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by

C. R. Downing/Dr. Chuck Downing

Page numbers don't mean much after 66. Deal with it.

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Traveler's HOT L – *The Time Traveler's Resort*

Chapter 2 Relatively Speaking

The mist moved in sometime Friday night. By 8:30, Saturday morning, my condominium was enveloped by the stuff. Actually, “permeated” would be a more accurate word, since the mist oozed in through a window I had forgotten to close.

Oh, now, wait. I feel like the after-dinner speaker I heard once who started his speech with, “Before I begin to speak, I would like to say something.” That line brought down the house that night.

But I digress. I'd better start over again. My name is Michael Casey O'Brien, IV. As I write this on the eve of September 13, I am 27 years of age and I work as an electronics repair coordinator, one of three in our local office, for a major manufacturer of electrical appliances, home computers, video games, and surveillance equipment. Our parent company gets lots of government contracts. Anyway, I am writing this for my son, or grandson, or is it great-grandson. No, it would be great-great-grandson. This is really confusing to me—I can only imagine what it sounds like to someone who hasn't experienced what I have.

Actually, I'm not married, and I don't have a son. Man-oh-man, that's not quite accurate, either. I think I'll start again with the mist.

Whichever number Michael Casey O'Brien reads this, I hope you understand.

Because of the mist, my room was dark longer than usual. I slept almost an hour past my normal rising time. I looked at the clock. When I realized the time, mild panic flashed through my consciousness, but receded when I remembered it was Saturday. I yawned and stretched. As I rolled out of bed, I saw two people holding an earnest, but politely whispered, conversation at the door of my bedroom. They were dressed in work coveralls and carried toolboxes. I figured them to be a couple of technicians from the plant.

“What do you guys want?” I croaked, my voice choked with morning hoarseness. I cleared my throat and continued. “You've got a lot of nerve coming into my house while I'm asleep, so it had better be real good!”

The figure on the right turned toward me. I could tell that she was female, but her features were indistinct. She moved closer. I was surprised when I still couldn't clearly focus on her face. The mist seemed to thicken between us the closer she got. It was almost as though she was the source of the mysterious haze.

Her companion also turned but did not move from the doorway. Instead, he leaned against the doorjamb and folded his arms. It was obvious that he was not about to do anything but observe. The girl cleared her throat, so I turned my attention back to her.

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“Mr. O'Brien? Mr. Michael Casey O'Brien?” she asked. I nodded.

“Michael. May I call you Michael?” Her inquiry was formal and most politely delivered.

“Michael is fine,” I replied. “In fact, Mike is quite all right, as long as it leads to the reason for the pair of you being here in my condo. Either that or I'm calling the cops.”

“Oh, your communication device—”

“Cell phone,” the man corrected.

“Of course. Your cell phone will not function while we are here. And, I believe I prefer Michael.”

“Suit yourself,” I shrugged. In spite of her warning, I snapped up my smartphone. It acted like a dumbphone—there were no bars, no glowing app icons, no evidence of any kind that the device was electronic.

“Still waiting for why you're here.” I scooted up toward the head of my bed, bunched my two pillows together, and settled back against the headboard. I had a feeling this was going to take a while.

“My name is Tempus,” she began again. “Epoch and I are a team of Time Synchronizers responsible for the 19th through 21st centuries. The timeline has been damaged, and we are requesting your assistance in order to smooth the now-wrinkled time fabric of the past century. Oh, the damage is slight, I assure you, but it is there never the less.”

I raised my hand like an elementary school student with a question for the teacher. The quizzical look on Tempus's face indicated that she had no idea what that gesture meant. Undaunted, I plowed ahead.

“I was wondering if I might ask a question,” I said.

The waves of mist that swirled around the woman's face increased in both height and frequency. My request appeared to have derailed my guest's train of thought.

“I, um, I suppose you could ask a question,” she began uncertainly. She looked back to her partner, who shrugged. “Oh, please, could you wait until I'm done?” she begged me.

It was my turn to shrug.

“Please continue,” I said as I demonstrated my best chivalrous hand gesture.

“We are here because we need your help to complete the repairs we have initiated. You will help us, won't you?” she breathlessly ended her explanation.

I am afraid my face must have registered the bewilderment I felt because the second figure moved through the mist and spoke. His tones were deep with a resonance I would have thought impossible without some kind of amplification system. “Tempus,” he spoke with tenderness tinged with resignation. “I think you will be forced to agree with me that your presentation of our mission here was something less than crystal in its clarity.”

The mists surrounding the girl seemed to turn a rose-color as embarrassment moved up her neck and face, like mercury moving up a thermometer in direct July sunlight. She squared her shoulders, though, and answered her confederate. “You may be right, Epoch.

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However, I am sure that at least some of the blame must rest on our Father. After all, if He had trained us equally, my explanations would, I'm sure, be more complete."

"Now, now, I was not criticizing. You are getting much better," he said, his soothing tones smoothing her ruffled feathers. Then he said to me, "Perhaps I can explain our presence."

"That'd be nice," I responded. "So far I haven't got a clue as to what you and your sister are doing here in my bedroom."

He smiled at the word "sister" and began his explanation. "The dimension you call time is really a continuum. New

portions are constantly being generated in what you would perceive as the far future. Imagine a long piece of, say, dough coming out of a noodle maker. The longer it gets, the greater the tendency for it to twist or tangle. It takes focused attention to keep the noodle flat. Tempus and I are responsible for just such attention for the segment of time you humans number 1901– 2099, with some grace allowed at each end date."

I nodded to show I was following his explanation.

"When you have something that is too long for an area and still continues to increase in length, you roll it or fold it to conserve space. Unfortunately, we cannot do that with the fabric of time. It must remain spread out at all costs. I think you will agree that the two of us have a full-time job to do."

I nodded again, this time in courteous agreement. Now he'd lost me. Epoch seemed pleased with my apparent grasp of the situation, though, since he pulled the chair out from my desk, sat down, and resumed his monologue.

"The One in charge of all time is He that Tempus calls Father. You may have called Him 'Father Time' or some other such pseudonym. His real name is not important; it is enough that you are aware that it is He who has sent us here. Tempus is not my sister. She and I are not related. I want you to understand completely what we are asking of you."

I nodded once more and mumbled my thanks. I felt like a bobble-head doll on giveaway night.

"Now, where was I? Oh, yes, discussing the fabric of time. Tempus, I, and many others are charged with keeping the fabric smooth and straight. Time is involved, of course, but the work itself consists mostly of straightening and realigning. Occasionally, however, we do encounter a difficulty.

"Such was the case two of your days ago. Something in the 1700s twisted, and part of our 1900-to-1913 time fabric was folded over upon itself. Let me show you what I'm talking about." With this he turned and began rummaging through my desk.

While the Man searched, Tempus, who had been standing silently by for some time, interjected. "I suppose fabric is, perhaps, misleading. Time is really more like your paper products. Silk, for example, can be crushed and then shaken out and be none the worse for the experience. However, paper, if it is ever wrinkled..."

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“Precisely what I am about to demonstrate,” Epoch interrupted. Tearing a sheet of notepaper off a pad he had located, he held it up, much like a magician.

“Look,” he said, directing my line of sight to the smooth sheet in his hand. “Not a wrinkle. But observe.” With those words, he crumpled the paper with his fingers. Then he turned back to the desktop and used the side of his palm to rub the paper out flat.

Holding the paper up once more, he spoke, “Now, look. Even though I have smoothed it out, there are still creases and small wrinkles which I cannot remove.”

I restrained myself from sarcastically applauding this demonstration. However, I could not help but limit my response to a cursory examination of the paper. Then I mumbled, not without irony, “I see.”

“Excellent! That is the point exactly. Time between 1900 and 1913 has wrinkles in it that we cannot repair.”

Here my mask of feigned belief must have slipped because the Man in the Mist's tone of voice altered quite suddenly.

“You doubt my words! You do not believe that we are Time Synchronizers? You think that we are... are... thieves, or perhaps worse... even lunatics?”

Tempus moved over to his side and placed her delicate hand upon her partner's shoulder, urging him to remain seated. Then she asked, “Tell me, Michael, have you ever noticed how some times of your life seem to pass very quickly? Have you ever said, ‘Where did the time go?’ or ‘The time flew by?’ Or how about when something never seems to end? You might have said, ‘That was the longest ten minutes I've ever spent.’ Have you done these things?”

“Of course,” I answered, “Who hasn't? Good times go fast and boring times go slowly. It's all a matter of perception.”

“Is it, Mr. O'Brien?” Epoch's tone of voice was back under control. “Did you happen to notice the time when you first realized we were here?”

“Not exactly. But it was around 8:35,” I replied.

“Quite close. And what time is it now... without looking?” “It must be at least 8:50. Maybe nine o'clock.”

“Not nearly so close this time, Mr. O'Brien. It is precisely 8:35 and 45 seconds. You see, we have some control over the speed at which time proceeds through our area of responsibility. There is some slack, and we have slowed time as much as we are allowed in order to speak with you.”

“This is preposterous!” I exclaimed as I leaped from my bed. “Check the clock, Michael,” Tempus directed.

I looked at the alarm clock on my desk. It read 8:35:45 on its digital readout.

“You could have turned off the power.”

“Really, Mr. O'Brien, how could you see the time on your clock without power? It is operated by electricity, is it not?”

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Epoch was patronizing.

“Michael, call the telephone time number. The phone company wouldn't be in collusion with us, would it?” Tempus' suggestion caught me off guard.

Mist Man shook his head as I punched up the time operator's number on my land line. “At the tone the time will be 8:35 and 50 seconds... BEEP.” I was pretty well defeated. Maybe they did have something I needed to know. I shuffled back to my bed and sat down on the edge of the mattress.

“I'm still not fully convinced,” I grumbled self-righteously. “Michael, have you ever experienced *deja vu*, where you

sense that you have been at some place or that you have seen someone before, even though you know you could not have? Or maybe you know what is going to happen next, and it does?” Tempus asked.

I nodded that I had. She continued.

“Most of the time when you experience those things, it is the result of work done by time technicians like ourselves. Sometimes the time fabric starts to gather and bunch up. We just pull it out straight quickly before it wrinkles, and you really do live a brief instant twice. Of course, that is not the only explanation of *deja vu*. But it is the only one over which we have control.”

I thought these two were starting to make sense. I tested my theory.

“Okay. Maybe you have slowed this 'time fabric' down. And maybe some types of *deja vu* are your responsibility. But if you are who you say you are, then make the time now five after nine.” “Mr. O'Brien, this is not something we do on a whim!

Velocity adjustment is a very exact maneuver. One slight miscalculation...” Epoch left the sentence hanging.

“You've got until I count to three, then I'm calling the police.

Thanks to you, I know the phone I'm holding works.”

“All right,” Epoch sighed. He walked over to the bedroom door, picked up his tool bag and disappeared into a dense pocket of the mist. Almost immediately, he strode back out of it.

“What's wrong?” I figured I had him.

Traveler's HOT L – *More Tales From the Time*
Traveler's Resort – Volume 2 - 2nd Edition

An Unauthorized Trip Through the Fabric of Time

“You *have* to leave!”

“Hasn't the past week meant *anything*?”

“It's not that,” she almost shouted—panic rising in her with each passing second.

He pulled her closer to himself. In his passion it seemed to him that the walls began to ripple. He felt a jolt like an electric current pass through his body.

She shuddered.

Although rippling walls and electric shocks were completely new experiences in his moments of passion, he knew he'd been right about her feelings—and not quite correct about his!

When the current passed out of their bodies, she slumped in his arms.

“That just rocked my world! I've never felt quite like this before, Gwen!” Martin gushed.

“This has to be what it feels like to be with the *right* person.”

The sound of a male voice penetrated her consciousness. *What just happened?*

She pushed the male away from her and looked around. *Something's not right about this place.*

“Something's wrong!” She cried.

“What could be wrong? Didn't you feel what we have together?” he asked.

“I felt something, all right, but I'm not sure what. Now it feels like this isn't the place I'm supposed to be.” Gwen's answer rambled as confusion overwhelmed her psyche.

“Believe me, this is *just* where you belong—right here—with me.” Martin pulled her back to him.

“No, it's not you. Well, it *is* you. I mean it's not *us*—at least it's not supposed to be us!” Gwendolyn Runslers's explanation meandered like the Mississippi River at flood stage.

“Then what just happened?” He demanded.

“I don't know, exactly,” she qualified her lie. She did know exactly what was wrong. She'd violated the terms of her agreement. She'd brought back an *artifact*—a six-foot, 180-pound, artifact with a gorgeous body and face. An artifact named *Martin*.



“There is a Code Red situation in Room 59.” Eternity understated the emergency.

“Who's supposed to be there now?”

“Gwendolyn Runslers. Back from twelve days in 2094. She wanted to preview her world on what would be her 100th birthday.”

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“Who is there now?”

“Allen Johnson.”

“And where's *he* supposed to be?” Chronos asked the question that had to be asked, although he really didn't want to know the answer.

“He should already be in 1889. At the World's Fair in Paris.”

“Wants to be the first visitor on the Eiffel Tower, right?”

“The . . .” Eternity ran a quick search on her computer. “The ninety-eighth first visitor we've sent up that iron edifice. If they only knew.”

“Okay. I'll stall Mr. Johnson. You find that *Runsler* woman!”

“Do you want me to request a full-spectrum search?”

“Not yet. Have Tempus and Epoch see if they can track her DNA resonance pattern first.”

“My first choice as well.” She clicked the red button icon on her computer's desktop.

Seconds later, the lobby filled with mist. The mist thickened in two locations and one male and one female form moved to the front desk.

“What's wrong?” Tempus asked.

“We have, as is protocol, suspended our scheduled synchronizations and have reported here immediately upon receipt of your Code Red signal,” Epoch added.

“I am not certain, but we think we have an unauthorized traveler. Observe.” Eternity pulled up a video of the final seconds of Gwen's time in her future.

“I take it the young man is our interloper,” Epoch said.

“Yes. Although, I doubt he is aware of that.”



Her twelve days in 2094 had been an idyllic time for Gwendolyn. The grandeur of the futuristic settings surpassed any her mind had conjured before this trip. There had been some negatives: the strict population control measures in all countries and the planet-wide rationing of protein sources and water were two she remembered most clearly. However, the majority of her time had been a wondrous fantasy—except for the unfathomable global monetary system.

In spite of all the good memories, however, from where she sat now, in a strange room in an unknown time with a man that was at least 100 years older than she was, her trip had deteriorated to an unmitigated disaster. She quickly ran a comb through her hair and stepped out of the bathroom and back into her hotel room.

Martin sat on the edge of the bed. He was mystified by the recent behavior of the young woman upon whom he'd been working his wiles for the past seven days. The relationship had started as he'd planned. He first saw Gwen at a second-tier club downtown. She wasn't exactly beautiful, but she was cute. She dressed well, and she was an engaging companion. Until about three hours ago, he'd thought he'd found enough of a soul mate that he could stop his club hopping nightly agenda—at least for a while.

Now, something was seriously out of whack.

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"I have something to confess," Gwen's voice derailed Martin's train of thought.

"Okaaay."

"I think you might have the wrong idea about me." She inhaled deeply and exhaled before she added, "I might have misled you. I didn't mean to, but I didn't tell you because I wasn't supposed to tell anyone. But, then, I wasn't supposed to get involved with anyone from your time, either. So, I guess what I mean is that this is all my fault, and I don't know how to fix it. Can you ever forgive me?"

Gwen's verbal hemorrhage swept over Martin with such intensity that it nearly pushed him physically off the edge of the bed. After the oral onslaught subsided, he could do nothing more than stare at the woman in the room with him.

"Who are you?" he finally asked in a monotone.

"Gwendolyn Ru—"

"Not a name. I thought I knew you, but now . . . Who *are* you, and what on *Earth* are you talking about?"

"Do you know where we are? Or what year this is?" Her queries lacked even a hint of expression.

The two questions shocked him. He'd been running scenarios through his mind, but those questions instantaneously forced him to reconsider—neither of the questions fit into any of even the wildest situations he'd imagined.

"I know that might not make much sense, but I need to know where *and when* we are," Gwen continued quietly.

"You're completely serious."

"Never more so."

"Why—" Martin stopped himself and decided to answer this strange female as best he could. He stepped to the room's single window, pulled the curtain back, and peered into the twilight.

"I don't recognize any of the buildings around here," he admitted. "And, I assume it's 2094 like it was a couple of hours ago and several months before that."

"Most certainly a wrong assumption," Gwen said almost to herself. She picked up the telephone off a nightstand and punched the OPERATOR button. She panicked briefly as she realized she had no idea what room she was in. However, the number 307 was handwritten on a sticker on the phone's base unit.

"This is room 307. I would like two things, please. First, please send up a newspaper. And, second, can you also send up a map of the local area. I'd like to wander a bit before I dine tonight . . . No, that will be all. Thank you."

"Well?"

"The front desk is happy to send up those items," Gwen answered.

"How will that help?"

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The dialog between the pair continued—each attempting to sort out what was going on in her or his own way.

So engrossed in their situation were both Gwen and Martin, that neither noticed the mist as it filled the room.

“Gwendolyn?” Tempus’ musical voice jolted the couple. Two bodies spun in unison toward the sound.

“Get behind me, Gwen!” Martin directed using his arm to encourage her movement.

“There is no reason to fear us,” the voice of Epoch resonated through the room from his position nearly ten feet to the left of his partner.

“Oh, no! There’s *two* of them!” Gwen’s comment started as a squeal and concluded in silence as she choked-off her final word.

“I’m Tempus. And my companion is Epoch.” A delicate hand motioned from one ethereal form to the other.

“We are Time Synchronizers. You have broken your agreement with Traveler’s HOT L, Miss Runslar. Tempus and I have been sent to see how best to proceed.”

“Room service!” A synthesized female voice called. Three forceful raps on the door quickly followed.

“What should I do?” Gwen asked—panic written clearly on every feature of her body.

“I recommend answering the door,” Epoch responded after a brief, awkward period of silence.

“But—”

“I’ll get it,” Martin interjected. “Whoever’s at the door can’t be any weirder than these two.”

He opened the door and stepped back as a metallic arm stretched towards him.

“We searched archival records and discovered the meaning of the term newspaper,” the synthesized female voice of the hotel’s housekeeper android began without preliminary courtesies. “You will find your newspaper and GPS enabled mapping system in this p-dat, which is now assigned to this room number. Please return the device to our front desk upon or before checking out.”

Martin took the proffered palm-sized p-dat from the android. When the bot hesitated, he dug into his pocket and dropped a coin into a slot designed for receiving tips found on its left shoulder. The android’s visi-plate glowed briefly. The value of the coin appeared to be sufficient. The bot spun around in place and rolled away.

“You still want this?” Martin proffered p-dat to Gwen.

“Yes, thank you,” was her automatic response as she held out her hand. However, as she regained focus she held up the an electronic device and, “What is *this*?”

“The service bot called it a *p-dat*. I suspect that’s their slang for ‘personal data device.’ It stores information and allows you to communi—”

“We call them *smartphones*,” Gwen interjected, stopping the conversation.

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“I think you will find that the year is 2027. The city is . . .” Epoch took advantage of the awkward pause.

“*El Cajon*, in a political entity known as the State of *California*,” Tempus finished.

“It’s pronounced *cah-hone*. It’s Spanish.” Gwen corrected the mispronunciation out of habit. At least she was close to home. But, she must have misunderstood the date.

“*California*? That can’t be right.” Martin insisted.

“I am afraid that, in spite of her lack of Spanish language skills, Tempus’ designation of our location is accurate,” Epoch said.

“Can’t be. *California seceded* from the United States in 2081. It’s been the *Republic of Cali* since then and has the fifth highest Gross National Product of any sovereign nation on Earth.” Martin failed to process the date Epoch provided as he wrestled with the wrong-in-his-time information about California.

Three pairs of eyes shot glances at one another in rapid succession. When Gwen began to speak, Epoch stopped her.

“Explaining your situation is a task that I must assume.”

“*No!*” Gwen blurted.

“No?” Epoch’s lack of inflection revealed the absolute astonishment he felt at being countermanded. “I await your rationale for such effrontery.”

“It’s not disrespect, Sir. It’s just that, well, *I’m* responsible for this situation. I feel responsible for explaining it to Martin.”

“While I disapprove of your methodology, I am sympathetic to your desire. However, if your explanation wanders outside what I determine is all that this young man needs to know, I will assume delivery of the explanation in no uncertain fashion.”

Tempus knew that meant Epoch was prepared to manipulate the time fabric if that’s what it took to control the situation.

“I understand,” Gwen said.

“You may proceed.”

“Martin, I’m neither from the state of New York nor the year 2094,” Gwen began while staring intently at her stowaway.

“I kinda figured that out.”

“I never deceived you—”

“Maybe not. But, you *did* lead me on.”

“And, I’m sorry for that—but you did make it *so* very enjoyab—I mean so easy.”

“This banter is not remotely related to what Martin needs to know about this situation. You will move to the essence of your explanation.”

“Please, Epoch. Allow Gwendolyn a bit of slack,” Tempus said. “Interaction of this type distinguishes humans from many of the other species in our timeline.”

“Very well. But do limit this off-topic banter, Ms. Runsler.”

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"I'll do better than that," Gwen quickly shot back. Then, in an admirable example of speed talking, she fired off, "Martin-I'm-from-80-years-in-your-past-When-and-if-I-am-alive-in-the-year-2094-I-will-be-100-years-old-I-have-traveled-from-my-time-to-yours-to-see-what-the-world-will-be-like-at-my-centennial-I'm-sorry-that-I-allowed-myself-to-become-romantically-involved-with-you-you-made-it-so-easy-and-desirable—"

"Ah-hem!"

"Sorry," Gwen slowed her pace. "Anyway, you were in my room when I was supposed to return to my time. That's what the ripples and the electric current were all about. I was given very specific instructions that I couldn't bring any artifacts home with—."

"Artifacts? You consider me an *artifact*?"

"No! Oh, my goodness, no! But, I did bring you back. And, it's obvious that by doing that I've completely ruined the time travel process."

Gwen stopped. Those in the room got the feeling that she'd run out of fuel.

"So what do *I* do now?" Martin asked. Then, after a startled reaction as something Epoch said sank in, he added, "Is 2027 the year we're in?"

"Yes to the date. As to what you do now, you assume the role of a sojourner along the fabric of time for the next eleven days. On the twelfth day, we'll return you to your time," Tempus summarized.

"It's that easy?"

"I'm afraid that Tempus has oversimplified what we must do in order to bring the projected outcome to fruition," Epoch interjected. "However, if you do as we instruct you, the odds are nearly 100% in your favor of returning to your own time, as I have heard the saying goes, none the worse for wear."

"I have two questions," Gwen said. "First, *why* are we in 2027? I mean that seems like a random year to end up in."

"It is hardly random, Ms. Runslar, You *do* remember the basic principles that govern trips along the time fabric, do you not?" Epoch asked.

"Only that we can go where our DNA is and, um, something about harmony . . . Sorry." Gwen's voice trailed away in embarrassment.

"Humph. That is less than I had hoped you understood," Epoch mused. "Do you both remember what felt like an electric current passing through your bodies at the time of time transfer?"

Gwen and Martin nodded.

"Yeah. But I thought it was just part of the passion we, um, were, uh . . . I'm guessing it wasn't, was it?" Martin's comment slowly dissolved into a rather lame rhetorical question.

"The voltage we supply in the HOT L is carefully calibrated to provide enough energy to transport the designated traveler, or travelers if we know there is a group." Epoch's tone hardened as he spoke the final phrase.

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“But, when an artifact is added to the equation, particularly a human as the artifact, the applied voltage is insufficient to harmonize the new total amount of DNA,” Tempus expanded Epoch’s explanation. She knew her partner well enough to know that the emphasis he’d applied to his final phrase indicated his patience was wearing thin.

“As a result of the new DNA mass, both of you were transported as far along the fabric as possible by the voltage applied. We followed the fabric. That’s how we found you,” Tempus concluded.

“So, this inverse DNA/voltage relationship resulted in an undershoot since the DNA mass was increased,” Martin added his interpretation of the situation.

“Very good, young man,” Epoch commended.

“Does adding artifacts always end up with not going as far as was planned?” Gwen asked. While at the most important level, this really didn’t matter, her career as a commodities analyst had trained her mind to look for patterns and deviations—sometimes a hunch paid off big in her world.

Silence reigned for several seconds as Tempus and Epoch stared at one another.

“You may elaborate,” Epoch finally conceded whatever silent argument had been undertaken.

“Not *every* time,” Tempus’ explained. “We did have a situation where a couple snuck a significant amount of extra weight into their HOT L room. Let’s just say that they ended up traveling much further into their past than they’d planned.”

“That makes no sense. If the explanation about the voltage—”

“This topic is closed.” Epoch interrupted Martin’s question and redirected the discussion. “Miss Runsler, I believe you had another question.”

“How will we get back where we belong?”

“We’re working on that. We should have the situation well in hand within a week,” Tempus said. She added with a smile, “Until then, you have *time* to explore *this* time.”

Without another word, the room filled with mist. When it lifted Gwen and Martin found themselves alone again.

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Traveler's **HOT L** - Volume 3

Chapter 1

Not Just Another Day

The condo wasn't new. The paint was recent, and the landscaping showed evidence of periodic maintenance. But, as a whole, the complex showed its age.

Newlyweds Art and Kaz Castillo occupied a first story unit in the middle of Building #6. The buildings were numbered from front to back of the medium-sized complex. The largest number assigned to any of the blocks of one- and two-bedroom units was #20.

In spite of the brevity of their marriage, the couple felt at home with one another. They were blissfully unaware that the 'at home' feeling was about to change.



Art Castillo awakened before his alarm did. He considered that an excellent beginning to his day and stretched his arms and back as he lay in bed. When his left elbow hit something soft, and an equally soft murmur indicated the physically soft object was alive, he remembered.

It happened twelve days earlier . . .

And, do you, Arturo Nieves Castillo take this woman, Kazuko Alica Hayashi, to be your lawfully wedded wife?

I do!

Friends had told him at the reception that he'd shouted his positive response to the reverend's question. He'd told them,

I don't care. I love this girl! And, I want the world to know it!

Of course, the fact that he'd called Kaz a 'girl' had cost him a fancy necklace charm from an overpriced crystal store on their honeymoon. But, it was worth it all to see her now—and 'til death do us part—as she lay sleeping beside him in their bed.

His finger traced a pathway down Kaz's arm. He started with a tender twirling of a long strand of jet-black hair. He found her shoulder and followed the smooth skin past her elbow to her wrist. Her face rested on the palm and fingers of her right hand. He paused, then his finger made a short jump from his wife's wrist to her chin. The pathway ended in a circle around her mouth.

Reverse Image

Kaz puffed out a breath of air in an unconscious attempt to rid her upper lip of what felt like an insect crawling on her. Slowly and carefully, Art withdrew his finger. The last thing he wanted to do was wake this beautiful creation that graced his bed.

He raised the finger he'd used to trace her arm to his lips and gave it a loving kiss. He pressed that kiss tenderly to her lips.

Satisfied he'd not awakened Kaz, Art climbed out of bed. He was careful not to create a bedspring quake in his wake.

Success! he thought. *Now, if I can just remember to be quiet while I'm getting dressed.*

Thirteen minutes later, he stood on the condo's small front porch. He leaned against the door and stretched his calf muscles. After tapping the **PLAY** icon in his smartphone's audio App, he jammed the device into the elastic band around his arm. Content with his preparation, he started off on his Tuesday morning circuit.

