
The Fold

As a university student, it had been explained to me how folding space worked. Personally, I don't have a good grasp of the actual physics. You can think of space linearly, like a piece of paper. Two spots can be on the opposite corners of the paper, as far apart from each other as possible. Yet if you fold the paper, those same two spots can touch. In the past, space travel was an enormously expensive proposition, but now it was the lifeblood of the economy. The cost had been mostly resolved, not by folding lots of space, only the space around a single space station.

Astraeus Orion station was up ahead. It looked like one of these space station illustrations from pulp magazines of the 1950's. A central core surrounded by an outside tube, like a bicycle tire. Only in Astraeus' case it was only half a bicycle tube. This half was here, a quarter of the way between Earth and Mars, in the Orion arm of the galaxy. The other half was in the Perseus arm, 20,000 light years away. At least until tomorrow when for twelve hours the two would be reassembled high over the galactic core, 10,000 lightyears from here. It would return to the Perseus arm for the next week as the generators built up enough power to join them again.

Walter Lipmann could see the other eleven ships of the fleet begin their docking runs on the station, loaded with parts and supplies for Astraeus Nova. The last ship was always the crew. It had been a long journey. They had passed Ersa Orion a month ago. When it was complete, trips to the station would be much shorter. But Astraeus Orion had been built at great expense, farther away. Mostly to calm the nerves of those who had claimed folding space would throw Earth out of its orbit. So, for now, one had to endure the long spaceflight to get to the other side of the galaxy. In all, the Global Space Agency planned hundreds of Orion stations, each going to various parts of our galaxy. There was even talk of Nyx, a station between our galaxy and Andromeda, but that was still only a conceptual idea.

Walter heard the docking clamps engage as the ship attached itself to one of Astraeus Orion's twelve landing bays. "At last," he sighed, "A chance to really stretch my legs and feel gravity again."

Lipmann didn't waste any time getting on board the station, although he did have to wait for Lux. Most people were still not used to the Lux's people. Lux was built like a seven-foot-tall Gorilla. That is, if Gorillas had dark green scales and no hair. Lux had a wicked streak of humor about him. Let liked to carry around a large empty book through customs with a gold stamped title on it. The title read, "To Serve Man." Lux loved the look he got in people's eyes. Taxaeans didn't laugh, instead their eyes get big. It was actually a subtle effect. But it was the only time you could see their sclera so it was noticeable. As I was saying, Lux loved to make people's eyes jump out. It made him happy. It also made him extra happy that I had to wait.

Lux was also unusual for in that he liked to wear suits. In fact he like to wear the exact same suit that I wore. He thought it was funny. It must have been a scream, every time we met Taxaeans their eyes got big. Right now, we were both wearing a long gray jacket that vaguely resembled tails, black shirt and trousers with a bright red Cravatie. The ones that changed color over time were all the rage now, but I

preferred the single-color types. I guess I'm old fashioned. Besides on Lux it looked ridiculous. I guess that's my little joke.

"Welcome back, Mr. Lipmann," the station manager shook my hand vigorously, "And you too Lux. I trust you had a pleasant time annoying the customs agents?"

Lux screamed like a banshee. It was a sound that once you heard it, you could never forget. Nothing else sounded quite like it.

"He was thrilled," I translated for him. Perseuseans don't speak, but they write about four times faster than people do, with a handwriting that looks like a printout. Lux as an expert in languages. He learned to write perfectly in 171 Earth languages in about four weeks at Princeton. I've been trying to learn written Taxaeon for about ten years. Someday I hope to be literate.

"Did you enjoy the flight?" The administrator asked as he walked us to the conference room.

"Not at all," I replied, "But I managed to get in a fair amount of sleep."

"I assume Lux was in his passive state?" the administrator quipped.

"Yes, the bastard."

Lux gave me a dirty look. Even though Perseuseans don't talk, they have great hearing and they understand everything being said around them. Lux knew I was referring to his placid state. Perseuseans don't sleep. They get quiet and move unbelievably slowly, but they have full awareness the whole time. Read Shakespeare to Lux while he is in his placid state and he can write the whole thing down for you once he is back in his active mode. And I don't mean one play, I mean all of them. We'd been partners for some time, yet Lux is still disturbed when he sees humans sleep. The concept escapes him. But the first time he went placid, and his eyes turned from all black to all white, believe me, people were upset.

When we got to the conference room, Lux looked sadly at the administrator. He was an expert at mimicking human facial expressions.

"Please Lux," the administrator responded, "be my guest."

