

## **The Letters of the Moons**

I arrived at Galozea, the capital city of Malagel, for a work assignment. The long season of the lunar monsoons, due to the planet's twin moons system, was finally over. As per the recently voted Climate Directives, monsoon suppression was no longer used at Malagel, allowing natural disasters to take their necessary toll and enable the cycles of life, death, and regrowth.

The Malageli, most of whom were Saturnic Daoists, accepted the Climate Directives with the same equanimity they applied to all manner of life. On my way from the space-port, observing the quiet train car, I could see echoes of the gentle religious philosophy in the demeanor of the people, and the soothing undulation of the spoken language. They all wore soft and accommodating loose garments, and cloth shoes. Everything was designed for simplicity and comfort. Looking out the window, I admired the residential structures for embracing the local vegetation -- embedded, almost integrated, within it.

What drew me to visit, a desire I harbored well before I had luckily been given my particular assignment, was the scroll hall of Galozea. The hall was famous across the galaxy for its singular treasure: an early Malageli manuscript that had yet to be deciphered. It was perplexing to linguists, computer scientists, math cryptography enthusiasts, and others. Maddening, even, that with so much code-breaking technology and knowledge of linguistic dialectology, with all the recent developments in algebraic hermetic structures, we have not been able to unveil that ancient language. Several years prior, I had poured over the digital captures of the scrolls myself, as a young student of language and galactic comparative

culture studies. To be able to look at that remaining linguistic challenge in person greatly excited me.

My job was to serve as the formal translator for a diplomatic delegation regarding Climate Directive certified irrigation systems. I know nothing about irrigation, and consider the matter rather dull, but I am a lingpath, one who has never lost the ability to integrate a new language simply by means of embedding oneself in a culture, and listening, the way children do. Most humans lose this ability by the age of ten, and most everyone else by young adulthood. About seven in ten billion never lose it, and are able to assimilate a new language in a matter of very few weeks. Across the galaxy, there are only 152 verified lingpaths. Some analysis predicts there should be another 50 or so, and I often wonder of their whereabouts.

I arrived in Malagel a few weeks ahead of the diplomatic delegation, so I could begin the process of assimilating modern Galozean. After settling down in my small and comfortable lodging, I made my way straight to the Galozea High Library, home of the scroll hall. I bought a ticket to visit the hall and stood in line. One group at a time, a dozen visitors were led to the hall entrance, to be given one of the often tedious mandatory exhibit explanations. It was to be delivered by a rather attractive Galozean library archivist named Moz, judging by the name tag. Moz's head was shaved, as was typical for Malageli scholars, a token of the monastic origins of the culture.

“Malagel was first colonized by one of the Back-To-Basics movement groups, during the Slowtravel Diaspora Era, and well before efficient space travel technology,” Moz spoke Standard Galactic, with a pleasant hint of an accent. “Ancient Galozean is one of the earliest known languages of the planet. Based on the two scrolls, the only remaining text we have, it appears to be a distinct language bearing no relationship to any of the multitude of modern

Malageli languages and dialects. No Rosetta stone was ever discovered for it, and no modern decryption model ever revealed much about its nature.

“There are ten ruins in the city, preserved as heritage sites, that have some of the same carved Galozean characters adorning them. I encourage you to visit them while in the city. Alongside the scrolls, that is all we have left of the language.

“Enter the hall to the left. We kindly ask that you do not spend more than five minutes in the scroll hall. Please do not touch the display cases. Leave through the exit doors at the back. Have a joyful visit.”

I lingered behind, a plan in mind.

“Is it pictographic, or phonetic?” I asked. I knew the answer, of course, but it was a good place to start.

“We believe the character set is phonetic,” Moz was clearly excited by the topic, “but it is unclear how many distinct ones exist. Some might be combinations of the others. You’ll note the letters are simple geometric shapes, there is nothing unusual about their form. It’s mostly straight lines intersecting at 45 and 90 degrees angles.”

“What material are the scrolls made of?” this I didn’t actually know. I might have, at some point, but forgot.

“It’s a curious alloy of palladium and rhodium, made into a long thin leaf. Actually, the thickness varies with some pattern that, while not random, is not clearly understood.”

