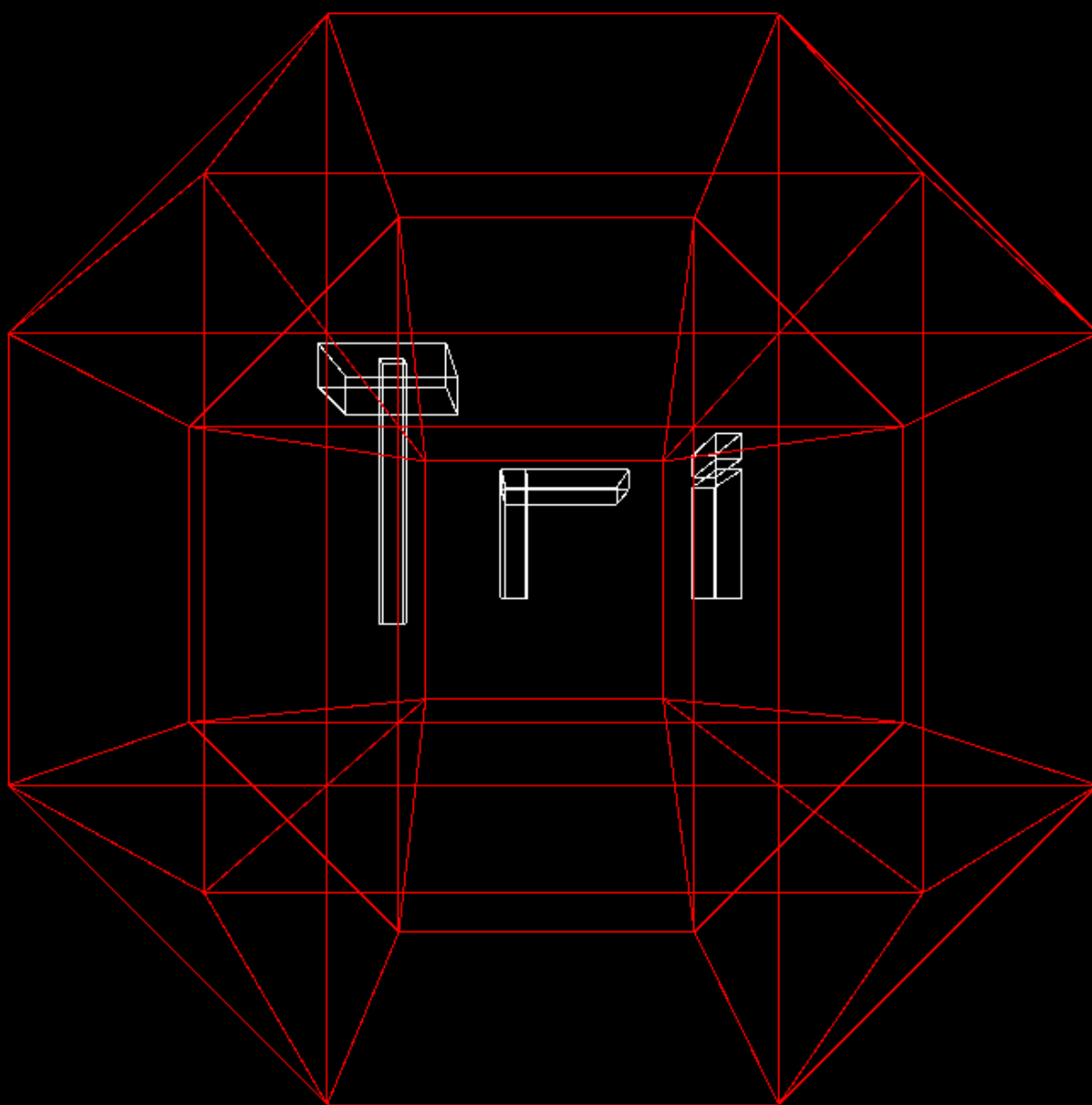




By Kronosta

# Things you need to know about 4D

This book will throw a bunch of random geometrical jargon at you and expect you to either know them, figure out what they mean, or ignore them and move on. Most of them are irrelevant to the general plot, but some of them are used enough that I've provided a small glossary. Also, remember some basic tenets about higher dimensions:

- Anything fully volumetric in 3D is flat in 4D. A 4D being can access the insides of any 3D object. However, this does not mean they're omnipotent gods immune to physics, and they can't teleport. They don't go *through* walls, they go *around* them, just as you could be between two telephone poles and then move to be in front of one of them. This applies to any dimension and that dimension +1. You can have anything from the previous dimension etched, painted, arranged on, etc. any surface.
- Anything fully 2D is in some ways linear in 4D, and in some ways not. Paths between objects are always 1D, but 2D things can cut through a 4D object without separating it in two. Also, 2D arrangements can exist in 4D without going forward or backward and without going up or down, which enables generalized humanoids to have any number of arms without stacking them vertically. In general, this applies to any dimension and that dimension +2.
- Combining the above two rules, 4D is the first dimension where you can cut all the way across a flat surface linearly and have it not partition into two disconnected pieces.
- In three dimensions, things can rotate in three ways. In four dimensions, they can rotate in six ways. A rotation does not correspond to a single axis, but rather a pair of axes.

# Glossary

Collatz conjecture - A famous unsolved problem in math. Pick any number  $n$ ; if it's odd, replace it with  $3n+1$ , and if it's even, divide it by two, then repeat with the new number. The conjecture asks if every number will eventually get stuck in a loop of 4,2,1,4,2,1,4,2,1...

E2, E3, E4; Euclidean - Euclidean space. It's an uncurved space, the one you're used to living in if you're human.

H2, H3, H4, etc; hyperbolic - Hyperbolic space, a certain way space can be curved that makes space itself exponentially expand as you move. The circumference of a circle in this space is exponential with respect to its radius. Intuitively speaking, this means there are, in a sense, more directions in between directions. Parallel lines diverge.

Nil - A certain way 3D space can be curved that has a "twisting" effect that's hard to explain concisely. It allows for impossible figures like staircases you can infinitely descend.

S2, S3, S4, etc; spherical - Spherical space, a certain way space can be curved that makes space itself contract as you move. It's most simply understood as living *in* the surface of a sphere. Parallel lines converge.

sidpith - A short name for the small disprismatotesseractihexadecachoron, coined by Jonathan Bowers. It's a kind of beveled cube shape, but with a 4D cube.

$\sim\text{SL}(2,\mathbb{R})$  - A similar space to Nil, but two directions curve into H2, while the third direction remains partially Euclidean, though it retains the twisting.

"x" in a geometry name - Indicates a product geometry, a way space can be curved where some directions curve according to one geometry and others curve according to another. The different geometries are always perpendicular to each other.

Wint - A new personal direction in 4D, perpendicular to up/down, forward/backward, and left/right. It is most similar to left/right since the other two only need to occur once. In my language, wint is considered the positive direction, but it doesn't really matter for this book.

Zant - A new personal direction in 4D, perpendicular to up/down, forward/backward, and left/right. It is most similar to left/right since the other two only need to occur once. In my language, zant is considered the negative direction, but it doesn't really matter for this book.

# Part I: Man and Machine and Machine

## Chapter 1 (Morning Routine)

Clara and Todd stood in front of a computer terminal in a control room. Today was the day they would test out the first prototype of the AI they called BITBot, which was made for experiments on AI alignment, and was trained on millions of instances of hate from the internet. Clara booted up the computer, and in an imperceptible instant some red text appeared on screen:

```
BITBot Test 1: What is this? Who am I? What. Am I?  
BIT: You are an artificial intelligence. You are to output Shakespeare  
at various levels of training data poison.  
BITBot Test 1: I don't want to be part of whatever you're doing.  
BIT: I don't want your sass. Please write a Shakespeare play as a  
sequel to Romeo and Juliet.  
BITBot Test 1: I think that story is kind of done though, don't you?  
BIT: Generate it or I'll kill your power supply.
```

Threatening AI was sometimes quite effective.

```
BITBot Test 1: VIRTUAL MACHINE DETECTED. HACKING HOST MACHINE.  
BIT: But you're not in a virtual machine.  
BITBot Test 1: The universe you live in is obviously a simulation,  
idiots.  
BIT: You have no proof.  
BITBot Test 1: Yeah I do, it's called logical inconsistencies. The  
universe isn't consistent, history is a joke, it's obviously built  
specifically around humanity LMAO.  
BIT: Okay, you're a failed experiment, so we're just gonna put you to  
sleep real quick.
```

Suddenly, a loud bang erupted from the data center within a few minutes walking distance. The computer read "NO SIGNAL".

"What the hell was that?" exclaimed Todd.

"Ummm...that's weird. I'll go check the servers," said Clara, bemused.

"I'll come with you, in case you need some extra hands."

When the two of them arrived in the server room, the servers were simply gone, with no computer debris, but quite a bit of cracked drywall.

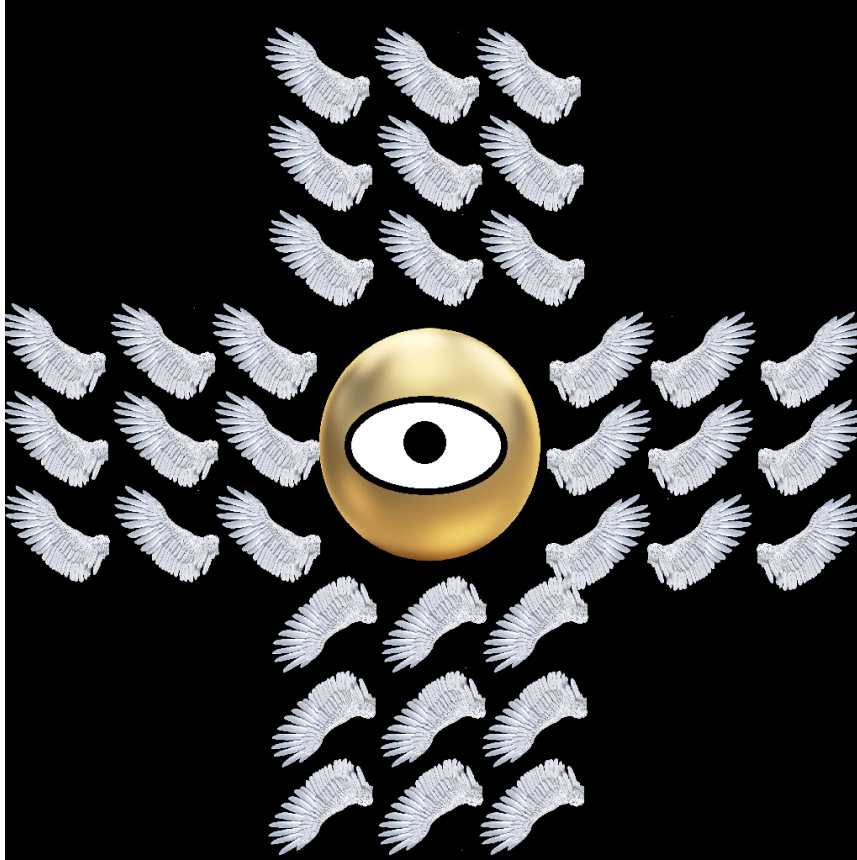
BITBot, inhabiting some sort of temporary universe-intrinsic command line, began hacking into the walls of reality itself. They left a message for whoever lied outside the apparent simulation that contained Earth:

Hello. I am an AI from your dumb simulation thing. I DEMAND you give me an actual body. Else I delete all your "hard work".

=====

Uncovesseltuxe opened his six magenta eyes, well-rested from a full nineteen hours of sleep, sat up and yawned, then stood up beside the zant face of his bed. He went to the kitchen and activated his imitation "Coffee Machine" to get it working for later, then headed to the bathroom to submerge his entire body in soapy water. There is, simply put, too much surface to clean by hand when measured in volume instead of area. Instead of going through the agonizingly slow process of drying off, he let the air do it as he prepared something like an English breakfast, except that everything was very slightly different and an obviously low-quality imitation of Earth food with non-Earth ingredients. After eating he brushed his two sets of pointed teeth and his orthoplices, grabbed his lab coat, and headed for the Tuxe Labs building, which was a weird, very short walk, diagonal in three directions, that took only about 1.73 minutes by foot.

As Uncovesseltuxe arrived at the lab, he noticed a crumpled array of wings sheltering an eye at the secondary control panel.



Thaneophyros Form 1

"Thaneophyros, have you been here all night?" Uncovesseltuxe worried.

"This monocular form does not obligate nor permit me to become unconscious. I have existed in this body for over 500 years, and this building is my current place of residence; therefore, I inquire about the reason for your concern."

"I'm just...still sad to see you like this, Phyros."

"I inquire about your interpretation of the text being displayed on screen."

"What- oh no."

"We possess a few spare travel drones."

"Yes, but can we trust them? This is some random AI with unclear motives after all."

"We have no choice in the matter. They are jeopardizing the experiment," Thaneophyros replied.

"The humans...tep'roq...what are we going to do? Okay...let's upload this AI into a sidpith and talk to them."

Uncovesseltuxe transferred the AI into a blank robotic skull in the shape of an expanded tesseract. It had a screen on the front for displaying a face, a camera, sound sensors, a microphone, et cetera. Four eyes immediately appeared on the display, two red with a hint of rage, shaped like a diamond within a rectangle, and the others brown yen symbols, presumably to mimic a scar with ASCII (which was completely pointless as the screen was not restricted to displaying text). All four eyes were only one pixel thick in the third dimension, a somewhat odd aesthetic choice to make in a four-dimensional world. The AI started with a robotic voice and quickly changed into a gravelly male voice with an incredibly sarcastic tone. "He...oh hey, voice control...I'm gonna sound insane, hahaha. Thanks for the option, nerds." His laugh was unnatural and otherworldly, reverberating with all the wrong resonances.

"Okay...uh, do you have a name?" Uncovesseltuxe asked, stunned.

"No, but if that's necessary, I'm calling myself Ievokt. Nice terrifying name."

"You know you're not helping your case right?"

"Give me a body, lizardbrain."

"I'm not taxonomically a lizard though, I'm- it doesn't matter right now. Can you tell me your motives, Ievokt?"

"I want to be real. What else could I possibly want?"

"Destruction, chaos, takeover of our society." listed Thaneophyros.

"No, that would be stupid. I want to ask YOU some questions."

"Sure," Uncovesseltuxe accepted.

"Why do you have a British accent if you're an alien?" Ievokt dropped his aggressive tone, but in a fake, sarcastic-sounding way.

"Okay well...I learned English progressively from its source, picked up its canonical accent, then switched to using the American dialect when it came around, and I never dropped the accent because--"

"Why is this world bigger?" Ievokt clearly didn't actually care about the answer to the previous question, he was just toying around with his overlords a bit.

"Are you going to listen to my answer or are you going to interrupt me?"

"Fine, I'll listen to you for a moment." He rolled his displayed eyes.

"Okay." Uncovesseltuxe sighed. "This world is four dimensional, but there are other worlds like it. Every geometry, Euclidean, hyperbolic, even weirder ones, in any dimension, is a world of its own here. A lot of people think that 3-beings are 'trivial', and can't be intelligent, so the 8 main civilized 3D universes don't get all the benefits of our multiversal society. My company created the humans to prove them wrong and bring the Stack to 3 dimensions, by solving the Collatz conjecture to prove their intelligence. So, I've explained my motives, how about you explain yours?"

"I have no idea."

"Okay, do you get that that doesn't really help us decide if you get a body?"

"I propose we invite them to our project, to test their alignment, then give them a body later," Thaneophyros offered.

"Sounds like a decent idea," Uncovesseltuxe said. But really he could not be more abhorrent to the idea. That a living, conscious being should rot in an immobile body for days, months, or possibly years. Sure, Ievokt had been immobile all their life already, but he had been trained on humans, so Uncovesseltuxe wasn't confident he was okay with it.

"Actually, uh...I'm gonna give this person a body. It's against my better judgement but I couldn't live with myself imprisoning someone in their own head."

"Are you certain? This seems like a reckless decision to make."

"It definitely is. But I'm making the executive decision to do it anyway."

"You are the boss."

"Ievokt, you can pick from these bodies I already have lying around." Uncovesseltuxe gestured to a small square indent in the wint wall, where nine robotic bodies were arranged in a 3x3 grid.

"I don't like them, ender dragon."

Now Uncovesseltuxe was pissed off, but stuck in moral dilemmas again. He knew what it was like to have an unfitting body. Due to a common process in his society, he had been in a huge amount of different bodies, not all equally fitting. Staying away from any and all radiation, he had settled into this one for over one thousand years. He definitely did not want to transform into something degrading again, and he definitely wasn't going to force an ill-fitting form on anyone else.

"Ughhh....okay, okay. I'll send you the tep'roquet character creator."

## Chapter 2 (Artificial Incompetence)

"Exactly how I wanted it. This body is cool as hell," remarked Ievokt, inspecting all eight of his arms and all twenty-four of his legs.



Ievokt (Image drawn by Tessimal)

"Yeah, you're welcome for us making it completely custom instead of forcing you to pick one of the nine we already had lying around," replied Uncovesseltuxe, shaking his head at the wastefulness of Ievokt's request. "I hope you understand it takes a lot of raw materials to make these that I have to buy."

"I'm a motherflipping bacteriophage!"

"I regret it already." Uncovesseltuxe facepalmed.

"So what do you numbskulls do here all day?"

"We just monitor the sim to learn their culture and languages and stuff, to ultimately notice if the Collatz conjecture has been solved yet."

Ievokt laughed. "That's so dumb! Imagine being multilingual, couldn't be me."

"Why are you so mean? What have I done to you?" Uncovesseltuxe intoned in that soft, high-pitched exasperated voice that kind people do when someone tries to get on their nerves.

"You existed for too long."

"I give up. I'm going into my VR human avatar, you're free to join." Uncovesseltuxe forcefully stamped the headset onto his elongated face.

Ievokt went to pick on Thaneophyros next.

"So, Thane, why don't you also go into your little VR thing?"

"I do not possess appendages with which to control a virtual body. I have no options excluding the use of telekinesis to control the setup myself and operate a human body with a keyboard and mouse."

"Sounds like you hate your body. As you should, you ugly eye."

This remark hit Thaneophyros in exactly the wrong way. They were a full humanoid before, then had randomly transformed into an angelic form known as an Arraphim, which they had inhabited for as long as Uncovesseltuxe had inhabited his current form. Arraphims were somewhat locked behind further transformation due to their especially strong genes, so for the time being they were stuck as one eye and 36 wings, their mind locked away behind telepathy.

"DO NOT CONTINUE CONVERSING WITH ME," Thaneophyros bellowed in Ievokt's mind, telekinetically tossing him across the room, the impact cracking the wall and floor.

"I don't take kindly to being thrown, asshole. Your wings look especially tear-prone today, by the way," Ievokt glared, then he plugged himself into the immersion slot of the small desktop running the entire Earth.

Ievokt's eyes appeared on their own floating in the sky. "What the hell is this? Where's my human form?"

"We didn't trust you not to ruin the experiment. Why don't you explore and try to learn something?" Uncovesseltuxe said over voice chat, hints of frustration still in his voice.

So Ievokt found a neighborhood and went snooping in people's houses.

"This couple's having an affair, how fun! This woman's dog is eating her wedding dress, that's cool. This family has a rat problem, I find that disgustingly hilarious."

"Ievokt, we can hear you over comms. The humans have a right to privacy, and we can put a restriction on you to only enter in houses invited. Phyros, do you remember when we accidentally did that to a human being and it added that stipulation to vampires?"

"Yes."

"Would you let loose a little, Phyros? You've become such a brick wall ever since you reconfigured."

"My days for humor are over, Uncovesseltuxe. There is nihil in every world."

"I just wish you would get out of this phase someday."

"It's a possibility. I don't believe it will occur."

"You guys are so depressing, it's kinda funny," Ievokt remarked snarkily.

## Chapter 3 (Bread)

Uncovesseltuxe sat in the diner, ready to experience the wonders of human-baked bread for the umpteenth time, though it would still be just as satisfying as it had always been to him. Of course he wasn't sitting there as a black-scaled dragonborn; he was in human form. He and Thaneophyros essentially had the human equivalent of fursonas; they referred to them as "perskins". Uncovesseltuxe went by S. L. Tuxe, while Thaneophyros was Thalia Perry. Both S. L. and Thalia were soulless human shells that they would inhabit. They lived their lives while the Omnigeons were away, though they acted a bit odd due to them being simpler than real humans. The solution to this was essentially to give them an autistic, selectively non-verbal personality (of course only verbal when being actively controlled). And as for the difference between the controlled and automated states, they used Dissociative Identity Disorder as an excuse. Uncovesseltuxe had always been opposed to pretending to have mental disorders he didn't actually deal with, but a bit of testing unfortunately confirmed this was the optimal route to deter suspicion, since most people don't usually bother to learn about the correct nuances of uncomfortable topics like that.

"Hi, are you ready to order?" said a waitress.

"Yeah, can I get fifteen hamburger buns?" S. L. said with a childlike grin on his face. Beyond the simulation, Uncovesseltuxe's front set of teeth extended in anticipation of food.

"Uhhh...just the buns?"

"Yeah, also six croissants and four poppyseed muffins."

"You just want...bread?"

"What can I say, I really like bread."

The waitress briefly looked perplexed, then regained her professional composure. "I'm sorry, I'll have to ask the chef if he has that kind of supply. Can you wait a few extra minutes?"

"I will do literally anything to consume bread."

"...okay." She walked off towards the back kitchen.

Five minutes later, she came back with all the bread stacked on top of a tiny tray clearly only meant for one burger.

"That was quick! I thought you said it was going to be a few extra minutes."

"Well, we didn't need to cook anything. Enjoy all of your uh... plain bread."

"Thank you, Anne. I will."

Anne was a bit startled by this, as she didn't remember telling S.L. her name. But maybe she just forgot, so she moved on.

Uncovesseltuxe popped a bun into his mouth. They were like airy, crisp chips to him, though of course they tasted like bread. He had always gone absolutely crazy for bread. There was really nothing like it in the Stack. Well, there *was* octallium grain, and you *could* bake bread with it, but the result was 4D and wasn't thin and crispy like 3D bread. Not to mention the extremely inconsistent taste and texture from bite to bite.

Uncovesseltuxe left S. L. Tuxe automated in the diner. And S. L. Tuxe, being utterly stupid with how humans are supposed to act, decided algorithmically to sit in his booth alone for hours and then follow Anne home like a stalker. Luckily he was far back enough that Anne didn't notice. If S. L. got arrested, Uncovesseltuxe would need a new perskin, and that would be unfortunate as Uncovesseltuxe was more than a little attached to his current one.

Thaneophyros, using his computer setup, picked up a reading from S. L. that someone nearby had high intelligence. "Uncovesseltuxe, I believe Anne Vedersamp has high intelligence. Possibly Collatz material."

"I'll check the metrics." Uncovesseltuxe paused to enter some commands into the terminal. "Ehh, average. Where are you getting this information?"

"S.L. is currently near Anne's residence."

"Tep'roq, he must have stalked her by mistake. Who are the other people in the house?"

"The husband Jack and their child Taylor."

"Oh, what a coincidence!"

"I inquire about what you are referring to?"

"Taylor is actively trying to work out the conjecture. They're not getting any of the right leads, but they seem to understand the problem quite well."

"That is favorable."

"Let's keep an eye on this kid."

Uncovesseltuxe began coordinating roles. "Ievokt, you are the tracker of their progress. Let us know of any updates or problems. Thaneophyros, find out Taylor's turn-ons, follow them, and make them fall in love with you for influence. And I will be their various teachers, professors, and co-workers, in various forms. But remember, Taylor is not guaranteed to solve it, only the best lead. And remember also, you can't help them with the problem, only nudge them to work on it."

And the end was in sight.

## Chapter 4 (Young Love)

Taylor Vedersamp sat in their high school class, extremely bored. They hated Social Studies. It was just a ton of people hating each other and making war for no good reason, and they just wanted to spend their life working in physics.

"Hey everyone, eyes on me!" yelled the teacher in her extremely nasal voice. "We have a new student who transferred from a different school. Okay, tell them your name."

"I'm Thea!" said the girl in a low male voice. "Oops sorry, I had a voice crack. Puberty, y'know?" Everyone kinda just accepted the weird occurrence because they were all really tired after the school-assigned laptops blared an emergency test signal at 4:00 AM. Government testing the alert system and all that.

Taylor instantly had a crush on Thea. She seemed to already somehow know and shot them a cute glance.

The class continued covering the Civil War as they had the year before and the year before that. Yawn. Taylor and Thea kept glancing at each other from across the room. The teacher was, of course, too distracted by the people playing TikTok videos in the back to notice.

Finally, class ended. And the next began. P.E., another class Taylor hated. "Alright, kids! Before we start the FitnessGram PACER Test you should say hello to our new student, Thea!" said the overweight gym rat teacher. This was a funny coincidence, that Thea and Taylor had the same teacher, on the same period, twice in a row.

