

KET'S DAY

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Introduction

This story follows Ket Tinla Ritt, an average citizen of the planet Veodon, through a fairly normal day in his life. The story opens when Ket gets up in the morning and ends when he goes to bed that night. Through him, we get a view of what life on that world is like.

As envisioned, Veodon is an earth-like planet with a human population of 140 million. The inhabitants of Veodon are a healthy, sturdy, handsome people of moderate stature who are content, affectionate, and long-lived. Their pointed ears are a main feature distinguishing them from earth-humans. The Veodonians remain active well into advanced age and normally live a century or more. They are highly intelligent, their average intelligence level corresponding in earth terms to an I.Q. of 140.

While KET'S DAY is not an entertainment novel in the usual sense - adventure, romance, intrigue - it is hoped that the reader will find it enjoyable reading. The story is a fantasy but is not so removed from reality so as to have no realistic possibilities.

KET'S DAY

Chapter 1

The sky began to lighten over the town of Teret on the planet Veodon. The town's structures were becoming silhouetted in the dawning light as were the forest beyond and the mountains to the north. Now, in late winter, the snows had largely receded from the fields which surrounded the city but were still evident in places. Here and there, a bird greeted the dawn. A light shown through an occasional window as some of the town's 607 residents began to stir.

Ket Tinla Ritt rolled over and switched off his clock's beeping alarm. He rose drowsily to one elbow and looked around. The clock read 575. The room was dark and cold. There was a hint of light coming through the window, just illuminating the spaces around the shutters. He remained on his elbow for a few moments, then rubbed his face and lay back, making a conscious effort to stay awake.

If he intended to work today, his best choice of jobs would be during the first application period. The period started in just a few centihours.

He stretched and yawned. Pulling the covers up, he lay there trying to escape sleep, which was difficult. He adjusted the pillow some. Perhaps he should take the day off, he thought. Gazing across the room, he reflected upon this, favoring the idea more as the moments went by. He had worked for several days and had assumed he would today also. Still, a day free would be welcome. He could visit with friends, go to the teahall, or some such. He began to drift off, then pulled himself awake.

. . . A day off?

It wasn't long before he opted for this course.

Relaxing, Ket wondered vaguely what he might do. One possibility was to go on a longer morning run than usual and, otherwise, simply take the day as it came. He lay there a few moments. Though quite tempted to stay in bed, he decided, with what remained of his rapidly fading consciousness, to get up. He rolled over and, with an effort, rose and sat on the edge of the bed, yawning. He stood and stretched, then dressed. Another day had begun.

Going to the window, Ket folded the shutters back and looked out. There was a faint light at the horizon that faded, higher in the sky, into a deep, dark blue, and then into black. Several stars still stood out sharply there. He remained at the window for a moment. Then, shivering some, he went across the room to the heat radiator and turned the valve which would allow steam into the unit. It would soon have the room warm. Going to the door, he opened it, went into the hall, and toward the washroom.

The hallway was dark, but there was a lamp on in the floor study. Three of his housemates were there waiting to see the day's job openings which would be posted at 600.

Using the computer that was in the room, they would be able to see the jobs that were open for the day as well as be able to apply for one; or more than one, if desired.

Ket entered the washroom. One of the early risers had turned the heat up and, so, the room was warm. He checked the thermostat on the water heater that was attached to the wall between the lavatory and the shower. It, too, had been turned up.

The water heater burned methane and had a ten liter capacity. It would maintain water at the temperature of the thermostat setting even when water was being continually withdrawn from it. When the water going into the heater was cold, more fuel was required. This was particularly true in the mornings - especially in the winter - before the sun shone on the solar pre-heater.

After several centihours, Ket returned to his bedroom. There, leaving the light off, he went to the window again and looked out. He leaned on the window sill.

His house was at the city edge, and his third-floor room was on the side of the building which faced away from town; so, in the gathering light, he had an excellent view of the countryside. A short distance from the house was a walkway that encircled the entire town. Two or three meters beyond this, the city's agricultural fields started. These continued from the town proper, outward, for about a kilometer. Stubble left from crops of the previous season stood in some parts of the fields, sometimes showing through the patches of snow that remained there. Beyond the fields were meadows and mixed forest which gave way, two or three kilometers to the north and northeast, to evergreen forest. This forest continued unbroken to the craggy Nang Mountains, 100 kilometers distant. Toward the south, the land became increasingly open.

Ket could just make out a few lights from two other towns in the distance.

The nearest was Ripnil, 11 kilometers away. Like most towns on Veodon, Ripnil was very similar to Teret in size as well as layout. The other city was Meadowgrass, 24 kilometers distant, the municium seat. Meadowgrass was about a third larger than the municium's 15 other communities and served as the area's distribution and administrative center.

He gazed a moment at Ripnil. That was where he would run this morning, he decided. It was a good run, and he could break it up by getting something to drink at the Ripnil central hall.

Turning from the window, Ket went to the heat radiator. He stood near it for a few moments, swinging his arms and shaking his feet some. Soon, he began a series of calisthenics - moving rather slowly at first. After a bit, he also began some stretching exercises, alternating these with the calisthenics.

This routine was an almost daily one for Ket. He felt that it was a good way to start the day. Others, too, felt this way because such early morning exercises were common enough among the populace. Ket liked the activity and considered the time so occupied good for thinking.

As he exercised, he gradually became warmer and looser. In a few centihours, he was perspiring some and was soon limber enough to touch his chin on the floor while sitting with his legs stretched in a 'V' in front of him. He continued the exercises for a time while watching the sky lighten outside.

Soon, after a final stretch, he got the shoes he used for running and put them on. He rose and picked up a pair of gloves that were on his dresser. Going to the radiator, he closed the valve on the steam pipe. Since his room would be receiving sunlight soon, he left the door open as he went into the hall. This way, the warmer air in the room could be more easily circulated through the house.

Two of his housemates were in the study examining on the computer screen the job listings which were now up. Ket went in to say hello.

In the room were his sister, Alyan, and his uncle, Mejen Ritt.

"Morning good." said Ket.

"Day's greetings! . . Hello." they said.

"How be you this morn?" inquired Alyan.

" 'Tis a wonder I am dislodged from bed, though I am now attentive unto the day."

"You must be as it appears you've been exercising." she noted.

"Aye and so." Ket said. "And you ones seem chipper."

He sat on a chair near the desk where they were looking at the job openings. "Get in some requests?"

They nodded.

"You will?" Alyan asked.

"Nay. I take the day off." replied Ket.

"Oh?"

"I will meet the day by jogging long." he told them.

"In fact. Where go you?" asked Mejen.

"To Ripnil."

"Quite."

Ket paused, looking at the monitor screen. "A printout of the job list have you?"

"We do." Alyan replied. She handed it to him.

Ket scanned the list. There were the normal daily openings, mostly crafts and custodial positions.

"And know, you should, soon, about the city analysis opening." Mejen said, referring to the position Ket had applied for - assistant director of the town's annual production/consumption assessment.

"Aye." said Ket. "This afternoon will it be posted."

Mejen nodded.

The computer beeped, indicating job assignments had been made.

"Go ahead." Mejen said to Alyan.

Alyan scanned the listings. Seeing she had been assigned the position requested, she sat down and tapped in a confirmation, then obtained a printout of the job description. Finished, she rose and Mejen sat at the desk.

"What's your task?" Ket asked her.

"Utilitarian. Maintenancing the bicycles."

Ket nodded.

Alyan would be checking the bicycles which were kept at the town's equipment check-out center. This would involve making sure that tires were properly inflated; that the bikes were well oiled; and that all nuts, bolts, and screws were tight. It would also require that she note any repairs which might be necessary. That the bicycles were well maintained was important since they were often used by the city's residents for travel to nearby communities and for recreation. This would be more common as the weather warmed during the coming weeks.

Mejen printed a copy of his assignment.

"What task have you?" Ket asked.

"I'll be testing and calibrating the air separators." Mejen replied as he took the position description from the printer.

"And so."

"Some time has it been since I've dealt with these. If they need adjustment, I hope I can do it." he said.

"I have faith that you will encounter, not, problems you can't solve." Ket stated.

"I would this." smiled Mejen. "At any rate, we all have to resubmit appointments occasionally. . .though to do so dents dignity."

"I know." said Ket.

They paused.

"You will run on the pathway this morning or go across country?" inquired Mejen.

"I'll stay on the path." Ket replied. He paused. "The remainder of the day, I'll simply see what occurs."

"And this. . . Aye." they said.

"I think" said Alyan, "that I might take a day free sometime soon and go skiing into the forest."

"This would be good."

"I haven't been much this winter." she said.

"Indeed."

"The trail up to the water station has been well skied." Mejen told her. "It's probably icy now, though."

"Aye." she said. "The next time it snows a bit would good be." She paused. "And, if snowfall were thought coming, check out items the day before, I could. . .and in morning, before sunrise, leave, and see the forest, snow-covered, in the early morning time."

"Quite! . . . And indeed."

"Perhaps company will you have." Mejen offered, indicating Ket and himself.

" 'twould be welcome."

Mejen folded his printout and rose. "Well Ones," he said, moving toward the door, "to breakfast will I be shortly."

"Okay Uncle. . . And so."

"Have a good run, Ket." he said.

"This will."

Mejen left the room.

"You will to breakfast now?" Ket asked Alyan.

"Yes." she said as she picked up her coat.

They exited the study, went to the stairway, and started down.

Alyan was six years younger than Ket. The two also had a sister who was three years Ket's senior. She had two children and lived in the same household as did their parents at the end of the next houserow.

"What were your activities last night?" Alyan asked.

"I was at Central Hall a while." he replied. "Then came home and went to bed early."

"Aye." she said. "You had bedded by the time I'd returned."

Ket nodded. "The orchestra must have rehearsed long last night."

"Yes, a while." Alyan said. "Yet I was later still. I worked on my solo for this moon's concert."

"In fact."

"I'll spend more time on it later in the week." she added.

He nodded. "I'm sure your effort will be, as usual, most fine."

Alyan smiled. "I attempt so." she said.

Ket nodded, then looked thoughtful. "How many straight concerts have you been in now?"

"This will, the thirtieth, be." Alyan answered.

"Quite." he said.

"Think you might join orchestra for one in the coming moons?" she asked.

"Oh, perhaps." replied Ket.

"Well, your expertise on trumpet or viola will always be welcome." she told him.

"You thanks." he said.

On the main floor, they heard voices coming from the house kitchen. They entered and found four of their housemates there.

"Hail all." said Alyan.

"Good day! . . . Morning's greetings." the others said.

"What type bread do you bake?" Alyan asked Jafi Noca.

"Oat-millet." she answered.

"I can help you with a thing?" Alyan asked.

"If you insist." interjected Ulen Varal, who was assisting Jafi.

Alyan looked at him with a purse-lipped smile. "Yet I do not take on burdens, only share them." she said.

"Oh." said Ulen.

"A quick cup only will I have." Ket said. "I run long this morning. To Ripnil will I go."

"Oh? . . . A distance." noted the others.

Ket got a cup and sat at the table with Fengog Taka and Jafi's brother, Ninx Noca. He poured himself some tea and put a spoonful of honey into it.

"How went it last night?" Ket asked Fengog, referring to the netball game, held the night before in Tall Pine.

"Teret won, but close." Fengog replied. "Twenty-three, twenty-two."

"Quite well." Ket told him.

"This so." said Alyan.

"You thanks." Fengog said.

"Well, keep winning, and Teret can be in the final at Annual Rendevous."

"Strive, we will." noted Fengog.

They were quiet a moment.

Then Ulen asked, "Ket, have you talked to Entekkin Charls of late?"

"A couple of days ago since." replied Ket.

"Know you if he plans to compete in strato-chess at 'Annual'?" Ulen inquired.

"Aye, he does."

"This well, as his skill in this is wide-known." Ulen said.

"Indeed. . . 'Tis well." the others concurred.

They paused briefly.

Then Jafi said, "Three or four years has it been since anyone from Teret has achieved place-first in an academic contest at 'Annual'. Perhaps someone, this year, can."

"Maybe."

Ninx had a sip of his tea, and looked at Ket. "Perhaps compete, you could, Ket, in veography." he suggested. "After all, a municiium ex-champion are you."

Ket laughed a little. "Yes, though I've studied but naught in the seven years since."

"Well, should you decide to try the exam, your studies you could review and know excellently once more." Ninx pointed out.

"This is true. . . And so." the others said.

"Much effort, it may not take, considering your previous efforts." Ulen noted. "Almost two moons do you have to update expertise."

Ket nodded. "Well, it might be amusing to try just for fun. And to review the knowing." He paused momentarily. "Do you think I should, then?"

"Why not? . . . You had as well."

He shrugged a little. "Okay."

"Most well!"

"Yet I would demand understanding when my placing wants glory." he stated.

"Forthcoming will such be in the unlikely event of this." assured Ninx.

"Truly!. . . It will!" the others noted.

Ket chuckled a bit. "How, into these things, do I get myself?"

The other laughed. "Have strength. . . Nay fear."

Jafi and Ulen had gotten breakfast ready; and while Alyan finshed putting out plates and utensils, they came to the table, sat down, and poured themselves some tea.

Soon, the household members would begin coming through for breakfast before going to work or to other activities. Today, there were scrambled eggs, oat-millet rolls, yogurt, dried fruit, and fresh fruit.

Alyan came to the table and sat down. "Incidentally," she said, "Cir Zinum is returned from Veopolis."

Veopolis was the planet's capital and, with a permanent population of 2500, was also the planet's largest city, being almost twice the size of provincial capitals. In addition to the full-time residents of Veopolis, there were typically two or three hundred temporary residents and visitors in the city at any given time.

"He has been away for a while, has he not. . . at the Institute?" asked Jafi.

"Aye," Ulen responded, "for about a moon."

"I hope his stay there was well." Alyan said.

"I wonder what they've learned about that radio source?" said Fengog. "It's in the star-group. . . Nalokon?"

"Aye." replied Ket.

"Interesting, 'twill be, to learn what they are finding out about this." said Ninx.

"Quite."

"Indeed, I thought to look him up him later today." Ket told them. "Questions will I pose, concerning discoveries."

"In fact. . . And so." they said.

"Well, if see him, you do, tell him to be no stranger unto our household." said Jafi.

"This I will." Ket said.

The group sat quietly for a few moments, sipping their tea. As he sat there, Ket's gaze fell on the household chores schedule which hung on the kitchen wall.

On this were noted which individuals would perform what household tasks on a given day.

Ket sat looking at the schedule idly for a bit. "You two are on house maintenance today then?" he asked, addressing Ninx and Fengog.

"Aye." answered Ninx.

"What do you?" Ket inquired.

"Oh, wash the solar room windows, check pipe and duct insulation, straighten the attic and basement, etcetera." Ninx said.

"Clean and oil the houserow vent fans probably." added Fengog.

Ket nodded.

"And in fact," requested Jafi, "would you check the shower faucet in the south washroom on the second floor? It's been dripping."

"This we can." Ninx said.

"I don't think anyone has entered this on the maintenance list." Jafi told them.

"Okay. . . Easily done." the two said.

"Of anything else does anyone know?" Ninx asked.

"Well, you might make sure the sink sprayer is in good working order." Ket told them.

"You've an interest vested in this?" asked Fengog.

"Aye. I do supper dishes." Ket smiled, nodding toward the chores schedule.

"Oh. We assure it will be."

"Most well." responded Ket.

In a moment, Fengog asked, "Ket, you will, then, compete in veography at 'Annual'?"

"Well. . . I guess so." he answered. "Anyway, why?"

"Uh. . . perhaps I will also." said Fengog. "This is knowledge, good to review, and we could study, each helping the other."

"Okay." Ket said. "This, so do."

"Quite." the others said.

"And find, we can, which others in town will try the test, so as to study with them also." Ket said.

"This quite."

Jafi nodded. "Indeed," she addressed the two, "we wish you well in the undertaking."

"We do. . . Aye." the others concurred.

"Thank you. . . We'll attempt knowing, much and true."

"And so!"

"Well. . . ," Ket said, finishing his tea. "I ought to my running."

"A good morning for it, I warrant." noted Jafi.

"This so." agreed Ket. He rose, taking his cup to the sink.

"You will pause in Ripnil or, directly, return?" Alyan asked him.

"Oh, probably will I stop there for a bit to drink." he replied.

She nodded.

Ket swallowed a little water, rinsed the cup, and started toward the hallway. "Very well, all. Go I. A good morning have."

"Okay, Ket. . . And you also." they said.

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Chapter 2

Ket left the kitchen and went to the rear entranceway of the house. There, he got a hooded sweat-shirt from his personal shelf and put it on. He then began some additional warm-up exercises. After a few centihours, he pulled the hood over his head, exited the house, and trotted off along the town-edge walkway.

He jogged to the pedestrian/bicycle pathway near the train tracks and turned onto this path, heading east. At the far side of the fields, he slowed to pass through the gate in the stone fence which surrounded the city and which helped to keep animals away from the crops and the orchards. He then continued toward Ripnil at an easy pace.

The sun was just edging the horizon. The air was cold but not particularly uncomfortable. The pavement of the path was free of ice except for an occasional shaded place. The trainway was a short distance to his right.

The pedestrian path closely paralleled the trainway with its two sets of tracks - one set for each direction traveled. This was generally true of all intercity pathways and trainways.

The sun rose above the horizon, and Ket found himself flitting in and out of shadows cast by trees near the trail. Birds chirped in the trees, welcoming the sunlight. As he approached a rise, Ket decided to stop and view the countryside from Standing Rock. Topping the hill, he left the path and jogged up to the so-named out-cropping some distance away. He climbed it and stood there.

The sky was almost cloudless, and the air was crystal clear. From his vantage point, he could see for many kilometers and he had a good view of Teret, now more than two kilometers away.

Central Hall with its turrets and observatory was prominent in the middle of town. The hall, also known as the 'centrum', was five stories in height with some turret tops and the observatory dome making up partial sixth floors. The hall was surrounded by several rows of houses. The houses were each four or five stories tall. Both the central hall and the houses were of stone. Ket's residence was the second house from the northeast corner of the city. He located the window of his room on the third floor. The train tracks ran along the south edge of town. Next to a shunt-track off the main trainway were a group of structures including a warehouse/ equipment storage building, a facility which housed various workshops, the city store, the food processing building, and the crop storage area. Opposite these buildings, south of the trainway, were three rows of greenhouses. There were four elongated greenhouses in each row. The greenhouses in the first two rows were used for growing vegetables. The greenhouses in the other row made up the city's sewage treatment facility. Set in the middle of the greenhouses was the town power station. The water tower, with its decorative spire, was just north of the power station. Fields surrounded Teret. On these were raised such crops as wheat, oats, rye, millet, potatoes, various kinds of beans and squash, spinach, cabbage, carrots, and lettuce. To the north was a large area of

orchards. There, apples, pears, apricots, peaches, and plums were grown. This fruit made up the major item that the community produced for trade. Other agricultural products, not used by the town's residents, were also important trade items. Near the outer edges of the fields, on each side of town, was a large pond. The fields were contoured so that the precipitation running off them was caught in these reservoirs. In the summer, this water was used for irrigation. Overflow ditches from the ponds connected with the precipitation run-off ditch from the town proper, forming a main run-off canal which ran diagonally across the south field to the town marsh southwest of the city. On the north edge of the city was an athletic area. The trainway disappeared into the forest a short distance beyond the west fields. It continued to the town of Augen, 15 kilometers distant. The entire community - fields and city proper - was surrounded by the stone wall which was 2.5 meters tall and about 2.25 kilometers long on each side.

Gazing about for a while, Ket noted features near and far. Everything stood out sharply in the bright morning air. He took an occasional deep breath. The scent was somewhat piney. After a while, he clambered off the rock, returned to the trail, and resumed his run.

He soon fell into a steady pace. Gradually, the rhythm of his breathing and of his feet padding the path as well as his passing in and out of the shadows of the nearby trees lulled him into somewhat of a reposed feeling. He was very cognizant, though, of the countryside surrounding him, enjoying it as he always did. Out of habit, he also remained aware of his own state, alert to any undue strain. He felt relaxed and covered the kilometers at a moderate gait.

Rounding a slight bend in the pathway, at one point, he surprised three deer which bounded a short distance off the trail, turned, and looked at him curiously.

"Nibi gaba!" he called to them nonsensically. They moved a few steps farther, turned, and stared at him again, ears aloft. Ket continued along.

The trail had separated somewhat from the trainway occasionally along the way; but now, the two were running close together. All along, on the outside edge of the pathway and the tracks, were ridges of snow which had been thrown there by the snowthrowers.

Ket wondered how much more snow they would get. The last moon of the year often produced quite a lot of snow. The weather was, however, noticeably warmer than it had been only a couple of weeks earlier. He saw evidence of this as he jogged across the bridge over the Heg River. The river was thawing. The ice and snow over the middle part of it was gone.

As he continued on, Ket exchanged greetings with a number of bicyclists. They were part of the normal daily traffic using the pathway between the towns. Somewhat farther along, a passenger shuttle hummed up on the trainway behind Ket and glided by, moving at about 80 kilometers an hour.

The pathway was used a great deal for travel between towns, most of this being by bicycle. The majority of individuals going from one town to another, though, rode the intercity shuttles which traveled on the train tracks. During the day, these single vehicles, each of which could carry twenty passengers, ran in a certain direction from each town every two hours.

Presently, Ket came to the wall surrounding Ripnil. He swung through the gate, and trotted toward the town proper.

Like Teret, Ripnil was ringed by fields and included a centrum surrounded by several rows of residences. There were also greenhouses, a water tower, a power station, storage buildings, and the like.

The city was waking up, and quite a few residents were on the walkways. Most were going to the centrum. Ket went to the building's west door and entered.

A town's central hall was the site of many of the activities of that town. It was where much of the work of the community was done, including administrative and educational functions. It was also the site of other activities, including athletic events, concerts, and dances. Also in the centrum was the community commissary - often referred to as the 'teahall' - which was always a popular gathering place.

This was the educational wing of the Ripnil central hall and there were a number of youngsters in the hallway chattering while waiting for their morning classes to begin. A bit farther on, three of the youngsters stood, playing their musical instruments. Two played violins and the third played a short wind-wood. They were surrounded by a group listening to them perform. The three played a traditional folk tune, and quite well. As he passed, Ket slowed, listening. He gave them an appreciative nod, and they smiled in response. He continued to the commissary.

There, he stood near the doorway and looked around the room which was, at this time of the morning, quite crowded. Ket had a number of friends in Ripnil, most of whom he had met through work or other activities. He wondered if any of them were here.

Just then, a female voice behind him said, "Good morning, Ket! Surprises that you are here."

Ket looked around. It was Netky Tanda, a friend he encountered only occasionally but whose company he much enjoyed. She was somewhat younger than Ket, being about Alyan's age.

"Day's greetings, Netky!" Ket smiled. "A morning run do I take."

"Aye. Busy, then, have you been." she said, pausing. "You will work in Ripnil today too?"

"Nay." Ket replied. "I thought but to get a drink and then return."

"See I." she said. "Shall we tea have?"

"Fine be your suggestion."

They went to the service area. Ket got two cups and spoons while Netky got them a pot of tea.

"Would you have something to eat?" she asked.

"I guess not since I've the return run."

She nodded.

Netky got herself two rolls and some butter, and they went to a table next to the wall and sat down.

"Do you work today?" Ket asked her as he poured them some tea.

"Yes, as clerk. We are beginning to collect information for this year's city performance." Netky said.

"Oh? Early have you started. Another moon will it be before we start ours."

"Well, we do a major evaluation this year." she explained.

"I see." he said. "As for us, we do a regular town examining."

Netky nodded.

Ket had a sip of his tea. "As a matter of fact," he said, "applied have I for the position of assistant director of our city analysis for the year."

"Oh?"

"Aye." said Ket.

"Do you meet, well, the qualifications?"

"Indeed, I only just have the required career-credits." he replied. "If get it, I do, it will be my first managerial position."

"And so."

"At any rate, the appointment will, this afternoon, be listed." he told her.

"I would you get it!" she said.

"You thanks." said Ket. He paused a moment. "In fact. How appears your town situation?"

"Well, from what we know so far, it looks like normal will be energy usage. For recycling, during the early moons, the weight of things that came into the recycling center was more than the weight of things that went out of the city store. So, we may end up with recycling more than a hundred percent."

"Excellent!" said Ket.

"And, through summer, plant matter sent to the fuel facilities, was ten percent more than average." she noted.

"Most well." he said, approvingly.

"We're glad of it." she said. "So, things seem sound."

Ket nodded.

The pair sat quietly for a moment.

"Me tell," she requested, "of your doings."

"Well, not much of news-note. Just working mostly." he answered.

"Have you been jogging much?"

"Some." he replied. "Mainly circling the town on the fence trail."

"And so." Netky responded. She had a sip of her tea. "What work have you done?"

"Well, for these weeks, several, I've worked mostly in maintenance. Also, I've helped with water-quality testing, been storekeeper. . . and, a couple of times, driven the pathway snowthrower."

"See I." she said.

"And you?" he asked.

"Let me see. Clerking in records, for the last three days. . . and which I'll do till after the new year. And since last I saw you, commissary assistant. . . and for a week did I operate an intercity shuttle."

"Quite." said Ket.

"But mostly, during the last two moons, I was announcer on the morning telecast."

"Indeed!" said Ket. "This well. I would liked to have seen you." He paused. "The telecasts are archived on the Ripnil comm-site?"

"Aye." she answered. "Keep them, we do, for six moons. So, watch a few you could."

"This I will." he said.

"Actually."

The two were quiet a moment.

"How's Alyan?" Netky asked.

"Fine she is. . ."

The pair continued speaking, Ket telling about Alyan and others, and the two sharing news about mutual acquaintances in their respective towns.

After a bit, Ket asked, "Enjoyed netball have you?"

"Aye." Netky answered.

"At your last two games in Teret was I. But I didn't have a chance to speak with you." Ket told her.

"That you attended, I am glad." she said. "And neither did I have much chance to visit with Teret friends while there. At any rate, a good season has it been. I've had a good time."

"And so." he said. "When's your next game?"

"Fifthday night in Meadowgrass."

Ket nodded. "Well, maybe your team will to the final, proceed, at 'Annual'."

"Actually, I'm surprised we've done so well." she responded.

"Truly. You've a fine club." Ket noted. He paused. "And. . . well-very have you, yourself, done in the games I've seen you in."

Netky smiled. "You thanks. Try I."

They were quiet a moment.

"Your activities have been good." Ket said.

"Liked them, I have." she responded.

Ket nodded. "And, participate in town-team kickball, will you?"

"Oh, perhaps." she answered. "And you?"

"Not sure." he replied.

She sighed. "I like kickball, but always it seems that I get kicked more than the ball!"

"I understand this well."

Netky had some of her tea. "Actually, I think I'll remove from extra doings this spring, to have more time free." she told him.

"Aye." he said. He was quiet briefly. "I took on an extra doing this morning."

"Oh? What doing?"

"I agreed to compete in veography at 'Annual'." he told her.

"And so!" Netky responded. She paused. "First place in the municium were you in this a time." she observed, "What year was that?"

"Eight seventeen." he answered.

"Seven years ago."

He nodded and had some of his tea. "Six times in all have I been in this. Four times before my championship, with my placings moderate in these, and one time since, in eight nineteen, when third, I finished."

"Indeed." she said. "So then, watch, I will, the outcome of your endeavouring. Sure, I am, that you will bring honor unto yourself."

He chuckled. "Well, we'll see."

"Best fortune." she wished him.

"Thank you."

They sat silently for a few moments. Ket watched Netky as she sipped her tea and finished her roll. She had excellent carriage and bearing. Her face was high-lighted by her bright eyes and framed by her long, pretty hair. As he watched her, he had no doubt that she would make Aurora, or mother-normal, when she was given her eugenics evaluation in a year or two.

He, himself, had taken the evaluation two years earlier and had not met all the allergies standards. While he had passed the other basic criteria, scoring at the population average in most general health factors, emotional stability, and intelligence, the degree of his allergies had warranted his being named father-conditional, or Alpha-c. This meant he could father just one child. He had been somewhat chagrined by this, but he recognized the value of the standard and had quickly come to terms with his result.

Netky looked up and caught Ket's gaze. They smiled at one another.

"That we happened into each other is fortune fine." she said.

"In truth." agreed Ket.

Netky picked up the teapot and refilled their cups. "A while has it been since I have, here, for breakfast, been." she told him. "Then, this morning, I just decided to."

"And I did decide, and arbitrarily this, to come here for a run. A good coincidence." Ket noted.

"Aye." Netky concurred. She paused momentarily. "And your jog over was well?"

"Yes and quite." he replied. "Early, I did start. The sun rose, the birds sang, the woods were 'round about."

"Actually." she responded.

They were quiet briefly.

"Did any animals-big you see?" Netky asked.

"Yes. Some deer." he answered.

She nodded. "No elk, then?"

"Nay." he responded.

"Indeed, a large herd has moved into the area."

"Oh?" he inquired.

"Aye. Late yesterday afternoon, heard we that out just beyond the north fence were they." said Netky, indicating the direction. "We-several ventured out to, them, see. They were more numerous than a hundred."

"In fact." said Ket.

"This is the first bunch to move through that I know of." said Netky.

"Aye." he said. "It's the first of which I've heard."

"Perhaps some will you see, on the way back." Netky said.

"Maybe." said Ket. "Watch for them will I."

They continued to visit, speaking further of their respective activities and mutual acquaintances.

After a bit, Ket looked at Netky a bit shyly and mentioned, "Netky. . . we haven't visited for a time. Uh. . . most honored would I be if you would come to Teret this Sixthday, were you free. Speak, we could. And you could catch up with your Teret friends. . . Alyan and others. There's a netball game with Augem in the afternoon. It, we could attend. Anyway. . . I would like this, if you would like this."

She smiled and looked down. "Well. . . perhaps."

"You don't need to say now. Let me know, you could."

"Nay, that's fine." She paused a moment. "No obligations do I have Sixthday. No chores required or other."

Ket paused. "Should you so want, I would be honored."

She nodded affirmatively. "Okay."

"Quite." he said.

"When would you like me to, there, be?" she asked.

"In morning? I could meet you at the shuttle at a time of your choosing."

"All right." Netky said. "The one at, oh. . . nine twenty-five?"