Lux knew earth customs and always respected them, but when he was with friends he always asked for permission to be himself. Lux jumped into his chair. Yes, that is exactly what I mean, he took a flying leap across the room ... table included ... and landed directly on his favorite chair. It was like looking at an Olympic gymnast doing a routine. The rest of us sat down normally. Lux's eyes got big. He thinks humans are slow and deliberate and that makes him laugh.

"So," I asked, "why am I here?"

"Yes," the administrator looked serious, "I think it is about time I explained that."

He rose and stepped into the presentation screen's operating circle. I did PowerPoint presentations in Collage, but that was the old days. Rufus doesn't need to be setup in advance. It reads your thoughts and presents the appropriate images. Astraeus Nova appeared at once, all twelve of his ships firmly attached to her docking clamps. "A few weeks ago, we connected with Astraeus Nova as usual. But nothing about it was usual."

“How so?” I asked.

“It was empty.”

“What do you mean empty?”

“Well,” The administrator explained, “all the equipment was intact. Including the station’s shuttles, as you can see here.” The images changed to interior shots of the station, all of them showing empty rooms and hallways. “But the crew was missing.”

“Missing?”

“Gone. Not present.”

“Any residue?” I asked.

“None. It was a real Mary Celeste. Only in this case, nothing was disheveled, giving the appearance that the crew might have abandoned her. The logs appear normal right up to the day before transfer, then nothing.”

“What’s on the cameras?” I asked.

The screen changed to a view of the main station hallway. People and Perseuseans were walking around normally, doing standard tasks. The red transfer light started flashing, like the station was getting ready to fold space. Everyone moved to the foldout seats that were fixed to all the outer walls. They calmly sat down and buckled their seat belts. Everyone looked like they were ready to fold, the system clock on the wall clearly showed it was one day early. The lights went out. It was only for a few seconds, but when they came back on everyone was missing. The seats were still down and the belts all closed. The seats slowly folded back up as they always did when no one was sitting on them. It was eerie.

“Huh,” I said, mostly due to a lack of words.

“Earth wants you to go over on the next fold and investigate.” The administrator explained calmly, although this hardly seemed the situation to be calm in.

Lux did a back flit over his seat and retreated to the wall. Arms outspread like he was expecting to be attacked any minute. Lux’s desire to behave in a human fashion was occasionally overruled by his survival instinct. In this case, I can’t say I blame him.

“Lux is not inspired by your plan,” I translated.

“So far it doesn’t seem repeatable,” The administrator tried to calm the situation down. “We’ve had two marine platoons over there for the past two weeks. And nothing has gone wrong.”

“Why haven’t we heard about this?” I tried to ask politely, with limited success.

“Earth doesn’t want to cause a panic. You know how crazy everyone got when we built this place.”

“We had to fold space for the first time a week early so that nobody knew it was coming,” I explained to Lux as he retook his seat. His fingers flew over the keyboard in front of his seat. On the screen appeared Lux’s question, “Was the station trying to relocate?”

When the station was new, we retargeted the end travel point several times. The first time we folded the station it ended in empty space 40,000 light years below the galactic core. There was no place for the shuttles to go. It took us twenty more tries before we go to Taxa Prime, Lux's home world. And Astraeus Nova has stayed there ever since. But from time to time, people talked about shifting it again, just to explore. Dr. Oreleous, Astraeus Nova's latest commander had been a big advocate of the Exploreiards, as the faction was called. He been one of the key members of the team that had folded space the first time. Since the 'crazy times,' the month before the first space fold, Oreleous had been in the habit of keeping his work to himself.

"How many Exploreiards were in the last crew?" I asked.

For the first time, one of my questions had made the administrator nervous. He looked decidedly uncomfortable. Finally, he answered, "All of them."

"What I screamed?" Now it was my turn to be upset. "You let an entire faction, famous for its secretive behavior crew Astraeus Nova? Are you out of your mind?"

"Dr. Oreleous wanted to pick his own team and Global agreed." The administrator responded sheepishly.

Lux tapped on the keyboard and "Well, they had to go somewhere." appeared on the Rufus screen.

"We agree," the administrator announced, "and Earth wants you to find out where they went and why they didn't come back."

"So, when do we go over?" I asked. Lux threw me a dirty look, but I ignored him.

"Tomorrow, the administrator explained, "During the regular weekly fold."

"Do you have enough power for an emergency fold if something goes wrong?" Lux asked on the screen.