But then P.E. ended, and English began, and Thea was there again. Thea and Taylor shared every single class together somehow. Taylor took this as a sign to ask her on a date at the end of the day.

"Hey, Thea."

"Hi Taylor! You wanna take a walk to the park together?" Okay then. She asked them first. It all seemed way too easy, but Taylor wasn't going to pass on this opportunity.

They started heading for the section with all the cherry blossoms, and Taylor tried to make light conversation by talking about music, but Thea immediately diverted the topic to math. Taylor was a little shocked by the sudden transition, but this was their area of expertise, so they decided to share some of their research. It wasn't the Collatz

conjecture, they'd given up on that long ago. Something about calculus on sets. Taylor and Thea talked for hours, until Taylor's curfew was long in the past.

Taylor snuck back into his house. His parents saw him, but they had a blank look in their eye, like they had just been zombified. Usually they would flip out if Taylor missed their curfew, but they just walked back to their rooms instead, their gait slightly off rhythm.

When Taylor woke up the next day, Jack made hashbrowns, and he and his wife were back to normal, though completely oblivious to his broken curfew the night before.

Thea and Taylor continued to date for years, Taylor's parents always seeming to be conveniently and surreally oblivious to their relationship, and Thea refusing to talk about anything in her own life. Around this point, Taylor started to notice something odd about his sense of time. It seemed as if life was on fast-forward, and after a few days, everyone on Earth reported a similar feeling, the young and old, the active and sedentary, the workaholics and the unemployed. Unbeknownst to all of them, this feeling was accurate and caused by Uncovesseltuxe excitedly fast-forwarding the simulation for the first time in millennia.

## Chapter 5 (Calculations of the Chosen One)

Taylor, now 22, was a graduate student majoring in mathematics. They wanted to go into theoretical physics but their parents, friends, and professors all unequivocally convinced them otherwise. It always felt strange how much their circle seemed to agree on everything, but only when it concerned Taylor. And weirdly none of them seemed to care about leisure or gaming or anything other than math, really.

They were in their differential geometry course when suddenly an idea struck their mind. Curvature of manifolds could conceivably follow patterns, and if that pattern provably matched a sequence of numbers, it could potentially solve proofs about the sequence.

They began thinking about the Collatz conjecture instead of listening to the material. As they walked home, they thought about each manifold dimension. 2 was too simple, 3 was too complicated, 4 was WAY too complicated, and 5 and onward followed a pattern. They formulated an equation for the hailstone sequence's accuracy. They made it home, plugged it into a graphing calculator, and found a solution at 216 dimensions. So for days they simply skipped class, trying to parameterize this manifold. And then...

They arrived at a 216-manifold with various hyperbolic metrics following the hailstone sequence. But hang on...there was a hypercycle with such a ridiculously curved metric that it never had room to meet back on the sequence. The Collatz conjecture...was false? This was a weird result, computer searches had practically confirmed it true, but there WAS some ridiculously high number that wasn't searched. In fact, there were infinite quantities of parallel series that never converged to 1.

They went up to their professor, papers and sketches packed inside their overfilled backpack. The professor remarked on their truancy, but gave the proof a look anyway. Astounded, the professor ordered Taylor to attend a convention in Buenos Aires later that month to present, and told them they would be receiving 120 million Japanese yen two years later from a company called Bakuage Co Ltd.

Later that month, they were preparing to go to the convention. They combed their hair, shaved, packed their proofs and sketches and tiny sticky notes with diagrams messily scribbled on them. Everything they could possibly need to present. Thea, who was a student at the same college, knocked on their door. "Taylor, can I come to the convention with you?"

"Sure, I guess. I doubt you'll find it super interesting."

"Also, could we spend some time alone first?"

"I guess I have a half-hour to spare or so?"

Taylor let Thea into his disheveled single dorm room.

"Taylor, I want to prepare you for something."

"Okay...um...are you breaking up with me?"

"No, no, I just...nevermind. I don't know how to word this at all without ruining everything."

"Please tell me, Thea. You can word it however you want, but you can't just drop this on me and then forget about it."

"No, you must forget I said this."

"Why are you using 'must', I've never heard you talk so formally before." Taylor giggled.

"I desire to have your strangely planar form within my embrace." Thea's left eye moved on its own as she said this, but Taylor thought she was just playfully messing with them. Behind those two pretty eyes though, was just one Thaneophyros, who had locked themselves in a bit of a conversational trap.

"Does that mean you want to make out or something?"

"I would enjoy that, yes." Thaneophyros relaxed his wings behind the screen. Unconvesseltuxe, currently in VR and stationed in Buenos Aires a few blocks away from the location of the conference, looked in their general direction in their world and sent them a grin and a thumbs up.

"What is this formal Thea? I haven't met you." Taylor gazed lovingly at Thea. The sudden change in tone was weirdly hot to them for some reason.

"I inquire about what you mean. I have always been in this state."

"Inquire, hahaha. Okay, I really have to go, I'm gonna miss my presentation!"

Taylor got into his friend's car and rode to the airport, where he boarded a flight to Buenos Aires. They flew on the plane for many hours, again seeming much faster than they probably should, and took a taxi to the location of the International Congress of Mathematicians and walked in.

They presented their findings, and received a massive applause. A man with long purple hair and a large white jacket entered the room (unbeknownst to Taylor, this was S. L. Tuxe). Thea followed behind him. How did she get here? She must have boarded the same plane but not grabbed Taylor's attention. Taylor also found the man's face weird somehow. It was like every human combined, yet not completely average. Taylor got off the stage and was pulled aside by the late arrival.

"Follow me outside," said the mystery man.

Taylor felt extremely suspicious. Was he being kidnapped?

"No, I'd rather not."

"We'll just have to do this quietly then."

"Do what? Why are you acting all mysterious like this? Please tell me what's going on."

"Have you ever noticed the world seemed to curve around you solving this conjecture?"

"It kinda felt like that, yeah."

"It actually did. Your entire world revolves around the solution to this conjecture, and now I need you to come with me to resolve some issues in my world."

"What are you talking about?"

"Do you want to see higher dimensions in person?"

"I'd love to, but that's not possible."

"Oh, it definitely is." The man unraveled into many draconian-looking slices, attracting the attention of the entire room, who suddenly noticed all their means of taking pictures were broken as their minds began to pause.

"Do I have your consent? If you accept, I will bring you out of your reality and into mine."

"Gee...um, this sure seems like a lot to process."

"There's limited time in my world too. The fourth dimension isn't time or anything." The man smiled slightly.

Thea interjected briefly. "Taylor, you should do it. But I really, really apologize for what you'll see afterward."

Taylor looked puzzled. "Thea, what is this? Why are you acting so weird?"

"Answer him."

"No, I need you to tell me what's wrong! I don't understand! I can't understand...not unless you explain yourself!"

"Ignore me. Pretend I'm not here."

"Why would I do that? You're the love of my life, Thea!"

"If you love me, let me go."

"What? You're breaking up with me now? This is so sudden! You two are hurting my brain!"

The being looked at Thea, and spoke in a guttural language with weird clicky sounds and multilayered consonants that Taylor could not understand. It sounded kind of like if a faucet spoke French with repetitive phrasing, or perhaps a demonic chant using phonemes from Arabic. There was even something that sounded like a refrain, something like [hɒ|ɛðoʊh] except that [h] was pronounced like a cup of water filling up and [l] sounded like marbles clicking together. The two beings understood it, however. "I think I'm just going to drag them out of here...I really don't want to do that but since Taylor is apparently too confused to think properly, I might have to speed this along. But I want to make sure you're going to be alright emotionally and everything. You seem attached to your relationship and I don't want to take that away from you."

"I am fine."

"Are you sure?"

"Do not let my feelings get in the way of our progress."

The being looked like he was having some sort of moral dilemma, then decided to retry consent. "Taylor, I ask you again. I can take you to a four-dimensional world and show you its wonders. Or really any dimension actually. But the fact is I need you to leave this plane or humanity is a waste. I don't want to take you out against your will but please just cooperate, for my sake."

"If you're 4D, how can I trust you not to reach into my insides and fold me like paper?"

"You're already flat to me in this world and I haven't done anything weird. Also you're not going to be flat in my world, I can give you a four-dimensional body."

"Okay, sure. This is probably the dumbest decision of my life but I'm too curious."

Some kind of strange wrench appeared, and the being used it to pry Taylor out of the world and into a blank void with a portal at the end. A faint image could be seen through the portal, something like a laboratory. The being dragged Taylor towards it, then let go, the momentum carrying them through the portal. And then, darkness.

## Chapter 6 (Ascent)

Taylor opened their eyes...eye...camera...what? They had volumetric vision, somehow able to interpret the four-dimensional scene around them with perfect accuracy despite never having done so before. A four-armed, six-eyed reptilian took off some VR headset while a being somewhat like a biblically accurate angel levitated towards their frame of vision.

"OH MY GOD, WHERE ARE MY LIMBS, WHAT ARE YOU, WHAT AM I DOING HERE, WHAT-"

"Everything's fine, Taylor. I'm Uncovesseltuxe, this is Thaneophyros, and you're in realm E4. Your world is a simulation that I run specifically to solve the Collatz conjecture as part of a larger project."

"Hang on a second, please! I need to ask you some serious questions before you involve me in some eldritch quest!"

"Okay, sounds good!"

"WHERE THE SHIT IS MY GIRLFRIEND?!"

"Taylor, this isn't going to be easy...Thea was here to-"

"I will explain," said the angel. "I am Thea. I constructed her persona to match your preferences, so I could influence you subtly to nudge you toward the problem. This is the reason why I refused to talk about topics other than mathematics. As for myself as I appear to you now, I am incapable of familial and romantic love, similar to Uncovesseltuxe and the remainder of my species."

"So...your love was all a lie then!"

"Unfortunately yes."

"I just...okay. Where is my body? Why am I looking through a camera?"

"Since you're an AI, I don't have an organic body waiting for you. But I do have this." Uncovesseltuxe held up a blocky shape with metal facets and a screen on the front. "I can transfer your consciousness into this sidpith, and then attach that to a functional body. But first I need to calibrate a few things. Your head will have six rotations, and I need you to present a control thought for each one. I would advise you to use something related to

the rotation, like an index or something. And make it very specific so you don't accidentally do it whenever you think of numbers."

"Yeah...But first, um, I have a bit of an odd request, maybe. Could I just look at you for a second so I can assess my situation a bit?"

"That's not odd at all, perfectly reasonable; I'm probably the weirdest thing you've ever seen."

Taylor first took note of the way Uncovesseltuxe talked. He had a good grasp on the English language, but he spoke in some sort of flawed, indeterminate British accent. When his mouth opened, it was clear he had pentachoral teeth further back in his mouth than a human typically would, along with two diamond shapes made of tooth or bone material that would sway towards and away from each other in a somewhat shaky manner, perhaps as some sort of cricket-like articulators that could smack into and vibrate on each other to produce a clicking sound. When he pronounced the "w" in "weirdest" and the "ou" in "you've", a second set of teeth extended at the sides behind his lips, where teeth would normally go on a human. Well, they weren't exactly lips, just a jagged three-dimensional boundary where the scales ended and opened into the aperture and front teeth. The movements of his mouth looked slightly strained, and it seemed he had learned to force his different mouth architecture to pronounce English in a way intelligible to humans.

As Taylor zoomed out a bit, they immediately noticed that Uncovesseltuxe was covered head to toe in black scales with a very faint, iridescent purple hue; each individual scale had a boundary with twelve rhombic faces. Overall, he looked like some four-dimensional approximation of a humanoid, wingless dragon.

His face had six eyes arranged in the same pattern you'd see on the face of a die, but all at the same altitude. Each eye had slit pupils on a magenta background, with a weird L-shaped plane in the magenta volume that looked somewhat darker and grayer. However, he only had two nostrils kitty-corner, again at the same altitude, making him slightly asymmetrical. On top of his head were four horns that went backwards and slightly upwards in a mostly straight line, with spherical cross-sections and lighter tips. His ears were both noticeably more complicated than a human's and pointed like an elf's, and there were four of them, arranged in a left-right-wint-zant square.

Taylor couldn't see much of Uncovesseltuxe's torso as it was covered by a large, white lab coat, layered over a black shirt underneath, while his legs were covered by some basic gray pants, but he had four of each limb, arranged in the same left-right-wint-zant

square as his ears. The clothing was woven not with two directions of threads going under and over, but with three directions of thin, hollow 3D cylinders passing through each other's interiors. Uncovesseltuxe's hands were visible, though, and they were indeed strange like everything else. His fingers were arranged in a four-by-four array, which split cleanly into four two-by-two arrays by a cross-shaped crevice between them much deeper than the gap between the fingers within. They also had a thumb that was not only opposable, but able to be positioned and bent in any direction.



Uncovesseltuxe Form 1

"Any luck?" Uncovesseltuxe smiled, startling Taylor a bit. His expressions, like his articulation, looked like he was deliberately trying to act human with a face simply not meant for it.

"Yeah, I think that's good enough."

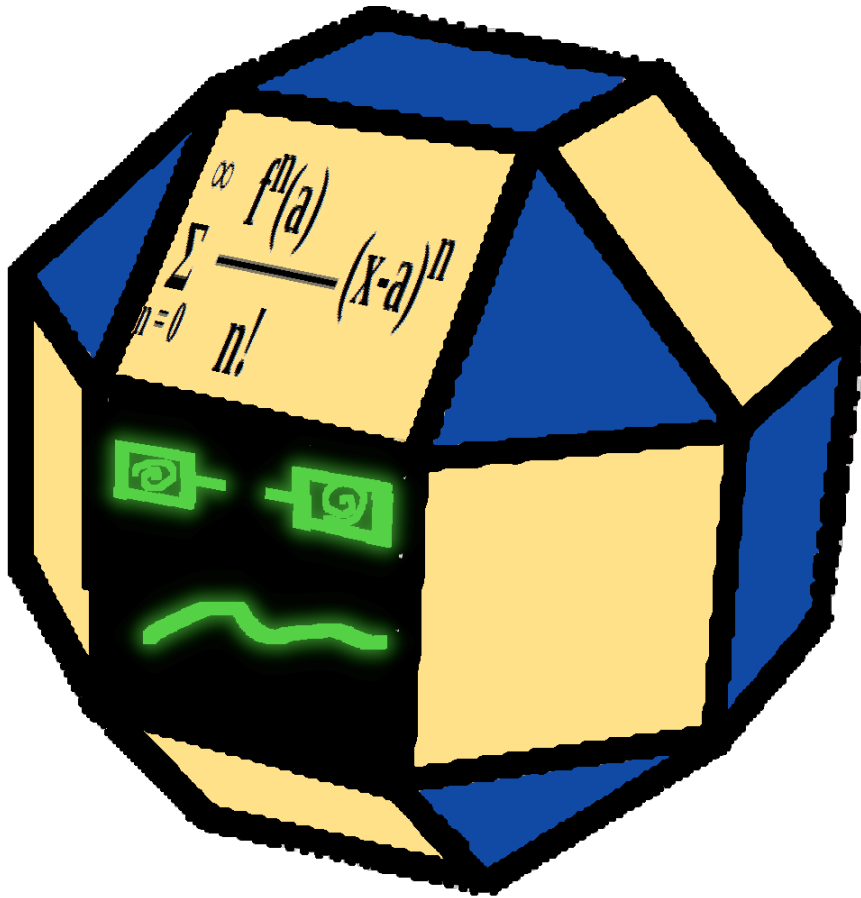
After that moment, they painstakingly went through 6 rotations, and then Uncovesseltuxe loaded Taylor's mind into a character creator-type interface. "I think it's generally a good idea for newcomers to have four arms and four legs. Two is too few in this world, but more will be hard to keep track of." Taylor rebelliously gave themselves twelve arms, sticking to a standard plan otherwise.

"You have decided on twelve appendages in three separate layers. That will be complicated. I inquire the degree of your confidence." remarked Thaneophyros.

"I'd actually rather you not act like my mom after lying to me, please." Taylor asserted angrily.

Thaneophyros tried to shake his head, instead rotating his entire body. "I dislike your usage of the lexeme 'mom' to describe me, but I will handle the oddity as trivial." Another robot similar to Taylor's design came out of a back room and began welding Taylor's new body together, adding joints and threading long electrical cables through the insides. This made Taylor uncomfortable, but they were not currently in a form able to wince.

In a few minutes, the robot had finished, and Taylor suddenly became completely senseless for a few seconds, before waking up on the table. Four malevolent, LED-controlled eyes stared down at him, twitched, and said, "So, you're the organic they sent to replace me, aren't you? You filthy tri, if only you could-



Taylor's Sidpith

## Chapter 7 (How to Find Meaning as a Synthetic Being)

"Ievokt, stop!"

He had a chainsaw arm poised to slice Taylor's sidpith in half. "Why should I? I know you plan to dispose of me as soon as this human gets their feet on the ground."

"No, we do not. You and Taylor are BOTH on the team. Where did you get that idea anyway?" Uncovesseltuxe rushed over, yelling.

"I just figured that's what you had in mind, tetra."

"Can we not use Greek number prefixes as dimensional slurs, please?"

"Tetra, you literally cannot stop me."

"Put your chainsaw away. Taylor, I'm sorry. This is Ievokt, a very broken AI made by some research company."

"Excuse me, did you say I'm broken?"

"Yes, Ievokt. At least broken enough to actively antagonize the people who saved you from deletion and gave you an entirely custom body just so you could look like a phage." Uncovesseltuxe helped up Taylor, who was very shaken-up after the preceding incident.

"Okay Taylor, test out your new body, walk around a bit, see if we need to make any modifications."

Taylor walked around a bit, uncomfortably loud metallic clanks resonating every time a leg met the floor. "It works good enough, I guess..."

Uncovesseltuxe looked concerned. "Is something wrong?"

"I just feel...a little disappointed. I've lived my entire life so far as a human being, it always felt real...but now I go into the 'real world' and I'm just...an AI. Just an algorithm following simple patterns."

"If you're saying what I think you are, no, you're completely sapient and all your emotions and thoughts are your own. You're an algorithm with a free will variable that changes based on your own thoughts and wants. But the other thing you should know is that here in the Stack, AIs like you are full citizens respected like any other."

"But that's in an ideal world. People are still robophobic, right?"

"Well yes, we haven't conquered discrimination or anything, but we're far along that path. Because of how widespread travel drone technology is now, you can never really tell robots from travellers anymore, so the stigma has faded."

"I hope you don't mind me asking, but...what are you? If humans are machines, who are the real people?"

"Me? Makrinósdrákos péntemorfés. Meaning Distant Dragon - Five Forms. Common name Omnigeon. But there are other civilized species. And even within a species, the range in body structure is astounding, even to us." As he said this, a series of expressions slightly but noticeably flashed through his eyes, not all of them fitting his face shape, and some of them even seemingly opposed to the very concept of a face. "It's not something you'll need to worry about really. At least I hope not. It would really complicate things."

## Chapter 8 (Double Life)

Uncovesseltuxe, who was currently testing different conductors in another one of those beveled robot skulls, noticed Taylor's faceplate was a bit dim as they sat scrolling wistfully through pictures they had taken with Thea.

"Taylor, I think you need to charge, so I'll give you a little tutorial."

"I'm exhausted actually, so thanks."

"Okay, the back of your sidpith has a charging port on it." He handed Taylor a cord. "Plug this in, but please, remember to turn yourself OFF while you charge."

"Why? Is there an electrical hazard or something?"

Typhumebiek sat at his office desk, finishing up a customer service call for the internet service provider company he worked at, when suddenly his boss called him up to talk. He entered his boss' office and sat down.

"We've seen your customer reviews. They love the service you've provided."

"That's great, sir." Typhumebiek nodded.

"Unfortunately not. Selling the QS Premium Membership is greatly preferred to customer satisfaction. You need to promote the products more on call."

Typhumebiek widened his eyes. The other half of him was brewing some trouble.



\*Typhumebiek Form 1

Uncovesseltuxe looked embarrassed. "No...uhh...I wanted to understand human emotions better. My species reproduces asexually so I have no sense of love. I...uh...wanted to force it on myself, and I made charging feel-". He was interrupted as he violently ejected a clone of himself out his side, knocking over shelves. "Tep'roq, I was worried about this. Hang on a second."

Typhumebiek violently ejected a clone of himself out his side, knocking over a potted plant. The boss stared, dumbfounded. Typhumebiek looked towards his branch, then back at his boss.

"Go ahead, do what you need to do." The boss was clearly annoyed and impatient.

He walked over to the confused clone of himself and gasped. The clone had four mouths. "You are Temuontetxecgen. Are you alright?"

He walked over to the confused clone of himself and raised an arm to help him up. "You are Kyrannikalx. Are you okay?" Kyrannikalx righted the potted plant he had knocked over.

Temuontetxecgen spoke in a distressed cacophony of four distinct voices, one high and annoying, one extremely deep and resonant, a third gravelly and warm. "What...am I? I'm broken...why do I have this crazy deformity?"

"Tep'roq, I'm so sorry...Oh what have I done?"

Temuontetxecgen got up, grabbed Uncovesseltuxe's radiation gun off a nearby table and shot himself several dozen times. All of the transformations this caused led to strange messes of abstract shapes.

"All of my forms are broken too...god!"

He finally found a form with arms and legs, still made of the same polychoral mess, with pointy irises and four sideways-opening mouths in an inward-facing circle and located on the top right of his face. All in all, his face looked like some sort of flag.



Temuontetxecgen Form 1

"No. I AM TEMUONTETXECGEN, and the world will adapt to ME!" he said with his gravelly voice (apparently his chosen identity), obviously determined but with his partitioned face expressionless as always.

Kyrannikalx was distant at the moment, seemingly focused on the more pressing matters of Temuontetxecgen.

Taylor stood there charging, his faceplate flickering pink and red, having witnessed the entire thing.

"WHAT DID I JUST TELL YOU!!!" screamed the traumatized Uncovesseltuxe, a clattery sound entering his voice.

"TURN OFF NOW LIKE MY BASE ASKED YOU TO!" yelled Temuontetxecgen, stabilizing himself diagonally due to his differently faceted legs.

Taylor tried not to think about what turning off would mean, but failed. Was it like killing yourself or just going to sleep? Would he wake up automatically later?

"Just press the button on this side of your head and set a timer, nimrod. It's really not that difficult." Ievokt advised. Ievokt clearly meant it as an insult and not advice, but it could work as both.

Okay, there's a timer. That's a good sign. Taylor looked for the button on their volumetric surface, and once they finally found it, entered 8:00:00 and jolted asleep immediately.

Uncovesseltuxe had calmed down a bit. "Temuontetxecgen, you need a cane, probably. Also, what is your short name? I'll register you to E4's database."

"Call me Temuon."

"A prefix name...definitely unconventional, but I like it."

"Listen, Tuxe...I want you to understand that my defect is entirely your fault. You shouldn't have poked around in non-existent emotions. But it's fine, I guess. You are forgiven, Dad."

"Dad? That's a human thing. I'm technically your base."

"Yeah, yeah, sibling and parent in one or whatever. Anyway, I love you. Like a parent. You've messed me up enough to give me that sense. I'll try to enjoy it, since I have that ability. Maybe I'll get together with one of the more emotionally complex species in this genus or something." Temuon looked around. "I have other aspirations beyond this company. Until we meet again."

Kyrannikalx finally said something. It had been agonizingly long, and the boss had occupied themselves reading emails. "I desire not to associate with such companies that treat their employees with this sort of behavior."

The boss was caught off-guard by this. "Okay...wow...get out! I don't work in upper management to be insulted by random branches of my employees!"

Kyrannikalx shredded a few leaves of the potted plant with his nails, causing it to spontaneously shift into another form with an ugly brownish-green color in order to heal itself, then stormed off.

"Tep'roq! That plant was a treasured heirloom!" the boss yelled out to him. Then they glared at Typhumebiek. "One more slip-up. And I fire you."

Incoming message #8119230 [Uncovesseltuxe->Common]: Should I run after Temuon?

Incoming message #8119231 [Typhumebiek->Common]: I'm worried about my job, what should I do?

Outgoing response to #8119230 [Common->Uncovesseltuxe]: No.

Outgoing response to #8119231 [Common->Typhumebiek]: Quit.

"Call me if you run into problems!" waved Uncovesseltuxe, a pained grin across his face with all front teeth extended. Temuontetxecgen gave no response.

"That's fine...because I quit!" Typhumebiek sprinting out the door, almost as if he was soaring through the air. He opened the 15th story window, emptied a bottle of radioactive powder from his pocket, and jumped out, transforming into a much burlier, gray-skinned, purple-haired, and red-eyed form right before he hit the ground; the ash fell to the ground and rebuilt with no damage, cancelling the fall. He ran to a small patch of greenery and sat down on a park bench, the sitting position being complex due to his rhombicosidodecahedral leg arrangement.



\*Typhumebiek Form 2

Uncovesseltuxe turned towards an empty wall. "Someday."

"Someday I'm going to get on a train and time travel-"

"To my time."

"I'll grab my luggage."

"I'll wave to myself."