"Indeed. I'll there be." he told her.

"Most." Netky said.

They paused.

Increasing numbers of others in the commissary were beginning to get up and start toward the door.

Netky glanced at the clock on the wall. "Seven-ninety it already is." she said. "Time to the office."

"And so."

The two finished their tea. Then, gathering their utensils, they rose.

"I'll walk up with you." Ket offered.

"Pleased." she said demurely.

They returned the utensils to the service area and left the commissary, going into the hall. They went to a nearby stairway and ascended the stairs to the fourth floor. Here, they went past a number of rooms in the administrative area until they came to the records office. They stopped.

"Well," Netky said, "glad, I am, of our encounter."

"In fact." he said. "A seeing fine."

"'Hi' to Teret-friends say."

"I will and reciprocally." said Ket. "I'll call. And, you, see on Sixthday."

"Aye and well."

They clasped hands briefly. She then went into the office, turning to wave as she went. He waved, then started along the hallway toward the west wing of the centrum.

Quite a number of individuals were in the halls, most going to work. As was the case in Teret, the fourth floor of the Ripnil central hall served as the administrative center of the city. There were several offices on the floor. As well, there were a few classrooms and the city news office.

Ket walked to the stairway at the west end of the hallway. Here, he paused. On a whim, he decided to have a look at the floor above. He went up the stairs to the fifth floor. There, he walked through the hallways to the north side of the building. On the way, he passed the music rooms and a couple of meeting rooms. He also went by the keyboard room for the town chimes. As he continued on, the chimes began to sound, signaling that it was now 800, though this chiming was done automatically. Farther along, he came to the observatory.

Opening the door, Ket went into the observatory study. He looked into a short hallway on one side of the apartment. It led to two office/workrooms. Off the other side of the study was a room containing some instrument panels. No one was present. He went to the spiral stairs in one corner of the room. Climbing these, he raised the hatch at the top and entered the dome that housed the telescope. The telescope there was much like the one in Teret. It was about two and a half meters long. Ket examined the telescope and looked around the dome for a few moments. Then, he went to the door in the side of the dome which led onto a balcony.

Outside, he had an good view of much of the town and of the surrounding countryside. Going around to the east side of the balcony, he spotted the house, two house-rows away, that he had helped build the summer before. Continuing around, he located several of the other communities of the municium. Far to the south, lay the flatlands of Vorda which were uninhabited. To the west and a little north, he could see the tops of some of the buildings in Teret. To the north, beyond Ripnil's fields and orchards, wooded slopes rose, marking the edge of the taiga.

After a while, Ket re-entered the dome. He went back down the stairs, closing the hatch above him. After looking around for a moment more, he left the observatory and continued on.

A short distance along the hallway was the city's television station. He paused and looked in. There were two individuals still in the studio, finishing some work following the morning newscast.

The morning newscast, like the evening one, covered Veodon's news from the planetary level to the local level. Besides reporting events of interest the telecasts often included documentary segments on various topics. These might include stories on the natural world, technological developments, or an individual. Most of the stories making up the newscasts were done by the information departments of individual cities. If these stories were considered to be of interest to a broader audience - for example, province-wide - then they would be carried by the stations throughout that area.

Other stories originated at World Information Central in Veopolis. Individuals were encouraged to contact 'World' about any event or development that was thought to have planet-wide significance so that a story concerning this could be compiled. Such a story would then be

telecast by the city television stations as part of the news-hour. Reports from 'World' were sent to the individual towns of the planet as often as necessary to keep the information departments up on significant, planet-wide news.

Ket said hello to those in the studio and proceeded along the hall. In the southeast part of the building, he passed the guest-room area. Farther along, in the south hallway, he came to the city's small natural history museum.

Here were displays of some of the plants and animals of the area and exhibits dealing with a number of topics such as the area's topography, biological distribution, and climate. Also, there were displays which dealt with the history of Ripnil and with the economics of the town and the locality. A number of examples of local wild and cultivated plants were growing in the museum solarium.

Ket continued his tour. He descended the stairs past the fourth floor to the third. Here, he passed some offices and the town computer center and came to the third floor of the Ripnil library,.

Entering the library, he browsed briefly through a couple of the aisles, then went to the stairs, and descended to the library's second level. There, he again browsed through the books before leaving the library and continuing around the second floor. At the entrance to the second level of the city's auditorium, he paused and entered. Going to the edge of a balcony, he looked around.

The auditorium was not especially large, but it would accommodate a good-sized audience. He looked at the third floor section of balconies and at the stage and the large organ pipes on the wall behind it. The scene reminded him of the several fine concerts he had heard here.

In a moment, he returned to the hall and went to a stairway. Descending to the first floor, he passed the athletic practise rooms, the emergency care clinic, the main floor of the library, the first floor entrance to the auditorium, and the main gymnasium. Continuing along, past the commissary and the classrooms of the education wing, he exited the centrum through the door he had entered earlier.

Walking to the south side of the building, he began some calisthenics to warm up before starting the return trip to Teret.

Ket had not worked in Ripnil since the summer before when he had spent a couple of weeks helping with the construction of the house he had viewed from the observatory balcony. He was glad that he had had the opportunity to have worked on the project. He decided to go and look at the house again before leaving town.

Finishing his warm-ups, he jogged to the east part of the city to the houserow on which the house stood. He trotted the short distance to it.

The building was a typical residence 10 by 29 meters, four stories tall, with a stone exterior. It was designed to house 36, but could comfortably house considerably more if individuals doubled up in bedrooms. In actuality, the house was likely home to from 25 to 30, as was generally the case. Ket's household, for example, was one of 29. A partial fifth floor on the house enclosed a

storage area and the solar heating units which pre-heated the household water and warmed the air which was drawn through the house by vent fans set in the subterranean utility corridors. These latter ran beneath all the city's buildings. The previous residence had served for seven or eight generations but had developed some structural weaknesses; and so, the decision had been made to reconstruct it. Construction projects of this extent were uncommon and occurred in the municium only once every three or four years. The house had been largely dismantled, and the new one built, using much of the same material. The new house was very similar to the old one. It was sturdy and well-constructed and would serve for many generations.

Ket looked the house over for a few centihours before returning west across Ripnil to the pathway back to Teret.

By the time he passed through the gate at the town wall, Ket was quite warm and was moving along at a steady, comfortable pace. The temperature was probably three or four degrees above freezing (centigrade). Just right for running. The gradual increase in elevation after he crossed the Heg River did not bother him much, and he padded easily along.

As he went, Ket wondered about Netky. He and Netky had been friends and fond of each other for some time. They visited only once every moon or two. When they did get together, though, they enjoyed one another's company. He wondered if she had any additional special associations. He thought she still had two. He would ask when next they spoke.

Special associations were affectionate friendships between males and females which involved more emotional bonding and physical intimacy than regular male-female friendships. Actually, the phrase was used rather loosely, but this was what it was generally understood to mean. Most such friendships developed during the younger years, and the bonds were permanent.

In addition to special associations, there were the formal Aurora-Alpha matches, the purpose of which was to beget young. These were normally the most highly bonded of the male-female pairings, though special associations could sometimes be as highly bonded.

Ket had two 'specials'. He thought of them as he continued along.

There was Teka Didriku. Teka was a housemate of Ket's. She was an excellent musician. She could play virtually any musical instrument and also had a very fine singing voice. Like Ket, she had not passed her eugenics evaluation for aurora-normal due to allergies, and, so, was an aurora-conditional. She was presently the supervisor of Teret's News Division on a long-term assignment. Ket had not seen her this morning because she was in the habit of leaving early in order to be at the television station for the morning newscast. She liked sports, though she usually played informally, in pick-up games or in an occasional intramural game, rather than on town-teams. She had a wide range of interests. Her natural charm was emphasized by her soft voice and her mild, yet enthusiastic manner. One of her other 'specials' was Ket's friend, Cir Zinum, of whom he and his housemates had spoken earlier.

And there was Eufonar Linzin. Eufonar was the fastest female runner in Teret over distances of 500 meters or less. She was an Aurora and had one child, a young daughter. Few knew as much

about nature, and she loved going on long hikes. She had once been treed by a sow bear with cubs. She had an intriguing way of cocking her head to one side when trying to understand something or to make a point. She was, Ket thought, exceptionally versatile, being at home in a great many activities. She had an endearing, winsome manner. Her attractiveness was augmented by - crazily - her slightly crooked nose; as well as by her shy passion.

Ket smiled thinking about the two. He was glad that he had them as 'specials' and felt very fortunate in this. He wondered about Netky and whether he and she might someday be 'specials'. This was possible. At any rate, they were good companions and good friends, and Ket was glad about this.

Ket continued along in a reverie on these matters until he heard a low engine sound behind him. This would be the cargo train. He glanced back occasionally to see it when it came into view.

The train was on its twice-weekly run from Meadowgrass to Riverside and back. Soon it appeared, traveling at about 50 kilometers per hour - a puller and four cargo cars. The train was powered by methane fueled engines. The methane was compressed into tanks. There were also tanks of compressed high oxygen air. Enough fuel and air was carried to power the train for the length of its route. Its axles rode on magnetic bearings. On the side of the first two cargo cars were signs reading "Riverside". Riverside was 14 kilometers south of Augen and was the last town on the train's route. On the third was "Augen" and on the fourth, "Teret". These cars contained cargo for the towns designated and were detached as the towns were reached. As was the case with the intercity passenger shuttles when these were cycling through the municiium, cargo trains turned around at the community on their route farthest from Meadowgrass and retraced their paths. So, at Riverside, this train would turn around and travel back to Meadowgrass, picking up out-going cargo cars, if there were any, at each town between.

Ket waved as the train went by. He wondered what was in the cars. They could contain a variety of things, from mechanical equipment to oranges. There were more cars today than on most days, he noted.

This was often true on days when supplies came from Taras, the provincial capital. Normally, all the cargo for the towns on a route could be combined into one or two cars.

Ket continued along at a steady pace. He was becoming quite warm now, so he pushed his hood back. Looking up, he watched some branches pass by against the blue sky above. He hoped to see some of the elk of which Netky had spoken or some more deer but saw none, though he did see the usual rabbits and squirrels. A number of birds were active in the trees. A bit farther on, he spotted an eagle perched in the top of a large, dead pine on the opposite side of a clearing that the pathway skirted. As he passed, the eagle rose, flapping its wings majestically. The bird circled toward the north, gradually gaining height. Ket watched it until his view was blocked by some trees.

A bit farther along, Ket passed the only intersection in the trainway and pathway between Teret and Ripnil.

Here, a set of train tracks and a pathway connected with the main trainway and path. These tracks and pathway led to one of the fuel/livestock facilities of the municiium, or ranches, which lay 5 kilometers to the south. There were 15 ranches in the municiium for meat, milk, and egg

production. Also at each of these sites was one of the municium's 15 methane production centers. (To be discussed later.)

Each of the sites was about 650 hectares (1600 acres) in size and each was home to several horses, for herding; a dairy/beef herd; a chicken flock; hogs; often, a sheep herd; a fish-farming operation, raising mostly tilapia and some catfish; and, at times, lesser numbers of other animals such as geese, ducks, and turkeys. Hogs and poultry were more confined than cattle, sheep, and horses, but with enough area so that they were, to a large degree, free-ranging. Too, their areas were changed regularly. Hay and grain for feed were raised mostly at the ranches, but some might come from the town farms. The whole of each of these sites was surrounded by a tall stone fence similar to the ones that surrounded each town-site. The purpose of these was to keep livestock in and predators out.

Often, cattle and sheep would be herded to a town-site and, along with horses, would be allowed to graze on the fields there.

While those on Veodon did not eat a whole lot of meat, they did eat meat. Their diet also included milk, milk products, and eggs. Consumption of eggs, milk, and such items as cheese, yogurt, and cottage cheese was common and pretty much daily. Meat consumption was usually moderate except for the feast on the last day of the week, Skyday. During this feast, an individual might eat as much as a half a chicken or a half kilogram of beef, pork, mutton, or fish. Most meat eaten at other meals throughout the week was mixed with beans or rice, or was in various casseroles.

When animals were dispatched for meat, they were killed quickly by being shot in the head with an electromagnetic rifle or by electroshock. Everyone had to participate occasionally in processing animals for meat, though doing this was not very appealing. But, it was understood that these animals had had a chance to be alive; had had good lives while alive; and, when the end came, it came unbeknownst and quickly.

Of course, there were numerous jobs at a livestock site besides meat processing that needed to be done, such as raising grain and hay, feeding, herding, milking (done by hand), etc. Everyone of working-age worked for a period of time each year with the livestock. This period was typically about 3 weeks for males and 1 week for females.

As he padded on toward Teret, Ket wondered if there might be any part-day positions remaining on the job list when he got back to town. He decided he would check, and perhaps take a job if there were one he could finish in short order.

As he neared Teret, he picked up his pace. It felt good to go faster, and he covered the last kilometer before reaching the city wall fairly quickly. Swinging through the gate, he jogged at an easy pace to the edge of town and along the walkway home. He walked around for a few moments to catch his breath and then went in.

KET'S DAY

Chapter 3

Ket went through the hall to the stairway, greeting, as he passed, those in the kitchen - mostly a different group than had been there earlier. Going up the stairs and to his room, he took off his knit-jacket, his pull-over and his shoes. He then went to the washroom.

There, upon flushing the toilet, he depressed a handle which kept a trap at the bottom of the bowl open and water swirling into the bowl as long as the handle was held down. After washing his hands with the citrus rind soap - the smell of which he greatly liked - he sponged off, washed his face, and combed his hair. He then started back to his room. The other ten bedrooms on the floor appeared empty. Back in his room, he dressed in his 'everydays'.

These clothes were what everyone wore on a daily basis. They were made of cotton and included shirts which pulled on and were commonly denim, flannel, or knit, and pants, also of denim. These garments were simple, loose-fitting, and comfortable. Also, they held up well and were practical. Like the 'everydays', more formal clothes were usually made of cotton, though these could be of other materials, and were typically less modest than were the 'everydays'.

Once dressed, Ket exited his room and went down the hall to the floor study. Going to the desk there, he sat down, and switched on the computer. He accessed the jobs program and entered "JOB LIST - TERET". A list of job titles and other information appeared on the screen.

JOB LIST

Place: Teret, Province Vacea

Date: 11-23-824

Start	Duration	Title/Job No.	OPEN	Cr/Hr	Assignee
Now	2 dy	Clerk/7		1.42	
	5 " apx	Painter/41		1.95	A
	2 "	Plumber/44		2.28	A
	1 "	Clerk/49		1.75	A
	" "	Laborer/181 (Warehouse)		1.57	A
	pd 1 yr	Communications Technician/304		1.28	
	" 1 dy	Utilitarian/255		1.34	
	" "	" /270		1.35	A
	" "	" /293		1.34	

12-1	1 mn	Teacher (Mid-lev social st)/12-1-1	1.12	A	OPEN
12-22	3 wk	Project Director (City Anal)/12-22-1	1.29	A	OPEN
	"	Asst. Project Director (City Anlys)/12-22-2	1.14	A	OPEN
1-5-25	2 yr	Asst. City Admin/1-5-1	1.25	A	OPEN

The 'A' next to the credit rate column indicated that at least one individual had applied for that position.

For those jobs which began at present, applications were taken and evaluated during each quarter-hour period from 600 to 1000. The positions were actually open for application for the first 18 centihours of each period. This was indicated by the word 'OPEN' appearing at the top of the list. At the end of the 18 centihours, the 'OPEN' would disappear and there would then be a two or three centihour evaluation period after which the job would be assigned to an applicant.

This evaluation was performed by the town's central computer. Such factors as education, the length of time which had elapsed since one had held a similar type of job, and experience were weighed in making position appointments. Often, inexperience in a field would make it more likely that one would be given an assignment, providing one met the basic requirements for the job. This was the result of personnel policy designed to give as many individuals as broad a range of work experience as possible.

At the end of the evaluation period, the name of the individual assigned the job would appear in the assignee column in place of the 'A'. The assignee then had four or five centihours to confirm the position. If the appointment were not confirmed by the end of the quarter-hour period, the position would remain on the list to be reapplied for. If the job were accepted, it would disappear from the list. At the end of the quarter-hour period, the names of any assignees who had not accepted appointments would be cleared and the 'OPEN' would reappear.

After 1000, the jobs were simply assigned immediately to the first applicant.

For those positions commencing at a future date, each would remain open for applications until such time as indicated in its job description. These job descriptions existed for each position and could be viewed.

The salary, or credit rate, for a certain job varied according to the number of individuals who applied for that position. The greater the number applying, the less the rate would be. This decrease did not start, however, until the sixth application was registered. If no one applied for a certain job so that it carried over into the next application period, the rate for it would increase. Besides being affected by the number of applications received, the rate for a certain position was also affected by such factors as the skill required for the job, its difficulty, its danger, and the

urgency with which it needed to be completed. All of these factors were reflected in the credit rate adjustment for a certain position. This figure was multiplied by the standard worth, in credits, of an hour's labor in order to determine the wage for the position.

Ket looked at the clock on the desk. It was 993. He decided to wait until after 1000 and see, then, if any of the part-day positions would still be available. While waiting, he clicked on 'Utilitarian/255'. The screen cleared, and the job description appeared.

JOB DESCRIPTION

Job Number	255
Position	Utilitarian
Department	Utility
Application Period	600, 11-23-824 to assignment
Commence	Upon assignment
Duration	2 to 4 hours
Cr Rate Adjustment	1.08
Salary	1.34 credits/hour 2.68 credits minimum
Requirements	Age - 18 years minimum
Duties	Inspect greenhouses 3, 4,7,8,11,12; note any deficiencies; perform general janitorial tasks in service areas. Inspect greenhouse utility corridors, note.
Comments	Refer questions to Supervisor, Maintenance Div, Utility Dept, Ext 8330

He noticed that an age requirement was mentioned.

Unless otherwise stated, all positions had a minimum age requirement of 20; though, of course, younger individuals were expected to perform a variety of tasks, especially in the household and in agriculture.

Ket decided to try for this job for the day. He believed he could finish it in a couple of hours, maybe less. He recalled the job list and sat, looking at it.

As he had told Netky, he only just had sufficient earned career credits to qualify for the city analysis opening. Nevertheless, he believed that he might get the assignment due to his inexperience. He decided to look at the position description. He clicked on the job name. The description appeared on the screen.

JOB DESCRIPTION

Job Number	12-22-2
Position	Assistant Project Director - City Analysis
Department	Utility
Application Period	600, 11-9-824 to 1200, 11-23-824
Assignment	1300, 11-23-824
Confirmation Limit	1700, 11-23-824
Commence	800, 12-22-824
Duration	12-22-824 to 1-9-825
Cr Rate Adjustment	0.92
Salary	1.14 credits/hour 100 credits minimum
Requirements	Career credits - 35000 minimum Educational - Certificates General Academics Industrial Crafts Administration Technology

Duties

Assist director in overseeing city analysis. Aid in collecting information concerning 1. energy and materials usage, 2. recycling, 3. hours labor, and 4. agricultural production during 824. Assist in directing the activities of 6-8 individuals. Help compile a report to be submitted to city administration by 1-9-825, giving above information and, possibly, suggesting improvements in operations.

Comments

The report will be the statement of community productivity for the year and will be used, together with other city analyses, in determining planetary productivity.

Refer questions to the Director, Utility Dept, Ext 8300

Ket knew that if he got this assignment, he would be busy while it lasted. He returned to the job list. There was now a name beside each of the day's openings for which someone had applied. While he watched, a number of these disappeared, having been confirmed. He looked at the clock. There were still a couple of centihours remaining before 1000.

Sitting there, Ket clicked, out of curiosity, on a number of the jobs that were listed in order to see the job descriptions. This included the teaching position. He knew that a couple of his housemates had applied for this job. He thought it would be an interesting job for the moon that it lasted, though he knew he did not qualify for the position due to his not having had the applied course in education. He thought he might

take this course in the future. In any event, this was one of the occasional jobs for which his education did not qualify him.

Ket's education was an average one. He had completed several applied courses - administration, agriculture, technology, and forestry. Too, he, like most individuals, held the certificate in general academics and the certificate in industrial crafts.

Ket smiled as he remembered his taking the examination for the general academics certificate, years before. He had been rather lax in his studies and had not passed the exam the first time he had taken it.

He had scored below the required 92% correct answers on three of the test's nine parts. A score below this minimum on any part of the examination precluded ones passing the entire test.

Ket had been embarrassed about this, especially since all his friends who had taken the exam had passed. He had been further chastened by his parents making him withdraw from junior sports for the duration of that season in order to study for a retake of the test. This had been humbling, but he had studied hard and passed the exam when tested again a few weeks later. He chuckled at the memory. He had learned an important lesson in self discipline that spring which had served him well since.

The complete education program consisted of four parts. These were 1. the academics course, 2. the course in industrial crafts, 3. the applied courses, and 4. the training in personal and social skills. All these, save the applied courses, were required.

Besides the basics of reading, writing, and arithmetic, the academics course provided a good grounding in the sciences, mathematics, history, and the arts, especially music. One normally began this part of ones education at about 10 years of age and completed it at 18 or 20 upon passing the examination in general academics. This test consisted of sections on agriculture, biology, chemistry, history, mathematics, physics, social/psychological studies, veography, and veology. Those who passed all portions of the exam received a general academics certificate. Those who could not pass all these tests in three tries, or who simply preferred not to take the general academics exam, could take another exam which covered reading, writing, and arithmetic. Those passing this exam would receive a basic academics certificate.

In the industrial course, the students, who were typically in their teens, developed proficiency in a number of fields. These included animal husbandry, carpentry, cooking, crop and garden practises, drawing and drafting, electricity and electronics, equipment maintenance, firefighting, first aid, food processing, keyboarding, machining, masonry, painting, plumbing, shoe and boot making, surveying, tailoring, and welding. The operation of various vehicles was also covered. They learned to operate the cargo trains and the passenger shuttles. Most already knew how to operate tractors, but those who did not were taught.

Applied courses made up the next part of the education program. These courses generally lasted from one to three moons. They included courses in administration, agriculture, economics, education, engineering, health care, information and communications, natural resources, recreation, and technology; and certain specialty courses such as forestry, drama, and maritime transportation.

In addition to formal educational activities and applied studies, scholarly pursuits and research were also considered important parts of ones education. Besides his regular education, for instance, Ket had completed one original research report. He had done this when a member of a 2-moon long scientific expedition on which he had been a part-time researcher. (He had served as a general expedition worker during the remaining portion of his time.) The report had been a veographical study of a portion of the remote northern reaches of the Skala Plateau, Jind Continent. It was on file in the library at the Veodon Institute of Science and Technology, and the information it entailed was part of the universal information database.

The personal and social skills which were covered in the education program included health and nutrition, fitness, wilderness survival, and sex education.

Ket looked at the time. It was 1003. He pressed a button, recalling the job list and noticed that most of the positions still listed after 1000 had a name beside them, the applicant assigned the position. He leaned back and watched as the jobs were assigned, interested in who got what. The positions disappeared from the list as they were accepted.

He noticed that the communications technician position had not been taken and remained on the list.

This job would be in the city television station and would involve working during the evening telecast and, maybe, during the morning newscast.

While Ket watched, a name appeared in the appointment column. Ket smiled and looked a little surprised. The assignee was Kinga Rafin. Kinga was one of Teret's handicapped individuals; he being mentally retarded.

While the community made every effort to integrate all those who were handicapped into the work-place and they had as good a chance of getting an assignment as did anyone as long as they were capable of doing the work, Ket was still a little surprised that Kinga would be assigned a technician level job. Actually, though, unless something went wrong, there was little to this position other than making sure the camera was aimed properly and that the picture being broadcast was clear. Besides, Kinga was a regular at all the Central Hall hangouts, including the television station, and was undoubtedly familiar with the procedure. Too, he would have plenty of help from the others in the studio if he should need it. After a moment, the listing disappeared as Kinga confirmed the assignment.

"Well achieved, Kinga!" bade Ket.

The custodial opening that Ket had considered earlier was still available, so he typed an application.

Utilitarian/255
KET-TINLA RITT
M-788-2-54-12-124

He entered the application. After a short pause, his name appeared in the assignee column next to the job number. He clicked for the job description. The screen cleared and the description appeared. He clicked the confirmation tab. A line appeared at the bottom stating: "ASSIGNED: KET-TINLA RITT, M-788-2-54-12-124. 1007, 11-23-824". He obtained a printout of the description and then recalled the job list. The list reappeared on the screen, and the position he had just accepted had disappeared from the list. Ket sat back in the chair looking at the assignment printout. He noticed that the credit rate for the position had increased after the last quarter-hour period. It had gone up 9 centicredits to 1.43 credits per hour with a minimum for the job of 2.86 credits.

Had the position remained untaken, the rate for it would have stayed at this level for the remainder of the day. In the morning, it would have been listed once more with the rate starting at this amount. Again, the rate would have increased after each application period until 1000. Of course, the higher the rate climbed, the greater became the likelihood that the job would be taken.

Swiveling around, Ket looked out the window. It was a nice day. Except for a few fleecy clouds, the sky was clear. He turned back to the computer, cleared the screen, and requested the weather information for Teret. It appeared.

CURRENT WEATHER

Place	Teret, Province Vacea	Date: 11-23-824
Time	1011	
Temperature	8	
Humidity	21%	
Forecast	Continued fair	

Ket rose and turned the computer off. He folded the printout of the job assignment and put it in his pocket. Then, returning to his room and picking up his coat, he went to the stairs and headed down them to the kitchen.

KET'S DAY

Chapter 4

Entering the kitchen, Ket found three individuals: Meva Noca, the sister of Ninx and Jafi Noca who had been here earlier in the morning; Buf Nevik, a young mother; and Tilriny Nevik, great-grandmother to Buf.

At 128 years, Tilriny was Teret's oldest citizen. She had surpassed the average life expectancy by 26 years. She was venerated by everyone. Her calm poise at the edge of a great unknown was an inspiration to all.

Ket greeted them, bowing slightly to Tilriny.

"Morning good! . . . Day's greetings." they said.

"Have you run?" asked Meva.

"Yes." Ket replied. "I returned just shortly ago."

"You will breakfast have?" she asked.

"Some, aye." said Ket, walking to the cabinet. "A part-day assignment do I have. . . custodial work at the greenhouses."

"And so."

"Dinner will I have at the commissary, afterwards." he said.

"Those are wheat-millet rolls on the stove." Buf told him. "They were baked while ago for late breakfast."

"Quite." Ket said.

He put three of the rolls on a plate along with an apple and an orange. He then got a cup from the cupboard and joined the others at the table.

"Where is the youngest of our household?" Ket asked, referring to Buf's year-old son.

"In the south room, he is, asleep." Buf answered.

Ket nodded.

"How was your run this morning?" Tilriny asked.

"Quite well." Ket replied. "To Ripnil, I went."

"A long run this day." noted Tilriny.

"Yes." he said. "I did stop in Ripnil for a time. I happened into a friend, Netky Tanda, and we, together, had tea."

"Oh? How is Netky?" asked Buf.

"Fine." replied Ket. "We visited until her work."

"What position has she?" Buf asked.

"A clerk she is, helping to collect information for their city analysis."

"I see." Buf said.

"Do you know her?" Ket asked Tilriny and Meva.

"By sight do I know her." Tilriny answered.

"As with me." said Meva.

"We met when we were both working in the Ripnil fields one summer." Ket told them.

"A charming one." noted Buf. "And oft active in doings. She's playing netball."

"Aye." Ket confirmed.

"In activities will she be this spring?" asked Buf.

"Perhaps." Ket responded. "Though she isn't sure yet."

Buf nodded.

They were quiet a moment. Ket placed some olive oil and some butter on a roll and began to munch it.

Looking thoughtful, Tilriny asked, "Ket. . . Netky's paternal pedigree, is it Acon?"

"Aye." replied Ket. "She is out of Kanki Tanda by Vor Acon."

Tilriny nodded. "Yes. Somewhat familiar, I am, with those families."

They paused briefly.

"Has she taken her parenting evaluation?" Meva asked.

"Nay. In a year or two she will have it." answered Ket.

"See I."

In a moment, Buf said to Ket, "The day we worked in the orchard at Riverside, summer before last?"

Ket smiled. "Aye."

"A group from Ripnil was there, Netky among them." Buf told Tilriny and Meva. "Ket tried to throw her into a pond, but he lost his balance and went in instead."

They smiled.

"Actually, everyone ended up in the pond, eventually." Ket explained.

"True this." Buf admitted. "Indeed, after Ket went in, a great struggle ensued. . . and it continued until all had met with water."

"Truly." noted Ket. "Even Emeritus Yen from Riverside took part. And he of over a hundred years."

"Oh?"

"Indeed." Buf said.

"At length, he also met with pond." said Ket. "This was no easy matter, though."

They laughed.

"That was the same day that the tractor we were using broke down and the next one ran out of fuel." Buf said.

"Aye." said Ket.

"So," she explained, "we ended up pushing two tractors and a wagon load of apricots back to town by hand. . . Still, it was a day most well."

"Truly." agreed Ket.

"And that night several of us did sit under the stars on a high balcony of their centrum. . . and talk of many things, and of Being." Buf remembered.

"A fine day." Ket said.

"'Twas." Buf concurred.

The group sat quietly a moment.

Meva had a sip of her tea. "You mentioned those tractors breaking down. Last night did we-several speak interestingly at the teahall. . . about technology."

"Oh? . . Of which?" they asked.

"The value of automation." Meva replied. She paused. "Our speaking was in response to the idea before the World Council to require any newly adopted technology for everyday purposes to be no more complex than that which it replaces."

"Indeed. . . Tell us of your talking." they urged.

"Well, technologies and automations do we have."

"Aye. . . Yes."

"So, Naka Uxen took the position for and argued that much more should automated be. . . though he did so only for debating as he does not actually subscribe to this view." explained Meva.

The others nodded.

"Well," Meva continued, "we talked about what individuals would do in a much more automated world, how hard it would be to maintain the devices, and whatnot."

"Aye."

"We pointed out that the more automated things were, and were something to go wrong with something key, which could not be easily repaired, or repaired at all, then people would be left without means." she said.

"True." they agreed.

"It could be almost certain that something much needed in the automating would fail at some time, leading to untoward results." said Meva.

