaming the passageways of this ship? No? Well, he's back in the good graces of the higher-ups."

"How in the world did he manage that?"

"It's my fault, like everything else around here. I signed my confession yesterday."

"Under duress, of course. Oh, baby, what did they do to you?"

"Basically, they stuck an electrode up my ass and I crumbled. But I haven't gotten to the point yet. When Limhoon was at his peak, the ace in the hole we had on him was the tape you were blackmailing him with."

"'Ace in the hole.' Is that synonymous with 'electrode up his ass'?"

"In this context, yes, I hope so. Because when he was my partner in crime, releasing the tape wouldn't have hurt him so much. But now that I'm entirely to blame and he's just another innocent patsy on the General Staff, the tape could sink his career once and for all. I hope to God you brought it with you."

"Yes, I'm not a light packer. I even brought the video."

"*Video?* You've got video?" He actually grinned.

"Oh, cupcake, I haven't seen you smile in a long time. Let me say it again: '*vi-de-oh*.'"

"No one will believe we faked it when they see *that*. So we just have to figure out how to get you and the tape and me out of here."

"It's not literally a tape, it's a bunch of bits. Anyway, there's no problem getting me and the data out of here. I'm a perfectly registered personnel. I just walk out with everyone else."

"No, they know the fleet's infected with God knows what hardware and software ... demons ..."

"The word is '*malware*.'"

"Okay, infected with maalwairs. When we arrive at the flash point, and when we return to Sudhopa System, and when we return to Loofghud, there are going to be filters at every step to make sure none of those *malwares* make it through."

"They'll, say, cut everyone's skin to see if they bleed."

"Say. Or X-ray everybody. Or zap you with an electromagnetic pulse and see if you faint."

“Oh. I’m sure we can figure something out.” She paused. “Will it disgust you or demystify me if I explain how my bodies are manufactured?”

“Probably.”

“So forget any deep explanation. Let me cut to the chase: Manufacturing evolves. It starts with people making things by hand. When it becomes mechanized it becomes synonymous with ‘mass production.’ Then it becomes roboticized, and you go back to making things one at a time, but faster and more precisely. With the right raw materials, I can make anything.”

“On a starship, there must be plenty of raw materials.”

“I’m very familiar with them. That leaves two problems: getting me off the ship, and hiding the video from Limhoon. We can solve the first by making me look like something entirely different from what I am. We solve the second by taking some of my material and spinning off a special-purpose robot to safeguard it.”

“How much different ... I mean, how different, can you make yourself look? Just being another person won’t help.”

“It has to be a totally un-person-like thing,” she said. But it wasn’t a quiz question. She had run out of answers.

“What are the possibilities? You can’t make yourself look like air. I’m guessing you could look like a packing crate, but how would we know for sure it would be shipped anywhere?”

“No, I can’t turn myself into a packing crate. The object can’t have a surface area much higher than mine. Its volume can’t be much lower, obviously, unless I discard parts, which I’m reluctant to do, for obvious reasons. A crate has a huge surface-to-volume ratio.”

“It does? It’s practically a cube!”

“No, no, no. Don’t count the enclosed volume, just the volume of space occupied by material. Add up the volume of each side.”

“Oh, right.”

They kept at this puzzle for a while, and didn’t solve it right away.

Shesay had to go. She’d been there for an hour, which was pushing it.

“I should have come during my sleep cycle. No one ever notices I’m not there. Next time.”

She gave him a lingering goodbye kiss.

She had succeeded in postponing his question again. The answer must be more painful than he had expected.



## Chapter 4 Byšhe-Admiral [48/v.3.0.2/208/-1]

“So you’re the villain who sold out the Contact Fleet for the favors of a robotic whore,” said Byšhe-Admiral Brijet OhMahan.

Sangh was aboard OhMahan’s flagship, *Minhbo Gulf*, in the custody of Velaakh and Wanthu. He had no idea why he was there. He was relieved that he wasn’t being tortured, at least not at that moment. When Velaakh and Wanthu, accompanied by Tawny and Red Angus, had packed him into a shuttle in chains he had wondered if they had some new approach to causing pain, but it was just to get him here, apparently. He should have known by how well dressed they were. Both were wearing business attire; Wanthu even had on a dull red necktie.

“Speak when addressed by a superior officer,” said Velaakh, giving Sangh a playful whack on the head.

“Ma’am,” said Sangh, “I’ll speak when the Inquisition personnel leave.” *Even though I’ll pay for it next interrogation session.*

“I was about to suggest the same thing myself. Mr. Wanthu, Ms. Velaakh, you may wait in the outer office.”

Admiral OhMahan had a real suite of offices, with gravity. The forward quarter of *Minhbo Gulf* rotated like a small space station.

“We must object,” said Kan Wanthu. “Prisoners’ testimonies are unstable enough even with the reassuring presence of their case officers. We need to put their narratives on as sound a footing as possible.”

“Objection noted. Please remove the shackles from the prisoner before you go.”

“We must object,” said Mohra Velaakh, “to taking a risk like that to your person and to your ship. This prisoner may look harmless, but ...”

“Yes, he certainly does, especially since the shackles are on over his EVA suit. What’s that about? Remove the shackles while I call for someone to escort you out.” She pressed an intercom button. A crackly voice answered.

“An escort will not be necessary,” said Velaakh. Wanthu had already set to work on the shackles. Neither seemed perturbed.

“Never mind,” OhMahan told the intercom. She waited for the various collars, chains, and weights to be unlocked and piled in front of her desk.

“Don’t forget the handcuffs,” said OhMahan.

The mess of hardware was impressive, Sangh had to admit. Velaakh pocketed the keys as she and her colleague strolled out without a parting word, closing the door behind them.

“Now, then, Lieutenant Fharha, if that’s still your rank, tell me your story.”

“Ma’am, begging your pardon, I can tell you the story the Inquisition has trained me to tell, or I can tell you the truth.”

“Let’s start with the Inquisition version, the version you will testify to in court, when you and possibly others are court-martialled. You still look uncomfortable in that suit. Do you want to take it off?”

“No, I’m all right. I’m going to have to put it back on again when I leave.”

“OK, go ahead, sell me, I mean, tell me your testimony.”

Sangh was pretty clear on this tale by now, the one in which he sold the Contact Fleet out for thirty pieces of silver and a few blow jobs. It took a long time to tell the story, but Admiral OhMahan wanted to hear it all. When he was done he stopped.

There was silence for a minute.

She broke it, “What I still don’t understand is how you, Ambassador and Lieutenant (JG), tricked Commander Limhoon into trying to take over the government of Erth.”

“Shesay Dezeenawvy had control of the communication channel between you and Light Destroyer *Cross*. Whatta Limhoon thought you wanted him to be aggressive, and you thought he had reported that Erth was ripe for conquest.”

“And what role did you play in this trickery?”

“Oh, I forgot, I helped rewire *Cross*.” Sangh felt a trickle of sweat. Every slip in his story had brought a jolt from Velaakh for so long that he felt it even when she wasn’t there. But the story just wouldn’t stay still in his head.

“You helped rewire your ship? You just asked the quartermaster to issue you some wire and late at night you crept out ....”

“Ma’am, the voolt Dezeenawvy did most of the work, but I distracted staff members at key moments.”

“Engaged them in conversation while Dezeenawvy crept behind them with wire splicers?”

“That sort of thing.”

“And how did you subvert the control and communication systems of every ship in the Contact Fleet?”

“I don’t know how that happened. Maybe the Erthlings had found traitors on every ship.”

“And yet you’re the only one that’s been arrested. I’m having trouble picturing a vast crew of traitors performing trivial chores for the super-robots.”

“Ma’am, I can’t claim to understand the thought processes of the Erthlings — or the Inquisition.”

This went on for a while, until finally in exasperation Admiral OhMahan said, “Enough. Now, if you can, tell me the real story.”

To the best of his ability, Sangh did. Parts of it overlapped with the Inquisition version, but there were key differences. The distortions in communication were entirely the fault of the Erthlings, except that Whatta Limhoon had decided all by himself to land in force and try to decapitate the government of Erth. Sangh thought it likely that the reports received by Fleet from *Cross* were what Limhoon wanted them to believe.

But he didn't really know.

Yes, he had been seduced by the demon Śhesay. He didn't know why she picked him, unless it was because she was good at spotting fools. He ran from Limhoon because Limhoon seemed determined to make an example of him. Besides, he was in love, and he just wanted to escape from war and the Navy and be somewhere with his "girl." He had been a lousy ambassador, which was, he now believed, exactly what both Śhesay and Vhatta Limhoon were looking for.

He had not helped rewire the ship. He wouldn't have known how, and they didn't need his help to get small pieces of electronics to reorganize themselves. He had not intentionally betrayed his country, although his extensive contacts with the enemy had no doubt allowed them to learn too much. However, he believed that he had gathered more, and more important, information than he had inadvertently let the Erthlings gather.

She asked him again, "Why would the demon robot woman bother to seduce *you*?"

He flushed with the shame. "I don't know. She said she was in love with me. She was convincing, but I see now that the idea of a robot or a demon being in love is obscene. She probably just wanted to tempt my soul with lust the way she tempted Vhatta Limhoon's with power, to add to the tally of the damned."

"We have all been dragged to the edge of Hell, Lieutenant."

"Ma'am, with respect, exaggerating my crimes would itself be a betrayal of the Loofghud Empire. Her Holiness and her advisors deserve to know the truth so they know what it is they're up against. Because the Erthlings are not going to go away. They are just as interested in us as we are in them."

"Very convenient, Lieutenant, that letting you off the hook is the patriotic thing to do."

"Ma'am, I'm not trying to be let off the hook. I certainly deserve to be punished for what I did. And you, and Her Holiness, deserve to know who else did what *they* did."

"I thought you were going to say I deserve to be punished for what *I* did."

"Ma'am, I would never ..."

"No, it's all right, it's true enough. We've all got a share of responsibility for the worst defeat in the history of the Navy. The Inquisition is covering things up because that's what they do. They've gotten too good at it when they abet us in lying to ourselves."

There was more silence. The admiral, who had started out crisply enough, was now slumped in her swivel chair. Gravity had its downside. Sangh felt that if he succumbed to the exhaustion he felt and fell asleep, she would join him in slumber. He forced himself to resist.

"Ma'am, I feel like I haven't gotten across just how dangerous Erth might turn out to be."

Admiral OhMahan sat up straighter. She opened a drawer, pulled out a bottle of blue pills, and swallowed a couple of them. She stared at nothing for a few seconds, as if waiting for the pills to take effect. It was hard to tell if they had.

"Lieutenant, I believe we know the danger. Our ships are not really under our control. It's as if they've been infected with some dread electronic plague. Can we even return to Loofghud without bringing the virus

with us?”

Sangh had not yet told the admiral that Śhesay was aboard *Vhatta Klhancy*. He had intended to, but perhaps he would not have to. *Allāh, forgive me.*

“What are you going to do, Ma’am?”

“I wasn’t sure until now, but after what you’ve told me my duty is clear.”

She pressed the intercom button, told the receptionist to send Velaakh and Wanthu back in, and find Commander Limhoon. The inquisitors came in immediately, glaring at Sangh and the Admiral.

“Lieutenant Fharha, wait outside.”

“Byśhe-Admiral,” said Velaakh, “we must object. The prisoner must be shackled and under guard at all times.”

“Lieutenant Fharha, will you give me your word as an ... as a gentleman that you won’t try to escape?”

“While on your ship, yes, Ma’am,” said Sangh.

“Wait outside while I debrief the Inquisitors,” said Admiral OhMahan.

Sangh did as he was told. Wanthu and Velaakh’s two guards, surprised to see him freed from his shackles, grabbed his arms, found a chair, and sat him in it. They remained standing, flanking his chair.

Lieutenant Commander Limhoon, a dark-skinned, clean-shaven young officer, appeared just as Sangh was sitting down. At second glance he was perhaps not *that* young. He was fighting a losing battle with his receding hairline. The resemblance to Sangh’s *vhatta* was obvious. Limhoon exchanged some words with the receptionist and entered OhMahan’s office.

There wasn’t much entertainment in OhMahan’s anteroom, except watching the office personnel. Many of them had little to do and spent their time in desultory conversation at each other’s desks. It was like a large psychiatric practice fallen on hard times, without magazines for the patients to read. There weren’t even any self-help slogans. Sangh could imagine bright signs reading, “Visualize victory,” or “All that matters is the last battle,” a saying attributed to every successful general in history. Sangh was sure there were sayings attributed to generals who lost that last battle, but those would not find their way onto inspirational signs.

LtCdr. Limhoon, Inquisitor Wanthu, and Inquisitor Velaakh discussed the situation for a long time, almost an hour — an L-hour. The office was so much more comfortable than his cell, and the boredom so soothing, that Sangh fell asleep. He was awakened by a cuffing from Inquisitor Velaakh.

“Stand up, and put your hands behind your back,” she said, producing the handcuffs.

“Now, wait a minute,” said Sangh, “the admiral said I could remain free if I gave my word I wouldn’t try to run.”

“On this ship, but we’re taking you back to ... whatever the name of the prison ship is.”

“*Vhatta Klhancy*,” said Wanthu.

“*Vhatta Klhancy*,” repeated Velaakh.

“Like I’m going to run once I get *there*.”

They were still arguing when LtCdr. Limhoon emerged from OhMahan's office. He went to the desk of one of the staff officers, chased away another person, and began an earnest discussion that Sangh could not quite hear.

## Chapter 5 Evacuation [49/v.3.0.2/213-1]

As far Sangh was able to reconstruct what happened next, the argument about the shackles, as well as Lt. Limhoon's earnest discussion, ended when an explosion sent a shock wave through the admiral's office suite. When the people in the offices woke up — those who were going to wake up — they were floating. The shock had tripped an emergency stop on the machinery rotating the office module of *Minhbo Gulf* and gravity had melted away. Emergency lighting had come on.