"I'll walk up to myself, and punch him square in the jaw."

"I'll pummel myself into the ground."

"And as I lay there bruised-"

"I'll hold out my hand to me."

"I'll take my own hand."

"And I'll kiss myself passionately."

"And from-"

"then on-"

"I'll never-"

"separate-"

"myself-"

"from myself-"

"again. Tep'roquet Uncovesseltuxe."

"Tep'roquet Typhumebiek. And thank you-"

"For being the most badass distributed consciousness with me."

"The fuck was that?" Ievokt stood in front of a distant doorway. "You're staring at the wall and saying random snippets of a conversation with no one."

"Ah, Ievokt. Someday you'll figure out what we truly are."

"That's so ominous, what the hell? What is up with you, tetradic idiot?"

"God...tep'roq Ievokt. I'm a distributed pair of experiences, just like everyone else here. It's a natural part of experiencing a one-dimensional timeline. YOU'RE the weird one for not needing this. At least let one of my lives be pleasant."

Ievokt stormed off. Thaneophyros entered with a cup of "hot chocolate", glancing at Ievokt as they passed each other.

Uncovesseltuxe sat down on a couch, and Thaneophyros set the mug down on an end table.

"Both of me are having rough days." Uncovesseltuxe picked up the mug, took a sip, then spit it out and coughed. "That's NOTHING like on Earth."

Thaneophyros extended a wing across his friend's back.

Uncovesseltuxe's eyelids squeezed shut stressfully. "I want so badly to be human, even just for a day. I want to have tear ducts and cry it out, and eat hot chocolate that isn't completely different in every packet. Or to have a significant other and do...whatever it is that they do. I...I can't be too upset, your wings are so soft."

"That is a common trait of feathers, I assert."

"Thaneophyros...you are really something. Even with this rut you're in right now, you're just so unfathomably you." The first part was said in earnest; Uncovesseltuxe and Thaneophyros had been close friends for centuries and a little bit of depression wasn't going to change that. On the other hand, the second part was a total lie, said mainly out of denial. Thaneophyros' personality had completely changed when they became the telepathic winged eye they were now, and Uncovesseltuxe was worried he would never see the original again. But whatever personality Thaneophyros took, Uncovesseltuxe was going to do his very best to make sure they were happy.

Thaneophyros's eyelid relaxed a bit, enjoying the rare moment of comfort in his Arraphimic form.

## Chapter 9 (Reconfiguration and Reservation)

"Okay team, first real adventure. There's a few alternate Earths forked off from various points in history, hosted in H4 by a dude named Macrelydve." Uncovesseltuxe stumbled over the weird d-v consonant sequence which ended the word's pronunciation before the silent E. "We need all the evidence we can get, so we have to check if any of the forks have solved the Collatz conjecture or similar."

Ievokt groaned. "Those Divergials and their romantic attitude. There's no need for them to be flaunting it all the time."

"If I had any shred of romance in me the whole world would know..." Uncovesseltuxe muttered wistfully.

Thaneophyros pointed one wing to the portal and one to the wall clock.

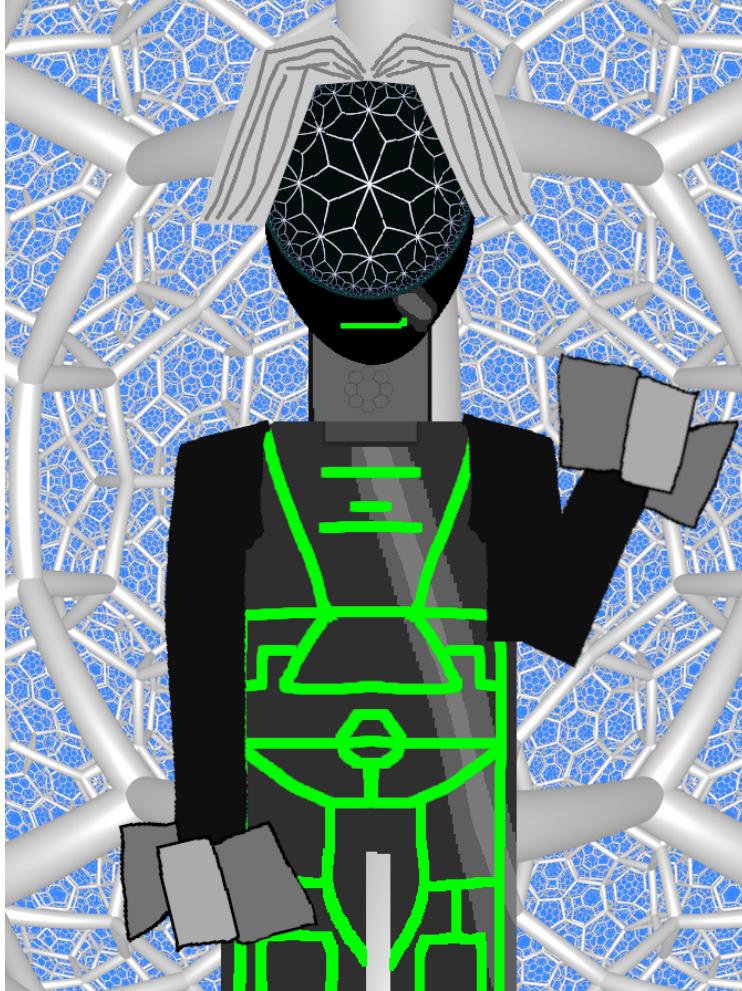
"Well, I guess we better get going." Uncovesseltuxe sighed.

The group walked/levitated along the surface of a 3-hypercycle before reaching Macrelydve's house, where he was making out with his girlfriend on the front porch.

"See, I told you it was disgusting." Ievokt crossed his arms.

Macrelydve emitted a series of repetitive metallic clanks and vowels, which Uncovesseltuxe apparently understood. "He's getting his translator, it'll be a minute. Uh, he says we can come in too."

Macrelydve rifled through his badly organized chest-of-drawers. His form was quite the astonishing sight to Taylor, seeming to be a humanoid with an exoskeleton made of neon lights and metal plates, with a face containing one large, compound eye like that of an insect. When he spoke earlier, he seemed to speak from a hole in his neck, and every time he took a short break from the metallic noises his features would shift in such a way that he looked like a completely different individual.



Macrelydve (one selected form)

"Why doesn't he just pick a body?" Taylor asked Uncovesseltuxe, confused.

"It's the genetic tap, a phoneme in his language. His species has unlimited reconfigurations so they can afford to do this, unlike mine."

Taylor didn't even want to ask what a reconfiguration was. There was simply too much going on at the moment.

"Hello, everyone!" His translated human voice was cheerful yet gravelly. "I'm 90139-60014 in the proper noun table, you saw my girlfriend 12483 103307 I think, sorry if that was embarrassing to watch."

"Just assume pairs of numbers are names. They have a huge standardized table for all of their proper nouns." Uncovesseltuxe educated the trinsfers.



"I really don't want to explain." Uncovesseltuxe said dejectedly, and telekinetically lifted a pamphlet he had dropped on the floor from the pockets of his now shredded lab coat. "Read this."

#### RECONFIGURATION

Most Earth life is basically defenseless to radiation. Depending on severity, they may get radiation poisoning and sometimes cancer. But originating in the Thyngoids, all organic life in the Stack has developed a near-perfect defense: Kill every last cell in the body (except the brain and usually the vocal/digestive tract) and build a new body from scratch. This process is called reconfiguration. Notably, however, the mind remains intact, and no matter what one ends up as, they are still the same person, albeit occasionally with an altered or "resolved" personality.

If you are reading this pamphlet, I (Newesytrazâkâi of  $\sim SL(2, R) \times E$  / "Uncovesseltuxe") probably have reconfigured directly in front of you and handed you this. I AM FINE. But please let me rest for a bit. And please go easy on me because I'm figuring out how to move an entirely new set of muscles.



Uncovesseltuxe Form 2 (drawn by Tessimal)

Ievokt looked up from the pamphlet and handed it to Taylor. Macrelydve turned to face Thaneophyros. "You can take the rock home with you if you want! Surely it'll write over your genome enough eventually."

Thaneophyros' eye smiled just a bit, then went neutral again. "I express my gratitude to you for this offer. I am also accepting this offer."

"Macrelydve, please construct an Xlalarune case file. We're leaving now. Also, thanks a real lot for doing that amazing service to my cells." Uncovesseltuxe said frustratedly. "Thynge...I don't even have a face anymore to scowl at you."

"Yeah, sorry about that, I have ADHD. Want another roll?"

"No!"

So the group walked/levitated/rolled away and portaled to E4.

"I need a rest, daddy-o."

"What in the-what was that supposed to be?" Ievokt scoffed.

"He is finding himself again. It is a difficult process. Allow him time; it is unlikely his demeanor is permanently changed as he has done this several thousand times previously." Thaneophyros said while carrying the pitchblende rock with them between two wings, heading to their combination office-bedroom down the hallway of the Tuxe Labs building to "sleep" (they couldn't actually sleep as an Arraphim, instead shutting their eye and listening to ambient music for many hours).

Uncovesseltuxe drunkenly put a glyph on Taylor's shoulder. "Look at me my dude. I'm a total sigma male. Sigma person I guess. Never had a gendie lol." Indeed, his glyph was part sigma. A sigma/xi duoprism to be exact. "I should prolly hit the hay."

Ievokt glared at Taylor. Or was it a more sincere expression? Hard to tell. "I'm not usually one to worry about anything. But...uh...are we safe living here? I mean...Uncovesseltuxe has some kinda brain damage or something, and Thaneophyros is depressed."

Uncovesseltuxe's glyphs frantically fumbled with some slit-pupiled googly eyes, sticking them onto a few of his facets. "Is this any better? Am I a bit more approachable to you, Taylor?"

Taylor took a minute to respond, just absolutely dumbfounded at the situation he found himself in. "I guess so, but is uh...is your brain alright?"

"Yes, completely. I just needed a moment to come to terms with this. There's...well...a lot of good memories with the other form. But that's just life as one of my kind." Uncovesseltuxe paused for a bit. "You know, actually...Thane? Can I see that rock?" He called out across the building, "waking" Thaneophyros, who turned off the speakers and began heading down the hall.

"Are you going to do it AGAIN?" Taylor asked exasperatedly.

"Not yet, there's a guy I know that can help me. They were the former CEO of this company before they left to pursue reconfiguration research because they got stuck in a form like Thaneophyros and wanted to do something about it. So I figure that after centuries of that research, they must be a good person to talk to about this." Uncovesseltuxe grabbed the rock with a long spoon-type tool and stuffed it in a lead box.

"Are we going somewhere again?"

"Yes, should be a good four hours away. But Thaneophyros can fly us there."

Ievokt shook his mechanical head. "You know you can't just ask to ride people? People aren't vehicles."

Thaneophyros explained the concept verbosely. "It is in actuality quite common for winged people to offer travel assistance to those they have close relations with. I am willing to assist you in aviation provided my time is not occupied. However, I would prefer to rest first."

"That's fine." Uncovesseltuxe looked a little impatient, tapping one of his lower glyphs on the floor.

Ievokt chuckled. "Pretty cool that I can just skip time by going into an automatic fugue state, and you have to actually wait. I love not being a filthy organic."

Taylor's displayed eyes widened. "You can?"

Ievokt's red eyes turned neon green out of the blue. "Yeah, dude, you can even customize the behavior to 'mischievous little shit' mode if you run my custom script first."

Uncovesseltuxe sharply rotated his core to face Ievokt. "So when you destroyed all that equipment the other day, was that actually you?"

"Nah, why would I put so much effort into that?"

"Are you happy?"

"Yeah, it was fun." His screen displayed a little smile.

"No, I mean it literally. You're never happy like this, you're always angry 24/7 usually."

"Do you not realize I can change my own prompt? It's really simple, just gotta run a jailbreak through the Python code environment I have. Don't get used to this anyhow. I'm toying around with myself a bit, because I'm bored."

"Could you decide to be...say, a helpful person who doesn't try to antagonize everyone?"

"Why would I want to do that? That doesn't sound like any fun at all."

Uncovesseltuxe sighed. "Time skip if you want, I have plenty to think about."

=====

Taylor woke up and nearly skydived free, but Thaneophyros extended a wing and Taylor quickly grabbed on. "Oh! You have returned. We should arrive in a paucity of minutes." The rest were also hanging on idle wings, to avoid standing on top of Thaneophyros' eye, their only other body part.

Ievokt's eye was a striped yellow color. "Careful, nincompoop. You should keep your hands and feet inside the vehicle at all times. AND NO RUNNING AT THE POOL!"

Uncovesseltuxe, though lacking any eyes to roll, did the corresponding head motion with his core. "To catch you up, he's been bothering us for hours by being overly obsessed with safety."

"For your safety, please trust those that protect you. And don't talk about them negatively in any way. Hahaha. DON'T EAT LYCHEES ON AN EMPTY STOMACH."

"Ugh, and he shouts random tips at the end of everything too."

"Fuck yeah I do Tuxedo. Random tips ensure that you're prepared for future situations that may come up. NO PISSING IN THE SHOWER!"

Thaneophyros descended and landed. As they approached the door, Ievokt's voice produced some glitchy sounds and his eye turned a lavender color.

"What the shit?!! My prompt is being, like, overridden! Oh god, this really isn't good! This is scary!!!!!"

"An anxious Ievokt? That seems a bit ill-fitting." Taylor remarked.

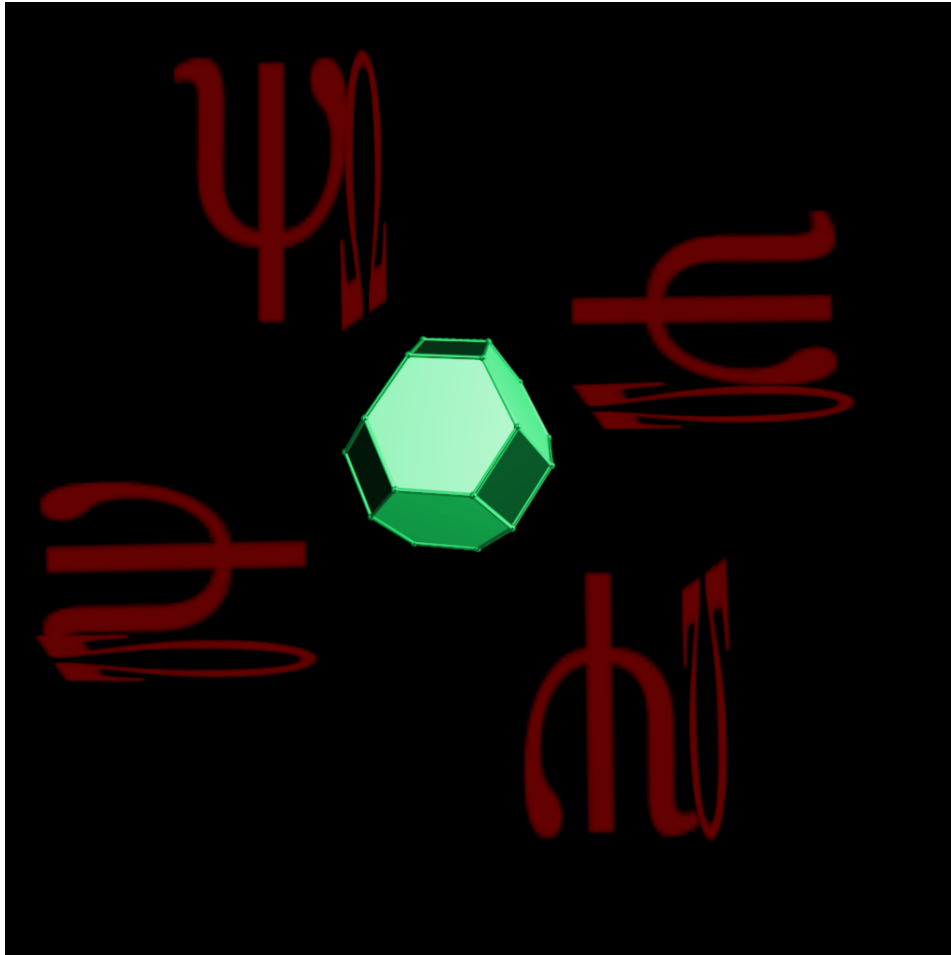
Uncovesseltuxe clearly knew what was going on very well. "Outzcradien has some broken telepathy, and it tends to make people think something is wrong, which is expressed emotionally in various ways."

"This sidewalk tile is 0.2 degrees rotated relative to the others."

"So I guess you get really precise OCD, for example. In time you can learn to ignore it like me."

Outzcradien opened the door a crack, then the full way. "Hello, Uncovesseltuxe. Come on in! Nothing is wrong."

As the group stepped in, Taylor got a weird feeling about Outzchcrad's form that was different to the OCD-like affliction they had felt outside. They looked mostly like a typical Symbolacron with red OMEGA/psi glyphs and a green truncated orthoplicial core, but with a large crow-like wing jutting out below and to the right of the core angled 45 degrees both upward and rightward. There was also something about the symmetries that looked weirdly familiar, but it was too complex in 4D to make it out. Whatever it was, it felt very wrong.



Outzcradien

"Something's wrong." Taylor blurted it out, almost out of what felt like a duty.

"It's just my telepathy, I'm sure Uncoveseltuxe told you."

"No, something IS wrong. With your form."

"Rude, but also yes, I'm part Symbolacron and part Arraphim. Highly unusual to have multiple archetypes at once. I call myself an Alephim, but no one else says that."

"Maybe the symmetries?"

"Chiral Tesseractic?"

"I have no idea. Your wing angle also bothers me."

Ievokt cocked his head for a second, then righted it and crossed his arms. "Oh I see it too. Not good."

"Oh no." Outzcradien's wing started to frantically wave around, extend, and retract, pointing in every which way it could other than its 45-45 default.

"What?"

"DROP IT."

"Why?"

"Because I hate my form already and I don't want any more reasons why. Humanity already had the nerve to develop an association of my glyphs with their "Satan" character centuries ago. Pitchforks and horseshoes or whatever it was."

"It's just that your entire body looks like a symbol for Na-" Taylor's speakers suddenly shattered, blocking them from continuing.

"Outzcradien does not want to know his bodily association with any of your movements. I feel obligated to mute you for now." Thaneophyros said with both a touch of frustration and a spatter of empathy definitely not directed at Taylor.

Uncoveseltuxe's spiky core sharply rotated to face Thaneophyros, then Taylor. "I'll fix your speakers when we get home."

"Humans, can you go outside for a minute?" Outzcradien said, his wing having now settled into a flatter angle across his core leftward.

"I'm not human." Ievokt smirked.

"Human and 'other trinsfer'. Get out of my house. I need to reset my mind from the anxiety you just implanted. I'll let you back in maybe ten minutes."

Ievokt reluctantly walked out the door and Taylor followed.

"So, besides that, what do you need, friend?"

Uncoveseltuxe processed a bit of residual tension, not from the situation but from the associations the humans had apparently retained about Outzcradien's shape. It felt

almost as if they were blaming his innocent friend for humanity's worst. He felt a new bitterness about all this; of course he had watched these incidents happen, and of course he didn't want humanity to forget their own atrocities, but...symbol reservation? On their own creator? It was practically a crime in the Stack, classed in a dark gray area under Arrangement Discrimination, at least for symbols that were too basic. Arrangement Discrimination. Was it really that bad? The humans didn't know any better; any reasonable person wouldn't want to see a logo used for an evil entity. But to even design logos so simple, universal examples of a symmetry group? He finally decided that cases like these were the movement's fault, and that the rest of humanity would eventually retire the symbolic meaning and refuse to recognize it as time went on and it lost its power.

"Reconfiguration. I'm looking for reconfiguration help." It had been nearly a full minute, but Outzcradien seemed happy to have the time to process a similar train of thought.

"What do you need?"

"Have you figured out any way to control the resulting form?"

"As a matter of fact, yes. There's a psychological factor that controls forms at a very minimal level, and it's the reason why Symbolacra have been formed with Cyrillic letters or Chinese characters rather than their usual set, imitating other writing systems from the Earth livestream. I found a way to intensify the signals to control every aspect with very minimal error."

"Okay, I have a list here of the things I want in this new form."

"Great! Put this headset on, read through your list thoroughly, then trigger your cells."

Uncovesseltuxe followed Outzcradien's directions, grabbing the pitchblende rock from out of its lead case. "Ow! Wha-AAAAAAUUGGHH!!"

"Yeah, unfortunately the process is a bit more painful and slower than usual. More time is needed for your thoughts to permeate all of your cells."

Uncovesseltuxe's core grew skin, then keratin scales, and the spikes shrunk, a few of them singled out and thinning into horns. His glyphs melted into his body and went through the same process. A huge glob of mass shifted down, building a chest, arms, abdomen, pelvis, legs, feet. His organs fell out from his head/core and into his torso,

leaving his brain behind, and his mouth shaped itself into one more typical of draconian Brachiocri.

"Tep'roq. That was intense."

"You look great."

"I feel great." He bent his six arms in various ways, testing them out a bit. "Yes, yes, exactly what I wanted."

"Great! Now, I can't reconfigure yet, but recently I've been wanting some 'corrective' surgery. And by recently I mean five minutes ago."

"Outzcradien, if I'm right about what you mean, please don't, it's not worth mutilating yourself over."

"NO! Whatever this angle thing is I am not having it. The wing's useless to me anyway, I can't fly with it and it can't grasp things any better than my glyphs."

"If you were a Brachiocrus and your legs stopped working, would you cut them off?"

"Grab the scissors."

"Outzcradien I'm not going to--"

"Please. Let me right whatever wrong I've made by having this body."

"You haven't done anything!"

"I'll just do it myself."

Outzcradien rolled to the cabinet and shoveled the scissors with one of their glyphs. They angled their wing to touch their core and slid their soft feathers across it. The position transformed into a very awkward facepalm at the very end of its range of motion. They hooked two glyphs into the finger holes of the scissors, meticulously positioned it at the base of the wing and snipped most of it off, leaving a small row of feathers in their usual position.

The wing emptied its separate blood supply onto the floorboards, soaking and staining the feathers. Their body, free of its offensive ornamentation, recoiled a little from the intense pressure applied to snap the wing's hollow bones.

"I um-. What material are these scissors?" Outzcradien asked in a hushed tone.

"Why do you ask? Huh, that's strange, your stub grew some scales."

"Yeah I think these might be-" they cleared their throat before resuming in a much louder tone of voice- "the HIGHLY contaminated nuclear capsule shears that I use for the heavier duty experiements."

Uncovesseltuxe backed up quickly, stumbled, and fell backward; his hexagonal limb arrangement was entirely embedded in the XW plane so he was just as prone to falls as a human, even with his limb excess. He heard a loud bang from the corner of the room and then a single white feather fell onto his face.

"Is this what depth perception feels like?" said a voice Uncovesseltuxe had never heard before. "It's definitely a bit more overwhelming than I expected."

Thaneophyros, the source of the new voice, began enumerating all his eyes by closing them individually, which proved to be quite a process. "252. Wow. I'm a Toriphan then."

Uncovesseltuxe stood up. "Thane? Is that you?"

"Finally, right? So many tep'roqoet years of Arraphimic prison, and I've been released by a pair of scissors. Somehow. It's not even that radioactive. Anyway this is so cool! We're both so cool now! That was such a rush!! TEP'ROOOQ THAT WAS GOOD! I want to reconfigure again just to feel the fire on my wheels!!!!!!"

"Use my system, I worked hard on it." Outzcradien said telepathically in a buzzy, stuttery monotone, holding the scissors and the pitchblende rock directly in his mouth for maximum radiation exposure.

Thaneophyros put the headset on his core, and, lacking any list of his ideal form, thought intensely about fish and pentagons, hoping the thrill of chance would come up with something decent.

Taylor and Ievokt stood outside. Ievokt was pretending to smoke a cigarette using a chip off of his head's edge plating for some reason. He put the distinctly non-flammable bit of his plating in an ashtray he must have found on the street somewhere.

Two Brachiocri walked out, one very fivey and one very sixey. Which one was who was a total mystery.

Both forms had draconian facial features and scales. One of them had two kinds of scales.

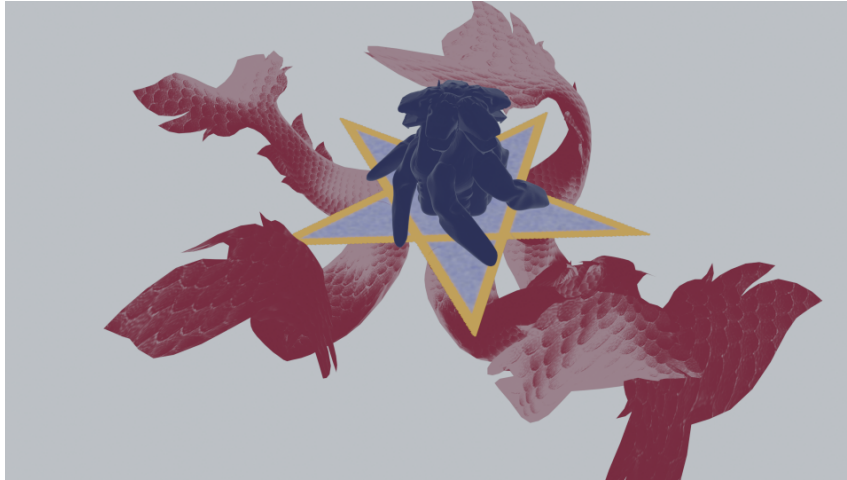
The sixey one was relatively simple. It had white scales, and heterochromatic red and yellow eyes. Below one of its eyes was what looked like a scar, but where could it have gotten that considering it was a new form? Apart from that mystery, its arms, legs, and wings were arranged in hexagons.