"Likely quite. . . Yes."

"And the more automated things were. . . and the longer things were automated, and much so. . . the less knowledge and experience would individuals have to do vital tasks manually."

"Indeed."

"And even if, people still had equipment available to carry on agriculture and manufacturing in a more manual way and, also, what they would need to hunt game, they might lack the knowing and not be able to do these things." she explained.

"Possible. . . Agree I." said the others.

"So basically. . . if the automation broke down with people overly dependent on it, they might perish, or many might before learning to do for themselves." said Meva. "We held that the better way would be to keep necessary functions in our own hands. Naka could not this refute."

"And so."

"Indeed," continued Meva. "we questioned whether we might, even now, be too far out on a limb. After all, much using are we of methane fuel, electricity, and various devices. But, most seemed to think that we have a good balance of technology and our own labor."

"It so seems. . . Yes." they agreed.

They paused.

"Indeed," noted Buf, "I am reminded of the robots at the Institute with which we tinkered when I was there. One can learn much about psychology in programming one to behave us-like. . . and therein lies their main value, in my view, rather than in any work which they can, for us, perform."

Ket nodded. "Amazing and interesting, it is, all that those things can be directed to do. And actually, quite astounding is technology in general. . but to become too much dependent upon it, would be wise, not."

"In fact."

Tilriny put out her hand a little and the others focused upon her. "Well spoken this all." she said. "Since I was young, I have seen some changes automational, especially in our reliance upon computers. So, more dependent, we are now, upon technologies. Agree I, that a greater dependency than we now have upon automation for our necessary tasks, would likely be to our detriment."

"Aye." they said.

Tilriny continued, "To risk dire downfall in an effort to save ourselves a little work, would be folly in the much-most. And truly, a bit of good, hard work never anyone harmed."

"Indeed. . . Your words are good."

They were quiet.

Then Buf asked, "When will the World Council vote on the simplicity criteria?"

"Probably sometime in the next two weeks, certainly before the end of the year." answered Meva.

"And so."

"I think it most likely will be adopted." Ket said.

The others nodded. "Probably. . . Aye."

As Ket finished his breakfast, he noticed that the teapot was low.

"Who's for more tea?" he asked.

"Perhaps some more. . . Yes." they said.

Ket got up and took the teapot to the cabinet.

There, he filled a small pressure cooker with water and turned it on high. After emptying the used tea leaves into the garbage disposal, he placed new leaves in the holder. In a few centihours, the water was hot.

He made the tea and returned to the table. He poured them each some.

"Thank you. . . So!"

Ket sat back down.

Momentarily, Tilriny asked, "Ket, concerning She Tanda, quite fond of her are you?"

Ket smiled. "Uh. . . well, friends we are."

Tilriny paused, then noted, "Your eyes are bright, when mentioned, she is."

He looked at her shyly. "But aren't they always?"

She smiled fondly. "Not so much so."

"Oh." said Ket.

The others smiled.

There was a pause.

Ket then said quietly, "She will come to Teret Sixthday. To visit, we plan."

They looked at him.

"Oh?" inquired Buf.

"Only once every moon or two do we speak." Ket explained.

Tilriny had a sip of her tea. "Perhaps invite her here, you could, for supper that night." she offered.

Meva chuckled. "Emerita Tilriny, you are always the match-maker!"

Tilriny smiled. "And remember, you, who helped you gain your Alpha and two 'specials'."

Meva looked down, smiling.

"And right was I?" asked Tilriny.

"Right you were." admitted Meva.

Tilriny chuckled. She paused. "And Ket, whatever the case with this one, you have much to give, and I would see you well-bonded."

He smiled shyly. "Thank you." he said.

"It would be good for you to give, and to receive, all of which you are capable." Tilriny told him.

"Yes, Emerita." Ket responded.

"Of course, your own heart must you obey in such as this. You should know, though, that we wish you well." Tilriny said.

"Truly spoken." concurred Meva.

"Aye." said Buf.

"You thanks." Ket said, his face feeling warm. He paused, then shrugged a little and smiled at them. "Then and so, to the house, invite her. . . I will."

"This is well." said Tilriny, approvingly.

"Quite. . . Yes!" noted Meva and Buf.

"Indeed," Ket said, "Netky will be glad to meet all those of our house. And Emerita Tilriny, she will be honored, very, to meet you. You are known well throughout the municium. And, indeed, intrigued would she be, I warrant, to hear of earlier days and of foreones. A visit good, it would be."

"Pleased will I be, to so speak, and to Netky meet." Tilriny stated.

"Most well." said Ket.

"And so. . . It is spoken."

They sat quietly for a bit, sipping their tea.

Then Meva asked Buf, "Your Alpha will visit this weekend?"

Buf's Alpha lived in Augen.

"Aye." Buf answered.

"Quite." they said.

"Good is this." said Tilriny. She paused, then asked, "You will remain a part-time member of his household, and he of ours?"

"Yes." Buf responded.

"Most well." Tilriny said. "We would that you were here, though of course, we want to share you with others."

"When will you next go to his house?" asked Ket.

"Perhaps for a few days next moon." Buf said. She hesitated, looking at the others shyly, and then looked down, smiling.

They looked at her questioningly.

"There are other bright eyes with us this day." Tilriny noted. "You are pleased about your Alpha's visit?"

Buf paused. "Yes. . . but. . . there's more." she said. "It's that. . . somewhat altered will be our arrangement during the next moon or two, as. . . as he will be more often of our house. . . and I more often of his."

They brightened a little.

"Speak more of your knowing." Meva said gently.

"Uh. . . planned, I had. . . to tell this at house meeting tomorrow night. . . but you might as well know." said Buf. She paused. "I have been designated for another child."

"Oh? . . Congratulations! . . And indeed!" they chorused.

They paused, Meva looking at her closely. "But is it not soon?" she asked. "Do you not have another year or two?"

"Normally, yes." explained Buf. "But several of the eligible Auroras have asked for extensions. One, for instance, asked for more time so that she could go with the provincial ballet on its regional tour this fall. Yesterday, I was asked if I could come to the City Cabinet meeting. As you know, last night was the meeting held. . . and they asked me if I would be willing to have my second now in order to help keep births even."

"Oh. . . And so!"

Tilriny smiled at her fondly and put her hand on Buf's arm. "We are well pleased, My Fawn."

"Yes. . . Most!" concurred the others.

"You thanks." Buf said.

"At this rate, you'll have your three before you know it!" observed Ket.

Just then, Ninx and Fengog came into the kitchen. "A merry bunch is this." commented Ninx.

"Tellings we have!" Meva said.

Each Aurora (normal) could have two or three children - and, in some instances four. Each was encouraged to have all they were designated for, though this was entirely voluntary. The attempt was made to keep the numbers in the population fairly constant and it was upon this that the number of births mainly depended.

Besides this, the number born to an individual mother also depended upon whether or not there had been problems associated with an earlier pregnancy or birth. Certain problems in this regard such as a premature birth or an overly difficult labor could preclude further child-bearing for that Aurora.

Normally, newly designated Auroras became pregnant during their first year as Auroras. After this, births were spaced every 2 to 4 years. It had been found that if this pattern held true, then the numbers of births and deaths would be about the same. Therefore, this scheduling was encouraged. Sometimes, though, if it were believed that births and deaths might get out of balance, individuals would be asked to delay pregnancies or to become pregnant earlier than they normally would have. This latter had been the case with Buf.

Ket sat listening for a few centihours as Buf explained her news to Ninx and Fengog. He then rose, took his dish to the sink, and rinsed it.

"Does anyone else need their name on the supper list?" he asked.

"Nay. . . I'm on, thanks." they said.

"Indeed, Ket," requested Meva, "would you get me the lunch printout while there?"

"Aye."

Ket went into the south room and sat at the computer there. He called up the supper list. There were 27 names on it - almost all the household. After entering his name on the list, he called up the noon-meal roster and obtained a printout of it.

The purpose of the meal lists was to give those who were doing the cooking an idea about how much of each item to make. The computer would calculate this according to the daily kilocalorie requirements of those who had put their names on the list as well as the menu for that particular

meal. While it was not necessary that one put ones name on the list or remove it if one decided to eat elsewhere, it was appreciated since an accurate list made things easier for the cooks.

Mostly, the females of the household did the cooking. A male would often do it or help, though. On occasion, Ket, himself, cooked for the house. Everyone took turns cleaning up afterwards. The schedule of who would perform these duties during the coming moon as well as other chores such as housecleaning and doing laundry was worked out at a previous house meeting. These meetings were held every Thirdday night.

Ket switched the computer off, got up, and went back to the kitchen. "Eleven." he said, referring to the number who would be at lunch. He handed Meva the printout.

"Thanks."

Ket sat back down. As the others continued talking, Ninx turned to him and asked, "Ket, will you go near the store today in your doings?"

"Yes."

"We removed the cracked pane from that middle room window." Ninx said. "Could another you get?"

"Sure."

"Okay, the recycle is in that carrying bag." Ninx told him, indicating a canvas bag near the kitchen door.

"Fine." said Ket. "Install the new pane, I will, when I return."

"Quite well."

They heard someone come into the house. In a moment, Jafi and Ket's aunt, Yanta Ritt, entered the kitchen.

"Greetings. . . Hello." they said.

"Hi."

"Your doings have good been this morning?" Tilriny asked.

"For the most part, yes. . . but some sad news do we have." Yanta replied, removing her jacket.

The group fell silent.

"Oh? . . What is this?"

"When we were at Central Hall, we heard that Lan Zunen is near death." Yanta told them.

They were quiet a moment. "I see. . . Indeed." they said softly.

"He is not expected to live the day." Jafi noted.

Jafi and Yanta sat down at the table.

"Well, quite ill, he has been, the last week." Ninx said.

"Aye."

"How old is he?" Fengog asked.

"I believe that ninety-five, he is." Tilriny said.

They paused.

"Much morphine has he required?" asked Meva.

"Some did they say he needed during the last few days, though in a coma he now is." Jafi replied.

They were silent.

"Might we do anything?" asked Buf.

"Well, they are maintaining things quiet at the household and request any doings be held." Jafi responded.

The others nodded.

"So. . . we can await further word only." observed Meva.

They were quiet.

"Indeed," said Tilriny, "his has been a life well lived."

The others agreed.

"And such is the way of things." Ninx added.

The group sat without speaking for time.

Tilriny then spoke. "The cycle of life, itself makes manifest. And we ourselves, to this, bear witness this day." She looked at Yanta and Jafi. "Buf has news."

"Indeed?"

Buf nodded a little and told the pair her news.

"And so? . . . Most sure?"

Buf received their congratulations and answered their several questions concerning the matter.

They wondered whether another Aurora might be asked to have a child early due to Lan's condition. They thought this possible.

The group continued speaking of these matters for a time.

In a bit, Ninx inquired, "Buf, of what other was spoken at the meeting last night in addition to your glad tidings?"

"Well," she said, "they spoke mainly of this year's farming. This included what will be grown, amounts grown, and positioning in the fields. The amounts of each crop will be much as last year, except that there will be fewer soybeans and more red and white beans. Good numbers of ladybugs, parasitic wasps, soldier bugs, etcetera available, are, at the pest control center in Meadowgrass. Methane supplies are adequate. So, in general, things seem ready for summer. Also, the bee hives are healthy and should be strong when, from their dormancy, they emerge."

"This sounds good. . . Truly." the others noted.

"Planting will be during the final week of First Moon?" asked Fengog.

"Yes, given good weather." answered Buf.

"And the grain and alfalfa will be planted in twelve meter strips again?" Ninx asked.

"Aye." replied Buf. "Ten to twenty meters wide will the segments be, with the usual one or two meter strip between each for natural vegetation and to aid insect control." She paused to see if there were any additional questions and then continued. "Also, they spoke some of inventory requirements, including additional seed that will be needed and tractor parts."

The others nodded.

"In non-farm matters, they decided to make some additions to the wild plant exhibit at the museum." Buf noted.

"Oh?" they inquired.

"What will be added?" asked Meva.

"A few examples of cactuses from the Vorda." answered Buf.

"And so."

"And, of course," said Buf, "new council appointments will be made at the end of next moon."

They nodded.

Ket knew that none of those present had served on the City Cabinet for quite some time; and, Buf, Fengog, and himself had never served. This being the case, there was a chance that one or two of them might be requested to sit on the council. If he were asked, Ket did not know whether he would accept the request or not. A position on the cabinet might conflict with some of the other activities he had planned. It was, nevertheless, important service to the community and, for this reason, he probably would serve if asked to do so.

The City Cabinet was made up of nine members. Eight of these members received regular cabinet appointments and each of these served a two year term. Four new appointments were made each year. The city administrator served as the ninth cabinet member. The eight appointed members were chosen at random by way of the town computer from among those who were eligible for this service.

To be eligible, a person had to have earned at least 25000 career credits and, if one had served on the cabinet previously, four years must have elapsed since this last term had ended. All residents of the community who met these qualifications were eligible for a cabinet appointment.

One did not have to accept a request to serve on the council. If an individual declined the seat, the computer would simply make another selection. This would continue until those appointments which had expired were replaced. If a member withdrew from the cabinet before the end of the two year term, a new member could quickly be selected by the same process.

Important tasks that the cabinet worked to achieve were 1. that the city's structures, equipment, and utilities be kept in good condition; 2. that the town be as close to being self-sufficient in food as possible; and 3. that as much biomass as possible be sent from the town each year to the fuel facilities. Suggestions from citizens were welcomed by the council, and anyone could come to the meetings. These meetings were held once each week.

Just as there were city cabinets, there were also nine member councils which administered affairs at the municium, provincial, and world levels. Those making up the governing bodies at these higher levels were also chosen at random from the citizens within that jurisdiction.

Governing members at the municium and provincial levels served for three years. To be eligible to serve on the Municium Cabinet, one had to have earned a career total of 30000 credits. To be eligible for service on the Provincial Senate, one needed to have earned 35000 credits. Municium cabinets met once each week, and provincial senates met for several days each moon.

The focus of provincial and municium councils was upon those concerns pertinent to the province or municium as a whole and normally concerned such things as productivity, supplies distribution, and area economic matters.

The highest governing body was the World Council. The qualifications for service on the World Council were that one have at least 40000 career credits, certificates in general academics and

industrial crafts, and scores at the 90th percentile or higher on the Comprehensive Intelligences Test. Each council member served for three years.

The concern of the World Council, the seat of which was in Veopolis, was the efficient functioning of planetary society. To this end, the council had two major responsibilities. The first of these was the responsibility for the various standards of physical measurement and societal evaluation that were used and adhered to. The second was control over what new technologies were adopted.

The physical standards for which the World Council was responsible included those such as 1. simple standards of measurement; 2. building and utility codes; 3. standards for the maximum environmental impacts allowable due to such things as land disruption, substances released into the environment, noise, light, and radiation; and 4. the amount of the planet's land surface that could be utilized (not to exceed 2%).

Societal standards which the council defined included educational standards; living-standard norms, which served as goals for economic production; and the eugenics criteria.

Most of the standards which had been developed through the years were never changed and others were modified only slightly from time to time. Therefore, concern with standards was not a major activity of the World Council. More common was the evaluation of technologies in order to determine which technologies that it might be beneficial to adopt.

As new technologies were proven workable by researchers in the Department of Prototype Evaluation at the Institute of Science and Technology, they would be demonstrated to the World Council. In conjunction with the Institute, the council would evaluate these technologies in order to determine whether they were more advantageous than those technologies already in use. A new technology would be adopted for use and replace that used if it were deemed better. This decision was made by the council.

The two criteria used in determining whether a new technology would be adopted were 1. the energy efficiency and general environmental soundness of the technology in its manufacture, utilization, and disposal; and 2. its performance. So, if a new technological method were more energy efficient and environmentally sound than that which was already in use and performed at least as well, it was likely that it would be adopted.

The council was considering the addition of a third criteria which would require that new technologies also be simpler than (or at least as simple as) the corresponding ones being used before they could be adopted. This was the proposal that Meva had referred to earlier. Such things as greater ease in obtaining the raw materials of which an apparatus were constructed; greater simplicity in its manufacture; and less skill and labor being required in its production, operation, and maintenance were among the factors sought. The requirement that new technological methods be at least as environmentally sound as those they replaced largely solved the problem of complexity, but not completely. Therefore, this new criteria was being considered.

The decision to adopt a new technological method could be an important one since technology was standardized. When such a change was made, then, it involved changing that technology planet-wide and this could be a major undertaking. Technological methods were not adopted on a partial basis since this would inhibit standardization, and it was important that technology remain standardized for manufacturing and logistical simplicity.

In practise, few changes were made through the years in Veodon's everyday technology because that already in use was quite environmentally sound and it served individuals' needs very well.

Still, it was considered an entertaining challenge to try to design something which would be an improvement upon an existing technology. This would be even more true if the simplicity criteria were adopted.

(The exception to the rules governing technology was scientific instrumentation used at the major research facilities. While reasonable environmental concerns did apply to this technology, free development of these instruments was encouraged. Standardization in this area was not a major consideration. Nor would any concerns about complexity be a factor here. The result of this policy was that changes in this technology were more common than were changes in the everyday science technology used in all the towns, which was standardized to a fairly high degree, and very much more common than changes in technology used for everyday, practical purposes. Though scientific instruments used at the primary research laboratories represented only a small portion of all technological items, their importance was great. This reflected the high priority that was placed upon understanding the world to the extent that perception allowed. Research technology extended this range of perception, and there were, at the major facilities, quite a number and variety of research devices.)

Ket had some of his tea. "There were many citizens at the meeting?" he asked Buf.

"A few." she replied. "Perhaps ten. Teka was there, covering the meeting for the news."

"Quite."

"She covered your story, too?" asked Tilriny.

"Aye." Buf answered.

"When will it be aired?" Ninx asked.

"Well. . . I asked Teka to hold the story for two days so that the household, I could surprise, tomorrow night at house meeting." explained Buf, smiling a little. She paused. "But. . . who can a secret keep?"

The others chuckled.

"Since the facts are now known, I will call Teka, and say the segment about me, she can show tonight." Buf said.

"Most well! . . . Indeed."

"Watch the news, we will." stated Fengog.

"Truly. . . And with high interest!"

They paused.

Ket looked at the clock. "Well Ones, my pardons." he said. "My job I should go to." He finished his tea and stood up.

"If must you."

"And," said Meva, also rising, "time, it is, for me to start dinner."

"Aye." said Yanta and Buf, getting up too.

Ket put on his jacket and started to the door. "In passing will I get the new pane this afternoon." he noted.

"Well." said Ninx.

"And we need nothing other?" he inquired.

"No. That simply."

"Okay."

"A good afternoon have." they bade.

"And you ones morefold." said Ket.

He bowed slightly to Tilriny and left the kitchen. As he walked toward the front door, he wondered about all the generations who had passed through the arched hallway.

KET'S DAY

Chaper 5

Ket exited the house and proceeded along the walkway which ran between the two houserows.

The walkways were in the centers of the spaces separating the rows of houses. In Teret, the houserows ran north and south, and the spaces between them were about 8 meters wide. Though not evident at this time of year, these areas were mostly grass covered, with this extending from the houses to the stone-lined drainage ditches on either side of the walkways. In the summers, grass cuttings from these areas, and from all the town lawns, were saved and sent, along with other plant material, to a fuel facility. At the present time, these spaces were covered for the most part by snow which had accumulated through the winter, including, especially, mounds of snow which had slidden off the roofs or had been removed from the walkways.

A short distance along, Ket turned onto another walk and saw Mejen and young Nimik Hento coming toward him.

"Greetings. . . Hail! . . Hello."

"How goes your day?" Ket asked Mejen.

"It goes with no problems. The air separators seem to be in adjustment."

"This well." said Ket.

"Some additional checking must I do on the backup unit this afternoon, but I expect, not, problems." Mejen added.

The community's air separators were devices which separated oxygen from air in large quantities. The purity of the gas that was collected varied, depending upon how fast air was drawn through a unit. At normal rates, it was taken from an air separator at a proportion of about 35% oxygen. This high oxygen air was then used in the combustion of methane at the town power station. It was also used along with methane to power tractors and other vehicles.

"And how are your activities this day?" Ket asked Nimik.

"Good are." he answered.

"This."

"Indeed," said Nimik, "we found out this morning that late next moon we'll begin learning to operate trains."

"Oh? Quite well. Looking forward to this are you?" asked Ket.

"Yes." he answered.

Ket nodded.

"The manuals, they will issue us tomorrow." Nimik told them.

"Indeed."

"Then, early this spring, to Taras will we go for actual training."

"And so." Ket said. "These are pretty easy to operate."

"Yes." said Mejen. "For cargo trains, the longer or heavier the train, to stop, longer takes. You'll get an impression of this in the simulator."

Nimik nodded.

"Aye." said Ket. "And alert, be, to the track ahead."

"Factually." Nimik said. "That I do well, I will hope."

"You'll do fine." said Ket.

"'Tis a task of responsibility. Simply be mindful, and you will accomplish this well." Mejen told him.

Nimik nodded.

Ket paused, then inquired, "A thing I am curious about, My Nimik. Several times of late have I seen you with little Yinya Pinvo. Are you 'specials'?"

Nimik smiled timidly and hesitated. "Uh. . . well, maybe."

"Quite." said Ket.

"Indeed," Nimik noted, "a number of things we have done of late. Skied and hiked and gone places on the shuttle. We also have, together, studied. A good time we've had."

"Truly." Mejen noted. "You and she are well together."

"You thanks."

Mejen paused, "Well. . . we ought to dinner."

"Okay and so." said Ket. "Luck-good with the other separator, and you ones have an afternoon well."

"And you also. . . Until the evening."

Ket continued along to the town square. Here, the Teret centrum was located, prominent on the north side of the square.

Like the central halls of other towns, the Teret centrum was a large building. Its five story height and stone construction gave it a considerably massive appearance. As noted previously, several turrets with balconies together with the observatory dome made up a sort of sixth floor. The various floors were marked by windows, and here and there was another balcony. On the inside, it was arranged much as was the central hall in Ripnil.

Ket crossed the square and turned, heading for the city store near the trainway at the south edge of town. In a few moments, he arrived at the store. He went in and to the right, going into the materials center.

In this section of the store were all sorts of items needed from time to time. These included household items; lumber; all kinds of hardware; and spare parts for every machine in town, including electronic devices. In another section of the building were clothes, bulk cloth, and cloth products such as bedding. The electronics area of the store was upstairs. The town grocery store was also in the building. (To be discussed later.) While the types of supplies kept in the materials section were comprehensive, there was not a large number or amount of any particular item. A great deal of any given item was rarely required. If the town's stock of something were used completely, the city could order replacements from the municium warehouse in Meadowgrass or the provincial warehouse in Taras.

"Good day, Ket." said Vicin Olla who was acting as storekeeper today in this section of the building.

"Hi." Ket returned.

"I can of assistance be?" Vicin asked.

"You can." answered Ket. "A standard window pane do I require."

"You have the recycle?" asked Vicin.

"Aye." Ket replied.

Vicin turned to his computer and clicked on "ITEM". A ready sign appeared, and he entered "WINDOW PANE - STANDARD". Information concerning the item appeared on the screen.

Item(s)	Location	Quantity
Window Pane - Standard	7	34

Vicin entered "REMOVE 1 (ONE)". The number '33' appeared in place of the '34'. He then cleared the screen and clicked "RECYCLE". Some headings appeared, and he filled in the information concerning what was being recycled beneath the headings. Meanwhile, Ket had gone to a scale on a nearby table and weighed the broken pane.

"Eight-hundred." he said.

Vicin nodded and entered this amount.

Material	Item(s)	Quantity
Glass	Window Pane - Standard	800 gms

"I'll put it up." Ket said.

"You thanks." said Vicin.

Ket went to the rear of the store and into a room where there were a number of containers. He took the glass from the carrying bag and placed it in the container labeled 'Glass'.

The containers in the room were for recycled materials and were of various sizes, some small and some large with rollers. A large bin on rollers was for recycled paper. Besides glass and paper, other holders were for steel, aluminum, silver, copper, gold, and mixed metals.

Normally, only the paper bin contained any significant amount of material. This paper included computer printouts, various pamphlets, and whatnot, as well as copies of the town newspaper, which came out once each week. The information in the newspaper was the same as that on the news pages at the town comm-site, but a newspaper was often preferred to reading at a computer, thus the newspaper was printed.

As well as the recycling bins, there were a couple of barrels with removable tops and on rollers for used motor oil. Motor oil was made from oil produced by algae grown on ponds at the fuel facilities. Second-hand oil was normally used to aid in trash incineration.

There were two other bins in the room; these being used for trash. One of these was for ceramics. The other held combustible solid items such as plastic, wood, textiles, and rubber. (Rubber was synthetic.)

A room next to the materials room was the town recycling shop. In this room might be found old computers, televisions, and various appliances; old tires; worn-out motors or motor parts; broken tools; electrical wire; etc. When there were enough items collected at the recycling shop, a crew would be hired to come in and break the items down into their constituent materials. The recyclable materials would be placed in the holder for each material. Non-recyclables would be

placed in the proper throwaway bin. Tires were always cut up before going into the trash. Also in the recycling shop, worn-out clothes and other cloth items were cut into convenient sized rags, with the parts not used for rags going into the trash.

The collected recyclables would be shipped, periodically, to an industrial complex (to be discussed) and stored there. When the complex went into operation, this material would be refined and used in new products. As part of this, reclaimed paper was made into new paper at the industrial complexes. This paper reclamation helped to reduce the amount of land needed for raising kenaf, from which new paper was made.

The trash would be taken, when a certain quantity had been collected, to the municiium incinerator near Meadowgrass. Once a certain quantity of this material had been collected at the incineration facility, it would be burned in the blast incinerator there, which utilized blowers along with methane/high-oxygen-air burners. As noted, used motor oil was mixed with the materials being burned to aid in combustiton. The resulting ash would be mixed with water and cement, placed into forms, and allowed to set up, forming low-grade cement blocks. Discarded ceramics would be ground up and placed into the ash-cement-water slurry to become part of the blocks. These blocks would be shipped to a seaport and, when a sufficient number had been collected, taken out to sea, and pushed into the water over a subduction zone.

Ket went to the small container marked 'SILVER'. There were a few strands of electrical wire in it that had been stripped of insulation. He moved over and looked into the gold container. There were a few scraps in the holder. He picked some of it up and began bending and pressing it between his hands, trying to make it into a ball. He tossed it up and caught it a few times, pleased with its weight. He then returned the metal to its holder and headed back into the store.

Going to aisle 7, he went to the standard panes and placed one in the carrying bag.

The manufactured items in the store, including the window pane, had been produced at an industrial complex. There were 22 of these complexes on the planet. These facilities operated for four or five moons a year in the time opposite the growing season. During the operating period, all the goods that would be required for the coming year were produced.

The manufacturing cycle began with careful planning. This planning normally started about a moon before the complexes became operational when representatives selected from the provincial senates met to form a manufacturing assembly. The purpose of this council was to plan manufacturing operations. One representative from each of the 60 to 80 provinces nearest 4 or 5 industrial complexes was selected to attend the meeting.

Every delegate to the assembly brought a list of manufactured items needed in their respective provinces. This information came from the city inventories, done during the fall, and during which, town inventories were examined and community needs for the next year, projected. (These inventories were a different activity than the annual city analyses, which were done in the late winter/early spring. But the information gathered in the fall inventories was included with the information gathered in the city analyses.)

The lists provided by the representatives told the assembly what items, and how much of each, would have to be produced during the operation of the complexes. Once this was known, the production process could be traced backward, and each stage examined, in order to learn what labor and materials would be necessary during each phase of production.

This done, job announcements for project managers were put on city job lists region-wide. Once managers were hired, they assumed responsibility for implementing the project. At this point, the activity shifted into high gear. The requisite personnel were hired - again through announcements on city job lists - and production was begun.

The focus of production moved from 1. getting raw materials ready; to 2. producing basic items such as nuts, bolts, and wire; to 3. the manufacture of various parts; to 4. the assembly of finished goods such as tractors, computers, and passenger shuttles.

An industrial complex in full operation required a great deal of power. For this reason, all of them were built near a hydroelectric dam, the sole purpose of which was to power the complex. The power plants in these dams could generate about 800 megawatts. When the industrial complex was not in use, water was routed through spillways.

As items were completed, they would be transported away to the capitals of the various provinces, then to the various municia, and thence to towns as per their needs lists.

Any manufactured item could be made at an industrial complex: from simple eating utensils to scientific instruments; from microprocessors to cargo-pullers; from textiles to steel. When the task was complete, the workers would leave. A small caretaking force would arrive at the complex periodically from nearby towns to keep it shiny and ship-shape. Otherwise, it would stand deserted until the following year when the process would be repeated.

Ket walked back to the front of the store.

"You got the pane?" asked Vicin.

"Aye." replied Ket. He put the bag down and sat on the desk. "How goes your day?"

"Quiet it is. You know storekeeping."

"True." said Ket.

Vicin yawned. "My pardons." he said. "Sleepy, I am. I was up until 200, and then up early."

"Oh? You did what?" Ket asked.

"At the teahall, I was, visiting. And I played some strato-chess with Entekkin Charls." he explained.

"I see." said Ket.

"A game or two did I win, but otherwise I wasn't much of a match for him." Vicin said.

Ket chuckled. "Familiar am I with this." he noted.

"Well, he should do well at 'Rendezvous'. In fact, Teret's entire strato-chess club could fare so. . . and perhaps take first honors." Vicin said.

"Possible this."

"Eufonar was there for a while last night." Vicin mentioned.

"Actually." Ket responded. "She was fine?"

"She was."

"Spoken with her, I have not, for a few days." said Ket. "You and she have done anything of late?"

"Aye. Last Sixthday, we bicycled to Meadowgrass. We had lunch there before returning. It was a nice day, and we cycled along slowly and had a good time." Vicin told him.

"In fact." said Ket.

"A couple of times since, she has helped me with the simulations of the model I want to build. She likes doing this and makes good suggestions." Vicin said.

"A fine 'special' she is." noted Ket.

"True this." agreed Vicin.

"And. . . concerning your model. . . are you still planning to build a perpetual motion machine?" Ket asked, kidding Vicin a little.

Vicin smiled. "This I am and with purpose great!" he stated.

"Most." Ket responded.