Thirty-five minutes into the run, Art made the far turn in his route. He was glad to reach this point. The long downhill slope that stretched before him would take him out of the city park and back onto the sidewalks of his neighborhood.

After traveling a short distance down the gentle slope, Art noticed what looked like ripples in the air just off the path. His curiosity piqued, he veered off his route to investigate.

What he discovered was the opening to an oversized ground squirrel or rabbit hole. The ripples bubbled up out of the cavity. He pulled the ear buds from his ears and knelt down beside the hole.

Art waved his hand through the ripples. He felt a smallest of electric shock with each undulation of the air made contact with his hand. His curiosity now far past piqued, he leaned over the opening.

"!em hitw gnimoc er'uoY" a voice called from inside the hole. A hand reached out and pushed against Art's shirt. He was shocked when that push-pulled him into the opening.

"Help! Something's !em tog" he shouted, although the last two words came out as an unintelligible whisper when his head disappeared into the cavern. Looking down, he saw what appeared to be the sky. He jerked his face upwards and saw a wild face staring back.

Art swung his fist again and again at his unknown assailant, but each punch he landed did nothing more than push the face a bit closer to him. He flailed away in frustration and somehow managed to rip a medallion loose from a chain around his attacker's neck.

In his flailing about, the medallion flew downward from his hand. Under the reverse influence of the rippling atmosphere, it traveled away from the cavern and landed in the undergrowth along the pathway instead of falling deeper into the pit.

The ripples slowed. Art Castillo disappeared completely. When the air was still, the opening to the underground world had vanished.



Reverse Image

*Time is not just **another** dimension, It is **the** other dimension.* Tempus could hear the words as clearly as she had the day, now centuries past, Pater had spoken them to her class of new recruits. She completed her training and now held a position as a Time Synchronizer. She and Epoch, her Supervisor and partner, were responsible for the years 1901–2100 of the fabric of time in Earth's quadrant of space.

Tempus smiled as she realized her mind was wandering. *Oh, well. This is just a routine inspection. Let's see where else I remember from that time . . .*

Time is eternal, unlimited, and omnipresent. The fabric of time is the physical manifestation of the abstract concept and has structural requirements. Like any fabric, time fabric consists of a network of threads.

One type of thread in the fabric is the structural thread. They are few in number and are found in all fabrics throughout the universe.

Most of the threads in a time fabric have nothing to do with the structure of the fabric. In a time fabric where sentient organisms exist, each non-structural thread is the life record of an individual organism. There is one thread for each organism capable of understanding the concept of time.

Oh, how Pater emphasized that point!

Only a trained synchronizer can correctly categorize each thread as structural or life record in any specific location along the fabric. Experience has shown that the amount of damage resulting from a single act of sabotage can be catastrophic. For this reason, Time Synchronizers must maintain a constant vigil.

That was refreshing, Tempus finished her thought as she refocused on her task. She was in no hurry as she moved along her assigned section of time fabric. She was traveling in the direction that humans called the future.

Time fabric moves away from its source. All time fabric in existence is a mix of past/present/future strands. While the designation depends on the individual's date of birth, future time threads are the shortest ones in any area. The reason is

Since an area of the fabric that is the future of one individual is the present to billions of others and the past to billions more, it was hard for Tempus to explain her understanding of the future to any organism not of her species.

Whenever possible, she avoided speaking with humans about these chronographic intricacies.

She found her thoughts drifting into her past for the third time. She remembered being chosen as a Time Synchronizer. She was proud to be working on Earth's time fabric. She'd heard that this timeline was challenging. After her assignment was finalized, Pater explained, *One full-time time synchronizer for a single collection of solar systems is not that uncommon. Two time synchronizers assigned to a single planet, as will now be the case with you and Epoch, is a first.* She smiled a crooked smile.

Reverse Image

It seems that Homo sapiens have the unique ability to generate far more timeline distortions than any other species known to Pater was his conclusion. She smiled a second time and refocused on the time fabric beneath her. *Time to return to vigilance!*

Now, this is odd, Tempus thought and rechecked the reading on her scanner. In what had been a routine scan of a field of the present threads, the scanner had recorded a most uncommon piece of data. According to her readout, the thread for Arturo Castillo was moving backward. It was moving very slowly backward, but, nonetheless, it was moving backward. *This is more than odd. By everything I know about this job and time itself, this is impossible.*

She recorded a high priority notification for Epoch. Before she could send her communiqué, something infinitely more pressing flashed on her scanner as a piercing warning signal sounded.

The alarm indicated thousands of threads in the time fabric associated with the fall of Communism in 1989 had pulled free of the surrounding material. Other threads, no longer locked in place by their neighbors, were working their way loose from that time period. All thoughts of the peculiarity that was Arturo Castillo's scan result were cast aside. The new threat, already an emergency, held the potential of becoming a catastrophe.



As Kaz Castillo stirred, a memory meandered around in her brain. She thought she remembered something crawling on her arm and face. A quick check of both body parts proved otherwise. She stretched and inhaled deeply. But, even after she'd awakened to a bedroom filled with light, she didn't realize she was lost in her fantasy world of newlywed bliss and unaware of her true situation.

Mrs. Arturo Castillo. Kaz Castillo. I'm now Kazuko Alica Castillo.

Kaz was on her fourth mental repetition of nuances of her married name. It was a ritual she'd established on the first morning of her honeymoon. She didn't know how long it would last. "Maybe I'll just do this every morning... forever," she said aloud.

She turned her head and took a quick glance at the clock.

"It's 7:15!" She shouted. As she bolted from the bed she called, "Art! How could you let me oversleep like this?"

I'm going to have to forgo shampooing and straightening my hair. That's okay. I'll just wear the head wrap I bought on St. Croix. I was going to save that, but any port in a storm. The jumble of thoughts careened through her mind.

"Art! Art, where are you?"

When there was no response from her husband to either her first or her second call, she set out to hunt the man down.

Chapter 2

Calls to Action

Nearly twelve hundred light years from the Milky Way is galaxy G-12.23.878-s. It is similar in size and shape to our own Milky Way. But similarities end with the physical parameters.

Due to a quirk of the fabric of time in that sector of the universe time, as we human's define it, does not exist in G-12.23.878-s. This galaxy is known throughout the sector as The Space Without Time—TSWT. In reality, TSWT time does move forward, but at an infinitesimal rate. The average of time-lengths equivalent to an earth minute on planets throughout G-12.23.878-s is one thousand years. In TSWT time units, *525,600,000 minutes* of Earth time translates to *one minute*. A human lifetime of 80 years—42,048,000 minutes—is the blink of the eye of a TSWT native.

The result of this quirk is clearly seen in all life forms in the TSWT. The concept of life span is ill defined. On several planets, that term is not found in the vocabulary of any sentient species. Most inhabitants of this region of space cannot recall the death of a fellow life form by natural causes.

This is not to say that beings in this galaxy are *eternal*. As might be expected, the possibility of a species where natural death is a non-factor is often the subject of debate across the galaxy. It is most common among beings composed of pure intellectual energy found on several dozen planets. Regardless of the rhetorical skill of the debaters, there is little chance of answering what is, literally, an eternal question.

The longevity of species in TSWT varies directly with the distance from the center of the galaxy. Those lifespans of species native to planets close to the center are those most closely aligned with the definition of eternal. Species native to planets along the tips of the arms of the spiral are nothing more than long-lived in comparison.

Sp-G-12.23.878-s.000101 is the astrophysical designation for a species inhabiting one of the planets midway up one of the arms of this galaxy. The name these have for themselves translates poorly into any known Earth language and is never used in any off-planet conversation. In their native form, members of this species are more energy than substance, although the ratio energy/substance ratio is near 50/50.

Patterns on Pages - Secrets of the Sequenced Symbols
Traveler's **HOT L – Volume 4**

The Way It Is

Distant Future

Marin looked left and right. She moved her left hand toward the holder of patterns of shapes. *The outside of this one looks rough. I've never seen that before.*

She stopped and looked both directions a second time.

Convinced that no eyes observed her, she once again extended her hand. *What did the ancients call you?* she wondered as she allowed her fingers to make contact with the stiff outer covering of the relic.

The sensation of what we know as handcrafted bonded leather beneath her fingertips brought with it a realization.

Some might think what I'm about to do is blasphemy or worse.

She performed a ritualistic gesture to the Man on the Cross with her right hand.

That should protect me if I upset the Man by thinking about what I'm going to do.

She reached out her right hand until it joined its partner at the edge of the book's cover.

She allowed both sets of fingers to caress the cover for several seconds before she lifted the book from its stand in the Lib'ry.

"You know you've got our Council in a tizzy," she murmured. "What is it about you that frightens some Council members?"

She turned, walked to the only table in the room, placed the book on the surface, and slid into the closer of two chairs.

Marin was named after an ancient geographic term for the area directly north of S'isco, the coastal city nearest to the village in which she lived. According to legend, S'isco once contained impressive buildings. Of course, that was before the devastation caused by Grumbler, the god who loved to shake the ground. In addition, S'isco was said to have been the home to millions of people. Although the concept of "million" was more fantasy than fact to Marin, she was sure that number was an exaggeration. No more than a few thousand people inhabited the entire state of No'Cal.

S'isco was now nothing more than a traveler's stop on the journey across the ice bridge from Nor'asia in the northwest to Soca'mex in the warmer regions south of them. Although limited in status, S'isco maintained the largest Lib'ry in all No'Cal. There were conflicting explanations for the reason lib'ries existed. All she knew for certain was that books were

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stored in their Lib'ry. She'd heard rumors that their Lib'ry was the largest in all the U'Sta'Am.

Regardless of the validity of the rumors about lib'ry sizes, Marin knew that books were irreplaceable. Each time she visited this shrine to the Ancients she was careful to respect their abilities by honoring the holders of patterns of shapes.

"I cannot bring you back," she whispered to the spirits of those long dead Ancients. "But I will respect the wonderful things you made."

She lifted one side of the cover with care.

What she saw inside the relic was nothing she hadn't seen before. While this disappointed her, she was certain that the organized patterns of shapes held a depth of meaning for the Ancients that she could not fully imagine.

"Every pattern holder is filled with these shapes," she said aloud. "They must have special meanings to be so carefully arranged and stored in this Lib'ry."

"I see my dreamer is back."

Startled, Marin let the book's cover drop back into the closed position. She turned in her chair.

Standing just inside the door to this shrine was one she called a friend.

"That was unkind, Lincoln," she chastised and hugged the book tight against her. "I might have damaged this in my fright."

Lincoln laughed.

"Marin. I've seen you with pattern holders before. I don't think a visit by the Man on the Cross would frighten you as much as you were just now."

"You might be right," Marin admitted. "Will you sit with me and look?"

"I will." Lincoln covered the distance between them in two long strides. "Although I see chose the best chair."

"I chose this chair because I was alone. If you wish, I will trade with you."

"Thinking of the desires of others before your own. That is your way, Marin. I said what I saw. I was not asking for a different chair."

She felt her face flush at the words of praise. Lincoln had a way about him that brought that feeling to her often. She was torn between the joy she felt at the sensation and the irritation at him she felt for causing it.

"A chair is a chair," she said as she pushed herself up and reseated herself.

Lincoln smiled. He loved this woman. She might never accept that, but he knew he loved her. He seated himself in the vacated chair.

"What thoughts do you have about this?" he asked as he hefted the book.

"I haven't had time to think," she confessed. "You disturbed my thoughts."

"Then, we will have thoughts together," he decided and flipped the cover open.

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There was no way that Marin or Lincoln could have known that a library was a place where books were stored for use by the people in the area. Neither could they have known that in prior centuries, people came to libraries to use or check out books on all topics imaginable.

Even the most prestigious school systems collapsed after the seismic catastrophe. For a few years, parents and committed teachers worked on keeping literacy alive. Eventually, survival won out over education.

By the time Marin and Lincoln were born, the term *book* meant anything with a cover that opened but had nothing removable inside that cover. With the loss of written literacy, use of the term “book” in reference to anything like those in this Lib’ry was uncommon.



Earth’s time fabric remnant now contained fewer than twenty percent of the threads included before the seismic calamity. Few new threads were being added. Only select individual time synchronizers knew that, in actual fact, more threads were terminating than were being added to the fabric.

Epoch and Tempus were two of those entrusted with the horrific news. They stood before Pater. He called them into his presence to describe their new assignment. It was an unprecedented meeting.

“ . . . Something must be done to reverse the ratio of fibers added to fibers lost,” he concluded.

“I do not yet understand what role you have for Tempus and me,” Epoch said.

“I’m sorry, Pater, but neither do I,” Tempus added. “What is it that you want us to do?”

“I have an idea. It’s been done once or twice elsewhere in the galaxy. To the best of my knowledge, you will be the first team in this quadrant to perform what is as close to an undercover operation as I will ever permit.”

The synchronizers looked at one another. This news was unexpected. Part of the initiation ceremony required newly recruited synchronizers to pledge to refrain from the direct intervention of any timeline beyond manipulating the fabric already in place. Not only that, but if they’d heard Pater correctly, he’d implied there had been another in his position prior to his assuming the leadership role.

“What is your plan?” Epoch asked. “Earth’s fabric in the time upon which we have been working is fragile.”

“I am aware of that. It is one of the motivators of my decision.”

“I cannot predict the exact number of threads that must be removed before we lose all structural control,” Epoch said. “I will not attempt to predict what will happen when structural control is lost.”

“We are both worried about what will happen if all the threads are removed, lost, or damaged,” Tempus added.

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“According to prevailing theory, only the elimination of the species most closely linked to its timeline can cause the loss of an entire piece of fabric.”

“I am aware of that,” Epoch said.

“Me, too,” Tempus added. “We must do something to prevent the extinction of humanity.”

“Agreed. Experience with humanity has taught us that most humans have good intentions. Unfortunately, we have also learned that they are too often weak on follow-through.”

“That is an astute summary. What do you propose to overcome that obstacle?” Epoch asked.

“My plan to prevent the extinction of humanity involves using the HOT L to transport at least one human from the damaged portion of the time fabric back to where the fabric is complete.”

“For what purpose?”

“Beyond gaining an understanding and appreciation of past accomplishments, I do not know,” Pater admitted. “The initial goal of your undercover mission is to determine the components of the most efficient and productive trip of that type.”

“And?” Epoch asked. “There must be an ‘and’ still to be unveiled.”

“Very well. *And*, once the humans have arrived at the designated time, the undercover assignment shifts to one of subterfuge. We cannot direct the actions of the humans, even if we know what they must learn or do before returning to their own time. It is up to the humans to make those choices based on information they gather themselves.”

“What if they make the wrong choices?” Tempus asked. “How much flexibility are we allowed in our interactions?”

“I cannot provide a definitive answer to that question, either. Making sure the future-humans return to their time with as much of the information they hoped to obtain as possible should be the extent of further interaction.”

“It becomes a routine assignment at that point,” Tempus offered. *We return to synchronization of our portion of the timeline, hoping the choices made provide adequate data to avoid extinction of humanity.*

“Routine in nature. Hardly routine in importance.”

“I would request some time to discuss this with Tempus. We must agree on our protocol before we accept this assignment.”

“I suspected as much. I offer you three Earth days to complete your deliberations. I must have a definitive answer by that time at the latest. If you decide not to be my agents in this plan, I would appreciate learning that as soon as possible.”

Pater gave a dismissive gesture and exited his audience chamber.

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Marin and Lincoln deliberated for more than an hour. Conversation, argumentation, and speculation alternated with silence as they studied, pondered, and pontificated.

"I see patterns in these shapes," Marin stated without inflection. "Look." She pointed out three occurrences of the same pattern of shapes.

"I agree. And many of the groups of shapes end with this one." Lincoln pointed. "It looks a bit like a wriggling snake."

"It's a puzzle." Marin decided.

"Maybe. I'm not sure of that. I think it's a way to communicate."

"It's a lot of work to go through unless the message is important."

"Have you any idea how many of these pattern holders are in this Lib'ry?"

"No."

"I don't know the true number. But, I want to show you something." He stood and extended his hand in a gesture of assistance. She frowned but accepted his hand after sliding her chair back from the table.

He led her through a doorway behind the long counter that divided the open space into a large area with tables and chairs and a smaller area with table-like wooden structures with room for only a single chair.

Each of the table-like structures had an ancient electronic view screen sitting on its surface. Many had metal and plastic towers below the desk. Lincoln assumed them to be some form of collection or storage sites of some kind because a cord connected them to the screens.

The doorway had no door. Marin hesitated when they reached the opening. Beyond the doorway was shrouded in darkness.

"I see no use in exploring a man-made cave. Did you bring any torches?"

"I never use a torch inside the Lib'ry. Besides, we don't need them," Lincoln assured her.

He stepped through the doorway. As if by magic, light sources in the ceiling illuminated. Marin gasped. *There must be hundreds of pattern holders in this room!*

"Are you all right?" Lincoln asked as he moved back to her side.

"How did you find this?" she asked.

"It was quite by accident," he assured her. "But, it is where many of the pattern holders are stored. Did you ever wonder where the new ones came from when you visited and the pattern holder on the stand was not the one there on your last visit?"

Marin nodded.

"I trade one for another each seventh day."

"Why?"

"At first, it gave me a purpose. Now, I do it because I hope people like you begin to wonder why the ancients had so many pattern holders. I know I do."

And, now I wonder, too, she thought and asked, "Can I touch them?"

"Same rules as out at the table," Lincoln intoned in his best officiant's voice.

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Marin smiled at him. She went to the first row of wooden book holders and removed one from its place.

She stepped away from the book holder to gain access to more light. She opened the book's cover.

"Lincoln! Look at this!"

Long strides brought him to her side. She held out the open book. He looked and inhaled sharply.

"May I turn this page?" he asked.

"If you don't, I will."

With reverential care, he turned the page.

Two sharp inhalations.

He turned the page back.

"It appears to be a, um . . ."

"I don't know what it is," Marin admitted. "But, I think that each page has some meaning for the single shape on it."

"I agree. Let's take this pattern holder out to where we were looking at the other one."

Back at the table they'd occupied previously, the duo opened the book to the first page. What they saw was an enlarged version of two single shapes. Beneath the shape was the picture of an apple. Below that was a pattern of shapes with the enlarged one on the page in the first position in the pattern.

"This picture is an apple," Lincoln said. He immediately apologized. "I don't know why I said that. I know you know what an apple looks like."

The Observers — *A Science Fiction Odyssey*

Prologue

Let the Games Begin

THE BURST OF laser fire scorched the wing of the Glieseian spacecraft as it made its retreat. The two Glieseians inside the craft breathed a collective sigh just before their communication system crackled to life.

“I know you two under-bodied, oversized-brainiacs can hear me, probably without this comm setup,” Haa-Ringg growled. “If you think you’re lucky I missed you with those laser shots, think again! That was a warning. Come poking around our planet again and we’ll vaporize you.”

Zerpall, the ship’s pilot, stole a quick glance at Mxpan, his Supervisor, in the seat beside him. Mxpan’s two large eyes stared straight ahead, oblivious to the pilot’s action. Zerpall skillfully manipulated the ship’s controls with his tiny, trunk-like arms, replacing the random zigzag pattern he had been employing during their escape with a more direct trajectory toward his home planet.

“If you, or any of your brainiac buddies, return to Tau Ceti, rest assured there will be no close misses of the craft *in which they will die*—vaporized in the vacuum on space—with no survivors to mourn the loss of their pitiful lives! Remember, *we have your DNA.*”

There was a sharp click. Sepulchral silence crept in and filled the void.

“*I don’t think our mission ended well,*” Zerpall offered after what he felt to be an appropriate interlude.

“*Why did you have to insult the leader’s companion?*”

Mxpan and Zerpall were from the planet known on Earth as *Gliese 581g*. The actual name of the alien planet transliterates at best from Glieseian as U77amed M**n. The native population of Gliese581g are known around the Milky Way and neighboring galaxies as Glieseians--after the star that holds their planet in place. Telepathy is their preferred method of communication. Vocalizing thoughts, while possible, is considered primitive and far too slow.

“*How was I supposed to know that public comments on the physical characteristics of females are taboo on Tau Ceti? I was experiencing an odd emotional state at the time,*” Zerpall telepathed. “*I honestly thought—*”

“*Everyone knows what you thought!*” the companion interrupted. “*How long will we be assigned as a team before you learn to filter thoughts before you broadcast them as auditory communication?*”

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“It was partly due to the strange libations being served and partly due to a previously unknown brain chemical released in my cortex,” Zerpall explained. “Without prior experience with that chemical. On another note, before that incident, I thought our visit had been productive, didn’t you?”

“Shut up and drive!”

1

Tau Ceti

126 Days Earlier:

“WHEN YOU ARRIVE at Tau Ceti, be certain that you immediately transmit the code programmed into your autopilot system to the Commander of the Planetary Defense Array.” Overseer Fugz’s telepathic communication was delivered with the strongest emphasis possible. It wasn’t that he lacked trust in Mxpan and Zerpall—well, maybe that was part of the reason—but he had learned to emphasize standard protocols before sending any survey team to their destination.

“Understood, Overseer.” Twin bursts of neurologic energy arrived in The Overseer’s consciousness as one.

The trip to Tau Ceti was without incident. Although nearly four light years from Gliese, Mxpan and Zerpall made the trip in less than five months thanks to the Glieseians’ advanced plasma propulsion system, and the manipulation of the space-time continuum through constructs of physics known only to the Glieseians. The survey craft entered the two-planet solar system slightly before the agreed upon date of arrival.

“Lower all shielding and reduce all propulsive devices to zero thrust!” The command from the Tau Cetian Defense Department echoed through the small bridge in the spacecraft.

“We should transmit the code programmed into our autopilot system now,” Mxpan telepathed. Because Zerpall had much more highly developed muscular coordination than his supervisor, he always assumed the role of *pilot* on their missions. Mxpan was left filling the roles of navigator and communications officer. However, the hierarchy during travel between mission locations was short-lived. Mxpan regained his dominant, supervisory position in the partnership upon arrival at the assigned destination—an action he made certain occurred at the first possible moment.

“Let me respond audibly first,” Zerpall telepathed. *“They will be expecting that.”*

“Very well.”

“This is Zerpall, piloting a Glieseian survey craft. Our arrival is expected.”

“Power down! Now! Or we will fire upon your craft!”

“But you don’t understand—”

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Zerpall's attempt at reasoning was truncated by a massive burst of energy that crippled its propulsion system. In less than one second, the Glieseians were drifting helplessly in space.

"You might want to send the code now," Mxpan suggested with his Glieseian tongue firmly in cheek.

"I can't," Zerpall responded.

"Why?"

"We've lost all outgoing transmission capability. However, it appears as though we can still receive incoming messages. I find myself impressed by the sophistication of the Tau Cetian technology," Zerpall telepathed.

"Prepare to be towed." The command from the military craft reverberated through the cabin.

Before the Glieseians could fire a thought between them, an attractive force began pulling the survey craft towards a very large, at least in comparison to the survey craft, militaristic-looking ship. The observers sat as rigidly as possible while their ship was drawn through an enormous hatch into a looming space dock.

"Remember, we are here to view the impact of our technological assistance in improving Tau Ceti's defense capabilities against marauding pirates," Mxpan shot to Zerpall as the airlock door between the space dock and the vacuum of space slid into place and the environmental systems restored a semblance of atmosphere to the docking area.

"If our arrival and capture is indicative of their defense system, I'd say Tau Ceti is safe from any threat in this sector of the galaxy."

The hissing sound of their exit hatch opening startled both observers. They swung their oversized heads in the direction of the noise.

"I hope you didn't mind our technological display," a stern-looking Tau Cetian officer said as she stepped through the door. *"Oh, forgive me. You are the Glieseian observers we've been expecting, are you not?"*

"We are, indeed, those observers," Mxpan replied. *"I was impressed by how easily you disabled our propulsion system. Overall, I must say that your demonstration was very—"*

"Impressive!" Zerpall blurted his way into the conversation. *"Would you say that your new, um... I'm sorry, but I don't know what to call your technology."*

"We call it Full-spectrum Anti-antagonist Immobilization Treatment."

"That is a bit much," Mxpan offered. *"What is the short version?"* He had analyzed enough planetary system transmissions to know that all military entities thrive on acronyms. (Such acronyms are here provided in English for your convenience.)

"FAIT. Pronounced like 'fate,' our word for the destiny of the vessel it controls."

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“If I may get back to my question,” Zerpall said. “Would you say that this system was the result of Glieseian technological assistance?”

The TauCetian flinched. The twitch of a grimace flashed across her facial features. Mxpan saw his subordinate had hit a nerve.

“What my partner is asking is if any of our suggestions might have been beneficial in creating the successful research pathway to your FAIT. Which, I might add, you have dramatically proven to be both successful and efficient— I am sorry, I did not get your name.”

“I appreciate the clarification,” was the emotionless acceptance of Mxpan’s words. “I am Security Officer Haa-Ringg. My assignment is to accompany you to our planet’s surface. Follow me.”

As the escort strode away, the two Glieseians took note of the speed at which she moved. As quickly as possible, they released their safety harnesses and began the laborious extrications from their seats.

Physical movement was not Glieseians’ forte. In any given day, Glieseians normally move not more than ten to twenty meters by use of their own ambulatory systems. Their body composition was nearly sixty percent brain tissue, tightly packed into a cranial cavity and covered with a transparent bone case that allows others to view the size and number of convolutions of the brain inside that cranial cavity. Cranial convolution counting is a major social- status-determining ritual among the Glieseians—with “What’s your C?” a common question among friends.

So important is protecting the brain tissue that the facial features of the Glieseians have evolved over the millennia into a mask-like covering. Made of material akin to the beak of predatory animals on other planets, the faceplate allows only minimal movement and atrophied facial expressions. The trade-off for the loss of emotional expression is maximum protection for the billions of neurons behind it. See the portrait on page 229. <Not in this sample!>

In direct opposition to their intellectual might, the remainder of the Glieseian anatomy consists of tiny, trunk-like arms with the three jointed fingers at the end attached to a ring-like “body” that morphs into a slime-lubricated foot. It is the foot, located ridiculously near the base of the “skull” that is used as a mode of ambulation. For all intents and purposes, a Glieseian looks like a one-meter long slug hauling the half-a-meter tall head of a highly intelligent organism around.

Generations of selective breeding on the home planet produced a race whose method of motility consists of sliding across surfaces on a layer of viscous fluid. Fortunately, after centuries of slime-tracked living spaces, that selective breeding process combined with advanced genetic engineering succeeded in producing a lubricating secretion that oxidized quickly and left no trail of evidence. The

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disappearance of the slime trail without residue proved to be invaluable to Glieseians as they visited other planetary systems.

At a thought command from the occupant, the seat in which each Glieseian was sitting quietly lowered itself until the cushion was level with the deck of the survey ship. The two began the long slither across the bridge to the door of the craft. Before they were halfway to the portal, their Tau Cetian greeter had returned to see what was causing the delay. She quickly recovered her composure at the sight of the two mollusk-like observers—it wasn't quickly enough.

“Do not fear us, Security Officer Haa-Ringg,” Zerpall said. “We have certain physical limitations,” he said, pointing his one digit of a tentacle-like arm at his slimy foot. He then gave a very weak flex of his upper arm that brought the flicker of a smile to the Tau Cetian. “However, you may rest assured that our mental capacities function at a level at least ten orders of magnitude beyond our bodies.”

“What my colleague is trying to say is this: while we are slow movers, we are quick-thinkers.” Mxpan hurried the conversation along before Zerpall could say anything else that might be misconstrued.