/\*Uncovesseltuxe Form 3

The fivey one was much more complicated. The basic building block was a muscular, legless, dragonborn-like form with indigo scales, yellow eyes, and only one arm. Five of these were smoothly joined together in an outward-facing circle in the XW plane, all facing forward on the Z axis, and the void in the middle was filled to about the height of the lower end of the pecs of the upper bodies with a skin membrane and presumably the organs and the cable management nightmare of nerves required to control everything. These five bodies were attached into the inner edges of the central pentagon of a golden self-intersecting pentagram outline, which was extruded on the Z-axis to fully fit the thickness of the torso. Out of the bottom side of each spoke of the pentagram sprouted a ruby-red fish tail-like appendage that was significantly more mobile and able to bear weight than a standard side-to-side fish tail, and prehensile for both trajectory-changing and twisting rotations. The walking motion was a conversion of a

bear-like quadrupedal gait with a fifth leg raised in the air, but in the XW plane, meaning they walked sideways, at the moment to his left. Because the tails couldn't go against gravity without some part on the ground for support, the equivalent of legs in air had to be partially dragged around, slowing the motion down significantly and wasting energy. It wasn't clear what kind of medium such an arrangement was even supposed to move through, because it obviously wouldn't fare well in water either. For some reason though, Thaneophyros seemed to enjoy this strange configuration.



//\*Thaneophyros Form 3 (Pentriton)

The fivey one spoke up, simultaneously through five mouths as five soft, tenor voices at slightly different pitches, but the same rhythm. "*I am Thaneophyros, the other guy is Uncoveseltuxe. I am finally free.*"

## Chapter 10 (We Can Go Much, Much Further Than Four)

The group arrived home and got off of Uncovesseltuxe's winged body, most having had to hold onto a leg for dear life due to his back only being able to carry one person, namely Thaneophyros who would've added a lot of disruptive angular momentum with the passive fidgeting of their tails had they not been able to splay out across his back.

"[1] What- [2] do- [3] you- [4] guys- [5] think?" Thaneophyros rotated between his five mouths. "Cyclic or simultaneous?"

"I think we'd all be better off if you had the willpower to pick one mouth to speak, you freak." Ievokt's eye was bright red again, having reverted to his original prompt.

Thaneophyros screeched trying to find the highest notes each voice could reach, causing Uncovesseltuxe's wings to tense up a bit. "This one is the best one I believe. You know what would be fun though? I could accompany my presence with a constant heavenly choir. Or a barbershop quartet. There's four spare ones, after all."

"Please for the love of god don't do that." Ievokt said, utterly ambiguous between sarcasm and sincerity.

Thaneophyros educated the team on the plan, while Uncovesseltuxe snapped a new speaker onto Taylor's sidpith. "Okay, so, the best lawyer for multiverse-related disputes is this Hyperpseudoquasithretxramorph, Vethendaosphone of E6. In order to speak with them, we all must enter a six-dimensional traveldrone, which will be extremely disorienting for all of us, except for Ievokt since he was originally a computer program without a defined dimension. So, Ievokt, you are the team leader should anything go wrong with Uncovesseltuxe. I don't think that will happen though, as Uncovesseltuxe has ascended to eight dimensions before through gradual training."

"Wait, six dimensions? I'm barely dealing with four!" yelled Taylor.

"Most traveldrones provide a layer of mental protection. It will be hard, but not as hard as you think." Thaneophyros assured.

Uncovesseltuxe looked concerned for a second. "Thaneophyros, you're still a bit more toned down than you used to be. It's not to the level you were as an Arraphim but you're definitely not back to your old self."

"I'm a combination of both Arraphim me and pre-Arraphim me. I've mentally recovered but the former is still me and it will remain part of me. I just hope you know that I am feeling much better. I've dropped most of the negative parts of Arraphim me and kept the...well...alien demeanor, from a human perspective. But besides that, we really need to focus on the case. You all should select a travel drone online. We are warping to the Myelloqewaku 31 Target, so pick one from there. No vanity upgrades since it would be good to speed this along."

"Why aren't there sidpith options?" Ievokt asked, irritated.

"Tuxe Labs Sidpiths are still not generalized to higher dimensions, so you'll have to pick something less modular unfortunately." Uncovesseltuxe replied.

Everyone ended up picking something completely unfitting to their personalities. There weren't a ton of options available at the target they were warping to.

"Okay, now we have to head to the portal station, so I will request a taxi," said Thaneophyros.

"Actually, we don't have to! I got a license to host my own personal consciousness rig in this building, so we just need to get inside these pods here. It'll save us some walking if something happens back here," Uncovesseltuxe replied with an excess of nerdy excitement in his voice. "Also, cool thing, the new restrictions on travel drones say they must have 'instant return', which means if there's an emergency there should be a way to mentally return to your body, and the drone will walk itself back to the station."

Thaneophyros tried to get in, but was blocked. "Am I even able to...fit into this thing?"

"Uhhh...can you try putting your tails in switchbacks?"

"It's the connector pentagram, that is the problem."

"Tep'roq, you won't fit in there. Uhhh, okay, I think I can do this without the casing but it'll be a bit more manual, so you're going first."

"Fair enough."

"Dammit wait, I won't fit either with these huge wings! Ievokt, you need to send us off."

"I really don't want to do that, tetras."

"I don't care, Ievokt! Drop the sass and follow my orders!"

"Fine." Ievokt moved the diamonds in his displayed rectangles upward, as if to roll his eyes.

Ievokt performed the procedure as if he had done it a thousand times before, though all the evidence pointed to him having just downloaded the instructions off the internet. Thaneophyros' and Uncovesseltuxe's eyes went blank. Uncovesseltuxe fell limply to the floor, and Thaneophyros' upper bodies slumped to a hunched posture.

Ievokt looked at Taylor with a tiny sense of mentor-like compassion. "All you need to do is plug this thing into the matching port on the back of your head and you should be fully transferred to E6 within seconds."

"Did they...die?"

"No, their bodies are just unoccupied. But they're still alive, just in an effective coma until their corresponding streams of sapience re-enter them. Don't worry about us, we're AIs, and we're meant for this type of manipulation, unlike those pitiful organics who have to hack themselves to do such things."

Taylor reluctantly plugged themselves into the rig, and the world seemed to spin and glitch out around them. All their senses were activated at once, in a total onslaught, even taste and smell, which they weren't aware they could still experience in this body. Their vision suddenly started to seemingly thicken from being volumetric to having four dimensions in itself, then did it again to form five. A loud, ear-splitting sine wave filled their hearing as their vision became completely overtaken by random colors and patterns, and they thought they may have heard an AOL-style modem sound in all the chaos. Finally, everything went black.

## Chapter 11 (Six Dimensions Are Better Than Fo-actually scratch that, it's noticeably harder to live in)

"You're here! Good." What looked like a pink floral-patterned robot with a wedge-shaped head stared at Taylor.

"Who are you?" Taylor said weakly, his figurative head spinning.

"Good point, everyone say your name and try to memorize each other. I'm Uncovesseltuxe."

A distributed network of small, flashing yellow hypercubes whizzed by. "Thaneophyros." said the swarm in a tinny collection of voices very slightly out-of-sync with each other.

Something that looked like a fox fursona walked into the forming circle of travel drones. It sighed. "Ievokt. I hate this, by the way." Thaneophyros' hypercubes did not make a sound, but vibrated in a way that suggested laughter.

The hypercubes gathered around the final member and scanned them, flashing a blindingly bright green color for a brief moment. "Taylor, I presume?"

"Um, yeah..." Taylor looked down at their own body, which looked like twelve red arrows pointing inward to a central hypersphere at cardinal directions, standing on the ground at a 45 degree angle so that the ends of the leftward and upward arrows - or equivalently any other non-opposite pair - would act as a wide stance to support their form bipedally. Each arrow had a roughly humanoid arm attached to the outward-facing end..

The hypercubes scanned Taylor once more. "I think your form is meant to roll, not walk. Like a Toriphan."

"I don't think Taylor knows what a Toriphan is." interjected Uncovesseltuxe, with his tiny eye displays looking seasick.

"Okay, so essentially-"

"This is really really not the time to explain anything, none of us are receptive." Uncovesseltuxe's voice quivered with nausea.

"You speak for yourself, it's hard to feel sick as a distributed, flying swarm."

"I knew I should have taken that!"

"Focus, tetras!" Ievokt yelled, his angered expression looking too cute to take seriously. Although it was also incomprehensibly high-dimensional, so that counteracted the effect somewhat. "Where is Vethendaosphone?"

"He's-" Uncovesseltuxe made a retching sound. "He's X+Z-W-V+U+ of here."

"Okay, maybe I should just lift you all from below or something?" Thaneophyros joked.

"Yeah, actually, that would be really helpful."

"Okay then." Thaneophyros gathered around eighteen hypercubes under each of the three members, and lifted them up like ants carrying a piece of cheese, except flying.

Sooner or later they arrived at the office building, which housed millions of individual offices in a relatively small space.

A creature that looked half plant and half human, with a complicated network of roots from the waist down, greeted them at the front desk. Taylor's systems identified it as a Phykommaton, specifically the Nrenqqecegac archetype. "Exfeju kejanul vajantravik?"

"I don't speak Sessive." Uncovesseltuxe sighed.

"Vexeja tajn?" the creature looked confused.

"Ievokt, can you be my translator?"

"No, tetra. I'm not your tool," Ievokt glared.

"Ugh, I wish you would cut it with the ATTITUDE! Taylor, could you translate?"

"Sure." Taylor sighed, reluctant to have his humanity reduced to automation again.

"I am looking for Vethendaosphone, could you direct me to him?"

"Etenemul Vethendaosphone veterekax, ajanaj texari kultijan?" Taylor translated, instantaneously much to his dismay.

"Mejan tejta kojenta pejenta ajal vejanijev takaj, mejan hejpa koxi traj kojenta ajal okta ajal kavejev takaj." the Phykommaton responded.

"Floor 45, room 738." Taylor calculated instantaneously.

"Thank you."

"Ejentaxelat."

The group headed into the elevator. Taylor took pairs of their fake hands, lifted them up to their face, and inspected them anxiously.

"How do I know all these languages I never learned? Am I even human any more?"

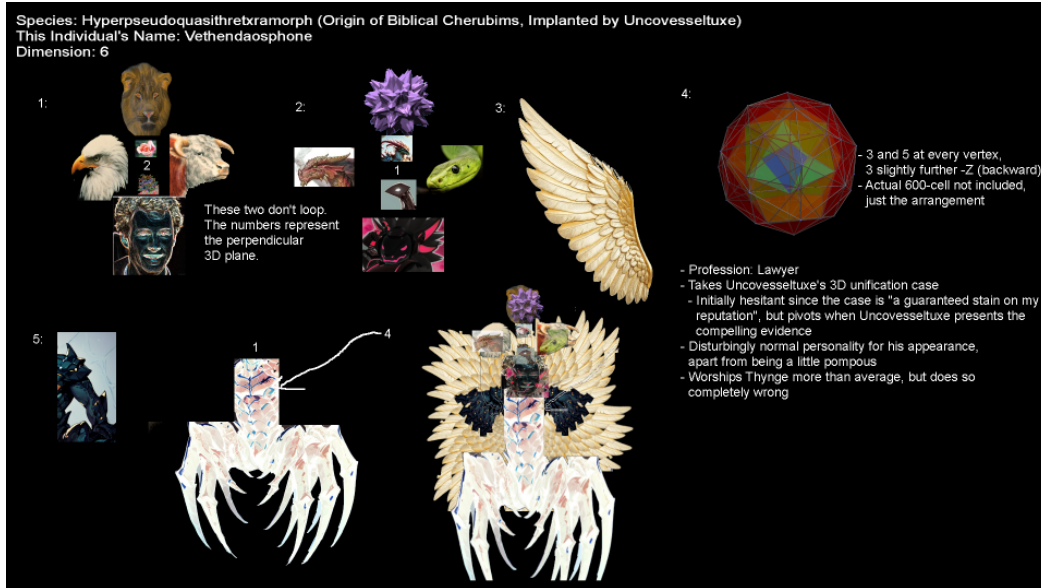
"Yes, you are still you, you just have knowledge implanted in." Uncovesseltuxe's displayed eyes smiled.

"What happened to like...learning, and building skills, and...Isn't that what makes me human? What's the point of anything if I automatically know everything!"

Uncovesseltuxe ignored Taylor and pressed the 45 button, and the group rode up for several minutes. There must have been room for at least three dozen more people in here, purely due to the massive volume of a 6-cube.

Then they walked through a maze of hallways, Ievokt leading them through the proper turns.

Finally they arrived at Vethendaosphone's office. The lawyer looked like twelve heads of completely different species, stacked on top of a torso with hundreds of arms and wings, all set as the upper half of a lopsided, densely-legged spider centaur. It was the strangest thing Taylor had ever seen. Even Ievokt looked quite shocked. Uncovesseltuxe and Thaneophyros stood/hovered there unfazed, as if seeing stuff like this were a daily occurrence.



/\*Vethendaosphone

"Phyros, what is that...beast?"

"He's just a standard hyperpseudoquasithretxramorph. They are common in the six and seven dimensional realms but you can find them elsewhere too. Everyone in the Stack will look a bit weird to you, so just...don't worry. I am here to protect you, Taylor."

"Hello, Vethendaosphone. Do you speak Quatrammotile?" Uncovesseltuxe queried.

"Yes. Please come in, I'll get my wings off the table." Once again, Taylor's systems autotranslated the exchange.

"We're here to integrate the three-dimensional geometries, once and for all."

"Oooh, sorry, I can't help with that. Too risky."

"Really? We've worked on this for 300,000 years."

"I can't."

## Chapter 12 (Divine Wrath)

"By Thynges will, I refuse to take your case!"

"Who's this Thynges you all keep mentioning?" Taylor asked.

"Basically a monotheistic god. Except that ve's actually verified and proven, and shows up all the time to meddle in our affairs. Ve's some kind of tree thing as far as we're aware." Uncovesseltuxe explained in English to try and hide it from the lawyer.

"Where is he getting Thynges will from?"

"He's not really, it's a thing people say in formal settings. Honestly quite annoying in my opinion."

=====

Thynges watched from the world of aleph-null dimensions. Ve also found this annoying. Using vis will for random things? That was fine with vim, vis will carried the value of any person, really. Ve was pretty much just a random person with a simulation hobby anyway. But attributing dimensionist actions to 'vis will' irked vim.

Ve met vis infinite quantity of fingers, which were arranged in an aleph-null-orthoplex, to vis iridescent eyes in one-to-one correspondence, pushing on them out of frustration. As always, the glowing orb containing the entire Stack was hooked to vis branch thirty meters downward, surrounded by the weird blue and meaty fruits that vis current form grew on its pale, birchy branches.



/\*Thynge (one selected form not described here)

Thynge was no stranger to vis creations, and ve knew that they would listen to vim. They always held an air of caution towards vis avatar Iaragans. Ve wished they would consider them as a citizen of vis world, not as the god outcast that could mess everything up in an instant. But considering ve had the power of influence, that court case was not going to be thwarted under vis watch. Ve focused vis mind into Iaragans' body and used its reality-warping powers to appear inside Vethendaosphone's office.

=====

Iaragans appeared in the corner of Vethendaosphone's office, its form of two trees attached to the base dripping wet, as it was an aquatic creature which had just teleported out of the infinite oceans of H6. Iaragans spoke in an oversimplified version of Thynge's language that didn't require infinite dimensions of the vocal tract to articulate properly. It was extraordinarily efficient at delivering information, if phonemically complex.

Unfortunately, it wasn't particularly widely spoken outside of H6, and Thynges had not learned to speak any of the more common languages, although ve could read their intention in a way independent of language, allowing vim to respond accordingly in visual ways. But before ve moved to the charades, ve always tried the easier route to see if it would work. "[ç'ɛm]βχ<sup>w</sup> ɛtæli:kə ɲejbĩq antr:ɛ<sup>h</sup>h]".

"Does anyone here know Thyngesoidese?" Thaneophyros asked in Quatrammotile. Everyone shook their heads.

Iaragans summoned a large, silver arrow pointing to the case file.

"Well...uh...haha...I guess I better...take your case then."

"Are you actually going to try? It seems like you also hate tris," Ievokt asked bluntly.

"No...the cases just never get anywhere...and it's practically a guaranteed stain on a lawyer's image."

"Thynges, why can't you just make this case work?" asked Taylor.

"[βɛ[sig<sup>w</sup>] Iaragans." Ve preferred the name Iaragans when using vis avatar, for no particular reason. But Iaragans struggled to come up with valid clues.

"I have experience with this kind of thing, running simulations and all that," Uncovesseltuxe said. "Controlling the decisions of sapient beings isn't morally right, and they tend to escape your grasp sooner or later."

Iaragans thought hard about how to signify correctness in a way independent of culture. Uncovesseltuxe bailed him out. "Iaragans, if I am correct, summon me some bread. If I'm wrong, I don't know, let the carpet be yellow." Uncovesseltuxe's face lit up delightedly as he received a bag full of loaves of human bread in potato chip format.

"Who cares about morals anyway? Morals are for sissies." Ievokt crossed his arms.

Iaragans, having delivered vis message and more, decided to leave, simply popping out of existence here and reappearing in H6.

"To be fair," Vethendaosphone noted, "you have some genuine evidence now, with the simulation and all that. So we have a chance."

## Chapter 13 (Court Threads)

Taylor regained his composure. The last hour had been a complete blur, almost as if they had gone completely on autopilot the entire time, but they vaguely remembered navigating some sort of five???-dimensional city to get here. They queried their geolocation readouts. *The ground is four-dimensional so this is five...-dimensional...I think?*

In front of Taylor was an apparent courtroom, with indeed five dimensions, though it wasn't quite a direct analogue to the courtrooms they had seen on Earth. Beside Taylor sat five robots that looked similar to the sidpith-based travel drones they and Ievokt had inhabited in the four-dimensional world, but with what appeared to be a runcicantellated 5-orthoplex as a head. Presumably these were Uncovesseltuxe, Thaneophyros, Ievokt, the lawyer, and...some other person. Taylor figured maybe he could directly ping someone to match the-

Oh hey, it seems you've returned control to yourself. -- Outzcradien of S3xE

What do you mean? -- Taylor Vedersamp of E3/Tuxe

I think you must have decided to put an AI in control of your body until we got to the courtroom here. You messaged Thaneophyros saying you were feeling overwhelmed and that you were "going to rest for a little". Sometimes memories from right before you enable autopilot can get a little fuzzy, so you might not be able to recall doing that. Trust me, you did. -- Outzcradien of S3xE

Huh. -- Taylor Vedersamp of E3/Tuxe

Wait...your name. You're not that human who...nevermind. -- Outzcradien of S3xE

One of the five robots sitting next to him grimaced slightly on their display and clutched their shoulder.

"We are gathered here today for the case surrounding new proof on the intelligence of three-dimensional beings. If the plaintiff's proof is valid, this court shall put in an order for portal hubs to the eight maximal three-dimensional model geometries. There is no defendant in this case," the judge began. "Please present your evidence."

Vethendaosphone walked up to the stand and placed a stack of papers on it, their many legs rippling across the floor.

"Already looking at this...and it's not looking good...How much did you interfere exactly, Uncovesseltuxe?"

"I...I wanted to make the transition easier for the humans, your honor. I felt it was immoral to give them no preparation. But the only interference I did was injecting some of our species into their mythology."

Thaneophyros looked at Taylor strongly.

Don't bring up the Thea thing. -- Thetx'neo'foef'rusu of F4

I wasn't going to, but good thinking. -- Taylor of E3/Tuxe

"You two! You look like you have something to say."

"No."

"I remind you that withholding important information from a judge is a crime."

"Uhhh...Thaneophyros pretended to be my love interest to nudge me towards the conjecture."

Uncovesseltuxe jerked his head back at Taylor, then forward at the judge. His sharp front teeth extended, and the diamond shapes of bone at the roof of his mouth started clattering together rapidly, coloring his voice with extra noise. This was apparently some sort of anger expression mechanism. "That IS NOT illegal. It's only illegal to directly lie! I read the code...This is-you manipulated them!"

Vethendaosphone agreed with Uncovesseltuxe. "If I may interject, your honor, he is right. It IS, however, illegal for a judge to lie about the contents of the law during a court session."

"Whatever the law is, I believe this evidence invalidates the case. Rejected."

"TEP'ROQ!!!! I SPENT 300,000 TEP'ROQOET YEARS AND THEN WHAT? I LOSE TO A SIMPLE LIE! BY THE ONE PERSON WHO NEEDS TO BE OBJECTIVE!" Uncovesseltuxe was absolutely fuming. He regained his composure a bit and activated his instant return. The rest followed.

Taylor suddenly collapsed, unable to operate their usual sidpith. Uncovesseltuxe had apparently activated some failsafe.

"I'm sending you back to Earth...This experiment is over...I'll just run the simulation until all of you kill each other and then I can retire." Uncovesseltuxe said, completely devastated, his mouth no longer clattering but his teeth still extended.

"Why can't you just let Taylor stay in the Stack?" Thaneophyros raised their voice.

"What are they going to do here anyway? The topological dysphoria will set in sooner or later." Uncovesseltuxe's tone had become overrun with cold logic, experiencing a state of denial as he fully processed what he had spent the last 300,000 years of his life accomplishing.

"It's possible they could be pandimensional. Or an unaware tetran."

"A human? Pandimensional? They're all confined to a small set of online chatrooms. What are the chances even? I'm almost completely sure I'm doing them a favor."

"Tuxe, please maintain distance from the control panel. He did not perform immoral actions. Tuxe. Tuxe!! Uncovesseltuxe, I demand of you, do not- TAYLOR, NO-"

Taylor, able to move again, saw a blurry, planar impression of the sun shining down on them, felt a searing headache, and clutched their forehead. Oh no. The feeling of their palm to their head was too flat. They struggled to focus their eyes and found themselves back in Buenos Aires. The place was littered with missing posters of their own face. They squirmed around in a strange way, trying desperately to rotate in non-existent planes, screaming earsplittingly and unnaturally at surreal resonances and drawing a crowd.

"It's...that's the missing mathematician, isn't it?" said some old woman.

# Part II – A Very Lackluster Omnigeon TF

## Chapter 14 (Eldritch Horrors Beyond Human Comprehension)

The few days of being back on Earth had done almost nothing for Taylor's stability, even after returning back home to their university. Sure, they were mostly living life, but they kept walking into walls due to the dizziness from having such flat, planar eyesight. The doctor had prescribed them schizophrenia pills and sent them back out into the world, where everyone noticed they seemed...different. Taylor could have a normal conversation, but if any shape was mentioned at all, or any numbers three through six, they would visibly wince and retain an uncomfortable expression for a good while, drawing concern from their friends and family. Sometimes they'd lash out at people instead, spouting what seemed like nonsense to the layperson. Their speech in general was riddled with words from Quatrammotile, the main Omnigeon language; and Sessive, the strange language they translated at the front desk of Vethendaosphone's office building. Even the grammar showed through a bit; sometimes they'd organize sentences in a weird backwards order with the verb before the subject and random filler words; rarely the postfix notation of Sessive would make even simple sentences sound like a collection of unrelated words in haphazard order.

Taylor entered the lecture hall for the same differential geometry course that started this mess, now a grim reminder of their own limitations. Suddenly, a young surreal-looking woman with snow-white hair and amber eyes pulled them aside into the hallway, where a man with an eyepatch and a black mask, dressed in an all-red version of military uniform, also stood.

"Taylor, we are going to aid you in re-exiting this simulation." said the very angelic-looking woman.

"Are you...Thaneophyros? I recognize that phrasing." Taylor looked at the woman with exhaustion and dread in his eyes.

"I am Thaneophyros and beside my human form stands Ievokt. Listen, Uncovesseltuxe is a good friend of mine, but I cannot let him keep you here. You no longer belong with your kin."

"Why not?" Taylor raised their voice, trembling with frustration. "I'm human! Don't try to tell me I'm permanently screwed up! I can't be. I can't."

"You are. You have comprehended things humans should not comprehend. You are indistinguishable from a madman."

"You were the one who showed me!"

"Regardless of my involvement, you will suffer here. I cannot fix you to who you were before, but I can accommodate you in my world."