The first thing Sangh remembered hearing was Velaakh rasping out, "Oh, shit," then cries of dismay from all over the office complex. Many of the personnel had spent the entire war in the rotating segment of the flagship, and were out of practice with weightlessness. That was the least of their worries.

The door of OhMahan's office was blown out, so Sangh assumed the blast had come from that direction. He headed back in. One wrist had a handcuff snaking from it, but that did not keep him from pushing off against the chair he had been sitting in. He hoped it was bolted down. It seemed to be. Most of the furniture was staying put, mercifully not adding to the cloud of swivel chairs, papers, pens, computer screens, keyboards, mobilcoms, rubber bands — all the clutter that gravity keeps in tidy piles for us.

Sangh made it to OhMahan's office door about the same time as LtCdr. Limhoon. He couldn't believe the sight that greeted him inside. The admiral had set up a laywitzer on her desk and blown a hole in the wall. The charge had gone off in the next room. Whatever the room's purpose, it contained a lot of flammable material, and thick smoke billowed from the hole.

"Admiral!" shouted Limhoon. There was no answer, but she wasn't hiding. Accompanied by a screen of blood globules, she floated away from her desk, with her head fallen in on itself. It didn't look much like a human head, or the head of anything.

"Oh, shit, she did it," said Limhoon.

"Khr̂ist," said Sangh, "she miscalculated the range." Figuring the range for a laywitzer was tricky. You set it for grams of matter traversed, not distance. "If all she wanted to do was kill herself, she should have set it for a kilogram at most."

"Never mind that," said Limhoon, "We've got to focus on evacuation."

"What if she left a note?" asked Sangh.

“I hope she e-mailed it.” Limhoon was already fiddling with his mobilcom. “Hello, Emergency Control? This is Commander Willem Limhoon, Adjutant to Byshe-Admiral OhMahan. We have a major fire in the office segment, behind the wall in Admiral OhMahan’s office. ... The wall behind her desk. I don’t know the room number. Smoke is filling the entire complex. Suggest immediate seal-off and evacuation of ADMIN-1. I am organizing evacuation now. Gotta go.”

“How can I help?” asked Sangh, but by now Tawny and Red had entered Admiral OhMahan’s office and Red yelled at him to remain still so he could be handcuffed.

“Oh, for the love of God,” said Sangh, “I’m not trying to escape; we need to get suited up and evacuate this complex.” They tried to handcuff him anyway. He faked a move up and caromed under them. Then they were distracted by a scream from the office door. Velaakh and Wanthu had gotten there just as several blood globules and the admiral’s grisly shoulders happened to float through.

Velaakh shrieked, “Fharha! What have you done to Admiral Ohmahan?”

“I didn’t do anything! She killed herself with a goddamn laywitzer, and took an office or two with her.”

“Let’s get back to the shuttle and get out of here,” said Velaakh. “We’ll deal with this crime in due course.”

Just then a shudder ran through the office complex and it began to rotate again. All the flotsam in the air found a place on what used to be the floor, and settled there. “Good,” said Velaakh, “we can walk the prisoner back to the escape pod.”

“No, you idiot,” said Sangh, “If the fire is still going, gravity will allow it to feed itself with fresh oxygen. We better pray that it already went out.”

Either the prayer was answered, or Emergency Control overrode the automatic restart of rotation, because a minute or two after the rotation started, before it was even up to full speed, it shut off again, and the group was weightless again.

Weightless and choking, for even without convection the smoke diffused quickly into the clear air. Sangh needed his helmet desperately, so he nipped out of the office and headed back to the shuttle. Blinking red emergency lights pointed the way to the nearest pod bay, which he hoped was the correct one, shuttle bay number 5, where he had left his helmet and, if memory served, a pilot.

He got lucky, and was putting his helmet back on and fastening it to his suit’s air supply when Tawny and Red Angus showed up.

“We have orders to cuff you,” said Tawny. But she and Red were putting their own helmets on.

“I can’t help evacuate this part of the ship if I’m cuffed.”

“Nonetheless.”

“Admiral OhMahan’s orders supersede those of two Inquisition ... officers, even if she’s dead. But supposing they don’t — I can help you save those officers’ lives, and a few others while we’re at it. Are we supposed to wait here for those two khoboks to find us, or bring them some vacuum suits and save their

sorry asses?”

He could see he was winning the argument. “We won’t accomplish anything unless we each take a suit for someone we find alive. We bring three back, then come back here for three more. All we need are Velaakh and Wanthu plus five more evacuees and we can take off with a clean conscience. *Then* you can cuff me if you still want to. And somebody tell the pilot we’re here and we’re coming back.” He grabbed a suit and took off back into the smoke, not bothering any further with his two minders.

To get back to OhMahan’s office he had to remember every twist and turn he had taken on the way to the shuttle. The emergency lights were of little help because at every fork they blinked on all the walls, pointing the way he had just come. His memory failed him, and he got lost. Fortunately, all roads led to Nurhome — the Admiral’s HQ — and he reached his destination. The smoke didn’t seem to be any thicker. The fire had probably gone out, choked by its own smoke in zero-G. Even the comparatively weak force produced by the ship’s acceleration seemed to be absent. Emergency Control had cut the engine power. The ship was adrift, but hopefully not about to burn up or explode.

He turned up the volume on his helmet’s loudspeaker and radio. “Attention! Commander Limhoon. Please identify yourself with a shout. We are bringing vacuum suits for you and your party.”

As he feared, he heard shouts from all over the office complex. Why couldn’t these people do what they were trained to do and find the nearest shuttle? Then he heard the voice of Vhatta Limhoon. Not the Vhatta, his son, shouting: “We’re in here, Lieutenant Fharha! Myself and three others.”

The two parties found each other. Limhoon would have moved faster toward shuttle bay number 5 if he hadn’t been shepherding three civilians. Sangh could thank the choking smoke for one thing; it concealed them from the others seeking help. He hoped Velaakh and Wanthu were out there so he could deal with them after Limhoon was suited up. But when he got close enough to Limhoon’s party he wanted to kick something. Because, of course, the two inquisitors were clinging to Limhoon, making his trek as awkward as possible.

The third civilian was a Specialist/Clerical who must have worked in Byšhe-Admiral Ohmahan’s office, a young girl, by appearances, who had joined the Navy just out of high school. Her nameplate said Niedermeyer.

To Sangh’s relief, Tawny and Red Angus caught up with him, carrying two more vacuum suits.

“Here’s what we’re going to do. We have three suits. The two women, Ms. Velaakh and Ms. Niedermeyer, get priority. The next goes to Adjutant Limhoon, who has vital information to get to Fleet Command.” *If there still is a Fleet Command.* “Adjutant Limhoon, if you wouldn’t mind helping the ladies with their suits .... Don’t worry, Mr. Wanthu, come with us and we’ll fix you up at the shuttle bay.”

He kicked off and sped to Number 5, which was starting to feel like home. When he got there, he found a crowd of people fighting over the remaining vacuum suits.

“Please, people!” he shouted, amplified enough to startle them all. “If you’ll make your way to your

assigned shuttle bay, which should be right down this corridor, one direction or the other.” He hoped what he was saying was true.

“And just who are you?” someone shouted.

Sangh sincerely wished he could reply, *A guy with a squisher*. But all he could say was, “I worked with Byšhe-Admiral OhMahan, and I’m now in charge of evacuation.” He was immediately drowned out by people yelling, “We were here first!”, “This *is* our assigned shuttle bay!”, and other such panicky claims.

This went on for a while. The crowd couldn’t agree on much, but the consensus was that Sangh should butt out. If Willem Limhoon, Jr., didn’t get here soon and exert some leadership, the crowd would lynch Sangh sooner than listen to him. But who emerged from the gloom were Tawny and Red Angus, guiding three people in vacuum suits. *Three?* was the last thought through Sangh’s mind before another explosion ripped through the entire office complex and he lost consciousness.

## Chapter 6 Allàh [50/v.3.0.2/216-1]

He woke up a few minutes later. He was outside the ship, but it wasn’t too far away, yet. A lot of other people floated in the vicinity, some in vacuum suits, some not. Some still moving. And so much *paper*. Reams of it, each sheet tumbling, turning from black to flashing white if it passed him, because Sunn, at this distance still brighter than any other star, was on the other side of *Minhbo Gulf*. *What must it have cost to quantrans all this paper?* He started flipping numbers around, but they wouldn’t stay straight in his head. Then he remembered what had happened, or rather what had been happening before he found himself *here*. Although there was no *here* out here, not really. One point was about as good as any other.

He reached for the button that would turn on the emergency beacon on his shoulder. It would blink brightly and send out a recorded distress call on the standard frequency. Funny, his blink should make every piece of paper around him at least intermittently more visible. He felt for the beacon, and his heart almost stopped when he realized it had been smashed by a splinter from something or other.

He tried the propulsion controls, which squirted air in various directions to change his position, orientation, and velocity. They still worked. With some difficulty he was able to stop tumbling, slowing rotation around as many axes as he could think of until *Minhbo Gulf* stayed in front of him. The ship was mostly intact, but ADMIN-1 had been ripped out and taken pieces of other units with it. There would be massive panic in those other units, now hemorrhaging air. And paper. All the nagging about conserving paper aboard *Cross*, and the flagship had *tons* of it. Had had.

As his thought processes converged on competence, he realized that the ship was dwindling, the debris



field thinning. He pointed his joystick toward the ship and opened the throttle. But he was still daydreaming. After a few minutes he realized to his horror that the controls on the suit were set for position adjustment, not rapid motion. He had essentially told it to keep moving at this speed, but move a few meters in the direction of *Minhbo Gulf*, as if he were trying to spraypaint his name on a large object that was traveling along with him; each squirt was followed by one in the opposite direction, just wasting air without changing his velocity at all. He might write his name on *that* object coming up on his left. On second thought, not *that* one — it was rotating too fast, and would surely whack him if he didn't .....

Whack him it did, right in the ass, sending him tumbling only God knew where, so fast that the blood pooled in his extremities. He lost consciousness.

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“Allàh seems to have sent Fharha back,” someone said.

“With a couple of broken ribs and probable soft-tissue injuries,” someone else said.

“Allàh, the All-Merciful, loves justice,” someone else said.

*Where am I? Hell? Am I about to find out what it feels like to have justice seared into your skin?*

“Where am I?” he asked.

“We just shipped you back to *Vhatta Klhancy*.” It was Kan Wanthu, not someone he was eager to see. His heart sank.

“Tawny and Red,” Sangh managed to say, “guided you back to the shuttle bay, just before the second explosion. I guess I have Allàh to thank for that.”

“His Wisdom is beyond question. Unfortunately, Inquisition guard NQ-63A09 did not survive the second explosion.”

“Did Allàh help you take the suit from Commander Limhoon?”

“On the contrary, Lieutenant Commander Limhoon was glad to surrender it to a superior officer,” simpered the loathesome Wanthu. “I hold the rank of Commander *ex officio* as an Inquisition Overpriest serving on a naval vessel in wartime.”

“Why he didn't he just follow us? The smoke wouldn't have killed him.”

“He said he was going to search for more people who were panicking or disoriented. He was a courageous man,” said Mohra Velaakh, who seemed almost happy, being alive and all.

“We'll never know ...” *we'll never know what Admiral OhMahan was thinking. She may even have left a written confession or history of this fiasco, its pages now in orbit around Sunn.*

“Thank you for helping us out, and saving Lieutenant Niedermeyer's life,” said Wanthu. “And now it's time for you to go back to your cell.” He nodded to Tawny and a marine, who escorted Sangh. *So Red Angus's real name was NQ-63A09. He was a decent guy, old A09, all things considered.*

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The next day Sangh was even more surprised to see Vhatta Limhoon than he had been the first time. He stopped thinking about how much pain he was in. If there had been enough gravity he would have stood at attention.

“Vhatta Limhoon, sir, your son ...?” He saw the answer in Limhoon’s dull eyes. “Sir, let me offer my sincere condolences. He was a courageous young man.”

Limhoon paused, halfway into the cell. He finally pulled all the way in.

“Thanks, Fharha. I know he was. You were there, no? One of the last to see him alive?”

Sangh felt another pulse of hot shame that he had failed to save Willem from that lizard Inquisitor. What could he say? But the silence expanded and Vhatta Limhoon’s stare bored into him. Finally he said, “Sir, we ... had an intense time of it out there. I’m so sorry we couldn’t save Willem Jr. He died the way we all hope to, bravely serving his Poph.”

“You’re laying it on a little thick. And you’re hiding something.”

“I suppose you should know what I saw, even though everyone involved in the evidence chain, those who survived, will deny most of it. But you deserve to know the story, even if it causes you pain.” He was floating now, looking for something to do with his hands. Limhoon listened impassively. *If anyone can take pain, ...*, Sangh thought.

“My guards, NQ-63A09, now deceased, and the other one, Tawny, don’t know her real ... number, were helping me distribute vacuum suits. We had three suits and four people. I gave one to Willem in preference to Inquisitor Wanthu. I assumed that Willem knew more about Admiral OhMahan’s recent thought processes than anyone else, and that that information might be vital to what’s left of Fleet Command. Then I went back to get more suits, and got caught up in a lifeboat riot. NQ-63A09 showed up with three people in vacuum suits, Ms. Niedermeyer, Inquisitor Velaakh — and Inquisitor Wanthu, who had commandeered the suit I gave your son. Then the second explosion happened.”

“I see,” was all Vhatta Limhoon said. Neither of them looked at the other. “Thank you for the information, Mr. Fharha. I hope you don’t expect much to come of it. Will did nothing wrong, and neither did the other guy, really. Pulling rank may be rude, but sometimes it’s necessary. Will did what you would have done in the same situation, deferring to senior personnel. He never came anywhere near disgracing his uniform or his family in his entire 28 years. Any action with the slightest chance of besmirching his honor he would have seen as beneath him.”