“Thank you!”

“You’re welcome. Have a joyful visit.”

I entered the dark, narrow hall. The first thing I noticed was the crisp, dry air. Odorless, soothing, and allowing for the kind of silence that speaks of reverence. In the darkness, it was impossible to know how high the ceiling was, and it felt like the long

hallway extended up into forever. The lights strewn down the hall were small and soft, aimed solely at the scrolls themselves. Each of the two scrolls extended along one side of the hall. I very slowly made my way down that dim passageway, spending my precious minutes exploring with my eyes the way the letters flowed and interrelated. It was so much more beautiful and moving than any high resolution scan could ever be.

As soon as I exited, I circled back, bought another ticket, and arrived right back at the hall entrance, with a new group of patrons. Moz began the explanation, pausing for a moment after noticing me, and then continuing on. I stayed behind once more.

“Again?” asked Moz, looking bemused.

“Yes. Although I usually go by Eyran.”

“Would you like to see the scrolls again, Eyran?”

“Yes, please, Moz.”

“Have a joyful visit.” Moz said with a smile, hand extended towards the entrance.

After a few more rounds, and a few more clever pleasantries, we established the fact I wanted more time with the scrolls, yet posed no risk to them. I told Moz of my profession, and my peculiar scholarly interest, and Moz agreed to let me stay in the hall for as long as I wanted.

I returned every day during that first week, spending much of my time looking at the scrolls, pacing slowly, enchanted with their mystery. I had also developed a habit of making light conversation with Moz on my way in. It was mostly in relation to the scrolls, and how frustrating yet exciting it was to have such cultural inheritance and so little real knowledge of its possible meaning.

Moz was curious about the actual purpose of my visit to Malagel.

“Why are lingpaths required at all? What’s wrong with Standard Galactic, or instantaneous automated translation?”

“Ah. Good question. As it turns out, there are things we have yet to be able to capture through standardized language, or translation. Lingpaths are needed for nuance. For delicate, intricate situations. That’s because we also absorb aspects of the non-verbal language hiding within a spoken language.”

“And what exactly is so delicate and intricate about irrigation system compliance? Where is the nuance, precisely?” Moz inquired, clearly amused.

I smirked. “Admittedly, that much is not clear to me either. But I did not feel inclined to pose challenging questions when I was offered this assignment. I was more than keen for the chance to see the scrolls. And their custodians.”

Moz snorted by way of brushing off the compliment.

“Do you hope to break the cypher of the language, Eyran? Is that why you are so often here?”

“Ha. Like any student of language, I wish. Brilliant people have already failed spectacularly. The only special skill that distinguishes me requires sound-based conversations, and of course we have no idea what ancient Galozean sounded like.”

Moz replied with something intelligible.

“Pardon me?” I said.

“I asked ‘how is the assimilation of modern Galozean progressing?’ I believe I got my answer.”

“Yes,” I sighed, “A library is a library. No use eavesdropping in here. I am making nearly no progress, and I do have a job to do. I will be coming less often to see the charms of

this place...” I said, and added, a bit awkwardly, “Will you perhaps join me for a tour of the city, you know, tell me more of the cultures, new and old?”

“That would hardly help you with your progress if we speak Standard, but, tell you what, why don’t you meet me for a traditional cha drinking ceremony? The library’s cha house has a surprisingly decent selection, and they are open after hours. Mid next week should work.”

Moz went back to reading and motioned with an extended hand towards the hall entrance, the usual sign for ‘time’s up for idle chatting’. I thought there was also a blush there. Surely, there was excitement on my end.

I began spending my days walking around the city, assimilating the language. It is a peculiar process. There is no intentional attempt to remember words, phrases, or phenoms. We just somehow absorb. There’s a distinct physiological tingle lingpaths experience throughout the process, and eventually we begin to understand previously incomprehensible utterances as we transition from understanding nothing to full fluency.

At that time, I had already acquired some seventy languages. We do not know if lingpaths have a limit. The most fluent lingpath I know, my friend Amirlo, who will make sure you are aware of his achievement whether you wish to or not, currently knows 467 distinct languages. That’s admirable and a slight cause for envy among the rest of us.