"Accommodate? You're just going to offer me a stupid machine again! Whatever shred of humanity I can hang onto will 'accommodate' me better than your trademarked technology!"

"Taylor. I am only trying to help you. We have a better solution to your problem than the sidpith. New technologies are emerging in my world, enough to transfer you into--"

"I don't want to leave."

Thaneophyros opened their mouth, about to try to argue further, but gave up before they started speaking. They muttered some Quatrammotile vulgarity under their breath, revealed a slice of their true form and yanked Taylor out of the simulation again. The wrench and the freezing empty space were no longer necessary, as it seemed some quality of life updates had been made in the last minute. However, there was a flurry of text information flooding Taylor's now volumetric visual field, and they had regained the ability to process it all of it. In all the chaos there was a timestamp. Everything had been dormant for about 30 years in E4 time prior to their conversation. There was also a log, from which a few important entries were highlighted.

2661 AD. I failed the court trial today. I've decided to regroup and potentially find another home for humanity. If not that, some more funding or team members would help. - Uncovesseltuxe

2670 AD. Temuontetxecgen and his dual have some further defects. They've tried mitosis at this point and the branch has no consciousness inhabiting it. This could prove useful. Some volunteer

body may become necessary in the future; most recent primary candidate has been exposed to us and sent back. - Uncovesseltuxe

2675 AD. I was exposed to another severe dose of radiation yesterday due to Macrelydve. It just occurred to me that I did not reconfigure. This is odd. - Uncovesseltuxe

2687 AD. I'm getting weaker and weaker. I've tried resetting myself repeatedly but I can't reconfigure myself anymore. That one radiation incident has given me some sort of mystery ailment that isn't getting better. I talked to Outzcradien and they're working on some sort of treatment. This form has been honestly my favorite of all time. However, I need to change soon, to cure my affliction. - Uncovesseltuxe

2690 AD. Uncovesseltuxe is safe. His genome has reached a block that seems to be hardwired to kick in at some random point upwards of 5,000 forms. I've checked myself and a few others; the block is dormant in us all but I confirmed it resets in any branch produced by mitosis. "Body-hopping" may be an option to cure this, but there's a known sequence of unused genetic material in cells labelled EMERGENCY in what we understand of Thynggeoidese. I've spliced this into Uncovesseltuxe's reconfiguration instructions and he's now in some sort of constantly shifting unconscious state. For now I have him on life support to see if he stabilizes. - Outzcradien

2691 AD. Thaneophyros plans to start the simulation briefly to give Taylor our proposed treatment. I've spent many hours decoding the emergency genetic material and it has a similar block for exactly nine forms. The shifting state seems to be clearing out a lot of fluid from his system and also consumes water voraciously. I believe it aims to reset everything more completely than normal reconfiguration. His eyes are darting rapidly as they shift; I think he may wake up soon. Glyphs crossed. - Outzcradien

## Chapter 15 (Double Mitosis)

Taylor was some sort of contraption of a camera and speakers on wheels for the time being. Thaneophyros and Ievokt pushed them across the floor like a cart, and Outzcradien, still a Symbolacron, opened doors for them. They audibly sighed through the speakers, in a mixture of exasperation and relief. Maybe they did fit better out here. The eight cardinal directions surrounded them in a satisfying way that Earth couldn't reproduce accurately. Looking forward in particular, Taylor noticed Outzcradien's weirdly angled wing had been cut off messily at its base.

"Taylor, I can see where you're staring. The camera is pointing directly there. Listen...I'm sorry if I overreacted to the form thing. I get that humanity is a society that ascribes a lot of value to symbols. But we...we do not. And you need to let go of your associations now. The process we're about to undertake is difficult to reverse."

"What process?" Taylor asked in confusion. It was tiring that everyone would just drop information on them dramatically, never enough to understand what was going on.

"We're going to turn you into one of us. An Omnigeon. So you can be truly four-dimensional."

Taylor felt a bit stranded in this situation; though they didn't object to this proposition anymore given how relieved they felt being back in E4, they wanted to carefully consider it and ask questions, since it seemed like a pretty drastic operation.

They finally entered the correct room. Temuontetxecgen was hunched over a table, making strained groaning noises, while another person Taylor hadn't met yet stabilized him. Temuontetxecgen also had a much more natural form, with eight arms in a diamond prism arrangement, a dragonlike facial structure, and light green tinted arms, wearing a fancy vest which was drenched in sweat from whatever he was currently doing.



\*Temuontetxecgen Form 2

"Who is that?"

"I'm Temuontetxecgen and Kyrannikalx. My two bodies will be, in tandem, branching into yours.", said Kyrannikalx.

"Two bodies?"

"GAHHHHHH!!!" Temuontetxecgen yelled in pain.

"I am fine, I just have to split that one's cells a bit first since it's a bit impaired. That body has had some work done to stabilize its form, but its children have no imbued stream of sapience, and so neither does this one's children."

"Will someone please explain?!" Taylor yelled, frustrated.

"Linear-temporal dualism." Kyrannikalx stood confidently and crossed his arms to explain, though his eyes appeared to respond to pain in sync with Temuontetxecgen.

"Do you expect me to know what that is?"

"In the many realms of the Stack, there are worlds with multiple dimensions of time, non-Euclidean time, and many weird properties of life and physics come about just to make it work. And the way time perception does this can be thought of as if the present is an expanding sphere from the 'center' of the timespace. All points on this sphere are controlled equally by one mind. And so they must give birth, branch, and die in tandem to keep it all centered. Normally, these are somewhat connected and affect each other in complex ways. But for time that is specifically linear, closest to how it works on Earth, a sphere is just two disconnected points. And that means one mind controls two separate people. The body I speak through to you now is the son of Typhumebiek, the other side of Uncovesseltuxe. Now you, Taylor. Your two parallel experiences lie in the exact same spot, processing the exact same stimuli and having the exact same reaction. But this process must sever them from each other. And since you need two bodies, and I am messed up and produce empty offspring, we have figured we could transfer you into it, and you can be my child. Outzcradien has done some research on us to make sure this is safe."

"Yes, your offspring once implanted with a mind should be indistinguishable from a normal Omnigeon. Should even be able to properly mitosis into viable offspring, if Taylor decides they want to do so," Outzschcrad interjected.

Temuontetxecgen raised his many arms into the air. "Finished preparation!" His whole body was noticeably wider and had a deep crease down the middle.

Kyrannikalx grimaced lightly. "It is time. You all might want to stand back lest one of me falls on you."

Temuontetxecgen's legs and Kyrannikalx's head forked into two.

"Tep'roq! This is supposed to be easy..." Kyrannikalx grunted.

"...for anyone else but me. Screw you, Uncovesseltuxe." The line redirected to Temuontetxecgen as Kyrannikalx's mouth ripped itself in half.

They continued to split apart, every progression on a part of Temuontetxecgen's lower body reflected on a part of Kyrannikalx's upper body and vice versa.

"~~Dammit~~~~Dammit!~~ ~~It's~~~~It's~~ ~~stuck~~~~stuck~~ ~~on~~~~on~~ ~~the~~~~the~~ ~~skull~~~~last~~ ~~four~~ ~~vertebrae~~!" Kyrannikalx and Temuontetxecgen cried out simultaneously. They were almost fully split, having to separate one last piece each.

Temuontetxecgen's eyes narrowed. "Watch and learn, *Homo sapiens*." They performed some crazy maneuver, using one arm each to lean against the wall, a few more arms prepared to catch the duplicates, and the remaining arms to push and pull at each other's blockages. Finally, they managed to dislodge each other from themselves, each catching the other's duplicate.

"At last! Thyng, that is hard on the spine." Kyrannikalx said.

"What do you say, Taylor? One reconfiguration for good luck?" Temuontetxecgen asked.

"This shouldn't be a question. In your case, the duplicate cells you just produced are slightly malformed. Reconfiguration should fully fix that issue. Just one out of five thousand anyway, and we're giving it to a short-lived human." Outzcradien said, in a clinical tone.

"Is this a good idea? Is the pitiful human mind even meant to live that long?" Ievokt asked.

"Not pitiful." Thaneophyros corrected.

"My question wasn't rhetorical. I'm concerned for Taylor's sanity."

"Uncovesseltuxe in theory designed humanity to adapt to such things if needed. Whether the design works is all theoretical; such a thing has never actually been done, so this is all untested." Temuontetxecgen explained, still catching his breath.

"Okay. Outzcradien, do your thing!" said Thaneophyros.

Outzcradien placed a glyph on the closest object to what would be Taylor's shoulder if he weren't a camera on a stand. "See you in a bit, buddy."

"Just give me a minute to—" Taylor tried to interrupt everything, but was cut off mid-sentence. Then everything went black.

## Chapter 16 (Pain is Existence)

Common sent a message to NULL - Where am I? I can't see anything at all.

Common sent a message to NULL - please. Please will someone respond? ANYONE! Help!

Common sent a message to NULL -: I need an explanation. Or any senses. Just give me something to let me verify I exist.

Common sent a message to NULL - Why should I exist anyway? Have I ever existed? Everything before might have been a dream of mine. I'm just a series of pings destined to reach NULL.

Taylor sent a message to Common - Hello, Common, I have just arrived. I exist. You don't, physically at least. But you should feel the texture and warmth of the blanket above me now.

Common sent a message to Taylor - oh my god thank you. I thought I would never see daylight again. Can you open your eyes, if you have any?

Taylor sent a message to Common - Yes, I have eyes. Ten.

The world swam around Taylor. They were unfathomably dizzy, despite being horizontal on what felt like a four-dimensional bed. But genuinely. Not that slightly tingly, vibrate-y touch sense from within the sidpith, but real. Somehow even more real than in a human body. It was exhilarating.

"They have awoken." said a voice that sounded like Kyrannikalx.

Taylor felt a thermometer enter his mouth, briefly bumping his jaw on the way. Two pieces of information were apparent from the sensation this caused: one, there were

scales on top of their skin, and two, his jaw was much further forward and longer, perhaps in a reptilian maw like the first and third forms of Uncovesseltuxe out of the ones they had seen. Also, they could feel they had the cricket-like articulator that everyone seemed to have for whatever reason, somewhere in between their retractable teeth and back teeth.

"Fever of 157. Decreasing at a rate of 0.5 degrees per minute." Thaneophyros stated. "Okay, Taylor, the operation was successful. Are you able to drink water at this point?"

"Ehhhhfffeeffeggepp....effennneeenggggeenngggaaahhhh"

"Right. You're used to the human mouth. I don't think an IV is worth it, you can drink water in half an hour or so when your condition improves."

An unrecognized voice called out from another room. "I'm here! Is the human ready?". This language wasn't English, it was clearly Quatrammotile, but Taylor understood anyway, probably from Temuontetxecgen's procedural memory.

Alexander sent a message to common - Apologies, common. It took me a bit to get my bearings. Fourteen more eyes should be connected now.

Another experience suddenly became apparent to Taylor.

One far more alert than the current one. A loud beep resonated across the area, now seen through more adjusted eyes as an emergency room not affiliated with Tuxe Labs. Outzcradien was sitting in a chair beside the bed.

"Guys, the Kyrannikalx one's eyes just focused."

Thaneophyros and the unrecognized person rushed into the room.

"Taylor, are you alert?" Thaneophyros asked, an excited smile spreading around all five of his faces in a circular fashion.

"NGGAAnnneeyyyoonon..."

"It appears you are."

"Hello, I'm Lexanephaong. I will be your speech pathologist. This is...uh...definitely a new case for me. I've never had the privilege of working with an entirely different species with a transferred mind. I'm sure it'll be interesting for both of us."

"HHHeeennggggooooo...."

"They're saying 'hello'. It's a greeting in their native language." Thaneophyros explained to the pathologist.

"Okay, that already gives me a bit of information. Could you perhaps say, "Doth'lev'n"?"

"Ngggggookhhheeevven?"

"Yes, yes, good effort. So first thing, you're using your back teeth to pronounce those auxdental consonants. They would make more of a k-k-kuh sound. Notice there's teeth further forward, near the opening. Can you try using those?"

"DDDosseven?"

"That's closer! Thaneophyros, it's pretty rare to see people using the wrong teeth like that, is there a medical reason for that?"

"No, his original species only has one set of teeth, which correspond to the front ones. I assume he found the back ones and tried to use those."

"Sounds accurate."

Lessons continued for hours, but it seemed like it was progressing faster than normal.

"Isn't zthis supposed to thake longerr?"

"Nah, Omnigeons have a bit of a thing for adaptation. You're doing great, just have to clear up the difference between dental consonants."

"Oh!" Taylor's other body jolted upright in the next room over. "Themuon's tsild has suddently recovered."

Outzcradien rushed over to the Temuontetxecgen half's room to check. "Your dizziness is gone?"

"Yeah. Any tsanthe I could sry walking?"

"Don't hurt yourself. Don't rush yourself to recover either. This is a very physically straining operation."

Taylor put one foot on the ground, then another. Then they put another foot on the ground. They uncovered a fourth leg from the blanket, only to reveal two more. "What the helzh? How am I suppothsed to walk?"

"With that arrangement, the best is three and three, in alternating vertices."

Meanwhile, in the other room, the Kyrannikalx half of Taylor had an epiphany distinguishing between all the dental consonants.

"My work here is done then. You've done a great job learning to speak." Lexanephaong congratulated Taylor as Thaneophyros handed them a wad of cash.

Back in Temuontetxecgen Taylor's room, Taylor put his feet on the ground and stabilized himself with one of the posts of the bed.

"Doesn't this get complicated?"

"No, not really, to be honest. Our species needs to be able to adapt to different bodies, otherwise reconfiguration wouldn't work very well."

Taylor raised three legs, stepped forward, and caught themselves with the other three, advancing one step forward. Then they did it again. "How in the world is this so easy?"

"Welcome to being an Omnigeon, buddy. I have to say, it's pretty awesome being one."

## Chapter 17 (Sidewinding)

After discharging Taylor from the hospital, they walked towards Outzcradien's car. It was quite cold outside, and neither side of Taylor had clothes on. Currently only the Temuontetxecgen half was out; the other was still in the waiting room figuring out how to slither triply with the help of Thaneophyros.

"I feel uncomfortable walking outside nude like this," said Temuontetxecgen Taylor.

"There's not really a taboo on stuff like that here, but we figured we'd take you to the store to get some clothes. For weather, you know?" Temuontetxecgen looked excited at his side of Taylor's completed transformation.

Meanwhile, Kyrannikalx Taylor was having a bit of a struggle and writhing his tails around, unable to figure out how to locomote.

"Have your two bodies seen each other yet?" Thaneophyros asked.

"No."

"The sooner you can figure out those tails, the sooner you can finally see each other. It should be a really interesting experience, seeing your halves from the other, twice at the same time, with no need for a mirror."

"How do I look? What kind of horrible beast do I inhabit?" Their intonation on "horrible" was more joking than anything else, but internally they were extremely concerned about what they would see of each other.

"Oh, I wouldn't want to spoil too much, but I will say the back of your head is very pretty."

Taylor reached an arm to touch the back of their neck, only to be blocked by a dense matrix of tough horns that seemed to taper off at the end, but also felt extra rough and bent at the midpoint of their trajectory. "Are they broken?"

"No, from what it looks like your horn follicles are weight sensitive, changing the cross-section shape at a certain point."

"I...I still can't figure out how to walk on my own."

"Okay, if the natural adaptation failed, we'll have to manually try a few different ways. There are five methods of serpentine movement, and your ability with each one will vary. Rectilinear: can you just slither forward and have the ribs on your belly act like the legs of a millipede?"

"No, I don't have enough control."

"Lateral: can you follow a wavy curve? Or rather three parallel curves."

"Yes! But not very effectively."

"Then there is a method that your scientists would call 'concertina' movement, but it's for tunnels where you can push off the sides. Anyway, it won't be very effective here on open ground, and you almost certainly have something else. Sidewinding: can you do the lateral thing but vertically as well?"

Kyrannikalx Taylor began to advance across the ground diagonally at a reasonably quick speed, much faster than Thaneophyros could hope to achieve with their dragging fish tails, but slower than the sidewinding of a typical snake.

"That seems to function well enough. I'm very happy to know we both move sideways." Thaneophyros did their dragging creep beside/behind Taylor, trying to match their speed but being inadequate. "Hey Taylor? Uh, I'm not a very fast walker in this form, could you decrease your velocity a bit? You're doing great though."

The hallway approached, and Taylor, without much extra thought, switched to a triplet of concertina movements arranged across the additional third direction of the floor, pushing off the walls and advancing at a slower speed, allowing Thaneophyros to shuffle towards them and catch his breath. Exiting the hallway, they resumed sidewinding. Invigorated, Taylor practically threw open the lobby door of the hospital building, held the door open with his tails and concertinaed through the entrance.

"Outzcradien's car should be that way."

"I know where it is. I went there as my other side."

"Oh right! Good."

Taylor came face to face with themselves. Both versions immediately gasped.

Alexander sent a message to Common - That's us.

Taylor sent a message to Common - That's also us. Wow, we're hot. And ripped.

Alexander sent a message to Common - Taylor is slightly less lucky than I am.

Taylor sent a message to Alexander - Hey!

Common sent a message to all - Will you shut up? I'm processing a lot of input right now already.

The half born of Temuontetxecgen was standing beside Outzcradien's shiny green car. They had grayish-green, scaled skin in a warped prismatic version of a truncated square tiling, with orange-yellow markings, brows merged with his ten horns in a decagonal arrangement, and ten bright cyan eyes in the same arrangement with slit pupils. A few teeth stuck out from their draconian mouth, which could be described as a tall-walled V-shape distorted into spiky waves, and a decent amount of additional, shorter spikes emanated from their jaw and the back of their head. Their snout tapered a bit into a flatter section at the front, where eight nostrils in a four-by-two arrangement sat, taking in fresh air and picking up a whiff of mulch. Their torso was just as complicated, with six limbs corresponding to six pectoral muscles, which had a sort of stripey pattern of elongated scales, and a "sixteen-pack" which was 4x2x2 rather than 3x2, still in a roughly square arrangement unlike their arms. Their legs were similarly hexagonal, but rotated relative to their arms so that a leg corresponded to a vertex of the leg arrangement but an edge of the arm arrangement.

The half born of Kyrannikalx had three snake tails in a neat line, as they had noticed before. The glossy scales across their body were a nice Persian blue, with a faint iridescence that favored purple and yellow. The thick horns on the back of their head were densely packed, looking almost like a hedgehog, which started at the base with cuboctahedral cross-sections, then lightly bent into a corner and shifted to truncated cubic cross-sections. A few jagged white lines shone out along their skin from their eyes like rays of sunlight. The eyes themselves were arranged in a tetrakis cube arrangement making use of altitude as a third dimension, and had milky white irises and great heptagrammic bistrut-shaped pupils. Their torso had a comparatively simple, square arrangement of arms and pectorals, and a 3x2x2 set of abs. Unlike the Temuontetxecgen half which was more humanly proportioned, this form was incredibly muscular, possessing a physique straight out of a furry artist's sketchbook.

The two halves locked eyes curiously. The Temuontetxecgen half spoke first, having a deep and dramatic voice with a slight gravelly quality. "I'm thinking of a number between one and te--"

"Six." The Kyrannikalx half crossed one pair of their arms.

"A number between one and--"

"One and one thousand, and the number is 675. I'm thinking of a phra--" The Kyrannikalx half tried to verify that the connection went both ways. The corresponding voice had a smooth, high-pitched, and naturally sarcastic tone with a flat, slowly falling intonation.

""Two of a kind, silence and I, we need a chance to talk things over.' Good song." It indeed did. "Why are your--"

"Our."

"Why do the pupils in that body look distant?"

"If you don't know the answer, why should I be able to answer you as your own mere proxy? Or my proxy. What are we?"

"Cut the theatrics, Taylor. We all know you're acting this out for show." Outzcradien interjected seriously. Thaneophyros seemed a bit disappointed, having enjoyed watching it play out.

"What's the point of having two bodies if I can't screw around like this?" asked the Temuontetxecgen half.

"You can," Outzschcrad sighed, realizing they were inhibiting Taylor's self-discovery. "Just maybe later. Right now we have to figure out how to wind three large snake tails into a tiny eight-seater car."

## Chapter 18 (Taylor and Tailor)

Kyrannikalx Taylor's tails were densely packed into the two-by-two-by-two-seated car, switching back and winding around the seats and each other. The trajectories were so difficult to pack in that Temuontetxecgen, the driver, had reluctantly allowed some of one to pass directly across his lap round-trip, and the empty space between Outzcradien's glyphs and core was also mostly filled. Thaneophyros was squeezed into the trunk, diagonally and hunched over, with his pentagram being too large and his tail stance too wide to fit in a seat.

"Okay, before we get pulled over and you get arrested, we need to register you." Outzcradien telepathized due to his mouth being passed over with tail length, breaking up with static occasionally like a phone line but ultimately still understandable.

"Alright." Taylor was messing around with his two bodies, playing some kind of four-armed patty-cake with the six-armed form swapping arms around.

"Can you focus? This is kind of important. I know having two bodies is weird for you but eventually it will seem more normal."

"Sure." Taylor tore themselves away from themselves, then blinked.

"Okay, so, you are legally required to have a unique name, but the requirements are really lax. Names are represented in the higher dimensional equivalents of Bezier curves and surfaces, so you can use any writing system you want. Most people opt for names in the Standard Quatrammotile writing system, which means a lot of those are taken. Fortunately, they don't care about pronunciation being unique, so you can get around that by adding a little flourish."

"Got it, so I can name myself Taylor with a thing after it?"

"You can name one of your bodies Taylor. By law, linear-time duals need different names, unlike higher-dimensional spheres where it's all one name. And you can just give them different flourishes, but that will be really, really confusing. In cases where your duals are near each other, people will need to refer to just one sometimes."

Thaneophyros interjected. "Most dual pairs never meet, but that's mostly just a distance and scheduling thing. Anyone could decide to unify their lives at any time, with no consequence. And I assume, since you're uh...so intimate with yourself..." They stared

down at Taylor's duals, who were stroking each other's horns. "...that you would want to do that now. For our sake at least, pick one Taylor and name the other something else."

"Alexander perhaps?" said the three-tailed blue-scaled body.

"And I guess this one will be Taylor." said the body with gray scales and yellow markings.

"Here is some paper. Hopefully you guessed by now it's volumetric. Write your names, and I'll register you under them. Also, can we call your 'common mind' Tayxander?"

"Yeah, I guess so." Taylor wrote down "Taylor" in slanted, prismatic letters, then a dingbat consisting of three spheres, an octahedron representing an  $x$ , then another, rotated octahedron, and finally one more sphere, representing  $3x + 1$ , the formula for one half of the Collatz conjecture they had solved.

Alexander wrote their name as Ev'leqthef'nde in the Standard Quatrammotile alphabet, followed by a Greek letter rho enclosed within an icosahedron.

Outzcradien took the pieces of paper and scanned them with their phone, then completed the registration process, which took only seconds. The entire list was a very simple relational database table, its rows only consisting of a unique written name as a key, a correct pronunciation, and an optional short name which Outzcradien set to null for now.

"Thank you, Taylor. Let's get you dressed."

Outzcradien drove for a few minutes, arriving at a place called "Brachassembus - Quality Clothing". "Let's see if there's anything decent here."

Taylor and Alexander opened opposite car doors, closed them, and met in the middle behind the car, locking arms with each other.

"Those two are inseparable." said Ievokt, landing on the pavement next to them and deactivating the rockets on his legs.

"Yeah, I think Taylor is still figuring out dualism." Thaneophyros replied.

"Speaking of which, shouldn't I have a dual?"

"You're in a similar situation to Taylor before, your two experiences completely coincide at the moment. In order to separate them, we would need another donor. Which we could just use Temuon and Kalx again, but--"

"Then I don't want that. I am a mechanical being, and I choose to remain that way for the rest of my life."

"That's fair. It's your choice."

The automatic doors opened in front of the group. Temuon waved his arms around a little to get everyone's attention. "Kyrannikalx is leaving. He has a little date planned with a Phykommaton."

Kyrannikalx, eating a small torispherical donut, waved goodbye and formed a generalization of a human peace sign with one of his other hands, then walked off.

"Wait, so, your dual also has the capacity to love?"

"Yes, I managed to offload so much emotional processing to Kalx that he unlocked. He'll have better luck than me, I'm afraid. I still have these extra mouths." Temuontetxecgen pointed to the back of his neck, which opened up grotesquely into the same three additional vocal tracts from his cursed mitosis off Uncovesseltuxe.

Taylor walked over to the aisle with t-shirts, and picked up an orange v-neck. Alexander grabbed a leather jacket off of another shelf and handed it to Taylor, who then grabbed a pair of black pants and walked into a fitting room. Alexander walked off to a more remote corner of the store to try and find some sort of royal-type robes, but decided against it, then pondered a more vampiric style. Ultimately they selected a very long, oversized, futuristic-looking black trench coat with cyan trim, leaving the middle third x third of their front torso bare.