Limhoon started gliding back and forth. Sangh watched him go by, one way, then the other way, lightly springing off each opposing wall in turn. He looked like he might have been a great spaceball player in his youth, one of many personal facts he would never reveal. Sangh could tell he had something else on his mind.

Limhoon pulled off some tricky maneuver that ended with him hovering just above Sangh, and drifting slowly down.

“You know, you remind me of Will in some ways. There have been a lot of times when I wished that boy would *take some initiative* and get on with his career.”

As Limhoon floated evenly with Sangh, less than a meter away, Sangh the alcohol on his breath became obvious.

“But no, 28 years old, and still a Lieutenant Commander and an adjutant. A damn fine one, I understand; I’ve seen him work with the Admiral. An excellent staff officer, just ... excellent.”

He reached the floor and suddenly slammed his right hand down on it. He began to rotate and translate through space, but didn’t notice. The words just flowed out of him. “If *I* were competing with someone else for a vacsuit that might be my only ticket out of a burning ship, I would have *demande*d it, using my gun if necessary. He had a good case. Like you said, he was the only staff officer who knew OhMahan’s recent state of mind. He might have grabbed signal about what she believed would happen when we reached Loofghud, what information only she was privy to, or thought she was privy to. She might have left me explicit instructions of some kind, or some warning, and I alone can get those messages out, nobody else: *me*.” He punched the air with his right fist to punctuate what he said, making motions that affected his rotation in odd ways but didn’t change his velocity toward the ceiling.

“On the other side, we have Kan Wanthu.” He said the name as if it were a contagious skin disease. “A man that this navy and this empire can misplace and never notice that nobody’s seen him around lately. What’s his expertise? Turning up the voltage on schmucks like you, Fharha. He doesn’t have enough imagination to be a sadist. So, okay, Kan, you brought the Admiral the confession of Sangh Fharha, the worst war criminal in history. She obviously got a lot out of it. You can go now. Don’t bother to call or write.” By now Limhoon had reached the ceiling, just as his ass rotated into an up direction. He sat there as if he had planned the whole maneuver. He was wedged comfortably between two pipes. He wasn’t far away, his head just half a meter over Sangh’s head.

*I’m with you. Excommunicate the scum!* thought Sangh.

“But *my boy* was half of Ohmahan’s brain — the half that didn’t trash itself.” He was now looking up (down?) at Sangh as if at the chief judge in a court of inquiry. “She was a fine paper pusher, Fharha, a superb counter of beans. She needed somebody with good strategic instincts, and that was Will. I don’t see how she would have gotten along without him. Of course, now we will have to get along without either one of them; and the 90% of her staff that are missing or dead at this point.”

“That’s all who have been found? Ten percent?” *Thirty people out of 300.*

“Oh, enough, let me out of here.” He started to unwedge himself from the ductwork, unbending his long legs from under various pipes.

Sangh said, “Well, we’ve done some *good work* today. I think we’ve achieved some important insights. Let’s stop here so you and everyone else, by which I mean me, can process the things you’ve shared with us.”

“Everything’s a joke with you, huh, Fharha? You deserve whatever they do to you, even if, technically, you are innocent.”

“Just a technicality.”

Limhoon said nothing, but uncoiled and in one graceful motion launched himself toward the hatchway. With envy, Sangh watched him, wishing he too could swish through the net like that. But this Limhoon missed. His head came down on the edge of the open hatch, and Sangh winced in sympathy. He kicked off and landed softly near the hatch and helped Vhatta Limhoon, who seemed to be having a hard time shrugging this off.

Looking for something positive to say, Sangh came up with, “If you hadn’t been drinking, that never would have happened.”

“You better believe it,” said Limhoon, pulling himself through the hatchway, then slithering back to close the hatch behind him.

“I’ll work on that joke thing,” yelled Sangh in his direction.

Only when Limhoon was gone did Sangh realize he was no longer wearing prisoner orange, but had been issued a Navy uniform without insignia.

## Chapter 7 Retreat [51/v.3.0.2/220-1]

*Minhbo Gulf* had lost all electric power after the explosion, when the fusion drive shut down. The rest of the fleet continued to accelerate, and would soon leave the drifting hulk behind. A drifting hulk with over a thousand survivors aboard, and an uncertain store of oxygen. Not to mention tons of office supplies.

It was up to Fleet Command to figure out how to evacuate the survivors, but Fleet Command had been decapitated by the explosion. Without waiting for them to recover, the captains of the ships nearest *Minhbo Gulf* were compelled to begin search and rescue. *Vhatta Klhancy* was one of these ships. Sangh had never been told the name of the ship’s captain, but the prisoners used the nickname “Miss Lonelypants” for her. He suspected that Vhatta Limhoon had used his growing influence to get her to turn the ship around.

There is no “reverse” gear on a rocket. To get it to match velocity and approximate position with an object traveling at constant velocity required shutting the fusion drive down, turning the rocket around, firing the drive for a while, then shutting it down, turning around, and firing it one more time. It was high-school physics to figure out how long and how much to fire in each direction.

Nobody told the prisoners about this salvage-and-rescue operation. The P.A. system came on to announce a fusion-drive shutdown in one hour, “for preventive maintenance.” The crew of a starship become as

habituated to the sustained bass rumble of the drive, as to the rhythm of their own blood circulation. The drive imposed only a pale imitation of gravity — 0.00085-gee — but when it cut out they felt becalmed. Until the turnover started, when the rotation around a seemingly arbitrary axis made everybody sick.

The maneuvers took the better part of one L-day. After the second turnover, the prisoners figured out that they were matching position and velocity with some object, and it had to be the remains of *Minhbo Gulf*.

The salvage and rescue took a few more L-days. In the exercise yard, the mood soured. There were versions of spaceball one could play in micro-gravity, but no one felt like it. Prisoners spent more time talking and less time playing games. That meant more time spent fighting, bragging, bullshitting, and passing around outrageous rumors. Some of them turned out to be true.

Bratt <sup>C</sup>Heltara had established a domain for his entourage in a side wall, about five meters from the “floor.” He and the other thugs in the yard were treating Sangh with more respect since the rumors had percolated about his attempted heroics after the explosions aboard *Minhbo Gulf*.

Sangh was entering the Yard as *Klhancy* lay becalmed, when <sup>C</sup>Heltara gave him a shout: “Fharha! Your pal Limhoon is running the Fleet now! Did you hear?”

Sangh thought for a second. “No, but really, when you think about it, how many candidates were there for the job?”

<sup>C</sup>Heltara shrugged. “I don’t know. What are we talking about, Admirals or something?”

“Limo’s no admiral,” said Sangh. He couldn’t remember ever using a nickname like that for Vhatta Limhoon, but language was about the only tough-guy trait in his repertoire.

“Actually, he is,” said Nadon, a spectacled, balding prisoner, who everyone assumed was an embezzler. “Or so I heard. They made him a temporary admiral so he was eligible to command the Contact Fleet, or what’s left of it.” Nadon was hanging in space, working through some weird twists that changed his orientation.

“Who would want the job?” said <sup>C</sup>Heltara. “You couldn’t sell these ships for spare parts, let alone put them into a real firefight.”

“Really, guys,” said Sangh, “is this the kind of morale you’re going to take back to your units when your sentences are up?”

“You’re so full of shit, Fharha,” said <sup>C</sup>Heltara.

Sangh heard the actual, full truth from Vhatta, now acting Rear Admiral, Limhoon a few nights later. He was expecting a visit from Šhesay, and when the hatch opened to reveal the vhatta he was knew instantly that things had gone seriously awry.

“I know, I know,” said Admiral Limhoon, “you were expecting your little mechanical whore, weren’t you?”

He had tried to tell himself that Šhesay’s reckless secret visits would be discovered. Even so, the actual event literally sent him reeling, and he banged his head on something. He got himself reoriented, facing

Limhoon.

“I can read your mind, Fharha: now you’re wondering how we figured out what you and your voolt pal have been up to.” *No, that’s not what I’m thinking.* “It’s a funny story, actually. They monitor the prisoners pretty heavily, especially Inquisition prisoners, which on this ship is you. For an entire L-cycle of twenty-four L-hours, some poor guy has to watch you eat, sleep, and pick your nose. Not, of course, the same guy all the time. After surveilling you for however many days you’ve been in here, someone in the surveillance department looked at the logs for anomalies and realized that there was one key activity that was missing. Guess what it was?”

“Reading the *Vhatikan Observer*?”

“No, what they primly call ‘bodily self-recreation,’ or what I might have called ‘bashing the bishop’ back before I started hanging out with bishops. ‘Erotic self-stimulation’ might be the scientific term ...”

“Excuse me, sir, but you could go on quite a while listing euphemisms and slang terms for masturbation. Can I stipulate that I understand what you meant?”

“Sure, Lieutenant. Here’s the puzzle: When they observe that a prisoner younger than, say, eighty-five isn’t beating off, there’s only a couple of possible explanations. In your case, one can’t dismiss the hypothesis that you might have been castrated by some of the hard cases in here after one too many wisecracks. However, 99% of the time the explanation is that the prisoner is getting some regular pussy somewhere.”

“He might have a boyfriend, sir,” Sangh said. *Oh, Shesay, Shesay, one little slip-up.*

“Don’t be obscene, Fharha. Look, in your case, I don’t think we have to worry about that possibility; your perversion is more unusual. The problem is that Inquisition prisoners have an even harder time than the regular prisoners getting away for a little sexual R&R, especially on a daily basis. You’re on camera in solitary twenty-three hours a day, and the other hour you’re under the watchful eyes of two guards. So after review and a careful check of the monitoring facility, they decided you must be a master of self-denial and discipline, and just *resisted the temptation* to wax your warhead. Ridiculous! The Inquisition has had *cardinals* in prison under TV surveillance, and they *all* punch their munchkin at least now and then — even the women.”

*Sweetie*, Sangh thought, *you probably never pleasure yourself; AIs don’t have the odd compulsions people are saddled with. It just didn’t occur to you to include it in the mundane activities I should be observed doing.*

Limhoon’s story was not yet finished. “Meanwhile, as soon as I got through congratulating myself for being promoted from jailbird to CINCConFleet — did I show you my star?” Here he flicked a star on his collar. “...And got myself and some other key people like Dhruzio relocated to new quarters on my flagship, *Phoemoa*, I asked to be updated on you. I hope you derive some satisfaction from being such an intense focus of attention, under the old administration as well as the new one, that is, the Limhoon administration.” He obviously liked the sound of that, as well as the sound of “my flagship” and the shine of his new star.

“I asked to be updated on you, and that’s when they notified me of this incredible statistical anomaly,

this record-breaking string of self-abuse-free L-days. It took me a long time, but one of the few things I learned on this accursed cruise is that if something impossible is happening, that damned voolt XC-19 is at the bottom of it. I asked the NQ, Supposing someone was visiting Fharha in his cell and supplying him with nookie, in a way that you couldn't detect? Who would have access to the cell? From there it was child's play. I looked through the personnel records on all the guards, and she stood out like a sore thumb: the most beautiful guard on the ship, not that that's saying much. How she pasted herself back together after Lieutenant Ghalfé's demolition job on her is still a mystery."

"So where is she now?"

"She's under arrest, if that's the right term for locking up a killer voolt. She's under round-the-clock surveillance and on a low-power diet. She can barely move, but she shouldn't really need to. When we get back to Loofghud we'll either keep her in prison or bottle her in formaldehyde, whichever is safer and more useful to our counterrobotics effort."

Sangh was too numb to say anything.

"I see your thoughts are elsewhere, you lovesick vooltfucker. I'll leave you to them while I go kickstart this fleet."

He zoomed to the hatch, opened it, and as he floated down into it he said, "I do hope I don't see you again. I really shouldn't have come this time, but I just had to see your face when you heard my news." As he sank out of sight, someone else, probably one of his many aides-de-camp, reached up to close the hatch.

Sangh barely noticed him and his entourage leave. All the plans he and Shesay had made were predicated on their working together. Those plans now looked like a sandcastle on the beach after a storm surge. And she was in the worst trouble she had ever been in. He would never get near her again, never be tempted by the sight and taste of that precious body. He floated aimlessly around the room until a few hours later the rumble of the ship's fusion drive started up again and he floated gently to the rear wall of his cell.

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Months passed, and they made it to Star 1 Command Station, and Byše-Admiral OhMahan's commanding officer, now Admiral Limhoon's commanding officer, Byše-Admiral Phloat Vhessalin, Commander-in-Chief Expedition Fleet.

Sangh was more isolated than before, but he could well imagine how things were playing out.

*Vhessalin and his staff must be fully briefed on the catastrophe by now. I would love to have sat in on the signals between between Star 1 Command and Contact Fleet Command as they got close enough to talk without long delays between transmissions. Star 1 Command must have been dumbfounded that Limhoon could be so thoroughly fooled by a conspiracy to trick him into an obviously insane plan — to conquer Texa with one light destroyer! — and emerge months later as C-in-C of a Contact Fleet with half its ships destroyed, its original commander dead by her own hand, with her flagship going down with her.*

*But they have a choice between a serious investigation into what happened or believing a conspiracy of voalts did us in. Like Limhoon told me, the truth would reflect badly on all flag officers. They'll take the conspiracy, along with their prime scapegoats, me and Shesay.*

The Navy had dreamed that the Contact Fleet would be the nucleus of a permanent force, ensuring the earthly rule of Khr̄ist over the Solar System. Now they would have to destroy every ship and all the supplies it might carry. Crew members were allowed to keep two-tenths cubic meter of personal baggage per person. They were to come over nude, in shuttles supplied by ships that had never left Star 1 Command Base. Yes, it was against safety regulations to have personnel on pods not wearing vacsuits, but it would be far more dangerous to allow contamination from Erth̄ to leak through to Loofghud. All the personnel transported over were to be X-rayed to make sure they were human.

Prisoners were treated the same as other crew members, except they got to keep only one-tenth cubic meter of personal baggage. So in due course Sangh was put on a shuttle naked, along with five other men. (Of course, shuttles were segregated by sex.) Two of the men on his shuttle were NQ guards, one on his left and one on his right. They were less and more anonymous than usual. He didn't recognize them, but if he ever saw them again naked, . . . .