My extended city walks taught me several things about the Malageli culture. It was clear they held their two moons, which they referred to as Light Dark and Dark Light, in great reverence. Small sculptures of the moons appeared in store-fronts and entrances to residential yards. Precious metals and gem-stones simulacrums of the moons, known simply as “reflections” were often worn as ornaments. This special appreciation for their moons was perhaps symbolically related to the most unusual aspect of the population, which was that all

Malageli were born as monozygotic twins. Many could be seen walking together, and to my surprise, often holding hands.

One of the first Galocean phrases that unfogged for me was a popular greeting I observed, where one person holding their hands together at heart's level to form a sphere, fingertips touching, would say something akin to "May the two be with you", and the other, returning the same gesture, will reply with "For the two are one", and both would, with intentional synchronization, detach the tips of their fingers, undoing the sphere, and slowly drop their arms to their sides.

When I next met Moz, I repeated the gesture, and the archivist returned it, clearly pleased. The cha ceremony involved intricate pouring of wonderfully aromatic liquids through sieves and small containers, which Moz expertly did while rattling off answers to my many questions.

"Will you tell me of the origins of the twinning phenomenon?" I asked.

"Of course. All visitors are endlessly fascinated by that. Well, as you probably know all of us share this genetic trait. How it came to be is shrouded in a fair amount of mystery, and it's all quite murky. I personally think it's more myth than history. The prevalent theory is that the head scientist for the original colonization mission carried that dominant mutation."

"And what, managed to impregnate all the women?"

Moz smiled, and said with an air of mystery, "Perhaps he transformed the expedition into some form of a cult. It's a controversial theory, for many reasons. It sure is the juiciest one."

"Are there competing speculations?"

“A much more dull one is that they resorted to genetic engineering to allow for rapid population growth. There is a geologically and archaeologically verified flood event that may have decimated a very large portion of the colony.”

“I admit I am very addicted to playing a silly game of trying to identify twins on the streets, as they do seem to often accompany one another.”

“It’s a fun game, isn’t it? Yes, we are very close to our twins. In body, but also in mind and spirit. Completing each other’s sentences and such, as the cliché goes.”

“What does your twin do?”

Moz paused, taking a delicate sip from the tiny cup. The usual cheerful demeanor retreated.

“My twin passed away several years ago. We were in many ways similar, but also opposite. Miv couldn’t find happiness.”

“Goodness, I’m so very sorry, Moz,” I stammered, “I cannot begin to imagine how hard that must be.”

Indeed, the depth of such tragedy seemed completely impossible to guess at. To not just lose a special kind of kinship, but to reside in a place where everyone else is twinned seemed like an impossibly dark predicament. It made Moz’s buoyant personality that much more admirable.

“It is very lonely, Eyran. Most days I am joyful. Grateful to be alive. Some days I simply feel like a broken half of a thing that cannot be put back together again.”

The silence stretched between us for a long moment, until Moz artfully found a new thread back to a less sombre conversation.

Meandering through the streets and courts of the city in the days that followed, I was particularly drawn to the ancient ruin sites. Tourist attractions are never the best of places for



assimilation, due to the mixture of languages, a cacophony of Babylonian scale, but no matter where I set out for, I found myself arriving at one of these sites. In each, there were two large obelisks, one made of white marble, the other of black volcanic rock. Both obelisks had exactly one character carved onto them, at eye level.

What had made it all unfold was a mild monsoon-like storm that erupted when I was at the site I thought of as “X” - for its carved letter resembled that symbol. I was standing between the columns when the thunder rolled, thick warm rain began to rapidly fall from the skies, and everyone scattered to take cover. It had been a humid day, I was quite sweaty, and was refreshed by the downpour. I remained standing in the rain with childish glee. Alone at the ruin site, the only sound that of heavy rain drops, I was filled with an inexplicable wave of joy. Without much thinking, I lifted my arms to the sky, and stood there, legs apart, face up, eyes closed, smiling moronically, awash in that awareness, the happiness of simply being alive.

That was when I heard the hum.

Startled, I immediately opened my eyes, and lowered my arms, while looking around with some alarm. The sound stopped. Tentatively, I raised my arms again. Silence, but the rain. I lifted my head up - and there it was, again. I tried shifting the angle of my stance. The sound dimmed away.