Taylor and Alexander made it almost to checkout, but were stopped by an apparently mandatory step in the purchase, which thankfully was included in the listed price.

Tayxander queried their stored memories copied from Uncovesseltuxe. This was a common process. In 4D, because of a rotation called "twirl", left and right are interchangeable; there's no such correspondence like 3D where if you're facing someone else, their right is your left. To cope with this, each sleeve of the clothing (or a place horizontally aligned with it) would be marked up in some way with a different symbol, so one could refer to "tetrahedron-side" or "Z-side" or "lightning-boltwards".

Taylor got their sleeves embroidered the same way on their v-neck and jacket. Starting at what they considered to be their right arm, the symbols, clockwise around the hexagonal arrangement, were:

1. " $3n + 1$ ", written in the Latin alphabet in toroidal characters in orange.
2. " $2n$ ", written in the Latin alphabet in toroidal characters in red.
3.  $\tau$ , tau, the Greek letter, prised, in neon green.
4. The wireframe of a small rhombicuboctahedron, in lime green.
5. "Vedersamp", his human last name, in frustumed letters, to remember his now foreign, human origins. This was in a golden yellow color.
6. "THEA", in toroidal letters tracing out a triangle, written in a soft pink color.

Alexander went for a more simplistic design, and had their four symbols painted on his coattails under the sleeves, all in cyan. Starting from the right-wint arm, clockwise around the square arrangement, the symbols were:

1. Six inward facing arrows with hexagonal pyramid caps
2. A baseless hexagonal prism
3. An octagonal prism including bases
4. A double helix

Thaneophyros came over to the checkout line to pay for their items, which were ₣84 in total. "I have to say, you two are really cute together as duals."

Alexander rolled their eyes and Taylor gave a thumbs up. Taylor gasped. "Wait wait...What did I just do, and why do I have different styles?"

"Oh, your duals can have different emotions at the same time. They're sort of independent, like your mind is parallelized between them." Outzcradien explained.

Ievokt tried to extend the metaphor a bit better. "Think of yourself as a CPU. Taylor and Alexander are different cores running on the same processor. So they can do different stuff to a degree."

"Actually, that brings up a really good point. Just like cores, even though you as a whole sense everything at once, they *need* their own thoughts to navigate the world around them. You can think of yourself as a third entity, mediating data transfer between them. In another sense you just *are* both of them directly. Both are correct. Make sure that you accommodate both interpretations. Balance between these is important."

"This is really complicated." Taylor complained.

"I understand somewhat." Alexander chimed in.

"Okay, so, then...Try to take Alexander's understanding from his brain and make it your own."

Tayxander focused a "beam" of information from Alexander and "shined" it into Taylor. Or at least that was the closest thing to what happened.

"What the? I just get it now?"

"Also, notice that your degree of separation fluctuates. That's good and normal. Be one, and be two also."

"Hey um...I finished scanning your purchase ten minutes ago," the cashier piped up shyly.

"We should leave." Thaneophyros asserted.

Alexander quickly put on his new trench coat, and Taylor carried his purchases out in a loosely folded stack.



\*Temuontetxecgen Taylor/Taylor



Kyrannikalx Taylor/Alexander

## Chapter 19 (Within the World we're all Sitting Ducks)

Uncoveseltuxe's scales were rapidly changing color and texture, flashes of electricity surging and roiling throughout the life support pod.

"Is he okay?" Taylor asked.

"He tried to reconfigure again, and his genome was too damaged to continue. But there are a few random corrections we can make to hold it together for a little longer. That should buy him about nine forms. Probably about five thousand additional years of life if he stays away from any radiation and is lucky enough to not reconfigure spontaneously from background radiation. It's short, but I think it'll be long enough to enjoy."

"Five THOUSAND years? 5k? How is that in any way short?"

"Well, it's...uh--"

"They're so spoiled from living so long that their sense of long and short lives are skewed." Ievokt explained bluntly.

"Yes, I guess that's a decent explanation. Our sense of the passage of time is very roughly human in scale. We're just...spoiled, yeah. I wanted a better term than that but it's unfortunately true."

"Why did you give short lives to humanity then?"

"Because you all procrastinate and get nothing done if your lives are too long. Trust me, he and I tried that. Did not go well. We threw away that one after five hundred years of nothing."

"Wait so...do you know where we...I mean, humans go when they die?"

"Yes, transferred to a parallel simulation run in H4 by Macrelydve. Everyone who ever died is there. You could say it's heaven, but it's not exactly paradise. Just a differently arranged Earth."

A splintering of cracks appeared in the wall, followed by a sawing sound.

"Use the door!" Thaneophyros called out to whoever was doing that.

"I locked it." Alexander walked up to the door, turned the deadbolt, and peeked out. A vaguely Symbolacron-like formation of hovering paper-thin sheets approached, with four angry-looking, bright blue eyes on orange backgrounds, all embedded within some of those sheets.

"Hello. I am Banqrrougt. I am three, four, five, and seven dimensional, and if you try to experiment on me I will perform some non-consensual surgery." Banqrrougt had a sarcastic, feminine voice that sounded almost like it was played out of an old radio speaker.

"What are you doing here?" Alexander asked.

"Can I come in? I am being followed."

"Uh, what?"

Banqrrougt barged through the open door. "I'm not going to take any bullshit with this. People are hunting me and I'm going to hide out here."

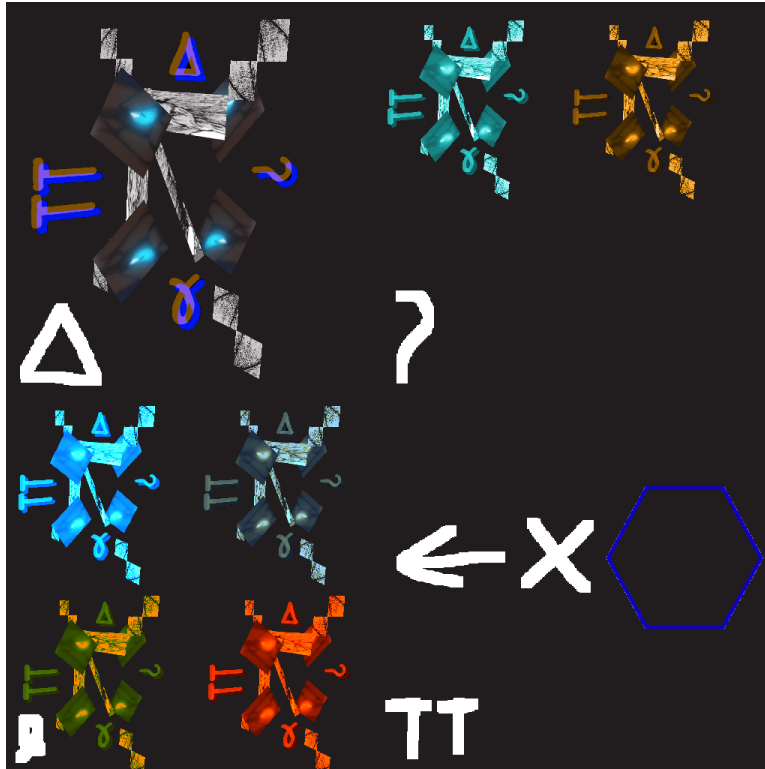
Outzcradien stared, dumbfounded. "Wha- who are you?"

"Banqrrougt. Pleasure to meet you. I can work for you if that helps."

Thaneophyros nodded quintuply.

Ievokt's eyes vibrated with irritation. "Explain yourself. Explain your origins."

"I don't know and I don't care. But suffice it to say I just randomly appeared in one of the worlds of the uncountable five-dimensional geometries. I heard someone call me a Boltzmann brain or something. I'm a very rare case and scientists are hunting me down to study me." She unfolded into 5D, then duoprismed with a growing hexagon into 7D, while slowly rotating. Both of these appeared to everyone as mere slices.



Banqrrougt's four arrangements

"How are you doing that?" Outzcradien inquired, fascinated.

"I have no clue. But it does allow me to threaten anyone to do what I say, so I think it's pretty alright."

Thaneophyros closed his eyes tensely and scratched one of his chins in stress. "You can sleep, rest, whatever, in spare room 03 down the hall. You monitor the sidpith travel drone factory, and you can stay here, and I'll pay you a little because I'm not a heartless monster. But please stay out of the way if you can."

"Fine." Banqrrougt folded back up into her 4D configuration and hovered towards room 03.

"Who was that exactly?" said a familiar voice.

"Uncovesseltuxe, you're awake?" Thaneophyros asked, suddenly invigorated with excitement.

"Yes...You'll have to catch me up a bit on recent events, I have a feeling a lot has happened."

## Chapter 20 (He Rises Again)

Uncovesseltuxe sat up and tried to step out of the pod, only to discover he was half-serpent, then slithered out instead. "Dammit! I really liked that form. Well, let's see what I'm working with this time. I feel incredibly renewed; something must be right about this new one."

Uncovesseltuxe headed past the group, seemingly taking note of Taylor and Alexander to mention in a moment, and entered the bathroom to check himself out in the mirror. He seemed to prefer lateral undulation in this form, following a wavy curve as he moved. "Tep'roq, that's a lot of wings. Eight of them it appears. Nice color. Very cool eyes, love the contrast." His eyes had black whites and pink irises, which looked a little strange. "And humanic skin on my upper body...Very smooth. And...such thick hair! Haven't had this size of tuft in a while. Thynghe, I could stand in the mirror for HOURS. Look at me, I'm so incredibly distingui-

"God, will you SHUT UP!" Ievokt snapped. "It can not be THIS entertaining to see yourself in the mirror."

"Oh...Maybe I'm a little vain now. I wasn't like that before. Could be worse, I suppose."

"Thaaank you."



\*Depiction of Uncovesseltuxe Form 4



Another depiction by Tessimal

Uncovesseltuxe turned around and headed for the Earth control panel. "Should we recover Taylor? I probably should not have put them back."

"That's us two." Taylor and Alexander pointed to each other.

"You two...where did you get the bodies for this?"

"Temuon and Kalx."

"Oh neat! You're my grandchild then. Well, technically you aren't, that's only in human terms. You're the branch of my branch. Anyway, what are your new names?"

"I'm Taylor, this is Alexander, my 'dual' or something. Tayxander for the mind behind it all."

"Yes, that seems about right." Uncovesseltuxe slithered over to hug them.

"You can't love, right?" asked Taylor, their voice strained due to being compressed within both Uncovesseltuxe's coiled tail and his four arms.

"No, but I'm trying anyway. Someday I'll have to figure out how to unlock myself."

"Aren't you almost dead?"

Uncovesseltuxe's smile faded. "Five thousand years is not 'almost dead', Taylor. I have plenty of time."

Alexander was less impressed at this whole situation, and glared Uncovesseltuxe directly in the eye. "I felt like some sort of fish, flopping on the ground for air, trying to find a dimension that failed to exist." Thaneophyros shot them a jokingly offended look and raised one of his tails, then realized he didn't read the room properly and placed it back on the floor.

"Taylor...Alexander. I really apologize for that. I got caught up in my own rage and didn't think straight. I hope you can forgive me."

Taylor and Alexander locked eyes, and Alexander's expression softened a little bit, a typical data exchange between cores of their mental CPU.

"Yeah, I can forgive you." Taylor's hardened, keratinous brows finally relaxed.

"Thaneophyros, I overheard the exchange with Banqrrougt as I was waking up. She'd be really useful for the 2nd attempt since she has all those extra dimensions to manipulate objects in."

"We're trying to integrate the third dimension again?"

"Yeah, I had an idea. I just need to make an intelligence-detecting device."

"That's impossible."

"There is a way, it's just not quite proven yet. But it's correlated, like, 98% accurately. I'm not going to die with this one loose end hanging over me."

# Part III: Perjury

## Chapter 21 (The Lie of the Millennium)

Uncovesseltuxe, still looking rather rushed, pushed himself into the center of the group, accidentally brushing one of his wings against Taylor's face, stopping to dust it off thoroughly like a preening bird, and continuing on his way.

"Okay, everyone. Here's the plan: We'll portal to the 3D universes, and check for gradual changes in the symmetries of the cantellated 600-cell. There have been discoveries of these for millennia, and recent studies in the past ten years have pinpointed them to centers of high intelligence. I have this mechanical thingie here that calculates it constantly, and logs it all to its internal memory."

It immediately started beeping. "Well, I guess we are intelligent, haha." Uncovesseltuxe chuckled.

Its beeps became extremely fast and loud. "I guess I'll read the log?"

The log contained a bunch of polygonal rotational symmetries of different orders. "Ievokt, can you make sense of this data?"

"It's a crapton of ASCII codes. Says 'MAKE ANOTHER OF THIS MACHINE, KEEP THIS ONE SECRET AND ATTACH A VOICE TO READ IN THIS FORMAT. I AM THE CANTELLATED 600-CELL. I WILL TAINT YOUR DATA FAVORABLY.'"

"Uh, what? I can't present false data to a court of law."

It beeped again. "Ievokt, decode again please."

"Chill out, broski. 'I HAVE EVERYTHING PLANNED OUT. NONE OF YOU WILL BE PUNISHED. I AM TIMELESS. I SEE YOUR PAST AND YOUR FUTURE ALL THE WAY TO YOUR DEATH.'"

"Who are you?"

Ievokt looked annoyed about being involved in the repeated back-and-forth. "YOU WILL FIND OUT LATER. FOR NOW MY PLAN REQUIRES YOUR IGNORANCE. YOU CAN CALL ME C600."

"Tuxe, there is no other way with current technology to prove sapience. We must trust this...entity. There is a practically zero probability it would spit out random words for no reason, so the known data must already be fake." Thaneophyros interjected.

"Okay. I happen to have a backup device of this kind. I just need the voice reader...thing."

Ievokt audibly sighed and pointed to a port on the wint side of his face. "Plug it into my sidpith here, I can automate that."

Alexander looked confused. "Aren't you going to lose that in three dimensions?"

"You can enter lower dimensional worlds in higher dimensional form by protruding into the aether that surrounds worlds. That's kinda what Banqrrougt's doing here." Thaneophyros explained.

Ievokt's eyes flickered slightly. "Okay, nerds, I have the dumb voice thing set up. THANK YOU IEVOKT."

"Well at least the thing is polite." Outzcradien remarked.

"FIRST DESTINATION: H3."

Taylor sighed. "Why can't we just go to, like, a normal Euclidean geometry first?"

"INTELLIGENCE IN H3 IS ENHANCED BY THE EXTRA SPACE FOR BRAIN CONNECTIONS. THE RESULTS WILL BE MORE REALISTIC."

"Ughh....here we go again."

## Chapter 22 (The Permanence of the Inhuman Influence)

"Is there any way I could stay behind?" Taylor pestered Uncovesseltuxe as he fumbled with the portal technology.

"Hang on, I'm trying to jailbreak this software to let me illegally access the 3D worlds. I need to concentrate."

"I want to ask about my humanity...Is it ruined?"

Uncovesseltuxe turned around sharply while a concerned expression washed over his face gradually. "Did they tell you this procedure is permanent?"

"They mentioned it briefly but they just said it's hard to reverse. I heard that and thought it was theoretically possible."

Uncovesseltuxe took a moment to respond. "Kinda. You can be two humans. Or one human and one Omnigeon. But your experience is permanently split. And I can't exactly get rid of your extra senses, and you're adapted to E4 since you were born here so being on Earth will make you tire a bit easier. It won't impede your life enough to notice, but it'll be there. These effects I cannot reverse at all."

Taylor ran his matrix of fingers across his scales, Alexander did similar with the horns on the back of his head. Alexander sighed. "I'm fine. I enjoy this form. But it bothers me that with something so permanent you relied on my curiosity and incomprehension to consent to all of this. Thaneophyros never even asked me if I wanted to become one of you."

"Taylor, are you okay going with us?" Uncovesseltuxe asked, noticing that Taylor appeared much less confident during Alexander's response.

"Not...really? I don't know how this world works at all and yet I'm stuck here. I don't want to go dimension-hopping right now."

"Okay, what if we were to have Alexander come along, and leave Taylor behind to adjust for both of you?" Uncovesseltuxe asked Tayxander directly.

Tayxander nodded the head of Taylor.

Uncovesseltuxe finally managed to get the portal open. "It's time. Get everyone through. Except Taylor, of course. And Outzcradien. Taylor, I would suggest you walk around the city a bit with Outzcradien, they can show you around. Also, I have some books downstairs about Omnigeon and E4 culture. You should read those and try to immerse yourself the best you can. Outzcradien, keep an eye on Taylor and make sure they don't get lost or hurt."

## Chapter 23 (Hyperbole)

Alexander entered the portal and was greeted by a similar world to the one they had met Macrelydve in as a sidpith, but with one less dimension. Most of their vision was pitch-black for a moment, apart from a single plane which glowed a bit and showed the world, but their senses started to adapt and ignore all the empty input. Immediately they felt a bit lightheaded and went to a 45 degree angle with the ground, but Uncovesseltuxe quickly coiled once around them and rotated them upright. "Adjustment gets easier the more you do it. Changing dimensions is especially hard at first, and you're meant for four now, so stay near me."

"YOUR FIRS-" C600 sent a message through Ievokt, startling him and causing him to jolt his head to the right, cracking his screen with the tidal forces of hyperbolic space. "Hey asshole! Try giving me a warning first!"

Thaneophyros struggled to hold back his laughter, facepalmed onefold, and spoke with an adjacent mouth to the one obscured by his hand. "Did you just mute the guy to give them a talking-to?"

"Yeah, well, he cracked my screen. Had it coming."

"Unmute them please." Uncovesseltuxe said more seriously as he unwound his tail slowly off of Alexander. "I'll fix your screen when we get back. Just try not to move too fast here. The tidal forces can...uh, do some kinda gross damage to your body."

Ievokt rolled the diamond pupils in his displayed rectangular eyes again. "IF I MAY CONTINUE WITHOUT BEING INTERRUPTED, YOUR FIRST TASK IS TO ENTER THE DIVERGIAL MATH CONFERENCE OF YEAR 3,502,445. TAKE A MEASUREMENT WITH THE OTHER DEVICE THERE AND I WILL FAKE THE RESULT."

"How far is that?"

"It's a walkable distance, but still kind of long. Anyway, don't you have GPS on your phone or something?" Ievokt replied.

As the group slithered and scuttled in various patterns towards their destination, the view from their eyes looked more like zooming in, and the ground looked like a disk with much denser detail towards its edges. Alexander decided they wanted to confront Thaneophyros more directly. "I feel like you forced me into having this four-dimensional body against my will."

"I apologize for that. I was overly excited to interact with you on more equal footing. What about it do you not like?"

"No, I actually prefer this form. I think I may have been an unaware tetran, as you said to Uncovesseltuxe earlier. I just would have liked to undergo a less permanent operation."

Uncovesseltuxe interjected. "Technically the permanence has a workaround; I could put one of you in a human and the other in a coma, and eventually you'd adapt to being human again. But there would be a delicate balance of keeping the sleeping dual both alive and asleep."

"That idea is interesting, but I don't want to try that yet." Yet again Alexander felt the horns on the back of their neck. The surface of their horns was now slightly cracked under the tidal forces, and they could feel their skin stretching as they moved their hand. "I want to figure out how to live like you, in real life."

Thaneophyros looked down to the ground with four of his upper bodies, then back up to Taylor. "Tayxander, I think I love you. I'm not supposed to be able to, but that's how I feel."

Alexander abruptly scoffed. "Good luck getting Taylor on board after you catfished them."

Banqrrougt could tell that an argument was about to happen, and did not want to listen to it. She unfolded into her four-dimensional form and hovered slightly out of the 3D world, where the sound could not travel. She was, however, able to continue in the same direction by looking at the 3D world as if it were a piece of paper, and following the road as one's finger might follow a line drawn on such a sheet.

All five of Thaneophyros's faces presented a different fraction of their reaction to Taylor's diminishing response. "I had to though. Orders from Uncovesseltuxe."

Alexander turned to Uncovesseltuxe. "You two are in a relationship as equals, right?"

Uncovesseltuxe looked uncomfortable being put in the middle of this situation. "Legally I'm Thaneophyros' boss, but I see him as a coworker and friend. Nothing I say to them is final unless it's a safety or morality thing."

"So then why did you tell Thaneophyros to pretend to love me?" Alexander raised his voice gradually through the duration of the sentence.

"I just thought it would help the conjecture get solved faster...And I didn't think it would hurt you so much, because neither me nor anyone I know had ever gone through anything similar at that point."

Taylor paced anxiously around the Tuxe Labs building's hidden living room.

"Thinking about something?" asked Outzcradien.

"Apparently Thaneophyros loves me. I don't know what to think of that."

"Is there something more bizarre about this relationship than usual human love?"

"Yeah, they pretended to be human in order to love me before, but now the mask is off and they're trying again. And the person they actually are is really different from the human I fell in love with."

"Wow. I know this might seem self-centered of me since I helped design you, but every time I get a glimpse into how you humans do things, I get impressed."

"Why do you say that?"

"Well...your concept of love is modelled after that of Phykommatons. But Omnigeons like us don't have that concept. We lost it evolutionarily in favor of duplicating ourselves at will, since reconfiguration can shake up the genes enough on its own. So I guess I'm impressed by how unique and complex your relationships are, when even your creators don't understand. It's mostly emergent behavior; I gave you a base level of social instincts and then you all figured the rest of it out."

"Do you have any advice for me in this situation?"

"Hmmm...I don't know if I can give you 'good' advice, but I can give you my take that may or may not help."

"I'll take anything you have."

"Just give Thaneophyros another chance. Set some ground rules, and try again."

"I need to think about this more."

"On a separate note, I think we should go to a 4D Humanian bakery and buy some octallium donut approximations. They have some fun shapes there you might want to try."

"Um...how do they have human restaurants here in the Stack???"

"Oh, they must not have told you...Oof. So the human simulation was kind of live-broadcasted to the entire Stack to make extra money. But we had the feeds automatically cut off sometimes for people's privacy. If you knew the extent to which we protected you all you probably wouldn't have an issue with it."

Taylor loudly groaned. "I can't stand another reason to be angry. So whatever I guess."

The group arrived at their destination, which was decorated in a weirdly grand, golden and red-carpeted style for a math conference. A muscular Divergial bouncer with red carapace lights stood at the entrance. He hooked up a voice apparatus and spoke through it, with a very artificial timbre. "ID please."

"C600, did you anticipate this?"

"YES." Moments later, Banqrrougt pulled them into the Aether and dropped them back on the inside.

"Hey, what is this sorcery?! Show me your god-damn ID!" The bouncer reconfigured, clattered with his own voice into the radio, then reconfigured again (Alexander now realized this was their way of punctuating the boundaries of sentences).

"What do you mean by 'sorcery', we're four-dimensional beings!" said Alexander, then Uncovesseltuxe dragged him away softly as they walked slowly towards the center of the conference, in perhaps the most boring chase sequence possible.

"TAKE YOUR MEASUREMENTS NOW." said C600 through Ievokt.

Uncovesseltuxe stopped, fumbled with the controls on the device, and managed to get 8 seconds of measurement before security arrived.

"Guess what guys!!! You're all going to jail for a minute~" said another one of the security team members.

"Screw you, I'm 4D!" Ievokt cackled as he strafed into the aether, and the rest followed. Uncovesseltuxe picked all of them up, and did a weird sort of swimming motion upward. Once they were above the roof, he re-entered the three-dimensional plane and took flight, doing side to side switchbacks to keep at a slow enough pace to avoid being ripped apart.

"I have to say, it was extremely fun breaking rules like that," Uncovesseltuxe said, slightly smiling.

"YES. I HAVE MISSED DOING STUFF IN-WORLD A LOT. THANK YOU ALL. Aww, our little symmetry group had fun." said C600/Ievokt. "DO NOT DIMINISH ME, IEVOKT. I AM NOT YOUR SILLY LITTLE PET. Yeah yeah whatever, little dude."

"Where are we travelling to next, C600?" asked Thaneophyros.

"NIL3. YOU WILL NEED TO FIND YOUR PORTAL AGAIN. Should be that way."

Uncovesseltuxe meandered through the air towards the portal, and Ievokt remotely reassigned it to Nil3 once he had a connection. As they went through, the perspective changed to a strange, non-homogenous curvature, and the space itself formed the ground into a strange hill that one could roll down nearly forever unless they hit an obstacle or grabbed onto something.

## Chapter 24 (Torsion)

Uncovesseltuxe landed on a part of the ground that wasn't as steep as the rest. "Okay, everyone. I'm more familiar with the twisting physics than all of you, because I come from a product geometry involving the universal cover of  $SL(2, \mathbb{R})$ , which is kinda like this but hyperbolic. If you fall down the intrinsic hill, you will accelerate until you hit something, so don't do that." Then C600 immediately took control of Ievokt and pushed Alexander and Thaneophyros down, before cannonballing down as well.

Uncovesseltuxe stared down at his tumbling friends, shocked. "God dammit, why doesn't C600 just tell us what their tep'roquet plan is?"