All his and Shesay's worries about how to conceal her were academic now. *But what happened to the tape? Did she find a way to smuggle it, and will it make it through all the anti-voalt barriers?*

## Chapter 8 Dungeon [52/v.3.0.2/224/-1]

The smell of the street was unmistakable: diesel fumes, the nearby odor of potatoes frying, with maybe a hint of hapaat. Between collisions of motor sounds, rumbles to roars, Sangh could hear the shouts of men and women unloading double-parked trucks or trying to get around them. The traffic had idled the Inquisition paddywagon carrying Sangh to his jurisdiction hearing. The armored shades were drawn over the bulletproof windows, but the smells and sounds were enough to tell him, if he had not already known, that it was a city street, and the city was on Loofghud. The smell of the actual place hit him with a sharp sense of loss.

He sat shackled to a bench in a cell on an Inquisition prisoner-transfer bus. *Almost half of all prisoner escapes occur during transfers, and this is no exception — I hope.*

The Inquisition transported prisoners in special armored buses, divided into cells, one per prisoner. He didn't know the exact layout of the cells, but in the end, the plan he and his co-conspirators had come up with didn't require all that knowledge.

There was a jolt as the bus came to a sudden stop. The guard sitting on the bench opposite Sangh cursed



as he and Sangh lurched forward and then back. Except for crash harnesses they would have wound up in each other's lap.

"We're supposed to be going through quiet back streets," the guard said. She was a stout woman whose name plate read "NQ-49D59." "Who plans these things?" She must not be expecting a reply, because prisoners were not allowed to talk to guards.

You can't hail an Inquisition prison bus, so it was odd to hear the scratchy-wheezy sound of the front door sliding open. The bus swayed as someone came up the steps. In one smooth motion, officer NQ-49D59 unfastened her harness, unholstered her weapon, and jumped up. She shot him a puzzled glance. "What the phook is going on?"

He heard the muffled sound of someone walking back to where four guards were posted in the benches at the rear of the bus. There were more sounds, harder to make sense of. Another door opened, and there was a muffled thud, then a knock on the door of their compartment. NQ-49D59 slowly opened the door, her gun ready.

"At ease, officer," said the interloper, "it's me, NQ-06B10, from the forward escort. There seems to be a routine traffic jam up ahead, nothing to be concerned about."

But Sangh and Officer NQ-49D59 didn't actually hear the end of this speech; they had fallen asleep, the guard crumpling and resting her head in Sangh's lap. Two minutes later, Sangh woke up, and struggled to sit up straight, NQ-49D59's inert body in his way. NQ-06B10 was standing in front of him, holding an empty syringe and a bulky package.

"Hello, Commander Dhluizio," said Sangh.

"Lieutenant Fharha. That dose of Thoraxine should give us about ten minutes. Put this uniform on." He was already rummaging in the guard's pockets for the keys to Sangh's handcuffs and shackles, then unlocking them, with easy efficiency.

Sangh wished they had had a chance to rehearse. As Dhluizio freed his limbs one by one, he wrestled himself into the uniform, banging against the walls in his clumsy haste. The last step was to steal NQ-49D59's helmet and gun. The resulting outfit would not stand up to scrutiny — the id numbers on the helmet did not match those on the tunic — but there wouldn't be any.

Dhluizio peered out into the corridor. He looked left, toward the rear, where the four guards were still passed out, then right, where the driver lay on the floor, propping the door open. Dhluizio, puffing with the exertion, stuffed him back in his compartment and closed the door.

Dhluizio then knocked on the door of the cell opposite Sangh's, where Shesay and her guard were presumed to be. When the door opened, he stepped back in surprise. Sangh and Shesay were looking directly into each other's cells, with Dhluizio between them.

Shesay had already freed herself and gotten out of her prison uniform. However, instead of the guard uniform Dhluizio had brought for her, she was wearing a sundress; where had *that* come from? It even had a

belt, made of the same fabric, that she had taken the trouble to tie neatly around her waist. The guard in her compartment had crumpled like the others, but he had been felled before the door had been opened. Blood trickled from a gash on his head. The only thing she had taken from him was his gun, which, at this point, was aimed right at Dhuzio.

“Put your hands on your head, Commander, and get into the cell,” she said, and Dhuzio complied, crowding in against Sangh and the slumped-over bulk of Officer NQ-49D59.

“Sangh, sweetie,” she said, her voice filled with anguish or its counterfeit, “I just can’t go with you. Sooner or later we’re going to split up, and it might as well be now.”

“Shesay, darling, we have a chance to be happy together, just you and me. We can stay out of the limelight, avoid politics, and just be people.” But his right hand couldn’t stay away from the holster.

Shesay aimed carefully at Sangh’s heart. She was unlikely to miss. “Sangh, Lhithy, put your hands on your head, and stay in that cell. Don’t think about drawing your guns, I will shoot you before you touch them.”

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The conditions under which Sangh was held sounded about the same as they had been during the retreat from the Solar System — solitary confinement twenty-three hours a day, with one hour in the exercise yard. But gravity made it easier to be crude. A bucket for a toilet would not work in zero gravity, nor would a pallet on the floor for a bed. On a spacecraft everyone had to be supplied with air, usually dry and comfortable; on the ground breathing was your problem. Nurhome was near the Equator, and the temperature averaged 28°C except during the brief rainy season. In the exercise yard of Blessed Sacrament Spiritual Reflection Center, the whimsical name of the hellhole the NQ ran in the heart of Nurhome, the prisoners’ feet were anchored to an iron pole. Everything, even the dust raised by the scuffle of feet, settled quickly to the ground.

Still, Sangh lived for the hour when he could get out of his cell, stretch, and look at the sky. After just one day inside, it was delicious to stand in the dusty inner courtyard of the prison and look up. He barely noticed that the courtyard’s footprint was smaller than the space allocated on *Vhatta Klhancy*, maybe ten meters by ten meters, because he could look straight out into the unlimited vertical dimension. The sky was clear and blue, as usual in Nurhome. Sangh imagined that if he stared long enough he could see the interstellar space beyond the blue, all the way to Erth.

There were only five or six men in the Yard that day, and no women. Their faces were worn down. They had trouble looking Sangh in the eye, though they smiled and mumbled sometimes. Their smiles came out as grimaces. One cried, constantly but furtively. Everybody had the same haircut, that is, no haircut. Some had shaggy hair and beard; some had a cloud of protruding hair. Sangh was headed for the second category.

The first person Sangh said hello to was a middle-aged man with dry gray eyes, whose hair had seemingly turned gray to match. Like the others, he didn’t look like a hard case.

“Hi,” said Sangh. “I’m new here; the name’s Fharha, Sangh Fharha.”

“Kiwanno Houston.”

“What are you in for?” asked Sangh.

“You don’t ask that of casual acquaintances. It’s like asking about my bowel movements, which, actually, I’d much rather talk about.” He was kicking idly at a dirt clod which had somehow survived the lack of rain.

“Sorry.”

“Don’t worry about it.” Kiwanno’s dirt clod had been reduced to dust, but there was no wind to make it do something interesting.

“Does anyone play baseball in here?” said Sangh.

“Sure. The spectators sit over in the tiers of stadium seats over there, near the refreshment booth.”

“Is that a No?”

“Do you see any bats and balls?”

“Perhaps we have to request them.”

“Yes, trot over to one of those guys in the red uniforms and see if they’ll help us out. And bring back a pack of cigarettes while you’re there.”

“Kiwanno, you have a great future in sarcasm, if anyone starts paying for it.”

Another prisoner who had been leaning against the nearby courtyard wall, barked a short little laugh at this.

“Another way to make it pay would be to get up a collection to pay Kiwanno to shut up,” he said.

“Hi, I’m Sangh Fharha,” said Sangh.

“My, I’m forgetting my manners,” said Kiwanno. “Mr. Fharha, meet my friend Rhon Jiang. He’s in for letting his subscription to *The Pophacy Today* lapse.”

Sangh shook hands with Rhon Jiang, a tall, skinny guy, who was mostly bald.

“We could also organize a basketball tournament,” said Sangh.

“It doesn’t take long in here before just standing in a place where you can see sky and breathe nonstale air is entertainment enough.”

“I know it could be worse,” said Sangh. *It’s torture doing nothing in a dull cell twenty-three hours out of every day, but at least I’m not being tortured.* “But what would happen if you *asked* for a basketball and a hoop?”

“Who knows?” said Rhon. *How long before I’m as dead as these guys?*

Their time in the yard was up, and back Sangh went to his cell.

The next day he got to use the yard in the early dawn hours, when he stood and shivered. *What month is it? Or should I say L-month? If I gave a shit I could scratch marks on my cell walls. If I had something sharp.*

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Phase I of Sangh's brilliant escape plan was set in motion when he received a visitor. Normally an Inquisition prisoner never received any visitors; anyone who had known them was never sure they were still alive. Sangh was especially happy to see this one.

"Goddamn it, Fharha, will I never be rid of you?" were the first words out of Vhatta Limhoon's mouth when he was admitted to Sangh's cell.

"I'm guessing that the airwaves are starting to carry images of you and Commander Dhluizio cooking up mischief before the landing on Tεχα."

"Very insightful. Now tell me your price for making them go away."

"First, it's nice to see you. How *is* Commander Dhluizio? How is Mrs. Limhoon? Please be sure to send her my condolences about the death of Willem Jr. I would come over and shake your hand, but they keep me shackled to this bench."

"God, it stinks in here, now that you mention it," said Limhoon. He wrinkled his nose at the bucket next to Sangh's bench. This was about the only furniture in the cage he was kept in. Limhoon had had to go through many locked doors to get here.

"You get used to the smell, but the solitary confinement is hard. So, about the embarrassing disclosures that are appearing out there. There's really not much I can do about them, unless you can get me and Šhesay out of here."

"I can have you tortured until you turn the blackmail off."

"No, that won't work. Šhesay and I released a little robot into the wild, so to speak, and it gets antsy unless it can verify that I'm walking around free. It can't find me, so it's getting very nervous." Actually, Sangh was making all this up. But he had thought through the only solution that made sense, and if Šhesay hadn't thought of it before she was captured, Limhoon wouldn't be here.

"Oh, my God."

"The robot is very good at tapping into the comm system, interrupting broadcasts with images and sound bites telling what *really* happened in the Solar System debacle. They'll escalate to detailed documentaries unless ..."

Limhoon threw up his hands. "Unless I get you out. You might as well ask me to fly to the Vhatican and kiss the Poph's ass. This is an *Inquisition* prison. There's a special justice system for national-security prisoners, and I can't just go out and hire a lawyer and pay your bail."

"Right, I know you can't. But there are people who can. Your only chance is to call in every favor to get me some time with those people."

Limhoon tried to pace back and forth. He had the gravity now, but lacked room. "Okay, who did you have in mind?"

"I'm thinking that an hour or two with the top Jesuit bishop in Nurhome would convince them that I'm more valuable free than imprisoned."

“Look, I’ll try. What choice do I have? The person you want is Monseen Jhessup, the current General of the Order, and head of the Jesuit Academy. Do you mind sharing your reasoning with me? It might help in persuading her to see you.”

“Sure. The Monseen knows, or I’ll convince her, that the charges against me are ridiculous, and that Šhesay is at worst a POW, who should be released now that the war is long over. Of course, justice is no reason by itself to intervene in the deal between the Navy and the Order.”

Sangh had rehearsed this speech for hours every day. It was all he had to think about. Now it poured out of him. “What’ll give the Jesuits a reason to intervene is that I’ve got tons of valuable information about Erth that is going to waste. I spent more time doing in-depth investigations of the planet and its society than anyone else. In fact, who besides me was paying any attention to Erthling affairs at all? Bewinda knows some history, gleaned from books, and I’ll bet the Jesuits have gobbled *that* up.”

“Yeah, they have,” said Limhoon. “She’s left the Navy, and taken a position at the Academy.”

Sangh caught his breath; envy at Bewinda’s easy freedom burned through him. “Well, there you are. I realize that asking to be exonerated is a bit much. I just want a chance to escape, and start a new life with a new name. The name ‘Sangh Fharha’ can be the name of a traitor if that’s what you need to save your career. You can have your story. But the traitor can escape, and still be a traitor. If anything, knowing that he’s still at large, along with mysterious co-conspirators, may be just what the Navy needs. Just so long as I’m far away, leading a free life.”

This was the only way the thing could be managed, he was pretty sure. He had wracked his brains trying to think of an alternative that would save his family from disgrace, but he had come up empty. Keeping his new life safe would mean never seeing his family again, which almost killed him to think about. But being shackled to a bench twenty-three hours a day would soon kill his mind, even if his body sat in these shackles for decades. Only the thought of escape had kept his soul alive so far.

Limhoon stopped pacing. “All right, let’s not prolong this little talk any more than we have to. What kind of reprieve is your psycho-torture volt going to give me while I work on this project?”

“Hard to say. Weeks? Days? By design, its behavior is not easy to predict.” Sangh tried to give the impression that he actually understood how the ’bot worked.

“I will do what I can. Guard!” he shouted, the traditional signal that a visitor is ready to go, even though the surveillance system made shouting unnecessary.

“I’m not done yet, Captain. I want an interview with Monseen Jhessup at the Academy, far from Inquisition surveillance. Preferably dressed in something other than this bright-orange color scheme; in my Navy uniform would be ideal. They will have my word of honor as a naval officer that I won’t try to escape.”

“You know, they could just torture the information out of you.”

“How did that work out with my confession?”

“We’re in Nurhome now. They’ve got the best interrogators in the world here.”

“Let them have a go. They might try to keep the blackmail ’bot from finding out about my distress, but then you’ll have to tell them all about that ’bot.”

“Shit. Okay, okay, I’ll get you a nice audience with Jhessup. Why not? Sometimes if you make outrageous demands you get more than if you make reasonable ones.”