"What good would that do?" I asked. Now it was my turn to give Lux a dirty look. "There's no way for us to ask them to use it. We'll be 20,000 light years distant. Way, way out of communications range."

Lux shrugged his massive shoulders.

"You can stay here if you like," I responded.

Lux let out two little ... fart noises. Well, that's the best way I can think of to describe them anyway.

"I'm sorry," the administrator sighed, "I didn't catch that."

"There's no direct translation," I said, "basically that was Lux's way of saying 'like hell I will,' in the most offensive and obscene way he can think of."

We sat in the main lounge for the crossing. It had much more comfortable couches than the foldout chairs in the main crew area. The red lights flashed indicating that the fold was about to take place. Everyone strapped themselves in. The crossing was normally completely smooth, you didn't even feel anything. No sense of motion, no light headedness, only a quick flash. Earth preferred to be cautious so

the seats and straps were required. At last, the flashing lights stopped, but everyone remained in their seats. That's when you felt the jolt. Hard dock. Astraeus Orion and Astraeus Nova were now Astraeus Station again and would remain so for the next twelve hours. If you weren't back in Astraeus Orion by then you missed the bus and it wouldn't be back in this neighborhood for a week.

We unbuckled the safety belts. These were always more of a struggle to get out of them than getting into them, except for Lux. He was out in a jiffy. We proceeded to the main airlock with some amount of trepidation, not knowing for sure what we would find. Or what might be missing. Everything looked good. The docking control lights were all green. The administrator pressed the large orange release button and the inner door opened. On the other side the door opened maybe a second later. I walked a Marine Lieutenant, much to everyone's relief.

"All present and accounted for administrator," the Lieutenant announced cheerfully. You could tell the man wanted to salute, but as we were civilians he kept the instinct in check. "I have twelve men requesting leave. I trust you have replacements?"

"We have three full platoons onboard if you want them," the administrator declared.

"I don't think that will be necessary," he replied in his best military tone.

"Is everything OK?" I asked.

"Ah," the administrator looked slightly embarrassed, "this is Dr. Lipmann. Dr. Lipmann, this is Lieutenant Karamatsov, Global Marine Force."

"The Dr. Lipmann?" He asked, "Dr. Walter Lipmann."

"Why yes," I explained matter-of-factly, "I believe I am."

"It's an honor to meet you sir." He seemed star-struck, "truly an honor sir."

"Yes, well," I responded happily, "Of course it is. I hope you'll pardon my lack of humility, but I'm a raging egotist." I smiled politely.

"Of course, sir, of course," He stopped shaking my hand and moved over to Lux, taking his broad, padded hand. "You must be Lux." He seemed equally enthused.

Lux grunted, leaned in and sniffed the Lieutenant's ear loudly.

"That's Lux's way of saying he's pleased to meet you too." I said. "is this the first time you met a Taxaeon?"

"No sir," he replied jauntily, "We've been down to the planet several times to look for the crew. I still have two search parties down there now."

"Recall them Lieutenant. We'll be leaving in twelve hours sharp." The administrator commanded.

"With all due respect sir, those men and myself, will be staying on. I have orders from Global to keep the search going for as long as possible. Only a higher ranking Marine officer can relieve us. The twelve men who will be going home are already on the station."

“Very well,” the administrator replied, although I could tell he was annoyed. The civilian administrators like to think they are running things up here. They don’t like it when they find out they are not actually in charge. That’s always the problem with doing things on the government’s checkbook.

“While you two discuss station policy, can someone show us to quarters?” I asked.

“Of course. After that,” the Lieutenant seemed pleased with himself, “You might want to come down to central processing. We found something you might be interested in.”

The Lieutenant sat down in front of the main information screen. “As you know we haven’t had the time to download all the video back to Astraeus Orion. While I was getting it ready, I found this.”

Dr. Oreleous was standing in the lab with another man who was strapping himself into a station chair. The two looked calm and relaxed, nothing out of the ordinary. The room’s clock indicated that this was only the second day after the fold. Still four days before they disappeared.

“Who’s the other man with the doctor?” I asked.

“That’s Hans Richter, he’s one of the station’s engineers.”

“What his specialty?” I asked.

“Quantum energy engineering.” The administrator responded.

“You mean the folks who actually understand how folding space works?” I suggested.

“The very same,” the administrator replied.

Lux tapped me rapidly on the shoulder, and used his hands to relay a message in sign language.

“Lux wants to know what happened to the sound.” I asked for him.

“Apparently, Dr. Oreleous shut it off after this man arrived in the room.” Lieutenant Karamatsov stated.