The Tau Cetian soldier was still visibly uncomfortable, but she refused to allow her discomfort to interfere with her duties.

“How are you at using stairs?” she asked.

“Oh, my! We were unaware that your people used such primitive height adjustment methodology. I'm afraid we are not good at stairs at all.”

“Perhaps you have a longer pathway which is comprised of ramps?” Mxpan asked delicately after shooting a very uncomplimentary thought and an associated command to be silent into Zerpall's brain.

“I'm afraid ramps are not an option. If you can make it down three steps, we can take an elevator to the bridge.”

“I'm sure we can accomplish that,” Mxpan said with far more bravado than belief. He nodded to Zerpall and the pair started off across the gangway from the ships hatch to the catwalk that surrounded the docking area.

“At the steps, you turn around and grab my hands,” Mxpan telepathed. “I will help you ease down the first level. Turn around and face away from the step. I will follow you down by easing into the back of your head. You slide forward slowly until I am on the tread behind you.”

“That's a great plan!”

Mxpan's only response was silence. There was no further communication by voice or telepathy until they reached the steps.

Part one of the plan went off without a hitch. It took only seconds until Zerpall rested on the tread below the gangplank level. Part two was anything but flawless.

The Observers

As Mxpan leaned into the back of Zerpall's head, Zerpall began slithering forward as planned. However, he soon discovered that the depth of the tread was only about half of what was required for two Glieseians to occupy one behind the other.

When he reached the edge of the step, before he could alter his course or relay his predicament, Zerpall cascaded down the remaining two steps followed closely by Mxpan who ended his trip down the stairs perched unceremoniously on the entire left side of Zerpall's face.

Both Glieseians were mortified. Haa-Ringg snorted a smothered laugh at the sight. But the good news was that the steps were now behind them in their journey to the bridge of the sentinel ship. They continued to the elevator and soon found themselves in the presence of the entire Command Crew.

"Security Officer Haa-Ringg reporting with detainees!" The female who had escorted the observers to the bridge barked after snapping to attention.

"As you were, Lieutenant," the ship's captain replied. She looked past her security officer at the Glieseians and continued, "I am Captain Ell-Nogg. Please accept my explanation for your unconventional arrival protocol. The plan to demonstrate immediately the level of our preparedness in such a dramatic manner was a joint effort of our governmental and military leadership and was flawlessly implemented by my crew and myself. We thought it was the best way to introduce you to the advancements made to our planetary defense systems since your last visitation."

"I must admit that we are indeed impressed by the level of sophistication to which you have raised your system. How much of the progress, if I might ask, do you attribute to our technological assistance?"

There was an awkward pause as the Tau Cetians cast furtive glances at one another. Finally, Captain Ell-Nogg gave a quasi-answer.

"I'd rather not speculate on that. It is a better question for the lead scientists and governmental officials you will be meeting in the morning."

"Thank you," Mxpan spoke, while simultaneously telepathing to Zerpall. "*Something is going on here. That was a very obvious attempt to sidestep my question.*"

"I agree," Zerpall inadvertently audibled his response.

Mxpan rolled his eyes and shook his head ever so slightly. Ell-Nogg's confused expression at Zerpall's interjection was enough to convince him that his partner hadn't blurted out something that would be difficult to explain—at least not yet.

"Shall we proceed to the surface now?" Mxpan queried. "Um... I mean, of course! Helm take us to the space port—half orbital speed."

"As you command!" The helmswoman responded crisply. She entered a code into her workstation. The ship reacted instantly.

The Mixer Murder – *And Other Case Files*

Case File #PM-01.001

Let the Game Begin

The nearly blank form in the typewriter accurately reflected the state of Police Detective Lieutenant Philip "Dancer" Mamba's current progress. He was attempting to develop and then summarize the required justification for "additional support personnel during periods of greater than normal caseloads requiring supplementary telephone lines for acquiring tips from the general public."

In spite of the fact that he'd come in early, the two lonely lines of chiseled ink letters across the area of the form intended to hold half a page of explanatory text stated only that phrase—the need for the request. Justification, actually *the lack of said justification*, was proving to be the bane of his existence this morning.

He thought about yanking the page from the carriage of the IBM *Selectric* he shared with Gary Jackson, the night shift lieutenant and co-occupant of the desk at which he currently sat. Jackson had gone above and beyond in convincing the top brass of the value of the newly acquired typewriter. It was, therefore, Mamba's task to lobby for the extra bodies needed during high crime volume periods.

After an additional moment of angst, instead of destroying the evidence of the futility of his mission, Mamba pushed his chair back, pulled his sports jacket from the back of that chair, and headed for the coffee pot. Caffeine and a brisk walk would help clear his writer's block—he hoped.

"Mamba! My office!" Captain Martin barked.

"Yes, Sir."

Mamba shrugged his coat on and altered his path so it ended in the chair across the desk from his Division Captain.

"This your *coffin*?" Martin asked rhetorically as he waggled a manila folder in his beefy hand.

"It's a little hard to tell. Those reports all look the same in their jackets."

Although it felt good to jerk the brash Captain's chain, he knew it would lead nowhere productive. He extended his hand in a gesture of request.

"Let me see it."

Martin grunted and flipped the folder across the desktop. Mamba picked it up and straightened the contents by tapping it twice on the empty desk space in front of him. The file, or *coffin* as the squad called the folder for a closed case, *was* one of his—a recent *unsolved* that he was reluctant to let go cold.

"It is."

"It's missing the *final nail*."

The Mixer Murder and Other Detective Case Files

The Detective inhaled. He bit his lower lip to keep from saying anything else that might ruffle Martin's feathers more than he had earlier. *Final nail* was the local euphemism for the form required as the cover page in all cases either closed, or *refrigerated*—the euphemism for a case gone cold.

"I thought you might have accidentally put your original *and* the carbon in the *tomb*."

Mamba exhaled slowly—he hadn't missed the Captain's emphasis. Once a case was *refrigerated*, there was no more manpower expended on the solution—it was allowed to remain cold. Sending a file to the *tomb* meant it was closed—buried in a file cabinet as the *final nail* implied. But cold cases also ended up in the same file cabinet. Whether closed or cold, once in the *tomb*, a case file very, very rarely saw the light of another day. Mamba phrased his response carefully.

"I still have two CI's who haven't given me their final reports on this case."

"Reel 'em in. *Today*. I want *the final nail in this coffin* by tomorrow morning."

"I'll do my best, Sir but—"

"Lieutenant Mamba." The voice of Linda Blake, the female officer who worked the switchboard, broke into the conversation. The Detective knew the call that had come in was *very* important. Nothing less than armed robbery in progress or a homicide would have prompted her to interrupt the Captain in his office. He turned in his chair.

"It's a 187, Sir. They're waiting for you. No evidence of a 603."

Mamba pulled his notebook from the inside pocket of his sport coat and made a couple of notations.

"Might be a domestic gone South," Officer Blake offered as she extended a note page with an address on it.

"Could be, Blake. Thank you." Mamba accepted the address and stood up. He turned to face Captain Martin and added, "I'll check with those CI's as soon as I get a free minute, Sir."

He was gone before the Captain could respond.

Division Captain Adrian Martin gritted his teeth and reached across his desk. In deference to the female officer still in his doorway, all the swearing he did was under his breath as he retrieved the manila case folder. Mamba needed to learn he *wasn't* the main character in *The Second Coming*. However, and quite uncharacteristically, the Captain's final comment was brief.

"That'll be all, Officer!"

For his part, Mamba was taking longer, quicker strides than usual as he put as much distance as possible in the shortest amount of time between himself and his Captain. He rolled his eyes upward and mouthed, *Thank you*, heavenward. As he passed his desk, he paused just long enough to yank the nearly blank personnel request from its position in the platen of the *Selectric*. He resumed the accelerated pace of his escape and tossed the crumpled paper in the first trashcan he passed.

* * *

The Mixer Murder and Other Detective Case Files

As he maneuvered the Crown Vic that was assigned to the on duty Detective Lieutenant through traffic, Mamba's thoughts were focused on the little he knew about his current destination. While he was headed in the general direction of the scene of the alleged crime, he decided he'd best be served by checking the actual address on note from Officer Blake.

At the next stoplight, the detective pulled his notebook from inside his coat and quickly flipped it open. The notes he'd penned were there on the page. However, the note with the address wasn't there.

He patted his chest with both hands trying to feel something in one of his inside pockets. The light changed—the harsh sound of an impatient horn in the car behind him brought that to his attention. He accelerated sharply; the short burp of the sound of rubber catching asphalt that resulted was an apology to the driver behind him for his lack of focus. Once away from the light, Mamba jerked the radio off the dashboard.

“Mamba here!”

“Go ahead, Lieutenant.”

“I need the address of this 187.”

“Sir?”

“Just give me the address.”

While Officer Blake read the street and number, the Detective struggled to write down the address in his notebook while avoiding traffic and cars parked along the side of the street. At a blast from the horn of an oncoming car, he jerked his head up and pulled hard on the steering wheel—first left, and then to the right.

“This is really awkward.”

“What's awkward, Sir?”

“Writing and driving at the same time is *dangerous*. I almost sideswiped a parked car while avoiding a head-on with another. I wish you could send me the address already written down.”

“Right, Lieutenant,” the dispatcher responded with a snicker. “Why don't I just send you a picture of myself, too?”

“I don't need a picture of you—that's already in my brain.” He waited, visualizing the blush moving up Linda Blake's memorable facial features. She was attractive. He was *between attachments*. However, he completely agreed with department policy on cops dating one another. This banter was just *him* being *him*.

When he was certain he achieved maximum impact by his comment, he added, “And, as cool as that sounds, I don't think sending pictures through the department radio system is *ever* going to be a priority.”

“Is that all, Sir?”

“It is.”

“10-4, Lieutenant.”

“10-3,” Mamba responded.

Meet the Cast

Eleven minutes after his call to dispatch, Detective Mamba pulled up behind a squad car on the street in front of an apartment complex. He climbed out of his car and reflexively checked the service revolver in its shoulder holster. Satisfied, he headed inside.

Mamba paused at the end of the hallway outside the door to number 352. He was glad he'd given instructions to all day shift personnel that any response determined to be *death under suspicious circumstances* were to be called in as a 187. That way, even a rookie cop wouldn't miss some key piece of evidence because (s)he had treated the crime scene as something of lesser importance than a murder. Institution of that policy had allowed him to escape a rant by Captain Martin on more than one occasion.

He arrived at the door to the apartment and noticed the door casing—a blow of considerable force had shattered it. Checking in his notebook, he was about to amend the initial report of *no sign of forced entry* he'd received. Before he could make the change, a uniformed officer nearly collided with him while exiting the apartment.

"Oh, excuse me, Lieutenant." The athletic build of an obviously rookie police officer showed in every perfect crease of the young man's clothing. The visual reminded Mamba of the wisdom of his decision on the 187 calls. "Sergeant Mulligan and I caught the call—anonymous tip on something suspicious at this address."

Mamba nodded.

"We've cleared the entire house—kitchen, living room, two bedrooms, bathroom, and a balcony. We didn't touch anything, Sir. Everything is just the way we found it—except the door that is. I had to kick it in to gain entry. It was locked and there was no answer to our summons."

"Thank you, uh, Davis," Mamba strained to read the engraved plastic nametag which was an integral part of an officer's uniform. "Carry on with your assignment."

The rookie turned and moved purposefully down the hallway. Mamba noted in his book to talk to the academy people about reinforcing to their cadets that the majority of apartment managers had passkeys to the units in their buildings. When there was no exigency involved, it was a lot cheaper, if a bit slower, to find a key than to bust up good carpentry and tick off the managers.

Stepping inside the living room of apartment 352, a trained pair of hazel eyes swept the entire area. It appeared to be an upscale unit with bedrooms to the right. A "generous dining/living space" nestled between the sliding glass doors to the balcony—to his left—and the bedrooms.

There was no sign of struggle. Everything was disgustingly neat. As he stepped further into the room, he noted that even the carpet seemed to spring back in perfect symmetry where his size 10's had depressed their expensive fibers.

The Mixer Murder and Other Detective Case Files

Straight ahead from the apartment door was a folding wooden divider that blocked a pass-through from the kitchen to living space. It was closed, but what appeared to be the opening of a pocket door to the kitchen was open. From that portal, a noisome grinding whine escaped to fill the whole apartment. He strode across the living room and stopped at the edge of the high-end, no-wax flooring of the kitchen.

INSECTICIDE

Among the hundreds of trillions of stars in the tens of billions of galaxies in our universe, there are millions of planets. All have a history. Few have records of their existence. Bafwique is one of those few.

Cor'a of Bafwique from
Early History of The Reunited Planet

INTERLUDE 1

IN THE RECENT PAST

INTERGALACTIC ALLIANCE INTELLIGENCE REPORT

IAC³ DATE: **/**/**.**

SUBJECT: PLANET # $\Delta\alpha$ -586.0- Γ MC- β 000E

LOCAL DESIGNATION: BLUE PLANET

PARTIAL TRANSMISSION INTERCEPTED BY SURVEILLANCE PROBE *****

Do you have a report?

Yes, Sir. The blue planet, *** one we've been approach*** for several light years, we **** a preliminary report on *** *iomass and species composition.

Good work***artic***rly from this distance. Those **difications to the scanners you developed ...

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DEVELOPED BY THE INTERGALACTIC ALLIANCE

3 Dates on all Intergalactic Alliance reports are from the Intergalactic Alliance Calendar (IAC) and are redacted as part of the Author's permission to access their databases. IAC protocol mandates truncating/redacting most documents, as is this Intelligence Report, when they are declassified.

The clicking sound echoed through the ship, although the crew couldn't "hear" it.

Organisms without ears don't hear in the human sense. In spite of that, the Captain turned toward his Science Officer as she approached.

"Do you have a report?"

"Yes, Sir." The subordinate responded in the best military manner. "We have a preliminary report on the biomass and species composition of the *Blue Planet*."

"Good work--particularly from this distance. Those modifications to the scanners you developed must be working."

"Thank you, Sir."

"Anything unusual in the scans?"

"No, Sir. Well, not exactly, Sir."

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“Go on,” Captain Cymjo knew his senior officers well. Leoptera⁴ had something to add, but she wasn’t sure if it merited reporting at this time.

4. In Clurn society, male names end in “o,” female names “a,” and clan names end in “q.” When drones existed, their names ended in any consonant other than “q.”

“It’s the biomass, Sir,” the Science Officer continued. “It’s larger than we’ve encountered on other planets. We speculate that the increase is due to the dispersion of both land mass and water planet-wide.”

The Captain waited.

“There is water everywhere, Sir. The amount of surface water is second only to that of Narxon among planets on which we have topographic data. There is an abundance of gaseous water in the atmosphere. And there are significant deposits of solid water at the planetary poles. However, that aquatic oddity should have been counteracted by an aberration in atmospheric composition...”

The Captain shifted his weight slightly.

“It, the atmosphere, has a dangerously high concentration of oxygen. Much more than we first anticipated—fully double of either of our home planets.”

“And...”

“Well, Sir,” the Science Officer’s reporting speed increased along with her excitement. “On many of the planets we have investigated, oxygen acts as a poison, impacting tissues and processes in a most negative manner.”

The Captain gave what would be the equivalent of a nod.

“Here, on the *Blue Planet*, it seems that an elevated oxygen level may be a necessity, or even a *prerequisite*, for life! That’s what makes the species composition numbers so, so, *intriguing*.” She paused, would have blushed if she could have, regained her military bearing, and continued.

“Sir, since species here are adapted to the oxygen content we’ve measured, that probably accounts for the increased biomass readings.”

“Have you taken into consideration the possibility of life forms in the oceans?” The Captain asked. He knew she had, after all Narxon was well known for its aquaculture. This banter was part of a game they played with regularity. “It would seem to me that—”

“Begging the Captain’s pardon,” Uncharacteristically, Leoptera cut the Captain off in mid-sentence. She was in no mood for gamesmanship. “That was one of our first considerations after we discovered the land/water proportions. While sea life is abundant, no aquatic life form appears to have any influence outside the water.”

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“I see,” was the Captain’s measured response. He picked up his Science Officer’s mood. His next question was back on point. “What other scans do you have planned?”

“I don’t see how more scans will increase our understanding or improve our current data.”

“How about a surface probe?”

“We don’t have precise directional control of a probe from this far out. It could land somewhere that would yield useless data.” The Science Officer paused. What she wanted could be the opportunity to be a big part of the salvation of her species. It could also be suicide for her career or *her*. She quickly decided that it was now or never. “If we want to know more about this planet, a landing party should be organized and assigned.”

The Captain smiled—well he would have if he could have. He now understood her mood. “You’re proposing an off-ship mission, aren’t you?”

“Yes, Sir. But it... it’s not just me, Sir,” she stammered. After cursing beneath her breath for stuttering, *Leoptera*’s final contribution to the conversation was delivered with military precision. “It has been some time since our last off-ship mission, Sir.”

“I’m aware of that, *Leoptera*.” Captain Cymjo’s use of his subordinates name indicated that further recommendations were inappropriate. A decision had been made. “You may organize your landing party. Give me a list of preferred participants by tonight. I’ll consider the value of sending personnel versus sending a probe down there.”

Leoptera, a *Solitaire*, saluted, turned, and literally floated off the bridge. The clicking sounds that had announced her arrival were lacking as she departed.

INTRODUCTION

This unconventional historical account of the planet Bafwique and its people, the Clurn, is not entirely factual. Every attempt was made to use verified source material for the basis of this book—samples of various source materials used as reference material are included periodically. However, some/most of the dialogue provided is based on “best guess” extrapolation from military surveillance records, fragments of civilian communications received at a variety of radio telescope arrays on three planets (Terra and two members of the Intergalactic Alliance). Digitized accounts of investigations by both on-planet and off-planet police also proved invaluable resources. In the final draft, Terran verbal conventions were used to “fill in the blanks” and provide conversational flow.

In spite of this exhaustive research and the cooperation of many governmental agencies across the Intergalactic Alliance, parts of the narrative are, of necessity, fiction—hence the opening sentence of this Introduction. The majority of the fictionalized accounts are “every day life scenes.” For the sake of the narrative, these segments are neither Bafwiqueian nor Terran. Rather they are, to the best of our ability, a blending of both, with each viewpoint

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slightly more emphasized at different times. Idioms are Terranized for convenience. One Bafwiqueian idiom appears in Part I: Chapter 1.8. It is so noted. It is hoped that this example helps explain the author’s decision to use Terran references as the primary sources for colloquial dialog inclusions.

Nearly all aspects of Bafwiqueian society have been converted into “Terran-friendly equivalents” to prevent the narrative from bogging down in excessive explanations of Bafwiqueian terms, customs, and mores. Dates and times¹ are presented in Bafwiqueian units whenever possible to provide the reader with a sense of the Bafwiqueian psychology. A glossary of time units is included in tabular form in **Appendix A**. For those interested in a more complete understanding of the Bafwiqueians, **Appendix A** also includes information on atmospheric conditions; **Appendix B** quotes from Bafwiqueian Scripture and provides examples of Bafwiqueian art. **Appendix C** displays the translated version of Bafwiqueian written characters.

1 The names of Bafwiqueian time units build on one another: ca=second, carn=minute, carnot=hour, carnotti=day, carnottiop= week or month, carnottiopper=year. Carnotti is the only unit that is both singular and plural. All others are pluralized in this manuscript by the addition of the letter “s” (ca → cas).

Two other eccentricities of the manuscript deserve mention. First is the use of Terran terms such as *sit*, *talk*, and *walk*. These are employed because of the difficulty in communicating what Bafwiqueians actually *do* in each of these actions. The second eccentricity is the inclusion of Interludes at the beginning of **Part I** and **Part II**. Because of the timeline involved, **Interlude 3** and **Interlude 4** occur a bit deeper into **Part III**. Each Interlude is part of the denouement of the story and occurs *In the Recent Past*. Early in the text they act as teasers as well as providing context for the storyline—eventually Interludes morph into the story itself as the narrative arrives at the *time* that we refer to as being *In the Recent Past*.

Due to advances in the translation capabilities of the Intergalactic Alliance in the millennia between the first discoveries of Bafwiqueian documents and those of more recent vintage, terminology in the Interludes and much of Part 3 is slightly different than in the rest of the manuscript. The decision to include the variation was intentional. Hopefully, the melding of Terran/Bafwiqueian² and ancient/modern descriptions paint a more vivid picture of Bafwique, the Clurn, and their quest this unconventional history chronicles.

2 This is the history of the Clurn species. In short: **Humans are to Terra as Clurn are to Bafwique.**

The author and researchers involved are confident that the life and times of those individuals whose stories make up the historical accounts herein are portrayed as accurately as is *humanly* possible.

Pages skipped

INSECTICIDE

CHAPTER 1.3

NO LAND IS NOT ENOUGH LAND

“Chato, what do you think this is?” Baraa called to her colleague.

“I have no idea,” Chato responded sarcastically. “I’m not looking through your telescope.”

“Ha. Ha. If you wouldn’t mind dragging your lazy exoskeleton over here...”

“The brightest object in B6?” he asked as he adjusted the telescope.

“No. B7. Northwest corner.”

Chato adjusted the field of view so the desired object was centered in the scope.

“What’s the absolute magnitude?”

“Plus three-point-one.”¹⁰

10 Terran values for absolute magnitude have been calculated as closely as possible from Narxonian data. By comparing their star charts to ours, Terran astronomers have located hundreds of celestial objects referenced by Narxonians.

“So it’s a star. But you knew that.” Chato stepped back and looked at his colleague.

“What’s going on?”

“I wasn’t certain. That value could indicate at least two other types of celestial bodies.”

While she spoke, Baraa gestured surreptitiously towards the door.

“You’re always bothering me with mundane things like this,” Chato whined in response to her furtive signal. “I’m going out for a walk. I’ve got to refocus.”

Baraa saw a flicker of, well, of what she was unsure, but she knew she’d seen something in Chato indicating that he knew she was trying to get them both away from the surveillance cameras in the observatory.

“Refocus. Fun-ney Typical male,” she grunted as he stalked out. Two carns later, she followed Chato out the door. She carried her personal data logger with her hoping it looked like she was headed to her supervisor.

“Why am I waiting outside my warm place of work in the cold, dark night?”

“Look at this.” She handed him her digital data recorder.

Chato studied the display. His exoskeletoned digits clicked against the screen as he moved from file to file following the trail Baraa had established. It was obvious when he backtracked and moved through certain data sets a second or third time.

“This can’t be the data from that 3.1 you showed me.”

“I have no idea what you looked at back there,” she confessed. “I needed you to see this ‘without eyes.’”

Chato stiffened. “Without eyes” was the code phrase they had devised to indicate data was too raw or ambiguous to show to those above them without consulting another astronomer. The eyes were the ubiquitous surveillance cameras in the observatory. He flipped back to the original screen and handed the data recorder back to Baraa.

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“This star is dying,” was his conclusion.

“I know. It’s our sun.”

“We need to report this.”

“What? You want part of the credit?”

“I was thinking more along the lines of sharing the blame. Central Cabinet is not going to like this information.”

“I know. Let me take whatever heat comes from this. Maybe you’ll get assigned to the team mandated to solve this problem.”

Chato grimaced. There was no solution. All stars had life spans. Their sun was no different.

“Okay,” he reluctantly conceded. “I’ll play dumb.”

“You’re just the one for that,” she shot over her shoulder as she started the return trip to the observatory. She would miss him. She hoped he would miss her too.

Central Cabinet did not like Baraa’s report. She was executed for “treasonous activity.” A team was established to find some solution to the problem. Chato was appointed leader of that team.

News Broadcast

Narxon News Network

BULLETIN: Our Supreme Leader, Xena, announced this carnotti the successful launch of a space probe. This first step in Narxon’s quest to rule the galaxy is an **interplanetary probe**. The probe is the latest example of Narxonian ingenuity, intellect, and technological superiority. Its initial destination is Bafwique.

In what our Space Scientists are calling a “flyby mission,” visual images will be collected and sent back to Narxon for analysis once the probe passes beyond the radiation zone from our sun that distorts communication signals of all kinds. Following its glorious triumph, the probe, named **Chato**, who shall now and forever be known as “Father of Narxonian Expansion,” will continue **out of our solar system**. Scientists hope to receive visual images for as long as 5 carnottioppers from distances as far as—

**TRANSLATED BY UNIVERSAL TRANSLATING SOFTWARE
DEVELOPED BY THE INTERGALACTIC ALLIANCE**

It was Chato that directed the research that led to the development of Narxonian space travel. For that reason, he is known as the “Father of Narxonian Expansion” in the annals of their history.

* * *

Sir Isaac's Car - And Other Tales of Daring and Disaster

Fair Game

Henry Langdon is my best friend.

You need to know that from the start. Otherwise, you might think that I was trying to harm Henry's good name. And, believe me, nothing could be further from the truth. What I want to do is to set the record straight now that all the excitement has died down.

Henry loves his mother. The poor woman has had a rough time since Henry's dad died while scuba diving for the family pig after it fell into the old rock quarry two years ago. Mr. Langdon must have run out of air. Or maybe he mistook a pig-shaped rock for Ol' Porkchop and drowned trying to lift the thing out of the water. Anyway, since his father died, Henry has been the man of the family.

Last summer, Henry decided to make his mom happy, regardless of the personal cost. He decided to help her to win the *Tastiest Pie Baker* title at the Deeds County Fair.

That was where the problem started because the number one best pie baker in Deeds County was not Henry's mom. Beulah Potts has held that title for the last 10 years.

Henry knew that Beulah wasn't going to be easy to beat. That is why he recruited me. Together we set out on a secret mission of sabotage.

Remember, this whole thing was Henry's idea. He deserves all the credit.

Two days before the contest, Henry and I climbed through Beulah's kitchen window about midnight. Henry took a small bag of Plaster-of-Paris from his knapsack. I held Beulah's box of cornstarch open. He poured about a cup of the plaster into it. It mixed together nicely.

Henry rummaged around in the knapsack until he found a big salt container with the girl and her umbrella on it. The sugar canister on the counter soon contained about as many of the salty white crystals as it did sweet ones. You couldn't tell by looking that we had done a thing.

The last thing we did was to put a dash or two—actually I stopped counting at 5—of Tabasco sauce into the bottle of “Pure Vanilla Extract” we found on the shelf over the stove. Fortunately for us, the stuff already smelled pretty bad before we started.

Following our mission, Henry and I returned to our homes. It was quite a relief to climb into my own bed without hearing my mom hollering about my being out so late... “and probably with that Henry Langdon.”

Sir Isaac's Car

The next morning Henry met me at our secret hiding place under General Burnside Bridge. He said that he had told his mom not to worry about the pie-baking contest because “I know you have a real good chance against Mrs. Potts this year.”

I'm sure that Mrs. Langdon gave Henry one of her famous *What in Heaven's name are you talking about?* looks while she shook her head, rolled her eyes to the sky, and sighed out loud.



July 4th was the big day. The whole town was out at the Fairgrounds.

There wasn't a cloud in the sky. Little drops of sweat made the sea of foreheads glisten in the sunshine. You could tell it was going to be hotter than a skillet on the front burner.

About 11:30 that morning, people began to gather around the long wooden table that was loaded with pies. Some of the old ladies got out their Fair Programs and began to fan themselves in the hot, July stillness. At 12:00 straight up, the three judges marched to the table.

Judge Carver was in the lead. I call him “Judge” because he really is one—and not just the pie tasting kind. He even had his official black judging robe on. Following Judge Carver was Sheriff Adams. I've never seen his shirt so neatly creased.