"In any event, 'twill be as close to the same I can make an electric motor and generator in one." Vicin said.

"And so! What've you come up with?"

"Well. . . there will be a shaft with a flywheel, or flywheels. And the shaft will be supported by magnetic bearings." Vicin explained. "The electricity generated when the shaft spins will be used in an electric motor part of the system to keep the shaft spinning. . . and to power the bearings."

"Quite."

"Uh. . . I plan the generator segment to be at the shaft, and the motor segment to be at the edge of the flywheel. . . or flywheels." Vicin said.

Ket nodded. "Aye and so."

"In my computer simulations, I can vary things. . . type of materials used, the number of flywheels, the size and weight of these, and whatnot. Anything."

"In fact!" said Ket. He was quiet a moment. "What materials will you try for the wiring?"

"Copper, silver, and gold." Vicin replied. "And also, thought I to simulate some of the room-temperature, super-conducting plastic being tested at the Institute. I think enough information there is about it now, that an idea about how it would work, I can get."

"Excellent!" said Ket.

"And. . . air resistance will I vary in the modeling. . . and will see how the device would do in a vacuum." Vicin told him. He paused briefly. "As far as bearings, I will also test regular roller type. . . which would be more available."

Ket nodded.

"It may be that what I actually build will be not up to the simulations." Vicin noted. "Though, build, I would, the best apparatus I could get materials for."

"This aye."

"So, interested, I am, in seeing what I can come up with." Vicin commented.

"This and most." Ket said. "Well. . . it shouldn't take too much to keep it spinning."

"It shouldn't and true." Vicin agreed. "And to make it to spin most easily is major in this."

"Yes." Ket responded. "Who knows. . . perhaps you will break even. . . or more than break even!"

"Indeed." Vicin said. "Such would be of significance."

Ket nodded. "Your plan, promise shows!"

"You thanks." said Vicin. "And. . . if build this, I do, and if it works well and interestingly, then it could be an interesting addition to the provincial hobbies show."

"Aye." said Ket. "Perhaps a good design, you'll find, and, build it, will."

"Possibly."

Ket paused. "Indeed, how much is use-crediting for the shops now?"

"Two credits an hour." answered Vicin.

"Not bad that."

"Nay." said Vicin.

In the community's industrial building, which was just east of the town store, were several shops and work areas in which various things could be fabricated and repaired. Individuals could use these facilities to work on their own projects. The facilities included a wood-working area, an equipment maintenance shop, a machine shop, and a foundry. Upstairs were a clothes and shoemaking section and an electronics shop.

Just then, the chimes struck 1200. Following this, a short tune was played. Ket and Vicin listened to the melody.

"Well," Ket said as the final notes faded, "time 'tis for me to be to tasks."

"You've an assignment then?"

"Yes. I do custodials and inspections at the west greenhouses." Ket answered.

"Oh."

"Return shortly, I may, because I am to check the storerooms." he said. "I would leave the pane here so in my way, it will not be."

"Fine this." noted Vicin

"On-going, then, I'll be." Ket said, starting toward the door.

"Okay."

"Until a while." bade Ket.

"Have an afternoon well." said Vicin.

Ket left the materials section of the store and went into the hall separating this part of the building from the grocery store.

The grocery store held a number of ceramic bins which contained various types of flour, ground each day or two from wheat, corn, rye, millet, and oats. Other bins held dry beans, various types of dried fruit, and whole grains such as rice. Each container was labeled as to its contents. The bins were elevated and had a trap door at the bottom that would open so that a portion of the

contents could be removed. At night, the bins would be rolled back into the food store's main storage area which was kept cool and dry.

Raw fruit and vegetables, including potatoes, were placed in containers and put on display in the store during the day and, then, were taken back into the storage area at night.

The store did not require a large freezing unit, the reason being that most of the vegetables processed in the fall were placed in storage containers, distributed to the different households, and kept frozen there. The store did have a freezing unit though, and it was used to keep meat, milk, and fruit juice concentrates. Also, there was a large cooler in which was kept mainly milk and milk products. Both the store's freezer and cooler could be entered by patrons or storekeepers through a two-door, air-lock entranceway.

Individuals could come to the food store to get items; or, these items could be ordered. In the latter case, they would be delivered to the residence by a storekeeper who would use a pedal-powered, 4-wheel, delivery vehicle for this purpose. These vehicles were multi-gear and could carry up to 150 kilograms of goods.

The containers in which food was carried and kept were made of plastic, ceramic, or glass. These were of different sizes from small to large. They had lids that pushed or clipped down tightly or screwed on. There were also carrying bags that were used. These were of various sizes, and they were made of canvas or denim. The containers and bags would be returned to the store when no longer needed.

Ket walked to the south door, and exited the building, heading toward the utility area. He crossed the town's shunt train-tracks and the tracks of the main trainway and passed the small station building where passengers got on and off the intercity shuttle. He then turned right onto a walkway and went to the greenhouse on the west end of the first greenhouse row.

KET'S DAY

Chapter 6

Ket entered the greenhouse at its west entranceway.

Another door farther inside opened into the main part of the structure. Such entranceways were found on both ends of the building and served as air-locks, preventing the escape of the warm, high-carbon dioxide air from the structure's cultivation area. The greenhouse office and utility rooms were found in these entranceway sections.

Going into the office, Ket hung his coat on the back of a chair. He checked the time. It was 1214. Returning to the hallway, he looked into the cultivation room. It appeared that no one else was in the building. He stood there for a moment gazing into this part of the greenhouse and at the vegetables growing there.

This greenhouse, like the others, was a semi-cylindrical building that was 7 meters wide and 55 meters long; the middle 50 meters of the structure being the growing area. It was one of the 8 greenhouses used for winter vegetable cultivation. The 4 other greenhouses were used for biomass production from wastewater treatment.

Vegetables grew densely in the soil across most of the growing room area. These consisted mainly of lettuce, spinach, turnips, beets, and cabbage. On either side of this planted area was a concrete walkway. These ran the entire length of the cultivation room.

Here and there, small whiffs of steam rose from the water-filled concrete-lined channels set in the middle of each walkway. These were covered with metal grating. Perforated pipes submerged in the water in these channels released exhaust gases - carbon dioxide and steam - into the channel water. These exhaust gases were from methane combustion at the city power plant, which was in the center of the greenhouse area. The water in the channels was warmed by the combustion gases, and this helped to keep the inside of the greenhouse warm. The heating channels also served as a part of the water pre-heating system for the power station boilers.

The carbon dioxide in the combustion gas bubbled to the surface and was released into the interior of the greenhouse, thus increasing the CO₂ concentration there. The increased carbon dioxide concentration inside the greenhouse helped the structure to retain heat and spurred plant growth.

Insulating shutters helped to keep the growing-room warm at night. These light-weight panels folded up along the structure's back wall when not in use. From here, they could be pulled up along the curve of the ceiling, and down, to the floor on the other side. On their interior surfaces, they were covered with reflective foil. This foil reflected heat inward.

After a few moments, Ket turned and went into the building's storeroom. He got a broom and swept the storeroom as well as the entranceway area and the office. He put the office in order.

Returning to the storeroom, he policed this room and checked the items there against a checklist on the wall. Everything checked except for a container of ammonia glass-cleaning solution which was low. Ket placed the container in a carrying bag and returned to the office. There were a few scraps of paper in the office wastebasket. He also placed these in the carrying sack.

He then picked up a clipboard on which he could take notes and a pencil and began his inspection of the building, looking for anything which might need to be attended to. He checked the entranceway area. Then, opening the door leading to the underground utility corridor, he went down the stairs to the corridor and back up, inspecting this area. He next entered the main part of the greenhouse and walked to the far side, looking for such things as panes that might be cracked or need to be washed and places which needed paint.

At the other end, Ket went into the east entranceway. In it were a small workshop, an additional storeroom, and another set of steps leading to the utility corridor. He quickly swept and inspected this area. He then re-entered the main section and walked back to the west end, examining the shutters as he went.

Back at the office, he sat down at the desk and looked at the instrument panel there which displayed various information concerning the greenhouse.

This information included the temperature inside the growing section, the humidity in that section, the temperature of the water in the heating channels, and the proportion of carbon dioxide in the building's air. The information was conveyed to the utility control-room in the power station. There, it was also displayed on the operator's console.

Ket scanned the readings. They looked normal.

The CO₂ level was 0.04%. Later in the afternoon, this would be allowed to increase, so that by nightfall, the concentration might be between 0.05% and 0.07% - or between 1.5 times and 2 times the atmospheric concentration.

After a moment, Ket picked up the telephone and called the power plant in order to verify that the readings showing on the central console there were the same as those displayed here.

The manager answered. "Power station." he said.

Ket recognized the voice of Rengel Tanak. "Rengel? Ket Ritt. Hail." he said.

"Greetings, Ket." Rengel said. "What can I do for you?"

"I act, today, as utilitarian for the west greenhouses." replied Ket.

"Aye. Compare the data readings, you would?" asked Rengel.

"Yes. In number four, I am."

"Okay." said Rengel.

Ket read the numbers to Rengel, who confirmed each one.

"Quite well." Rengel said. He paused a moment. "And you, your day is well?"

"Indeed." answered Ket. "And things are quiet there this day?"

"Aye." Rengel replied.

"What kilowatts are generated?" asked Ket.

"Well, right now. . . three-hundred." said Rengel. "Overall, its been about average."

"In fact." noted Ket. "And Mejen did say the main air separators are in adjustment good."

"Aye. Some additional checking, this afternoon, will we do." Rengel told him. "We'll start the reserve unit and run it for a while for this."

"Indeed." Ket said. He paused. "You'll go to lunch?"

"No." answered Rengel. "I brought my lunch today."

"And so." said Ket. "Well, I'll proceed, and check call from the others."

"And so." Rengel said. "Talk to you shortly."

"Okay. Bye." said Ket.

He replaced the phone and pulled the building logbook to him. He noted in it the things that he had done and the date. He then closed the book and pushed it back across the desk. Rising, he got his jacket, picked up the carrying bag, and left the building.

Ket worked his way through the greenhouse on the end of the second row, then moved to the west-end greenhouse on the third row. He entered and, after placing the bag and his coat in the office, went back to the hall and looked into the main section.

This building was one of those used for wastewater treatment and biomass production. Like the other wastewater greenhouses, it housed a concrete pond that was 4.5 meters wide, 48 meters long, and a half meter deep. The wastewater in these ponds was normally kept between 25 and 30 centimeters deep. This water flowed slowly through the reservoirs at about 1 meter an hour.

On each pond grew a dense covering of water hyacinths. The plants grew quickly in the water, utilizing most of the waste matter in it. When water exited the reservoirs after being there for 48

hours, it was fairly clean. If tests indicated that the water needed further treatment, it could be held in the ponds for longer periods of time.

The effectiveness of this water treatment system was increased by its aeration scheme. Air from the air separator - 30% to 40% oxygen - was pumped into the ponds at a rate which would most facilitate bacterial action in the water and, thus, the breakdown of wastes. The high oxygen air was pumped into the water by way of perforated pipes which lay in slots along the bottom of each pond. There were more holes in these pipes in their upper ends and, so, more air released where, due to a higher concentration of organic matter, the oxygen demand was greatest.

The substances in the pond water included sewage; food particles; tissue paper; and certain other materials including soap, detergent, solvent, etc. All of the materials in the water were broken down in the pond by bacteria and utilized by the water hyacinths or utilized directly by the hyacinths. In fact, any manufactured materials which would eventually end up in a sewer were designed so that they would be broken down and support plant growth there - this support ranging from some degree to a great degree.

The flow of wastewater to the water-treatment greenhouses was not constant but varied throughout the day. For this reason, there were two 10 cubic meter collection tanks where sewage was held before being pumped into the greenhouse ponds. The wastewater was taken from these collectors to the ponds at a constant rate. As long as the quality of the water at the output end of a reservoir was acceptable, it would be released at this same rate.

In the summer, treated water was used to irrigate biomass for fuel use grown in the open fields. Otherwise, it went, by way of the drainage ditch, across the fields to the town marsh. Here, it supported further plant growth and, eventually, flowed into Rocky Creek, having been restored to its natural quality.

Ket looked at the water plants covering the pond. The sun was shining into the greenhouse, and the plants stood out bright green in the sunshine.

He entered the pond-room. The room was warm and muggy. The odor there was negligible. An occasional puff of steam rose from the heating channels on either side of the pond. The insulating shutters were folded along the north wall. He went to the pond and examined the water plants there. Some would need to be harvested in a day or two.

About a fifth of the plants were removed from each pond every week. Because of the high concentration of CO₂ in the air and the high levels of nutrients in the wastewater, the water plants grew very rapidly. Plant production averaged 32000 grams of plant matter on each square meter of pond surface annually. This was about 15 times greater than annual plant production in the open fields. The plants harvested from the ponds were taken to a municipal fuel facility for methane production.

After a moment, Ket exited the pond-room, and returned to the office so as to repeat his policing and inspection procedure. Over the next hour, he continued with his task, working his way through the other greenhouses.

He was making logbook entries in his last building, the vegetable greenhouse next to the power plant, when he heard someone enter the hallway from outside. He turned to see Theti Linzin come into the office.

"Oh. Hi!" she said, seeing Ket.

"Hello and greetings!"

"Rengel said that you were working in the west greenhouses." she said. "You are finished?"

"Nay, but almost." replied Ket. "Yet must I check the utility corridors and, then, to the city store, go."

She nodded.

"So you work here today?" he asked.

"Yes." Theti replied. "We both plant and harvest."

"Indeed." Ket responded.

"Quite a bunch of vegetables did we take to the store this morning. We are replanting this afternoon. I came here to change the water."

"Most well." Ket said. "Where is everyone?"

"In the east greenhouses. . . some at lunch." she answered.

"And this."

She came over and sat in a chair near the desk. Theti was the younger sister of Eufonar, Ket's 'special'. Her smile and many of her mannerisms were very similar to her sister's, as were her bright, happy eyes.

"What'd you pick this morning?" he inquired.

"Uh, some cabbage, parsley, and turnips." Theti answered. "All from greenhouse five. Some spinach from this building."

"Aye. You will replant the same?" he asked.

She nodded. "And also some lettuce."

"Factually." said Ket.

"I would guess that we harvested about a quarter of the plants in greenhouse five." she said.

"Indeed. Busy are you this day." he noted.

"A bit." Theti agreed.

"You will do the replanting today?" asked Ket.

"Some." she replied. "But we'll do most on the morrow."

"And so."

"I would that there are enough lettuce seeds. If not, we'll need gather some from the seed plants." she said.

"There should be these, as I believe that seeds were collected last week." observed Ket.

"Quite."

They paused.

"Are the carrots in number five coming up yet?" Ket asked.

"Yes, just." she answered.

"We did plant them about two weeks ago." said Ket.

"Oh." she responded. "They seem to be, fine, doing."

"Most."

They were quiet for a moment as Ket finished his logbook entries. He then closed the book and placed it back across the desk.

"You and Eufonar are looking forward to your trip to Vennzi?" Ket asked, referring to the trip to that coastal town that the two planned to make, along with Eufonar's young daughter, to visit relatives and to sightsee.

"Yes." Theti replied. "To leave a day or two after Annual Rendezvous, we plan, and to be away for several days."

"Indeed."

"You have been to that area?" she asked.

"No. I understand, though, that it is most scenic." he noted.

"Truly is it." said Theti. "With some of our relatives, we plan to go to various places within the locale. Stay, we will, in the guest-rooms when in other towns. We have been to Vennzi before, of course, but have not seen some of the surrounding areas and communities. These, we would like to visit."

"In fact." Ket said.

"The guest-room crediting will be a credit or two a day." she said.

Ket nodded.

"We also plan to do some camping while there."

"Actually." he said.

"My relatives do know of places along the coast to go. We-several may go on a long hike or two, and camp, sleeping to the ocean swells as they meet with shore." Theti told him.

"Quite well!" said Ket.

"As you know, most of Father's relatives live in Vennzi. . . my grandparents, my aunt and uncle, and most of my cousins. We also have cousins in a couple of the nearby towns."

"Aye." said Ket. He hesitated momentarily. "You know. . . featured, you will likely be, on the Vennzi news."

"Know I. We hide." she smiled.

Ket laughed.

"Actually, when we are on television, tell much of Father, we will, for the benefit of his hometown friends."

"And so." said Ket.

"Five years has it been since either Eufonar or I have there been and, of course, Eufonar's young one, never. So, quite interested will they be in us. . . as will we be in them."

"Indeed."

Theti paused a moment. "Another thing we would like to do, while there, is to try to spot whales."

"Oh?" inquired Ket.

"Yes. There are promontories near Vennzi from which one can see, with distance, over the ocean-sea." she told him. "They-whales can sometimes be seen swimming past."

"Quite!" Ket said. "Black whales?"

"Yes."

"And this." said Ket.

"These, we would like to view."

"I hope you good fortune in your viewing." he said.

"You thanks." Theti responded.

They paused.

"I imagine you would venture into the forests there." said Ket.

"This we will."

"They are well known for their impressiveness." he noted.

"And truly so, and rightfully so." she said. "While we've large trees, the size of ours is modest in comparison to those there. Amidst those. . . quiet it is. . . enchanted. When one stands in those forests, one stands in awe."

"Actually." Ket said quietly.

"This 'tis."

Ket paused. "You ones ought have a trip most well." he told her.

"Aye." Theti said. She was quiet momentarily. "Well. . ." She stood up and stretched. "I. . . I should be on now, and check the water."

"And this." Ket said. He pushed his chair back and rose.

"Please visit our house." Theti said.

"This I will. . . and you, ours. And a good afternoon have." he wished her.

"As you. See you." she said.

Theti entered the main part of the greenhouse and closed the door behind her.

Ket returned to the desk and picked up his clipboard. He then walked to the door leading to the utility corridor steps and opened it. He pressed the light switch and descended the steps.

The town's utility corridors were concrete-lined tunnels through which passed all the city's electrical conduit, water pipes, gas pipes, sewage lines, and the like. The corridors were laid out in an interconnected grid across the town; and, in most cases, they passed directly beneath the city's buildings.

They were about two meters wide and two and a half meters high. Pipes and conduits always ran along the ceilings of the passages. The only exception to this were the sewage pipes under the city proper. Each of these rested on a shelf in the corridor wall which sloped gradually downward to the point where the lines emptied into the sewage collection tanks.

Corridor air was changed often by the ventilation fans placed between the tunnels and the outside. There were thirty of these spaced throughout the corridor network. Air was expelled by these fans after having been pulled down through the town's buildings and into the passages. The fans ran most of the time, keeping the air changed, not only in the corridors, but in the buildings as well. The greenhouses had additional ventilation fans; but here, too, most of the ventilation was accomplished by this main system.

The corridors did not flood since they were encased in concrete. The city's drainage system was separate and apart from them. Since the passages were all connected, they were often used by the town's residents to go from one part of the city to another, especially in bad weather.

At the bottom of the steps, Ket looked around.

The passage was a spur corridor for the greenhouse. A few meters to the right, it intersected the main utility corridor serving the first row of greenhouses. He looked at the various pipes and conduits which were spread out across the tunnel's ceiling. They ran along the ceiling to the main corridor where they connected to their counterparts along that ceiling. In the other direction, they turned upward into a vertical utility shaft of the greenhouse.

Ket went to the main corridor.

Every third light was on there. This was normal for the corridors under the utility area; and if work needed to be done in a certain part of one of these passages, the other lights could be switched on to better illuminate that section. More of the lights were kept on in the corridors under the town proper since these were more often used for pedestrian traffic.

Ket walked to the west end of the passageway, inspecting it and the other spur corridors along the way. Then, retracing his steps, he walked to the east end of the main corridor, inspecting the passages in that direction. He continued his inspection, going through the main corridors for the other two rows of greenhouses as well as most of the north-south passage that passed beneath the power plant and which connected the corridors of the utility area with those of the town proper. He saw no wet spots in any of the tunnels which would betray a leak. The air seemed fine.

Returning to the greenhouse from which he had come earlier, he went back up the steps and into the building, turning the spur corridor lights off as he closed the door behind him. He pulled on his jacket, glancing into the growing area to see if Theti was still there. No one was present. He picked up the carrying bag, and left the greenhouse, heading back to the city store.

There was a passenger shuttle stopped at the station building. As Ket passed the station, he waved to two Teret residents who were at the computer in the building, entering their destinations.

Shuttle rides were negatively credited depending upon the number of kilometers one was to travel. These minus-credits, like any others one accumulated, were figured into ones acquisitions account. Most of the negative crediting Ket had incurred of late had been for shuttle rides and commissary items.

When near the store, Ket heard the shuttle beep its horn. He looked back and watched it pull away from the station and gather speed as it left town, heading west.

Entering the store, Ket went into the recycle room and placed the scrap paper that he had gathered into the paper bin. He then went into the main section of the store and filled the three bottles which he had in the carrying bag with ammonia solution, using the hand pump set into the solution barrel. This done, he went to the front of the store.

"Again I." he said to Vicin whose chair was facing the opposite direction.

The chair jerked a little. "Huh? Uh!" Vicin said, swiveling around. "Oh. . . once more hi." He rubbed his eyes.

Ket laughed. "My apologies, One, for interrupting your nap."

"A problem not." Vicin commented. "Such's apt to happen when one's at work."

"This be true." Ket noted.

"You did need something for the greenhouses?"

"Aye. Three containers of cleaning solution. These, I got."

"Okay." Vicin reached out to record six liters of ammonia solution removed from the store inventory.

"Went you to the teahall after I left?" asked Ket.

"Yes. Right after."

"I will, there, go shortly."

"You had no lunch?" Vicin asked.

"Nay yet." Ket answered.

Vicin nodded. "Then ready you'd be."

"Aye."

"There is." said Vicin as he finished entering the cleanser Ket was taking from the store. He paused a moment. "Things are normal at the greenhouses, I presume."

"Yes and usual." noted Ket.

"Quite."

"And I put a few scraps of paper in the bin."

"Okay." said Vicin. "Indeed, need I to rise and to do some custodials, myself."

"Have strength." Ket offered.

"My thanks."

Ket bowed a little.

"And just remember the old saying and true." said Vicin.

"Please bespeak this saying." Ket urged.

"'Nothing significant was ever accomplished by nose-to-the-grindstone'."

Ket smiled and nodded. "And a wise saying 'tis." he observed.

"Aye." noted Vicin.

Ket picked up the carrying bag. "Well, I'll back to finish, then."

"Okay." Vicin said. "And I'll let you know how my design efforts proceed."

"This well, as you've a project promising."

"I hope it proves to be."

"Have an afternoon good then." Ket bade.

"As well. Later see."

Ket left the store and headed back to the greenhouses. He took the ammonia solution to the different buildings as needed, finishing in greenhouse 4 where he had started. He went into the office there, placed the clipboard on the desk, and removed the sheet upon which he had made his inspection notes. He folded the sheet and put it in his pocket. He then left the greenhouse and headed toward the power plant.

At the station, he entered and walked toward a nearby set of steps. There was a steady, muffled hum coming from the generator room. It was a sound he rather liked. Going up the stairway, he entered the control room on the building's top floor.

Rengel was in the room, as was Mejen.

"Greetings!" said Ket.

"Hello. . . In come." they said.

"Your inspections are complete?" asked Rengel.

"These are." said Ket.

"The corridors were okay?" Rengel asked.

"Yes, they seemed fine." Ket answered.

"Quite good."

"Now, your computer, I do need." Ket said.

"Guest be." Rengel told him.

"The separators are true?" asked Ket.

"Seem well." responded Mejen. "A bit of final checking, now."

Ket nodded.

Sitting down, Ket entered "JOB REQUEST". Some headings appeared on the screen. He then typed his comments concerning things that he had noticed that needed to be attended to, referring occasionally to his notes.

JOB REQUEST

Date	11-23-824
Department	Utility
Place	Greenhouse #1
Task	1 latch magnet missing from east exit door
Labor Estimate	0.5 hr
Place	Greenhouse #12
Task	Replace 1 section in fourth set of shutters from west
Labor Estimate	1 hr
Task	Harvest water plants
Labor Estimate	5 hrs
Place	Greenhouse #9 - west spur corridor
Task	Insulation on combustion exhaust line needs to be replaced
Labor Estimate	1.5 hrs

The job requests were examined by the personnel office which would write job descriptions for the tasks on the requests, sometimes combining two or more of them, and perhaps needed work noted by others, into a single position. These would be posted on the job list one or two days after the request had been entered; or in less time if the request were more urgent.

Ket looked at the request for a moment and, then, satisfied, entered it. He then cleared the screen and called up the jobs program. He entered "JOB DESCRIPTION - 255". The description appeared on the screen. Glancing at the clock, he typed the completion notice and entered it. Briefly, the number of credits earned appeared below the other information. He obtained a printout of the description and looked at it.

	JOB DESCRIPTION
Job Number	255
Position	Utilitarian
Department	Utility
Application Period	600, 11-23-824 to assignment
Commence	Upon assignment
Duration	2 to 4 hours
Cr Rate Adjustment	1.15
Salary	1.43 credits/hour 2.86 credits Minimum
Requirements	Age - 18 years Minimum
Duties	Inspect greenhouses 3,4,7,8,11,12: note any deficiencies; perform general janitorial tasks in service areas. Inspect greenhouse utility corridors, note.
Comments	Refer questions to Supervisor, Maintenance Div, Utility Dept, Ext. 8330

Assigned	Ket-Tinla Ritt M-788-2-54-12-124 1007, 11-23-824

Start	1214, 11-23-824
Finish	1448, 11-23-824

Total Time Required	2.34 hours
Credits Earned	3.35 credits

Ket cleared the screen and called up the job list. He wanted to see who had been assigned the city analysis position. He looked in the assignment column opposite the position title. His name appeared there.

"Huh!" he said. He would be busy.

He noticed that the director's position had been assigned to and confirmed by Vink Linzin, the uncle of Eufonar and Theti. Ket was pleased, knowing they would work well together.

He typed "JOB CONFIRMATION - 12-22-2" and hesitated before entering it. He thought of the time involved, the veography test, how the job would affect his daily activities, the report that had to be written. He paused for a moment. It was a valuable community service.

His hand went down, and he entered the confirmation. The listing disappeared. He called up the job description and obtained a printout of it.

Before getting up, Ket cleared the screen and requested the day's dinner menu at the town commissary. It appeared. He scanned the list, deciding which dishes he wanted. He clicked on these. He ordered some spicy white beans, some mild white cheese, fried rice, boiled beet greens, rye rolls, an apple, some yogurt-custard, and tea. He then entered the order, so that its 0.82 minus-credits could be recorded on his credits record. Then, picking up the telephone, he called the commissary, speaking with the attendant there, Lat Nanf, who confirmed the order.

"Good this." Ket noted. "I'll be over in twenty or thirty centihours."

"Fine. Ready will it be."

"Quite well." said Ket. "Bye."

"Bye."

He replaced the phone, got up, and went over to Rengel and Mejen who continued checking the air separator readings on the control console.

"Appointed, I was, the town performance position." Ket told them.

"Oh? . . . Most well!" they said, looking up at him.

"In hands capable are we." observed Mejen.

"I would this." Ket smiled.

"Has the director assignment been confirmed?" asked Rengel.

"Yes." Ket replied. "Vink Linzin."

"Aye."

"Fine appointments th'are." Mejen said.

"In fact." said Rengel.

"You thanks."

Ket watched for a few moments while the others continued working. He then walked to the observation windows and leaned against the sill, looking at the utility towers to the east and to the west of the greenhouses, watching the slow, steady rotation of the large, 'squirrel cage' rotors at the top of the towers.

In a moment he asked, "How much electricity is generated by the wind-catchers today?"

"Oh, a bit less than average." answered Rengel. "About seven percent."

Ket nodded.

"Not bad is that, though." said Mejen, glancing outside. "Fairly still it seems today."

"Aye." the others concurred.

Ket stood, gazing at the greenhouse area and listening to the steady hum of the turbine coming from below.

The city's power plant could produce 500 kilowatts of electricity; though during waking hours, it normally produced about 200 kilowatts. It was fueled by biogas, refined to be almost all methane. The gas was burned in a combustion chamber with high oxygen air from the air separators. The resulting heat produced steam in a boiler which was sent through a turbine-generator, the shaft of which was supported by magnetic bearings. The current was routed to the town's buildings by way of the utility corridors through silver wire.

Methane was used, not only to generate electricity, but also to power the various vehicles that were used. Too, it was burned in furnaces for heating buildings. Methane provided most of the energy used on Veodon. In addition, a portion of electricity was generated by wind - about 10% annually in Teret from the town's 2 windmills - and by solar. And there was the hydroelectric power of the industrial complexes.

The methane used was produced at the municium's 15 livestock/fuel facilities (ranches). There was a fuel plant at each of these sites where the gas was generated in a fermentation system from plant matter and manure.

The energy content of the biogas obtained was enhanced by the separation of other gases, such as carbon dioxide and nitrogen, from the methane after this mixture was collected from a fermentation enclosure. While most of the fermentation gas was methane to begin with, the proportion was increased after the gas had passed through the gas separators so that the final product was almost all methane. The effectiveness of the methane as a fuel was further improved by its combustion with the high oxygen air. A further advantage of using the high oxygen air and the almost pure methane was that the combustion products, being virtually all carbon dioxide and water, were harmless.

Most of the plant matter from which methane fuel was obtained came from crops grown specifically for this purpose; and this included crops otherwise used for food and/or livestock feed such as corn, sugar beets, and alfalfa. Also, large amounts of grasses were grown for biomass.

About 5600 hectares were used each year in the municium for biomass production. Each individual community grew plant bulk on about 180 hectares, and there were another 180 hectares used for this purpose at each livestock/fuel facility.

Besides the cultivated biomass, each town had other sources of plant matter - water plants from the sewage treatment ponds, lawn clippings, weeds that had been pulled or cut, plant matter from fields following harvest, leaves from both town and forest, and miscellaneous matter such as that obtained from the town marshes.

All the plant bulk gathered by the communities of the municium was transported to a livestock/fuel facility. Each year, about 87000 tonnes of plant matter, along with a considerable amount of manure, was used in the municium for biogas generation. At a fuel facility, this material was ground up and mixed with water to form a slurry before being put into the fermentation systems. Each of the municium's fuel facilities produced about 110 cubic meters of enhanced biogas (almost all methane) each hour.