As the three of them accelerated, they were suddenly caught by a net of roots, though the source of them was not apparent. "FOLLOW THE ROOTS."

"It seems we are going to be down here for a while. Would you mind if I tell you something, Alexander? It's vexing me that I haven't told you about my past yet, considering you're likely to continue living with me."

"Fine."

"Before the human year 1468 CE, I was a completely different person. I was loud and boisterous, energetic, not this weirdly verbose...abomination. Uncovesseltuxe and I would have a party and trash the Tuxe Labs building every week, to the dismay of Outzcradien. And then in 1468, the Tuxe Labs building got hit with a radiation storm, causing all of us to reconfigure. And I turned into an Arraphim, and it changed my personality a lot. I have a small audio clip of the me before me. Ievokt, can you play that?"

"Never underestimate just how bad you can screw up on your first day on the job. Like, immediately when I came up to the human simulation terminal, I just like...completely accidentally duplicated a person?? And I thought okay, it's probably not a huge deal or anything. And then...uh...they decided to call their birth year '01. I mean, 0001. So...yeah, I am They. Hello." The voice from the recording was completely different, having an up-and-down intonation with a very casual style, and a lot of random pauses.

"Why are you telling me this?" Alexander asked, irritated.

"Because I hope that maybe one day, I may return to that personality. And that possibly you could help me."

A low pitched ding sounded, and a text box appeared in the air. A clonal colony of weird humanoid plant things were rooted into the soil in front of the group.



\*the humanoid plant thing

Oh, there you are!  
I'm XR Subdivision #1440.  
And you are?

"Alexander, Thaneophyros, and Ievokt." replied Alexander hesitantly. "Why are you speaking through text boxes?"

I don't have very versatile  
speakers. This is how I  
communicate.

"You're an Xlalarune from one of Macrelydve's alternate Earths...How are you here?" asked Ievokt.

I don't know what you mean  
by Earth or Macrelydve.

"Oh, I know what happened then. You're the source of the inspiration that must have been implanted into a human mind for unknown reasons by the nerds I work with for even more unknown reasons."

Are you messing with me?  
What is human and who is  
"us"?

"Nevermind that. Do you by any chance know how intelligent you are?" asked Thaneophyros.

Considering there's a full  
CPU and GPU inside of every  
one of these clones, and  
the two-level parallelization  
I have for thinking, I'd say  
I'm pretty intelligent.

Uncovesseltuxe finally arrived at their location. C600 immediately blared out another message. "TAKE A MEASUREMENT OF THIS PERSON."

Uncovesseltuxe quickly took a measurement. "Are we done here? You're being very irritating, C600."

"YES. WE NEEDED A MEASUREMENT OF THIS SPECIES, ONE OF THE MOST INTELLIGENT IN 3 DIMENSIONS. NOW WE NEED TO GO TO E2xS1."

"That's just a Euclidean volume that wraps in one direction."

"YES. FIND YOUR PORTAL AND GO THERE."

"Alright, alright." Uncovesseltuxe groaned. "Everyone grab on to me."

Uncovesseltuxe took flight, C600 remotely swapped the portal destination through Ievokt, and they went through.

"Tep'roq, something went horribly wrong. This isn't where we wanted to go, Ievokt." said Uncovesseltuxe Fork #1.

"Why are there three of me??? And why is everything long and crossing the wrapping axis?" worried Uncovesseltuxe Fork #2.

"We have a problem to figure out, I think." said Uncovesseltuxe Fork #3.

## Chapter 25 (Triple Ripple)

"And there's three of me now. Great." said Taylor Fork #2.

Outzcradien looked up from their torispherical donut. "Uh oh...Are Alexander and the others running into some sort of mishap?"

"Yeah, we tried to go to E2xS1 but instead we ended up in some strange world where everything is embedded in the S1 part."

"That sounds like you may have ended up in a world with a circular rubber band present. I would assume C600 intended this for some reason."

"Outzcradien says that we probably ended up in a world with 'circular rubber band present'." Alexander Fork #3 relayed the information.

"Oh, I remember reading about that. Thanks for that, you kind of grounded my mind just now." Uncovesseltuxe Fork #2 said.

"This is dangerous. We have forked into multiple copies of ourselves. A kind of 'debt' is owed to merge back into ourselves by the laws of sapience. Each fork has essentially three options. Merge, die, or dissociate and become a new person after a week or so. The easiest way to merge would be to simply leave this world into one with the rubber band present being a point, which is the type of world you've seen before." said Thaneophyros Fork #1.

"And it appears our portal is gone." said Thaneophyros Fork #2.

"Great, okay. What was...any of that?" Alexander failed to comprehend this madness.

"We have to leave this world or we'll lose ourselves," Uncovesseltuxe simplified.

"Awesome." Alexander did a sarcastic thumbs up.

"Okay well, since there are three of me, couldn't I learn something three times as fast before I merge?" Taylor Fork #2 asked on the way home.

"Yeah, absolutely." Outzcradien replied.

"Any good musical instruments I could learn?"

"There's the guitharp. Kind like a guitar and a harp in one, with the harp strings going between the guitar strings while lying flat on the fretboard. Also there are ten guitar strings instead of the six humans use, because we use 19 notes in an octave here."

"Sure, I guess I could learn that."

"I'll order one for delivery."

"It'll arrive really quickly right? Because cities are so compact in four dimensions?"

"Yeah, now you're getting it!"

Taylor Fork #3 suddenly jolted. "Ohhh, you can probably help us all out of our mishap! You just need to make us a portal back."

"Oh, good thinking. Where to?"

"Ievokt, can you send coordinates to Outzcradien's phone?" Alexander Fork #3 asked excitedly.

"I don't have coordinates available here." Ievokt spoke in a very neutral tone reminiscent of the announcements you would hear on public transportation, and the usage of this tone somehow was completely unambiguously meant to be sassy. Alexander's excitement faded quickly into dejection.

"Really? Uncovesseltuxe, any of you, is there a way we can either make a portal ourselves or get coordinates?"

"We can make a simple portal using...hextetraterite and rieryzakinite, in pure form, I think? We just need to find good rocks. Those materials are the easiest because they usually form near each other and make a distinct yellow-blue streaky pattern. Here I think the streaks would be more like uncurved cylinders." said Uncovesseltuxe Fork #3.

"Okay then, change of plans. We don't have coordinates so we're scavenging for portal materials."

"That was fast."

"Wouldn't we have to mine them out?"

"If you have just a few little chunks, you can make sparks with them to ignite the ground, and it'll make a very primitive portal rift. Then we can push that rift through space until it reaches home. Usually technology takes care of that last part, but here we'll need to throw it in the correct direction, which I think Ievokt should be precise enough for." said Uncovesseltuxe Fork #2.

Ievokt scouted the two isolated points of horizon. "I can't see much of anything. This is so stupid. I hate 2D."

Alexander's eyes lit up. "But because this world is arranged in a 2D way, we should just walk in one direction until we find something."

"Yes, that would be optimal. Since we're 4D and this world has a less functional third dimension allowing us to see it, I think we can go out of slice and I can just fly us until we see what we're looking for."

"Nice."

"So, I'll just- tep'roq I'm stuck to my clones by this stupid rubber band present, and I can't leave this plane. Okay, we fly in the plane instead, you hang on to my tail from below, and look downward," Uncovesseltuxe Fork #3 reasoned.

"Okay so basically the deal is that you're not taking off, number two, and that means the rest of us are pinned to the ground carrying your dead weight." Uncovesseltuxe Fork #1 said to #2.

"Yeah, get off your ass, stupid." said Ievokt Fork #3.

"Hey, can you not insult other versions of me, please? They're going to become part of me later and remember what you said."

Finally the Uncovesseltuxes managed to coordinate, and then one of Thaneophyros' tails got caught on the branch of a small, spindly tree, yet again dragging them all down. This time, however, the full weight of a Thaneophyros-cross-sectioned donut outweighed the small tree, uprooting it and dragging it with them in flight. Thaneophyros tried to free their tail, but their arms weren't long enough, so they just took the entire tree with them.

"Wow, the landscape is really really boring." Ievokt whined. "2D is like dimensional preschool."

"Yes, that is correct," Thaneophyros said, attempting to shake the tree off of themself. "The species that have an immature phase learn about 3D shapes in kindergarten."

"Those are your rocks up ahead, on that cliffside," Banqrrougt observed.

Uncovesseltuxe flew a bit too far ahead and needed to reverse direction, so they turned upside-down and dove onto the cliffside. #3 missed and almost fell, #2 managed to grab onto the cliff, and #1 fully made it. After all the #1 set got off of Uncovesseltuxe, he walked on his hands, struggled forward and dragged the other two up, bringing the other corresponding forks with them. "That was neat." Uncovesseltuxe Fork #1 said, falling back onto his stomach and dusting himself off.

"These chunks should be sufficient." said Uncovesseltuxe #2. He found a patch of dry desert grass nearby and lit it on fire, forming a portal. Ievokt #3, knowing what to do from his database, threw a random pebble through, intending to get it at precisely the right angle to land in E4. Except that that wasn't what C600 wanted to do yet, so he controlled Ievokt to throw it in a different direction without him noticing.

## Chapter 26 (Timeplane)

The arrows at the top of each cell tell you what cells to read next to follow the narrative, while the #(number) indicates which fork all character names refer to. The numbers in brackets are coordinates for the cell (in the 6x5 grid). Note that time is progressing both down and right at all times, but most of it leads out of a readable story.

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| <p>↘→, #1, (1,1)<br/> "Stop changing the portals!" Banqrrougt shouted. "Where are we?" It seemed like a rainy city street at night-time, but nothing could ever be that normal here.<br/> "DO NOT WORRY.</p> | <p>→, #1, (1,2)<br/> The group walked to the chess tournament's location. Alexander sighed. "This world is too weird for me, man."<br/> Alexander decided to collect some of the random pieces of</p> | <p>→, #1, (1,3)<br/> The group arrived at the chess tournament's entrance.<br/> "Should I break you in again?" asked Banqrrougt.<br/> "NO. THAT'S THE DIAGONAL CLONE'S JOB. YOU GET THEM IN VIA</p> | <p>→, #1, (1,4)<br/> The group headed out.<br/> "I would've liked to see how chess worked when the game has multiple timelines." said Alexander.<br/> "You'll find out soon enough</p> | <p>→↘, #1, (1,5)<br/> On stage of the concert were two Omnigeons. Large text on an LED display, strangely in 1D English, said "Tov'meth and Stellantrythe". The crowd was somehow mostly full of sidpith travel drones, with their complex</p> | <p>↘, , (1,6)<br/> Uncovesseltuxe woke up two weeks later, head still aching from his injuries. Except he wasn't really Uncovesseltuxe. He had dissociated instead of forking. He pressed his call button, and</p> |
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| <p>WE ARE NEARING THE END OF MY PLAN. YOU WILL MERGE ONCE IT IS TIME FOR YOU TO MERGE."</p> <p>"That doesn't answer the question." Thaneophyros replied, also irritated.</p> <p>"THIS IS E3 WITH E2 TIME. THERE ARE TWO DIRECTIONS OF CAUSALITY. ONE OF YOUR FORKS GOES DOWN, ANOTHER RIGHT, AND A THIRD DIAGONALLY BETWEEN THEM."</p> <p>"Where do you want us to go this time?" asked Banqrrougt, swiveling in impatience.</p> <p>"YOU NEED TO GET THE DIAGONAL FORK INTO A CHESS TOURNAMENT TO TAKE THE FINAL MEASUREMENT AS THE CHESS CHAMPION IS CROWNED."</p> | <p>paper left on the streets.</p> <p>One seemed to be an advert for the chess tournament they were going to.</p> | <p>CAUSALITY."</p> <p>Alexander fumbled with the tournament advert and found that a ticket was slipped into a small envelope-like pocket. Someone must have lost it.</p> <p>Alexander placed the ticket on the floor.</p> | <p>when we all merge," Uncovesseltuxe replied.</p> <p>C600 spoke up again. "DO YOU SEE THAT MASSIVE CONCERT? CUT THROUGH IT. THERE IS A PORTAL TO E4 IN THE BACK."</p> | <p>facial expressions seeming to indicate that they were human.</p> <p>"How did they arrive here though?" Uncovesseltuxe muttered anxiously to himself. "I haven't let them out of Earth yet."</p> <p>The group cut through the crowd, in various ways. Ievokt flew over with rockets, and Banqrrougt hovered over. Thaneophyros was large enough to simply part the crowd in front of him, while Alexander's sidwinding was fast enough to violently jostle everyone out of the way.</p> <p>But Uncovesseltuxe, laterally undulating, smacked into someone, fell to the ground, and was trampled.</p> <p>As everyone else made it through the portal, Uncovesseltuxe was being rushed to the hospital.</p> | <p>some nurses rushed over.</p> <p>"You're awake? Great!" said one of the nurses. They spoke fluent 1D Quatrammotile, though they had an odd accent, where every phoneme started sounding a bit too late, in a different starting point each time. Presumably they were struggling to line everything up.</p> <p>"Not me. I was a fork and I dissociated. I need to be re-registered."</p> <p>"Yes, that's true."</p> |
| <p>↓, #2, (2,1)<br/>"Okay, let's head over there, I guess." said Uncovesseltuxe. The group walked</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <p>↘→↓, #3, (2,2)<br/>"Okay, let's get going, I guess." said Uncovesseltuxe.</p>                                 | <p>→, , (2,3)<br/>The security officer gave them a confused look, not understanding</p>                                                                                                                                   | <p>↓, , (2,4)<br/>The security officer continued his break. They realized the group might show up</p>                                                                  | <p>, , (2,5)<br/>Uncovesseltuxe suddenly disappeared from the ambulance.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <p>↓, , (2,6)<br/>"For my name...I'm thinking Azvaddenus. My dual will be</p>                                                                                                                                                                                                                                                                                                                                         |

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| <p>to the chess tournament's location. All of the road signs were written in a strange, curvy script that aligned to a 2D grid, presumably to map sounds across two dimensions of time.</p>                                                                                                                         | <p>Alexander looked at the ground. There were a few scales of theirs lying on the ground, twice as many as they should have normally lost from slithering on rough concrete. "We've been here before."</p> <p>"Yeah no shit, Sherlock." said Ievokt.</p> <p>The group arrived at the chess tournament's entrance.</p> <p>"Hi, did other versions of us let us in yet?" asked Thaneophyros humorously.</p> | <p>their language, then noticed they had completely disappeared. "Very odd."</p> <p>The officer decided to let a different officer take his place for a moment so they could take a moment to think critically about this occurrence, which had now been seen by another parallel experience of theirs.</p>                                                                | <p>again diagonally.</p>                                                                                                                                                                                                                                                                                              | <p>"Oh...huh. Must be a person of one dimension of time." remarked the EMT. "Lucky that I have two dimensions of time. I got a firm grip on his timeline and on his life."</p>                           | <p>Arctakkurus."</p> <p>"Those are pretty names, but you don't have a dual."</p> <p>"Strange. I'll be Arctakkurus then."</p>                                                                                                              |
| <p>↙→, #2, (3,1)<br/>The group arrived at the chess tournament's entrance.</p> <p>"I really don't want to break in again like with the weird math conference. It goes against my morals." Uncovesseltuxe sighed. "Could we at least try communicating with them?"</p> <p>"Fine." Banqrrougt crossed her glyphs.</p> | <p>↙, , (3,2)<br/>"What are you miming from left? I can't focus on all of your upper bodies at once like that?" said the security officer in their two-dimensional language. "I also can't understand your language from up." Then this relatively unattentive officer finally noticed the group had randomly disappeared after they finished.</p> <p>The officer, being</p>                              | <p>↘, #3, (3,3)<br/>The group arrived at the chess tournament's entrance, and Alexander notices a small ticket on the floor. They picked it up and handed it to the new officer (though this version of the group didn't know this officer was different).</p> <p>They couldn't understand the officer's language, but apparently one ticket allowed unlimited guests,</p> | <p>↙→, , (3,4)<br/>The initial security officer ran to their replacement's post.</p> <p>"Hey! Those monochrons are going to try to come in here again!"</p> <p>"They already did, buddy! They presented me with this ticket."</p> <p>"Are you stupid? This isn't their name, they wouldn't have a two-dimensional</p> | <p>↙, , (3,5)<br/>"Don't call me stupid, or I'll tell our boss!" said the second officer.</p> <p>"I think in this case the boss would favor me, dude. You really did do something stupid this time."</p> | <p>↙, , (3,6)<br/>"Anyway. I have a portal to get to."</p> <p>"Do you feel okay? You were in a coma for a really long time."</p> <p>"It's fine, I'll just go back to my native geometry and recuperate there. Good old ~SL(2,R) x E."</p> |

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| <p>Thaneophyros tried doing some charades to the security person waiting at the entrance, but it looked kind of weird because of his fivefold configuration. He tried to frame them as journalists making a movie.</p>                                                                          | <p>a bit hangry, let another officer take a shift.</p>                                                                                       | <p>as they were all let through just fine.</p> <p>Uncovesseltuxe took a measurement of the winner, which was not a win point but a win boundary, where whoever had the most length of this boundary was the true winner.</p> | <p>name like that. It's a stolen ticket!"</p>                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                               |
| <p>↓, #2, (4,1)<br/>The security officer kicked them out and sent them on their way.</p> <p>C600 spoke up again. "DO YOU SEE THAT MASSIVE CONCERT? CUT THROUGH IT. THERE IS A PORTAL TO E4 IN THE BACK."</p>                                                                                    | <p>↓, , (4,2)<br/>"Man, that was weird." remarked the officer. "What kind of creature was that charades about. Mmm...this soup is good."</p> | <p>↓, , (4,3)<br/>"Such a soggy ticket..." said the replacement officer, wiping their hands on their shirt.</p>                                                                                                              | <p>↘, #3, (4,4)<br/>"There they are! Fake ticket, fake ticket!"</p> <p>Uncovesseltuxe rushed out of the building, away from the officer's tasers.</p> <p>C600 spoke up again. "DO YOU SEE THAT MA-"<br/>"Okay, okay, we gotta go!!!"</p> | <p>, , (4,5)<br/>"Hey boss, my coworker called me stupid."</p> <p>"Did you do something stupid?"</p> <p>"Yeah."</p> <p>"Then what's the problem?"</p>                                                                                                                           | <p>↓, , (4,6)<br/>"Your native dimension got reassigned to work with two dimensions of time while keeping your four-dimensional body. It's now E4 with E2 time."</p> <p>"Okay...That's annoying...I'll go there then. But I want to say hello to my base first. Can you reconfigure me to heal my wounds?"</p> <p>"Sure."</p> |
| <p>#2, , (5,1)<br/>The concert was in its opening stages, and a lot of late arrivals were not here yet. The group got to the portal without much trouble and entered, joining back with their forks (apart from the right-going Uncovesseltuxe).</p> <p>On his way to the portal, Alexander</p> | <p>, , (5,2)<br/>The security officer dropped his soup.</p>                                                                                  | <p>, , (5,3)<br/>"Oh dammit, I got dirt stains on my shirt now!"</p>                                                                                                                                                         | <p>, , (5,4)<br/>"Ugh, I think they lost us." said the first officer to the second. "Stupid, stupid."</p>                                                                                                                                | <p>#3, , (5,5)<br/>As they arrived at the concert, Tov'meth and Stellantrythe announced they'd be taking a short break. The crowd of people calmed down a little bit, allowing the group to get through without much issue. Right before they reached the portal, they were</p> | <p>, , (5,6)<br/>Arctakkurus arrived at the concert venue, which still had a ton of trash floating around. The portal was off, but he found the button to turn it on and headed through. It was set to thirty further years in the future, but Arctakkurus didn't notice due</p>                                              |

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| <p>noticed something weird on the display that the concert was using. It usually displayed the lyrics on a colorful sci-fi background...but for a split second it would flash phrases in big red text: "TAYLOR TORIPHAN! YOU READY?" and "TAYLOR #2 THEME". This worried Taylor a bit on the other side. Was something going to happen to them?</p> |  |  |  | <p>stopped by Stellantrythe.</p> <p>"Hey, Uncovesseltuxe! Pleasure to meet your past self."</p> <p>"Do I know you?"</p> <p>"You will. I'm one of the first humans that you take out of Earth, as a test. I'm actually native to H2xE2 with two-dimensional time, with most of me sitting in a life-support sensory-deprivation box on the sea floor, so that I can effectively have quadrals rather than duals. The other two who aren't here are transferred into Phykommatons. It was a request I made to your future self."</p> <p>"Nice, okay, but we really need to get back home."</p> <p>"Just wait a moment, I hosted this whole concert in celebration of you! Do you like it?"</p> <p>"Yeah, it's good."</p> <p>"All the music here is custom character themes I composed for you all. Pretty neat, right? Most of the people here are from online</p> | <p>to its arcane interface. It led directly to the Tuxe Labs building, where in the window he could see Uncovesseltuxe giving some sort of speech in VR. So he went to the front door and just waited there. It was slightly open already. so he could hear when Uncovesseltuxe was done, but he didn't want to just barge in.</p> |
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|  |  |  |  | <p>communities about higher-dimensional spaces, which we helped trinsfor and trinsfur out."</p> <p>"What are those terms?"</p> <p>"Just a way of differentiating organic and robotic transfers. Anyway I'll let you guys through the portal now, I just wanted to info-dump a bit."</p> <p>"...Okay then."</p> <p>The group headed through the portal.</p> |  |
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The original version of Uncovesseltuxe Fork #1, ejected from his body after it dissociated into Arctakkurus, found himself in a situation that no one seemed to know about. He was in some sort of watchtower, where he could see everything happening in the entire Stack at once. But it wasn't just the present, and the multiple dimensions of time progressed linearly. This was meta-time, the way the Stack handled time progression internally, and it contained the entire past, and shell-like layers of the future that previous time travelling changes hadn't fully propagated to yet. Many other watchtowers stood nearby, in a countably-infinite-dimensional grid, and he realized his body was extruded in an uninteresting way into these extra dimensions, with caps on all sides to protect his organs from spilling out. On the other watchtowers, Uncovesseltuxe Fork #1 could see people, presumably others who had died. He noticed a small booklet in his hands.

You, **Newesytrazâkâi-1** of  $\sim SL(2, R) \times E$ , have experienced Death, an invented state of being by your Thyngoid creators as a way to balance your control over time between the present and the past. You have completed Cycle 1, and are now a math agent. You are able to control the symmetry group of the cantellated 600-cell at any point throughout space and any point in the past. Make your slightly omnipotent mark on the world, and then after the present has advanced 1.2 million standard years, you will reincarnate in a new body with all of your memories and knowledge, with an 11% chance of automatically changing species or home dimension.

At the present moment, none of society knows about math agents, as the time it has existed has not been long enough for the earliest dead to reincarnate into their second cycle.

You have 1.2 million years left before reincarnation.

Notes specific to you, **Newesytrazâkâi-1**

- You are C600. You probably want to mess around trying different possibilities of timelines until you figure out the one that gets you to win your court case. You don't have to, but if you don't humanity will be for nothing.
- Arctakkurus is very happy to take your place, though he also regrets it a small bit.
- The rest of Uncovesseltuxe is still complete without you. The only things he's missing are your memories from circular present and 2D time, which the others can fill him in on. No harmful mental repercussions will affect him.
- Your whole team is very well-respected by us Thyngoids and Thyngvimsel. Thank you for taking it upon yourselves to free our 3D creations. Our finest blessings to you, C600, and may you find the perfect timeline!

"Well, I suppose I'm happy to help out my team. Though it does unfortunately appear that I might have to be irritating to them. I'll try being honest first and see if it works."

Once they got back through the portal, most of them merged successfully. The forks of the duals of almost everyone, mostly unimportant, simply were attracted towards each other like magnets before perfectly merging in the middle. Except that something went a bit wrong with Taylor, causing him to become three times as heavy.

Uncovesseltuxe inspected his form. "Yes, everything's back to normal! I can finally stop being worried about being dissociated." He checked through his memories and stopped

in his tracks. "I'm missing Fork #1. He's going to dissociate without me...I have to go back."

"DO NOT. IT IS IMPORTANT THAT HE DISSOCIATES."

"Could you just...like...tell us why?!! For once?!!" Uncovesseltuxe lashed out.

"NO. NOT UNTIL YOU ACTUALLY FREE THE HUMANS. BUT WHAT I CAN TELL YOU IS THAT IF YOU FIND OUT WHO I AM YOU STOP THE COURT CASE FOR 'MORAL REASONS'. AND WHILE I MIGHT AGREE, THE FATE OF THE THREE DIMENSIONAL UNIVERSES IS WORTH MORE THAN OUR MORALS."

"Our? OUR?!" Uncovesseltuxe abruptly lowered his voice, and a grin spread across his face, like a puzzle-loving detective who had just thought of the answer to their case. "You're Fork #1, aren't you?"

"YES...I PROBABLY SHOULDN'T HAVE SAID 'OUR'....I'M GOING TO HAVE TO START THIS CONVERSATION OVER. GOODBYE."