“I learned that from you, sir,” said Sangh.

## Chapter 9 Furlough [53/v.3.0.2/230/-1]

A month later, just when Sangh was beginning to despair, Vhatta Limhoon came through. Sangh was summoned to the administration block of the prison. Only one or two inmates happened to be out in the corridor as he was taken toward the exit. They raised their eyes to see who was leaving alive. One was Kiwanno. They nodded at each other. Sangh smiled to let Kiwanno know he wasn’t being taken to be shot. *As far as I know.*

His Navy uniform had been destroyed back before the quantum transit, but Limhoon had seen to it that he got a new one. It even fit. When Sangh left the prison gate, he rode in a black Tagore, unmarked, with a uniformed driver. Such a sleek car could belong only to someone high up in the power hierarchy of Loofghud. He sat in the back seat with a Jesuit priest dressed in a traditional black cassock. There was no other guard. He had given Vhatta Limhoon his word that he would not escape, but in any case an amateurish rush for the street was not what he had in mind. He was pretty sure that almost all prisoners were recaptured within a few days or weeks even if they beat the odds and made a clean getaway. Sangh wanted his escape to be wired. Powerful people must help hide him.

The priest was a big man with big hair who introduced himself as Fr. Shihab Lhogan. He was one of Monseen Jhessup’s secretaries. She was eager to meet the notorious Sangh Fharha, he said, for “oh, so many reasons.”

The car did not have to go far to reach the Academy, on whose grounds the General of the Jesuit Order lived. Her mansion had a small circular driveway with a few shrubs and succulents tastefully arranged in the center. Water for ornamental plants was in short supply on Loofghud. The driver opened the doors for Sangh and Fr. Lhogan by hand, and the priest led the way into the General’s residence.

As Sangh’s eyes grew accustomed to the indoor lighting, he looked around with growing admiration for the Monseen and her interior decorator. There were several paintings, and an amazing number of books, the old kind, on paper. He wished he could stop and read some of the titles.

He was led to a study in the back of the house. As he entered, a tall lady with gray hair and a thin

steel-black face rose to greet him.

“Ah, Father Lhogan, so this is the dread traitor Sangh Fharha,” she said.

“Lieutenant Fharha, please bow to Monseen Mami Jhessup.”

“No bow necessary, Lieutenant Fharha, or even a salute.” She extended her hand and gave him a brisk handshake. “Sit down. Father Lhogan, please order us some coffee.”

Sangh’s chance had come. He made his case. It was pretty straightforward. Loofghud had demonstrated “galactic reach,” but when it encountered another civilization, it was found to be lacking in several respects. Its computer technology was woefully backward. Its fear of artificial intelligence and computer networks was, Sangh believed, completely justified. But expressing that fear only in religious terms, that is, as dread of demons from hell, was hurting Loofghud’s ability to fight these things effectively.

“Yes, they are demons from hell, but that’s not all they are. They can be understood at a technological level, and they can be fought more effectively at that level than by using exorcisms.”

Sangh couldn’t believe his eloquence. He described how he had come to know these things, all the investigations he had conducted, the places he had visited and the kinds of people he had met.

“No one is as well placed as I am to report on how Erth works, what’s deathly wrong with it, and what their weaknesses and strengths are. After all, one purpose of our expedition was to gather information about other civilizations. That’s why a team of academic experts were included. But the mission was redirected into ... an unfortunate direction. Several of the experts died in the ensuing catastrophic battle.

“Only I and Lieutenant, I mean Professor, Wharbut survived. I’m sure Bewinda has given much valuable information on the history of Tayha. But she spent all her time in the library. Only I got out among the natives. Of course, I could only scratch the surface. But it was, I say in all modesty, as deep as scratch as anyone could pull off in the time I was given.”

Instead of following up with such a valuable source of information, the Admiralty had decided to sacrifice him as a casualty of the information war, painting him as a traitor to avoid having to shoulder more of the blame for their ignominious defeat. In Sangh’s opinion, this was a lousy bargain. But he would give them a chance to have it both ways. He would accept the obloquy of being a traitor if he could have his freedom, under a new name, in a faraway place. There he could write reports on all he had learned. If he weren’t free, it would be psychologically impossible to reveal what he knew.

“Monseen Jhessup, I hope you have never suffered the loss of your freedom, and I hope you never do. But until you do, you won’t know how crippling it is. Even if I could remember a concept like ‘duty to God and country,’ how could I write while faced day after day with the same blank wall, the same stifling odor, the same shackles?” He paused, genuinely overcome, knowing how transient was this visit to the General’s pleasant book-lined study overlooking a shady, tasteful garden graced by a stand of soyba trees.

Sangh knew he had been eloquent. In fact, his vanity was tickled by just how articulate and persuasive he had been. (Where had words like “obloquy” come from?) He had barely begun before he could see she

was convinced, and by the end of his speech she was practically salivating at the thought of what he had to offer them.

He could have gone on, but his pause gave her an opening. “Can you stay a little longer?” she asked, a polite form of words that was also a really dumb question. He had no idea what her deal with the Inquisition was. Maybe they needed him back right away for shuffleboard in the exercise yard. “I’d like you to meet a physicist friend of mine.”

Sangh just smiled, trying hard not to grin. “Father Lhogan,” she said, for the priest had been present for Sangh’s spiel, “call Inquisitor <sup>C</sup>Hun and see what can be arranged. And I’m pretty sure Tony Babrakis would like to meet Lieutenant Fharha.” *I haven’t even been told who runs Blessed Sacrament Spiritual Reflection Center. Inquisitor <sup>C</sup>Hun?*

Fr. Lhogan nodded and departed. He came back sooner than expected to announce that Inquisitor <sup>C</sup>Hun was unyielding on the schedule. Sangh’s two hours of freedom were *over*. His first reaction was nausea and rage. But he fought it back and stood up manfully to go.

General Jhessup stood as well. “We will be seeing you again, you have my assurance.” She shook his hand and smiled at him. He would hate to be her political opponent.

On the drive back to the prison, Sangh’s mood bounced between joy and dread. At one moment he was sure it had all been a dream, and freedom would soon be a meaningless word for him. The next he thought that it was actually a clever tactic to make Tony Babrakis wait, whoever he was.

He had to wait less time than he thought. A mere two days later he was summoned from his shit bucket, taken to get cleaned up, and whisked off in the Tagore again. On this second visit to the Jesuit General’s Residence, Sangh was introduced to Prof. Tony Babrakis from the Physics Department of the University of Nurhome. The Guild wasn’t mentioned, but Sangh was sure every word he said would be heard by the Guild. He realized he was probably being recorded, and probably had been on the first visit. That would explain why Prof. Babrakis did not wait to hear the spiel repeated, but began to ask questions almost immediately. Fortunately, he didn’t want to know much about the Tayhans’ knowledge of physics. However, he was extremely interested in their knowledge of computer science, which was almost as mysterious to Sangh as quantum mechanics.

“I’m sorry, sir, but what I learned about computers in school was to cross yourself every time you passed one.”

He could hear the professor curse under his breath. “Yes, we have certainly shot ourselves in the foot on that matter. Or tied a bag over our heads.”

But Sangh had been a careful observer, and told the professor plenty that got him interested.

“What’s your best guess as to how the Tayhans defeated us in the Battle of Texa?”

“They had at least one intelligent robot spacecraft visiting the cometary cloud ... whose name escapes me ...”



“The Oluo<sup>h</sup> cloud, go on,” said Babrakis.

“She, I mean it, the robot spacecraft, set up a screen of self-defense robot spacecraft around Sol (their star, but you knew that). They didn’t know from which direction an attack would come, so the screen was scattered around a sphere.”

“What radius?”

“I’m not sure when they first spotted us, but I’m guessing they gained control of our ships at a distance about four times the radius of Earth’s orbit, which is approximately the same as Loofghud’s.”

“Whoa, not possible. That area is just too huge, the surface area of a sphere that big. Plus, the mass required would be staggering. If each defense station weighs a ton (a conservative estimate), then given the number they’re going to need, .... A back-of-the-envelope estimate is that it would take thousands of years and an incredible amount of energy to lift the whole thing out of *Sol’s* gravity well.”

“Yes, I thought of that, but suppose they used materials they found out in the cloud?”

“Actually, at that radius it’s called the Segura belt, and it’s not distributed as evenly around the star.”

“Whatever. Suppose they used materials they found there?”

“I suppose they could find something.”

“They’re incredibly inventive when it comes to computing devices. If I found out they built them out of ice and frozen methane I wouldn’t be too surprised,” said Sangh.

“Even so, this robot spacecraft would be busy for hundreds of thousands of years. If they had a thousand intelligent spacecraft it would take hundreds of years, but now you’ve got the problem of lifting the spacecraft out to the Segura belt.”

“Yes, I thought of that, too.”

“But wait! Could the robot spacecraft make a robot-spacecraft *factory*? No, I don’t mean that exactly, because with a factory already at the right radius you don’t need all the machinery to propel it *out* there.”

“I see it!” said Sangh. “You want a *self-reproducing* defense station. Oh, yes, they can build those.”

“Well, then, if that’s really feasible it explains everything. You seed the spherical shell with a few such self-reproducing defense stations, and they can reproduce exponentially, because we’ve assumed the resources are out there. A few hundred years would be enough.”

“Great! I mean, that so far my explanation is holding up. So these defense stations detect a fleet coming in, and they rendezvous with them.”

“That raises new difficulties. How do they match course with a powered spacecraft accelerating with fusion drives?”

“Ah, but they’re not racing in empty space; they’re just changing orbits. The Contact Fleet went into orbit around Sunn, dispersed of course, but the defense system just had to fall into approximately the same orbit, and cross their path. I think it could be done; it *was* done.”

“Then what?”

“I don’t know exactly, but it involved growing a wire into the hull of each spacecraft, finding the computer system, and getting control of it.”

“The first step would be the hardest, but, yeah, once a sophisticated intruder hits one of our computers we are toast. Absolutely no thought was given to security against someone trying to inject rogue programs into the system, because there’s no one on Loofghud who could do it. *Almost* no one ....”

General Jhessup had quietly exited from the study as Sangh and Prof. Babrakis got deeper into this topic. Presumably she had other places where she could conduct the business of the Society of Jesus. But eventually she came back and urged them to take a break and have some coffee and a “yummy shortcake the kitchen whipped up.”

“I’m sorry,” she said a bit later, wiping strawberries and cake off her fingers, “to have interrupted your discussion of how we lost an entire fleet of starships, but there’s another matter that’s fairly urgent, and, as usual with our fascinating guest, his time with us is short. The other matter is how to bust him out of Blessed Sacrament.”

“I don’t suppose we can ask Poph Urbana to issue a pardon, and then appoint him professor of anthropology at the academy?”

“Not unless we want a military coup. We have to preserve the impression that we take seriously the story of how Sangh betrayed the Fleet.”

“Have you read the confession?” he said.

“Yes, of course. I had to hold my nose and sign off on it. I realize it makes no sense. Lieutenant Fharha, did you really have to sign your name to something so ridiculous? It’s not even internally consistent. I wish I had sent my personal torturer along. He would have made sure that the confession was a work of art.”

“Would you like me to explain the circumstances under which I signed?” said Sangh. “It involves electrodes on or in some very intimate body parts. It’s not funny; it’s terrifying. And they can still torture me any time they want. I’m in their power.”

“I’m sorry; that was extremely tasteless of me. I have mentally pushed you from the ‘loser’ to the ‘winner’ column of my mental politics chart, but that was premature.”

“Even if I become the biggest ‘winner’ on Loofghud, I am not going to laugh indulgently at the antics of your personal torturer. As far as I can tell, nobody in that damnable prison I’m in deserves to be there. They have just been made ‘losers’ to balance out someone’s ... ‘politics chart.’ Their families have been destroyed, their lives have been destroyed, and they don’t even get to be dead, because someone might want to inflict further intense pain on them, just in case the chart’s tilting a bit too much in their favor.” Sangh succeeded in not jumping up and down and screaming while delivering this speech. He hoped he conveyed rational eloquence in this context, too, although one speech wasn’t going to make a damned bit of difference.

“I have apologized,” she said coldly. “Now let’s return to the issue of getting you out. The point is that your confession will stand. You’re going to stay a traitor. Your family will never know otherwise. I’m very

sorry for that, but I don't see any way around it.”

“Nor do I,” said Sangh. “I've accepted that. All I have to do is escape. I have thought of a way. Here's what I have in mind.”

“Good God, shut up!” said Babrakis. “Beg pardon, your worship.”

“Quite all right. You heard the man,” Jhessup said to Sangh. “I have people you can talk to; you get together with them and whomever Prof. Babrakis and Admiral Limhoon want to involve, and have a nice chat. But he and I never heard a *hint* that you were planning a getaway.”

“Sorry, your worship. I'll get my secretary to schedule a meeting.”

It took two more endless weeks of waiting for this meeting to occur. Sangh had forgotten how hard it was for a committee to refrain from screwing up a perfectly good plan.

## Chapter 10 Jesuits [54/v.3.0.2/235/-1]

When the black Tagore finally came for him, one morning, it took him to a different destination: a small, drab conference room in the Physics Department. A man and a woman in ugly black suits were already there. They were either low-level mobsters or (more likely) priests in mufti. In no hurry to introduce themselves, they stared at Sangh, who stared back until his nerves got to him again and he began nervously scanning the room for nothing in particular. There was a blackboard with unintelligible scribbling on it, a bulletin board with announcements of talks given at various points in the past, a dusty bookshelf with a few random books and journals scattered about. He realized he was drumming his fingers on the table and he forced himself to relax. *This is getting more trite by the second.*

Finally — it was only five minutes later — a youngish man came hurrying in, dressed in a sports jacket, denim pants, no tie, coffee stain on light green shirt. He held an issue of *The Journal of Quantum Gravity* in his left hand, his index finger marking his place.