After the methane had been generated, it was pumped into one of four pipelines through which it could pass to the various cities of the municium. Each of the four pipelines went to all of the municium's communities. There were four pipelines, rather than just one, in order to prevent a major gas loss were something to happen to a line - as could be the case were there but a single line. Also, each pipeline held about a week's supply of gas. The pipelines all lay in an underground, concrete-lined tunnel, similar to the utility corridors in the towns. This corridor paralleled the trainway from town to town.

There were valve stations every few kilometers along the pipeline corridor. If work were required on a section of a line, the valves on each end of the section could be closed, thus isolating that part of the pipeline. The methane could then be pumped from the closed-off section and into the main part of the line and/or into one or more of the other pipelines. This was done at the valve stations.

As long as the valves were open, as was normally the case, every part of a pipeline was open to every other part of that line. The lines were, in fact, large containers in which gas was stored under pressure. This pressure was typically kept at about 12 atmospheres.

At each town, the pipeline corridor intersected the utility corridors near the power station. In a room just off one of these corridors, the city's primary gas line was connected to the main pipelines. The city line then passed through utility corridors the short distance to the power station. Also in this room, the residential gas line was fed by way of regulators from the town main line. The pressure in the primary city line was kept at 4 atmospheres. The pressure in the residential conduits was kept at just over 1 atmosphere.

The 14.5 million cubic meters of methane used in Muncium Meadowgrass every year was, in a sense, its livelihood. This was also true of the other muncia all around the planet.

"I believe that's that." Mejen said.

Ket turned to Rengel and Mejen who had just completed verifying the separator readings.

"The figures seem well." said Rengel.

"Aye." Mejen concurred.

"This well." commented Ket.

Rengel rose and went over to scan the generator displays. Mejen made some additional notes in the logbook. He then replaced this on a nearby shelf and rose. He walked to the teapot.

"An amount?" he asked.

"Yes, a cup will I have." Rengel replied.

"Ket?" Mejen asked.

"Thanks, nay." Ket replied. "My lunch is probably ready, so I'll there proceed."

Mejen nodded.

Ket started to the door.

"Congratulations again on your appointment." Rengel said.

"You thanks." Ket said.

"And thanks for your inspections." Rengel added.

"Easily done 'twas." Ket responded, opening the door to the stairs. "So. . .have an afternoon fine, both."

"And you also, Ket. . . Later see."

Ket left the control-room, went down the stairs, and toward the door. Going by the window to the generator room, he waved to the two technicians in the room who were wearing head-ear-eye protectors. He then exited the power station and headed to Central Hall.

KET'S DAY

Chapter 7

Ket crossed the city square, going to the main entrance to Central Hall. Entering the building, he went to a washroom, removed his coat, and washed his hands and face. Finished there, he headed along the centrum's southwest hallway to the commissary - the 'teahall'. He entered the teahall and walked to the service area.

Lat was at one of the occupied tables and, seeing Ket, started to get up.

Ket held up his hand. "Nay, remove not." he said. "I'll get it."

"Okay." Lat said. "Your tea is on the warmer."

"Most well." Ket called as he went into the kitchen.

Ket got the tray and carried it to a table next to a window. He sat down, removed the domed metal coverings from the dishes, and began eating.

As he had dinner, he mentally reviewed the things that would need to be covered in the city analysis. It seemed to him that the community had done very well this year. It would not be until after the analysis, though, that the actual figures concerning operations and productivity would be known. He wondered if this year's performance could be bettered in the coming year.

Veodon's economy was geared for survivability and sustainability. Some important facets of it were the goals of maintaining a good standard of living and local independence in food and fuel. Also there was the credit which was the medium of exchange as well as a means of gauging an individual's contributions to society. Finally, the whole was based on maintaining environmental quality.

Self-Sufficiency

Very important was the food self-sufficiency of the individual towns. To as great a degree as possible, each city produced its own food. This task was accomplished fairly easily in Teret as it was in the great majority of the planet's other cities.

Some towns did not produce quite all the food that they required. When this was the case, that city's efforts were divided between food production and the production of some other important item such as cotton, minerals, or timber. A typical example of this was the town of Augen which grew just 80% of its own food but which was a major timber center, producing all the lumber used in Vacea Province as well as most, if not all, of that used in several other provinces. Each community that was self-sufficient in food grew a bit extra to make up the deficit in communities not wholly so.

Like the city-level independence in food, the energy independence of the different municia was also important. As was previously discussed, each municium produced all the biomass necessary to make the methane that it needed, and each had fuel facilities for this purpose.

This local self-sufficiency in food and energy simplified the distribution process of basic items and also made the economy resilient.

The Living Standard

In addition to food and fuel independence, the economy was geared to provide what was known as the 'target standard of living'. This living standard met the basic needs and provided certain enhancements which insured a good quality of life, and did so without surpassing the acceptable environmental impacts. Specifically, the living standard included water, food, housing, clothing, heating, sanitation, lighting, refrigeration, rapid transportation, world-wide communications, knowledge, occupational variety, leisure time, entertainment, and cultural activities.

Many of the factors which made up the target living-standard were quantified. For example, on a per-capita basis, these included such things as the following: food - 2900 kilocalories per day in a balanced diet; power - 16000 kilowatt-hours per year; and leisure - 110 days yearly.

The assumption was that the target living-standard could be achieved with what was known as the 'baseline economic inputs'. Annually, this included 1. 154 billion hours of labor, which assumed that 60% of the population spent 21% of their time working; 2. the utilization of 2.24 trillion kilowatt-hours of power; 3. no net gain in the amount of materials or land used; and 4. the reclamation of at least 99% of the waste products from the manufacturing carried on at the industrial complexes.

If the target standard of living were achieved with the baseline inputs, then the result was known as 'standard productivity'.

Meeting the target standard of living required that similar amounts of goods and services be produced for the planet's 140 million inhabitants annually. Because requirements remained about the same, production was not increased by producing a greater amount. Rather, it was increased by producing the same amount in less time. It was also increased by using less energy, fewer materials, and doing less environmental harm in the process.

In practice, it was common for the target living standard to be met with 70% to 90% of the baseline inputs. Some factors which contributed to this efficiency were the standardization of technology; the longevity of products; cooperation; and good work habits.

The Credit

A further important aspect of the economy was the credit. Credits were created by individuals doing work that was necessary to maintain life. They were erased when they were used to acquire the results of work.

The definition of a credit was the following: if the baseline economic inputs were necessary to maintain the target standard of living (standard productivity), then one hour's labor would be worth one credit.

If standard productivity were exceeded, then an hour's labor would be worth more than one credit; and vice-versa. The worth, in credits, of an hour's labor was established for each community at the beginning of every year by averaging community economic performance of the year previous and the performance of the world as a whole.

Teret, for example, had improved upon standard productivity by 25% the previous year. Planetary production as a whole had been 23% better. So, the value in credits of one hour's labor in Teret for the year was 1.24.

Pricing was always based upon one hour's labor being worth one credit.

Productivity greater than the standard level meant that individuals could make more purchases of those things for which credits were assessed. These included commissary items, travel, certain clothes, town shop usage, materials for personal projects, equipment rent, and purchases from private ventures. Additionally, productivity greater than the standard level meant that individuals did not have to work as much and, so, could have more free time if they so wished. In these ways, then, the target standard of living could be improved upon.

Individuals over 90 years of age were not charged for commissary purchases or travel.

The credits one earned were recorded in ones credit account throughout the year. Purchases were noted in this account as negative credits. At the end of the year, the number of credits spent was deducted from the number earned and remaining credits were added to ones community service record. Should the balance in the account be negative at year's end, this balance would have to be brought to zero before further purchases could be made.

The credits in ones community service record were called 'career credits'. These credits were no longer available for purchases. Rather, the balance in the service record helped to represent an individual's social contribution. An individual would be honored at a special awards ceremony each time an additional 10000 credits were added to his or her community service record.

The number of credits received over a given period of time depended upon three factors. These were 1. the number of hours worked, 2. the credit-rate adjustment for the position or positions held (which, as before mentioned, depended upon such things as the number of applications received for a job, the urgency that the job be completed, the skill required, etc.), and 3. the community's annual credit-rate. The total was determined by multiplying these factors. For instance, since the beginning of the year, Ket had worked 1472 hours at an average credit-rate adjustment of 1.02. The town's annual value of an hour's labor was 1.24 credits. So, his earnings for the year to date were (1472 hrs. x 1.02 x 1.24 cds./hr.), or nearly 1862 credits, which was about average.

Ket had spent 257 credits since the beginning of the year. His net for the year, then, was (1862 cds. - 257 cds.), or 1605 credits. He thought he would have around 1800 credits to be transferred to his service record by the end of the year.

Besides being earned for work done, credits were also given for pregnancy and early motherhood. This way, those who were pregnant or had small children would have some spending credits without having to work. These payments started at about the fourth moon of pregnancy and continued until the child was 2 years old. In effect, these payments were made for 2 and a half years. The amount received might be 1800 to 2600 credits per year depending upon the credit rate for a given year.

The amount in a credit account was canceled when an individual passed away, and these became career credits in that individual's posthumous community service record.

Private Enterprise

Private enterprise was a part of Veodon's economy. Much of this consisted of personal transactions such as one individual making a special set of clothes for another or giving another music lessons aside from those offered by the community. However, larger concerns also existed. An example of this in Teret was a business that made several flavors of bottled sodas. These were sold at the commissary. Many of the products or services which were luxury items - which enhanced the quality of life but which were not really necessary - were produced by private enterprise.

There were restrictions placed upon the use of materials and energy for private uses. Materials for business undertakings (as well as for personal projects, hobbies, etc.) were obtained from the planet's auxiliary materials supply. The crediting for these varied according to the demand for them. Each individual could purchase up to 75 kilograms of materials a year for personal uses including private commerce. Also, each could buy up to 500 kilowatt-hours of power annually. The reason for the restrictions was to prevent too many resources being removed from necessary community use.

All business transactions were handled by the community's Office of Commerce. Privately produced items could be displayed and sold at the town's Commercial Store.

Credits earned in business by an individual or earned by an employee of a private concern went into that individual's commercial account. One could transfer credits from this account to ones regular credit account at the end of the year, providing one had earned at least 1200 credits in that year doing community work. Then, at the end of the next year and as was usual, any credits (including those transferred from a commercial account) in this regular credit account which had not been used for purchases went into ones community service record.

Trade

One further aspect of Veodon's economy was the trade of agricultural products between towns. There was a website that acted as an exchange for this purpose and information on this exchange

could be easily viewed online and could be updated regularly. This way, communities could be put in touch with one another for trading purposes. So, if Teret wanted to trade apples for oranges, information from the exchange could be called up and the nearest town interested in such a trade noted. The value of agricultural products depended upon the amount of labor which went into producing them.

Summary

The economy of Veodon was geared to provide the basic needs of each individual. In addition, things which improved the quality of life, which made life more interesting, were also provided. These ends were achieved by cooperative effort although private enterprise contributed, especially in the latter regard. Individual contribution to the process was signified by the credit.

Ket finished his meal and sat drinking his tea and gazing across the city square. An occasional individual walked across the square, most coming to or leaving Central Hall.

Out of the corner of his eye, Ket saw a movement in the sky to the southwest. Turning, he looked in the direction of the motion. The object was an airship. He recognized it as one of those based in Taras. It was moving by at a stately pace about a half a kilometer away, heading east. Ket had no idea what it was doing. It might be carrying some special cargo or be involved in a special task. At any rate, those on it had a nice day for flying.

The airship continued on its way. While he watched it move off into the distance, the chimes sounded, signaling that it was now 1600.

Soon, he began hearing more activity in the hall. Individuals began coming into the commissary. Outside, others were exiting the centrum. The workday for many ended at 1600, and they were leaving work. Some were youngsters, just getting out of an afternoon class.

After a few centihours, the number leaving the building gradually trailed off. The activity inside the teahall, though, had increased considerably, and the tables were becoming occupied with individuals visiting noisily. In a moment, Ket rose, picked up his tray, and carried it to the service area, exchanging greetings with several of the newcomers as he went. He then headed out of the commissary and into the hallway.

Going to the building's main stairway, Ket went up it to the third floor. He then followed the passages past the computer center and some other rooms to a small office on the west side of the building. The door to the room was open, and Ket went to it and looked in. There, putting some papers away and straightening his desk, was Cir Zinum. Ket knocked on the door frame, and Cir looked up.

"Oh! Hail, Ket, and hi!" Cir said. "Enter in."

"My greetings!" stated Ket. "Welcome back and how go your activities?"

"Thank you and well." answered Cir.

They shook hands.

"You enjoyed your stay in Veopolis?" Ket inquired.

"Immensely. And how have things here been?"

"Quite well and usual. Things as normal." Ket answered.

They spoke for a few moments about their respective activities. Ket asked Cir a number of questions about his trip and his sojourn at the Institute. Cir also told Ket how he had made very good time on his return trip, having ridden a submarine from Veopolis to Oceanport and then having made almost immediate connections with a high-speed train from Oceanport to Taras.

"This well." Ket said. He paused, looking at the computer monitor on the desk. "A report you are writing?"

"Aye. It will summarize my observations of the radio source." replied Cir.

"Excellent." said Ket.

"In fact, exciting developments are afoot." Cir told him.

"Oh?" Ket inquired.

"Yes. As you know, this radio source have we watched with interest and closely since its discovery five moons ago." said Cir.

"Aye." Ket said.

"More do we know now, though our knowledge but more questions poses."

"Please bespeak your knowing." Ket requested.

Well," said Cir, "almost sure are we, now, that the radio source is a planet."

"Interesting most!" Ket stated. "Free speculation has much suggested this."

"Yes. And this appears to be the case." Cir said.

"Most well!" Ket responded.

"And this." said Cir. He paused briefly. "The object's path indicates that it orbits the star, Opdis. It's in the Nalokon group, as you know. Opdis is a star seen close to Ryardis."

"I see."

"Opdis is much as our own sun." Cir continued. "The same type and about the same size. . . and the path of the radio object around Opdis seems to be about the same as that of Veodon about our sun."

"Indeed." Ket said.

"We think the radio object is almost certainly a planet." explained Cir. "But still. . . and this us startles. . . the signals are stronger than one would expect from a planet, including a large one."

"In fact? Of interest." noted Ket.

"Yes." Cir said. "And this leaves us with questions."

"Quite." responded Ket.

"We consider the possibility that it is a large planet, highly gaseous maybe, and very electrically active." Cir told him.

"Oh?" Ket said. "As though both, in one, star and planet?"

"And so."

"Interesting." Ket responded. "How far away is it?"

"About twenty-eight light years."

"Aye." said Ket. He paused. "And could it be solid a planet?"

"Perhaps." replied Cir.

"Like Veodon?" Ket inquired.

"Well, that's possible."

"Hmmm. If it is," Ket noted, "what could be causing the signals is wondered. Lightning?. . space currents? Volcanos?"

"Maybe," Cir said, "though the emissions seem too regular."

Ket nodded. He hesitated a moment. "Which brings us to what we-many do wonder. . . this being. . . could intelligent beings be creating the signals?"

Cir paused. "A possibility, this is." he stated.

"Stars!" responded Ket quietly. He walked to the window, looking out briefly. "A discovery of consequence would such be."

"This it would." agreed Cir.

"Yes." said Ket.

"Though again, we are unsure." Cir explained. "Yet. . . the possibility remains."

Ket nodded.

"At any rate, a discovery most exciting 'tis." said Cir.

"This so." agreed Ket. "And you a part of the group examining this. Most well!"

Cir nodded a little. "Appreciations I have for this." he said.

"Truly." said Ket. He paused. "You will point Opdis out to us?"

"Aye." Cir replied. "The household wants me to do so tonight when dark enough. And, I thought I could be at the observatory for a while later tonight, and for the next few nights, for showing."

"Most well."

"But, all ones can see, and through the 'scope too, is a star." Cir pointed out.

Ket nodded.

"However. . . knowing what's there, significance, lends."

"Factually." said Ket.

Just then, there were voices in the hall. Ket and Cir looked around. Lareg Vizvar, Entekkin Charls, and Mux Ree came to the door.

"Greetings both! . . Hi Ket. . . Hello." they said.

"Hail. . . Day's greetings!" Cir and Ket responded.

The three entered the room.

"Cir has taught you of the 'radio planet'?" Mux asked Ket.

"He has, and it is interesting most."

"Truly." observed Lareg. "Of note 'tis."

"Aye." said Entekkin. "And well it will be to garner knowledge, more, about the object. Do you think this will soon be forthcoming?" he asked Cir.

"For this we strive." Cir answered.

"Quite well."

"When the space telescope is up," noted Lareg, "the radio source can be much better studied."

"True. . . Actually." agreed the others.

"Indeed and quite." Cir said. "This should give illumination concerning the object, and maybe provide answers to questions many, which now, us, baffle."

"And so. . . This."

They paused.

"When do you return to Veopolis?" Lareg asked Cir.

"Late next moon." answered Cir. "We will prepare a writing on the matter. Then there will be a conference about it. . . probably during First Moon."

"Indeed."

Mux looked thoughtful, then inquired. "Will signals be sent to the object?"

"This has been discussed. Probably so, I'd say." answered Cir.

"Well this."

They were quiet momentarily.

"Me tell," Entekkin requested, "where is Opdis? I know the group Nalokon but not this star."

"Aye." said the others.

"Quite." Cir responded. He moved to a star map on the wall. The others gathered around. "Okay. . . here is the Nalokon." he said, indicating an area on the map. "Here is Ryardis. And Opdis is. . . here. In the evenings, high overhead and a bit north it is."

"And so. . . I see."

"You could show us it, tonight?" asked Lareg.

"Aye." Cir answered. "Just telling Ket, I was, that I could be at the observatory tonight, and nights later, for this."

"Good! . . . Quite well."

"What time will you there be?" Entekkin asked.

"Oh. . .About twenty-fifty." Cir replied.

"Fine. . . Aye!"

Ket sat on the desk; and while the others continued speaking, he idly looked at the computer screen, which displayed some of Cir's notes and figures concerning the radio object.

The room in which the group was gathered, and which was one of the rooms that were sometimes called "research labs", was actually just an office. There were several such rooms in the centrum and each was equipped with a very high speed computer. Experimentation could be done on these computers.

There was a hands-on laboratory in Teret that was used mainly for water quality testing and soil tests, though the lab could serve a variety of purposes. The lab was also used for educational purposes. Most of the major hands-on experimenting was done at the institute in Veopolis.

"Your group has released a news report?" Entekkin asked Cir.

"Aye. It should be shown sometime this week."

Entekkin nodded and paused. "Cir, I must say that a story concerning your involvement in this research for the local news would interesting be. I spoke of this with Teka a couple of days ago." he said. "Uh. . . I'd like to undertake this would such be acceptable unto you."

"Oh. Well, guess I so." said Cir. He smiled. ". . . as long as heroic you depict me."

"This I will." assured Entekkin. "In fact, object I didn't think you would. So. . . I brought a video recorder."

"Oh?"

"Aye." said Entekkin. "It's in the hall."

Cir looked at Ket, and the two went to see.

"Quite. . . It is there." they said.

"Aye so." Entekkin said.

"But. . ." Cir began.

"Have stage fright not." Entekkin encouraged.

"But. . ."

"Thought I, that we could record some scenes now."

Cir laughed and shrugged. "I am always one for interesting activities."

"Aye. . . Most well." the others said.

"In fact then, let us, this, do." Entekkin declared.

The group brought the video camera, light, and two tripods into the room.

"I suppose we could get some scenes of you working at your desk and at the computer as you oft do." suggested Entekkin.

"You're the director." Cir said.

"And perhaps tonight, some scenes of you at the telescope." said Entekkin.

"That would be good. . .And so." concurred the others.

When they had set up the equipment and were ready, Cir sat at the computer desk. "How's this?" he asked, turning so that he was facing the camera a bit.

"Fine and a striking pose." answered Entekkin. "Keep the sound off, I will, and these scenes can be for narrated segments. An interview can we do when we've written some questions."

"Okay." Cir said.

They spent several centihours recording scenes of Cir at the computer, as well as his looking at some papers and working while at the desk, and showing the others Opdis on the star chart.

In a bit, Entekkin suggested that they shoot some scenes on the other side of the room.

"The director you are." said Cir.

"Perhaps get, we could, you standing in front of the bookshelf and looking at some papers." Entekkin offered.

"But my acting ability do you utilize to its full?" Cir asked.

"Aye." replied Entekkin.

They recorded a number of additional scenes, each of those present getting in several of these, and also took some shots of Cir's calculations.

In a few centihours, they finished, deciding that they had videoed enough so that, after obtaining scenes of Cir in the observatory, Entekkin could ready most of the report. Entekkin told Cir that they could write

out an interview in a day or two, then video the interview, as well as some scenes of Cir commenting on the radio object. The group thought this a good plan.

"We can take this to the observatory tonight." said Entekkin as they placed the equipment in a corner of the office.

"More than one television segment do you plan?" Cir asked.

"Well. . . one now and. . . maybe one after the conference." Entekkin answered. "And an article or two for the news-site and paper."

"Carried away, let us not become." Cir urged.

Lareg smiled a little. "The stories, in fact, will likely be telecast municipium-wide." he speculated.

"Or province-wide." suggested Mux.

The others smiled, agreeing.

"Planet-wide." Ket said.

"But indeed!" said Cir. "The mantle of renown is placed upon my shoulders, and I fear its heft will prove too great for carrying!"

The others laughed.

"Yet, nay worry." assured Lareg. "Your might will make it a burden most easily born and lightly."

Cir looked toward the ceiling. "Of this I have questions, quite most."

They laughed.

"And now Ones," offered Cir, "what say you, we adjourn to the teahall and there continue our discussion over drink?"

"An idea good! . . . Aye." they said.

"Dinner did I just have, but a ginger soda could I drink, I wager." Ket commented.

"Assuredly. . . Quite! . . . We go!"

They left the office, followed the hallways to a nearby stairway, headed down the stairs, and toward the commissary.

KET'S DAY

Chapter 8

The commissary was now quite crowded with individuals off work for the day and visiting. The group greeted a number of these as they made their way to the service area. There, they happened into Teka Didriku.

"Salutations! . . Hello." they greeted her.

"Good afternoon!" she said. "My eyes brighten."

"As do ours, only more so."

"Just the one we wanted to see are you." Entekkin told her.

"Aye." the others concurred.

"Truly, if wondering, you are, about the report concerning the radio source, it is the story, first, on this evening's news." Teka said.

"When we talked this morning," Cir said, "I wasn't sure the story would be sent today."

"Aye 'twas sent." Teka noted. "It, we got, a short while ago when we received the planetary news."

"See I. . . This well."

"And indeed, Teka," said Entekkin, "we started on the story for the local news."

"Oh? Good!" she said.

"And so." Entekkin said. "We can speak of it."

"This well." Teka said. She looked at Cir. "Gosh. . . so well your being a part of this!"

"You thanks, One. But this reflects good fortune much more than talent. Let us order, and we'll speak of it further."

Lareg tallied their orders on the data entry terminal while the others helped Lat with the drinks - tea and sodas. They then went to a vacant table near the wall.

For a few centihours, they spoke with Teka about the radio source. She listened, asking a number of questions about the phenomenon. Cir filled her in on the details of the matter and also told her that he planned to be at the observatory that night and later in the week to point out Opdis. Mux suggested that

this be announced on the night's newscast so that anyone interested could come there and be shown the star; although he then noted that this might result in quite a crowd at the observatory. Teka suggested that someone from each household could come to the observatory, be shown Opdis, then point it out to those of their households upon returning home. This suggestion could be presented on the evening's newscast. This way, almost everyone in town could learn tonight which star the radio object orbited. They thought this a good idea. Too, Entekkin discussed his plan to report Cir's involvement in the research. He and Teka decided to try to get the story ready for the next day's evening newscast, and Cir was agreeable to this. Ket noted that Teka should be their household representative to the night's viewing since she was helping Entekkin with the story, and that Entekkin should represent his house. The others urged Lareg, Mux, and Ket that they come tonight, but the three said they would wait until later in the week to see the star through the telescope, Ket noting, too, that he was scheduled for that night's household chores. Teka and Entekkin also spoke of getting the story on the provincial news video, Cir putting his forehead in his hand as they did so.

Soon, the conversation turned to the idea of intelligent life on the 'radio planet'. They spoke of the possibility of this and questioned what such beings might be like.

"Well," Lareg said momentarily, "if the signals result from beings' activities, then maybe we could make some assumptions about them."

"Oh? . . . Please continue." they urged.

"Assume, we could, a number of things." said Lareg. "For instance, the signals indicate communication, and communication indicates more than one being. . . that is, a population."

"Reasonable."

"Also, the signals indicate that they-beings are technological. Now, to create their technology, they would need to be intelligent. And, they would require mobility and the ability to manipulate objects. So, they might have structures like our legs, arms, and hands." He paused. "Though. . . they might possess such a something as psychokinesis."

"Perhaps. . . Speculated interestingly." they noted.

"Vision, too, would be necessary to make the technology." Lareg continued. "Since Opdis is much as our sun, I suspect that they would see much as can we."

"Feasible."

He was thoughtful a moment. "Uh. . . if the emissions from the planet are communication, then this means that they need communication, and so, telepaths, they are not. They could have such that are similar to ears and vocal cords. Though. . . they might, themselves, emit signals. . . but require technology to send these over distances."

"Could be. . . Maybe."

"Let's see. . . they are probably land dwellers surrounded by a gaseous atmosphere. I don't think a technical society could be made by creatures living completely within a liquid or a gaseous environment. And, being technologically advanced, they would have to have a high level of social organization." He was quiet briefly. "Now, as far as other attributes such as their size, how they gain energy, it is difficult to speculate. If carbon based, they are, they might eat as we, or they might carry on photosynthesis."

"Actually. . . Much is possible." the others noted.

"For energy," added Lareg, "they might, in fact, have a photovoltaic capacity."

"Aye. . . Perhaps."

"All this is well." Teka noted. "One concludes that they would be recognizable to us as fellow beings, and us to them, but that they could be very different in some ways."

"In truth."

"Perhaps we will find out someday." observed Mux.

"Maybe."

They paused.

"Bespeak. . . What's the future of the radio source examinations?" Teka asked Cir.

"Well, the object will be monitored for the next year until the space telescope goes up. Then our observations of it will, improved, be. As for myself, to regular activities will I return following the conference."

"And so."

"You will return in time for spring planting?" Entekkin asked.

"Aye. I'll be back from Veopolis by then." answered Cir.

Entekkin nodded.

"And indeed, One, this is well, for we like your straight rows." kidded Mux, remembering some of the rows that Cir, daydreaming, had planted in the past.

"My decorative rows, you mean." he corrected.

"My pardons." offered Mux.

"Indeed," declared Cir, "you ones have the equipment ready. And then. . . Lareg and I will show you, and well, how farming is done."

Lareg's eyebrows arched, and he looked at Cir, a bit quizzically. He then shrugged and straightened, stating, "He speaks truth!"

"We eagerly await your demonstration." noted Mux.

"Yes!" agreed the others.

"And," said Ket, "as assistant director of the city analysis, newly appointed, vow I, that the equipment will stand ready for your expertise."

"Oh? . . Truly?" they asked, looking at Ket.

"Admittedly true." he responded.

They were silent momentarily.

Then Mux said, "Well, settled it be then. We, under Ket's supervision, will make ready the tractors. Lareg and Cir will farm the fields."

"In fact! . . This be good! . . 'Twill be of legend!"

Entekkin nodded. "Though truly," he told them, "methinks it would be wise to feast now, for famine be nigh."

"Aye this. . . Indeed!" the others concurred.

The group's attention shifted back to Ket's news. They congratulated him on his appointment.

"My thanks." he told them.

"A toast is called for." stated Cir.

"I warrant, one is." Mux concurred.

They picked up their cups. Then, Lareg said, "The toast!" They knocked the cups on the table and raised them in Ket's direction.

"Hail!" they declared.

Ket smiled and bowed to them. "Well and accurately will I endeavor doing." he swore.

"Most good!"

They continued the conversation.

Cir told them more about his stay in Veopolis as well as his trips to and from. The others filled him in on recent events in and around Teret. The events of the day were also discussed, the six growing somber when they spoke of Lan Zunen's condition.

Presently, the discussion turned to Annual Rendevous. The group wished Entekkin well in the strato-chess competition there. Ket told them that he and Fengog planned to take the veography test.

"Quite good." said the others approvingly.

"And actually." Entekkin said. "Perhaps honors will you sweep."

"Well. . . we'll hope for good performance." Ket said.

"Truly."

"A good item for the news this is, Ket." Teka told him. "But I haven't seen your names on the participants list."

"Nay." said Ket. "We just spoke of it this morning."

"I see." she said. "I haven't talked with anyone from the house since early."

"Aye. And I'll ask Fengog tonight if he really wants to do this. If so, we can put in our entries in the next day or two."

"Well be this." Teka said.

The group sat silently a moment.

Then Mux asked, "You are readying for reporting on 'Annual', Teka."

"Aye." she said. "In fact, I go to Meadowgrass next Secondday for a meeting to plan the general coverage."

"And so."

"We in Teret will meanwhile plan the coverage of Teret's own participants. . . as well as arrange for the regular news." Teka noted. She paused. "Too, we soon will be giving attention to this year's eugenics evaluation."

"See."

"How many from Teret will the evaluation, attend this year?" Cir asked her.

"Five." Teka answered.

Cir nodded. After a short pause, he asked, "And indeed, Ket, Alyan is nervous about taking the evaluation?"

"Oh some, maybe." Ket replied. "But I think she is more excited than nervous."

"Aye."

"She has increased her running, quite." Ket explained. "And has been spending considerable time, of late, stretching and weight lifting. She's in the best condition she's been in for a time."

"In fact. . . She looks most well." they commented.

"'Tis an important cross-roads for her." Teka noted.

"This so."

The eugenics evaluation was a comprehensive examination of an individual's mental, physical, and emotional characteristics. The purpose of the evaluation was to determine how many children an individual could have. As a result of the testing, an individual would be classified as parent-normal or parent-conditional.

Most (typically about 80% of the total population) were given the normal classification. These passed all the tests and could have 2 or 3 children, or occasionally more.