“What’s the last thing on the audio?” I asked.

“Dr. Oreleous asking if he was ready.”

“Ready for what?” I asked.

“I think your answer is coming in the next few minutes,” the Lieutenant stated definitively.

In the recording the doctor took a step back from the man in the seat. The other man gave the doctor a thumb’s up sign and the recording went black for a second. When the lights came back on, the chair was empty. Lux stepped forward and relayed another sign language question.

“Can you run the recording back a few minutes?” I asked.

The Lieutenant reversed the recording and Lux held up his hand to stop. When it stopped, he went up to the screen and made a circle gesture at the lower right corner.

“Can you enhance the lower right of the image?” I asked.

As the image grew, Lux pointed out a digital indicator on the console. It was the power generator capacitor used to help create the fold. It read 9.065% ... which would be expected with five more days to go. Lux made a pointing signal with his forefinger. The Lieutenant fast forwarded the image on the screen. After it went black, Lux indicated that he should stop. The indicator now read 9.067%.

"Sharp eyes," I complimented Lux. Well he didn't use the fold generator to leave. "Why did he left early?"

"He didn't," Lieutenant Karamatsov responded, "Well not exactly." The image on the screen flashed forward. At some point, the Lieutenant slowed the image back to normal speed. Based on the station's clock the recording had advanced about 20 minutes. The image went black again and when the light returned, the same man who had disappeared had returned to his seat.

"Has someone altered the recording?" I asked in a suspicious tone.

"Not that we can tell," the Lieutenant replied.

What happened next was even more unusual. The seated man released the safety belts and the two men, jumped and danced in front of the now empty seat like children for a full minute.

"He went somewhere," Lux signed.

"Yes," I said sarcastically, "we all saw that."

"No," Lux signed, "I don't mean in regard to disappearing, he went somewhere else. Not on the station."

"How can you tell?" I asked facetiously.

"I read his lips," Lux signed.

"You want to let me in on this?" The administrator asked impatiently.

"Lux seems to feel that Mr. Richter went on a trip, physically, and then returned to the station."

"What?" The administrator asked in an astonished tone.

"I think he folded space." I responded. Lux gave me the thumbs up. Apparently, he had come to the same conclusion.

"Not possible," The Lieutenant commented with an air of finality. "The station logs show it didn't go anywhere until the regular crossing, five days later."

"Oh, the station didn't go anywhere," I reported, "Only Mr. Richter."

Both the Lieutenant and the administrator looked at me with disbelief in their wide eyes.

"Did I say something funny?" Lux signed.

Back in the central hub, the administrator was preparing to return home with Astraeus Orion. In a few minutes the lights would be flashing.

“I need you to stay here and find out what is going on.” The administrator commented. “Earth is never going to believe that the crew folded space without the generator and left the station on their own.”

“We’ll see you when you get back,” I told him, “You might not want to inform Earth until we have all the facts. We’ll look into things and see what we can find out.”

“I need you to find out where they went,” the administrator looked worried, “But more importantly, I need you to find out why they didn’t come back.”

The airlock opened and the administrator started back over to the other side of the station. As he looked back one last time, Lux gave him a thumbs up and a grin. For Lux, a grin involved baring all his teeth. It was rather more frightening than the smile Lux intended it to be. The administrator’s eyes went wide.

“Now that,” I told Lux, “was a good joke.”

As the red light went off, we all sat down in our couches.

“Lieutenant,” I asked, buckling my belt, “why did Global allow the crew to be so secretive?”

“They seemed to be operating normally. The station logs are filled with data.” He declared.

“What kind of data?”

“Mostly routine stuff,” Lieutenant Karamatsov responded, “Oxygen usage, food consumption, waste disposal, reactor output, write ups on the power collection for the next fold. Oh, and Dr. Oreleous had a birthday.”

“No experimental data?” I was a bit surprised.

“Come to think of it,” the Marine officer looked at me quizzically, “No, none.”

“Odd, don’t you think?” I suggested, “A bunch of scientists who don’t keep any data. That’s kind of like an actor who doesn’t want his name in the credits.”

This time everything went smoothly. You didn’t feel a thing. That’s because when the station separates there’s no docking thud at the end. The light went off and we all got up. I knew we were in the Perseus arm. The light here always seems to have a more blue tone to me. Of course, that’s an illusion. The station lights don’t change. It just seems that way.

“We’ll Lieutenant,” I said, “time to start looking were they don’t think we would look.”