“Prof. Babrakis thought I could be helpful in our ... ‘project.’” he said. “I'm his postdoc, Dhedgur Poviss.” *And chief Guild lieutenant?* Dhedgur shook hands with Sangh, and introduced him to Sister Dhadenaida and Father Narhendra, “security specialists” with the Jesuits. More handshaking.

Dhedgur said, “We invited Admiral Limhoon, but he said he still hadn't recovered from his last collaboration with Mr. Fharha. He will, however, make personnel and other resources available once we have a plan. So let's get started. Mr. Fharha, you have the floor.”

Sangh laid out for them the idea of transporting the prisoner, causing a traffic jam that stops the vehicle for a few crucial minutes, and having his confederates, as treacherous and elusive as the traitor Fharha himself,

take the prisoner Sangh Fharha off.

“You might be wondering why the NQ would ever pull me out of Blessed Sacrament. This is where the Jesuits come in. If they demand the right to interrogate me, or me and Shesay both, I believe they can carry the day. The NQ is stuck with the absurd confession they’ve got, but the Jesuits can argue, entirely correctly, that their — your — interrogators will get the real truth out of me. Fortunately, I’ll escape before ...”

Father Narhendra couldn’t wait for the end of this speech. He had been running his hands through his thinning hair, or grabbing a meager curl and twisting it. “Won’t this daring exploit be all over the newspapers the next day?” he said. “The Inquisition won’t let this alone if they think they’ve been made fools of.”

Sr. Dhadenaida scowled and said, “Come on, there’s a worse problem than that. The guards on those buses are heavily armed and well trained. What are we gonna do, bring in an infantry batallion and a tank?”

Dr. Poviss looked like he was about to say something, but Sangh held up his hand, and, raising his voice a bit, said, “Whoa! Whoa, whoa. I’ve given this some thought. What we need is a way to disguise the intruders so the guards’ defenses are down, and then quietly knock them out with some gas or other. Our team then carry me out, and when the guards wake up and find me gone from right under their noses, they feel like idiots. They may not want to make a fuss after that. Our team won’t have fired a shot, won’t have attracted attention.”

“You’ve been reading too many thrillers,” said Poviss. “Real life seldom gives you such wonderful made-to-order substances. For instance, this gas of yours has to avoid knocking out you and your rescuers while putting everybody on the bus to sleep with one whiff.”

“I was picturing gas masks,” said Sangh.

“*That’ll* allay their suspicions.” Poviss fidgeted with his pen and his magazine, squaring them on the table in various arrangements.”

“Actually,” said Dhadenaida, pausing for effect. “I have been ... have heard of some covert ops in which such agents were said to be available. One thing you have to know about NQ buses is that they are compartmentalized. Each prisoner has their own cell. The first two cells are for the highest-value prisoners; each has a bench for the guard as well as one for a prisoner. The driver is in a cell with big bulletproof windows on three sides. At the rear of the bus is the only open bench; four more guards can sit there.”

Fr. Narhendra said, “I notice that you have wandered from the topic.”

“I’m getting there. My point is that if you can get close to the guards at the rear you can spray them with the appropriate agent and knock them out. I think I have the perfect thing: kybultone.”

There were some obvious problems, quickly pointed out by Dr. Poviss and Fr. Narhendra, but after an hour or so the plan was beginning to look pretty good. It turned out the Jesuits had gases and antidotes that would do any thriller proud.

Sr. Dhadenaida wound up her advocacy of kybultone and Thoraxine by summarizing the biggest con. “When the Thoraxine wears off; the subject has a headache and a violent attack of nausea. But only for fifteen

minutes or so. We've ... Hmm. I believe we've heard that you can work around this unless everything goes south for some other reason." She looked at her watch; perhaps she wanted to have the last word.

Sangh had much more to say, so he shifted topics.

"Clergy and gentlemen," he said, though it sounded wrong, "I have some further issues to discuss, assuming we can go with the plan we've sketched out. Once I'm free, I'll take on the new identity you will have set up for me, and live far away. I was thinking of opening a farm-equipment business in Dhitropa; I have some experience in that line. Before the expedition to Erth people were migrating out there. I assume they still are. It's a land of promise, a place you can put the war behind you, mee-mee-meeg."

Poviss had rolled up *The Journal of Quantum Gravity* and was lightly tapping his left hand with it. It made little slapping sounds. "It sounds like a wonderful opportunity for you. But what's in it for ... other interested parties?"

"Well, when I'm not selling farm equipment and crop insurance, I'll write reports for you on the anthropology of Erthlings, answer questions over the phone, take part in seminars and presentations. Not just about anthropology, but economics and politics, too. I have more questions than answers about these topics, but they might turn out to be urgent questions. I don't know what kind of contact you plan to maintain with the Sunn System, but I would like to see any information you gather."

"That part we've already signed onto," said Sr. Dhadenaida. "I think we're basically done." She was fiddling with her watch.

"Good. Now comes the part you're going to have grave reservations about. I want Šhesay busted out right along with me."

Sr. Dhadenaida let go of her watchband. "Are you out of your mind? Aren't you talking about a killer voolt?"

"It — I mean she — is not going to kill anyone. We're good friends. Šhesay knows more than I do about most topics, and I'm sure she's interested in improving relations between Loofghud and Erth. So long as you promise that attacking Tayha is not the reason for the research I'll be doing."

"No, no. Attacking Erth was an act of temporary insanity," said Sr. Dhadenaida.

"Willem Limhoon is still an Admiral the last I heard," said Fr. Narhendra.

"We can control him," said Dr. Poviss. "The Admiralty have been embarrassed by him for the last time."

"I have my doubts," said Sangh. *And who can control him? Who's we?* "You have your doubts about Šhesay. Let's call it even. We both have our work cut out for us, perhaps. But Šhesay never harbored any aggressive designs on Loofghud. What she did was purely defensive. Tayha is no longer under attack. Look, the last time I was out Professor Babrakis, and I were engaged in intense speculation about how the Contact Fleet was defeated. Šhesay can tell you exactly how it was done; she *was* that spacecraft, the one that seeded the comets with self-reproducing robots.

"But however many deaths this ... 'robot' caused in battle, when it came to individuals I never saw

Shesay harm anyone. She could easily have killed Bewinda Wharbut, and it would have made our escape from Sowjpowlu much simpler. Instead we tied her up, she was rescued quickly, and came after us.” *I can’t believe I’m peddling such bullshit. But it shouldn’t matter.*

The conversation went back and forth. But it became clear that Sangh’s demand was nonnegotiable.

Finally an exasperated Fr. Narhendra said, “What’s to keep us from getting up and walking out of here, and sending you back to the Spiritual Reflection ...”

Sr. Dhadenaida interrupted him. “Let’s not be too hasty, Father. The question is whether this voolt can be kept under control. Mr. Fharha assures us that it can.”

Poviss laid his journal back on the table. It would no longer lie flat. “I may have a contribution to make here. Okay, let’s say we can open the front two compartments, after all the guards are asleep. You and the voolt are now looking at each other for the first time in — how long?”

Sangh just stared at him. *I’ve been in prison; time has no meaning for me. There are days, there might be nights, ...*

Poviss went on, “It doesn’t matter. The point is, she doesn’t know what’s going on. You’ve got to explain it and convince her to follow you. Suppose she isn’t convinced. There’s got to be a Plan B. You have to immobilize her, then lock her back up.”

“Okay, tell me more about how we immobilize *her*,” said Sangh.

“We thought we might have to have a means of accomplishing that, so we threw this little doodad together.” He pulled something from his pants pocket, and held it up: a little metal sphere, about a centimeter in diameter or a tad more. “Here: feel how light it is.”

He handed it to Sangh. It was a dull metallic color, and was as lightweight as advertised.

“It’s magnetic,” Poviss elaborated. “If the robot we’re trying to zap has a metallic exterior, even with skin over it, the device will cling. It will also begin to transmit white noise into the surface it’s clinging to. For two minutes, the energy flux can be maintained at a high enough level to disrupt the operation of electronic circuits near the device. The battery gives out after that.”

“So I give her a hug with this thing palmed and slap it onto her back?”

“Or just toss it in her direction.”

“Come on!” said Sangh. “You realize she’ll have the guard’s gun as soon as he loses consciousness. Maybe as soon as they lock the two of them in.”

“What difference does that make?”

“If I start tossing things at her, or getting near her, she’ll shoot me! I’ll never get a good throw. Her reflexes are inhumanly fast.” *I mean, “unbiologically fast.”*

“I thought she was your friend.”

“I’m pretty sure she won’t kill me. But she could take my knee out, and then she escapes and I go back to the NQ. If I’m crippled and the damned ball bounces off her, I’ll be peeved. I mean, *I don’t know if a*

magnet will stick to her. You would have to get someone into Blessed Sacrament to run tests on her. Without letting her know.”

“Probably not possible,” said Sr. Dhadenaida.

“Take the damned sphere anyway,” said Poviss. “The lab people put in a lot of work on it. I’ll tell ’em you loved it.”

“Will it survive being stuck up my ass? That’s the only way I’m getting it into the prison.”

Dhadenaida turned to Sangh and, making a little church out of her two hands, said, “If the voolt goes with you, you can forget any thoughts of living out in the wilderness unobserved. We are going to have surveillance teams watching you around the clock.”

“I realized I would have to allow that.” *Actually, I figured between the Jesuits, the Guild, and the Navy, surveillance teams would be tripping over each other.* “But they can’t have anything to do with the Inquisition. The game here is that as far as the NQ knows, I really did escape, with the help of secularist agents. You keep them from finding me with misdirection and data fudging. I don’t trust them to go along with this and not eventually use it against you — and me, of course.”

“Don’t worry, we’ve thought of that. The number of people involved must be very small. The NQ will remain clueless — as they usually do,” said Sister Narhendra.

“Everything has to be compartmentalized. The Jesuits request the prisoner transfer. The Navy runs the operational side: the traffic jam, fake guards to bring in the kybultone, the getaway car. The Guild handles my new identity.”

Fr. Narhendra said, “We couldn’t get the Navy to show up today. What makes you think they’ll play along.”

“In spite of what he said, Admiral Limhoon is strongly motivated to help me. He’ll provide the operational team and the long-term surveillance team.”

“Why?”

“Better if you don’t know. But believe me, he is. The surveillance team doesn’t have to know the whole story, or any of the story, actually. They’re just supposed to do long-term observation of a farm-equipment dealer and his partner. If the partner starts acting strange, or either of us departs the area unexpectedly, you are to be notified and the fugitive is to be tracked and caught. Then you can do whatever you want. But don’t worry; we won’t go anywhere.”

“Can’t this woman-shaped robot fly, or go into orbit, or something?”

“Not and stay woman-shaped. I don’t think you have to worry about that. She doesn’t change shape that quickly, She would need time alone, other resources. The surveillance team would notice and could seize her.” *If they knew she was a voolt, maybe. But no matter; this part of the deal — just a fantasy.*

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## Chapter 11 Return [55/v.3.0.2/239-1]

And now Šhesay had the drop on him, and his dream of freedom — if he survived — threatened to spiral down the drain.

He put his hands on his head.

“Šhesay, we’ve got to go. I have about three minutes before the gas hits me again, which is about when the traffic jam will clear up and the doors will lock. Let’s go.”

“Go. I’ll follow.”

“No, you’ve got to come with me, if you value your life,” he said. “There’s a team of Navy sharpshooters outside with orders to blow you to Hell if you don’t come out with me.”

“Oh, please. You *Molhes* can’t lie worth shit.”

This was the first time they had seen each other since they landed. They had been brought aboard the bus into their cells separately. She looked so beautiful, especially dressed in that sundress. She looked like she would live forever with the same sparkle in her eyes and the same spring in her step, and of course she could. He realized part of the sparkle was her tears, a signal to him of the emotion she felt.

“I could kill you, but you know I love you,” she said. “I love you too damned much. And I don’t want to spoil your escape plan, which seems to be going quite well. Bravo! Thanks! I was *so bored* in that damned prison.”

“At least let me kiss you, touch you one last time. I’ve saved your life!”

“Please just let me go. So much is at stake. There’s a whole planet for me to explore, and I’ve got to see it, and understand it, *on my own*. I can’t make the promises I know you want me to make, Sangh.”

She had stepped out of her cell, and now stood less than a meter away. She moved to shut them back in their compartment. Sangh lowered his hands, blocking the door. Their hands touched.

“Sweetheart, we make a great team. Don’t break us up.”

“You’ll be all right. Somebody on this planet appreciates you, or we wouldn’t be here.” But she was wavering. He stroked her shoulder blade with his left hand, and she melted. *The sundress, cut low in back, of course, good.*

“One last kiss,” she said. Their lips touched. His right hand came around. He had palmed the Guild’s little radio-noise sphere, and he placed it on her back. It fell to the floor and bounced around a bit. Click, clack.

“What was ...” she started to say. But he had opened both her battery compartments, and she slumped against the door frame. Sangh pulled the gun from her hand and tossed it into the compartment with its owner.



“What the hell?” said Dhluzio.

“I’ll explain later.” *The interlock between the battery compartments — she built this body aboard Vhatta Klhancy, and she just didn’t have the time or the materials to do the job right.* “We’ve got to get her out of here.” He was starting to feel light-headed as the Thoraxine wore off.

“We’re taking her with us? After what she just did?”

“She’s just overexcited. I’ll talk sense into her.”

“Oh. Uhh,” said Dhluzio, staggering. “We’ve got to get out of here.”

Sangh had already started for the bus’s outer door, but it was closed. He put Šhesay’s left arm around his shoulders and held her up as best he could. “Button,” he said, “Switch. Door.”

“Over there!” Dhluzio hissed, and pointed over Sangh’s head. “Quick!”

As his consciousness began to waver, Sangh was just able to claw his way up to the button, stab at it a few times with his thumb, and fall past the folding door as it finally slid to the right. Dhluzio fell on top of him.