Those who received the conditional designation could have 1 child. Those who were given this classification had a certain weakness or weaknesses and/or were given this designation on the basis of educational attainment. Those not holding a general academics certificate usually made up about two-thirds of those receiving a conditional designation.

The eugenics examination was given once a year to those who had reached the qualification age which was 30 years for females and 34 years for males and who did not have an obvious, absolutely disqualifying condition (usually 2% - 3% of the total population).

Absolutely disqualifying conditions were officially defined as congenital weaknesses which would prevent one from surviving alone for extended periods in primitive or wilderness situations. These included such things as diabetes, hemophilia, heart problems, poor vision, mental deficiency, kidney ailments, etc.

The eugenics evaluation was made up of three parts: mental, physical, and emotional.

Mental

The mental standard in the eugenics process was based on ones academic background. Those with certificates in general academics and industrial crafts met the cognitive qualifications for the parents-normal designation. Those with a basic academics certificate and a certificate in industrial crafts met the criteria for the parents-conditional designation.

In the eugenics evaluation, the Comprehensive Intelligences Test was given, but the results were not used directly in determining parental classification. Rather, the scores from this test were used in making up Aurora-Alpha matching groups following the evaluation, finding individuals qualified to sit on the World Council, and for identifying Alpha-extras and Aurora-extras (those whose performance on the intelligence test was at the 99th percentile or higher). These individuals, should they meet the other eugenics criteria, would become, for males, Alpha-extras and, for females, Aurora-extras, and could parent more children than was normally the case. For Alpha-e's, for example, an individual could have 2 or 3 children with his own Aurora plus 1 or 2 more with 1 or 2 other Auroras. Aurora-e's were unlimited with regard to the number of children they could have, though the total number was entirely voluntary and might range from none to the normal number to a great many.)

Physical

The physical part of the eugenics evaluation entailed testing individuals for health, physical ability, and certain other factors. The criteria which were to be met for the parents-normal designation in this part of the examination included the following:

Health

Vision - 10 meters/10 meters or better, uncorrected, in each eye, normal peripheral vision, normal color vision

Hearing - 95% of normal or better in each ear

Teeth and gums - no cavities, healthy gums

General - heart normal, blood pressure normal, lungs clear, urinalysis normal, allergic response within acceptable limits

Physical ability

Males

Running - 100 meters in 3.55 millihours (12.78 seconds) or less and 40 kilometers in 3.00 hours or less*

(* At sea level. Required 40k running times were adjusted for elevation.)

Pull-ups - at least 18 consecutively

Push-ups - at least 70 consecutively

Sit-ups - at least 50 consecutively

Females

Running - 100 meters in 3.9 millihours (13.68 seconds) or less and 40 kilometers in 3.00 hours or less*

(* As above)

Pull-ups - at least 7 consecutively

Push-ups - at least 30 consecutively

Sit-ups - at least 50 consecutively

Other factors

Balance - normal

Ancestry - average longevity of forebears, 100 years or longer

Miscellaneous - good general appearance

Individuals who did not meet these standards would obtain a parents-conditional classification as long they were within a certain range of the standards. Some of the more vital health standards, however, had to be met by all who would be parents.

Regarding certain of the less vital health standards, as well as ancestral longevity, an individual could fall short by up to 10% and receive a conditional classification. In the physical ability criteria, one could fall short by up to 30% and qualify for a conditional designation.

If an individual did not pass a certain physical ability test, then it could be retaken either the same year or another year for a maximum of three times. The 40 kilometer run was always held on a 500 meter oval track. This lent yearly consistency to this test.

Information about ancestral longevity was obtained from the universal database. The pedigree of each of Veodon's individuals was recorded there.

Emotional

The third part of the eugenics evaluation was that which dealt with emotional factors.

It was recognized that environment and experience had an important effect on emotional make-up, and it was for this reason that social structuring which acted to optimize self-esteem was so important. However, it was also recognized that heredity played a significant role in emotional characteristics. For this reason, the examination of personality was included in the eugenics evaluation. In this way, those individuals with emotional characteristics conducive to community well-being could be identified and chosen, in the hopes that they would pass their attributes on to their children.

Emotional traits were examined by the use of the General Personality Test. What was sought in using this test were individuals who were 1. high in such traits as feelings of adequacy, altruism, affection, and empathy; 2. low in hostility and possessiveness; and 3. without excessive anxiety or guilt. A good psychological balance was sought.

Here again, certain levels were set which had to be met or exceeded for a parent-normal designation. Individuals who fell short by no more than 20% or so would be classed conditional.

General

The eugenics evaluation was given over a three day period at the end of Twelfth Moon. It was administered by members of municipal cabinets and by individuals who had completed the health training course, which included a section dealing with the various procedures involved in

the evaluation. The examinees met in their municipal seats on the days designated in order to take the evaluation.

Each year, there were about 4 or 5 individuals in a typical town such as Teret who reached the age at which they would be eligible to take the eugenics evaluation. One could take the evaluation in any of seven years after reaching the minimum eligibility age.

Following the evaluation, individuals designated parents-normal would pair off with a partner of choice or become part of a matching group and be assigned a partner.

Aurora-Alpha matching by way of a matching group was done by random selection from among members of the group. A matching group was made up of equal numbers of males and females. Each group member had to have passed the eugenics evaluation; each one agreed that each of those group members of the opposite sex were acceptable as a match; and no two individuals of the opposite sex in a matching group could be more closely related than third cousins. Matching groups varied in size, but normally consisted of 10 to 20 individuals.

Except for parenting by Alphas-extra and Auroras-extra, an Aurora and an Alpha parented only one another's children.

Individuals designated parents-conditional were helped to compile lists of those who were willing to participate in extra parenting and who had strengths which sufficiently offset their weaknesses. Two individuals with conditional classifications could pair off providing their strengths and weaknesses offset.

Ket had some of his soda. He thought for a moment of his own parental future. He glanced at Teka, visiting with the others. Ket and Teka had talked at one time about having a child; and even though they had the same short-coming (allergies), they thought they might get a special dispensation from the city cabinet. Upon further consideration, though, they dropped the idea, knowing that it was very likely that their child would have allergies. Ket and Eufonar had also considered this, but they had also decided against it since Eufonar had barely passed the allergies testing during her eugenics evaluation. Looking back at Teka, he chuckled to himself about how he sometimes teased her about holding out for an Alpha-e. Actually though, he knew that in recent moons, she and Cir had discussed parenthood. Cir did not have allergies, and Ket thought it quite likely that Cir and Teka might have a child. As for himself, he knew that to a large degree he had been avoiding the responsibilities of parenthood, involved as he was in having a good time and a relaxed life. It was likely, though, that he would take steps along these lines in the near future. At any rate, he'd see.

Ket wondered about those who could not meet the eugenics criteria at all. The reasons ranged from nearsightedness to elevated blood sugar. Besides the worry of their conditions, these individuals were disallowed biological parenthood. He wondered about the impact of such a judgment. Of course, this varied. Individuals who were mentally retarded, for instance, were, by and large, unperturbed by such matters. These individuals made up about a quarter of the 2 or 3 percent who did not meet the eugenics criteria at all. But what about the others?

Evaluations, even one leading to a conditional parent designation, inevitably led to upsets.

Across the room sat one of Ket's housemates, Pemu Errel, visiting with her friends. Pemu had failed to meet the requirements for the general academics certificate a couple of years before due to a weakness in mathematics. While she had done well enough in her schooling, and very well in some areas, she had hit a wall when she got to physics and higher math. She had given these subjects her best effort but it soon became apparent that she did not have the abilities required for them. This had been a difficult time for her. She had felt rather a failure in not being able to do something which most could do with relative ease. Of course, she also knew that her failure would mean a conditional parental classification. She cried, and especially on the evening after she had ceased trying to surmount the challenge. The household had consoled her.

In a general sense, the community tried to assure that everyone had a sound psychological make-up. One result of the good sense of self-esteem which followed from this was that the effect of failure - such as that which could occur due to the eugenics testing or in such other areas as work, sports, academics, or relations with others - was lessened.

In terms of the eugenics evaluation, the primary purpose of the community was to insure the greatest good for the greatest number, and the eugenics procedure played a central role in this purpose. The traits assessed were considered valuable for individuals to possess, both for their own good and in order for them be effective in maintaining a society which would be the most beneficial to those living within it.

By way of the eugenics process, the problems of physical health, emotional stability, and education were largely solved before conception. And as a result, most social problems were thereby solved.

Because of the absolute nature of the eugenics process, though, a conflict arose between the good of the community and the good of those who did not meet certain of the eugenics standards or did not meet the criteria at all. If individuals were emotionally traumatized and the quality of their lives reduced due to falling short in the evaluation, then the community would be defeating its purpose - seeing to the well-being of each individual - and, in fact, doing just the opposite of this purpose. While there was no perfect solution to this dilemma, the problem was not ignored; and, normally, extra solicitude on the part of others toward those who did not meet all the eugenics criteria helped. Too, the results of the eugenics evaluation affected no rights other than reproductive ones.

Those who did not meet the eugenics criteria usually made a pretty good adjustment. This was also true of others who had failed in some way.

Ket looked back at Pemu, visiting cheerfully with her friends. She had soon accepted her academic shortfall, with considerable grace Ket thought, taken her basic academics certificate, and gotten on with her life. She seemed as well-adjusted and happy as anyone, and he was glad about this.

Ket sat quietly for a few more centihours, listening to the others talk and watching the activity in the room.

Soon, Cir and Teka offered to get the group another pot of tea and some more drinks. The others agreed, Entekkin insisting they credit these to his account. The pair rose and went to the service area.

When they returned, Cir noted the presence of several individuals who had left Teret to work in the industrial complexes late the previous autumn. He guessed the year's manufacturing cycle was winding down.

"Aye." Entekkin concurred. "With several [of the returnees] have I spoken, and they believe production went well this year."

"This good." said Cir.

They sat quietly a moment.

"Those who were at the Lake Ziga complex seem to think that that lake will need to be de-silted this summer." Mux noted, referring to the hydroelectric reservoir that existed at one of the three industrial sites where those from their region usually worked.

Cir nodded. "You helped with de-silting operations there a few years ago I remember." he said to Mux.

"Yes." replied Mux. "We cleared the main lake-bed from the foot of the dam back about two-hundred meters. . . in addition to de-silting the slow-water area." He paused. "Anyway, it might be due to be done again."

"And this especially since there have been a couple of wildfires upstream from there." Teka observed.

"Aye." the others said.

"Lake Vosga was done last year." Lareg noted. "But what about Lake Tant?"

"Think I, its been seven or eight years there." responded Entekkin. "So, it, too, might be worked on this summer, or maybe next year."

The others nodded.

Siltation in the reservoirs serving the industrial complexes could become a problem as the years passed. So, steps were taken to deal with this concern. Such steps included, at each complex, a smaller, secondary dam at the lake's inlet which formed a slow-water, settling area and the utilization of remote controlled, electrically powered, submarine bulldozers.

Most of the sediment coming downstream was trapped in the slow-water area. There were pipes which could be opened or closed and which were at different levels in the slow-water dam so that water could be allowed from the settling lake into the main lake only from the settling area's less sediment laden upper levels. Every 5 to 10 years, the underwater bulldozers were used to push the silt which had collected there toward the settling-lake dam, into which was built a

pumping system. This pumped the sediment into a pipeline through which it was taken away from the site and deposited on land downhill from the main dam.

There was a similar pumping system in the main dam so that occasionally sediment could be pushed toward this structure - again using the submarine bulldozers - and removed in the same way.

Another factor which helped to reduce sedimentation in these reservoirs was the fact that the watersheds above each of them were wilderness so that plant cover there was as intact and as soil-retaining as could be hoped for.

"I would guess that the decision on which lakes will be de-silted will be made after spring runoff." Mux observed.

They nodded.

"Well anyway, good 'tis that industry went well this winter." Cir said.

"Aye."

"Incidentally," Cir inquired, "what do you here think of the proposed simplicity law before the World Council?"

"It seems well to me. . . Aye." they said.

"And you?" Ket asked him.

"Sense it makes." Cir answered. "I'm for it."

Ket nodded and briefly related to them what he and the others had said earlier that morning concerning technological dependency. He concluded, saying, "This would help insure we don't get too far out on a limb. So why not?"

"In fact."

"Well," noted Lareg, "it's in agreement with good sense in terms of balancing social lastingness and quality of life."

The others nodded. They were quiet briefly.

Momentarily, Teka inquired, "Do you ones think that in terms of the lastingness of society, we have achieved a lengthy lastingness?"

"Seems so. . . Aye and likely." they replied.

"I believe so." Lareg told them. "We live within the bounds of nature, and stable have we been for centuries-several." He paused. "One wonders what future centuries hold."

The group sat silently for a few moments, becoming reflective.

"Six-hundred years, now, is Teret." Mux mentioned. "Wonder I what it'll be like six centuries hence."

They paused.

"And six millennia hence." said Lareg.

They were silent a moment.

"Great, indeed, is the march of time." Cir noted.

"Aye."

"And astounding, it is, the span of the ages." Ket observed. "They are vast."

"In truth. . . Most." the others agreed quietly.

"And each of our lives is but a blink in the enormity of time." Teka added.

They paused, sipping their drinks.

In a moment, Entekkin said, "Wonder I, of those, whom these very walls knew, centuries ago, who questioned, as do we, of life and of Being." He looked around the room a moment. "And long after we are gone, others will here be. . . wondering about existence. . . as do we. These walls, they will know also."

"Truly."

After a brief silence, Cir noted, "Reminded, I am, in so speaking, of spans of time and space. . . and limitlessness." He hesitated. "And yet here is paradox interesting. This is that while there is infinity, there are ends too. Variations with their attendant boundaries exist. If they didn't, nothing would."

The others were quiet a moment.

Then Mux said, "So, matter and energy, for instance, differ. Such differences are fundamental to Being as we know it."

"And so."

"Indeed." offered Lareg, "One wonders about the time, if there were such a time, when there were no variations, so that everything was in absolute unity."

"Truly." concurred Teka. She paused. "And, assuming this were so, what caused the universe to differentiate in the first place? Also, will the now varied universe become, again, absolutely consistent?"

"Aye." the others said.

"Well," Ket observed, "if the universe were consistent then nothing would exist since no differences would there be to define anything. . .though perhaps distinguish, one might, between the nothingness of a pure something and the nothingness of absolute nothingness. At any rate, the cause of differentiation within a situation with no variation would arise. Though how?"

"Indeed."

"And also, Ones," said Cir, "if the universe could be absolutely consistent at times, could it not also be absolutely inconsistent or in disunity at other times?" He paused. "And yet, this total variability would seem to mean that there were a lot of different somethings. And each of these somethings would be completely invariable within its boundaries. But. . .exist, could not, these instances of invariability in a situation of infinite variability." He shook his head a little.

"Well. . ."

"And so," offered Mux, "for infinite inconsistency or variability to exist, many somethings, bounded by boundaries, would have to exist. But if these things and their boundaries existed, with these things being invariable within their boundaries, there would not be complete variability."

"Quite. . . Seems so." the others speculated.

"And one wonders. . ." said Entekkin, "about boundaries. Where one thing becomes another thing. What would be the nature of boundaries?"

"Indeed!"

The group was quiet for a moment.

"Well. . ." Teka said, "regarding our own state, I would say, that dwell, we do, in a circumstance between total consistency and. . . if it can exist, total inconsistency. . . since we would be impossible otherwise."

"Aye. . . Factual seems." the others agreed.

After a pause, Cir noted, "Truly, imponderables are many, and questions abound."

Lareg nodded. "Indeed. At any rate, a degree of certainty we do have. Common sense, this is. And this in its formal form. . . science."

They nodded.

"Yes." Entekkin agreed. "This doth give us light unto the limits of our perception."

"And so. . . Quite."

Teka had some of her tea. "Truly, Ones," she said, "I would ask. . . how does consciousness. . . the sense of self, fit in?"

"Indeed! . . . Question good!" they said.

"Quite." noted Mux after a brief pause. "When one thinks of all the individuals who have lived, who are alive, and who are yet to be, one wonders why we, ourselves, are here at this time, and this place." He paused. "I am myself. . . and each of you, yourself. Obvious, this is, but much baffling too."

"Truly!" Teka said. "Another wonder."

"Yes. . . It is this."

Cir nodded a little, looking at the table. "Imponderables many." he said.

They sat, sipping their drinks quietly for a time.

Over the next few centihours, the group continued talking and also visited with others at nearby tables as well as with several who came by to say hi. These inquired about and expressed interest in the radio source. Cir discussed this with them, telling them also about the plan to have a person from each house come to the observatory that night to be shown Opdis so that they could then show their housemates. He also agreed to "hold court" at the observatory later in the week for anyone interested. Lareg commented that there would be considerable star-gazing later that night and that the observatory would likely be a busy place for a few nights.

In a bit, Teka mentioned to Entekkin and Cir that she would be at the television station during the night's newscast and that they could bring the videotape they had taken that afternoon by for review if they so wanted.

"Perhaps so. . . This good."

They paused.

"You are working extra tonight, Teka?" Lareg asked her.

"Aye. I'll be at the studio two or three nights during the night newscast to help teach Kinga to use the camera. He is our new camera operator for the evening news." she explained.

"Oh? . . . He can do it?"

"I believe so." replied Teka.

"Indeed," Ket said, "this I saw on the job list this morning. Luck to him."

"Truly. . . Indeed." they concurred.

"I will tell him your good wishes." she said. "He's happy about this and was at the studio most of the afternoon. Around the studio he often is anyway, so fairly familiar with things there, he is. I let him help video our story concerning the forest survey that was begun today."

"In fact."

"There is a forest survey being done, then?" inquired Ket.

"Yes." Teka replied. "They're updating the tree inventory in part of the utilization forest."

"See I." said Ket. "That explains the airship I saw earlier."

"Aye. Today is the first day. In four or five days will the survey be completed." she said.

"And so. . . Quite." the others said.

"I wonder if any trees, additional, have come of size there since the last inventory." inquired Entekkin.

"Perhaps." said Teka. "The updated mappings should be online by next week."

The utilization forest was north of Augen. It covered 300 square kilometers. Trees from this area were sometimes harvested if more timber were needed over a certain period of time than could be obtained from the municiium tree farm. All trees in the use forest of moderate size or larger were mapped. This facilitated selection and cutting as well as preservation of the trees. Normally, if the health of a tree began to decline, it would be harvested before deteriorating in the forest. Timber trees found in the area were pine, fir, and spruce. A network of railroad tracks existed throughout the forest for hauling.

The larger trees in the utilization zone were not cut unless they went into decline. Having hiked and worked a great deal in the forest, Ket knew the locations of many of its large trees, particularly the largest ones. There was one pine that was about two meters in diameter at its base and close to 55 meters tall. It was estimated to be 700 years old. This was the largest tree he knew of in the use zone, though there were larger ones in the nearby forest outside this area.

While the utilization forest was an important source of timber, most of the lumber turned out by the mill in Augen came from trees grown at the municiium tree farm. The trees grown there were pines and, when harvested, were usually about 100 years old. The tree farm was a short distance northwest of Augen and covered 20 square kilometers.

"How many trees have gone to the mill this year?" Cir asked.

"About fifty from the tree farm and, from the use forest, seven." answered Teka.

"A few more than average from the utilization area." Cir observed.

"Aye." said Teka. "Two of the seven had been, by lightening, struck and another appeared to be in decline, so these were harvested. The extra lumber will be stockpiled."

"And so."

The group continued talking.

While listening to the others, Ket's thoughts turned to possibilities for the weekend. It seemed to him that since Netky was coming, since Cir had returned from Veopolis, and since it had been over two moons since a dance had been held, that a dance might be called for. Sixthday night would be a good time, he thought, if it did not conflict with anything.

In a few moments, he asked, "Teka, concerning activities, there's nothing scheduled Sixthday night is there?"

"Nay." she answered. "Sports events are Fifthday night and Sixthday afternoon. Skyday afternoon will this moon's concert be held. Why?"

"Well. . . have any spoken of holding a dance this weekend?"

"One has not been planned, that yet has been spoken of." she responded.

"Indeed and seems it, a number of things dictate one." Ket told the others. "A couple of moons has it been since the last. . . and Cir's return from researches honorable."

The latter bowed to Ket a bit.

"Also," Ket continued, "uh. . . Netky Tanda from Ripnil intends to visit here this Sixthday, and. . . and I thought that if a dance there were, she might like to go."

They looked at Ket. "Oh? . . . Truly!"

He nodded.

"A nice one she! . . . And so." they observed.

Ket's face felt warm, and he looked away.

"Perhaps call the recreation office, you could tomorrow, and see if one, they will schedule." Mux told him.

"Aye." they said.

"A dance that night wouldn't conflict with any other activities." noted Teka. "I don't believe there would be any problems in finding 'aunting' for youngsters, first at the dance and, later, at the households."

Ket nodded. "Should, then, I contact 'recreation'?"

"Do! . . . Quite." the others responded.

"This I will then." He paused and looked at Teka. "And. . . uh. . . Teka, if a dance we have, I would like for you to be a partner of mine also."

They looked at him and smiled.

"And mine too?" Cir asked her.

The other three chuckled.

Teka looked down a little. "Certainly, Ones." she said quietly.

The others smiled.

"We witness matchings many." observed Entekkin.

"This and quite." Lareg concurred.

"And truly and indeed, Teka," Mux added, ". . . perhaps you could save dances for us all."

She straightened and smiled at them with her head back slightly, "How could I refuse such honorable requests?" she stated.

"Most well! . . . This be good!" they noted.

"And also Our Teka," suggested Ket, "perhaps we can dance to the minuets you composed. Fine compositions these be."

"Uh. . . fine this," she responded, "and. . . I would be accepting of it."

"Well-very!" the others said.

They paused.

Lareg then cleared his throat. "Uh. . . " he murmured.

They looked at him.

"Uh, wonder I if. . . if Alyan might attend as I would like this, and. . . if she pleased . . . would oft dance with her."

They gazed at Lareg, a little surprised, and he covered his face with his hands.

They laughed a little.

"That she will be there, I will warrant!" stated Ket.

Mux laughed. "Well, it seems it's going to be the usual interesting affair."

The others agreed.

Over the next few moments, more of the crowd were beginning to leave the teahall. Outside, the sun was getting low.

Lat was working around, policing the tables which had been vacated. He came to one near the group and began wiping it.

"You work long today." Cir said to him. "This morning early were you here."

"Aye." responded Lat. "I did open at six and will remain to close tonight at one."

"Oh? . . . This so?" they inquired.

"A day long somewhat." Lat chuckled as he finished cleaning the table. He straightened the chairs there and came over to them. "Too, will I so do through Fifthday."

"Wow!"

"What's the occasion for your lengthy workings?" asked Entekkin.

"Well, I knew that I had worked quite a lot this year, but had not thought much about it." Lat explained. "Then, about a moon ago, I looked at my job record and saw that, if I worked just a bit more, I could better my old high for number of hours worked in a year."

"Indeed."

"Also," Lat continued, "saw I, that if I increased the number of hours worked even more for the last few weeks of the year, that I could set a mark that would be higher, much, than my old. So, this is what I do. In fact, my old high, twenty-nine hundred hours, I surpassed last week."

"Oh? . . . Actually!" noted the others.

"How many hours do you think you'll have by the end of the year?" asked Lareg.

"About thirty-three hundred." Lat answered.

"Gaaa! . . . Junipers! they responded.

Lat smiled.

"Quite well!" said Mux. "My high is about twenty-five hundred."

"As is mine." Ket added.

"And indeed, my mark for this year, I will most likely let stand," Lat noted. "It is hours working, many."

"Aye." they agreed.

Lat straightened the chairs at the next table and asked, "You made good progress on your report today, Cir?"

"Yes." Cir answered. "In a day or two should I have it finished."

Lat asked about viewing the star the radio source orbited. Cir told him about the viewing planned for that night, saying he might as well come up if he wanted.

"Okay. I'll run up there on my break." Lat said.

"Quite."

Lat noticed some individuals at the service area. "Well, I need go. Until later then."

"Okay. . . Until later." they replied.

He walked on.

Teka looked at the clock. "Time for me to go to dance class." she said, referring to the ballet class she frequented.

"Aye. . . The evening's on. . . So." they said.

They all rose from the table.

"I'd like to the gym for awhile." Ket said, as he removed his jacket from the back of the chair. "Anyone else?"

"Some things at the household, I need do. . . As I. . . Perhaps tomorrow."

"I'll be up when we finish at the studio." Teka told Cir and Entekkin.

"This well. . . Aye."

"It's clear, so a good night for viewing 'tis." Lareg noted, looking out the window.

"True. . . And so."

"Okay Ones. . . Until later. . . Till the morrow. . . Good night." they bade.

Cir, Entekkin, and Lareg headed for the west commissary door, and Teka, Mux, and Ket headed toward the door to the main centrum hallway.

Pemu was still seated at her table, talking to her friends. The friendliness Ket had felt toward her earlier made him reach out now, as he came to her, and squeeze her shoulders. She looked up, surprised, and smiled at him questioningly. Ket stood there for a moment, Pemu and the others at the table looking at him. He smiled at them and, feeling increasingly self-conscious, waved to them awkwardly and went on.

Teka and Mux looked back and paused, waiting for him at the door. He caught up with them, and they went into the hallway and along it for a short distance, then turned into another hallway, heading for the centrum's north wing.

KET'S DAY

Chapter 9

"What and which programs will be on television next moon?" Mux asked Teka as they walked along the hallway.

"Oh. . . well, several documentaries, there will be." she replied. "One about the Institute's prototype laboratory, for example, and a few nature shows. For dramas, there will be a couple of historical ones and one about a scientific expedition that gets stranded in a desert."

"And so."

Ket usually watched the entertainment programs if he were home. These shows were aired on the first four days of the week. They were shown following the evening newscast and, generally, lasted an hour or two. Because sports events, concerts and the like were normally held during the latter part of the week, no entertainment programs were aired then. The morning and evening newscasts were the only television broadcasts on these days.

"You know," Teka began, "several in the Information Department have talked recently about making a movie."

"This so? . . . Indeed?" Mux and Ket responded.

"Suggestions several have been made concerning the story. . . adventure, romance, serious, funny." Teka told them. She paused. "Perhaps something involving beings from outer-space might interesting be, considering recent developments."

"Quite so."

"Are they sure and serious about, this, doing?" asked Mux.

"Well, there has only been speaking of it." she answered. "It would be something well to undertake, though."

"Truly. . .Aye."

"And indeed," said Teka, "the idea is to make a quite good movie. One that would be suitable as an entertainment program planet-wide, and not here in Teret only."

"Actually. . . In fact." the others noted.

"It would be a task requiring efforts, though most interesting should it be." she said.

"And so."

They arrived at the dressing room area and stopped.

"A lack of expertise there is, and this acknowledged, in the field of movie-making," she told them, "so learning would be called for. At any rate, 'twould be an undertaking well."

"Indeed! . . . We'll hope the doing proceeds."

"And so." Teka said. She moved to the door. "Well then, till soon, Mux, and until this evening Ket."

"Okay. . . A good class have." they bade her.

"And then, I'll to the house." Mux said. He started toward the exit. "And I'll probably see you the morrow."

"Okay." Ket said. "An evening good."

"See you."

Ket entered the dressing room. He placed his coat and boots and his shirt and under-shirt in one of the cubicles. He then got a sweatshirt from the storage room, put it on, and headed to the workout gym.

There, quite a few others were present, as was normal at this time of day. Ket greeted several of these, and went into the adjoining room, where there were mats on the floor. He began jogging slowly around the room to begin warming up. After a few laps, he stopped and leaned against a window sill to stretch, gazing out the window while he did so.

In the lengthening shadows were the orchards, out across the north field, and the edge of the taiga beyond. The provincial boundary ran east and west five kilometers from Teret. Beyond this was the vast wilderness known as the Kenak. He could see the peaks of the Nangs and, beyond these, he could still make out mountains of the Kexon range stretching farther away into the distance.

In a few moments, Ket turned, shaking his arms and legs, then went to one of the mats.. He joined several others there who were stretching. He sat on the mat, joining their conversation and continuing his stretching.

After a few centihours, he and the others moved to the weight room where they began a sequence of exercises with weights, as well as exercises without weights - pull-ups, push-ups, sit-ups. They performed their sequence several times, repeating the routine in a cycle.

Throughout their exercising, they spoke of the events of the day, Ket telling the others about the radio object. They expressed interest in this, speculating on the source of the signals. They spoke of Lan's condition and also acknowledged Ket's appointment as assistant director of the city analysis.

In a while, they decided to return to the mats and do some simple tumbling. Following this, they retrieved some ear protectors from the storage room and engaged in a half-hour of good-natured wrestling.

They finished off with some further stretching. As it grew later, the group broke up, some going home and some to the teahall.

Ket stayed for a while, doing some additional stretching, then headed for the dressing room. There, he placed the sweatshirt he had been wearing into the laundry bin, got a washcloth from the storage room and sponged off briefly. He then re-donned his shirts and boots and put on his coat. After visiting shortly with a couple of others, he exited the dressing room.

He had just stepped into the hallway when he saw Eufonar Linzin appear from a passage that came from a north entrance.

"Greetings One!" he called.

She turned and stopped. "Hi and hello!" she responded. She signaled 'just a moment', went to a water fountain, and got a drink. She then came over to him. They joined hands briefly.

"You have running been?" he asked.

"Aye." she answered.

They continued along the hallway.

"I have begun practicing more each day." she told him. "This I need do if I'm going to put in a good showing at 'annual'. . . and in spring events."

"Indeed and in fact."

"I would that I can improve a bit." said Eufonar.

"Confident, I am, that you will succeed in being as fleet as the woodland's doe."

"You thanks." she smiled. "'Twill try." She paused. "And you've been exercising?"

"Aye." he answered. "A good workout and fun."

"Excellent."

They came to an intersecting corridor and stopped.

"Your day has, in other respects, been well?" Eufonar asked.

"It has." replied Ket. "I worked part-day and visited much."

"See I." she said. "What work did you?"

"At the greenhouses was I." he answered. "I did janitorial and inspections at the west six this afternoon. "

"In fact."

"I saw Theti there, and a visit, well, we had."

"Fine so." responded Eufonar. "I knew she was working over there today."

"And well has been your day?" asked Ket.

