## Chapter 1

Unless one had exotic attachments or mods to scale the vertical cliff face of the Fermi Rift, the only way to go from Teslac, in the Lower Plane, to Jian (or anywhere else) in the Upper Plane, was to fly.

Gertie's hometown of Crol, a small Lower Plane village between the Perdita Forest and the lazy Eisenstein River, was only five kilometers from the Fermi Rift, but the nearest civilian air transport with flights to Caslet, atop the rift wall, departed from Gliddesh more than fifty kiloseconds away by groundcar and rail.

Fifty kaysec stuck inside a noisy, boring transport. It may as well be fifty gigaseconds! Gertie dwelled on this tiny part of her trip to Jian for hundreds of kiloseconds before she started the journey; the expectation of a miserable train ride from Crol to Gliddesh nearly made her call the whole thing off. Those thoughts were soon pushed to the memory stack when Gertie stepped off the railcar at Gliddesh and caught sight of the gleaming air tender.

The air tender was parked on the tarmac next to a bright metallic blue air limo. Maintenance vehicles were scattered around the landing pad and luggage drones were stowing packages into the tender's small rear hold.

Shortly, the tender would fly up and over the kilometer-high rift wall and deposit her and fellow travelers into the Caslet Hegemony. Gertie had never flown before and was not sure what to expect. She had winced as she stepped aboard the small craft, seeing that the seating arrangements were even more crowded than aboard the train.

Fortunately, the trip was to be a quick one. There was a short hop across the city to pick up more passengers, then the tender used its jet boosters to fly up, up, up along the sloping portion of the Fermi Rift wall where it met the Wheel's leftspinward edge. The rotor-based tender easily could have flown straight up to the Upper Plane at any convenient point along the Fermi Rift; it was the Hegemony that restricted entry to the Upper Plane to the far leftspinward and far rightspinward extremes of the Rift wall.

Flying up the Wheel's edgewall only took about eight hundred seconds. Gertie had a good view out the porthole where she was seated, and the pilot was nice enough to slowly rotate the tender as it rose, to allow passengers on both sides of the craft to enjoy the sights. Down below, the Lower Plane stretched outward and curved upward as far as she could see along the interior circumference of the Wheel. Towns, cities, forests, plains, mountains, lakes... it was a fascinating thing to see in real life, compared to the holovids she had seen in university and on entertainment systems. The land curved ever upward, chasing the sky until it disappeared into the mist and clouds.

Now she had a firsthand look, seeing the Lower Plane from one thousand meters above ground level. And she could play back the whole experience anytime using re-memory. She thought she would dream of nothing else for the next ten, twenty megaseconds.

The idyllic view was shattered when the portholes all went dark just before the air tender rose above the top of the Rift wall. She recalled the warnings. The Caslet government would often censor the view, particularly from flying craft.

It was not just the view they wanted to control. The Caslet Hegemony limited access to the Rift wall, all along the edge of the Upper Plane. It was a natural border separating the Caslets on the Upper Plane from the Teslacs on the Lower Plane. With the Hegemony's expansionistic ways, they were hardly concerned about maintaining the integrity of their neighbors' borders. But they were conspicuous about ensuring nobody came back the other way without due authorization.

After the windows were blacked out, the flight continued longer than Gertie expected. When the air tender started to shake and bounce, the lack of a visual frame of reference with the ground induced a vertiginous unease. The oily wetness that formed inside her mouth then oozed onto her lips was a sure sign of motion sickness. She had to launch background tasks to filter her sensory inputs; she did not want to be sick inside the confined space of the tender.

The portholes were still dark when the tender landed. Where they were *now* was anybody's guess.

All part of the Hegemony's paranoid control, she thought as the passengers were led off the tender by a pair of gruff-looking soldiers. They were herded out into a windowless tunnel, which twisted and turned through several directions before ascending a slight ramp up into a waiting train car.

She gave the Caslets credit for their rail transport: it was much posher than any typical public transportation available back in Teslac, at least in the Crol-Rutger area – or even in the modern metropolis Triumph, where she had attended university.

Gertie found an available seat and settled in, trying to think pleasant thoughts, unsure how long the train ride would be.

Since she was transiting through the Caslet Hegemony on her way to Jian, she expected to go through a Caslet customs inspection at some point; the thought did not sit well with her and had been a source of worry while planning the trip.

Once the train got under way, she could see through the windows that the railway passed through some charming, forested areas and over broad expanses of green savannah. She was amazed to see, in the middle of one particularly flat and verdant field, a heard of sizable cattlebeast grazing on the tall grasses; so many large biological lifeforms huddled together was a rare sight – particularly since she had been led to believe the Caslets were not fond of bioforms, in general. Unfortunately, whenever the train approached an urban area, the windows blacked out, preventing anyone from seeing the Caslet infrastructure. At one time, deep in the middle of what seemed like a completely unoccupied section of land, having only wind-whipped grasses and the occasional grove of tall, leafy trees which she did not recognize, the train car's windows went black for all of ten seconds. If it were not a malfunction, Gertie could only assume there was something of importance or secrecy that required the blackout. All part of living in the Hegemony, she thought grimly.

## Robot Civilization: Free State of Jian

But fortunately (*thank the ones and zeroes!*) she was only passing through the Caslet Hegemony, on her way to Jian – or more correctly, the Free State of Jian, as the country had recently renamed itself. It was in Jian that Gertie hoped to find her calling, to start her career as a teacher-bot. It was in Jian that she planned to stay at least the next sixty megaseconds – two whole cycles.

Two cycles spent learning and teaching, within the walls of a land where, according to childhood stories, exotic robots lived side by side with fanciful bioforms; where gigaseconds of isolation had allowed the robots to change – to evolve rapidly in their confinement, to alter their bodies to accommodate the unique challenges and constraints they faced. More intriguing to Gertie than the notion of physical changes caused by a hypothetical "evolutionary pressure", was the widely held notion that the primitive inhabitants of Jian understood the nature of life and were more in tune with the Wheel. It was said that Jians possessed ancient knowledge held within their customs and beliefs, and that they were in a sense more advanced than the technologically superior Teslacs or Caslets.

It all made for an intriguing adventure, according to the little girl inside Gertie. She had been dreaming of this journey for many cycles, having spent all her free time pouring through all the history and stories about Jian that was available to her. From primary school up through university, she had focused her studies and attention on Jian, and the riddle of the mysterious robots that lived there. She had eschewed hobbies, sports, boys – and later, men – to concentrate on Jian. From a young age, she knew that she had to visit the walled country, to live there for a time among its people, to teach them whatever she could about the Wheel outside their walls, and to learn everything she was able to store on her memory stack about Jians, their lifestyle, language, religion, and culture.

Eventually the train went underground, leaving the passengers with little to look at other than the tunnel lights flashing by their windows.