Normally, the Sheriff looks more like he keeps his clothes rolled up in a sleeping bag. I wanted to ask him if he owned a hanger, but Henry just gave me one of his looks.

Just then, Henry poked me in the ribs and whispered, “I'll bet he even has on clean underwear!” We both snickered.

Mrs. Langdon said, “Hush!”

The third judge was Principal Haynes from the school. His tie looked so tight that it was puckering up his head something fierce, but he kept smiling. I guess he figured that if the Judge could wear his hot, black robe, he could keep his tie on until the contest was over. Anyway, you never did see three more dignified, serious, *honest* pie judges anywhere.

Six pies had been cut and small pieces of each one had been eaten by the judges before they got to Beulah's first pie. Everybody knew it was hers because she swelled up and just about burst with pride when the knife poised over the top crust of her peachy perfection.

Henry poked me again and wiggled his eyebrows. I nodded and smiled. Henry grinned so big I thought his cheeks were going to split.

Principal Haynes brought that knife down in a professional pie-cutting fashion. We weren't real close, so we couldn't *hear* the sound the knife made as it hit the crust. But, Hannah Gillis was heard to say later that she thought that Principal Haynes had missed the pie and hit the table with the knife.

Whatever the sound the knife made, it couldn't have been any funnier than the look on the Principal's face as he kept on trying to force that knife through the part-plaster crust.

Sir Isaac's Car

There was a gasp from the crowd to our left. Beulah had fainted dead away.

Never before in the entire history of the *Tastiest Pie Contest* had there been a delay in the proceedings. Even rain just speeded up the judging. But Beulah lay there on the ground in a heap moaning and breathing real shallow. Well, there wasn't much for the judges to do but hold on while Doc Quinsly ministered to the poor thing.

Having never seen a real person faint before, I was intrigued by the spectacle. For his part, Henry was holding his face in his hands. At first, I was sure he was praying for Beulah's recovery. But, when he looked at me and rolled his eyes up into his head like he can, that's when I knew he was holding his face so he wouldn't laugh out loud.

"Beulah must be coming down with something," Mrs. Langdon commented. "Or else the heat just got to the dear."

Henry turned his face respectfully in the other direction while his shoulders shook with what looked like sobs.

In a couple of minutes, they had a wobbly Beulah back on her feet. It's tough to keep a champion down.

The very next pie to be tasted was Beulah's famous Cherry Supreme. The whole crowd leaned forward with interest to see how Judge Carver would react to a piece of heaven.

The good Judge had no sooner popped that piece into his mouth than out it came again lickety-split right onto the ground. The look on the Judge's face was priceless as the salt we had put into the sugar hit his taste buds.

Beulah fainted again.

Several people started fanning Beulah with whatever was handy. Mrs. Langdon had a funny look on her face. She wasn't even interested in Beulah this time. She turned her eyes right to Henry.

He looked like he had eaten too many hotdogs the way he was holding onto his sides and snorting through his nose.

Mrs. Langdon shook her head. It wasn't the first time Henry had gotten himself a painful stomach by eating too much of a good thing at a picnic.

I started over to see how he was. After all, he is my best friend. He looked over at me and winked a sly wink that stopped me in my tracks. He pantomimed using a salt shaker and snorted even louder than before.

Doc had to use smelling salts to bring Beulah around the second time. When she finally got some color back, someone brought her a folding chair from the Pavilion to sit on for the rest of the contest. The judges were careful to taste pies from several other ladies before they came to Beulah's last creation.

Sheriff Adams was the lucky judge that got to taste the Banana Cream Dream. He picked up a forkful and slid it into his drooling mouth. I think it says a lot for Beulah's reputation that someone like the Sheriff would be drooling after all the pies he'd already tasted.

Sir Isaac's Car

I had never seen a man so affected by the taste of a pie before. As the whipped cream melted in his mouth, his eyeballs began to tear and his nose began to run.

Then his legs began to run.

He ran right to the lemonade stand where he gulped down six glasses one right after the other. The last "glass" was actually a measuring cup with straight lemon juice in it, but he didn't even seem to notice much.

I guess that Tabasco sauce has that effect when you are expecting vanilla extract.

I really can't say for sure who hit the ground first. Most folks I talked to later said it was Beulah as she fainted for the third time.

But, Henry was rolling on the ground in a fit of laughter when his Mom spotted him.

Mrs. Langdon hurried over to Henry as fast as any sprinter in a track meet. Between spasms of laughter from Henry, their conversation sounded sort of like this.

"Henry Langdon, what is going on here!" It was more of an accusation than a question.

"I told you that you wouldn't have to worry about Beulah Potts this year," Henry's reply was punctuated with hysterical laughter.

"Just exactly what did you do, Jonathan Henry Langdon?" I didn't even know that Henry Langdon had another name.

Henry rolled on the ground and nearly busted his sides laughing. Then he pointed at me and gasped, "Aaron can tell you!"

I didn't know whether to be proud or excited or both.

The mood of the crowd turned ugly as I related our mission of sabotage in Beulah's kitchen with all the glorious details. I included some details that I didn't actually remember happening but which sounded real good when I told them. Henry says to always make your story sound convincing.

At the end of my story, Judge Carver and Principal Haynes started toward Henry. They were threatening conviction of malicious mischief and expulsion from school.

From over at the lemonade stand, Sheriff Adams bellowed his threats of incarceration in the county jail as best he could with blistered tongue and lemon-juice puckered lips. All his contributions to the growing list of Henry Langdon's consequences were added in between very determined tongue fanning movements with his right hand.

"Aw leave th' boy alone," Lemuel Benson drawled about then. "He warn't hurtin' nothin'!" The battle lines were drawn around that simple statement.

They never did figure out who threw the first pie, but when the big fight was finally over, several score of folks, led by Mrs. Langdon, set out looking for Henry. And most of them had switches.

Yep. That's pretty much the way it happened.

I'm writing this sitting here under General Burnside Bridge. This is where I found Henry that day after the pie-throwing. We sat and talked about our success. Actually, we didn't sit long before the crowd found us both.

Sir Isaac's Car

Come to think of it, I didn't sit anywhere for a couple of days. Several of those switches, including my mom's, found my backside along with Henry's since Henry had told them I helped fix Beulah's pies. And I *had* done a fine job in describing what we had done to Beulah's pie making ingredients.

The thing that me and Henry were talking about when the posse arrived was a great idea he had for how his mom could win the quilting bee in December. I heard him holler as his mom hauled him away by his ear to his bedroom for two weeks of restriction that I could be in charge of our next plan.

That's Henry, always wanting to give other people credit.

The End

A Quilted Bee Gathers No Honey

It all began when Henry Langdon and I were making the model of the Taj Mahal out of sugar cubes. We had that building up about three feet tall and had pretty well cleaned out both our piggy banks and all the boxes of sugar cubes we could buy from *Norm's Grocery*.

But, as luck would have it, we finally found a picture of the place and discovered that we had quite a lot of remodeling to do from our original design. I admit, our model, even if not too accurate was, to say the least, creative. That's when Henry decided to go out of the construction business and into the business of helping my mom win the *Quilting Bee* down at the Ladies Club.

The original plan was for us to help his Mom win. Henry's mom, however, still had her arm in bandages from putting out the fire in the hen house. But that's another story. So, my mom was elected to receive our help.

My mom has to work very hard, even though she doesn't have a real job. She hates it when I say that, but I mean a job like in a store as a clerk or something.

My dad's a paraplegic. He's been that way since before I was born. There was an accident at the same mill where Henry's dad worked. That's not surprising because the mill's about the only employer in town. Because of the accident, my dad's in a wheelchair. He doesn't get out much.

The next story is an anthology by high school students and me. All royalties from Sci-Fi High are split five-ways for student scholarships.

Sci-Fi High - Live the curriculum!

Introduction

My name is Robert Livingstone. I'm a senior at Jacob McFarland High. The school is named after the first Superintendent of the Shallow Valley Unified School District.

It's a pretty good high school. Most days, it's just like any other school. Teachers teach. Students try to look interested while the teachers talk.

And collect homework assignments.

And assign more homework . . .

You know, stuff like that.

Some days, Jacob McFarland High is nothing like any other school. In fact, on those days, we are so unlike any other school that around the state JMHS is known as *Sci-Fi High*. And, that's for a good reason.

On those days, in some classes, teachers aren't needed. Students become part of the curriculum. It's not like dressing up in English class and acting out a scene from Hamlet. It's not like making stewed octopus in Home Economics because you're studying some far off culture. It's not even like when you walk around as electrons in a circuit in a science lab.

This is going to sound weird and maybe creep you out, but it's really very cool. You walk into your classroom. When the bell rings to start class, desks, projectors, books—all the school stuff—morphs into whatever you're studying in that class. You might find yourself in London during a production of Hamlet where Shakespeare is in the audience. Or, you might end up in a swimsuit wearing a snorkel and trying to catch the octopus you need for stewing. You might even end up helping Nikola Tesla build an electric circuit in his lab.

Students call this active participation "morphing."

There are three popular theories of the cause of the morphs. One theory is that Shallow Valley is located in some kind of *super energy swirl*. The second theory is that the space-time continuum around our school is unstable.

Theory number three is a wild one. Morphs happen because the lowest bidder built the school, and he probably sold his soul to the devil to get the contract.

Take your pick. Or, make up an idea of your own. It's got as much chance of being the real reason things happen as any of the ones I listed. My personal opinion is that morphs happen because Shallow Valley is a suburb of Roswell, New Mexico.

Sci-Fi High

As I said before, nobody knows what causes Jacob McFarland to become Sci-Fi High. But, there are some rules for morphing that students and administrators have figured out over the years. Below is a list of all the rules that are usually followed during a morph.

1. When a morph occurs, each student experiences the morph as an individual. EXCEPTION: The entire class can experience the adventure as a group if one hundred percent of the class agrees to that before the day of the adventure. Nobody knows how the morph knows that the whole class has agreed, but I know its possible because it happened to me a couple of times.
2. The morph starts when the bell rings to start the class period.
3. All students are part of a morph. I've heard about kids kids morphed on their first day of school. I'll bet that was especially memorable.
4. What happens during the morph is what the teacher planned to cover in that class period. It can include stuff that happened earlier in the year. But, nothing beyond what the teacher had planned for that day can happen. It's like our teachers are aliens. I mean, how can whatever causes the morph *know* what was supposed to happen in that class and make sure only that happens if it's not an teacher-alien?
5. Unless a student chooses a character, (s)he is "assigned" the role of the main character, idea, or concept in that class for that day. Like once I was a water molecule in my chemistry class.
6. A student can choose to become a minor character in a story or choose not to be the most important concept. Whatever you choose can't choose a character that dies or is eliminated in some other way in the original story. You can't choose to be something that gets all used up in a process, either. There's never been a morph where the main character in a story dies, or a morph where all of some substance a student morphed into is destroyed.

Those rules make sense if you stop and think about them. Except for number six, they only apply to morphs during class periods. Rule #1 gets bent pretty badly when a morph occurs before or after school or during lunch. Everyone is involved in those morphs as a group. Period.

Other rules get bent from time to time. That makes me think maybe the contractor really did sell his soul to the devil. You'll read about some of that rule bending in the stories that follow.

For some reason performing arts classes have the most morphs.

Hmmm.

Maybe morphs *are* caused by an energy swirl that is strongest in the performing arts building.

Five Final Follow-ups

1. When it's a *Sci-Fi High* day not all classes morph.
2. All the stories in the book happened in a morph—just not the same morph.
3. Morphs don't happen in the order of periods very often.

Sci-Fi High

4. If the story isn't written in the first person, that doesn't mean it didn't happen to the author of the story.
5. I listened to a lot of weird stories before picking the ones in this book. I was going to write all the stories I heard, but what happens in each morph is so weird that I had to let the person it happened to write about it because that's more true-to-life.

In the end, I decided to start the book with a story of a morph I was in. It isn't an "in class morph." My story happened to everyone in the quad before school one day.

I'm pretty sure you'll have a better understanding of what happens at JMHS on Sci-Fi High days after you read my "before school" story.

Pages Skipped

What follows is the part of the first "student story."

The Most Sublime Act

Rhiann Glaudini

"The most sublime act is to set another before you."

– **William Blake**

I suppose that the first thing you should know about me is that I had no idea what was happening before it happened. And I certainly had no idea that I was going to accidentally break all the rules when it did.

I had just arrived from my old home in California, where I had left my best and only friend. I was not happy to be in a new school, in a new state, and in the middle of absolutely nowhere. I mean, New Mexico? Really? There wasn't anything particularly special about the state—not to mention the high school I was all set to attend.

Or so I thought.

My very first day at my new school proved me wrong.

I trudged through the courtyard towards the brick steps of the Jacob McFarland High building, glancing up at the overcast sky. It was darkening with gray stormy clouds even as I watched.

I hoped it wouldn't rain; I didn't have an umbrella with me. Given that I'd lived in the sunniest part of California my whole life, where it rains less than one percent of the year, I wasn't even sure my family owned an umbrella.

Pushing open the door to enter the building, I brushed past a laughing blonde hanging on her grinning boyfriend's arm. I rolled my eyes and kept walking, trying to keep my head down. As soon as anyone met my gaze, I knew it would start.

"Have you seen her eyes?"

"Freaky, huh?"

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“No kidding, dude.”

They would shuffle as far away as possible time and time again. Over and over, I’d gotten the same thing from new kids; as well as from kids I’d known my whole life. I’d glance up to meet their curious gazes, not postponing the inevitable. They would look away every time.

When I lived in California, I had my best friend Jaden to walk with to school every day. Back then, when people stared at me funny, he would push his glasses up on his nose and scoff derisively at them.

“Don’t pay any attention to them, Ell. They don’t know anything!”

“Don’t call me that. My name’s Ell-a,” I’d grumble back, but Jaden always knew I didn’t really mean it.

He’d wrap an arm around me, since he was just tall enough to do that, and tug me away from the area where “those ignoramuses”—as he liked to call them—were grouped in their gaggles.

“As your best friend ever, I reserve the right to use your official nickname,” he’d say, mouth pulling up into a bright, knowing smile. “And there’s nothing you can say to change my mind. *Ell.*”

I would grumble a bit more, but I would go with just a little token resistance, and later we’d laugh about the stupid expressions on the faces of the ignoramuses.

But now there was no Jaden, no comforting arm around my shoulders, no best friend to laugh with and talk to. And there was no one to dismiss the cutting remarks about my contrasting eyes. Even though everything else in my whole life had changed, my heterochromia was just the same as always. By heterochromia, I mean that my eyes were two different colors. The left one was green and the right one was brown, and I couldn’t afford color contacts, so people were often strangely unkind about them.

Frankly, my eyes embarrassed me. Why couldn’t I have normal stupid eyes, like everyone else? Then again, why were people so rude? But Jaden never cared about something as stupid as the color of someone’s eyes. He’d even said it was cool.

Jaden was gone, I reminded myself. I could still remember that day when I lost him. In movies, sad things tend to happen on rainy days, but that’s not always true in real life.

One sunny afternoon we were walking home from school. We strolled along the sidewalk without a care in the world, we had been laughing about some stupid joke. I never thought that a normal, unremarkable day would turn into the worst of my life.

Suddenly, a shriek pierced the air. Time slowed down. Jaden and I both whipped around in the direction of the scream. His eyes widened, he flicked a sideways glance at me, dropped his backpack, and ran. It was less than eight steps to the middle of the road, which was precisely where he was headed. Jaden took one last, huge lunge, gave an almighty shove, and pushed a toddler out of the way of a speeding truck just in time. Not even a millisecond

Sci-Fi High

later, the truck hit him head on. With that last ditch effort, he sent the little girl straight into the arms of her mother, who had provided the warning scream.

The truck's tires squealed as the driver backed up frantically. Numb with shock, I took a stiff half-step forward. From where he was crumpled on the ground, Jaden's head turned slightly, and my mismatched eyes met his hazel ones. His glasses lay on the road beside him, smashed.

Jaden's eyes slipped shut, instantly breaking the spell.

I sprinted toward him.

The toddler's frantic mother called 9-1-1.

An ambulance arrived eight and a half minutes later, but there was nothing they could do.

He died only moments after the collision. He probably didn't even know what happened. At least, that's what they said.

Yeah, right, I thought. Jaden knew exactly what happened. He knew just what he was doing, and he still put that kid before himself. He gave that toddler a whole life to live and left me without a single friend.

That was when I took my first step down the staircase of depression and grief. Within days, the stairs became more and more slippery before turning into a slide. It took me a long time to stop going down it at breakneck speed. When I finally started to recover, I kept thinking about stupid things; things like how he had needed a haircut, but now his brown hair would never need a trim again.

I turned a corner and was abruptly jolted out of my thoughts, grabbing the banister attached to the wall for balance. In the midst of my thoughts, I had missed the first step on the staircase leading up to the second floor. Looking around, I checked to make sure no one had noticed my clumsy stumble. I was alone.

That was ironic. Where I had once been pulled down a staircase, I was now pulling myself up one. At least I was trying.

I took the rest of the steps at a jog and nearly missed the left turn I was supposed to take at the top. I had to check my schedule again before I remembered where I was going: English, the first class of my day. Oh, joy.

NON-FICTION TITLES FOLLOW

Idea Farming - A Science Guy's Read On Writing Volume #1

Thread One

Ideas On Generating Ideas

Chapter 1

Idea Mining—where to get ideas for your story

Never discount your own brain as a rich source of story ideas

Before I discuss “Idea Farming,” there is one basic requirement you must meet. Before any farming can begin, you have to have an idea. So, Chapter 1 discusses sources to *mine* for story *ideas*.

There are three sources for ideas that I use with regularity. First, we’ll look at each as an independent entity.

Real life

Events that really happened are excellent sources for ideas. They have the ring of truth to them, and they usually provide key plot points you can incorporate.

In one of my upcoming novels, **The 5th Page** (scheduled for a summer/fall 2015 release), a friend, and former police officer, told his story of why he left the police force and became a pastor. Since the idea of transitioning from police officer to pastor intrigued me in and of itself—and the minimal details he was allowed to provide based on the circumstances of his separation from the force provided significant tension—I thought his was an ideal story idea.

So I wrote a novel about it.

After my friend read the manuscript, my friend returned it saying, “Thank you.”

“Oh, no,” I replied. “I should be thanking you.”

“You don’t understand,” he said. “Now I know how the story ends.”

That’s what a fiction writer dreams to hear.

However, there are critical points to keep in mind and essential policies to follow when converting fact to fiction.

But more about that in subsequent chapters.

Published material

Idea Farming

Since you can't copyright an idea, existing stories can provide ideas. But, the number of possible plot situations is limited.

"Georges Polti was a 19th century French writer [who] described 36 situations that may be found in many stories, based on the list identified by Goethe who said it was originated by Italian Carlo Gozzi (1720-1806)."

http://www.changingminds.org/disciplines/storytelling/plots/polti_situations/polti_situations.htm

While Polti's list is extensive, it, like nearly any list, is most probably incomplete. However, when teaching high school biology, after the Advanced Placement Biology Exam, my AP Bio students wrote a science fiction story—after all they had all taken 3-4 years of science and had listened to my stories for at least a year.

To be fair, I also wrote a story while the students were writing one. To even the playing field a bit, since I was writing short stories regularly, I allowed the class to pick three numbers from 1-36. Those were the required plot situations I had to include in my story. In addition they got to select two major characters. Those ranged from students in the class to Sponge Bob and Chuck Norris—in the same story! Finally, they were allowed to select the *science* upon which my story was based.

I will admit that is probably not the best way to mine your story ideas, and many of the stories written in that manner were cheesy. However, I, and some other teachers, have used two or three of those classics to pique interest in a topic for various science classes. The basic outline of one of them is the structure for one of the stories in my Traveler's HOT L series.

Dreams, etc.

Never discount your own brain as a rich source of material. I have learned to get out of bed and write down ideas when I wake up in the middle of the night. Sometimes I read *skdf solsnof soo s alsno*, or some such iteration of what I was thinking. But, most often, enough of the dream is there to allow me to reconstruct my thought patterns and use them.

Keep a pencil and paper on your nightstand!

Chapter 2

Idea Mining: Additional Mine Tunnels to Explore

I get my ideas from at least four sources

If you have a book that's been published, or if all you've done is mention that you're writing a book, it's very likely that you've been asked the question, "Where do you get your ideas?"

Idea Farming

Most people in the world are content to hear stories. They like to listen or read and be drawn into a different time, place, or dimension. Once inside the world you, as a writer, create, the reader follows the paths you establish. They might think they know what's going to happen and be surprised when it doesn't.

Readers might even talk or write to you after reading your story wanting more information on some point they consider underdeveloped. But, that's okay because they were in YOUR world for a time.

While you will learn valuable lessons about what people want from listening to this type of "feedback," don't assume you need to change your story to fit every comment. Try that, and you'll never write a second, or next, book. It's your story—you control the characters, the action, and the setting.

Additionally, you probably left certain details out of your book on purpose—and that bothered some readers. Whether for length, continuity, or personal preference, your story is how you wanted it when you had it published. If that's not the case every time after the first book, which, in fairness might not have been the perfect novel, *why wasn't it what you wanted to publish?*

That being said, here are four additional sources for my story ideas.

1. **Family.** My favorite example of this is when my oldest son, Steve, now in his late 30's, was about ten years old. We had one of the first video games. It was a plastic box about the size of a gallon of milk. Aliens came in waves shooting at your single laser cannon. Steve used to literally flop back and forth on the floor, dodging the imaginary enemy fire. That became the basis for a short story that begins as the 8th story in Traveler's HOT L and ends as the first story in [Volume Two](#) of that series.
2. **Stuff you see/read.** Television. Newspapers. Internet sources. Books. Remember, you can't copyright an idea. **But**, *be very careful not to plagiarize another's work*. For example, discussing DNA manipulation is fine, but stealing the methods used by Michael Crichton Jurassic Park is illegal.
3. **Life.** I've had laparoscopic **robotic** hernia surgery. I guarantee some AI robot or android will go rouge and end up using surgery in an unapproved way in a future story.
4. **Weird brain connections.** If you've never woken up in the middle of the night with an idea for a story or a plot twist, you probably haven't been writing long. But it doesn't have to be genuine sleep that triggers weird brain connections. One day, in a meeting, the topic was reflective thinking by teachers. Somehow, during sleep, that morphed into a new dimension where everything is reversed—reflection—the last story in Traveler's HOT L Volume Two.

Idea Farming

You probably have stories, too. Pass on your best ideas to others with “writer’s block.”

I GOT THIS EMAIL ON NOVEMBER 12, 2014.

Congratulations!

**The results of the 2014 USA Best Book Awards
have been announced.**

Your book has been honored as a "Winner" in the
"Fiction: Science Fiction" category:

**Traveler's HOT L: The Time Travelers Resort
by C.R. Downing**

Koehler Books - 978-1-938467-89-9

Winner: Fiction: Science Fiction

I am very proud of the above award for my first published novel. I hope it acts as affirmation for the content of this booklet and acts as encouragement for you in your writing.

Chapters 1 & 2 Takeaways

- Real life (family members, life events, personal experiences, etc.) are an excellent source of ideas.
- Published materials of all genres can be sources of ideas — **but be careful not to use those sources’ actual words!**
- Record all ideas you have — *no matter when you get them*—even if while daydreaming in a meeting.

Book Creation

A Science Guy's Exploration of Publishing Resources
Volume #2

Preface

The title of this booklet—Volume 2 in my series on writing, publishing, promoting, and collaborating—includes the word **creation**. That is intentional—there were other terms considered. Creation was the ultimate choice because humans are gifted creators at a variety of levels.

What you'll find in the following pages is how production of a physical—or electronic—book is significantly different from the process of writing the story that fills those pages or bytes.

Stories can *evolve*. I doubt if any writer in any era has not found that some story (s)he was writing began to follow an arc in the plot that was never in the outline. Frequently the result of some random occurrence, the new ideas evolved as the writer progressed through the story. Books—defined here as a marketable print or eBook—should not evolve.

Creation implies a target has been chosen. That *target* should be clearly defined *before* the creator begins creating. And, that target should be the focus until the project is completed—the “book” has been *created*.

Introduction

For generations, the only way to get a book in print was to go through a publishing house. Of course, if you had enough money, you could print your own book, store copies in your garage, and hawk them at carnivals and door-to-door. But the reality was without a publishing house backing you, you really didn't have a snail's chance in a salt mine to sell many books.

1. Today, there are myriads of ways to “get your book out.” Of course, major publishing houses are still around. You'll most likely need an agent if you want *any* consideration—serious or otherwise—of a first book by one of them.
2. Independent publishing houses also exist. Some “indie” houses are small-scale versions of the major publishers. You submit a manuscript—agents may or may not be required. If your manuscript is accepted, you go through a process similar to major publishers in terms of cover design, editing, and distribution. Many independents offer what is known as “co-publishing,” or some other term, that indicates you INVEST your money up front. They do varying degrees of editing and cover art. This path will probably get you access bookstore public relations people, since your book has a “publisher.” Royalties from this option can be similar to those from major publishers. Of course, until you've recouped any investment, you really haven't *made* any money.
3. My final example of “getting your book out there” is self-publishing. An Internet search for “self-publishing” yields pages of options. The VAST majority of those publishers require

Book Creation

front money and provide varying levels of service/support depending on your willingness to line their coffers—there may even be additional charges for conversion from print to eBook format. Self-publishing services that do provide editing as part of one of more of their packages should help you create a more professional manuscript. However, you still publish whatever you wish to publish.

This primary focus of this booklet is self-publishing—specifically, publishing your book through Amazon.com. Their FREE services—CreateSpace for print books and KindleDirect for eBooks—allow you to generate both/either print copies or eBooks from your manuscript. The service has a final “scan” for spelling errors and massive grammatical gaffs. You can make your own cover from a template, or use their “for a charge” cover production service. In addition, they offer varying amounts of editing for additional cost as well.

Royalties from option #3 are all yours. If you select a self-publishing option that charges “up front” fees, as with the some independent publishers, you don’t “make” any money until you’ve recovered your investment. With many of the self-publishers, you have some control over the amount you get per sale.

Since over 50% of all books sold in the USA are now sold through Amazon, unless you are able to score a contract from a major publisher, that’s were many/most of your book sales will still occur. Option #3 can be a very good choice.

My first science fiction novel, **Traveler’s HOT L – The Time Traveler’s Resort** and my fourth book, **The Observers – A Science Fiction Odyssey**, are a co-publishing ventures as is my co-authored book on changing school class room climates to increase student learning, **Tune Up Your Teaching & Turn On Student Learning – Moving from common to transformed learning in your classroom**. My third book, **RIFTS – A Science Fiction Thriller**, and my fifth book, **Traveler’s HOT L Volume 2 – New Tales from the Time Traveler’s Resort**, are self-published through CreateSpace and KindleDirect, as are the booklets in this **A Science Guy’s...** series. Unless I land a contract from a major publisher, *all* my future books will use these Amazon venues for production.

Whether you chose option #2 or #3 from my list, you should expect to be responsible for the same amount of marketing—in other words, essentially *all* responsibility for marketing.

Author’s Note

In the twelve months I have used the Amazon printing services, there have some significant changes to their protocols that made my life *as one of their authors* much easier.

This book was up-to-date when published in March of 2015. I plan on updating/revising this booklet annually, if new features become available or protocols change to any great extent.

If you are reading this as an eBook from Amazon, KindleDirect may contact you about those updates/ revisions and offer you a way to update your file to the new version as little/no cost.