“Here,” he handed Lux and myself a small electronic component, “Snap that on to your access badge.”

“What are these for?” I asked.

“Locator beacon, so we know where you are.” He smiled. “We don’t want anyone else disappearing, now do we?”

I placed the component onto my access card. It snapped into place with a loud click that sounded like a lock. Testing it, I found it wasn’t coming off without some serious tools. You have to admire the method. Putting it on the access card. You couldn’t leave a room without an access card, so wherever the card went, you were there too.

Lux started looking in the crew quarters. Checking for personal data pads, emails from home. Lux was the perfect man ... if you want to call him that ... for the job. For him, heavy lifting ... well ... wasn't heavy lifting at all. I spend my time looking at the off-hours video of the crew. I started with the doctor's birthday party on day four. It was the only other part of the video that was recorded without audio. What would you turn off the audio for a birthday party?

It all seemed normal. There was a lot of drinking and a cake. Then a lot more drinking. One man stood on his head, while several others balanced glasses on his feet. I programmed the display to read lips and put the results up as a closed captions. It wasn't impressive. The usually party banter about kids and because this was a gathering of scientists the inevitable argument over who should get this science award or that accolade. Someone walked by a bookshelf and put back a book that he must have borrowed earlier. Naturally there was some discussion of grant money and who was likely to get it. Snide remarks about people that they didn't like. As well as a discussion of who was sleeping with who.

On the other screen I was running some data on the members of the crew. Text scrolled by listing personal data and assigned tasks. On Dr. Oreleous' section was a listing of his life's achievements, testimonials, awards. Mother and father's names and the date of his birth ... wait a minute ... wait one minute ... it wasn't until next month.

That's when it hit me. They knew that they were being recorded and that we would be able to read their lips. The whole thing was staged. It was like a rehearsed performance. That's when I noticed Oreleous looking directly at the screen. He was smiling. He knew we would be watching. I swear he was looking directly at me, as if he knew that they would be sending us to investigate. They were trying to hide something, but what? Out of the clear blue, he looked up at the camera and yep, he did it. He winked. The bastard.

Lux and I spent hours going over the tape. We ran it through several encryption programs and the response was that there was a 97% chance that some data was being passed in an encrypted method, but the computer was unable to decrypt it. I was about to bash my head against the bulkhead walls when the Lieutenant came running in.

"I found it," he yelled.

"Found what? I asked.

"You know that whenever any part of the crew disappears the lights go out for a moment." Lieutenant Karamatsov explained.

"Yes."

"The main fusion reactor." He said excitedly.

"The main fusion reactor what?" I asked.

"The energy output drops to zero," Lieutenant Karamatsov smiled.

"They turned the reactor off?" I looked at the young man oddly.

“No,” he said, “All the power was shunted somewhere else.”

“So, there is a machine,” Lux signed to me.

“The lab,” I screamed.

We all got up and headed for the door. When it opened, that’s when we saw it. Lux’s eyes squinted half closed as he looked at it. He turned to me and signed, “That’s not funny. I hate that joke.”

On the ground, in front of us, was a banana.

“Any of you men fond of leaving fruit lying around?” I asked the astonished Lieutenant.

“No sir.” He looked as surprised as we were. “That’s wasn’t here when I came in.”

“So, one of your men left it?” I asked.

He quickly checked his data pad. “No one has been near this hall since I came into the room.”

“You seemed sure it wasn’t one of your men before you checked you pad, Lieutenant. Why is that?” I asked pointedly.

“We’re Global Marines.” He stated flatly. I shrugged my shoulders to indicate that I wasn’t sure what that meant. Finally, the Lieutenant responded to my stare of silence, “We have no sense of humor.”

“We’ll then,” I replied, “it seems we have a visitor.”

A search of the station turned up nothing. Whoever had left the banana was either gone again or was doing a really good job of hiding. The hallway by the door didn’t have a security monitor. I’d have to talk to the station designers about that oversight.

We rushed to the lab. No one was there. We started tearing the place apart for unusual equipment. Believe me, Lux knows how to tear a room apart. There was a lot of monitoring equipment. A refractascope to measure the energy output of the local star. Clocks, gaseous anomaly detectors, Nucleic acid quantitation tools, laser measuring equipment, an End-point PCR and enough Geiger counters to detect the Manhattan project. But nothing that looked like it had anything to do with folding space. The only other thing in the lab was the ever-present system clock, counting down the time to the next fold. They were in every room. The only thing that was unusual about this clock was that it was broken. It was the only system clock on the station not working.