I was turning on and off a sound system I could not identify. I was dimly aware that at a distance, the tourists and locals were looking at me, puzzled.

Lingpaths are, as one can easily surmise, musically inclined. We tend to have perfect pitch. We are aware of rhythm, timbre, frequency, and amplitude in a manner that musicians understand well. Sound is a more important sense for us than sight. I knew this hum was composed of two distinct frequencies. A simple two-toned chord.

I was perplexed.

Then, a theory, crazy as it might be, began unfurling within me.

I made my way as quickly as I could to the nearest site, one I thought of as “T”. The rain had dwindled a bit, but was still coming down. I was soaked through and through, too excited to care. I rushed to the obelisks. I assumed the same wide stance, lifted my arms, head up. Nothing.

I tried a few more times to elicit the hum, and then brought my feet back together and dropped my hands down. Disappointed, I stared at my feet.

A sound emerged. This one was a single frequency, not a chord, different from the previous one. I lifted my head, and as before, the change in posture made the sound disappear. This sound was elicited by a different pose, then.

I rushed to site “Y”. I knew what to do. I stood, legs together, arms stretched upwards at an angle. Face up. As I expected, it was a two-chord sound. Composed of the frequency of “T”, and the higher of the two frequencies of “X”. My hypothesis was confirmed, then. All three sites produced a hum to the simple alignment of my posture that mimicked their letter’s shape.

I was not nearly as curious about the mechanism triggering the humming as I was about the implications of my discovery. To test my theory, I needed to map all the letters to their tones. Confirming all the frequencies required a few more days of thrill. I had to wait for moments of absence of human noise to be able to hear the hums. The simplest tactic was to go very early in the day, or just before dusk. I am slightly ashamed to admit I trespassed on one of the sites, well after closing hours, jumping over the low shrubbery that was meant as a gentle fence. It felt justified, following a frustrating day of waiting to no avail for the crowds to disperse or at least be quiet.

Soon, I had a mapping of all the single frequencies and the answer to the question of the number of symbols of the alphabet. I went back to the library.

“Eyran! There you are. I thought you had decided my cha brewing was too awful to ever talk to me again.”

I ignored the tease, too eager to share the news, and told Moz of my recent discoveries. I was glad to see the archivist’s eyes widen in excitement, clearly as ignited by the finding as I was.

“I have this idea, Moz. You might think it’s crazy, but I really believe we’ll make real progress towards unlocking the scrolls.”

“What is it you have in mind?”

“Can we go to the scroll hall? And hum?”

“Hum?” Moz asked with obvious skepticism, and perhaps some amusement.

“Well, I guess whistling might work as well, but humming seems more pragmatic, I’m not much of a whistler.”

“Eyran, friend, this is a library.”

“Yes, I know! Will you come hum with me? I cannot make the chord sounds all by myself.”

“Ah, yes. I see...of course....you think as we hum the letters, this will engage your special lingpathy talent? And you’ll understand the language?”

“Exactly!” I was very pleased with Moz’s sharpness.

“What’s the problem with sitting outside in the nice warm sun and reading from a scan? Why do we need to be in the hall itself?”

“I tried that,” I admitted, sheepishly. I even recorded my own voice, to get the chords.

“It didn’t work.”

“Hmm. So you think it will work with the actual scrolls? Why? What’s the mechanism?” I was very annoyed with Moz’s sharpness.

“I have no clue. I also don’t know how the hum is generated at the sites, there’s much here I don’t understand. But I’ve the strangest sense the humming must be done with the original scrolls. It’s worth a try, no?”

For what seemed like a very long moment, Moz said nothing, considering my unusual request. I was afraid of getting the reasonable answer -- submit a proposal, fill some forms, present the findings to this committee and that quorum, and on and on. I was much too eager for proper scholarly protocols. Not while knowing I was that close to a discovery.

“Well, then. Let’s see about this humming, Eyran,” Moz said, to my relief.

With practiced calmness, a smile, and a subtle hand gesture that kindly indicated ‘No Entry’, within a few minutes Moz managed to get all visitors to leave. The archivist signaled for me to enter, and locked the door behind us.