An Important Observation

While preparing this manuscript, I found a blog post from one of my Twitter followers. The entire post is directed at authors who *don't sweat the details*—in a bad way. The excerpts included here are designed to help you focus on your process—and make the appropriate adjustments.

In 2015, I'm reading only indie writers and publishers, self-published, and new novelists... Finding a quality book is a chore. It's searching for a needle in a needle stack.

Details matter... My process is petty and superficial. I scan for a unique title and intriguing cover art. Self-published authors fail at cover art...

The concepts are strong. The writing is terrible. The editing is worse...

Matthew Foster Ph.d. [@quarkytrons] is the author of these very pointed comments.
<http://www.quarkytrons.com>

My Comments

While it was difficult for me to read this blog post, there is a tremendous amount of very sound critique and directive in these words. No writer wants his/her work to be categorized in this way.

My initial response to reading this blog was to look carefully at my self-published books. I'd like to think they are not part of the mire described by Dr. Foster. I did find formatting errors that needed correction and some wording that I was able to strengthen in them. I will be more diligent in future books.

There are chapters in this booklet that address both book covers and editing. That being said, to misquote Shakespeare:

“Read on, Macduff!”

Chapter 1

Figuratively Speaking... Text Is Better Pitfalls You Can Avoid

Follow the Amazon—or whatever publisher's—manuscript guidelines

When you write your story, you will/should be using a word-processing program. Like it or not, MS Office/Word is the industry leader. Many/Most all publishers recommend/require either .doc/.docx format for their submissions. This quotation is copied from Amazon's Kindle Direct formatting page:

Word is a great tool to use because it's extremely easy to format. We suggest writing your book in Word or converting an existing source file into Word (.doc or .docx) format before continuing.

Book Creation

In this chapter, I am assuming you are using MSWord for your manuscript and that your goal is book that is 6” x 9” in size.

If you even *think* you might be publishing an eBook version, start with that. The formatting is much easier to convert to print version than vice-versa.

For Kindle, you just need to remember a few basic rules.

1. Don't tab anywhere.
2. Format your paragraphs so they automatically indent the first line. That's at the top of the dialog box when you open "Format/Paragraph" from the dropdown menu. If you don't do this, Kindle will do it—and justify your text in your paragraphs:

Paragraph text displays with justified alignment by default. The first line of each paragraph is automatically indented.

3. **BIG IMPORTANT NOTE!** Kindle now allows tables, however, the quote above still applies to the sentences inside the table.
4. You cannot use bullet points. Remember, you can't have tabs—bullet points have tabs—therefore you shouldn't include bullet points.
5. If you use figures in your text, you must use specific formats and low resolution (72-200 dpi). Make the figures large—mine are all about 6 inches in width. Use the "Insert/Photo" dropdown and **Insert** each photo individually from the Insert menu. You **cannot** copy/paste from other sources—even within the manuscript itself. If you copy/paste figures, you will end up with grey rectangles as placeholders where you had figures when you view the proof. Then, you'll have to go back and **Insert** each of your "missing" figures anyway. If you insert small figures and make them larger by formatting them in place using the Word **Format Picture** command, you will still get small figures in your eBook—these are VERY hard to see on small screens.

There are other requirements for figures—acceptable formats, etc.

Reality: *Download the manuscript guidelines and read them.* If you don't follow those guidelines, you will spend inordinate amounts of time *fixing* rather than *writing*.

Ultimately, if your book is all text, you will find the Kindle experience much more friendly than if you have lots of tables and figures. **RIFTS – A Science Fiction Thriller** has over 30 figures, but now NO tables in the eBook after what I learned by tedious—and unnecessary—experience. One option for including tables in your eBook is to screenshot the table and insert it as a figure. See Chapter 3 for all the options.

Chapter 1 Takeaways

- Use MSWord as your word processor.
- Avoid tabs in the eBook manuscript.
- Insert each photo or figure individually. Do not copy/paste photos. Do not change the size of any photo by formatting it in Word.
- The publisher's guidelines are not merely suggestions—follow them!

NICU - An Insider’s Guide

From: The Desk of Dr. Chuck Downing

To: Readers

I am not a medical professional of any kind. I have never worked in a NICU anywhere. My doctorate is in Science Education.

What? How can you promote “an insider’s guide” if you don't work inside a NICU?

I didn’t say I’d never *been inside* a NICU.

My first granddaughter’s projected due date was early September of 2012. Hadley Marie Downing arrived via Caesarean section in the afternoon of June 26, 2012.

I’ve done the math. *She was 11 weeks premature.*

Hadley spent a total of 60 days in two first-class NICUs. I visited at least 50 times, spending between 60-100 hours *inside* those NICU walls.

Notice the **bold** and *italicized inside* in the previous sentence.

I’m convinced that spending that amount of time inside a NICU qualifies me as **an insider**.

This book begins as Hadley’s life began—*without a thought of NICU*.

Once she was born, our thought process changed—instantly and completely.

It is my prayer that you will find help, solace, comfort, and encouragement as you read this book.



NICU Insider

Inside in a Hurry

June 26, 2012

I'm a Grandpa! As of 2:58PM, baby girl Downing entered the outside world via emergency C-section. Right now Steve said she's just got oxygen tube under her nose. She's long and very skinny. Mom in recovery. — at Grossmont Hospital Womens Center (SGWC).

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This was my announcement of my granddaughter’s arrival. While Steve and Theresa knew that the baby was a girl, they really hadn’t given much hard thinking to names—after all, they had eleven more weeks to decide!

“Very skinny” was being kind. The above photo is the *only* picture we have of newborn Hadley. It was taken as the gurney was being wheeled out of Sharp Grossmont Women’s Center to the ambulance for the trip to Sharp Mary Birch Hospital for Women and Newborns—some six miles away. The reasons for the move were Hadley’s low blood pressure and blotchy skin—indicators of a possible need for heart surgery. Mary Birch was much closer to San Diego’s Children’s Hospital where such surgeries were performed, so she was sent to Mary Birch.



The actual birth of Hadley was dramatic *and fast*. Theresa had just returned to her bed after measuring her fluid output. She’d been feeling lousy all day, but was ready to go home! The way I heard the story is this:

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Theresa suddenly felt warm fluid on the bed and a sense of relief from the lousy feeling. She said to the nurse, “I think my water broke.”

The nurse took two steps over to the bed and pulled back the sheet. What she saw was not amniotic fluid—blood was soaking into the bed coverings. The nurse called the delivery room. Theresa was rushed there. An emergency C-section was performed without anesthesia. Theresa was given only something to render her unconscious.

Eighteen minutes after the nurse saw the blood on the bed, my granddaughter was a newborn.

We were very grateful for the knowledge, skill, and composure of the whole **SGWC** team—they saved two lives in that eighteen-minute span.

Only Steve got to see Hadley on days two and three. Theresa was recovering from her surgery in Grossmont Hospital. While the physical pain was intense, her worst pain was knowing that her tiny newborn daughter, now officially **Hadley Marie Downing**, was struggling for life in an incubator eleven miles away in **SMBHW&N**.

---- Insider Insights ----

Insider Takeaway. *Just Being Present Is Important.* When no one knows what’s going to happen, I found that just being with Mom, Dad, and the Baby helped us all.

Insider Tip: How you can help others. *Be There.* Some days it’s obvious what you should be doing when you go to see *your* premature baby. On other days—not so much. So, on those “I really don’t know what to do” days, just be there. Sit. Wait. Listen. Talking might be just the thing someone needs, but it might also be just the thing someone else is trying to avoid. If you live too far to be physically present, find out when you can make contact and make that contact. It might disrupt your schedule. The best time to make contact might be downright inconvenient. Make contact anyway. Let the parents and others who can be there that you are there, too.

Insider Information

If you have a chance to go somewhere that has restricted access, you appreciate benefits it is to knowing someone employed there. You can get inside information from your friend that will enhance your experience.

In this chapter, you’ll find inside information on *fetal development* and *the metric system*. Immediately following metrics is a *glossary of medical terms*. You might want to bookmark the first page of that.

A Brief Overview Of Fetal Development

There are dozens/hundreds of websites that provide detailed information on the early development of child *in utero*—inside the uterus. The intent of this *brief* section is to provide a quick overview of what your premature baby has gone through, and why the

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care of an NICU is targeted the way it is. This link leads to a site that describes important *in utero* developmental stages: http://www.babycenter.com/0_fetal-development-timeline_10357636.bc. If you prefer, this site has video of various stages: <https://www.ehd.org/prenatal-summary.php>.

When a sperm fertilizes an egg, the resulting single cell—the zygote—has all the genetic information it will ever need to become a human adult. The fact that one single cell eventually becomes newborn composed of trillions of cells is, in and of itself, miraculous and amazing.

The table below provides the timeline for the development of five *in utero* landmarks. As you can see, your baby develops the foundation of thinking and sensing its world very early in life.

Developmental Landmark Time in Pregnancy

- | | |
|---|--------------|
| • nerve tube formation | • 4 weeks |
| • arms, legs, brain, eyes clearly seen | • 5 weeks |
| • obvious heart beats | • by 6 weeks |
| • skeletal ossification begins | • 7 weeks |
| • obvious ears/umbilical cord | • 8 weeks |

The *nerve tube* listed above will become the spinal cord. *Ossification* is the replacement of cartilage in the embryonic skeleton—and throughout life—with boney material.

Between the 10th and 12th weeks, the embryo has developed rudimentary forms of all the body systems it will need to be functioning human. Now known as a *fetus*, the baby grows and matures from then until birth—but very little *new* is added.

A Brief Overview Of The Metric System

Most of the world uses the Metric System for measuring length, weight, and volume. Americans are generally unfamiliar with this system, since the standards we use are part of the English System of measurement.

While not expecting you to become *fluent* in metric, I’m providing information you need to know—or review—to help you interpret *hospital speak*.

The metric system clearly defines the different units of weight and volume—the English system does not. For example, if I say, “I’ll take 16 ounces,” you don’t know if I want a medium soda (volume) or a pound of peanuts (weight). A metric request for a soda

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would be “I’ll take half a liter, please,” while requesting peanuts would be done with, “I’ll take 450 grams, please.”

The distinction between *liquid/volume measurement* **and** *mass/weight measurement* is critical in hospitals.

Centimeter (cm). A unit of measurement of *length* in the metric system. One *inch* is equal to 2.54cm. 1cm = less than 0.5 an inch. *If your baby is 16 inches long, it will be recorded as 40.6cm on the baby’s chart.*

CC (cubic centimeter) Also known as a Milliliter (ml). A unit of measurement of *volume* in the metric system. One *fluid ounce* is 29.5cc (29.5ml). 1.0ml = .03 fluid ounce—not much.

Liter (L). A unit of measurement of *volume* in the metric system. 1.0L = 1000ml. One *quart* = 0.95L.

Milligram (mg). A unit of measurement of *mass/weight* in the metric system. Used in most dosage amounts for medicine, 1g = 1000mg.

Gram (g). A unit of measurement of *mass/weight* in the metric system. There are 453g in a *pound*. One *ounce* of weight is equal to 28.3g. *If your baby weighs 3lbs, it will be recorded as 1360.8g on the baby’s chart.*

Kilogram (Kg). A unit of measurement of *mass/weight* in the metric system. Used for larger weights, 1Kg = 1000g. 1Kg also equals 2.2 *pounds*.

A Glossary Of Terms You’ll Hear

Acid reflux. A condition where stomach acid is pushed up out of the sphincter valve between the esophagus—swallowing tube—and the stomach. The esophagus lacks the protective mucus that lines the stomach, so the acid burns the esophagus. Sometimes inaccurately called “heartburn,” acid reflux is common among premature babies who should still be receiving nourishment through the umbilical cord—not through the esophagus and the still developing sphincter valve.

Amniotic fluid. A clear, slightly yellowish liquid that surrounds the unborn baby (fetus) during pregnancy. It is contained in the **amniotic** sac. This is the fluid that is released when a mother’s *water breaks*. While in the uterus, the

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baby floats in the **amniotic fluid**, which fills its nose, mouth, and lungs. The baby does not breathe air until after birth.

APGAR. Although the **Apgar score** was developed in 1952 by an anesthesiologist named Virginia **Apgar**, you also might hear it referred to as an acronym for: Appearance, Pulse, Grimace, Activity, and Respiration. The **Apgar test** is usually given to a baby twice: once at 1 minute after birth, and again at 5 minutes after birth.

Tune Up Your Teaching & Turn On Student Learning

Teaching & Learning Content Through Communication, Collaboration, Creativity, and Critical Thinking (21st Century Skills)

A Quote to Kickstart Your Thinking

I have a short attention span—I don't have ADD, I just need to be engaged and entertained when I learn, and it has to be fast paced. If the process is slow and dull, I tune out. Well, your classes were ALWAYS entertaining, so I was engaged, even when I didn't want to be (when I was sleepy, would rather socialize, etc.) **In fact, for some activities we had to socialize, so it was perfect!** [authors' emphasis] As a student, I almost could not help learning, despite my efforts to the contrary—and that's remarkable. If only more educators could do the same, how engaged would our children be? And armed with a lifelong love of learning? I can't help but think that children are born with an innate curiosity that the education system snuffs out.

Dr. CK-P: Doctor of Medicine

Purpose and Background for this Report

In our combined seventy-six years of teaching, we have witnessed myriad educational movements and trends come and go. Like all other teachers, we have been called upon and held responsible for effectively implementing new policies, programs, curricula, educational approaches, methods, and school structures. Depending on your teaching tenure, you might remember project-based learning, smaller learning communities (school within a school model, for example), the whole language approach, phonics, integrated math and science, or providing academic targets for students during lessons.

Some changes to the educational landscape have proven exciting and were truly transformational in nature. For example, the move away from tracking students by alleged ability levels, that too often pigeonholed students for their entire K-12 academic careers, was transformational. Reconfiguring classroom enrollments so that students of diverse abilities and needs could work and learn together opened doors to understanding, respect, and opportunities for many who would have otherwise been confined to a narrow view of *ability*.

Of course, some attempted changes have proven to be unsuccessful and ineffective... we'll let you determine which of those changes you remember and in which category they fit.

There is, however, one cornerstone of the educational "building" that has not changed—the indispensable requirement that all students become ready to engage in meaningful and rigorous thinking. The high quality of this type of thinking compels students to be persistent—each one becoming an intellectual risk-taker, competent in the use of learning strategies and methods. Ultimately, students like these are characterized by intrinsic motivation, disciplined

minds, and well-developed problem-solving skills—all necessary for “real world” achievement and life-long learning.

So how can we wade through all of the *latest and best* ideas about how to improve education and hone in on what really works? The bottom line is this:

There are four academic skills that are, in some combination or iteration, common to all successfully implemented, long-lasting educational reforms.

1. Communication
2. Collaboration
3. Creativity
4. Critical Thinking

This report focuses on defining and describing each of those **four** academic skills and providing **one** strategy you can use, as a teacher or parent, with your students to encourage *building*—use of and improvement in—each of the skills.



Before you continue reading this Special Report, take as much time as you need to write down your current definition of each of our four essential academic skills

The Definitions

Common definitions of each of these important academic skills comes from:

<http://www.p21.org/storage/documents/4csposter.pdf>

Communication: sharing thoughts, questions, ideas, and solutions

Collaboration: working to reach a goal – putting talent, expertise, and smarts to work

Creativity: trying new approaches to get things done equals innovation & invention

Critical Thinking: looking at problems in a new way and linking learning across subjects & disciplines

While far from the only ways to define the academic skills, these definitions provide a strong base upon which to build, particularly when combined with a working definition of learning.

A Definition of Learning

To say that the question “What is learning?” is broad is an understatement. Volumes have been filled with attempts to provide the definitive answer to that question. Vigorous and impassioned discussions have taken place across the ages generating multiple responses. Issues of culture, power, equity, and equality all influence the answer to the question. Policies, regulations, and legislation have grown out of attempts to manage the then current answer to “What is learning?” Enormous collections of resources in multiple forms have been committed to carrying out a succession of the latest and “best” decisions of how to include what learning encompasses in curricula.

We do not claim to have crafted the best definition of learning. However we offer the following to provide you with a foundation and a glimpse into our perspective. We define learning as:

- *a social process* requiring appropriate challenge in terms of novelty, complexity, depth, and quantity.

- *a collaborative process* requiring support and feedback that are both developmental and context specific and have as their ultimate goal the release of responsibility of the learning *to the student*.
- *a mental process* requiring the development of metacognition—the *monitoring* of understanding, the *awareness* of the need for assistance or correction, and the *ability* to recognize and effectively employ cognitive strategies.
- *a perceptual process* involving active processing and attention to schemata (an organizational or conceptual pattern in the mind) that enables the learner to acquire, process, and organize information for new learning.

Along with the above definition of learning, it is important to recognize that students' brains are designed to find meaning through patterns and connections in an environment that acknowledges and respects the emotional and social dimensions of learning. For optimal learning to take place, the influencing factors of emotional safety, appropriate challenge, and self-constructed meaning must be effectively integrated.

Making the Connection

Let's look at one way to illustrate the connection between each of the four academic skills (communication, collaboration, creativity, and critical thinking) and learning. What is shown below is from a summary of work done by the American Psychology Association's Task Force, *Psychology in Education*. The task force was charged with conducting a meta-analysis of decades of research on learning, motivation, and development from the fields of psychology and education. They were presented with a formidable task of uncovering enduring principles and practices from both disciplines and identifying strong, authentic intersections.

The product of *Psychology in Education* was a document that presented a new paradigm for education: Learner-Centered Psychological Principles (APA 1993; 1997). This paradigm

... [provides] a framework for developing and incorporating the components of new designs for schooling. These principles emphasize the active and reflective nature of learning and learners
(APA 1997).

Communication/Collaboration/Creativity/Critical Thinking

Selections of Learner-Centered Psychological Principles

#6 Learning does not occur in a vacuum

#11 Learning is influenced by **social interactions, interpersonal relations, and **communication** with others.**

- Learning can be enhanced when the learner has an opportunity to interact and to **collaborate** with others on instructional tasks.
- Learning settings that allow for **social interactions**, and that respect diversity, encourage **flexible thinking** and social competence.
- In interactive and **collaborative** instructional contexts, individuals have an opportunity for perspective taking and reflective thinking that may lead to **higher levels of cognitive**, social, and moral development, as well as self-esteem.
- Positive learning climates can also help to establish the context for healthier levels of thinking, feeling, and behaving. Such contexts help **learners feel safe to share ideas**,

actively participate in the learning process, and create a learning community. (From Tune Up Your Teaching & Turn On Student Learning, Table 5.1b – Page 118)

Source: Framework for School Reform & Redesign (American Psychological Association: Work Group of Educational Affairs, November, 1997)

If you are following our thinking, we have

- presented four academic skills that are common to all successfully implemented, long-lasting educational reforms.
- recognized that their development and use are foundational for students to successfully participate in effective and engaged learning.
- offered a glimpse into key supportive research on the principles of learning.

The One Strategy

Oftentimes, a strategy is thought of as a single *tool* that is used in specific learning circumstances or with specific student populations. Effectively transferring such a strategy to other learning circumstances or student populations is considered difficult or inappropriate. While there certainly are many strategies that align with this thinking, we propose a different type of strategy—one that offers flexibility, multiple combinations of *parts*, and promise of increasing mastery of the four academic skills we have presented as critical for learning success.

The Building Blocks for the Strategy

The One Strategy is comprised of Learning Tasks that individually warrant conversation, but it is in their purposeful combination that greatest value lies. We'll begin with the list of tasks. The list of Learning Tasks has been culled from current educational reform movements and is presented in **Table 1**. While this specific list appears in no individual reform movement's official documentation, investigation of those documents reveals these terms, or variations of them, in all. These Learning Tasks will be referenced where the concept is represented in the "One Strategy" recommended in building the four core academic skills defined above.

Table 1. List of Learning Tasks

| | | | | |
|---------------|----------------|-------------|------------------|------------|
| Analysis | Complex Tasks | Creativity | Curiosity | Engagement |
| Metacognition | Multiple Tasks | Persistence | Real World Tasks | Synthesis |



Take as much time as you need to write down your definition and an example of each of the ten Learning Tasks shown in Table 1.

Consider your definitions and examples of each of the learning tasks listed above. One question that may have come to mind is,

“How can this list of Learning Tasks truly be used to transform teaching and learning?”

We'll begin the answer to that question with a critical statement we made in the last paragraph on page 1 of this Special Report:

...the indispensable requirement that all students become ready to engage in meaningful and rigorous thinking. The high quality of this type of thinking compels students to be persistent—each one becoming an intellectual risk-taker, competent in the use of learning strategies and methods. Ultimately, students like these are characterized by intrinsic motivation, disciplined minds, and well-developed problem-solving skills—all necessary for “real world” achievement and life-long learning.

The next part of the answer to the question lies in the knowledge that thousands of activities are designed for students to learn subject matter content and develop academic skills. As teachers, we don't set out to design or implement activities that require students to *think minimally* or on automatic pilot. The reasons for this are varied.

What we propose is an integrated perspective when determining the most effective and potentially engaging learning opportunities for your students.

Friendship Bread: An Analogy

Authors' Disclaimer: For those of you readers who are expert bakers...just go along with us on this.

You may have received a bag of starter dough for Friendship Bread from someone you know. Starter dough contains essential ingredients for every loaf that must be used and a portion thereof saved or passed on for future loaves. Important to remember is that starter dough takes time and care to make it useable.

The essential ingredients are yeast, water, flour, sugar, and milk.

Yeast is the leavening agent – the accelerator that is necessary for step 1 of the recipe. Without yeast, the dough remains recognizable as dough but not of the quality needed for a successfully executed recipe.

So, what's the connection?

- *Our definition of learning is the accelerator and foundation that supports the Four Academic Skills and One Strategy.*
- *The other four ingredients are analogous to the four academic skills - communication, collaboration, creativity, and critical thinking.*

Each of the ingredients in the Friendship Bread starter dough is mixed in specific amounts and over a specific period of time. Attempting to take short cuts or hurry the process results in a wasted opportunity to both have and share the product. Equally disastrous is waiting too long to perform some aspect of the process—exploding bags of gooiness often result from this.

Remember though, this recipe is only the Starter. It's the *generic* version. When a baker adds in customized ingredients, it becomes personalized and perfect for the ones it is baked for.

Considering the 4 academic skills, the *common/generic* version of one size fits all learning environments also needs customization to make it as “good” as possible for your students. Diverse student populations, subject matter content, interest levels, readiness, and learning profiles are a few of the *ingredients* that must be considered to turn *common* into *transformed*. Customization means ownership and accountability.

So, while the *starter* we are providing you is critical and will transform your teaching...it is

in the customization that transfers “ownership” from others to you.

Example of Transforming a Common Activity

Common Assignment in Any Core Area: Use your textbook or notes to define the following terms. Give an example of each.

Social Science: Teacher provided list of Forms of Government

Language Arts: Teacher provided list of Literary Devices

Math: Teacher provided list of Mathematical Functions

Science: Teacher provided list of Parts of a Cell (Organelles)

Commentary: This assignment is completed as students look through their textbooks or notes. Definitions and examples are copied from either source and written on the student’s paper with little regard to either context or importance.

In every discipline there are key concepts that are grouped together to form larger sets of information. Dictators, kings, and presidents are linked to various Forms of Government. Onomatopoeia and simile are two of many Literary Devices. Addition, subtraction, multiplication, etc., are grouped as Mathematical Functions. Cell Organelles make up cells. The list of such aggregations is very long.

In general, this is essentially a worksheet. Students find the information and fill in the definitions and examples on a form provided or their own notebook paper. Either way, **Engagement** is minimal. Depending on the situation, this might be a partner activity but is most commonly done in isolation.

Examples of the above as a Transformed Activity

In this example of transformation, ideas for catalogs of student directions for the four content areas are provided. Basic requirements and expectations apply to all the catalogs.

The Forms of Government Catalog

These examples are available at Teachers Pay Teachers as individual products by discipline. In addition to the catalog, each product file also includes individual creative assignments in these content groups—résumés and classified ads. Ideas for scoring and peer grading/ editing are part of each product.
<http://www.teacherspayteachers.com/Store/Chuck-Downing>

There’s not much that you can’t buy by mail order or online any more. There are catalogs for just about anything you can think of. Your task in this assignment is to create a catalog for something that there is not a market for yet... but you never know about the future. Your catalog will be for the major forms of government throughout history.

1. Form groups as instructed by your teacher.
2. Decide which individual in your group will be responsible for the catalog page (front and back or two fronts) describing each of the following forms of government.

| | | |
|-------------------|---------------|---------------------|
| Absolute Monarchy | Democracy | Democratic Republic |
| Dictatorship | Divine Rights | Limited Monarchy |
| Oligarchy | Socialistic | Totalitarian |

3. Use textbooks or other references to look up information on the form of government you were assigned. You may not cite Wikipedia as a reference in your catalog.

Jurchan/Downing-Special Report

4. Design a page in your catalog for your form of government. Your page must include a word-processed description of your form of government and how it functions. You must include each of the following points and a reference number (3) where you explain each:
 - A. Who is the Head of State?
 - B. Who makes the governmental decisions?
 - C. What the Source of Power is **and** how power is acquired and maintained?
 - D. How long the Head of State rules **and** the process for replacing that Head of State?
 - E. Who determines what political freedoms are granted?
 - F. One other key piece of information on this form of government.
5. Your page must also contain the sales pitch, a contact name—and phone number, e-mail, and Twitter handle from an historical example of a leader of that form (e.g. Louis XIV) with the hourly rate(s) he charges as a consultant to those wanting to implement that form of government—and a full-color diagram to illustrate some aspect of your “form.” **Notes: 1)** Original art is preferred. However, if you download diagrams from the Internet or a CD-ROM: **a)** be sure to include appropriate reference citations. **b)** be aware that some diagrams are **big** files that might not print—try printing before the morning this assignment is due! **2)** All forms of government prices in your catalog should be comparable.
6. Be sure to leave a 1” margins on all edges.
7. Your group will need to design a cover for your catalog and produce a Table of Contents that will be the first page inside the cover of your catalog. The TOC should be done last.

Commentary: This catalog assignment increases the list of Learning Tasks dramatically. Production of the product is a moderately **Complex Task**. **Creativity** and **Engagement** at high levels are requisite. Ultimately, the final catalog is a **Synthesis** of many, many parts.

This particular example of Transformation is included here for a specific reason. This Special Report has been a discussion implementation of a single strategy to help develop four critical academic skills. Production of any of these catalogs requires significant, *productive* social interaction. As the former student remarked in the quote that opened this chapter, “*I was engaged, even when I didn’t want to be (when I was sleepy, would rather socialize, etc.) In fact, for some activities we had to socialize, so it was perfect!*”

For purposes of demonstrating the concept, only the list of items to research and include in the catalogs are given below.

Literary Elements

| | | |
|------------------------|----------------------|---------------------|
| Alliteration | Analogy | Hyperbole |
| Irony | Metaphor | Onomatopoeia |
| Personification | Point of View | Simile |

Mathematical Functions

| | | |
|----------------------|-----------------|-----------------|
| Addition | Area | Average |
| Circumference | Diameter | Division |

Jurchan/Downing-Special Report

Multiplication

Subtraction

Volume

Cell Organelles - (Sample pages of an actual student-generated catalog of this type are found on the last page of this Special Report.)

Cell membrane

Ribosome

Golgi apparatus

Mitochondria

Endoplasmic reticulum

Cytoskeleton (flagella, cilia)

Even though your students won't care about the theories behind your quality teaching, they *will* appreciate it.