Lux took it down off the wall and startled fiddling with the pieces. After a few minutes and he put it back into the bulkhead. It came alive and started ticking down the time with it’s little red numbers, like all the other ones.

“What was wrong with it?” I asked.

“Nothing,” Lux signed, “it was perfectly fine. Someone had deliberately unplugged it.”

“Why would you unplug the system clock in the lab?” I asked to no one in particular.

Lux and I checked the video for the lab. The clock was running even after the missing crew had, well, gone missing. Someone had come back to station only to turn off a single clock ... and to leave a banana.

Lieutenant Karamatsov called back some of the search parties and we went over the station again, room by room. We must have opened every locker big enough to hide someone and then opened a few more that were definitely too small. In the middle of one of these searches, Lux came in with a pad. He handed it to me. It was the galley manifest. He held up the banana and pointed at the pad. I checked. He was right. No one had even brought any whole bananas onto the station. So where did it come from?

After a fruitless search, if you'll pardon the pun, I settled back into looking at the birthday party footage. Something was definitely wrong, only I couldn't tell what it was. I felt like the missing clue was a clown standing in the middle of the room in full regalia shouting that the top of his lungs, 'Hey moron, what's out of place in this picture?' I felt it was that obvious, I just couldn't see it.

It wasn't until later when I joined the others in the main control room, going over more of the station's recordings. I was daydreaming, looking about the room, when my eyes hit it. It was an old photo of the commons room. The one they had used for the birthday party. There was the clown, staring me right in the face, smiling.

I brought up the party and there it was. "Bingo," I shouted. Lux looked at me and I showed him the picture. I showed him the video feed from the party. We both said it at once. We'll, I said it and Lux signed it, but you know what I mean. We both announced, "bookshelf."

"What?" Asked the Lieutenant.

"At the party," I said, something that was never originally on the station. "A bookshelf in the common room."

When we arrived, there is was, plain as day. A bookshelf. Both sections were neatly filled with scientific notebooks. Two shelves of leather and cloth bound books. Not titles, only covers. Although they had been brought to the station blank, they were now filled with calculations, diagrams and experimental data. This was everything the missing crew had been working on. But why hide them? Why not store the data in the station pads? Lux and I both looked at each other. We didn't have a clue.

We sat down and poured over the notebooks. It took a while but again I noticed that the books didn't contain any space folding calculations. You needed some specific calculations if you wanted the station to end up in a different place after the fold. Or, for that matter, if you were going to fold space without the station. Some of the data was general experimental results. Sunspot activity, gravitational records and the like. A lot of it was quantum mechanics. Calculations about the effect gravity had on the bending of light around a stellar body, the apparent changes in the speed of that light.

It was pretty old school, writing in blank books. It sort of dated everyone. That's when it struck me. No one in this crew was under 50. It wasn't merely a crew of like-minded physicists, but a group of older like-minded physicists.

I pulled down another book. More of the same. Then another and another ... still nothing that would pertain to folding space. That's when I noticed it. The lower right shelf had a gap. I checked the video from the party. No gap in the books on that shelf. After a quick count of the books we found three

missing. A pity none of the books were labeled, so it was impossible to tell which three had been removed. I could only guess at their contents.

“Which three books would you have taken?” Lux signed.

“Which three books indeed.” I said.

I checked and all the books remained after the crew had disappeared. The three books were still there. Someone had come back to remove them. Why did they decided to turn off the clock? I sat back to ponder where we were. No data in the pads. No fold data in the books. No useful data except the one video of the experiment in the lab. That left the banana.

As a kid I played an old educational game, ‘The Quest for the Golden Banana.’ In the game you play a monkey attempting to keep a treasure map out of the hands of pirates. Just for laughs I took a stroll through the files on the main computer. There is was in the programs section, ‘The Quest for the Golden Banana.’ It was hard to believe that a group of physicists would be interested in a kid’s game, so I opened the file. It opened in a menu screen that looked like the game. So, I selected new game, and started the Shipwreck Shoal part of the game. I was about to give up my search when I earned my first sand dollar, the currency of the game. The sand dollar expanded on the screen, eventually filling the entire screen. But in this case the dots and bumps on the sand dollar were not a natural phenomenon at all, but fold calculations.

Lux and I spent the next two days pouring over the calculations. Most of that time was spent playing the game to get the rest of the calculations off the sand dollars. Let me say, just this once, that it makes you feel intensely foolish playing a kid’s game to collect scientific data. I got the felling the this was Dr. Oreleous’s way of torturing us. Once we had all the data collected, sat down to analyze it. But rather than clearing things up, it added to the mystery.