“Now what?” came the bemused question.

I quickly hummed the basic frequencies to Moz, while pointing at their corresponding symbols. I then explained how I thought we could read out loud the scrolls by simultaneously hummings the two frequencies of the two-chords letters. As I laid out these instructions, I realized if Moz had no musical tendencies or even worse, was tone-deaf, this could be painful, to say the least.

“Moz...can you carry a tune?” I asked nervously.

“I have perfect pitch.”

I sighed in relief. What a bit of good luck, indeed. Moz snorted. It was obvious the archivist found it all quite entertaining.

“Shall we just give this carefully crafted plan of yours a go, Eyran?”

We began. Perfect pitch or not, it was slow going at first, but as we continued to hum, we became more synchronized and made fewer mistakes. The sequences yielded pleasant sounds. It wasn't exactly what I would call music, but it was not random, either. The chords made for simple and beautiful harmonies. I already knew that from my own attempts, but doing it alongside Moz felt considerably more satisfying. I was losing myself in the ways the tones interlaced, drew apart, complemented each other and connected together. There was beauty to it that was unfamiliar to me, distinctly different from all those many languages I knew. It was blissful.

And what more, it was clearly working. That was far more obvious to me than it might have been for Moz. I knew it because I was feeling the tingle, the very familiar tingle, of my strange and rare neurological pathway awakening to a new language to assimilate.

It was an uncanny experience. The first and only time in which I was eavesdropping on myself. Myself and the archivist. I felt like we were two children caught in some juvenile act, juvenile and so very exciting.

That first afternoon we spent perhaps 15 minutes before professional conduct caught up with Moz, who rightfully asserted we really must let the other patrons in. I did not argue. I did not yet know what the scrolls would say, but I expected it would just be a matter of time until I knew and that filled me with sweet and feverish anticipation.

Impatient, barely containing my enthusiasm, I waited. Moz and I agreed I could come again at the end of the day, just before visiting hours were over. When the time came, Moz locked the scroll hall door behind us once more, and we continued our strange singing. I was so immersed in my need to hear the 'words' that I paid little attention to wondering what was keeping Moz there, humming in unison. In retrospect, I should have realized there was a

reason why the archivist was so engaged, beyond scholarly curiosity, or what I hoped was my pleasant company.

“Come tomorrow midday, we close for a time to take our break,” Moz said before we parted, an hour later.

The next day, at noon, just as the last two visitors were leaving the room to comply with the archivists’ kind gestures, one of them muttered something to the other in their native tongue, likely assured only their companion would understand it. It was a language from the planet of Zetooen, where I had formerly done some translation work, and so I understood the rather lewd joke. I smiled to myself.

I heard the archivist chuckle.

“You speak Yali-Zeto?” I asked, surprised.

“Well, not really. I don’t get much chance to speak it. I mostly understand it.”

“How come?”

“You work here long enough, you pick up a lot of languages.”

“You mean all library staff are polyglots?” I asked, even more surprised.

“Hm...no, I guess not really. I do have a knack, I’ve been told.”

I didn’t think this was just a knack. I asked Moz a few more questions, and the answers made it patently clear that the young archivist was, indeed, an undiscovered fellow lingpath. Moz possessed a rare and wonderful gift, yet was completely unaware of it.

It was a thrilling piece of news. It’s not every day that we find a new lingpath. My brain was already rushing forward, making plans to introduce the archivist to the guild, and perhaps to a different life, where worlds, traditions, languages, cultures would unfold and be available for Moz to explore. I gushed a bit at the discovery, as I was already quite charmed with Moz, and it brought my sense of our kinship to a whole new level. But as excited as I

was, the task of historical proportions we were undertaking took precedence, and captured the bulk of my attention.

Over the next few days we spent every available moment locked in the hall. When the archivist could spare more time after closing hours, we would excitedly debate the nature of this curious two-speaking pattern and its possible implications. It didn't seem like it was just a property of the scrolls, we both agreed it must have been a deep aspect of the language, of the culture. But how did it work? How did people engage in conversation if there were certain words they couldn't pronounce when by themselves? Or, were they able to somehow produce chords themselves, without a second person, and if so, how?