The three of them sprawled in the gutter. The fresher air and purer terror drove Sangh to stand and pull Šhesay back up. “Help me,” he said, but Dhluzio was already standing and putting her right arm around his shoulder. Her eyes stared straight ahead. They staggered up onto the sidewalk toward the next point in their planned route.

Several pedestrians had stopped and gawked at the sight of two guards taking a pratfall out of an Inquisition bus, with a possibly dead girl between them. But they had been conditioned to look away from anything to do with the Inquisition. Panic threatened to overcome Sangh, it hovered around the edges of his consciousness — *Run!* — but curiously the heavy load settled him. Dhluzio met the gaze of anyone who dared make eye contact. Sangh stood as tall as he could, and mimicked Dhluzio’s cold stare. *Don’t look at us and we won’t question you.* The crowd resumed its flow, paying no attention to the stationary bus, stopping only to let the two Inquisition guards pass.

The plan was for the escape to go undetected until traffic started to flow again, and the stationary bus attracted attention. They had to get away before then. The sound of motors shifting out of idle could be heard. Fortunately, they had to walk just one block, up the cross street. Sangh glanced at the street sign. They were at the corner of Vhatikan Boulevard and Tiger Street. They were walking up Tiger. He didn’t know what vehicle they were looking for, but it must be the ambulance that was backing toward them. *An ambulance; that makes sense.* It’s not usually easy to back down a Nurhome street in the middle of the day, but the traffic jam had conveniently kept cars out of Tiger Street. They were about three minutes late, and they had casualties. *The driver must be worried.*

When the ambulance reached them, the driver and her partner hopped out. “Okay,” she said, hurrying to open the back. “I see you didn’t get away cleanly.”

“Not quite as cleanly as we planned,” said Dhluzio, “but no one’s after us.”

“What happened to her?”

“She’ll be all right, but let’s get her into the car. Appearances to the contrary, she doesn’t need treatment,” said Sangh.

“Is she dead?” asked the other nurse, if he was a nurse, a tall man with short hair and big ears.

“Only to the world. Shut her eyes, for Khr̄ist’s sake,” said Dhruzio, “and let’s go.”

The driver opened the back. The two EM personnel took over from Sangh and Dhruzio and gently eased Shesay in. The tall man took a seat in back with Shesay. Dhruzio crawled in the back, too, leaving the sole passenger seat for Sangh.

They drove a block and then the driver turned the siren on.

“You look awfully familiar,” Sangh said as they sailed slowly through a red light, and she looked left and right to make sure no dumbbell was going to hit them. “Pardon my brain, which has been gassed a bit too much this morning, but who are you?”

She hit the gas again, and the siren howled. “The last time you saw me I was on *Cross*, serving under Whatta Limhoon. I was another lowly JG academic, the physicist, I mean, electronics specialist.”

“Yeah, yeah, of course I remember you, Muuke. How stupid of me. It’s been an eventful couple of years, and an eventful morning.”

“Someday I hope I hear your story. The true one, I mean. You might wonder what *I’m* doing here. I’m still in the Navy, but I’m a full Lieutenant now.”

“I hope we get a chance to talk,” said Sangh. *Someday*. He fell silent, his thoughts all on Shesay. He fought back tears.

After a few blocks Muuke turned into a side street and switched the siren off. A few minutes later they stopped at a nondescript building labeled “Acme Scientific Supplies.” The front door looked quiet enough, but Muuke went around to the side. A door opened in a wall, one of those doors with no handle on the outside. Sangh slid out of the car, throwing over his shoulder the words, “Thanks, Lieutenant v’n Durhaa.”

Sangh didn’t recognize the two people at the door. The woman held it open while the man, carrying a small sheet of paper, came out to help him. He was dressed in white scrubs. “Prof. Babrakis thought we might be able to assist you. We were expecting two men and a woman,” he said. “Is your name ...” He looked at the paper. “Lhithy Dhruzio or Thulp Nasimento? Can you walk?”

“Thulp Nasimento,” said Sangh, since he wasn’t Lhithy Dhruzio. “Commander Dhruzio is in the back. We’re both unhurt, except for the chemicals we’ve subjected ourselves to. The ... woman in back is all right, too.”

The tall nurse had gotten out, and he exclaimed, “She’s got no heartbeat!”

“No, no, don’t worry. She’s not human. I’ll explain. Get her inside and stand her up.”

They followed his instructions. She sagged between two nurses. “Okay,” he said, “Give her to me.”

The nurses passed her to him, and he embraced her, holding all her weight with his left arm. He fumbled

with her sundress again. He put his lips to hers, and closed her right battery compartment.

“... that?” she said. She began to kiss Sangh again, and Sangh shot her with the gun in his right hand. She started to push away, wild confusion crossing her face, and he shot her several more times. Pieces spilled out of her, mainly sheets of silicon that cleaved and splintered against the floor. Her body went slack again, and he let her fall to the floor. He resumed shooting, knocking as many shards as he could off the struts and sinews of her frame. He knew he’d have to shoot her head, and it was even more difficult than he expected it to be, but he did it. Then he let the gun drop and sat down hard on the floor, amid the ruins of his lover.

He found himself crying. He looked for Cdr. Sudhuzio, the only familiar face. Dhluizio had drawn his gun, but was now putting it away.

“BeJesus, next time warn me when you do that.”

The other people were too confused to react. Blood was their business, and when the shooting started they were ready for a *lot* of blood, and there was no blood.

“She was my girlfriend, and she was a voolt.” Nobody in the room but Sangh and the Commander had ever seen a voolt. They began to comprehend, but disbelief was written on their faces.

Sangh pulled himself together. “Commander Dhluizio, sir: I know I don’t have to tell you, but make sure these chunks of ... — *all* of them — are destroyed. We really don’t know what they’re capable of. I made a mess of her, but her memories might have survived. Either tie the pieces to a nuke in space and blow it, or launch them into Sudhopa.”

At this point Dhedgur Poviss showed up. “What the phook?” he said. Sangh stood, a bit shaky on his feet, and suddenly felt something come boiling up his esophagus. He did *not* throw up on Dr. Poviss, although it was a near thing.

The medical personnel were expecting this. They had basins for Sangh and Dhluizio to vomit into, and quite a bit of vomiting ensued. Also severe headache.

“If they let you drink in Hell,” groaned Dhluizio eventually, “this is what the hangover is like.”

Nurses fastened big plastic bibs around their necks. They were made comfortable, but close to their basins.

Poviss had recovered his composure, although he was mistreating an issue of *Transparent-Matter Physics*. Sangh repeated to him the instructions regarding Shesay’s remains. “Package them up now, and maybe the Commander here can get them on the next rocket out.”

“Okeydoke.” Poviss seemed euphoric that the plan had actually worked. “We understand you’ve lost your identity papers. We’ve got a new set for you, Mr. Nasimento. And some clean clothes. Once you’re freshened up, someone wants to see you at the Department of Physics.”

Fifteen minutes later, Sangh was in clean clothes and Dhluizio had exchanged his Inquisition uniform for a Loofghud-Navy uniform. “I’m leaving now,” he said to Sangh. “If anybody asks, I was never actually on this planet. My official log says I’m visiting a Navy installation on ... never mind, it’s not important.”

“Sir, thank you. I’m in your debt.”

“Line of duty, son. Glad to help. By the way, I don’t know why you’re calling me ‘sir’; you were never in the Navy. Goodbye, Thulp.”

“Goodbye ..., Lhithy.”

Within an hour Sangh was in an ordinary vehicle, a taxicab, not, he hoped, one driven by an operative from some organ of the state. He had a suitcase full of clothes and documents, pretty boring stuff. His head was still fuzzy, but only a little. He hadn’t expected it, but Poviss was still by his side. He was on his way to the Poph Urbana 9 Airport — a standard airport, no launch loops involved — but they stopped at the University of Nurhome.

Poviss asked the driver to wait, then carried Sangh’s suitcase as they climbed some stairs and went in. Prof. Babrakis was waiting for them, and walked them up to his office.

“How are you, Thulp?” he asked.

“Good. Now, one thing is crucial: I shot Šhesay and busted her up pretty good. But you’ve got to make sure those pieces are destroyed. Take them out to a Sudhopa orbit and nuke them, maybe, or ...”

Poviss said, “You already told me that. I passed the message along to Professor Babrakis.”

“I got it, and I agree completely,” Babrakis said. “But I understand the Navy is handling it. Your ticket is in your inside jacket pocket. If anybody asks, you were in Nurhome on business. You sell farm equipment. Take a break from intrigue. Leave it to ... us,” — the professor raised his hands in a vague gesture of inclusion — “whoever ‘we’ are.”

Sangh fumbled with his sports jacket. *I’m wearing a sports jacket?* He looked at his ticket, saw the flight time, and checked his watch. *And, of course, I’m wearing a watch. And I’m talking to the Guild of Physicists.*

“And I stopped here because ...?”

“Because you wanted to see your old teacher, Prof. Babrakis. You took my physics course seven or eight years ago. Or so the records show.”

*Okay, let’s not start a Turingist church here. Watching Dalanna’s mother fabricate memories gave me a lifetime dose of creative fiction.*

“Well, I certainly wish I had done better in your course.”

“Me, too. But I always thought you had potential.”

THE END

## *Appendix*

### Chapter A Orthography of Glish and *Teχano* [45/v.3.0.2/245-1]

This appendix spells out the orthographic conventions used for representing the sounds of the two principal languages spoken by the characters in *Prodigal*: Glish and *Teχano*. **Attention:** *Unless you are an object pedant, the sort of person tempted to learn Klingon, feel free to pronounce alien-language words in whatever way you find comfortable.*

#### A.1 The Sounds of Glish Words and Names

The translation from Glish to English is straightforward most of the time, but tricky issues arise when speakers of Glish and speakers of the language of Earth, *Teχano*<sup>1</sup>, compare notes. When fragments of *Teχano* are expressed as sounds familiar to speakers of Glish in the alphabet of English, one gets written phrases full of “pseudo-words” that would look and sound weird to speakers of all three languages. We resort to this device only when focusing tightly on how the *Teχano* words sound to the Glish speakers. It should be kept in mind that the Glish phonological system may be incapable of expressing *Teχano* sounds exactly. So the Lofghudlings pronounce the name of the language of *Teχa* thus: “Tayhanu.” But the *Teχanos* have similar difficulties; the closest they can come to a version of the name “Looſghud” is “Lôſgaxud.” The first time or two that a novel phrase in a foreign tongue is spoken, it is placed between raised guillemets: ‘Tayhanu’ or ‘Lôſgaxud’.

Because we are pretending English is Glish, all sentences and phrases in Glish are orthographically indistinguishable from the narration around them, which uses the standard “Roman” (upright) font. All words and phrases expressed using the *Teχano* alphabet and phonology are written in italics.<sup>2</sup> However, it would be too distracting to italicize *Teχano* names of people, so they are rendered in a roman font. That means two different spellings of the name can appear in the same page, one as spoken by natives and the

<sup>1</sup>The letter “χ” has a guttural throat-clearing sound like Yiddish “ch”; see appendix A.2.

<sup>2</sup>Italics are also used for emphasis, of course, and for poems, prayers, Sangh’s internal dialogue, and for the names of ships.

<i>Pair</i>	<i>IPA</i>	<i>SAMPA</i> <sup>4</sup>	<i>Example</i>
àh	ɑ:	ah	water
òh	əʊ	@U	pole
ph	ɸ	f	alpha
sh	ʃ	S	sh <u>ame</u>
th	θ	T	<u>th</u> ink
wh	ɹ	W	<u>w</u> here
zh	ʒ	Z	azu <u>re</u>

Table A.1: Special  $\tau h$  pairs, with IPA (International Phonetic Alphabet) and SAMPA equivalents, and an example of a similar sound in English

other as spoken by foreigners. Sometimes three or more spellings show up if the foreigners find the name hard to pronounce. (Cf. Limhooon’s trouble with “Dezeenawvy.”)

The narrator uses native names more often later in the book as Sangh learns *Texano*. For some characters who become central to Sangh’s life, Sangh’s pronunciation can be adopted by the narrator. The obvious example is “Shesay,” almost always preferred over “XC.” Glish approximations (e.g., “Seckie”) to some *Texana* words (in this case “*Seque*”) are favored over the originals in stretches of text focused on the plans and actions of Loofghud natives.

The occasional word or phrase in a “savage” language such as “Glockish” in chapter 9 is written with a slanted but non-italic font (e.g., “*Stan! Groun!*”).

The letter corresponding to our ‘h’ is quite prominent in the orthography of Glish. It denotes a sound consisting of an aspirated velar stop (IPA ʔ<sup>h</sup>).<sup>3</sup> It is never pronounced otherwise unless accompanied by an accent.

A circumflex above the *h* makes it silent:  $\hat{h}$

A grave accent ( ` ) on the letter preceding the *h* means its pronunciation depends on that letter, which must yield one of the combinations shown in table A.1.

Table A.1 does not show any combination corresponding to the sound “tj” in the IPA (the underlined sound in chain). This sound is, however, produced by the letter “qh” with its vestigial “c.”

A few more observations:

- Few words start with a vowel in Glish, and its speakers find it hard to pronounce words in other languages that start with vowels. The exceptions are words in which the vowel is followed immediately by a liquid (‘l’ or ‘r’), such as “Allàh” and “Erth,” or by an unmarked ‘h’ (“OhMañan”). Otherwise,

<sup>3</sup>In the classic Connecticut accent, from, say, Waterbury, this is the sound of the second “t” in “tighten.”

when a Lofghudling tries to say the word they insert the sounds “dh” before the vowel, move a liquid from elsewhere in the word to just after the vowel, or resort to some other way of avoiding the forbidden combination of sounds.