Now remember that I don’t actually understand how folding space works. It’s more of an art than a science. But one part of it is very much is science, the targeting calculations. If you want to go to a specific place, the calculations must be precise. It’s not a matter of folding space, it’s a matter if knowing where you want to go, based on where you are. Also, you need to avoid all the obstacles. Imagine trying to hop across a mind field without a map. The navigation calculations are, for a lack of better description, the map. Even if you learned how to fold space, around yourself, you’d still need the map of the minefield. There are whole classes taught on I subject. I should know, I teach one of them at Oxford. But then that’s why I’m here.

The part that was making me scratch my head was that all the calculations were wrong. They were so wrong that they were a mathematical dead end. In the early days of the science, people despaired that they could never make the idea work, but that was because they were going down the wrong path. If they had continued this way I wouldn’t be standing here 20,000 light years from home. The whole thing came down to an insight from the late Dr. Henry Musa. An eccentric scientist that worked out of Papua New Guinea. Most of his other ideas were so insane that the scientific community generally ignored him as a quack. Yet he literally invented the method we use to fold space today. In his lifetime, he never invented anything even closely resembling science either before or after. But it was enough to earn him a Nobel Prize.

Still in most museums, his bust or statue stands by itself. Away from Newton, Darwin and Einstein. Because other than folding space he was a complete and total crackpot. But, then again, maybe you needed to be a crackpot to figure out how to fold space.

But these were the old calculations, the ones that were never going to work. They were like trying to prove that one plus one is 87. Musa's technique had proved that. So why was I looking at all these calculations that couldn't possibly lead me to find the answers that I was looking for? I felt like looking at these were as much a dead end as the technique itself.

I pondered this for some time. The whole time Lux had a look on his face ... like ... well it doesn't have an Earth definition. Suffice it to say that if you felt like Lux looked now, you'd be extremely frustrated. For me it was day six and I didn't have anything more concrete than I had on day one. So, you can imagine how I felt.

As it happened, I was sauntering down one of the main hallways, where most of the crew had disappeared from when I saw a seat fold down all by itself. It was an odd feeling, like a ghost walking through your body. If you believe in such a thing. Slowly the others started folding down, not in order, but randomly. The belts, stilled lock in the closed position, seemed to inflate, as if someone invisible was sitting behind them.

The crew started popping back onto the station. Not all at once, but one at a time. Within the hour everyone was back on board. Each one seemed as pleased as Hans Richter had appeared in the video feed. People stood and shook each other's hands, slapped people on the back. There was a fair amount of hugging. Lux and I took off for the lab at a run. When we got there, Dr. Oreleous had finished unbuckling his belt and getting to his feet.

He turned to another member of the crew, "Well," he said, with more than a hint of pleasure on his face, "We're back, so it must have worked."

As I rushed over to him, I saw in his eyes a look of recognition on his face. "Ah, Dr. Lipmann, I presume." He shook my hand as I stared in astonishment. "And, of course, Lux," he smiled, shaking the big ape's hand as well.

To him everything appeared normal. I, on the other hand, was so astonished that I was at a loss for words.

"You know," Dr. Oreleous mentioned, "We met once at a university party in Stockholm about four years ago."

Finally, I managed to get out a few words past my amazement, "Where did you go?"

"That's the wrong question, Dr. Lipmann," he suggested, "It not truly a question of where, but more of a question of when."

Later in the main conference room, Lux and I sat with the professor Oreleous and a small gaggle of Marines. The doctor was busy explaining how they had not folded space at all, but had moved in time.

"It took me quite a while to assemble a team of people who were in specific places 30 years ago." He explained.

"But why go back 30 years?" I asked.

"You found the banana?" he asked. Lux's eyes grew narrow. He was not amused.

"Yes," I answered before Lux could fly across the table and throttle him.

"Then I assume you found the game in the computer?" He asked, not even noting Lux's discomfort.

"With the old calculations? Yes." I replied.

"That was where we were 30 years ago," the older man explained, "going nowhere fast, with zero chance of ever folding space successfully. Then one day Dr. Musa arrives with the answer. Did you ever meet Dr. Musa?" he asked pointedly.

"No," I said, "By the time I had graduated he was pretty much a recluse. He didn't see anyone."

"30 years ago, I was Dr. Musa's assistant." Professor Oreleous explained, "He was an idiot. His degree was from St. Bart's University. He only took online courses."