"Aye." she responded.

"You held a position?" he asked.

"Yes. Clerking for several days in ag department will I be. Work did begin today on deciding this year's crop positioning." explained Eufonar.

"Actually." he said.

"Next week, we will make up the location map." she told him.

"And so." inquired Ket.

"Copies should be ready for distributing by the middle of next moon."

"In fact and well." said Ket.

They stood quietly for a moment.

"Theti and I spoke of your planned trip." he told her.

"Indeed. About this, we are excited. Since I've not been out of the municium, but for one or two trips to Taras* in the last three years, nice will it be to wander a bit. The coastal country where my relatives live is most well."

*The provincial capital.

"Truly."

"Some interesting visitings will we have there." she said.

"Without doubt. And I warrant one Fafny will enjoy the trip." Ket said, referring to Eufonar's daughter.

"Yes." agreed Eufonar. "Most of my relatives and friends, there, haven't seen her. So I suspect she will bask in attentions many."

"Possible, this is. . . and that she will like this." observed Ket.

Eufonar smiled. "Aye, this likely."

They continued the conversation, discussing the day's occurrences. They spoke about Lan's condition. Also, Ket told her about his city analysis assignment and that he would be working with her uncle. She thought this was good, believing the two would do a fine job.

They paused.

"You did know that Cir is returned from Veopolis?" he asked.

"Yes." said Eufonar. "I saw him from a distance this morning but have not yet spoken with him."

"There are developments concerning the radio source he's been researching."

"Indeed?" she inquired. "What are these?"

Ket told her briefly about the 'radio planet'.

"Most intriguing this!" Eufonar responded.

"Aye. Watch the news tonight. The story will be featured." he said.

"This I will." she stated.

"The plan is for a person from each house to be shown Opdis by Cir at the observatory tonight." Ket told her. "And then for these to show their households."

"Good. I'll like seeing the star."

"Indeed." Ket said.

Eufonar nodded and paused. "Do they have ideas about what causes these beams?"

"Well, some theories do they have. But they really aren't sure." answered Ket. "Something like electrical discharges and storms maybe. Yet. . . Cir said the signals seem too regular for a natural cause."

Eufonar looked at him. "Wow!" she said quietly.

"Aye." he returned.

"Which, of course, puts at center stage the question we all have." she noted.

"Indeed it does."

"Wouldn't it be something if t'were beings?" Eufonar offered.

"Truly it would." responded Ket.

They were quiet a moment.

"Well, definitely watch the news about it tonight will I." she said.

"Quite well." Ket said. "'A mystery of note."

Eufonar nodded.

They paused.

Then Ket said, "Eufonar. . . at the teahall, we several did speak of scheduling a dance for the weekend. You would like this?"

"Uh. . . Aye, I would."

"Well, I plan to contact 'recreation' tomorrow concerning it."

"Actually." she stated.

"Thought, we, that this would be a good way to note occurrences of late such as Cir's return from Veopolis. . . and a while has it been since there has been a dance. . . so, to hold one would be well." Ket said.

"Aye."

"And also. . . Netky Tanda is coming for a visit Sixthday." Ket said. "This, she might enjoy."

"Oh?"

Ket told Eufonar of his jog to Ripnil and of his visit there with Netky, who Eufonar knew.

"And so." said Eufonar. "Well, together we should get. With her I haven't spoken for several moons."

"Indeed." Ket said. "Perhaps at the netball game or at teahall later."

"Aye and perhaps so." she responded.

They paused.

Momentarily, Eufonar inquired, "Do you think that. . . that you and Netky might someday be 'specials'?"

"Well. . . perhaps this could be in future." he answered.

"This would be good." Eufonar said. She reached out and ran her hand along his arm. "A fine 'special' you are."

Ket smiled. "You thanks." he said. He paused, then said, "Good fortune in this. . . I have."

She smiled.

"And as far as Netky and I," Ket said, "see we will, happens what."

"And so."

Ket paused briefly, then inquired, "Eufonar. . . if a dance we have, will you wear your hair down around your shoulders?"

"Sure." she answered.

"Quite." he said. He hesitated, glancing at her shyly.

She looked at him closely, raising her eyebrows a little, questioningly.

They paused.

"Would you. . .uh. . .wear your split-to-the-knees?" he asked.

Eufonar smiled a bit self-consciously. "I suppose so." she replied.

"Most well."

She was silent a moment. "I have a new pair." she told him.

"Oh?" he inquired.

"Aye." Eufonar answered. "These are split along the front from floor to somewhat above the knee on one leg, and on the other, the same, except they're split along the back of the pants leg. And, other than the loose lower legs, fairly close fitting are they."

There was a pause.

"Indeed!" Ket managed.

The pair stood quietly a moment.

"So," Eufonar noted momentarily, "do see about scheduling a dance. 'Twould be well."

"Quite so." agreed Ket. "And I will." He paused a moment. "Would you like to go for lunch tomorrow?"

"Certainly." she replied.

"Fine." he said.

"In the 'ag' office, I'll be, if you want to meet me there." she told him.

"Okay. About twelve?"

"Quite." Eufonar said.

"I'll there be." said Ket.

Eufonar nodded and paused. "Well, I should be to home."

"Okay." Ket said. He took her hands in his. "Until later then."

"And so." she said.

They held hands briefly. Then, Ket raised one of her hands and kissed it, maintaining eye contact the while. They hugged, and held this for a bit, softly cherishing one another in the embrace. Parting, they stood still for a moment.

"You make my eyes glow." said Ket.

"You honor Existence." she responded.

He bowed to her. She stepped back and curtsied. She then turned and proceeded along the hall. He watched her go. She looked back, smiled, and disappeared into a connecting corridor.

Ket continued along, going toward the centrum's south hallway. Turning into this passage, he went to the main door and exited the building.

KET'S DAY

Chapter 10

Outside, it was becoming cold. Ket fastened his jacket and headed to the city store to get the window pane that he had left there earlier. It was almost dark, now, though the western sky still glowed somewhat. Lights shown from a number of windows in the nearby residences as well as from a few windows in Central Hall. Ket looked at the sky. A couple of planets and a number of stars were visible.

He walked across the city square to the store and entered the building. Everyone had gone, and all the lights were out. He pressed the light switch for the front area and went into the store's materials supply section. The carrying bag with the pane in it was on the desk. He got it and returned to the door. Switching the lights off, he left the building and headed back across the square.

He had gone only a short distance when the chimes began to sound. It was a low mournful sound. He stopped. The death knell. One of Teret's residents had died.

Ket knew that Lan Zunen had passed away. He looked in the direction of the residence, though it could not be seen from where he stood. He looked back in the direction of the fading light in the west.

The chimes continued the slow, sad melody. Ket stood, facing the sun's after-glow. The melody continued. After a few centihours, the piece began to change. Gradually, it became joyful and inspiring. It ended, in a bit, on a note of exaltation that was quite moving. As the last notes faded into the distance, Ket stood for a moment, then turned, and walked on. In a couple of days, the smoke would again rise, as it did every two or three moons, from a funeral pyre in Eagle Meadow to the north.

In a few centihours, he was at his household. Opening the door, he entered. He went into the middle room and to the storm window leaning against the wall. Taking the new pane from the carrying sack, he snapped it into the storm window frame. He then removed the entire main window from the casing and leaned it against the wall. He put the storm window into the opening and twisted the latches which held it firmly in place. Returning the main window to its place, he secured it, and closed the shutters. Then, he picked up the carrying bag and walked toward the kitchen.

Two of the household's younger members were starting up the stairs as Ket came by.

"Greetings, Ket. . . Hail!" they said.

"Evening's greetings." Ket said. "Supper will be ready briefly?"

"Aye. . . A centihours few." they responded.

"Quite well." Ket said.

They trotted up the stairs. Ket went into the kitchen. Several individuals were there, including Meva, Mejen, Yanta, Alyan, and Vok Tinla, Ket's cousin. Some were busy getting supper ready, and some were sitting at the kitchen table.

"Hail, all." Ket greeted them.

"Hi. . . Hello."

"The knell is sounded." Ket said. "Lan Zunen?"

"Yes." Meva replied.

Ket nodded. He put the sack away and removed his coat.

"Day after tomorrow will the cremation be." Vok told him.

"I see. Will help be needed with the pyre or anything?"

"No, I believe everything is taken care of." answered Vok. "Go to the ceremony with Mejen and myself as household representatives, as might Tilriny."

"Aye." Ket said.

They paused.

"A good life he had." Meva observed.

"Yes. . . True." the others agreed.

"And be it so." said Ket. He was quiet a moment. "I'll shower and change. About a half-hour until supper?"

"Aye." replied Yanta.

Okay."

Ket left the kitchen, went up the stairs to the third floor, and to his room. He put his coat on a chair and opened the valve to the heat radiator. Going to the window, he pulled the shutters closed. He then sat on his bed and removed his boots, socks, and shirt. He got some clean clothes and went to the washroom.

Here, he checked the thermostat on the wall water heater. It was fine. Getting a towel from the towel shelf, he hung it near the shower, finished undressing, and turned the main shower knob.

The water felt fine, so the hot and cold water knobs on either side of the main knob were set about right. He got in and showered.

Finished, he dried and dressed. Collecting his clothes and the towel, he switched the vent fan and light off and returned to his room. He hung the towel to dry, gathered the rest of his laundry, took it to the chute in the hall, and dropped it in.

Everyone sewed their names into their clothes so that these could be identified in the laundry room. Two or three times each week, one of the household members would do the laundry and place the items in a box labeled with the name of the owner, who could then retrieve them.

Back in his room, Ket got on his hands and knees in front of the heat radiator and flung his head back and forth near it in order to dry his hair some. After doing this for a few moments, he got up and combed it.

Going to the closet, he pushed some items aside to get a shirt. While doing this, his attention was drawn to his awards sash. He wore the sash from time to time, mostly on ceremonial occasions. He stood there, looking at it for a moment.

Near the top of the sash were pinned three gold stars. These indicated Ket's career credits - one star representing 10000 of these. Close to these was a silver triangle, indicating that he had completed one original research project. Next were a small 'A' and 'I', indicating certificates in general academics and industrial crafts. Further down were other badges and patches, including the badge for his winning the municiium championship in veography; a pin indicating musical proficiency in all brass instruments, and a specialty pin for the trumpet; another musical proficiency pin for stringed instruments, and a specialty pin for the viola; a number of patches which were alike - circular, silver, with a black border - each of which stood for an individual's having personally collected one bin of plant matter for methane production (this was aside from work done harvesting regular biomass crops); and above these was a yellow patch which looked like a fire and which was equivalent to ten of the 'one bin' biomass patches.

He was proud of all his awards. The next occasions upon which he would wear the sash would be at the opening and closing ceremonies at Annual Rendezvous.

Ket took a shirt off a hanger and closed the closet door. He put the shirt on, then shut the heater valve and headed for the stairs.

Most of the household members were now in the dining room. Ket went into the kitchen. He looked at what was being served. There were a corn meal-chicken dish, red beans, mashed potatoes, yellow squash, salad, whole wheat bread, and apricot pie. Ket served himself and placed the dishes on a tray. He then went into the dining area and to a chair near Tilriny, Alyan, Pemu, Yanta, and Ninx.

"Take seat. . . Aye." they said.

"My thanks."

He poured himself a glass of water from the pitcher on the table and shook some olive oil and vinegar on his bread. He also got a lemon slice from a nearby dish.

The others were talking about the recent death and reminiscing about the deceased. They had all known Lan, Tilriny best of all. She was saddened by the death because, as was the case with almost every passing that occurred in the town now, she had known him all his life. Still, she remained philosophical, knowing better than most the cycles of nature.

"Even when death is expected, it surprises us some." Pemu said. "I wonder about this."

"Entities of light, we are." said Tilriny. "And, while both light and darkness constitute Being, it is the light for which we strive."

The others nodded.

After a pause, Alyan asked, "Emerita, how do we determine what is of light, and what of darkness, when the difference is not always obvious?"

"The way is, to know your feelings." answered Tilriny. "To simply say of things and of actions that one is always of darkness and that one is always of light is oft faulty. So simple, the world is not."

The others sat listening.

"Even in regard to life and death, it is not always one way or the other." Tilriny continued. "For instance, had Lan lingered too long in his illness, this lingering could have become more a manifestation of darkness, and his death, light."

"Aye. . . Yes." they said quietly.

"So, your natural, basic feelings heed." said Tilriny. "Positive and negative, these will most often tell."

They nodded.

"Knowledge, too, can help one." she explained. "This increases by trying to remain open to the true nature of all things." She paused. "Though here, too, one must careful be, as one might use knowledge, over much, as a shield. . . or worse, as a weapon."

They agreed and were silent momentarily.

"And so," Alyan inquired briefly, "honesty is the way to wisdom?"

"Well," Tilriny responded, "I would say that we are always wise. . . and that in seeking to escape hurt or being afraid, we can become diverted from wisdom. This happens to us all from time to time. Through honesty though, we can, wise, remain."

"And so. . . Aye." the others responded quietly.

After a pause, they continued their conversation, telling one another about the events of the day. They talked about work and about certain of the day's activities. They spoke of Buf's news, and Ket told them

about his job appointment. Also, he mentioned the radio source, to their interest, and told them that it would be covered on the night's newscast.

In a short while, most of the household was finished eating. Vok, who was sitting at the other table, then rose and called for everyone's attention. He was serving as house president for the year.

"Attention, all, please." Vok said. "Attention."

When the talking subsided, Vok continued. "I would speak briefly of some important matters." He was quiet briefly. "The house meeting is tomorrow night. The household chores schedule for next moon is completed. So, if any conflicts, there be, concerning the schedule, then maybe work them out, we can."

He paused momentarily.

"As you know," he continued, "Lan Zunen has passed away. In two days, evening, will the pyre be struck. The memorial-honoring will be held the morning next, and the ashes placed in Rocky Creek." He looked at Tiltriny. "Emerita, you will attend?"

"I will." she replied.

"Emerita Tiltriny, Mejen, and I will attend as formal household representatives, and for any of you who would like to attend, we will know the times tomorrow." Vok said. "All arrangements for the cremation and the honoring are taken care of. But, if anything else be needed, I have stated that our house stands by, ready to help."

They nodded. "Yes. . . Quite. . . Indeed."

Vok waited for the room to become quiet again. He then stood a moment, now looking more light-hearted. The others' attention became focused upon him.

"Also," continued Vok, "featured on this night's news will be one of us. . . Buf Nevik."

They all looked at Buf and clapped. Buf smiled a little, self-consciously acknowledging the attention and the applause.

"See, we will, if the camera shows, and properly, her appealing self." Vok said.

"Indeed. . . Truly!" the household concurred.

Buf smiled and looked down.

"Tell you, I cannot, what the story is about. . . for a secret it is." Vok told them.

They laughed. Buf dropped her head to her forearm.

Vok paused briefly. "And so, if nothing further there is, I thank you."

There was a murmur of conversation as the house-members got up and began clearing the tables. They all pitched in and had the room cleared in a few centihours, drifting off to the middle room as they finished.

In the kitchen, Ket separated the plates and other items on the cabinet so that he could more easily wash these following the newscast. He then went into the middle room and sat next to Fengog on the bag couch.

The television was already on, displaying a picture of Teret which shown 5 centihours before broadcasting began.

Also, the fireplace had been lit.

The fireplace burned methane. The modest flame produced heated stones which were of a type which glowed when hot.

Shortly, the picture of Teret showing on the television blinked off and the news logo along with the newscast's musical score came on. In a moment, the announcer, Angu Holvan appeared.

"Evening's greetings." Angu said. "To the Teret evening news, welcome. First tonight, long-time Teret citizen, Lan Zunen, passed away late this afternoon at the age of ninety-five. He had been ill for several days. . . "

Angu spoke for a few moments, giving details about Lan's life as well as information concerning the memorial ceremony. He also pointed out that the arrangements for the funeral pyre had been made as had been arrangements for accommodations for several out-of-town relatives and friends who would be attending.

". . . any questions concerning the memorial honoring or other details can be directed to City Administrator Nikin or members of the city cabinet."

Angu paused, briefly looking at his notes. He then continued.

"A team of scientists at the Institute of Science and Technology have announced that the radio source discovered several moons ago in the star-group Nalokon may be a planet. Signals from the object indicate that it is orbiting the star, Opdis. Researchers are unsure of the cause of the signals. Here is a report from the Institute."

The scene changed to two of the lead scientists studying the 'radio planet'. They explained what was known concerning the phenomenon as well as some ideas about what might be causing the signals. They also addressed the possibility that the signals might indicate intelligent life. While they did not discount this idea, they emphasized that neither was it a conclusion. There was a murmur of interest around the room in response to the report.

The scene returned to Angu who spoke of Cir's involvement in the research. He ended the report by saying that Cir would be at the observatory that evening, and for the next several evenings, to point out Opdis, adding that Cir suggested, for that evening, that someone from each household come to the

observatory to be shown the star to reduce crowding, but that he would try show it to anyone interested. There were further expressions of interest around the room. Ket suspected that Cir would be quite busy answering questions tonight and during the next few days.

Angu continued. "The results of waste recycling from this year's manufacturing cycle at the industrial complexes in the northern hemisphere have been released. Again this year, reclaimed were the great majority of waste products."

The manufacturing cycle was always in the winter. So, the cycle was at opposite times of the year in the northern and southern hemispheres. However, since 92% of Veodonians lived in the northern hemisphere and, consequently, since almost all the manufacturing was done there, then the matters concerning manufacturing in the northern hemisphere were by-and-large true for manufacturing overall.

"Here is a report."

The scene changed to a reporter at an industrial complex who gave a brief introduction to the story saying, "Accounted for, have been virtually all of the waste products from the region's manufacturing process carried on this year."

The supervisor of waste auditing, reclamation, and disposal at the complex was then featured. He discussed, briefly, the findings and the results that had been achieved. "Ninety-nine point seven one percent of total waste products have been recovered." he said. "Most of the wastes unaccounted for were airborne hydrocarbons, mainly from lubricants. . . Microbiological reclamation has resulted in the recovery of the bulk of waste metals. . . No detectable level of any pollutant in the vicinity of this complex have been found. . . Other complexes report similar findings."

The report ended and the scene shifted back to Angu. "All these results are now posted on the manufacturing cycle comm-site."

Angu continued with stories from the world, regional, and provincial levels. There were a couple of reports on activities in the municium, including the one concerning the survey of the utilization forest, and, then, the town news, including the activities of the city cabinet and the latest sports news. As a part of this latter, Angu announced that Teret had won the netball match in Tall Pine the night before. The others expressed approval and cheered Fengog a bit, knowing he had played.

The last story was the one about Buf.

"The next Aurora in Teret to be pregnant, likely will, Buf Nevik, be." said Angu. "Buf was asked last night by the City Cabinet to become pregnant. Teka Didriku spoke with Buf at the cabinet meeting."

The scene changed to Buf and Teka in Central Hall. The household again clapped and cheered.

"I am here with Buf Nevik who has received a pregnancy request from the City Cabinet, the first such request the cabinet has had to make in four years." Teka said. "Buf, accept the request did you?"

"Aye." Buf responded.

"It is relatively early for you is it not?" asked Teka.

"Yes, somewhat." Buf replied. "Born was my son a little over a year ago."

"Need to think about it did you?"

"Nay." Buf answered. "A surprise, it was, but quite willing am I to proceed."

"Was the reason for the request the usual one. . . to keep the birth rate even?" inquired Teka.

"Yes. Several Auroras who most eligible were. . . with two to four years since their last. . . had asked for extensions for various reasons. Thus the request." Buf explained.

"How did they choose?" Teka asked.

"They simply at random chose, from among those of us for whom it had been one or two years." said Buf.
"The first one asked was I."

"Will others, they ask?" Teka inquired.

"No, I don't believe so. I agreed to go ahead. Also, one only was needed to help the birth rate steady."

"Aye." said Teka. "Glad are you?"

"Yes." Buf replied.

"Most well." said Teka. "You thanks."

"Thank you."

"With Buf Nevik, this is Teka Didriku."

The household members clapped again, and there was a scattering of "Quite well. . . Well done! . . . Bravo!" around the room. Buf smiled and sank into the couch where she sat.

"Thank you, Buf and Teka." Angu said. "Incidentally, due to our recent passing, it has been inquired as to whether another pregnancy request might be made. City Administrator Nikin states that this will be taken under consideration at the City Cabinet meeting next week."

Angu paused. "Concludes, that, the evening report. Tonight's entertainment program will be an hour-long documentary, 'The Far Sands', dealing with the natural and the social history of the Vir wilderness of Jind Continent. You thanks for watching. This is Angu Holvan. . . good night."

There was a rustle of activity in the room as individuals began moving about and talking. Some left the room, going to the kitchen for tea or to a washroom. Mention was made of attending Cir's star-showing at the observatory. A number of individuals decided to go.

These began looking for their shoes and getting their coats, announcing their intention to others who had momentarily been out of the room. Several more opted to go.

"You would go?" Ket asked Fengog.

"Well....tonight, I guess not. Many likely will be there. So, I think I'll bed early." Fengog answered. "We didn't get back from Tall Pine last night until about midnight, and early up was I." He paused. "I would see the star soon, though."

Ket nodded.

In a few centihours, those heading for the observatory had gathered, putting their coats on and inquiring if any others were interested.

Tilriny noticed Buf looking longingly at those going. "Buf, if you would like to get out of the house for a while, we can, him, watch." she said, indicating Buf's baby.

"Oh. . . Well. . . okay." responded Buf. "You thanks."

Buf rose, went over, and gave her son, who was now asleep, to Tilriny. She then went to put on her shoes and coat.

"Promise you, to learn the star well and show everyone?" Mejen asked.

"We will and quite." replied Ulen.

"This fine. . . And do."

The group started toward the door. "We're off."

"Good viewing." bade the others.

They filed out the door.

Ket and Fengog sat watching the announcements and messages that were shown on television for the few centihours between the news and the entertainment program.

In a moment, Ket asked, "Have you considered how you would like to proceed with studying for the veography test?"

"Well," answered Fengog, "thought I, that we could each review 'Introduction to Veography' and ask one another questions on this."

"Quite." said Ket. "We could cover a chapter a day starting this weekend."

"Aye. This sounds well." said Fengog. "I think there's most of what we need in the household books. And we can check out anything else needed."

"Indeed." Ket said.

After a pause, Fengog said, "You know, as long as we're dealing with maps, we ought, this summer, to chose places on maps, fairly away, where neither of us have been, and see if we can go to those places by compass."

"Hmm. . . that might be an activity interesting." Ket noted.

"Truly." said Fengog. "We could keep it in mind. Fine practise it would be in our map-reading."

"Aye and indeed."

They were quiet a moment.

"And about the veography competition. . . much do we have to cover." Fengog noted.

Ket smiled. "This yes." he said. "Something tells me time may be short. Shall we go forth?"

"Let us this." answered Fengog. "And, even if our efforts lack greatness, we will still have the learning."

"True. And a consideration more valid." agreed Ket.

The room had now become quiet again. The nightly television program beginning.

"Perhaps tomorrow, further can we plan about our studyings." said Ket.

"Quite well." Fengog said. He paused briefly. "Watch will you?" he asked, referring to the program.

"Aye will."

"The Vir Wilderness, Continent Jind." said the voice of the narrator as the scene scanned a broad plain backed by a high mountain range. "One of the most diverse regions on all Veodon. Site of the sand seas of Zankar and of the towering Nogow range. Home to a great many species of plants and animals, both common and uncommon. A land of history, where roamed philosophers of yore. From it's coastal beaches, cliffs, and estuaries to it's lofty peaks and alpine meadows, it is an area of interest, and of contrasts. . . "

The program continued, focusing upon various aspects of the natural features of the area in question.

As Ket watched, he reflected upon the trip he had made to Continent Jind, which lay on the opposite side of the planet, though also in the northern hemisphere. This had taken place when he was a member of the

expedition during which he had made his veographical study. The site of his expedition had been a few hundred kilometers from the region being featured on television, though.

That expedition trip had been an interesting one. In fact, it was on this trip that he had circumnavigated the planet. He had first journeyed to Veopolis where the expedition was organized. He then traveled with the group to the Jind. At the close of the expedition, he continued around the globe in the opposite direction so that when he arrived back in Teret he had circled the planet. Much of interest had he seen on the journey; and it fascinated him then, as it continued to fascinate him, how one could travel to almost any part of Veodon in just a few days.

The planet's transportation system included local and long-range transport of passengers and cargo.

Transportation within municia included the passenger shuttles and cargo trains. These cycled through a municium from the municipal seat.

Transport between municia included the interfacing connections between local passenger shuttle systems as well as direct passenger and cargo transportation between provincial and municipal capitals. Just as passenger shuttles and cargo trains from a municipal capital cycled through the communities of that municium, cargo/passenger trains from a provincial capital visited all the municia of the province, stopping at the capital of each. These trains ran once or twice each day.

Provincial capitals were also linked by trains. On these routes, the carriers were known as 'high speeds' and traveled faster than the inner-provincial and municipal carriers. The routes of these inter-provincial carriers formed a grid over a continent. Passenger transport was timed so that it was possible for one to get on a 'high-speed' at a provincial capital going north, south, east, or west once each day.

Travel between provincial capitals could also be done by airship. These airships utilized helium and were primarily for passenger travel.

Transoceanic transportation was by ship, submarine, and airship. These followed set routes across the water from one continent to another. A vessel or an airship embarked from a main coastal port of a continent every two or three days. All these modes of transport - ships, submarines, airships - carried both passengers and cargo, though the ships were primarily for cargo and the submarines and airships were mostly for passengers.

One of the most common long-range journeys that was made was from an outlying community to Veopolis.

The trip from Teret to Veopolis, for example, which was fairly common, was one of 7200 kilometers. On this trip, one would take a shuttle to Meadowgrass and a train to Taras (350 km). From there, one went by 'high-speed' (150 km/hr) or airship (120 km/hr) the 3200 kilometers to Oceanport. At this city, one could get on an airship, a submarine (30 km/hr), or a ship (32 km/hr) for the 4000 kilometer voyage across the ocean to Veopolis on the west coast of Continent Plica.

The entire trip could take 3 to 8 days, depending upon the type of transportation taken as well as the timing of arrivals and departures.

The night's television program continued. Besides explanations of the landforms, plant and animal life, and the climate of the region, the narrator also spoke of some of the important historical events which had taken place in the west Jind, citing the fact that the earliest and greatest philosophers of Veodon's culture had dwelt in the area - individuals whose ideas formed the bases of present-day society. The household watched, interested in this history, though it was familiar.

After a bit, the program reached its conclusion; and as the title song played, those in the room stirred. When the picture of Teret again appeared on the screen, signaling the end of programming for the day, a house-member turned the set off.

Fengog stretched and yawned. "Dreams call me."

Several others concurred.

Tilriny nodded. "Indeed," she said, placing aside the shirt into which she had been sewing a name for a house-member (Jafi having taken Buf's baby a little while earlier). "That time, it is."

Several rose.

"And, I am, by dishes, summoned," commented Ket, also getting up.

The others smiled.

"I am confident that your skill will make the task go quickly." Vok assured him.

"Practise makes perfect." Ket noted.

"And so, My Ones," said Tilriny as she rose. "I'll be to bed." Yanta offered her an arm to walk with her to her room. "A night-good I wish you."

"Goodnight, Emerita. . . Until the morrow."

"And I go too. . . Night-fine. . . Good evening." noted Fengog and a number of others as they started for the stairs.

"Good-night."

Ket headed to the kitchen, pulling his sleeves up as he went. There, he switched on the lights and went to the sink. He adjusted the hot and cold water knobs to the pressure sprayer so that the water which came from it when the handle was depressed would be quite warm. He collected the pots and pans and began washing these, using soapy water and a brass scrubber. This task completed, and using the sprayer and a scrub pad, he began rinsing the dishes and utensils and placing these in holders so that they could be put through the washer/steam cleaner.

As he worked, he thought about those who had been referred to earlier on the night's television program - those early individuals whose ideas had shaped society. They had been the ones who had laid the philosophical foundations upon which, much later, would be built the present civilization - the world that he and, indeed, all those on Veodon for over twenty generations had known.

It was one of those rare pivotal points of history when the leaders of the four realms in the region of the Vir as well as several respected philosophers who wandered the area sought a meeting with one another for the purpose of renewing old friendships and sharing ideas. Word went out, and the rendezvous was agreed to. When the time came, the parties gathered at the place designated.

The seventeen who met on the banks of the Nondak River at the foot of the Yuxon Mountains that day 1200 years before were an extraordinary group. The philosophers were individuals of understanding, who had made the pursuit of truth their life's purpose. The four kings - friends and allies of long standing - ruled their respective domains with wisdom and justice.

They lived in a world of city-states, minor kingdoms, and tribes among whom, conflicts were common. And indeed, before the meeting was very old, the group's attention was focused upon the disharmonies of their world and how these disharmonies might be alleviated. The result was that during the next moon - and after much discussion and consideration - those gathered had hammered out the philosophical principles which would, in centuries to come, form the foundations of Veodonian culture.

The kings and philosophers who met on the Nondak that spring recognized that conflict between and among people constituted the social disharmony with which they were concerned. They realized that if this conflict could be abated, then social harmony would be improved. They quickly came to the understanding, though, that attempting to eliminate conflict itself was the wrong tack since this merely focused upon symptom rather than cause. Instead, they sought to understand those things which led to conflict in the first place, to see what might be done about these.

The group spoke of how the natures of individuals in a society determined the nature of that society. In light of this, they wondered what sort of individual would bring about a harmonious world. Discussing this at length, those gathered agreed that, basically, such individuals would be content with themselves. Following from this, such individuals would likely be satisfied with what they received from others. And given this, they would function and behave in such ways as to make their society beneficial to its members.

Those at the meeting believed that contentment with self would follow to a large degree from individuals having traits which matched or came close to matching those traits which were generally preferred - traits emotional, physical, and mental.

In addition, the group thought that individuals having the traits which led to contentment with self would be attractive to others and, so, that these individuals would receive from others those things which were desired from others - such as friendship, acceptance, companionship,

affection, etc. - and therefore, that these individuals would be generally satisfied with regard to their relationships with others.