“He Said/She Said”

Dr. D: So, what do you think we accomplished in the report?

Dr. J: For some this will be a meaningful starting point in their thinking about how to improve student learning.

Dr. D: Not bad, but what's the value for teachers who've been working towards this goal for a while?

Dr. J: We recognized that many changes are being recommended or imposed. We are certain that you can't go wrong if you focus on four academic skills that transcend trends and policies.

Dr. D: Sounds good to me, but it feels like something is missing?

Dr. J: That's because I didn't get to it yet.

Dr. D: Be my guest.

Dr. J: We provided *One Strategy*, as the list of learning tasks, that acts as the catalyst in implementing transformed learning in classrooms. [*Best Announcer's Voice*]

Both: And now, we would like to invite you to expand your exploration. Our book, [Tune Up Your Teaching & Turn On Student Learning](#) is filled with more examples of how to increase the learning in students, whether they are your children or have been assigned to you by the school at which you teach or administrate.

The authors of this Special Report are Dr. JoAnn Jurchan and Dr. Chuck Downing, two of the leading experts on presenting ways to *move from common to transformed teaching & learning in your classroom*. Classroom teachers and college professors for over 75 combined years, Drs. Jurchan and Downing have hundreds of hours of experience in leadership and as speakers at conferences and in school district professional development sessions.

While [Tune Up Your Teaching & Turn On Student Learning](#) is their first jointly authored publication, they have been colleagues for over fifteen years at both Point Loma Nazarene University (PLNU) and Azusa Pacific University (APU).

Dr. Jurchan is fulltime faculty in the Teacher Education Department at APU. While Dr. Downing has retired from full-time teaching, he works as an Adjunct Professor at PLNU.

THE CELL CATALOG

Rough endoplasmic reticulum Golgi apparatus

Nucleus Mitochondrion Smooth endoplasmic reticulum

HOT

THIS MONTHS CELLS ARE IN AND THEY ARE HOT! GREAT VALUE.

1.800.HOT CELL

GOLGI APPARATUS

Best Value

HEY YOU!!!

Are you stuck at home while all your friends are enjoying **HOT** mitochondria or ribosomes? Do you want **INSTANT** gratification? Well let a **GOLGI APPARATUS** do all the work for you. It transports and stores virtually all of the molecules that our bodies are made by your system. Its made of **smooth** membrane, lubricated with lipid membranes. The Golgi, as we like to call it, collects all of the protein molecules from your endoplasmic reticulum and adds carbohydrates. This mixture then into energy granules packaged in vesicles ready for spilling through your cell membrane... all while floating peacefully inside your cytoplasm. Its the apparatus everybody's talking about. Call and order today!

1(900)-MY-GOLGI

SALE \$19.95

Twin Sisters Want to rock your world from the inside out!

ROUGH RHONDA

WHAT A NICE SET OF RIBOSOMES!!!

SMOOTH SALLY

These days isn't everyone looking for that **someone to love**? Although that probably won't happen, we have someone for you! For a limited time only, you can date the **endoplasmic reticulum twins!** Do you like your mate **rough**? You can have that strong membrane, full protein supply, and toxin defense system you have always wanted to love forever. **Rough Rhonda** has a set of top quality ribosomes for all your membrane strengthening needs. **Rough Rhonda** also boasts excellent secretory protein antibodies, transport vesicles, and glycoproteins. If **Rough Rhonda** doesn't sound like your type, she has a sister named **Smooth Sally**. She is great in the liver and muscles, producing valuable lipids, such as fatty acids, phospholipids, and steroids, and she is essential for muscle contraction and just a good time. You could date them both for just

\$29.99!

1-800-HOT-TWIN

MIGHTY MITOCHONDRION

DESCRIPTION: This sensuous organelle is amazing, referred to as the "POWER HOUSE" of the cell, this youth full nickname was not obtained easily, his lifestyle is always pumping with energy. He has been known to have quite the sweet tooth and indulge in sugar treats regularly. His sign is Eukaryotic and he is in search of a partner that will be there to charge him back up after his strenuous cellular respiration workouts. He is most proud of his dying desire to produce ATP at any cost. His friends can't live without him.

Matrix Cristae Inner membrane Outer membrane

HOT.HOT.HOT

1.800.hot.mito

FOR ONE LOW PRICE \$24.95

Betrayal in Blue – A Mamba Mystery

In the late 1970s, a police officer in a city in the western United States was part of a task force against a violent criminal gang. The summary report from that task force to the police department was five pages long. The first four pages were a narrative of the task force's actions and results. It was released to the media for their use.

The fifth page was a list of task force members with annotations of their specific contributions. It remained in-house . . .

. . . at least it was supposed to remain in-house.

Somehow, a copy of the fifth page found its way out of police headquarters. Several task force members and their families were targets of anonymous threats, vandalism, and drive-by shootings. At least one member of the task force was directed to leave the city and his career in law enforcement after his family home and personal vehicles were riddled with bullets. The police department could not guarantee his family's safety.

This story is based on that incident.

Chapter 6

Manzanita Chief of Police Dwight “Buck” Rogers laughed out loud. He’d just realized the topic of conversation among his underlings in the open workspace occupied by the support staff of MPD’s upper echelon. Not that laughter was unusual for him, but laughter, out loud, while in “Chief of Police” mode was uncommon.

He’d heard a peal of thunder. Then, to help him ignore the underlings’ discussion over the celestial rumblings, he’d tuned out several more. A Detroit native, and having worked in St. Louis before his arrival in Manzanita, thunder was a regular part of summer.

Not so in Southern California. He stood and walked to the open door of the conference room.

“I have it on good authority that those booms and rumblings are not caused by explosives,” pointing both index fingers to his chest as he made the declaration. “It’s called thunder. It’s not uncommon for rain to follow close behind.”

“Thank you, Chief,” echoed in various levels of sarcasm from those who’d turned to look at their boss.

“Let me know if you need the definition for rain.” Rogers flashed the smile that made him a media darling and waved. He turned and went back into the conference room reserved for him each Tuesday morning.

Betrayal in Blue

He removed copies of the meeting's agenda from the manila folder in which they were ensconced. He walked around the conference table placing one agenda on the table where each chair nested.

The five highest-ranking officers in each of the key cadre in the Manzanita Police Department comprised the Chief's Leadership Team. Captains from Northeast, Central, Western, and the Internal Affairs Divisions, and the Lieutenant of the department-wide Records Divisions had all been hand picked or intentionally promoted to their current positions by Rogers. They were a loyal, hardworking team.

Four of the five were SoCal natives, and the fifth was from the San Luis Obispo area. None was familiar with either thunder or lightning. In fact, except for the Western Division's Captain, the SLO native, rain itself was a novelty. But, this was monsoon season in Arizona, and sometimes the moisture from the Gulf of California managed to sneak west enough to impact Manzanita.

I'll have to let them get the weather out of their systems or we'll never get anywhere close to completing this agenda by ten-thirty, he thought.

"Morning, Chief," the Captain of Northeastern Division, the perennial first arriver, called his greeting as he entered the conference room, coffee mug and yellow legal pad in hand.

The Chief turned to greet the first of his five confederates.

"Good morning back at you, Captain."

* * *

"I don't know if you should wait up, Liz," Sergeant Franklin Stallings said as he unlocked the door of his g-ride, the nickname for every Crown Victoria assigned to an officer by any division of the Manzanita Police Department. Within limits, he was allowed to use the car now in his driveway as he saw fit.

"You know I will, no matter what you suggest," Lizbeth said as her husband opened the driver's door. *I wonder if he understands how much I don't like to be called Liz,* she thought. *I'm already Lizbeth, which is different enough. Liz sounds like it's short for lizard.* She sighed.

Franklin looked at his wife. She was tall. He was medium. He was athletic, playing soccer as a kid because of the Nigerian refugee contingent in his neighborhood. She was an athlete. She'd played college basketball at Kent State until suffering a career-ending knee injury.

Today, she wore an Afro wig. She was in chemotherapy for ovarian cancer. That process had taken its toll on her. Her hair, normally shoulder length and moderately kinky had fallen out early in the treatment series. She'd shaved her head and "gone 'fro," as she called it, with the wig. Contrary to her opinion, he thought her flawless ebony skin made everything she wore look spectacular.

Betrayal in Blue

“That’s why I love you,” he said. He’d heard the sigh, and he’d been married long enough to know he’d done or said something untoward in her opinion.

“If that’s your only reason . . .” she left the threat hang.

“It’s not,” he assured her. “Given enough time, I’m certain that I could come up with one or two more.”

“Not funny,” she called as he slammed the car door. She reached down, grabbed the newspaper off the porch, and launched it as a projectile towards the now moving car.

“Airball. Ouch!” he chided as the paper fell short of the mark. Then, he grinned, waved, and blew her a kiss.

She grimaced, returned the kiss, sighed again, and trudged after the paper. *Five months ago, that paper would’ve smacked his windshield*, she thought and shook her head. By the time she returned to the porch, she was breathing heavily. She hated cancer.

She heard a rumble. *Thunder? In Manzanita? In summer? That’s not supposed to happen* flashed through her mind like the lightning she hadn’t seen.

Big, fat raindrops began to leave their mark on her driveway. Lizbeth ducked back inside the house. She didn’t feel like getting wet this morning.

As is typical in every central to southern California city, rain transformed a normal commute into a giant bumper car ride. Stallings made scores of unscheduled stops, starts, and turns on his route to the division office. All the while, his thoughts drifted back over the past year.

The house they lived in now was significantly smaller than their home in St. Louis. His commute to work was longer because of traffic, not distance, especially today. The weather was glorious compared to the Midwest, *except* for today.

He was glad he’d accepted the Manzanita PD’s offer. He considered adding *except for today* but didn’t. He knew the offer was based, at least to some degree, on Manzanita’s need to move toward compliance with Federal Affirmative Action mandates. But, since he’d been on duty, he’d experienced little internal prejudice, neither overt nor covert, because he was an African American.

So, why am I angry so often? He asked himself. As was his habit, he formulated his answer as a list.

My wife has cancer.

I’m tired.

The caseload here is huge.

I don’t know who’s real and who’s playing me.

And, there’s the pressure from—

He jammed the brake pedal of his sedan into the floorboard. Tires squealed. Bumpers came to rest mere inches apart. Imprecations flew. Gestures were exchanged.

Stallings drove the rest of the way to work without thinking about anything but his driving. By the time he passed the Desk Sergeant, his mood was bad, and headed to worse.

Betrayal in Blue

* * *

After letting the phone at Reed's only known phone number ring over a dozen times, Hope Mamba moved to Plan B. She sighed and dialed the number for the hangout suggested by her husband for the stealthy Mr. Reed.

"Tug's Tavern. The tug's in port. This is the Cap'n."

"Is Mr. Reed there, please," Hope asked with as much professional demeanor she could manage after the bartender's standard telephone greeting. Making phone calls to places like this was an uncomfortable, but necessary part of her job.

"Mr. Reed?"

"Yes. My, uh, husband, Phil Mamba, asked me to call."

"Dancer?"

"Yes, I guess. I know some people call him that."

"You say you're his wife?"

"Yes, but—"

"Blow me down!" the Cap'n shouted into the phone. Hope then heard him bellowing in the background. "Ahoy, Mates! Dancer Mamba's got himself a female first mate."

She tried to figure out what she could say to reclaim the bartender's attention. She failed in her deliberations and just held the phone a little way from her ear until the noise in the bar subsided and the Cap'n returned to his end of the connection.

"Little lady, if you've managed to hook the Dancer, I'll try to find a Mr. Reed or Miss America or anyone else you and he want." The Cap'n's voice reverberated in the phone's receiver.

"This man has worked for him before."

"You mean Reed?" was the bartender's skeptical offer.

"Yes, Mr. Reed."

"Well, he's never been no mister, and he's not here—" he paused. "Blow me down! He's comin' aboard now."

"Hold on a moment, please, Mr. Mamba wants to talk to him." She buzzed her husband as she spoke. She didn't care if anyone heard her or not.

"I think Mr. Reed's on the phone now."

"Thanks, Hope," the detective responded. He wondered how she could think someone was on the phone. *Being on the phone is like being pregnant: either you are or you are not.* He shrugged and punched the outside line button on his phone.

"Reed?" he asked. There was no immediate answer. The detective could hear the Cap'n instructing someone to, "Take the phone if you know what's good for you."

Mamba smiled with understanding at Hope's previous remark. He asked again, "Reed?"

"Yeah," was the slurred reply. "Who wants to know?"

"This is Dancer. I want you. Five o'clock this afternoon. Write down this address." He stopped talking.

Betrayal in Blue

"I ain't got no paper or pen."

"Put the Cap'n back on."

No response.

"Reed!"

"Sure. Sure. Put the Cap'n back on."

"This you, Dancer?"

"Ahoy, Cap'n," Mamba greeted the bartender. He rushed to continue before the man could ask any questions. "I want you to write down this address and give it to Reed."

"Anything you want," the bartender promised, dropping the sea-going jargon he used to promote the name of his bar. He recognized the tone of Mamba's voice. He'd heard it before and knew the detective didn't want any questions about his orders. "Go ahead."

After Mamba gave his office address to the bartender, he asked, "Is Reed flying?"

"Not on my booze. He just got here."

"Will twenty dollars keep him that way until five o'clock?"

"Twenty-five would guarantee it."

"You're a pirate, you know."

"That's a might strong, Mate," the Cap'n pouted, grateful that Dancer had opened the door back to his nautical slang. "But, maybe a cabin boy on a skull and crossbones."

"Close enough," Mamba laughed. "Put him in a cab at four thirty for the extra Lincoln."

"Drop anchor on that, mate," the Cap'n agreed. "Say who's this Mrs. Mamba?"

"Later. Just get Reed in that cab."

"Like a steamer into port, Mate."

"Goodbye, Cap'n."

Mamba sat lost in thought after he hung up the phone. If he met Reed tonight, the possibility of a quick solution to the Anderson case could increase by a significant percentage.

"Honey," Hope stage-whispered from the office doorway.

"Huh?" Mamba shook his head as he recovered from the brief start his wife/secretary had caused him.

"I'm going to pick up Jimmy and go on home," she continued. "When can I expect you?"

"Reed's coming at five," he mused aloud. "It shouldn't take long. I should be home by six or six thirty."

"Why didn't the bartender know whom I wanted when I asked for Mr. Reed?"

"You asked for *Mister* Reed?"

"Of course."

"That's the problem," Phil smiled as he went to his wife and hugged her. "I don't know what Reed's name would be if anyone called him *Mister*. We call him *Reed* because he plays a mean tenor sax when he's sober."

Betrayal in Blue

“I'll never keep up with all the nicknames your acquaintances use,” Hope complained good-naturedly. Acquaintances was a deliberate choice over some less polite, but more accurate terms she'd considered. She brushed her husband's cheek with a kiss as she departed. “Call me if you'll be late. I might wait up, if I'm in the mood.”

She left Phil alone in his office with his thoughts about what kind of mood he hoped Hope would be in when he got home.

* * *

Reed sat in the back seat of a cab. At least that's what it looked like to him. Of course, this far into a bottle of cheap whiskey, he might not have left Tug's yet.

He belched. The cabbie shook his head in disgust and prepared to demand a sizeable tip for this fare.

Reed never told anyone his given name. Most assumed the brain cells that had stored that information had drowned in a sea of alcohol years before. As a young man, he'd been considered a rising star in the jazz community in and around Mobile, Alabama. His future looked as bright as is could for any black man in Alabama in the late 1950s.

With success came more gigs. With more gigs came more jazz joints. With more jazz joints came more women—and more booze. He did fine with the extra gigs until the combination of more women and a lot more booze turned him into an unreliable sot who used to be someone who could light up a saxophone.

In recent years, he'd managed to remain sober only long enough to play a couple of sets two nights a week in low-end bars along the Central California coast. Somehow, he managed to hold a ratty apartment in Manzanita through it all.

Reed did know for certain that he would go to Dancer Mamba's office. As a Manzanita police officer, Mamba had threatened to run Reed in for miscellaneous misdemeanors—mostly D&D or creating a public nuisance. Only on rare occasions did Reed get involved in physical altercations. No matter how drunk he was, he retained an understanding of the importance of intact fingers in his line of work.

Because he never booked Reed, in the past, Mamba squeezed him as a confidential informant, a CI. In exchange for reliable information from Reed, he'd let the man skate on his offenses since they harmed no one but Reed himself.

Deep in Reed's nearly pickled brain he knew that's where he was headed this evening. He was going to be squeezed by Dancer Mamba for information.

At 5:02, Mamba paid Reed's cab fare, including a sizeable tip, and led him into his office.

“I've got enough from the Anderson job for the narcs to nail you,” he lied as he waded right in with a frontal assault on the informant. “Either you give me names of the friends you're working for or you are going to fall. Hard.”

“You got nuthin'!”

“I scraped the office threshold, Reed. It's at the lab now. When they confirm what I suspect, that'll do it.”

Betrayal in Blue

The sweat trickled down Reed's face. The color in his gaunt features faded from dark to milk chocolate as the implications of Mamba's words soaked in. He mustered his final defense.

"That resin could've come from anywhere. Not only the floor of The Jazz Machine has sawdust on it. Besides, I just got back in town from up to Oregon."

"I've got witnesses that place you at The Jazz Machine last week," Mamba lied again. He had only a rumor about Reed's presence in town, but he needed information quickly. Leaning back in his chair, he studied the shaky figure before him while he contemplated the mention of resin in Reed's statement. He had suspected fresh asphalt sealer, but resin was a possibility. He pressed harder on the man.

"Face it, Reed, you're taking the fall if I want you to."

Reed's body slumped forward in resignation at Mamba's pronouncement. He'd thought that only the manager knew of his visits to The Jazz Machine during off-hours. Now it was clear that somebody else had seen him going in or coming out. *Dancer still don't miss a thing. Just like when he was a real cop. I gotta tell him. I'll never survive prison!*

"What do you want to know?" the informant asked in a hoarse whisper.

"You know what: names, dates, places, where the stuff's going and who's taking it."

An hour later, Reed was gone. Mamba sat in shock. Lying on the desk before him were four pages of detailed information on drug deals in Manzanita and two neighboring cities. Twisting Reed hadn't produced a trickle of information. What he'd wrung out of the man was a flood.

Even if only a few of the names Reed had provided were actually trafficking narcotics, the police could cripple local drug dealers for quite a while with a systematic series of raids. Mamba wondered what was waiting for Reed in prison. *It's got to be bad for him to spill his guts like this to stay out.*

He decided to wait until morning to go to the police. His former partner, Mike Mulligan, would be on duty then. Mamba wanted to run the information past his old friend before anyone else knew about the bonanza. Mulligan had earned that.

After slipping the unfolded sheets of notebook paper into a large envelope, Mamba placed them in his briefcase. Hefting the briefcase in one hand, he locked up the office, glad that he would be home for dinner with his family.

In spite of all the good being home for dinner was, and the potential Hope hinted at, he wished that tomorrow had already arrived so he could unload what he had obtained.

As he drove home, he knew he would not sleep that night.

Freedom's Just A Word . . .

Location: Frinyo City – Weapons Cache

Date: 38.442.02.13

Gnarnell looked down with one of her three stalk-eyes. The rough wooden box she focused on sat in the corner of the small room she and her fellow freedom fighters occupied. The two other stalk-eyes and her pair of inset-eyes remained focused on the evidence of her predicament. It was a mental challenge to focus a single ocular organ on something while the rest of her eyes were otherwise engaged.

She grunted.

“Yes, Captain!” The closest of the twenty-seven insurgents under her command provided the required response to any directive from an officer. That was the expectation, even when the soldier wasn’t sure of the directive.

How foolish is our protocol? Gnarnell thought. *This youth is willing to do something without even knowing what it is. I must devise a task.*

“I require,” she said before pausing. *I have the answer!* “The box of ammunition and weaponry from that corner.” She pointed a prehensile finger toward the box. “Bring it to me!”

“By your command!”

The young male made his way through the packed room. Gnarnell’s stalk-eyes followed his progress. *He’s so dedicated. I wish he lived in a better time in our history.*

The room was too small for them. It was too poorly located to act as a shelter for any who championed their cause. In fact, it was too poorly built to provide adequate protection for anyone, regardless of the cause they championed.

The room was never meant to be a sanctuary. It was listed on government manifestos as a weapons cache. That description convinced her to stage the end of the mission there.

The youth returned with the box held tight against his scaly body. She noted that his fingers had yet to mature into the almost sentient digits of mature Deloqkites. *The boy’s no more than twelve-years-old.* He sat the box close to where her tail circled her legs and clawed feet. She flashed the sign for a job well done. He beamed.

She gave a nod of dismissal. He nodded in respectful reply and worked his way through the crowd, recounting the end of his successful mission to each companion he passed.

Using her well-muscled tail, Gnarnell slid the box against the wall behind her. She turned her body to shield her movements and the contents of the box from prying eyes. It was best that she know what she had before anyone else. There was neither time nor space for panic or celebration.

The lid lifted with minimal resistance. She leaned it up against the front of the wooden container.

Inside she found much less than she’d hoped for.

Freedom's Just a Word

Records indicate that this room holds a supply of weapons. I assumed that at least some would be plasma-based or laser pistols. This, this collection of antiques does not qualify as a supply of anything but disappointment.

In the box were ten items. She recognized them all from books on the history of Deloqk, her home planet. Despair crowded out other thoughts She gave her head a vicious shake to reset her feelings and began taking inventory.

One grenade. Three canisters of noxious gas. One canister each of flammable liquid and explosive fluid. One detonator for a bomb. Two sacks of projectile ammunition. One bottle of what I assume is wine.

Despair pushed against hope, trying to gain the upper hand in her mind. *This is a twisted joke being played by fate.*

“I need a volunteer,” she said with even less inflection than was usual for her species. Suppression of emotion was her preferred method of overcoming unwanted thoughts. She’d found the technique useful in times past.

All heads turned in her direction. Twenty-seven quintets of eyes found their point of focus on her. Twenty-seven first-fingers on twenty-seven hands of twenty-seven *arms of revenge* of twenty-seven guerrillas pointed at her.

It is as I expected. They’ve all volunteered. How many do I take with me on this suicide mission?

§ § § §

Solar System: Quadrant 4/Red Dwarf 221

Planet: Deloqk

Personal Observations Log

Author: Gnarnell

Rank: Captain, Army of the Sovereign Nation of Cronoqk

Date: 38.435.15.24

The celebration is finally over. I was afraid it would never end.

The aliens called themselves *explorers* when they arrived on Deloqk. Civilians should have asked, “Why would an advanced civilization on a mission of exploration need an armada of spacecraft to survey a three-planet solar system at the fringe of the Andromeda Galaxy?”

But they didn’t. They were too busy enjoying the novelty.

I was glad when the aliens were greeted with cautious optimism by the governments of Deloqk. The hundreds of alien ships are sleek and fast, unlike the bulky cargo

Freedom's Just a Word

spaceships of the Deloqkian space fleet. The technology the aliens freely share is decades, perhaps centuries ahead of anything we've got. I'm fearful that the opportunities for improving the status quo are seen as goals by the populace and not the temptations they are.

Few Deloqkites outside the top military brass on Deloqk doubt their claim of a neighboring solar system as their home. From a military point of view, the alien ships' design and number indicate hyper-light capability. No solar system close to ours would commit this many long-distance spacecraft for a drive through the neighborhood.

Unless exploration was not the primary motivation of that neighborhood jaunt.

The public refuses to doubt any alien claim regarding space travel. Our social media channels buzz with praise of the "spacemen." I see their point. For the public, the proof of the alien claims regarding interstellar travel is orbiting our planet.

Deloqk has never been a major player in interplanetary commerce. Only four Deloqkian nations have access to materials and fuel sources needed to build and maintain rudimentary interplanetary craft. For that reason, the vast majority of our citizenry is naively unconcerned with interplanetary commerce or interstellar travel.

I know for a fact that the Ruling Council of Chronoqk withdraws support of anything when revenue drops below its predicted monetary benefit. The direct correlation between cost and benefit is especially true for a venture as expensive as space travel. I've heard the other governments involved in space commerce feel the same way.

Because of this known expense versus hypothetical gain or loss, all spacecraft produced on Deloqk are cargo-carries. ALL OF THEM! We don't have a single spaceship equipped with offensive weapons. Our ships don't have even the most rudimentary of defensive shielding systems.

I'm seriously concerned about the last issue. Mark my words, the lack interest in space travel as anything more than an economic novelty will come back to bite us in our collective muscular tails.

Pages Skipped

Freedom's Just a Word

Solar System: Quadrant 4/Red Dwarf 221

Planet: Deloqk

Pirate POL

Author: Hextl

Rank: Corporal

Date: 38.442.02.10

I told Captain Gnarnell my idea to kill off the aliens. She's working on the implementation from her end now. I've got to run a couple more simulations before I get the word to proceed.

I heard that a number of civilians have hooked up with the Captain. I know she'll appreciate that. They must suspect something's up with Gnarnell out and about.

The theory behind my plan is simple. I get into the alien comm center and reset their frequency filter to expedite 180 Hz transmissions. Then, I send out a repeating message of only that frequency at maximum amplitude for as long as I can keep transmitting.

I'm hoping for at least 20 seconds. That should incapacitate the bunch of them.

I think 10 seconds might do some permanent damage. According to my calculations, a couple of minutes of my transmission should kill all the aliens on Deloqk and in orbit receiving the transmission.

There's a chance a burst of that length of time could impact any alien that receives the message wherever it is. That would be a nice bonus!

A lieutenant and squad of soldiers just arrived. It's showtime.

I hope you'll read my next personal log, too. That will mean we succeeded!

Location: Frinyo City – Weapons Cache

Date: 38.442.02.13

“I need a volunteer,” she said with even less inflection than was usual for her species. Suppression of emotion was her preferred method of overcoming unwanted thoughts. She'd found the technique useful in times past.

Freedom's Just a Word

All heads turned in her direction. Twenty-seven quintets of eyes found their point of focus on her. Twenty-seven first-fingers on twenty-seven hands of twenty-seven *arms of revenge* of twenty-seven guerrillas pointed at her.

It is as I expected. They've all volunteered. How many do I take with me on this suicide mission? After some rapid mental machinations, she continued.

"I've changed my mind. I now need a maximum of ten of you to come with me. We're going to draw enough of the aliens surrounding this room after us to give those that remain here a fighting chance to hold out until Corporal Hextl fries their alien nervous systems."

A cheer echoed through the room. She considered cutting it off, but let it run its course instead. When silence returned, and twenty-seven arms of revenge once again stabbed in her direction, she continued.

"My first choice is the unmarried. If you have no family, you move higher up my list. If you meet one or both of those qualifications, keep your arm of revenge up."

Seven hands dropped. Eleven others were slowly lowered to the sides of eleven freedom fighters.

Nine left. They won't like it, but I'm cutting three more.

"Master Sergeant, sergeant, sergeant, I'm amending my qualifications list to exclude all non-com officers in the Deloqkian military."

"But, Captain—"

"Which part of my amendment is unclear, Master Sergeant Raginn?" Gnarnell barked at the most senior of the non-com's present. Nine stalked eyes drooped.

"I can't begin to tell you how proud I am to have served with the three of you. I want everyone here to know that it's only because of your commitment to duty and your courage that I cannot afford to lose any of you on this mission." *Besides, there's a very real chance that you'll die in this room after I leave anyway.*

Grunts of approval and pats on the backs of the three officers sealed the deal.