That was information that I had never heard. I don't think anyone had. "Go on," I suggested.

"Back when he made his great discovery," he explained in a sadder tone, "I was in Sydney for a month trying to get the Science Ministry to explain to me why I had been assigned to such a hopeless individual and to try to convince someone to reassign me. When I got back, Muse met me at the airport ... which was quite unusual for him. He shook my hand and thanked me for all my help. I had no idea what he was taking about. I merely assumed that he was off his rocker as usual."

"So, you made the great discovery," I concluded for him, "went back in time and taught it to Musa."

"Well, not exactly," he said. "I was never interested in folding space. I was much more interested in time and how time could be manipulated by gravity. I only learned how to fold space about four years later in a classroom, like most of my colleagues."

He sat back in his chair with a slightly amused look on his face. "You know. Muse called me a few years later and offered to share the Nobel Prize with me. I turned him down."

"So how did you figure out how to fold space?" I asked.

"I have no idea," he suggested, "Like I said I learned it in a classroom. I can't imagine how I would have come up with the answer. I guess that will have to be one of those time paradoxes that will be the subject of debates by philosophers for the next hundred years." He smiled.

Lux signed a question to me and I translated. "Lux wants to know why you brought so many people with you?"

"Ah, excellent question." He relaxed, "Teaching Musa wasn't the problem. That was going to be easy. Like training a money to ride a unicycle." He looked at Lux, "Sorry. No offence intended." Lux nodded politely. "No, the real problem was setting things up so that someone in the Science Ministry would read

the report once I got Musa to write it. That was no mean feat. Most of the people who got it in the mail, simply tossed it. Frequently without opening it. If you check these people's records they were assistants to most of the folks who got the first copy of the report."

"Why involve my people? They didn't invent folding." Lux signed.

"I bet if you check your records, you'll find that 30 years ago none of your people believed that there was anyone else in the universe. We had to make sure that we wouldn't cause anyone to flip out the wrong way when we arrived and destroy the station. That ... that would have ended the folding space experiment real fast, I can assure you." Oreleous smiled.

"Over the next years you'll find your leading scientists postulating that there were other beings in the universe, and more importantly, they would be friendly. Lux I believe your father was one of them." Lux nodded an affirmative. The professor smiled again. Perhaps a little too smugly if you ask me.

"So why all the secrecy?" Lux signed.

"It's simple," I explained, "The first folding of space had to happen a week early because of all the rioting on Earth. People believing that it would be the end of the world. Imagine what would have happened if they found out Dr. Oreleous had invented a time machine."

"Exactly," the professor explained, "and the station was the perfect place to actually run the experiment. Earth wouldn't find out about it for a week."

"That was a nice touch," I complimented the old man.

"Thank you."

"Everything else was a setup to keep us from finding the answer too quickly," I explained, "But what about the clock in the lab? What was that about?" I asked.

"You didn't figure that part out?" Oreleous looked surprised. We both shook our heads no.

Dr. Oreleous punched up two images of the system clocks from the station logs. One in the lab and one in the common room. They were both working. I looked at the doctor and shrugged my shoulders. I didn't get it.

"Look at the time." The old man chuckled.

The clock in the lab was two minutes slower. That was impossible, since all the clocks were linked to central processing. They should all be showing the same time. I didn't even think to look at that until the doctor pointed it out.

"That's the machine. The time machine if you will. Every time we use it, it loses a minute." The professor explained, "I don't know why, it seems to be a byproduct of the process. That's why I sent Hans back to turn it off. I really thought you'd notice that. Oh, well."

"The original one is back in storage locker BB-27," the old man explained, "with the rest of the backups. We replaced it as soon as we got on board."

Dr. Oreleous punched up a live picture of the lab. The doctor kept going on as we stared blankly at the monitor. Finally, the professor turned to the monitor. He saw what we were seeing. The clock in the lab was gone. All that was left was an empty space in the bulkhead.

“Well,” I spoke to break the tension, “I suppose you can build another one.”

“Not exactly,” the doctor looked embarrassed.

“What do you mean?” I asked a bit confused.

“I actually didn’t build it,” he replied a bit sheepishly, “It was given to me about two years ago before the station got online.”

“By whom?” I asked.

Oreleous reached into his coat pocket and pulled out a piece of paper about the size of a business card. I reached out my hand to take it, but he handed it to Lux. He looked at it with a deadpan expression on his face. I walked over to it. Over his shoulder, it had one word written on it. It was in his own hand writing.

The card simply said ‘Lux.’