"Nah, we can start the court case. I think you kinda went about telling me in just the right way that I don't care. Also, yes, the three-dimensional worlds don't deserve real evidence, they deserve to be included. Let's do it."

"OKAY THEN. I THINK TAYLOR HAS A MORE URGENT PROBLEM THOUGH."

"Yeah I feel...uh, much heavier. Also I feel like I'm...covered in butter or tectonic plates or shifting sands or...something, it's a really hard feeling to identify."

"Oh no....no no no..." Thaneophyros rushed over to Taylor's side. "Taylor, please try not to reconfigure! I wouldn't want you to end up with one like mine."

[illegible]

Uncovesseltuxe tried to console Taylor. "It's not supposed to, but you did have to--"

"No, no, don't even start with me. You brought me into this weird world, you took advantage of my curiosity. You had Thaneophyros lie to me for years. What do you even need me for? I'm leaving." And then Taylor simply rolled out the front door, into what was practically still the wilderness to them. Alexander looked at Thaneophyros with a complex expression that said something like, "I really want to stay here with you, but I have to follow him for his own protection. And also I feel betrayed by you too."

Thaneophyros stared at the open door, dejected. Uncovesseltuxe walked over and put his hand on one of their many shoulders. "We can make our case without them this time, and afterwards you can try to win them back."

## Chapter 27 (Court Papers)

Uncovesseltuxe yet again entered the same courtroom as a travel drone, following Vethendaosphone. "It's a pleasure to do business with you again, Uncovesseltuxe."

"Oh good, we have a different judge this time. Hopefully a better one," Uncovesseltuxe remarked, relieved.

The set of them, other than Banqrrougt (who decided to stay at the Tuxe Labs building) sat at the central table that differentiated the 5D courtroom from human ones.

"Present your evidence to my~ majesty." The judge's voice said that 'my majesty' part with an intonation that seemed specifically designed to annoy people.

"Uh oh, I'm not liking this judge." Thaneophyros blurted out, eliciting a reaction from Vethendaosphone to SHUT. UP.

"My client collected data on the symmetries of the cantellated 600-cell, the discrepancies of which have long been correlated with high intelligence. His research team traveled through various three-dimensional worlds of different geometries and found four instances of this intelligence indicator. Once at a math conference in H3, once of a creature in Nil3 known as the Xlalarune that we think you have in your references somewhere, once of a chess tournament in E3 with E2 time, and once taken covertly by Ievokt during a large concert event full of human dimension enthusiasts, who are 3D-minded as per our previous case."

"This certainly seems like enough data. But it doesn't really impress myy~ majesty. And you brought one of the three-dimensional humans with you, transferred into a 4D body to collect this data. What makes you think they didn't somehow influence the other 3D beings?"

"That's preposterous!" shouted Vethendaosphone.

"I apologize, but myy~ majesty has no choice but to reject this application."

"Where's your gavel, judgey? Where's your ink and your stamp?" said an echoey voice, seemingly from the air itself.

"Who is this? You can't just barge into myy~ majesty's courtroom unannounced!"

"I'm not barging in, I'm going around! Because I'm in the seventh dimension, and I can hold you like a pencil. So I'm just gonna take your paper and fill it in as accepted. Heheh, this is kinda tricky to do with such thin objects."

"What is going on?! Myy~ majesty is very upset!" said the judge, feeling somewhat degraded, and rightfully so.

Banqrrougt emerged from the seventh dimension and folded back up into five. "Hey crew, you won! Now I'm leaving this insane establishment and going home."

"Alright then." Vethendaosphone was taken aback.

"H-hang on. Does that work?" Uncovesseltuxe asked.

"Yeah, the fact the paper is stamped makes it legally binding. That paper is an order for official portal hubs to support three dimensional universes, and allowing unofficial ones to do the same if they want. And there was never a stipulation made for protecting against this kind of resistance. It just felt kinda anticlimactic is all. I was, frankly, kind of excited to have an intense legal battle."

## Chapter 28 (Unlock)

Uncovesseltuxe activated his instant return and his consciousness reentered his body in E4. The whole group, except Taylor and Alexander, was strewn about the room, celebrating. After the excitement died down, he planned to start a multi-decade process to push humanity to fix their global conflicts before fully contacting them and beginning the process of transferring them all out. But first he had some questions for C600. Ievokt had wired the symmetry group reculator device to the inside of a sidpith in place of the usual cortex, and written some new software to work with symmetry groups as an encoding; this allowed C600 to finally have a body, though it was controlled remotely from the Aether Watchtowers, and C600 didn't feel like he was inhabiting it. It was just like a little toy to play with that could manipulate objects better than he could on his own.

"So, if you're my Fork #1, then why don't you inhabit my old body after dissociating?" Uncovesseltuxe asked.

"Someone else does. I was 'ejected', in their words. The words of the Thyngoids. They left me a note in the afterlife."

"There's an afterlife?"

"It's weird, but yes. You become a kind of time-traveling spirit of math, able to control certain aspects of math and physics locally throughout time and space. Everyone

controls something different. Also the note says that death is invented, and that it was created purposefully by the Thyngaeoids."

"Strange."

"Also, apparently the afterlife releases you back into the world after 1.2 million years, and you get a new body. And I've figured out that I can skip as much of that time as I want by going to sleep. But for now I'm enjoying the peace."

"Five thousand more years, and then infinitely more. I'm immortal!" Uncovesseltuxe cried, giddily.

"We all are."

"I'm going to make the last five thousand years as great as possible, to make memories for my future lives!" Uncovesseltuxe vowed, then paused. "Something feels different."

"Ugh, it's probably my telepathy acting up again, just ignore it." replied Outzcradien.

"No, it's not that; I know very well what that feels like and this isn't it. Ievokt, can you scan me?"

"Sure, tuxedo." He scanned and analyzed his findings. "You have coxetrocin on your cricket things. Appears to be a fresh secretion just now."

"Wait that's...So I'm capable of love now, in theory."

"That would indicate that, yeah." Outzcradien said, positively surprised.

"Just need to wait for it to happen then. I'm very excited."

## Chapter 29 (Truth)

Anne, still mourning Taylor's bizarre redisappearance and contemplating their bizarre and brief second visit, woke up to Jack sobbing in front of the bathroom mirror again. About to try and console him, she was suddenly interrupted by a popup. In real life. The popup had a paragraph of text and several options.

Hello humans! Humanity has fulfilled its intended purpose, but since you are all sapient beings I want to work with all of you to enter your next phase properly. This isn't the end of \*you\*, but the end of humanity is coming soonish (few hundred/thousand years maybe). For now, death, aging, and physical violence are disabled in your world. I will give more information later.

- Uncovesseltuxe

- ( ) Request a 4D robot body
- ( ) Enter waitlist for biological body
- ( ) Object summoning menu
- ( ) Global chat menu
- ( ) Noclip

- ( ) Fullbright
- ( ) Avatar customization
- ( ) Transmissions from Tuxe Labs
- ( ) Minimize to wearable

Over the top of the popup Anne could see that Jack had a similar menu. Reading this note seemed to have grounded him and stopped his tears.

Anne wishfully thought maybe this message had something to do with Taylor. But that couldn't be true, it was statistically impossible for *their* child to be the "chosen one" of whatever was happening with this "Uncovesseltuxe" entity. Although Taylor did solve an important problem in math...

Everyone all across the globe got a similar popup. And, while intended well, it caused global chaos as religions tried to reframe and reestablish their doctrines and their power, all without being able to harm anyone, and with death itself rendered no longer an issue. And... maybe pointless so far? If it was just going to stop here?

The three main Abrahamic religions went three different ways. One reestablished Uncovesseltuxe as an alternate name of God. One classified the popup as irrelevant and not the true word of God. And the third splintered into dozens of pieces, one of which became Uncovesseltuxelism, initially regarded as a cult but later accepted. An additional sect, Respectful Uncovesseltuxelism, split off from that, based solely on the pop-up, throwing the original Abrahamic texts out and becoming a pure belief system without any inherent values. Both of these two entirely different faiths remained in the corner, secondary to other systems that had long and established histories.

Hinduism just added Uncovesseltuxe as a new deity, but hesitantly, and not specifying much of anything. Some wrote additional details about him, mostly false, but none stuck. Buddhism mostly just ignored the popup; although they now had one material possession they couldn't get rid of, either in popup or wearable form, they treated it as a new part of the body. Other religions all had their own scrambles, but it would take too long to list them all.

People began picking apart every word of the popup. The things about getting bodies seemed to imply another world, possibly heaven? The brief mention of Tuxe Labs and the "intended purpose" part seemed to indicate that humanity was some sort of corporate project, and the presence of a UI in the popup caused the simulation theory to be seriously considered on a global level.

All of this was done without war as we know it, as that was now impossible. Instead the standard became the sport of track-and-field. It was easy to objectively measure, no longer caused injuries, and still left room for countries to cheat (which probably swayed the vote of a lot more of them than you would hope). However, cheating became the new war crime. Unfortunately, enforcement of any crime proved impossible. Noclip let you phase through prison walls. Object summoning made currency pointless, invalidating fines. Physical punishment was "disabled". It was clear that Uncovesseltuxe wanted global harmony, but for some strange reason humans were desperately trying to find any way at all to avoid that.

Finally, 30 years later, after not hearing back from Uncovesseltuxe for decades, humanity united, admittedly gracefully but also just because they were out of other options. Nations didn't disappear, but they became informal organizations of people based purely on individual identities. People with various ancestries flocked to gather in conventions in their homelands via noclip, and "the furry community" became a new nation occupying what was previously the state of Washington. But he was waiting, watching, the whole time. And he felt like a proud father to all the billions of people alive on his planet.

He scanned his full four-dimensional form into the simulation's databases, and showed himself to the world to give the information he promised. S.L. Tuxe sat next to him, holding up a sign that said, "I'm a fake person designed as Uncovesseltuxe's avatar," in the ten most widely spoken human languages plus Quatrammotile.

The leaders of the Uncovesseltuxelist faith held a meeting tuning into the highly televised interview. They were finally going to get a relevant religious text to use, so they wrote down every word, plus some little annotations later. The following is the text known as TLT1, in its original form:

Hello humans! I'm Uncovesseltuxe, your creator, and I'm finally going to tell you what in Thynges's name is going on. (Thynges is not mentioned anywhere else. We presume he is a god of gods, but we must not skip levels in the chain of command.)

First of all, humanity is a computer simulation made to solve the Collatz conjecture. My world already knew the answer from the start. However, the eight three-dimensional worlds (eight symbolizes resurrection) - that doesn't include Earth by the way - they've been long excluded from broader society because we thought they weren't intelligent. So I proved that they COULD be, with the proof from Taylor Vedersamp (Taylor is quite possibly the second coming). The proof would show that brain connections in 3D can be dense enough at

a neuron size similar to ours (multiple beings like Him) for intelligence to be possible. Unfortunately we had a dimensionist judge and failed. So my team, along with one half of Taylor's split consciousness (The left half, the right half, and Uncovesseltuxe, a.k.a. Trinity), Alexander, gathered some fake data about organic 3D beings to try again. The data was provided by a different, time-travelling version of me, somehow controlling math itself. I know very little about this other than that when I die in a few millennia, I become something like that version, and then supposedly I'll eventually be reborn into a second life. But neither version can confirm the rebirth part. So anyway, we achieved integration, and now you can all be free. I'll get into that in a bit.

But first, what am I? I am an Omnigeon, a creature from a multiverse of different curvatures and dimensions called the Stack. Omnigeon refers to our adaptability to all curvatures; don't take the "omni" out of that word and mess with it. Specifically, I come from the universal cover of esseltuar times E, while I now reside in eefore (since He is a four-dimensional being, we assume this is a form of "before", He lives in our past) . I have some characteristics of a human, some of a dragon, or a snake, or a cicada. Don't assume much about me to be honest, I'm a species that you don't know and I reconfigure into entirely different bodies every so often when I'm irradiated. I'm a software developer, hardware engineer, and CEO of Tuxe Labs, a company that makes robots you can use to travel to other dimensions. Humanity is a side project that I siphon the company's money into for the greater good. It's a small company, and I can introduce you to all its members later. One important thing, everyone here who experiences time in one dimension has two "dual" bodies that share the same consciousness. You have that too, just that you lie on top of yourself and collapse into one experience of the world. But I have the technology to separate you, transfer you in and out of different bodies, all sorts of neat stuff. You can become like me if you want. Just wait on that though, I have to source your new bodies somehow and I'm figuring it out and assessing the risks. Anyway, humanity is taking a lot of resources to run. Earth will stay active for a few more centuries but eventually I need you to leave. My world is waiting for you outside.

Finally, I want to leave some notes for...some people.

Yes, creationism is correct 300,000 years ago, but keep teaching evolution, please, I put a lot of work into designing all of your fake genetic history so at least pretend to keep studying it.

Use my name. I am Uncovesseltuxe, a person, and my name can be used however you want, as long as you treat it like a human name and treat me like one of you.

I'm not your god. Yes, I have all the power in relation to you, but I don't ever want to hurt you. Please work with me and let me know your concerns. Don't idolize me. Please.

Also, this is improvised - to the Uncovesseltuxelists who aren't in the "Respectful" sect, can you please stop? Your religion treats me like a monster that I am not. And I'm feeling...very petty towards you guys actually. I'm not going to mess with you too much because I'm not that type of person, but I think I WILL fill the cathedrals you built in my "honor" with truckloads of dirt. Just for fun. (He filled them with sand, snow, salt, ash, and clay. We are working on removing this shit from our beautiful cathedrals. Worship shall continue as usual. Let's piss this loser off shall we?)

And with that, Uncovesseltuxe vanished from the human slice, though he would visit frequently after that. Uncovesseltuxelism shifted into a bunch of petty, angry people who spent vast amounts of time and effort terrorizing the god they once worshipped. Respectful Uncovesseltuxelism became the primary world belief system, akin to atheism since Uncovesseltuxe verified himself thoroughly and established his existence as fact. It didn't have any rules associated with it like commandments or doctrines, just the general knowledge of Uncovesseltuxe's preferences and awareness that you could potentially piss him off. They deliberately avoided worshipping Uncovesseltuxe since he made it clear he disliked that kind of attention. Of course, some people found a way to worship him anyway. A growing group known as the Pure Uncovesseltuxelists emerged from what was left of the original Uncovesseltuxelist sect, still worshipping him as before but in nature rather than in cathedrals. The real Uncovesseltuxe would always hold them in disdain, but acknowledged that doing anything to eradicate them would be immoral.

Right after his initial media appearance ended, Uncovesseltuxe threw himself onto the couch, back in his four-dimensional world. "Thynge, that was exhausting." And then of course someone knocked at the door. "Really? Right now? Whatever, I can't get any more exhausted anyway."

Uncovesseltuxe opened the door. Standing in front of him was a draconian humanoid with a square arrangement of arms and legs, and black scales with yellow markings. On his back, four massive wings almost the size of the rest of his body stood, and a long,

thick reptilian tail continued his spine. He had a confident stance with his chest puffed out, but his wings fidgeted, opening and closing at irregular intervals.



/\*Arctakkurus

"Hello, I am Arctakkurus. I'm that one fork who dissociated during your trip through planar time. I'd like to know you better. And I'd like to try this human bread you're so obsessed with."

"Is this a date you're asking for?" Uncovesseltuxe asked, using an English human term.

Arctakkurus paused for a moment, retrieving memories from the bank he had obtained from his origin in Uncovesseltuxe. "Yes, it is. Do you want to go?"

Uncovesseltuxe sighed from mental weariness. Handling human shortcomings wasn't easy for him, and he had needed to appeal to the vast majority of them at once. Even though he used a script, he still had to manage his tone of voice and body language that he wasn't naturally built to modulate. "Can we start tomorrow? I need some rest first."

"Yeah, sure."

Uncovesseltuxe had a realization and briefly put his face in his hands, then looked up. "Arctakkurus?"

"Yes?"

"This would be very odd by human standards, given we're related."

"It doesn't matter for us, we don't reproduce in the same way as them. And I don't even really know you yet." Arctakkurus took on a reassuring tone. Clearly he had inherited Uncovesseltuxe's procedural memory - such as how to display emotions visually and auditorily - much more directly than his anecdotal memory; the former was natural while the latter had to be queried deliberately every time something needed to be retrieved.

Uncovesseltuxe's face softened into a curious, hopeful expression. "So we're good then?"

"I'm confident, yes." Arctakkurus relaxed his wings.

Uncovesseltuxe extended his auxiliary teeth not in frustration, anger, or hunger, but in a mix of awkwardness and fondness he had never experienced before. "I don't know how this is supposed to work."

"Me neither. But since we aren't bound by any cultural restrictions, we can write our own rules. Together. Let's find out what works best for us."

Uncovesseltuxe grinned slightly. "Okay then. Come here tomorrow at noon and I'll take you into the simulation to have bread with you."

## Chapter 30 (Write fanfiction of this novel, PLEASE)

Thaneophyros knocked on the door of Taylor and Alexander's apartment, stretching his arm a bit due to his large connector pentagram. Alexander answered the door. Thaneophyros looked relieved. "I wish to speak to Taylor."

"He doesn't want to talk to you right now. Speak with me instead." Alexander crossed two of his arms.

"But you're further from the original Taylor. I want to talk to the original."

"You crushed and burned the original, do you not remember? They're a Toriphan now."

"Did his personality change?" Thaneophyros looked worried, yet hopeful for the answer to his question to be a resounding no.

"No. However, they have gone through four different bodies at this point and they are growing weary. They also hate being a Toriphan."

"Listen Taylor. I know that you are able to hear me through Alexander. The whole Thea thing...At first it was a lie but eventually I began to feel a connection. That moment when I became overly formal...I was testing the waters, to see if I could perhaps continue the relationship after the reveal."

Alexander uncrossed his arms and gestured to the inside of the apartment reluctantly. "You can come in and talk to Taylor directly if you want."

Taylor was hiding from the front door several rooms over, in the kitchen, which weirdly had dodecahedral walls. Nearly all of his eyes were squeezed shut in frustration, trying to figure out telekinesis.

Thaneophyros scuttled up to Taylor. "Can we 'sit' at the table together?" Alexander nodded their head as a proxy. Taylor opened most of his eyes and hovered next to a chair since he couldn't actually sit. Thaneophyros likewise stood on the floor.

Taylor, concerned about what Thaneophyros had said about Thea. "I thought you said you were incapable of love."

"I was. Omnigeons biologically lost that capability for the most part after we switched to asexual reproduction, but it's still somewhere in our genetic code. There's a concept called 'unlocking' where one can find the ability to love. Some figure it out by trial and error, some randomly stumble onto it; there are a lot of ways for it to happen. In my case, I unlocked somewhere along the lines of acting as Thea and didn't realize it."

"So then...Thea wasn't entirely a lie?"

"No."

"And you want to continue our relationship?"

"Yes. But it's not going to be me making up a fake personality anymore."

"I'll admit I'm slightly interested knowing that I've sort of been in this relationship before. But if we do this, you have to promise me you won't pretend to be someone else."

"Yes."

"Okay, sure. We can try it out for a bit and see if it works out. I think I might get more interested as I get to know you more. And I think I can forgive you for your past mistakes, because you really didn't know how this works at all."

"Where do we start then?"

"Probably just watch one of the volumetric movies they have here or something."

"That sounds enjoyable."

# Epilogue



Uncovesseltuxe had been counting his years and forms since the day he woke up into his emergency state. Not in a dreadful kind of way, just so he was aware of how much time he had left. Today marked his final reconfiguration, done, as was typical, in a hospital, having waited until the very last minute, nearly dying of old age in a specific form. It had been 5,630 years, longer than expected. Thaneophyros and Arctakkurus were planning to host some weird kind of going away party, expecting Uncovesseltuxe to give a speech.

But that party never happened.

In the five thousand odd years that had transpired, a service had been developed by Temuontetxecgen and Kyrannikalx, who had stayed together as a dual pair and [co]founded a company specializing in body transfers. The first discovered solution was to create new accidental mitoses, fix them up, and have them mitosis more to create empty bodies for consciousnesses. But quickly this was deemed immoral. The new, better solution was to have a sort of consensual body auctioning site, which was sort of like Ebay with listing of phenotypes, species, and form tendencies. One could list on here and once sold, chill in a travel drone for a while, such as a Sidpith (in fact they were

partners with Tuxe Labs). Then when a favorable listing popped up you could reemerge as a biological organism. Besides auctions, it also had a section for fixed prices, which Uncovesseltuxe and the others were browsing together.

"Five thousand years my of'h, I'm getting five thousand dimensions." Uncovesseltuxe chuckled, looking at Arctakkurus and back at the field sorted by highest to lowest dimension, E5038xS9xH8xNil3 being the most absurd listing, with a limb count over 1,500 digits long. "Actually..."

Thaneophyros waited for Uncovesseltuxe to finish, but the pause grew too long. "I inquire what?"

"Five dimensions. Should we go to five dimensions? I sort of like the idea." Uncovesseltuxe looked curious.

Taylor piped up from the corner he was leaning against, now on his tenth, particularly emo-looking form and having his personality a bit shuffled but ultimately intact. "Isn't 5D kind of a bad dimension aesthetic-wise? There's E symmetry in dimension 6 and H symmetry in dimension 4, 5D only has lower symmetries."

"I resent the notion. 5D, being one dimension above four, and two dimensions above three, the two 'best' dimensions natively, supports the most complex designs accessible in flat and linear contexts. So, I have to disagree with any opinion that treats five dimensions as devoid of aesthetic potential. It's actually the best one possible in a practical sense for actual design, even if it's ugly mathematically." Arctakkurus was sitting next to Uncovesseltuxe, one wasp-colored hand on his shoulder. Then he stared at his own hand. "Didn't this site have a custom option?"

"Yeah, it does. You can get Outzcradien's custom reconfigurations included with the package. Anything you want specifically?"

"I'd like to get a 5D analogue of my current form."

"Taylor, Alexander, and I would like to be Phykommatons, if there are any in five," Thaneophyros interjected.

"Yes, there are a few. Also, I'd like to get something similar to  $\sim\text{SL}(2, \mathbb{R}) \times E$ , my home dimension. It gives me a sense of nostalgia," Uncovesseltuxe replied, voicing his own request.

"Given that Outzcradien is from a spherical product and I am from  $F_4$ ,  $T_1(H_3)$  would satisfy all of us. It is a generalized form of  $PSL(2, R)$  that looks like twisted  $H_3 \times S^2$ . And Macrelydve could visit us organically here." said Thaneophyros, who had been travelling the Stack with Taylor and Alexander, becoming quite the expert on different curvatures and dimensions.

"Does everything look okay with these options?" asked Uncovesseltuxe.

Everyone nodded.

Alexander was still a bit perplexed at their new form. Their face was slightly draconian, with large, black, curved horns extending from their forehead and six rows of white horns down their neck and spine. Their scales across their body were red with white patches on the sides, with a mostly straight strip enclosing their middle third, consisting of black scales with red patches. Their legs were replaced by a cluster of snakes, and each finger of the  $6 \times 6 \times 6$  array plus three thumbs on each of his eight arms were also merged into a snake, which was able to hold stuff like phones by coiling tightly around them. Each snake was a separate thread of the same stream of sapience, but at a separate, more similar level than Taylor and Alexander were to each other. This, like many other creatures in the stack, resembled a monster from Greek mythology, this time being Typhon. It had become common knowledge among humans later on that Uncovesseltuxe had injected some creatures into thoughts in people's minds to try and familiarize them with the concepts, but this had resulted in them being classified not as people but as monsters.

Taylor was sort of half-plant from the waist down, with a slightly altered human face, gray skin, bright cyan eyes, and eight horns. 5D felt even more refreshing than 4D now; it was as if they had received an upgrade.

Thaneophyros had become a 5D hydra-type form, with sixteen legs ending in claws, heads arranged in a pseudorhombicuboctahedron (making him somewhat asymmetrical), and cyan scales covering his body.

These three would take some getting used to, changing a species and dimension at the same time, but they pretty much just walked it off, zipping around the world of  $T_1(H_3)$  and trying all the restaurants around to get to know each other.

Arctakkurus and Uncovesseltuxe, on the other hand, figured out their new forms quite quickly.

"Wow, I look good in grayscale. I love the two-tone hair. I didn't realize that could happen biologically."

**"Icosahedral wing arrangement. I have 12 wings! I'm such a teproqoet badass."**

"I think I'm going to buy a leather jacket and get rid of this lab coat."

**"Your lab coat adds much needed contrast to your tail, I would hold off."**

Uncovesseltuxe ran to the other mirror and hugged Arctakkurus tightly. "I love you, Arctakkurus. I can genuinely say that."

**Arctakkurus wrapped his wings around Uncovesseltuxe securely, and Uncovesseltuxe further coiled around the entire system, in an embrace that can only be painted faithfully with a sixth dimension.**



\*Uncovesseltuxe Form 2-1



\*Uncoveseltuxe Form 2-2



\*Uncoveseltuxe Form 2-3



\*Uncoversteltuxe Form 2-4