"Raginn, as soon as my ample tail clears the exit out of here, you're in command."

Raginn nodded.

"I need an inventory of weapons and ammunition, and I need it yesterday," the Captain ordered.

§ § § §

Location: Frinyo City – Diversionary Action

Date: 38.442.02.13

Gnarnell and her volunteers, which included one civilian, took most of what she'd found in the supposed ammunitions cache. She'd led the way out an obsolete exhaust tunnel.

Freedom's Just a Word

When the guerrillas emerged onto the street, they were over one-half kilometer from their starting point.

She took the point and assigned one of two corporals and the civilian as the rear guard. After six blocks of covert travel, she stepped inside a burned out store and gathered her team around her.

"You're probably wondering why I called you here," she said. Three of the soldiers grinned at the often-used phrase. The civilian's face showed her lack of understanding of the joke.

"I'm sorry, um, I don't know your name," Gnarnell said to the civilian.

"Konarxx."

"That's a pretty name."

The young woman smiled a relieved smile.

"What I should have said, Konarxx is that it's time for you to know what we'll be doing to help our comrades back in the weapons cache."

She outlined a plan that involved rigging the containers of flammable liquid and explosive liquid to the detonator. They would plant what she hoped passed as a bomb at a point behind the alien troops. Once the containers of liquid were in place, she and two others would approach the aliens from the rear. She would lob the grenade to get their attention. Two canisters of noxious gas would follow the explosion, and the trio would retreat along a line that led pursuers past Konarxx. She would detonate the bomb when there were aliens on both sides of the device.

The last point of engagement, the snipers' nest, was set up at a distance from the weapons cache. When the aliens arrived at that location, they would use the remaining gas canister to confuse the aliens and pick them off with their projectile weapons.

Only if necessary would they engage in hand-to-hand combat.

The soldiers nodded grimly. Konarxx tried not to throw up.

The next and final sample is from an "in progress" Biblical Fiction book. Tentatively titled *Who Leads the Shepherd*, it follows the parallel lives of Jeremiah, Chief of the Bethlehem shepherds and Jesus of Nazareth. No publication is set. Comments and corrections are appreciated.

Who Leads the Shepherd?

WHO LEADS THE SHEPHERD?

CHAPTER 1

A chill wind whistled down the hillside. Jeremiah snuggled deeper into the wool-filled bag. It lay in a depression his father had laboriously dug into what passed as soil on the hills outside Bethlehem. The earthen sides of the depression blocked the most blustery gusts and kept some of Jeremiah's body heat from escaping as well.

The clear night sky and brisk breeze promised ice on the still pond where he would wash the sleep from his eyes in the morning. It also promised colder temperatures that night than the 10-year-old appreciated.

He appreciated the extra wool that his father saved each year when they sheared the sheep. Most of the shepherds were greedy for immediate profit. They sold all their wool except what the family needed to the merchants in Jerusalem during the shearing season. But his father always kept three or four linen bags full of the soft, and happily warm, wool. And now, when there was a nip in the air, his father would sell off those last bags and earn an even larger profit as a reward for his patience.

In fact, that is exactly what his father had done yesterday. He had taken three bags into Jerusalem to sell. He would be home tomorrow. Jeremiah was glad of that. He missed his Abba.

Jeremiah understood the need to sell the wool to earn shekels for food and other necessities. But, bags of wool were also marvelous to snuggle down and sleep in on nights like this. *I'm glad Abba saved this bag*, he thought. *I'll bet he knew a cold snap was headed our way. He says his knee knows when cold is coming.*

The rhythmic breathing of the sheep lulled him. It wasn't long until he was enveloped by sleep. It wasn't much longer before he experienced a miracle.



“God of Abraham!” The voice of Jonas, the oldest shepherd in the field shattered the stillness of the night. The patriarch pointed toward the western horizon.

Other exclamations of astonishment snapped the cords of slumber wrapped around Jeremiah. He sat up, rubbed his eyes, and tried to focus on a brilliant light that grew brighter by the second.

“Fear not!” A voice rumbled from the light in the sky.

The words had little effect on the older herdsman. The sound of a booming ethereal voice coupled with the dazzling light drove even the bravest of them to his knees with his face to the ground.

Contrary to the reaction of the other shepherds, Jeremiah sat upright, ramrod straight. His eyes widened with excitement.

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“Fear not!” the voice repeated. “I’ve been sent to bring you information that will bring great joy to all people.”

“It is the Angel of the Lord,” breathed Bartholomew, a teenager, and the shepherd closest to Jeremiah in age. He had raised his head in curiosity, but now he almost wailed, “I can see the Angel of the Lord!” He covered his eyes again.

To Jeremiah, the light and the voice were much too different and exciting to be scary. He kept his eyes glued to the radiant figure in the air.

“Today a child was born in Bethlehem, the City of David. This child is your Savior, Christ the Lord,” the Angel continued. “Here’s what you should do to verify my words. Go into Bethlehem. There you will find the baby wrapped in strips of cloth as is your custom. But, instead of a bed, your Savior sleeps in a manger.”

Two or three of the shepherds now ventured a look at the heavenly messenger. The familiar term *manger* and learning that the baby was wrapped in cloth strips as they had been eased their minds.

Jeremiah looked around him. Everyone, shepherds, children, wives, servants, and slaves were awake. While many were frightened, none seemed puzzled by the words of the angels.

I know I heard them speaking Aramaic, the boy thought. But, the elderly ones, who speak only Hebrew and the slaves from other countries who know no Aramaic or Hebrew seem to understand, too. What can all this mean?

Without warning, thousands of angels materialized and joined the Announcer, so many that they filled the night sky. Their voices echoed through the hillsides.

“Glory to God in the Highest! Peace and goodwill toward all people of the earth!”

The stanzas were repeated many times. Each repetition was louder than the previous one. By the end of the angelic pronouncement, the sound waves from their voices rocked the ground beneath the shepherds’ feet.

Then, they were gone.

Many in the crowd now covered their ears. The silence was deafening after the intensity of the angels’ choral message.

“What have we witnessed?” Bartholomew asked.

No one answered for what seemed like the longest time. Then Jonas ventured his opinion.

“My sons,” the old man began. “God has chosen to reveal the coming of Messiah to us. We must offer Him a sacrifice of thanks!”

“Messiah is to be our King!” Nathan, tall and strong, retorted. “Messiah will not come as a baby, or in a manger!”

“Samuel was chosen as a lad,” Jonas replied. “And David, as a *shepherd boy* felt God’s choice in his life. A baby grows up to be a man. Our Messiah has come this night!”

Who Leads the Shepherd?

"Then why a manger?" Joshua, Nathan's brother stepped into the conversation. "I could maybe accept a baby Messiah, but not one so poor that apparently he was born in a stable and laid in a manger!"

Several voices rose in agreement. But at least as many others favored Jonas' interpretation of the events of the night. The debate lasted several minutes. It was most discussion Jeremiah could ever remember the shepherd group having at one time. In the end, five of the men decided to go to Bethlehem and see if they could find the baby.

"I'd like to go, too," Bartholomew said.

"You, Boy? Why you nearly passed out from fear!"

"But, I didn't pass out! And, I believe what the angels said.

The men looked at one another. There was a communal shoulder shrug indicating the request was inconsequential. The self-designated leader of the search party gave a wave of acceptance. The matter was settled. The men started off.

"Hold!" A female voice brought the expedition to a halt.

"What is it, Anna?" Jonas asked on behalf of the crowd. Anna was the oldest female in the group of families. Her accumulated years brought them respect not usually offered to a female.

"Look at yourselves," Anna commanded as she waved a hand in the direction of the departing men. "You go to see our Savior. At least, that's what I heard you say."

"And that is true," leader responded.

"What gift will you offer Messiah?"

The shuffling sound of sandals on the dirt was the men's only answer.

"I thought as much," Anna said with more than a hint of ridicule. She limped over to the group and handed a small cured sheepskin mat to one of the men.

"Take this! Give it to the baby's mother. It will give her son a warm place to rest and sleep in the coming cold nights"

Isaiah, the man chosen by Anna, knew well, what he held. In addition to the normal curing process, the skin had been soaked and scraped repeatedly by the women to soften it. The gift was a warm, gentle mat that any mother and her child would love.

I know it'll be warm, but my mom would like it because I wouldn't get so dirty if I was playing on the dirt floor with it under me, Jeremiah's thoughts focused more on little boy reality than Grandmotherly concern. I've got to go with them and see what the Savior's mother says about Anna's gift.

Each man muttered his thanks in turn. The group headed off the Bethlehem a second time.

Jeremiah clutched his shepherd's bag and fell into step with the last of the men. Bartholomew looked down, startled. He grinned at the boy and tousled his ebony hair. Then he motioned him to silence.

Jeremiah grinned his understanding. They hurried to catch up with the others.

Who Leads the Shepherd?



The town of Bethlehem sat on the top of a hill. It was the birthplace of, David, the most famous of shepherds. The shepherds now climbing the hill toward the city felt honored to live so close to the birthplace of the “Man After God's Own Heart.”

Bethlehem's position was strategic. It had been an Israeli fortress in King David's time. But, now a Roman garrison occupied the town as it afforded another place for the Emperor to display his strength.

Even though it was well past midnight, the little town was surprisingly busy. At first, the shepherds thought that the people moving about had seen the angels, too. They suffered several verbal and one or two physical rebuffs by members of the citizenry. The small party decided that the wondrous events were not seen inside the city walls and the restlessness they observed was due to a large number of visitors to the city during the census.

Determined to find the baby, Jonas led his band through the streets along the city wall until they came to the stable areas. It did not take long for the old man to learn of the location of the man and wife who had delivered a baby that night.

“Come this way friend.” A stable keeper of vintage equal to Jonas spoke in hushed tones. His concern was more for the animals and not arousing them. But his lowered voice impressed Jeremiah as only appropriate for a man leading others to a baby. Pointing past the last stable in the yard, the keeper directed the shepherds to exit the city.

Jonas argued a moment before accepting the stable keeper's direction. Motioning for the group to follow him, he set his sights on where the child and his family had settled. It was little more than a straw-lined cave in the hillside.

As the group passed through the city walls, Jeremiah realized how much noise was held inside them. Even the relative quiet of the stable area was noisy compared to the stillness that surrounded him. Without realizing it, he relaxed. Cities and their sounds were sources of stress for a boy who spent the majority of his hours with sheep as companions.

Trained as the men were at moving quietly, there was not a sound to announce their approach to the stable. A young woman turned toward them as they appeared in the stable-cave's entrance. The new mother heard them enter despite the quiet of the night and silence of the shepherd's movements.

Jeremiah noticed the peace in her smile. Bartholomew later remembered her beauty. Jonas was impressed by her attitude of expectation of their arrival.

“We have come to see our Savior,” Jonas whispered.

“I know,” Mary whispered as she nodded. She lifted a blanket that covered the manger to her left. “He's asleep.”

It was Jonas' turn to nod in response. The other shepherds crowded around until each had seen the sleeping Child. Jeremiah, too, crowded forward until his hands held the wooden sides of the manger-crib.

Who Leads the Shepherd?

“Ouch!” he exclaimed. He stuck his finger in his mouth. He removed the finger from his mouth and squinted at it in the dim light. With deftness born of necessity, he pulled a large splinter from the finger with his teeth. No baby should have to sleep in anything so rough, he decided.

He turned to see what Jonas and the others were doing. They were deep in muted conversation with a large man who must have been the husband of the silent, smiling young woman. Curious, he moved close enough to overhear the shepherds relating the visit of the angels. His curiosity satisfied, he returned to the manger.

The Baby was awake now. Tiny pink hands flailed at the cloth coverings that loosely bound His body. Jeremiah reached out and touched the fingers of the Baby whose birth had been announced by the heavenly messenger.

As his hand made contact with the hand of the newborn Savior, a feeling of joy and deep peace flooded the heart and soul of the boy. An overpowering love seemed to flow from the Child to the young shepherd. Gurgling sounds from the manger broke the fixation of the moment. As Mary reached past Jeremiah and lifted the small form from His bed, he knew that the wonderful feeling would not be quick to leave.

Their excitement rekindled by their narration of the angelic visitation, the shepherds were ready to leave. They each stopped in front of the mother and Child, either with bowed head or bended knee. Mary touched the top of each man’s head but said nothing. She had not spoken since the men had first arrived. It looked to Jeremiah like she was thinking about something special.

“Stop! We have forgotten something,” Jonas commanded as the last shepherd rose from his knees. The shepherds looked from one to another. What was Jonas talking about?

“Isaiah, where is the skin Anna gave you?”

Isaiah’s eyes widened. *How could I have forgotten!* He reached inside his outer cloak and eased the softened sheepskin mat from between his belt and his tunic. He made a move to hand it to Jonas, but the elder stopped him with a gesture and nodded in the direction of Mary and the Child. Isaiah’s eyes widened even more.

“I am not worthy,” he protested.

“Anna chose you,” Jonas recounted. “You will be her hands and heart.”

Isaiah approached Mary with reverence. Once again, he knelt. With head bowed, he held out the gift. Mary lifted the skin from the shepherd’s shaking hands.

“Thank you, Isaiah,” she said. When Isaiah started to protest, she added, “Please tell Anna how much we love this most thoughtful gift.” She turned to Joseph. “Feel how warm it is from having been held close to Isaiah. Jesus will come to love it.”

Joseph nodded and smiled at Isaiah.

Bartholomew called to Jeremiah from outside. The boy turned to go with the other shepherds. Then he stopped.

Who Leads the Shepherd?

Jeremiah looked completely around the stable. A donkey, no two donkeys, a cow, and a pair of oxen stood or lay in silence. Some chickens roosted in the loft above the manger. This was not a place for a baby.

“There was no room in the inn,” Mary’s voice interrupted Jeremiah’s thoughts with the answer to his unspoken question. “With the census, there are many visitors like ourselves. This stable is warm and dry.”

“But,” Jeremiah protested. “This is not a place for a baby. And he needs a nice place to sleep. Look,” he paused and held up the finger that had picked up the splinter from the manger. “I got it from the rough wood.”

Mary nodded her sympathy.

“You be careful,” he touched the Child again.

“We will keep him safe,” the Baby’s father said to Jeremiah.

“Yes, and, the sheepskin mat will help,” Mary added. “God is with us.”

“I know.” Jeremiah nodded solemnly. “An *angel* told us. But it still isn’t right. I mean even I was born in our family’s tent.”

“We won’t live here always,” Mary smiled her warm smile. She was touched by the young shepherd’s real concern for her Son. “We’ll be going back to Nazareth after the census.”

“Oh, good!” was Jeremiah’s happy response. But his face clouded again.

“What is it, Little Friend?” Mary asked as she noticed Jeremiah’s abrupt change in demeanor.

“It isn’t fair,” Jeremiah reiterated. “He needs something that a new baby would have.”

Inspiration struck! He reached into the shepherd’s pouch that hung from his belt. With reverent movements, he reached inside and fished around in typical boyish fashion. He stopped and smiled in triumph.

“This will make it better,” he declared. “At least, he will have a toy.”

He held out to Mary what appeared to be a grime-stained wad of wool.

“Take your son, Joseph.” Mary handed Jesus to Joseph and delicately took the offering from the boy. She held it up.

“It’s my sheep toy,” Jeremiah told her, moving close to show her the tiny feet and tail. “My mom made it for me when I was a baby,” he explained. “But, well, I don’t need it now, ‘cuz I’m, I’m grown up.”

Mary brushed a tear from her eye. She had heard the catch in the boy’s voice as he spoke. This young man was special.

“It is a fine likeness of a sheep. I couldn’t take it,” she held it back to him.

“It’s not for you.” Jeremiah was firm even as he sniffed a little. “It’s *His*,” he motioned toward Joseph and the Baby, “so it’ll be OK that He was born in a stable.”

Who Leads the Shepherd?

Mary tried to speak, but the words stuck in her throat. As she sat in unwanted silence, tears filled her eyes. She looked helplessly to her husband. Joseph sniffled, but he was able to respond.

“Why, thank you, uh...” Joseph stopped. He did not know the boy's name.

“Jeremiah,” the boy supplied the desired information and beamed as he realized that his name was the solution to their problem.

“Yes. Thank you, *Jeremiah*,” Joseph smiled. “Mary and I thank you. And Jesus.”

“Jesus?” It was Jeremiah's turn to be perplexed.

“The Baby,” Mary found her voice again. She pulled Jeremiah toward her and kissed his cheek. “I know that this will be His favorite toy.”

“It's my favorite,” Jeremiah started then stopped. “Was my favorite, too!”

“Jeremiah!” Bartholomew's head was back inside the stable. “Come on! The others are already far ahead. We're going to have to run.”

“I gotta go,” he told Mary. He touched the Christ Child one last time.

She nodded still not trusting herself to speak.

“Bye, Jesus! Maybe I'll see Him again someday,” he called back to Mary as he left.

“Maybe you will, Jeremiah,” Mary breathed. “In fact, I have a feeling.”

“Not to doubt your feelings, my Love,” Joseph spoke as he handed Jesus back to her. “But I think that the chance of a Bethlehem shepherd getting all the way to Nazareth is pretty slim.”

“If God wills,” she answered and stroked her first-born son's cheek with the tiny toy sheep.

Interval

THIS IS A BONUS BONUS.

The pages that follow are the current opening pages of a novel with the working title: Interval. It is currently in the midst of it's first edit of the rough draft. I have no clue when that might be completed.

Interval

Prolog

The human brain is, in many ways, mysterious. The organ contains approximately 100 billion (10^{11}) neurons connected to one another by about *100 trillion* (10^{14}) synapses. Those numbers are *averages* for every structurally sound human brain.

You might have heard that “humans use only 10-30% of their brains.” While at the basic functional level this is wrong, selected parts of the brain are more active in some people than in others. Regardless of origin or station in life, 100% of every brain is involved in the process we call life.

A plethora of unedited video footage of individuals exist where humans push spikes through their cheeks and are upset if a single drop of blood oozes from one side;

bend cutlery from a distance without making physical contact, and move small objects via telekinesis.

Henry Houdini was capable of performing magic tricks that killed scores of wannbe Houdinis since his death. Those imposters lacked enough mind control to mentally regulate physical functions such as breathing and heart rate.

For as yet undiscovered reasons, an occasional human with an anatomically normal brain possesses capacities others do not. Some of those individuals are capable of mental actions that astound the vast majority of humanity. Others can create masterpieces of art, music, and literature. Still others have prodigious memories or power of performing complex mental calculations instantaneously. In addition, there is no scientific explanation of why identical twins separated at birth often exhibit uncanny parallels in jobs, spouses, names of children, etc.

Scans of various types indicate that at any given moment, different portions of our brains are transmitting nerve impulses while the majority of our brain tissues are in non-transmitting mode. What is occurring in those seemingly dormant parts of the cerebral cortex is open to speculation.

For Isaac Lawrence there is less speculation. He knows what goes on in far more of his brain than either you and I know is going on in ours.

Chapter 1 – Beginnings

Many times in his early life, Razi was sure that he was cursed with a defective brain. As a child, he could remember far more detail than all but one or two of his playmates. In addition, his memory included things he had not accomplished himself.

Interval

Sometimes those non-native memories were incomplete. For the most part, though, when brought to the forefront of his consciousness, the memory was as real as if experienced the event in question. Far more often than not in such cases, it would have been impossible for the thought to be his from experience. The constraints of the time/space continuum prohibit objects—and people—from being in two places at the same time.

As years passed and Razi began his training as a priest, he discovered that he was not cursed. He was gifted. He was aware of many of the most secret thoughts of others. That revelation led to the exploration of his potential.

* * *

The entire generation of his contemporaries passed into communion with the High God, but he still looked, felt, and acted as one in the midst of his youth. During the lifetime he'd already lived, he learned to precisely focus his thoughts. Because of this, he could view the actions of others as though he were looking *down* on a scene from the past. It was as though he was a housefly perched high on the mud-cover wall of a hut.

He also learned that there were limitations of his gift. Frustratingly foremost was that he could experience only events from the past. No visions of future activities ever entered his mind.

He complained to the High God of this restriction for two years of his extended lifespan. Then he realized something profound. *If I see what is going to occur, I am equal to my God.* He knew that would never happen.

It was at the beginning of what would have been for most a second lifespan, that Razi began to focus his mental powers on exploring the limits of his gift. It took only two cycles of the seasons before he perfected his ability to read the thoughts of a few. Within another cycle he could influence the thoughts of most of those around him. By the end of his self-apprenticeship, he could telepathically guide almost anyone for a time. It was child's play if they were tired, distracted, or drunk.

There were some whose thoughts he could neither read nor influence—no matter how focused his concentration. In his way of thinking, that restriction was worse than his inability to see the future.

* * *

“Don't argue with me, Razi. I know what I saw, so now I know what I will do,” King Andikan warned his brother.

“I have no doubts of the accuracy of your visions. If you have seen where the split-hooves gather to spend the darkness together, then those with tearing teeth also know. I urge caution.”

“Razi, as good a seer as you are at your young age, you have much to learn about manhood and leadership.” The King slapped his brother on the shoulder as he left his brother's dwelling.

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“Prepare a pit, for tomorrow we shall feast and then smoke other meat for our futures!” were the last words Razi heard from his older brother. The King, and his chosen hunting companions were slaughtered by a score of hyenas that night as they waited for the split-hooves.

“I go to the mountain to commune with the High God. I do not know how long it will take. I now have many doubts and many more questions,” Razi told Andikan’s wife. He reached out and cradled the chin of a contemplative toddler—Andikan’s only child. “Keep this one safe. She is your link to leadership.”

By the time Razi returned—over fifty years later—the Queen of the tribe was Ifiok, his brother’s great-granddaughter.

* * *

As was common, Razi awakened this morning from a visionary dream. His two inherited skills, dreams/visions, and mental power over most members of the tribe allowed him to serve as Chief Witch Doctor and High Priest of the region.

His visionary experiences—always of the past and focused by his will on specific members of the tribe—left him with a bothersome throbbing in his temples. The experience of the night before left him in intense pain.

His tenure as Chief Witch Doctor in the area was in its fourth generation. During those ninety years, several powerful women of his people seized power from the reigning kings in their tribes. Ifiok was the most recent queen to accomplish that feat.

He had no historical interest in the politics of the tribe because he could dictate much of what would happen with his mental skills. From time to time, he’d used those skills to help a queen. His decision to help was financially driven. Matriarchal governments had benefited his business since its inception.

The dream that haunted him this morning swirled around the current queen and her twin daughters.

As was his custom, Razi pressed the misshapen upper portion of his thumb into the skin beneath his jaw as he pondered which of the next moves bubbling through his mind would be most prudent.

A noise outside his hut broke his reverie. Before the female approaching could announce herself, he called, “Wait there, my Queen.”

Ifiok stopped. It bothered her much more than she let on that this Priest was always one step ahead of her thinking. *Some day he might have to pay for his boldness*, she thought. On this day, she needed all his considerable mystical powers to work for her.

Razi’s instincts took over. He shot this thought to his Queen,

Choose the one who chooses kind actions over powerful ones when the outcome can be attained by either means.

Interval

Queen Ifiok smiled. As was usually the case, when she was troubled by a decision, and sought guidance from the Priest, the calming peace of the presence of the High God had crystalized her thinking. There was only one choice.

“May long life and prosperity bless you, my Queen!” Razi said while performing the expected act of obsequiousness in the presence of the tribal monarch.

“And you as well,” Ifiok responded as courtesy dictated to any official advisor.

“How may I serve my Queen?”

“Once again, the spirit of the High God surrounds this place. I have clarity of thought and now seek only your validation of my decision.”

“As you wish. Speak your conclusion, and I will pray for the High God’s guidance of affirmation.”

Ifiok smiled an enigmatic smile. She knew full well that the Priest needed no further contact with man or god before his answer. *It’s often*, she thought, *as if he knows what I’m thinking*.

“I have two daughters,” Ifiok began.

“Twin visions of beauty.”

Ifiok ignored the Priest’s comment and continued.

“Meria is the eldest by minutes. By tribal tradition, she should be named my successor.”

“Spoken truly.”

“But, Meria is mean-spirited. She enjoys hurting animals for sport and other children for her pleasure. Neither of those actions are befitting of a Queen of this tribe.”

“The Queen speaks wisdom as clearly and as often as her subjects speak of daily tasks.”

“Nadira, the younger, is kinder of heart and soul. She is more balanced in all areas of her life. She has the character that royalty demands.”

“This conundrum must have caused the Queen to endure many sleepless nights.” Razi reported what he’d seen in over a score of night visions.

“More than I care to count. But, today, even as I stood outside your hut, on the holy ground that surrounds your dwelling, a thought, as clear as any speech I’ve ever heard, came to me.”

“Speak that I may hear and know and then seek the High God’s confirmation.”

This time Ifiok made no attempt to hide her smile. Her Priest was toying with her—of that she was certain. And yet, she was not angry with the man, although she had every royal right to be.

“Here is the thought that has become the basis of my decision. I must choose one who chooses kind actions over powerful ones when the outcome can be attained by either means.”

“A wise decision,” Razi intoned.

“It was as though the High God Himself was speaking to me without words,” Ifiok emphasized each word. “I must select Nadira as my successor, although it goes against all tribal tradition.”

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“Your servant hears and understands. I require time to commune with the High God on this important matter. Return in seven days with an offering of meat worthy of a decision of this significance.”

With that, the Priest turned and walked past his home into the wild grassland. As the Queen watched, Razi’s path deflected to the south. It was obvious that the Priest was headed toward the Holy Mountain where he would commune with the High God in private.

Ifiok frowned. As was common, something about this visit—this pseudo conversation—contorted her psyche. However, as befitted a Queen of her people, she soon straightened her shoulders and strode imperiously back to her karaal.

* * *

It took two full days of fast walking and hard climbing to get close to the summit of the Holy Mountain. There the Priest felt close enough to the High God to seek His will. He would spend two days communing with his God and the nature created by Him. Only then would he retrace his steps in a leisurely return to his dwelling in time to meet the Queen.

For decades, Razi had been aware that he had the power to cast thoughts of his own into the minds of others. It was far from perfect at first. His vague ideas became aberrations of his intended action more often than not. As time passed, he learned that if he focused thoughts that originated in his dreams, far more often than not he could elicit the exact result he desired. It was as though the mind he targeted was nothing more than an extension of his own.

He began his time on the mountain with a time of supplication and prayer. The Priest knew that there was a power involved in his ability that deserved his reverent meditation and respect. He was willing to give both to keep the gift with which he’d been blessed.

Razi slept most of the rest of his time on the mountain. Not the restless sleep of his normal nights. This sleep was deep and restorative.

Until the last hours of the last night.

As clearly as he could see his hand as he cupped water from the stream and drank it, the Priest saw Meria with her supporters.

She spoke of her awareness of her mother’s reluctance to name her as successor to the throne. She bragged of how she’d feigned a change in heart to sway her mother’s selection in her direction. She continued by explaining that even minimal effort in that area proved far too difficult to maintain. In the end, she’d decided that, if her sister was a problem after her mother died, she would deal with it directly.

“If I need help in ending the problem, I will get help. I am willing to do whatever it takes to keep Nadira in her rightful position as my younger sister.”

Razi sat up with a start.

What is this place? Where am I? I was in the presence of the oldest daughter of the Queen. Now, I’m alone in a . . . a cave?

Interval

“Praise to you, Highest of the Gods,” Razi intoned as he stood to his feet. “I have never received such clarity in a vision or dream before. I bow in thankfulness for this glimpse into the character of the evil Meria.”