I wondered who would assimilate the language first, Moz or myself, and was excited for the archivist to experience this wonderful phenomena as a deliberate and intentional act. Whether I wished for it or not, I was becoming fond of Moz, perhaps too fond. Travelling as much as I did, there was little point in getting attached to anyone, and it was never my habit to do so. Our growing closeness was turning into a professional hazard. An extremely enjoyable one. I made sure to hold myself back.

It was perhaps two weeks into our intense musical adventures, over a modest lunch at what had become our favorite spot, the library's cha house, that Moz offered the rattling observation that set off the final stage of the process.

"How do you suppose people divided who said what, for chordial words?" Moz asked.

"How did we decide, when we began our humming of the scrolls?"

"You took the lower frequencies. We never really gave it much thought."

"Yes, we never did."

"Eyran, I wonder if the fact my people have always been twinned is the key."

“How do you mean?”

“This is a language that can only be spoken by two. There is no way around it. Twins are tied together in a bond stronger than all others. I often had similar thoughts and ideas as my twin did. Saw things the same way. Everyone here is a twin. Everyone learns to speak their first words and sentences alongside their twin, we are always in twos. Perhaps that’s how the language was spoken, how it evolved.”

“Are you saying they were never alone? What if they wanted to be by themselves for a bit? What if some adventurous teenager wished to sneak out at night, as teenagers do, to make out with the hot new kid whose family just moved to town?”

“Hot new kids. Not kid. You forget. There’s a balance, another person on the other side. My twin and I always fell in love with twins. That’s how people tend to marry at Malagel...” Moz's voice wandered off. I waited, knowing silence was the only appropriate response.

“What if those ancient Malageli twins never wanted to be alone?” Moz continued, “For them being alone would mean losing the ability to talk, maybe even think.”

“That’s...fascinating.” I felt that I was only beginning to comprehend the implications of the language, the potential it harboured, the closeness it allowed. At the same time, I was also sensing the smallest glimpse of the depth of Moz’s own loss.

I reached out and held Moz’s delicate hand in mine. Moz looked, in wonder, but did not pull away from my touch.

“Yes,” Moz said. “That’s so very fascinating.”

I felt the tingle in a way I’ve never experienced it before. Not as a mild sign, or a weak signal, but as an all consuming energy, washing through my being. Moz was looking at me intently, and I could tell the archivist was affected as well.



We both understood what had happened at the same moment, I think. We realized we were no longer speaking Galactic.

We were talking in ancient Galozean. We weren't exchanging sentences. We were sharing them, co-creating them. We were jointly creating our thoughts. It was a tantalizing experience, thinking together, alongside another human, through the experience of talking.

I no longer wished to hold back. I doubt I could have. I leaned over and allowed myself to do what I had fantasized of doing for days.

I kissed Moz, eagerly, deeply, fully. I felt wonder rush through me, down, and up, swirling, mesmerizing. I felt a sense of connection and belonging I have never felt before.

"I was hoping/scared of that" I blurted. Except, I didn't speak the words. We both spoke them. Intertwining through the words, we were saying together, at the same time, two contradictory things we both felt to be true.

I understood. Or perhaps, we understood that deeper aspect of ancient Galozean. In a two-think language, two can inherently hold and simultaneously express contradictory thoughts, conflicting points of view. It allowed an elegant and softer way to respect the simple truth: most of our thoughts are nuanced, sometimes paradoxically opposite. Galozean allowed communicating with ease and eloquence the two sides of things -- the light, and the dark, as one. That was why previous attempts failed at deciphering this code. There was no prior expertise, human or artificial, to deal with embodied duality of expression, of thought, held in parallel, rather than sequentially.

Breathless, holding hands, confused and bewildered by this new way of communicating and sharing, by the silent monsoon of emotions, by a dead language now alive, we walked back to the scroll hall to uncover together, two as one, a secret of ancient

wisdom that has eluded humanity, a secret that expanded beyond just a language, a secret we were only beginning to understand.

At the scroll hall, once again, as we did so many times before, we hummed the story of the scrolls, and this time we knew what they were humming back to us.

They began with “May the two be with you, for the two are one.”