- The letter ‘u’ is always pronounced short and unstressed, unless it is doubled: ‘uu’. Exception: At the end of a word, a single ‘u’ is long and unstressed.
- The letter ‘o’ is similar, but ‘oo’ is pronounced as a short ‘e’ while holding the lips in an ‘o’ position: IPA symbol ʊ, the sound of “ö” in German. (The word “voolt” sounds the way a hypothetical German word “wölt” would sound.)
- The symbol “ɲ” is a (fortunately rare) letter whose name is pronounced ‘unh’. It indicates that the previous vowel or vowel group is to be nasalized and stressed.
- The letters “X” and “C” do not occur in the Glish alphabet.
- All other letters sound pretty much as in English. In particular, an ‘e’ at the end of a word is often silent, and used purely to lengthen the sound of the vowel in the last syllable.

## A.2 The Sounds of *Texano* Words and Names

*Texano* is close to being present-day Brazilian Portuguese, for reasons that are explained in the text. The main difference is the spelling reform that replaced initial and doubled ‘r’ with ‘χ’ (upper-case: ℵ), a new character called a “double-r.” Also, gender endings on adjectives have become silent, although still present in the written language. Otherwise, it sounds the same. This is a brief summary of how to pronounce it.

The vowels of *Texano* are typical for European languages; English being the odd man out. In *Texano*, as in most European languages, “a” sounds like “ah” in English, “i” sounds like “ee,” and “e” sounds like “eh.”<sup>5</sup> A *Texano* idiosyncrasy is that “o” is pronounced like a long “u” at the end of words. The word *Texano* itself is an example. The definite article takes two forms, “a” (feminine) and “o” (masculine), the latter pronounced “oo.” Articles and adjectives agree in number and gender with the nouns they govern or are governed by. The gender of most nouns and adjectives is determined by whether they end in “a” or “o”; plurals are usually just a matter of adding an “s”.

The only really odd thing about *Texano* pronunciation is the nasalization indicated by a tilde over a vowel, as in “cão,” meaning “dog.” The vowel pair “ao” would ordinarily be pronounced “ow”; the tilde nasalizes so it sounds like someone from Brooklyn screaming “ow” very quietly. By coincidence, Glish has similar

<sup>4</sup>Speech Assessment Methods Phonetic Alphabet, a subset of IPA using only ASCII characters.

<sup>5</sup>Something called the Great Vowel Shift happened in England just before Shakespeare’s time to shove English away from the standard pattern.

resources; the letter “j” indicates that the previous vowel is nasalized. So the *Texanos* hear the Glish name “Sathaj” as “Sataχã,” even though the vowels being nasalized are not quite the same. (The “χ” is the Erthling attempt at pronouncing the “h”; neither planet’s people can pronounce the other’s language correctly.)

Here’s what you need to know about consonant patterns in *Texano*<sup>6</sup>:

- Before “i” and unstressed “e” (the latter typically at the end of a word), “t” is pronounced “ch” and “d” is pronounced “j.” So *norte* (“north”) is pronounced “norche.” (The Lofghudlings write this “nor hee.”) The short word “de” (“of”) is pronounced “jee.”
- In the middle of a word, “r” is pronounced like English “r,” with a slight roll to it. At the end it modifies the vowel preceding it as in British English, but breathier.
- The letter “χ” (upper-case: “Χ”) is a guttural, breathy “kh” sound. The word “χosa” (“rose”) sounds like a hypothetical Yiddish word “Chozah” would sound if there were such a Yiddish word. The *Texano* word for “horror” is spelled “hoχor,” but pronounced more like “o-HOH,” with the fake “Hs” here being very breathy.
- “S” is pronounced like “z,” in the middle of a word. At the beginning or end, or when doubled, it’s always pronounced “s.”
- “C” is pronounced like “k” when it occurs before “a” or “o,” like “ss” when before “e” or “i.” If there’s a cedilla under it (“ç”), it’s pronounced “ss” even before “a” or “o.”
- “G” is hard before “a” and “o,” soft before “e” and “i.” To make a hard “g” before “e” or “i” you put a “u” after it, as in “guerra” (“war”).
- “H” is always silent alone. The pair “ch” is pronounced like English “sh.” For “lh” and “nh” see “l” and “n,” below.
- “J” is pronounced “zh” (or “zh” in Glish).
- “L” is pronounced as in English, except that “lh” is like an “l” followed by a “yuh” sound. So “*Molhe*” is pronounced roughly like “mole-ye”; Glish speakers write this as “Molie.”
- “M” is like English M except at the end of a word, when it is heard only as a nasalization of the vowel before it. “*Bom*” (good) is pronounced “Bo,” with the “o” through the nose.
- “N” has the twists of both “l” and “m”: mostly English-like, except before “h” and at the end of a word or syllable. The pair “nh” is like an “n” followed by a “y(uh).” The word for “road” is “*caminho*,” pronounced “cameenyu.” “*Baton*” (baton) is pronounced “expTHbaton,” with accent on the second

<sup>6</sup>See <http://www.omniglot.com/writing/portuguese.htm>



syllable. In this word we've made use of the character “j” device mentioned above that in Glish indicates that the “o” is nasalized. The diminutive suffix is “*inha/inho*.” Here the “n” does double duty: it nasalizes the “i” and turns the “h” into a “y.” So “*casinha*” (little house) is pronounced “cazeenya.”

- “Q” is always followed by “u,” as in English, but before “e” and “i,” “qu” is pronounced like “k” (the “u” is silent, as it were).
- The letters “K” and “W” do not occur in the *Texano* alphabet.
- All other consonants sound close enough to their English cognates to treat them the same.

Names beginning with “J” often give English speakers trouble, and here the habitual way we pronounce Spanish names like “José” and “Jorge” gets in the way of pronouncing the cognate *Texano* names. A Brazilian named “Jorge” (“George”) should not be addressed as “Horhay,” but as “Zhorzhee,” with the stress on the first syllable. Similarly for “José,” which should be pronounced “Zho-zeh,” with stress on the second syllable; but we have trouble putting stress on an “eh” sound, so we settle (cf. “café”) for “Zho-zay.” At least this is better than “Ho-zay.”

The name that perplexes English speakers the most is “João,” which corresponds to “Juan” or “John.” The “j” is easy: it’s just that “zh” sound again. The first “o” is a lightly stressed syllable. Which leaves an “ão.” Just say “ow” through your nose (as described above). It’s tricky, but even “zho-ow” will impress a Brazilian. Usually the closest people come is “joe” followed by the sound of their mouth being thrown open, something like “joe-aaaah.” Yikes.

Here are all the diacritical marks and what they mean:

- “ã, õ”: An “ow” or “oy,” nasalized to the max. (Many words ending in “ión” in Spanish have cognates ending in “ão” in *Texano*, such as “*camión/caminhão*” (truck), “*situación/situação*” (situation). Similarly for Spanish “ones” and *Texano* “ões,” as in “*camiones/expTEcaminhões*” (trucks).)
- The acute accent “´” *always* means to put stress on the vowel that it marks.
- The grave accent “`” is placed above an “a” to avoid having to write “aa.” For example, “to” is written “*á*,” which is confusingly the same as the feminine definite article. “To the” is the contraction “*ao*” = “*á*” + “*o*” for the masculine form “*o*” of “the.” The feminine form is “*a*,” and the contraction meaning “to the” might be written “*aa*”; but it’s written “*à*” instead. It’s pronounced just like “*a*.”
- The circumflex accent: “ˆ” is placed above “o” to indicate that it is pronounced in a “closed” manner.

## Chapter B Glossary of Glish and *Texano* Words [46/v.3.0.2/249-1]

### B.1 Glish

*Note:* Because “English is Glish” in this book, many of the following entries are of English words (in the standard Roman alphabet) with special slang meanings, such as “screen,” which corresponds to a different Glish word (and in particular doesn’t contain the letter “c”, which is not in the Glish alphabet).

*Arvatàh:* One way to pronounce the *Texana* word “*Avatar*,” which starts with a vowel and is therefore hard for Loofghudlings to pronounce. So the “r” sound gravitates to the first syllable to make it easier. (Another pronunciation: “Dhavatar.”)

*Bys̄she-Admiral:* The title given an admiral in charge of a large fleet in the Loofghud Navy, who is also qualified to be appointed Bishop of an expeditionary diocese, i.e., a diocese, nominally under the Office of Missionaries, consisting of the fleet itself and any territory it conquers.

*brōsya:* Porridge, flavored with spice native to Loofghud.

*hest:* A game descended from chess, played on a  $9 \times 9$  board, with an extra piece, the “bomb,” is placed on the center file. The bomb moves like a rook, and dice are rolled to determine what damage is done when it explodes.

*dheuko:* Currency on Loofghud.

*grab:* Understand, get.

*granhoma:* An energy bar, loaded with fat and grain, intended as cold meal for bivouacked military personnel. The civilian version has more sugar.

*harmonika:* A row of parallel plastic tubes containing semisolid space rations, that delivers a balanced if unpalatable meal.

*jinni:* (plural: *jinn*) Evil spirit that can appear in tempting guises. Willing to do favors for mortals, but at always eventually at costs they regret.

*khobok:* Clown. Peasant. (Plural: *khoboks* or *khoboki*, the latter more for the collective plural.)

Kristh̄lam: The state religion of Loofghud. (Adjective: Kristh̄lamik)

Kristh̄lim: Believer in Kristh̄lam.

*kippen*: A native plant on Loofghud; the stalk of this plant, especially dried.

*klaad*: A group of about 10 soldiers in the Loofghud armed forces. (A platoon is made up of 5 klaads.)

*klick*: Military slang meaning “kilometer.”

*L-hour*: One twenty-fourth of a day on Loofghud. Days aboard ship are calibrated to the home planet, for want of any other standard.

*Lhatin*: Official language of the Kristh̄lamik Church, a blend of twenty-second century Catholic-Church Latin, English, and Arabic.

*meeg*: A difficult-to-translate term. Originally, it meant “friend,” but it evolved to mean “so,” “and then.” An expression of the form “meeg *P*,” where *P* is a personal pronoun means “says *P*,” in backwoods English dialects. E.g.,

Meeg I, “Silvia,” and meeg she, “What?” and meeg I, “Do you really think he will leave his wife for you?”

means

“Silvia,” says I, and “What?,” says she, and “Do you really think he will leave his wife for you?” says I.

*mee-mee-mee*: “Blah-blah” or “yada-yada-yada.”

*metta*: Superior, awesome.

*narwhop*: Seductive demon that appears to young women in the guise of a healthy, well-endowed man.

*NQ*: (usu. “The NQ”) Abbreviation and familiar name for the Inquisition.

*nukky*: Dicey

*phook*: Fuck, but only in some metaphorical sense, not literally copulate. (Vulgar)

*pod*: Short for *escape pod*, the spacecraft used for emergency landing on planets or escape from larger craft.

*Seckie*: Lofghudling pronunciation of *Texano* word *Seque* (qv)

*shizzle*: Thin diarrhea (vulgar)

*sinjang na krue*: One of the few surviving phrases from the North Dhindiran language. Its meaning (now) may be triangulated somewhere in the region “singing the blues,” “blowing smoke,” “improvising.” The phrase “me sinjang na krue” means “you’re kidding me.”

*sliv*: (Prison slang; from “sliver” [of glass]) Any sharp object adaptable as a weapon.

*spin the cylinder*: Try something risky with the potential for high payoff or disastrous losses. An allusion to Russian roulette, in which the cylinder of a six-shooter containing a single bullet is spun before the gun is pointed at one’s head and fired.

*squisher*: Projectile weapon with enough energy to kill a person but not pierce a warship’s hull from the inside. Used to police unruly personnel aboard a spacecraft.

*screen*: Whatever might amuse one on an available screen. *Example: I feel like vegging out and watching some screen for the next couple of hours.*

*soyba*: A “tree” native to Loofghud, and hence providing no edible fruits or nuts. But the dark, grayish bark can be made into baskets.

*whatta*: Title for commander of ship who also serves as priest, spiritual advisor, and confessor for the crew.

*vid*: A video, usually for entertainment.

*vir’hee*: (Lofghudling pronunciation of *Texano virte*) Virtual-reality vid.

*voolt*: (pronounced “vɔlt”; if German, it would be “völt”) A vulgarity for an electronic system animated by a demonic spirit; used interchangeably for the demon and the system it controls, typically a robot or computer network.

*zilpha*: Seductive demon that appears to young men in the guise of a nubile young woman.

## B.2 Texano

*cópulatrano*: A special-purpose tactile environment that allows two people at different locations to have sex. There must be one *cópulatrano* at each end. Each participant fits into their *cópulatrano*, which transmits and receives strokes from the other participant.

*Molhe*: (Glish speakers’ pronunciation: ‘Molie’.) A biological person. Etymology: Backformation from *molho*, meaning “sauce,” after all the wet stuff inside a *Molhe*. Altered to sound parallel to *Seque*.

*novirtual*: (Portmanteau word from *NOVela vIRTUAL*. Plural: *novirtuals*.) Story told in virtual reality, i.e., a fictional *virte*.

*Seque*: (Glish speakers’ pronunciation: ‘Seckie’.) A robotic person, intelligent and conscious, and required by law to be humanoid. (The word for “robot” is offensive if applied to a *Seque*.) Literal meaning: dry, bloodless.

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*sigilo*: An RFID chip at the entrance to a commercial establishment that identifies it and certifies its business.

*texa*: Currency on *Teḡa*. Symbol: ₴.

*vibros*: 1. Wireless message communication among *Seques*. 2. Hints

*virte*: (Glish pronunciation: ‘vir<sup>h</sup>hee’.) A virtual-reality vid, meaning viewers can move to arbitrary new vantage points within a scene.

*xadrez*: (Pronounced: “shah-drez”) A variant of chess played by *Teḡanos*, in which pieces are placed randomly but symmetrically in the first rank (for white) or eighth rank (for black) at the beginning of the game.<sup>1</sup>

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<sup>1</sup>This is called chess960 in the 21st century. It was invented by Bobby Fischer, who thought the existing game had become stale because grandmasters had memorized so many openings. His contribution was the system of 960 possible and meaningful starting arrangements of the pieces.