His trek homeward was a forced march. He had to get to the Queen before the time he’d allotted expired.

* * *

“The High God gave me a vision of the true character of your daughter, Meria, the heir to the throne by birthright,” Razi said to Queen Ifiok. “Your vision from the High God was a message, a message that cannot be ignored.”

“This is what the Priest of the High God learned from his time of communion?”

“It is, My Queen. More importantly, I know that Meria will not accept this insult with even a modicum of grace. She is willing to do whatever is required to rid herself from any impediment to her ascendance to your throne.”

“The throne is a gift of the High God. His will be done,” Ifiok intoned.

“If that is to be, you are the instrument of fulfillment of that will.”

“What counsel does my Priest offer?”

“Banish Meria from this people. Abdicate your throne. I will anoint Nadira as your successor.”

To Razi’s amazement, Ifiok’s reply was swift and certain.

“By new moon’s appearance, Meria will be but a memory, and I will be Queen no more.”

* * *

Queen Ifiok looked down from her ornate chair. She knew that some members of her tribe felt she was unworthy of her position. They insisted that it was only her gift that kept her in control of the people she ruled. She didn’t care.

I am a Queen among the Bantu people. I am royalty.

She rubbed her left hand with her right hand. Most of her subjects believed that her left hand was evidence of her special anointing by the High God. The proof was her left thumb. Nearly all members of her tribe had thumbs of common design. She, herself, had a common right thumb. However, her left thumb was so different—so unique—that all who viewed it commented on the rareness of its form, but never in her presence.

Instead of forming the symmetric partner of her right thumb, her left thumb’s upper joint was at a forty-five degree angle away from the palm of that hand. While the joint still allowed the thumb to flex and grasp like a normal thumb, the tip of her left thumb would forever keep its right hand partner at a distance when in the ritualistic position of supplication to the High God.

The Queen had kept the purpose of this day’s gathering a secret. She was well aware of the rumors flying and the sabotage attempts against her reign by her eldest daughter.

Interval

She coughed—a long, continuous cacophony of hacking sounds. As the fit passed, she took a long, unsteady look at those gathered in response to her summons. Fear shone on many of their faces. For that she was thankful. She knew that some feared her. She remained a formidable figure in spite of her illness. Others feared her death and the uncertainty the aftermath would bring. Still others feared the change they knew was coming.

She inhaled, coughed again. *It is time.*

“I have made a decision,” Ifiok declared in her finest royal tones.

All two hundred heads before her nodded in sober understanding. When their ruler took time to explain an action, it demanded their complete attention.

Ifiok waited. She knew her announcement would be met with varying feelings. Some would welcome the decision. Others would deal with sorrow because of it. When she generated enough discomfort to provoke the full attention of all in attendance, she delivered her decision.

“On the night of the new moon, you will have a new queen.”

In spite of the inbred and well-practiced self-control of her people, an audible gasp rippled through Ifiok’s subjects. She smiled inwardly at the myriad of expressions unable to be suppressed or masked. And, then, she smiled outwardly in self-satisfaction.

“Go from this place. Spread the word to those of our tribe who are not here. Pray to the High God for my successor.” Her pronouncement made, Queen Ifiok retired to her home.

Her people were slow to disperse. There was an air of excitement tempered with uncertainty. Two young women—twin daughters of the Queen—were among those with conflicted thoughts. One because of the uncertainty she felt. The other because of the exhilaration she felt at the thought of being queen.

That night, the bright light of the full moon shone down on the village. The vision of serenity projected would soon be exposed for the illusion that it was.

* * *

Fourteen days later, Queen Ifiok abdicated her throne. At her command, the Witch Doctor smeared the oil of consecration on the forehead of Nadira, youngest of the Queen’s children. When Razi removed his hand, Nadira was the new Monarch.

As the Seer had prophesied, Meria, Nadira’s older twin, did not take the news well.

Glossary of African—and other—Names and Meanings

| Name | Meaning | Chapter Introduced |
|---------|-----------------------|--------------------|
| Nadira | <i>Unusual</i> | 1 |
| Meria | <i>Rebellious one</i> | 1 |
| Razi | <i>Secret</i> | 1 |
| Andikan | <i>Conqueror</i> | 1 |
| Ifiok | <i>Wisdom</i> | 1 |
| Nadira | <i>Unusual</i> | 1 |
| Meria | <i>Rebellious one</i> | 1 |

THIS IS A BONUS BONUS BONUS.

The pages that follow are the current opening pages of a book on teaching, **Teach Like The Teacher**. It is currently in the midst of it's first edit of the rough draft. Dr. Smith and I hope to have a draft suitable for submission before June 2018.

Teach Like The Teacher

By Chuck Downing, Ph.D. & Robert Smith. D.Min.

Jesus was a poor Jewish rabbi from a backwater town in Roman occupied Judea. His teachings changed the world. What can we learn from what He did and how He did what He did?

Overview/Table of Contents

Realize that Every Student is Unique in Some Way

1. Use Illustrations and Analogies
2. Provide Different Explanations of the Same Content
3. Ask Questions
4. Make Students Think
5. Give Relevant Assignments
6. Use Groups When Appropriate while Holding Individuals Accountable
7. Accept that Your Students Won't All "Get It" at the Same Time
8. Validate Student Effort and Production

References and Resources

Chapter Template

Validation

What?

Why?

How?

Examples

Examples from The Teacher

1. Use Illustrations, Analogies,

Validation

I remember one lesson "endoplasmic reticulum" you told us that we won't remember what it is but we will never forget the name. Well you were right. **Employed by Rhor Industries**

I appreciated and enjoyed all of the analogies you made to get the point across. I remember watching students move around the room in a certain way demonstrating a certain cellular process. And how could I forget the 'demonstration of left-brained and right-brainedness, and how I was the perfect example of an extreme left-brain. I think I got as far as the cafeteria in my directions on how to walk to the locker room. **Art Director and Free Lance Designer**

What?

Webster's New Collegiate Dictionary Defines Analogy: *Resemblance in some particulars between things otherwise unlike.*

A team of three high school students generated this outstanding example of an analogy in under 30 minutes. It was part of an assignment that included a drawing of the analogy on butcher paper and a reading of the written version while displaying the drawing.

The cell membrane can be analogous to a chain-link fence with gates patrolled by security guards. Some things are small enough (e.g., bugs and wind) to pass through the chain-link without the guards' assistance or even their knowledge (like diffusion of oxygen and carbon dioxide through the membrane). Other things go through the gates after "permission" from the guards (like proteins that must meet certain requirements of electrical charge to enter the cell). Still other things are carried into the cell by the guards (analogous to active transport in the cell).

Why?

The human brain excels at pattern matching. Incorporating analogies gives the brain a pattern to match to the real content. You might use teacher-generated analogies in your teaching—many, perhaps most teachers do.

Student-generated analogies are also viable options. The problem with student-generated analogies is that the pattern in a student-generated analogy is sometimes so esoteric, creative, or off base that other students find the analogy less valuable than a direct explanation. This is especially true if those analogies are presented to the class.

Research indicates that the majority of teachers that use analogies use more teacher-generated analogies than student-generated analogies. This is partly due to the problem with student-generated analogies described in the preceding paragraph.

In some teaching situations

- analogies are more effective in some content areas than in others,
- males tend to favor student-generated analogies while females prefer teacher-generated analogies

While not always as effective as a teacher might hope, using analogies with students helps them learn. Analogies are formed through searching between what is already known and what is trying to be learned. For that reason, they are natural vehicles to use to increase student learning.

Many learning theorists include analogy formation as part of their learning process. Lawson & Lawson report that,

the crucial element in transferring experiences to long-term memory is the brain's ability to find past experiences that are enough like the present ones to allow their assimilation. If such analogous experiences can be found, then assimilation and retention will occur. If not, then the new experiences will be forgotten (1993, p. 1328).

Let's look at an analogy to help explain Lawson and Lawson's quote.

- Think of your memory as a collection of closets.
- There are lots and lots of closets.
- You are exposed to a new piece of information.
- Your brain begins searching the closets looking for one that contains information similar to the new information.
- When a suitable closet is located, the brain stores the new information there.
- The pathway to the newly stored information as been traveled before; the closet already had information stored in it.
- To remember the new information, all you have to do is follow the existing pathway because when some new pattern matches an existing pattern, the brain is able to reproduce that pattern quickly and repeatedly each time the pattern appears.
- If the brain can't find a closet with like information, it's likely to consider that information unimportant.
- It might not store the new information. Unstored information cannot be retrieved. You don't remember it.

- Even if the brain stores the new information in an empty closet, the pathway to that closet is not well established. You have a hard time recalling it.

How?

As you prepare to describe a process, procedure, or situation in your content area, try and think of an analogy for that piece of content. Your analogy can be simple or complex. The complexity of your analogy is not as important as using an analogy is.

Two examples of analogy use follow. The first is a simple teacher-generated analogy to help students understand a process. The second is a very complicated process by which student-generated analogies are produced.

Examples

The Content - How water moves up inside a plant.

Plants that are taller than an inch or two have to transport water from their roots to their leaves. *Phloem*, transports manufactured materials—sugars—from leaves downward. Also known as *sap*, this is what is collected from maple trees. Maple sap is also known as maple syrup.

Xylem transports water from the root system up to stem, branches, and leaves.

Water is absorbed by root hairs, thin-walled extensions of root epidermal cells. Water isn't pushed up the stem by pressure from water entering the roots. That pressure isn't capable of pushing water up more than 30' or so.

Water molecules have a negatively charged area and two positively charged areas. Once a water molecule enters a xylem vessel, either the negative part of the molecule is attracted to one of the positive areas in the water molecule above it. If a positive area is exposed to the newbie water molecule, its negative part is attracted to that. Either way, after an individual water molecule enters the root by osmosis, it is pulled inside xylem vessels. The new molecule joins a chain of water molecules.

Tiny holes in the leaf allow water to evaporate out through them. Each water molecule that evaporates out of one of those holes pulls on the chain of water molecules just enough to move the chain up by one water molecule.

In large trees, this process releases thousands of gallons of water from the leaf holes in a single large tree on a warm day with low humidity.

PowerPoint slides used to along with that verbiage are shown below. The left view is the slide after the lecture material was presented. The diagram in right view was added only after students were directed to think and discuss what they'd heard. The technique is known as "Think-Pair-Share." Keep reading to learn why it's used how it works.

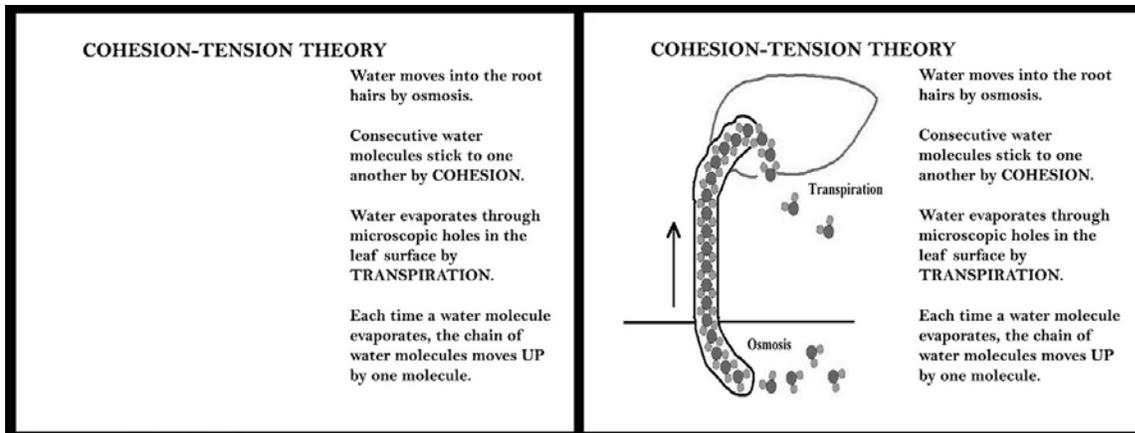


Figure 1.1.

Bonus Tip. Figure 1.1 demonstrates how to incorporate various learning styles in presentations. Notice that diagram (visual learning) came after the written description/lecture (linear/audio learning). By waiting to show the visual, every student unconsciously or consciously develops a mental image, a pattern of the concept. Having a pattern to match helps lock in the information when the diagram is revealed.

Just for fun, think of an analogy you might use to describe how water moves up a plant before you read through an analogy that's been used successfully to cement the concept in the minds of students.

The Analogy

For this analogy a box of Kleenex facial tissue sits in plain view from the beginning of the lecture. While other tissues might work, Kleenex brand is the tissue of choice because of its consistency of performance

After the content presentation is complete, pick up the Kleenex box.

Pull one sheet out of the box.

Another sheet pops part way out of the slit in the top of the box.

Ask: "What's left in the box?" I ask.

Some version of "a stack of sheets of Kleenex tissue" is the answer.

Ask: "What do you think will happen if I pull this sheet out of the box?" and grab the next tissue.

"Another will pop out," is usually the students' answer.

Ask: "Why am I doing this?" and pull a third sheet from the box. Ignore all hands

Say: "Talk with your partner."*

Depending on the class, it takes seconds to a minute or so for the conversations to conclude, "It's just like the water molecules in the plant."

Score!

The reason that the Kleenex tissues pop up has nothing to do with molecular charges. That doesn't matter because this is an analogy—*resemblance in some particulars between things otherwise unlike*—and not the xylem in a Tracheophyte plant.

I've included a sample of a student-generated analogy process with examples in the Resource chapter.

***Bonus Tip.** "Talk with your partner" is a term used during lectures. It appears on screen at irregularly regular intervals in the PowerPoint presentation. Often designated TWYP, it's a direction for the class to perform cooperative learning activity known as Think-Pair-Share.

Three reasons to use this strategy are

1. It slows down the speed of delivery of the lecture material. This is valuable in any class. Its value increases throughout the school day if you teach the same course more than one time.
2. It gives students time to process information they've received. Without processing time, much audio input is lost or misinterpreted or matched to the wrong pattern by students.
3. It allows the teacher to hear what students think was just said. Teachers can reinforce, reteach, or rectify as necessary for clarification. This is accomplished without drawing attention to students whose level of understanding is deficient.

For more information on Think-Pair-Share and other cooperative activities, visit <http://www.co-operation.org/what-is-cooperative-learning/>

Examples from The Teacher

Matthew 13: 24, 31, 33, 44, 45, 47

All the analogies presented below in support of their use by Christ are sequential. Whether or not they were spoken during a single teaching session isn't important. Follow the presentation of the Kingdom of God. Notice how each analogy emphasizes a different characteristic.

24 Another parable He put forth to them, saying: "The kingdom of heaven is like a man who sowed good seed in his field; but while men slept, his enemy came and sowed tares among the wheat and went his way. But when the grain had sprouted and produced a crop, then the tares also appeared. So the servants of the owner came and said to him, 'Sir, did you not sow good seed in your field? How then does it have tares?' He said to them, 'An enemy has done this.' The servants said to him, 'Do you want us then to go and gather them up?' But he said, 'No, lest while you gather up the tares you also uproot the wheat with them. Let both grow together until the harvest, and at the time of harvest I will say to the reapers, "First gather together the tares and bind them in bundles to burn them, but gather the wheat into my barn." ' "

This situation was something all Jewish farmers could relate to. The reaction of the workers is compared to the reaction of the owner. The significance of the owner's decision and the ultimate end for the tares was not lost on Jesus' audience.

31 Another parable He put forth to them, saying: "The kingdom of heaven is like a mustard seed, which a man took and sowed in his field, which indeed is the least of all the seeds; but when it is grown it is greater than the herbs and becomes a tree, so that the birds of the air come and nest in its branches."

Mustard is considered a weed in parts of the world; it grows quickly and without much care. Usually, a short plant, even today specimens of heights as tall as ten-feet are found in Israel. Every listener understood this analogy.

33 Another parable He spoke to them: "The kingdom of heaven is like leaven, which a woman took and hid in three measures of meal till it was all leavened."

Leaven is used to illustrate both good and bad in different situations. Here, leaven, forbidden for use during Passover, reminded the listeners of the positive change leaven made in their daily bread.

34 All these things Jesus spoke to the multitude in parables; and without a parable He did not speak to them,

This is quite a statement of affirmation for Jesus analogy-heavy teaching strategy.

36 Then Jesus sent the multitude away and went into the house. And His disciples came to Him, saying, "Explain to us the parable of the tares of the field."

He answered and said to them: "He who sows the good seed is the Son of Man. The field is the world, the good seeds are the sons of the kingdom, but the tares are the sons of the wicked one.

The enemy who sowed them is the devil, the harvest is the end of the age, and the reapers are the angels. Therefore as the tares are gathered and burned in the fire, so it will be at the end of this age. The Son of Man will send out His angels, and they will gather out of His kingdom all things that offend, and those who practice lawlessness, and will cast them into the furnace of fire. There will be wailing and gnashing of teeth. Then the righteous will shine forth as the sun in the kingdom of their Father. He who has ears to hear, let him hear!

One of Jesus' most powerful analogies is explained to the disciples. You might need to do that on occasion to cement the concept in the minds of your students.

44 "Again, the kingdom of heaven is like treasure hidden in a field, which a man found and hid; and for joy over it he goes and sells all that he has and buys that field.

This demonstrates that you don't have to be lucky to enter God's Kingdom. You do have to make a choice to obtain it, however.

45 "Again, the kingdom of heaven is like a merchant seeking beautiful pearls, who, when he had found one pearl of great price, went and sold all that he had and bought it.

Careful listeners knew that Jesus was reinforcing the concept that there is only one God.

47 "Again, the kingdom of heaven is like a dragnet that was cast into the sea and gathered some of every kind,

Jews were not used to hearing that God welcomed non-Jews in worship. This parable makes it clear that all are welcome in the Kingdom of God.

The application of these examples for today's teachers is this

You might not need as many analogies as Jesus used for a key concept in your curriculum. These examples show many ways to skin the proverbial cat.

A terrorist/researcher sets out to insert the gene in yeast that converts lactic acid (muscle waste in animals) into alcohol into US military personnel. The story is one of intrigue, danger, and courage. It's not far along at all.

THE DRUNK GENE

The laboratory building shimmered in the heat of the Sahara Desert. The building was in Chad. Or Sudan. Or Libya. Which nation housed the laboratory and its associated complex was unimportant. The funding source of the research paid significant American dollars each month to the governments of all three nations.

To those outside the razor wire fences, the entire complex appeared as an oversize mirage. But, few ever viewed the facility from the outside. Its existence was a closely guarded secret. Software technicians insured that no GPS coordinates were associated with the location.

Anyone passing by the location was considered a spy. Drones monitored travelers passing at a distance. Travelers passing close to the compound were intercepted by heavily armed troops. If those intercepted offered no resistance, they were escorted away by troops. But only after having their electronic devices confiscated or damaged beyond repair.

Those who made the mistake of resisting being rerouted or confiscating of equipment paid a penalty. The harshness of the penalty depended on which national troops were on duty. Torture was the option of choice. Death of the resistor, whether from torture or execution, was considered an acceptable consequence.

On this day, the outside temperature was 44°C. By comparison, inside the lab was 25°C. The inside temperature was the critical one. Many of the experiments conducted in the lab produced the best results at what chemists designated as Standard State.*

***Standard State** conditions are used for thermodynamics calculations. Conditions specified for standard state include: 1) The temperature is 25°C. 2) All gases are at 1 atm pressure. 3) All liquids and gases are pure. 4) All solutions are at 1M concentration.

Researchers seldom ventured outside the concrete filled Styrofoam® block walls of the laboratory building during daylight hours. Few ventured out from *any* building in the compound--regardless of the time of day or night. Room suites for all involved in the research were part of the main complex. The interior of every building in the main complex was climate controlled.

The research the scientists were conducting was important to only a handful of people on Earth. Fortunately, at least two-fingers worth of that handful of people were extremely wealthy. And, those fingers were the ones funding Jafa's project.

The funded title of the research was "Production of a Vector of Delivery to Host Muscle Cells of *Homo sapiens sapiens*." Drug manufacturers were clamoring for a vector to deliver a variety of their products to specific body tissues.

The Drunk Gene

The Lead Researcher of the project was Jafa Jernoim. Although limited in scope to muscle cells, Jafa's work had the potential to deliver product directly to any specific cell type. One project goal was a protocol that could be customized to target other tissue types.

The venture's unofficial name was “The Drunk Gene Project.” The lab rats invented that moniker based on their leader’s fixation on adding the gene for the ** enzyme to human muscle cells. That enzyme was native to yeast. It was essential for the conversion of lactic acid to ethanol in anaerobic conditions.

Only Jafa knew why adding ** to muscles cells was important enough to spend time and money pursuing. His co-workers considered the concept of inebriation by working out--as opposed to feeling sore--intriguing. But the intrigue was more for the novelty of the idea than any practical value.

The researchers *never* used the term "Drunk Gene Project." They were likely to refer to the project as "Jafa’s Quest"—but only in his absence.

Jafa Jernoim was the second-oldest member of the team--age and experience did have some advantage in his field. In spite of both his age and experience, he was also one of the few people in funded research with *two* ABD’s on his academic record.

His first ABD was in biochemistry at the University of Nevada, Reno. His research centered on developing a short-lived blocker for of the second oxygen-binding site in human hemoglobin. He'd stopped his research and withdrew from the university immediately upon validation of his results.

All his UNR coursework was complete, but his dissertation was not. That combination placed him in the ranks of those known as ABD—“All But Dissertation.”

The other ABD on his resume was in molecular biology from Israel's Weizmann Institute of Science. He did not include his Nevada transcripts in his application to Weizmann. That decision insured the ABD stigma would not be an issue. And, it wasn’t... until he presented his findings at an international conference on molecular biology.

At that conference, he reported how he'd produced a self-assembling protein jacket that was the size of a large virus. The process generated *significant* commercial interest. Drug companies are always searching for new delivery systems for their products. Jafa's protein jacket was such a delivery system.

Enzymes might break down administered drugs before they reached their target. A protein coat had a major advantage over other delivery systems. A coat that covered the drug molecule would limit the risk of breakdown occurring. Once ingested by the target cell, enzymatic activity was no longer a concern—and was often a requirement for drug efficacy.

Jafa was known for his single-minded focus. That made him an excellent researcher. It also condemned him to the status-reducing degree-less category. Being ABD eliminated a scientist from consideration for competitive funding opportunities.

He was leading this project because those financing the research were not investors looking for huge monetary returns. It was a case where *ideology* trumped *income*. *Background* of an employee was of minimal importance.

The investors' focus was *guaranteed results*. They were not opposed to making money from the research. But *results* were what they were what they were paying for. It was a most non-traditional focus. None of the researchers on the team talked about what might happen *if* the desired results were not forthcoming.

So far, progress of the research had kept the ideologists if not happy, at least calm.



By the eighth month into the grant's funding, some of the investors' calmness had evaporated. Representatives of six of the principal funding sources arrived on site. The visit was unannounced to Jafa or his staff.

The Lead Researcher's reaction was swift. He'd called a meeting of five of his most senior researchers. After he was convinced they were all on the same page on major points, he'd led the team to the conference room. The six scientists now sat across a conference table from the investors. A pair of translators occupied each end of the table.

Jafa sat in silence as he mused. His unhappiness was evident in both visage and posture. *I don't know what their agenda is. At one level I don't care what it is. However, pragmatically, I must be concerned for the continuance of the project.*

"Dr. Jernoim, we have come to view your progress and present a new target for your team." The statement, in Arabic, originated from a man in traditional *thobe*, *ghutra*, and *egal*. The researchers learned the content of the statement through one of the interpreters to the man's right.

I must be careful—bite my tongue and swallow my pride if necessary. How I reply may determine our futures--as researchers and living human beings. And, at no time will I correct one of them when they assume I have my terminal degree.

"I am pleased with our progress on the protein matrix required by the vector. We will soon be ready to being testing assembly mechanisms in vitro."

Four voices began simultaneous translations. Jafa made mental notes as he matched investor to translator. It appeared that there were two speakers of Arabic. One of the others was receiving the translation in French. His best guess for the language of the fifth was Hindi. The final pair looked politely to the Chinese translator. *But, I'm certain they are merely confirming what they had heard me say in English.*

It was the Asian duo that most worried him. *I'll pass the word to the others to speak to one another only of the science being conducted when they are within earshot of that pair.*

The Arab who'd opened the session spoke again.

"What is your timeline for production of enough product to use in the field?"

*To the point. While I wasn't expecting that question this early in the research timeline, I knew it was coming. It's time to give one of the others a chance to—*Jafa's intent to graciously *pass the talking stick* to another of his team was usurped by the oldest scientist on the team.

"When do you want to field test?" Dr. Heinrick Gunter asked.

What is he doing? Jafa did a quick visual assessment of those on his research team. *At least I'm not the only one of us shocked by Gunter's question.*

The speaker of Hindi began to reply. However, one of the two Chinese speakers interrupted him in English. The Hindi gave a polite bow and granted the only female in the room the floor.

"I have doubts about your team's ability to produce the vector you have promised," the Chinese female said. When Dr. Gunter began to interrupt, she silenced him with a hand gesture. "I will see evidence of *any* progress in this area. If you do not produce evidence by morning, my colleague and I will recommend that our government withdraw its financial support."

Without waiting for answer or argument, the two Chinese representatives left the room.



"The titer is good," Dr. Meria Brienviance said without taking her eyes off display panel on the automated titration system. "Decant the rest and we'll run it through the dispenser."

"What do you want on the label, Doctor M.?" Lead Technician Alex Collins asked.

"The expiration date should be 90-days from today."

"Check."

"What was the manufacturer's name on the last batch we sent to Togo?"

"I'd have to check, but I suspect it was NVWaWVN. That's the one we use most often on shipments to Africa." She pronounced the acronym, *Niv-Waw-Vin*. That was Dr. Brienviance's preferred pronunciation for *Nolan Vaccines When and Where Vitally Needed*. That biotech company, created and named to honor the memory of her late fiancé, Nolan Carpentano, was the team's primary vaccine producer.

"That's probably okay," Dr. Brienviance said. "But, I want the labels to look *exactly* like those we shipped the last time. Every one of those boxes got to a clinic with at least

half of the vials still intact. Whatever mojo that label has, I want it available for this shipment, too.”

“I’ll double check. We should be ready to ship by noon tomorrow.”

“Call...” Meria stopped and her brow wrinkled in thought. *What shipping company is up to carrying this shipment?*

“I’ll call International Express,” Collins said. “They’re almost always our cheapest to Africa or Asia.”

“Good. You know I think you’re a mind reader.”

“You’re not the only one—or anywhere near the first one—who believes that.”

“I’ll have to take your word on that, Alex. Before you commit to International Express, make sure they can pick up tomorrow. Too many people have died already from the virus. I don’t want more *avoidable* deaths because some shipping scheduler screws up.”

“Not a problem. I’ll make sure they’ll be by here before 5:00PM before I commit.”

“Good.” Meria turned back to her workbench and began disassembling the titration set up she’d been using. Having said her piece, and certain her requests would be handled accurately and efficiently, Dr. M turned back to her lab bench. She had other products to monitor. The vaccine being processed for shipment was only one of the dozen her team had in various stages of development and production.

Alex headed to the office. Once Dr. B started back to work the chance of further communication with her was a *very* long shot.



END OF THE SAMPLES

Here’s the link to my Amazon’s Author’s page . . .

https://www.amazon.com/C.-R.-Downing/e/BooJ29L16W/ref=dp_byline_cont_ebooks_1

In case you’re shopping for Christmas/Birthday/self-indulgent presents.