And finally, those gathered concluded that individuals who were satisfied in their social relations would be fond of the society in which they lived and, consequently, that these individuals would be supportive of, would work for the benefit of, and would be good citizens within, their society.

The kings and philosophers concluded that, basically, contentment with self would lead to reduced conflict and greater social harmony. But how to increase this contentment was the question that arose and which they next considered.

Though they lived centuries before any knowledge of genetics, those at the gathering knew from everyday observation that the form of any living thing followed from the form of its predecessors. They realized that were those individuals who were higher in the sought after characteristics to reproduce proportionately more than those lower in these characteristics, then the proportion of the society having the sought after traits would increase and social advancement could occur.

The group then discussed how this could be done; and how it could be done while minimizing the hurt feelings and discord which could result from the process. The method that they decided would be best was that those who had the desired attributes would first be identified. Then, each of these individuals would be offered the option of having children with another from the group with the desired attributes, and, for engaging in this parenting, would receive monetary and other rewards. If an individual with the sought after traits were married to an individual not in the group with the sought after traits, then having a child or children with someone from the group with the desired traits would be extra parenting besides that engaged in with the spouse. If individuals with the sought after traits were married to one another, then they would receive payments and rewards for each child they had with the intent that these payments and rewards would encourage them to have more children than they otherwise would have.

Those at the meeting believed that this process would lead in a fairly timely manner to an increase in the proportion of those with the desired characteristics while, at the same time, minimizing discord that might result from the process since, save for the existence of this extra parenting activity, life would go on as usual.

The theories which were brought forth at the gathering at the foot of the Yuxons that spring were put into practise to a large degree in their respective lands by the sovereigns who had been there. However, neither the writings of those involved nor the activities in the four relatively small, out-of-the-way realms (later, the quiet constitutional kingdom) in the west Jind received much attention until the ideas were adopted by Emperor Targ Zinn of the Vycon Empire two centuries later.

Following this, the ideas became more widely accepted by way of greater familiarity and imperial consolidation. This continued until 800 years before Ket's time when planetary unity was calmly achieved.

Just about finished rinsing the dishes, Ket glanced at the clock and decided to call Netky before it got too late. He wanted to tell her about the possible dance and to see if she would be able to extend her visit from a day-visit only to perhaps staying overnight. Going to the telephone, he tapped in the town of Ripnil and Netky's name into the directory computer that was part of the phone. The directory came back with two choices, her household and her room. He pressed the household button, assuming she might not have gone, as yet, to her room. A member of her household answered, and Ket asked for Netky.

"Okay. A moment." said the housemate. "She went upstairs a bit ago."

Ket heard him on the intercom to her floor saying she had a call. In a moment, Netky answered.

"Hello?" she said. There was a small click as her housemate replaced the other receiver.

"Netky? Hi. Ket."

"Oh! How be?"

"Fine. And your day was well?" he inquired.

"It was. Yours also?"

"Quite well."

They spoke for a few centihours, talking about general events of the day and things of interest - the radio planet, work, the news, his city analysis assignment. She wished him well in this.

He thanked her, then paused. "Netky, a couple of additional doings for Sixthday, I would inquire your interest in."

"These are?" she asked.

"We're looking into having a dance that night." he told her.

"Oh?"

"And, if so, perhaps interested in attending, you would be." he said.

"Well. . . perhaps."

"We could have supper here at the household beforehand." Ket said. "And we'd make sure you didn't miss the shuttle back home later that night. . . though, of course, you could stay the night. We've rooms extra, or you could stay in with Alyan."

Netky paused. "Well and so. . ." she said, pausing again for a moment. "Yes, I so suppose." she responded.

"Most well." said Ket. "A guest, special, would you be, and we would want to show you a good time."

"My thanks."

"I'll let you know if the dance is arranged." he said. "It is sure to be."

"Fine this." she said. "I will like the visit, and seeing our friends, and meeting those of your house." She was quiet briefly. "For your invitation, you are gracious." she told him.

"As are you, to attend us."

They paused.

"And, how was your run back to Teret this morning?" she asked.

"Fine was it." Ket replied. "A nice morning."

"Truly."

"I didn't see the elk. I did see an eagle, though." Ket mentioned.

"And so." she said. She paused momentarily. "Indeed, I should to Teret afoot some day before long. A fine jog and walk, 'tis."

"This ought."

"But this weekend, on the shuttle will I ride." she told him. "And as we this morning noted, the one for half past nine. If there's a change, I'll let you know."

"Aye and fine." Ket responded. He was quiet a moment. "Truly, One. . . I think with surety and believe with knowing that when you are here, and especially at the dance, you'll be popular."

"You so think?" she inquired.

"Aye." Ket replied.

"But. . . I might feel conspicuous."

"You will be." he said, kidding her a little.

"Mercy!"

"Fine will you do." he assured.

"I've hopes thus. . . yet. . . shyness betakes me." she said.

"You will shine forth." He paused. "And pray. . . save me at least one dance." he implored.

"I'll try."

"And so, I'll let you go." he said. "Tomorrow will I call, concerning the dance."

"Quite fine." she said.

"Until then. . . well be." he wished her.

"As you, also." Netky returned.

"Bye."

"Bye."

Ket returned to the sink and finished rinsing the dishes. He then loaded and started the washer/steam cleaner, and had begun wiping the counters when Maccen Hento, Nimik's mother, came into the kitchen.

"Nye finished." she noted. "Quickly have you worked."

"Mightily have I striven." Ket smiled.

"Quite well!" she returned. She picked up a copy of the next day's menu that had been on the cabinet. "I check to see if all is on hand for tomorrow's meals."

Ket nodded.

Maccen scanned the list and, then, opened the refrigerator, looking at items inside. In a moment, she closed the door. "A container of vegetables need we." She turned to go get this.

Ket looked around. Maccen had sprained an ankle slightly when she had slipped on some ice a few days before, and she was still limping a bit. "I can get those if you'd like." he offered.

"Oh. . . okay. Green beans will be fine." She came over to him. "I can finish here." she said, indicating the counters.

"This well." Ket said. He handed Maccen the towel. "How's your ankle today?"

"A little sore still, but each day improving." replied Maccen.

Ket nodded. "Quite so and good. Easy be upon it." he advised. He started toward the door. "Is anything else needed?"

"No, that's all." she answered.

"Okay." he said.

Ket went into the hallway and around to the basement entrance. Opening the door, he descended the stairs to the basement, which was actually a wide place in the houserow utility corridor, and across to the household food storage room which enclosed the freezer compartment. He opened the room's door and entered. To the right and left, on either side of the freezer section were cool storage areas, where were kept potatoes, dry beans, raw fruit, and the like.

The walls around the freezing compartment were hollow, thus helping to insulate the freezer. Also, the freezing section as well as the entire storage room was insulated with the standard felt insulation.

Ket opened the freezer door, went inside, and got a ten-liter container of green beans. He then exited the freezer and the storage room and headed back to the stairs.

Looking up, he saw another of the town's residents walking along the utility corridor. She waved to him just before turning and disappearing into the cross-town corridor two houses away. He slowed momentarily, looking down his houserow corridor. He could see to the end of it, 90 meters or so the south. No one else was in the passage.

While doing this, Ket noticed that the lights were on in the nearest of the house's utility shafts. He put the container down and went to the shaft, standing under it. Through the metal grate landings at each floor, he could see to the fifth story attic.

The two utility shafts, one at each end of the house, were the main passageways for the water, sewage, gas, and steam pipes; the electrical conduit; and the information cable. A ladder was attached to the outer wall of the shaft and ran from the attic to the basement. The lower section of the ladder slid up and attached magnetically to the first floor ladder section so that it would not be in the way in the utility corridor. It could be pushed down from the first floor landing or pulled down from the utility corridor by the short rope attached to it. The various pipes and conduits joined at the shaft opening with the mainline counterparts running along the ceiling of the utility corridor. The sewer pipe went to the main sewer line on its shelf in the concrete wall.

Ket saw no one in the shaft. Some household youngsters had probably been playing in it earlier. He turned the lights off and walked to the other end of the house to check the second shaft. It was fine. He then retrieved the container and went back to the stairs and up them, into the house.

Maccen was no longer in the kitchen, having finished there. Ket put the container on the drainer. He then went to the stove, poured himself a cup of tea, and returned to the table. He sat there, idly looking across the kitchen, watching small puffs of steam come from the washer and sipping his tea while the unit finished its cycle. In a bit, the washer clicked off. Ket got up to take the items from it. He removed these, drying them as needed, and put them away. He took a final look around as he hung up the cuptowel, then turned to exit the kitchen, switching off the lights as he went, and returned to the middle room.

KET'S DAY

Chapter 11

"Thanks Ket." said Maccen.

"Most welcome." he responded. He sat down on a bag chair.

Just then, the front door opened and those who had gone to the observatory began entering the house, pausing in the entranceway and the hall to hang up their coats and to remove their shoes and boots. They began filing into the middle room.

"Greetings." they said.

"Hi. . . Hello."

Those who had remained at the house saw Teka with the group.

"Hi, Teka!"

"Evening good." Teka responded as she entered the room.

"It is cold out?"

"Somewhat. . . Fairly." they replied.

Several sat down.

"Teka," said Ninx, "your interview with Buf, we saw. Quite well."

"Indeed. . . Truly!" the others agreed.

"You thanks." she returned.

Others entered.

"So. . . you ones did see the star that the radio source orbits?" Vok asked.

"Yes." answered Buf. "Most interesting it was. The presence of the 'radio planet' there lends the viewing much import."

"Indeed. . . I warrant, it does."

Yanta got Buf's attention. "We put him in his crib. He's asleep." she told her.

Buf smiled and nodded, then went over to the crib.

"You do know this star well, now?" asked Jafi.

"We do." Ulen replied. "And in fact, we are to, if you like, point it out to you."

"Well, we would like seeing it. . . Okay. . . Certainly." the others commented.

"We will show it." said Alyan.

Those who had not been to the observatory rose. The group began retrieving footwear and coats. Ket fetched his boots and a jacket. In a few moments, they all started toward the back door.

"There were many there tonight?" Ket asked.

"Aye. Quite a number." Teka replied. "Probably over a hundred."

"I be!"

"Lareg, Mux, and Entekkin were there, of course." Teka told him.

"Eufonar came for a while, and Theti. Kinga went with me from the station. Vicin, town administrator Nikin. Lat made it up."

"And about everyone who was in Central Hall came up." added Nimik, looking back. Those in the teahall and those playing netball in the gym."

"Indeed." Teka said. "A good crowd was on hand." She chuckled, "Cir was swamped. . . But a look through the telescope we each had."

"Aye. . . And this." the others noted.

"Most well." said Ket.

The group filed outside and walked a short distance from the house. Neighbors from other houses on the houserow also were also coming outside to view the star. Those from Ket's house greeted these and the various groups joined one another.

The ones who had been to the observatory located Opdis in a line of three stars near the brighter star, Ryardis. They pointed it out to the others.

"Aye. . . I see it. . . Oh!"

They all gazed at the star for a bit, making sure they knew which it was and speculating some about the radio source orbiting it. Standing there, they also located the other stars which had been found to harbor

planets, wondering some about how many more such worlds would be found when the space telescope went into operation.

"The space telescope is still scheduled to be launched in about a year?" asked Faxal Nirien, Buf's uncle, who lived in the house next door.

"Yes." Teka responded. "The launch time scheduled is First Moon, eight twenty-six. Right now, no reason is there to believe that it cannot take place then."

They nodded.

"Indeed," noted Faxal. "twenty-eight years ago did that light leave Opdis, and those signals, the planet."

"Actually. . . And true."

"One wonders what signals are leaving there now." said Ulen.

They were quiet, gazing at the star for a few moments.

"Easy, it is, to assume that there's a civilization out there." Buf observed.

"This is it."

"Wonder I, how many civilizations exist out across the cosmos." Pemu said speculatively.

"Truly." said Maccen. "Many, there may be, or none. . . but I am wont to think them numerous."

The others agreed.

"Make contact with another world we might, someday." noted Mejen.

"Perhaps. . . Who can foresee?" they said.

They stood for several centihours more, looking at Opdis and commenting on it further. Nimik offered the idea that a capsule containing pictures and what-not be sent to the radio planet. The others thought this a good idea.

After a while, the groups began drifting back to their houses, neighbors bidding one another good-night, and those who had not been to the observatory thanking the others for showing them the star.

As Teka and Ket stepped inside, Teka inquired, "I go to give a book to Benka Linn that I borrowed from the Meadowgrass library last week. She will return it for me when there tomorrow. To walk along, would you like?"

"Indeed."

"I'll get it." she said.

Teka went for the book.

Some of the group went into the kitchen to get themselves a snack. Several bade the others good-night and headed upstairs. Most of the company, and Ket, returned to the middle room where they continued abuzz about the 'radio planet'. Ket sat on the edge of the couch, listening and mentioning some of the things that Cir had told him that afternoon.

In a few moments, Teka returned. Ket rose and the two started toward the door, telling the others they would be back in a few centihours.

They exited the house and headed off along the walkway to the other residence which was on the far side of town.

They again noted Opdis. Then walked along quietly for a few moments.

Presently, Ket said, "Your story on Buf was well received. All the household watched."

Teka smiled. "This is well."

"Buf was self-conscious but glad. She liked it quite." Ket told her.

Teka chuckled. "This good."

They were quiet briefly.

"Also," Ket noted, "Kinga's camera work seemed fine."

"Yes." said Teka. "Quite excited is he about his new job." She paused. "I didn't get that job request into personnel until mid-morning and wondered if, taken, it would be. When after the last application period it wasn't assigned, Kinga asked if he might try. Wondered, I, 'why not?', and I helped him apply."

Ket nodded.

"Indeed," she noted, "sometime next year. . . probably in the summer. . . he should qualify for his first career credits star."

"Oh?" inquired Ket.

"Aye."

I warrant he will be pleased, much, upon this receiving." he noted.

"Truly." said Teka. She paused. "You know. . . he has more plant matter collection badges than almost anyone in town."

"I know." Ket said. "It's amazing."

They were quiet momentarily.

"So, One," Teka began, glancing at Ket, "you visited with Netky Tanda this morning. Bespeak a bit of your visitings."

Ket told her of his visit with Netky; and they spoke of her briefly, Ket telling Teka some of what Netky had been doing of late as well as what their plans were for the weekend.

"And. . . also," Ket noted, "she'll have supper with us that night if we have the dance."

"Quite well." said Teka.

They walked along silently a moment.

Teka smiled a little. "Netky Tanda, huh? . . . hmmm."

Ket looked at her and smiled. He shook his head.

She paused. "Of course and also. . . I am sure you know. . . that in my capacity as News Division director. . . that it is my duty to see that Netky's visit is noted in the 'Local and Social' section of the weekend news."

Ket looked at the sky. "But of course." he said resignedly.

"Nay worry, 'twill be interesting reading."

"I'm sure it will."

They continued on quietly a bit.

"You ones did review the scenes we videotaped this afternoon?" Ket asked.

"Yes." she replied. "Cir and Entekkin came to the station and we viewed them just before going to the observatory."

Ket nodded. "The scenes were well?"

"Aye." she answered. "And also, additional taping did we at the observatory." She paused. "There should be scenes sufficient for Entekkin's story."

"Good this." he said.

"A fine report, it should be."

"Aye." Ket agreed. He paused, then noted, "You seem to be liking your position as news supervisor."

Teka nodded. "Yes." she said. "Very busy it is at times, though."

"Yes." Ket said.

"In the two moons since I started, I have much learned." She said. "I should become quite practised since it's a two year appointment."

"This is true." agreed Ket. "Most well have you done so far."

"You thanks." she responded. She was quiet a moment. "You know, I feel a little apologetic, though."

"Oh?"

"In my involvement in the position, I've been able to spent less time with you, the house, friends."

"Oh." he said, silent a moment. "Yet. . . nay worry One. We understand the demands of the job."

She smiled. "Well," she said, 'twas nice to take some time this afternoon and visit."

"Indeed." Ket concurred. He paused. "I would imagine you'll be spending some extra of your free time with Cir for a while now that he's back."

Teka nodded. "Aye, a bit." she said. "I'm to have supper with him, Revana*, and Lilivi** tomorrow night. He and I are going to try to do something on Skyday."

(* Cir's Aurora, ** Cir's other special)

"And so."

Teka was quiet briefly. "At any rate," she said, "my time is occupied much, and I would not want to be deemed negligent by you, the household, others."

Ket reached over and took her hand. "Indeed, I say with honesty and truth, and I believe I speak for others as well as myself, that while your attention is highly desirable and well, your existence is our main reward."

She looked at him. "Reciprocally." she said.

They continued along quietly and, soon, arrived at the other household. They went to the front door and through it into the entranceway. Here, Teka pulled a decorative cord which was attached to an entry bell. One of the house, Evet Lata, came to the door.

"And so. Hello Ones!" she said.

"Hi! . . . Evening good."

"You will in come?" Evet asked.

"Nay now, but thanks." said Teka. "We just stop briefly by."

She handed Evet the book and explained her purpose.

"Okay and most." Evet said. "I'll see that Benka gets it."

"You thanks." Teka responded.

Evet then mentioned Teka's interview with Buf and the pregnancy request. The three spoke of this for a moment. They also spoke of Lan and the upcoming memorial, Ket telling Evet that Tiltriny, Mejen, and Vok would be their house's representatives.

Speaking momentarily about the radio source, Evet told them that their household, too, had been shown Opdis by those who had been to the observatory.

"Likely is it, that everyone on Veodon will know Opdis before the end of the week." noted Ket.

"Truly." Teka and Evet concurred.

"A thing of significance it is." noted Evet.

"Most so. . . Aye."

They paused.

"Well," Teka said, "we'll back, then."

"Okay." said Evet, going with them to the door. "Night well and say greetings to your household."

"We will this and yours also." they responded.

"And give Buf our best." Evet added.

"This we will. . . Evening good."

"Good night."

The pair walked on.

They had not gone far when the small, hooded pedestrian lights - one of which stood every few meters along the city's walkways - blinked off. Also, the city chimes sounded one note.

"Twenty-two fifty." noted Ket.

"Getting late." Teka said.

They could just see the outline of the walk in the starlight. Ket reached out and touched Teka's elbow; and they hooked arms, walking along close together.

The air was cold and clear, and a multitude of stars stood out sharply across a jet-black sky. They gazed skyward, and at Opdis again. Lights shone softly from windows in the surrounding residences. It had been an active day, and the pair walked along in silence, simply enjoying the moment.

A bit later, however, they came alert when the stillness was pierced by a distant wolf howl. Instinctively, they drew closer together, looking in the direction of the sound. It had been some time since they had heard a howl. This one was familiar, though.

"Is that Ol' Phantom?" Teka asked.

"Or Loner maybe." Ket said.

Another howl echoed through the night, this time more distinct. It sent chills down Ket's back. All wolf howls were scary, intriguing sounds that drew one like a moth to a flame, but only one wolf could howl like that.

"Phantom." said Teka quietly.

"Aye." Ket concurred.

The sound reminded Ket of the night several years before when he had missed the last shuttle from Augen and had decided to walk back to Teret. Almost from the time he cleared the Augen town wall to the time he was in Teret proper, he had had an over-powering feeling of being watched. That was one 15 kilometer walk he had no desire to relive. The fact that he had found one of Ol' Phantom's characteristic paw-prints in a patch of snow by the pathway just outside the town wall while he was working the next day, might have been a coincidence. On the other hand, it might not have been.

There were two more howls and then, silence. They stopped for a moment and listened. The silence continued.

"Vanished," Teka noted, "back into the night."

"Aye." said Ket. "Back to his taiga home."

They continued on, quiet again, walking along close together. In a few centihours they arrived at their house and stopped. They remained close.

Ket then pulled Teka gently around and put his arms around her. They stood face to face for a moment, each gazing into the other's eyes in the darkness. They kissed. Hugging one another, they were drawn to a

second, more prolonged embrace and a gentle brushing together of faces. He kissed her again. He could feel Teka's heartbeat through their coats, becoming a bit more rapid, keeping pace with his own. In a moment, and with some effort, they stepped back, clasping hands. They then went to the door, opened it, and entered the house.

Teka and Ket would stay together at nights on the three days next moon when it was quite certain that she would not be fertile. This, along with other birth control measures would guarantee that an unplanned pregnancy did not occur. It had been two moons since they had last been together, Cir and her other 'special' having been with her in the interim.

Teka and Ket went into the middle room. About fifteen household members were there. These sat talking quietly and reading. One group - Vok, Pemu, Jafi, Nimik, and Mejen - were on bag chairs around a low table playing Ting-Tak, a relaxing, entertaining game requiring little skill and much luck. Alyan sat in the middle of the room, playing softly for the group on a lap harp.

After going to the kitchen to get themselves a snack - some dried fruit, rice chips, and cheese - Ket and Teka returned to the middle room, pausing to pull off their boots and shoes drop these near the foot of the stairway. Teka joined the Ting-Tak game, and Ket sat on a bag chair near Ninx and Ulen.

The three sat quietly for a while, listening to the melody Alyan was playing.

Presently, Ninx asked the other two, "Me tell. . . plan, you ones, to make up a farming trio again this year along with Vok?"

"Aye. . . Yes." Ulen and Ket answered.

They paused.

"And you will work with Mejen and Entekkin again this season?" Ket asked.

"Yes." replied Ninx.

"Any experimentals will you raise?" asked Ulen.

"Aye, probably some rows of southern-hemisphere yellow beans." Ninx replied. "And you?"

"Spoken of it we have not." said Ulen. He hesitated briefly and looked at Ket. "Some Nar melons maybe?"

"Aye. They might grow fine here." Ket responded.

"Possible this," said Ninx, "though the growing season could be a bit short. Anyway, interesting it would be to see how they do."

"And so."

They were quiet a moment.

"The crop maps should ready be by the end of the week." Ket told them. "Eufonar helps compile these, and she said that they might be ready for printing next week."

"Oh? . . . Good that."

"I suspect that the area where our plots, several, have been for the past four years will be in clover this," assumed Ninx, "if they rotate on schedule."

"Aye." agreed Ulen and Ket.

"At any rate," said Ket, "see, we should, next week when the maps come out."

The others nodded.

While grain for food and biomass crops were mono-cultured in long strips, vegetables were raised in 1 or 2 hectare plots; and all the various types of vegetables were raised on each plot. These parcels were attended all season by the same three or four individuals. Ket had teamed up with Ulen and Vok for the past five years, and they generally got very good results from their areas. Each team was responsible for raising the various vegetables on their plots, harvesting them, and getting them to the city store or to the food processing facility.

The preparation of the fields and planting was normally done in the later part of First Moon or in early Second Moon. The process involved most of the citizens of the town and kept the city's 12 tractors busy from morning till night for the better part of a week.

The fall harvest was also a busy time both in the fields and at the food processing center where vegetables were put into containers for distribution to the various households, grain was de-husked and stored, and fruit was packed for storage or shipment or squeezed for juice.

They sat quietly for a bit, Ket finishing his snack.

In a moment, Ninx asked Ket, "Did I hear you and Fengog mention going camping this summer?"

"Aye, this we mentioned." Ket answered. "And try to go by map to certain places."

"Truly. . . Quite." the others noted.

"How many days would you be out?" asked Ulen.

"Well, we didn't say. . . two or three, I guess." Ket replied.

Ulen nodded and paused. "To go on a walkout, I would, in the coming year."

"Oh?"

"Indeed," Ket said, "on a walkout, I haven't gone, since two years ago. That's when Lareg, Vicin, and I went way up beyond the Nangs and were out for a week."

The other two nodded.

"How much weight did you lose?" asked Ninx.

"We each lost a couple of kilograms." Ket answered.

"In fact. Not bad that." Ninx said.

"Nay." said Ulen.

"Well, the middle of the summer, it was." Ket explained. "So, there were quite a few plants-edible and berries. Also, did we manage to catch a few fish."

"Aye. . . And so."

A walkout was an excursion into the countryside in which one took nothing but the clothes one wore. There was no tent, no sleeping bag, no matches, no fishing line. An individual simply started walking and lived off the land as best he or she could. The wilderness survival knowledge learned in the general education program was useful on such outings. Especially important was knowing which plants were edible and where these could be found.

Individuals judged what their wilderness survival ability had been on a particular walkout by how much weight they lost or, in some cases, gained while involved in the activity. Ket had gone on a walkout or two in which he had managed to keep his weight steady, though he had done relatively little walking on these outings. He had never managed to gain weight. He suspected that in those cases during which individuals did gain that there had been very little exertion. Actually, the weight comparisons were done rather facetiously, but they did give some indication of how well one fared, physically, on a walkout and everyone was curious about these comparisons.

Such outings were not uncomfortable once one felt at home in the wild. Most liked the activity for the challenge and as a way get closer to the natural world.

On one occasion, Ket had walked away due to aggravation and had stayed out for four days. He had not been away for long, though, when he began to feel guilty about the worry his walkout would cause. So, he sent word back to town regularly via pedestrians and bicyclists on the pathway that he was okay and where he was. The natural surroundings had quickly put him in a more positive frame of mind and the irritation soon vanished. He would have returned to town sooner save for embarrassment. When he did return to town, three kilograms lighter, he had acquired a new respect for the value of community.

"What was the longest walkaway you've taken, Ninx?" Ket asked.

"I once, many years ago, went out two weeks." he answered. "By myself did I go."

"Indeed? . . . Stars!" Ket and Ulen stated.

"Into the country to the northwest, I went, to the Kar Hills west of the Kexons." Ninx explained. "After I got out-land pretty far, I didn't move around much. For two or three days, simply stay, I would, in the same place, enjoying the scenery." He paused briefly, his expression becoming a far-away look. "On a bluff would I sit, and reflect on things many. And this was well." He hesitated, then nodded. "Aye, a fine stroll 'twas."

"Yes. . . . Quite."

"Actually," Ninx continued, "I was lost for a time. . . . at least in the sense of knowing the exact way back to town. Surviving well, I was, though, so I wasn't worried. Just careful not to break a leg."

Ket and Ulen nodded.

They paused.

"Did you gain weight?" asked Ulen, kidding him some.

Ninx smiled a little. "No. . . . But I became bigger."

Ulen and Ket looked at Ninx. "And so. . . . Most well." they said quietly.

The three remained silent as their attention was drawn to Alyan's music. They sat, listening to her play several ancient folk melodies. Over the next few centihours, the room was still as those present read or sewed, dozed or day-dreamed while listening to the gentle strains from the harp. The only other sounds were the subdued voices of those playing Ting-Tak.

As Ket sat ensconced on the bag chair idly watching Alyan play, the glow from the fireplace, and his housemates involved in their game, he reflected on the conversation that he and the others had had at the commissary that afternoon. He looked at the room's walls and ceiling and wondered what scenes these had been witness to over the past five centuries. Many had been the scenes, such as tonight, of a relaxed household at the end of a busy day. He wondered what sights would illuminate the walls in the future. A great many more generations would they see.

Alyan finished a tune and lowered the harp.

She yawned. "My pardons, Ones." she said, pausing. "But believe I, that time is it for me to meet with sleep."

There was a rustle of movement in the room.

"Such time is upon us. . . . For myself, also. . . . True." several said.

Alyan placed the harp aside and rose.

"And your playing was well." Buf told her.

"Truly." agreed the others.

"You thanks."

Vok rose to his knees and stretched. He then inquired, "Ones, do you want to sing the 'day-end' song?"

"Indeed. . . And so. . . Let us."

Vok put out his hand, palm up. All the others came over to him. They each placed a hand on top of Vok's, one atop the one preceding, also palm up. Then, Vok began the solemn strains of the 'day-end' song, the others joining in. They sang softly. As they sang, Ket kept his eyes mostly on their hands; though he occasionally looked into the misty, faraway eyes of the others. They went through each of the song's five verses, singing in good harmony this tune which was traditional all around the planet, and had been for generations.

Finished, they were still a moment, keeping their hands together. Then, they separated, most of the group drifting off to bed, wishing the others good-night. A few returned dishes and cups to the kitchen. Ket and Teka did so, then clasped hands briefly and kissed good-night before she headed up the stairs. Ket returned to the middle room to get his jacket and to take his leave of those still there - Jafi, Buf, Meva, Mejen, Vok, and Ninx.

"Incidentally, Ket," said Meva, "congratulations on being appointed assistant for the city analysis."

"You thanks." He sat down on the edge of the couch, briefly telling them such things as who the director would be, when they would start, and when the report would be due. They wished him well in the appointment.

"In fact," noted Ninx, "always interesting, it is, to see the figures, and see how we did compared with other communities."

"Aye. . . 'Tis." they agreed.

"And indeed, these figures will we strive to discern well and truly." Ket stated.

"Actually. . . Quite most."

"Well. . ." Ket said, rising and stretching, "I'll to sleeping."

"Okay, Ket. . . Until tomorrow, then. . . Dream well." they told him.

"Good night."

Ket went to the stairs, picked up his boots, and trotted up to the third floor. The floor was quiet and dark, illuminated somewhat by the soft stairway night-lights. Entering his room, Ket pressed the switch and put his boots down. He went to the dresser, squeezed some toothpaste on his toothbrush, and got a cup. He then headed to the washroom, leaving the door open slightly for light.

After several centihours, he returned to his room and closed the door. He removed his shirt and hung it up and set his alarm for 575. Then he went across the room and turned the bedroom lights off.

Going to the window, he pushed the shutters back and leaned against the sill. It was quite dark out. He could just make out the town wall across the field. In the distance, he could see some dim lights from Ripnil, and could just distinguish two or three lights, farther away, in Meadowgrass.

Looking up, he gazed at the stars. He moved closer to the window, looking up in order to see Opdis again. In a moment, he moved back, scanning the sky. The stars were many. There was a denser band across the middle of the sky - the plane of the galaxy. Each was a mighty world, out there, across the vastness of space. Each had been there eons before his birth. Each would be there eons after he was gone. What mysteries had they beheld? What secrets did they hold? Perhaps on some far away world, at this same moment, another being looked into the night sky, awed by the cosmos.

Ket stood, gazing skyward, in wonder of infinity, and of eternity.

In a few centihours, he reached out, found the shutters, and after a final look, pulled them closed. He finished undressing, then went to his bed. He got under the covers. The bed was cold at first but soon warmed. He was aware of being quite drowsy and relaxed - and of a deep, universal appreciation - before falling into a sound sleep.

The End