

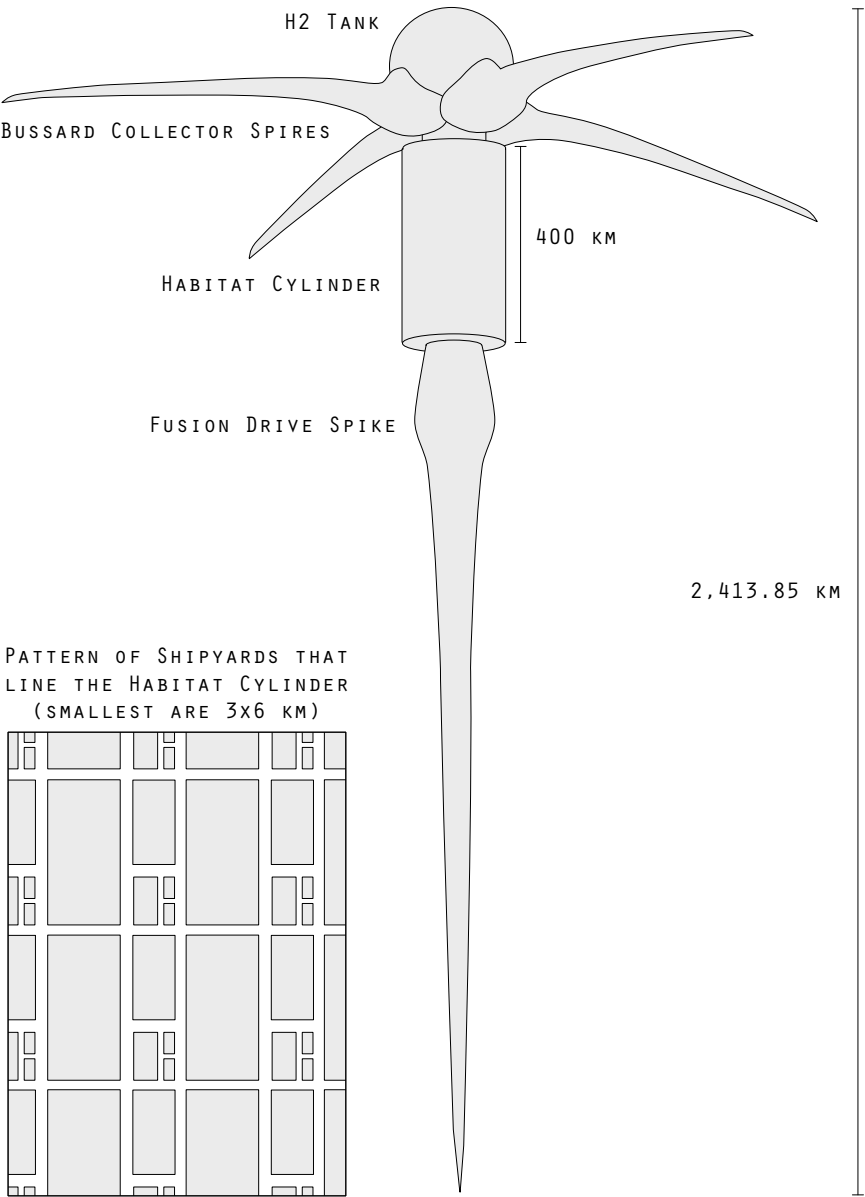


THE SUNSPOT CHRONICLES

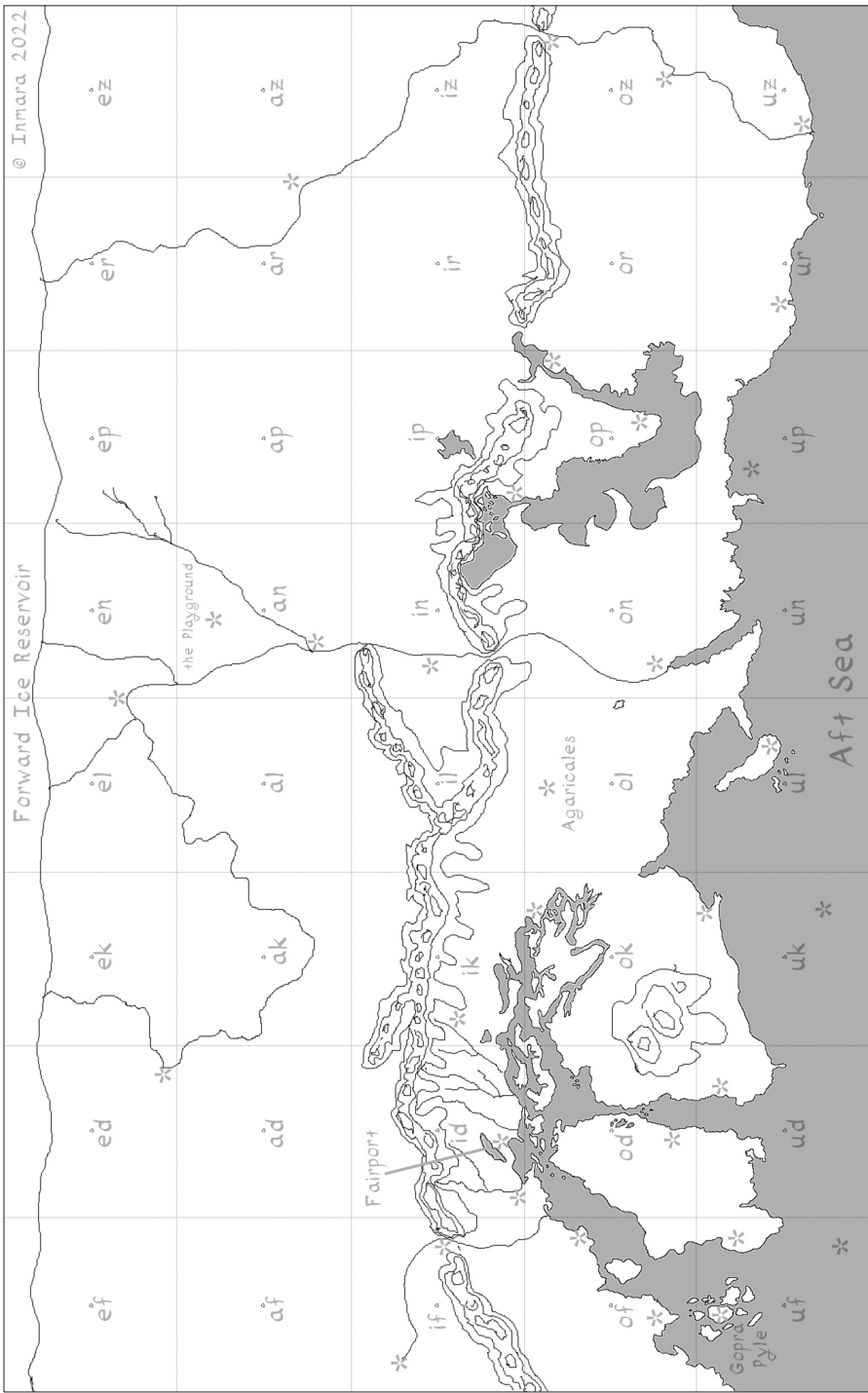
VOLUME 1

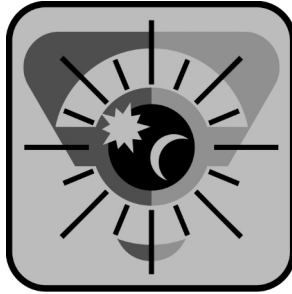
BY INMARA K FENUMERA

Anatomy of the Sunspot



Map of the Garden





'anuu yunakero 'enaa 'inchoayoa
'anuusholfisstemhoarräo'a goarräoreg
nenuu'oamäonäof '**inmara bäomoang'i**.

This document is approved for
publication within the Sol system by
the Council of the Inmara
in hopes of promoting peaceful relations
and mutual understanding.

The Sunspot Chronicles

Volume 1

the Inmara K. Fenumera

Includes:

Children of the Sunspot

and

Systems' Out!

by Metabang Fenumera

Ni'a

by Abacus Fenumera

Outsider

by Ni'a Ktlaticcete

This is a work of fiction. The names, characters, and places are real and extant to the psyche of the Inmara K. Fenumera, and their names and likenesses have been published with their consent. The actions, relationships, and incidents that occur in these stories are fictionalized, as are many characteristics of the people and places that participate in them. Any resemblance to persons, living or dead, places, businesses, or events in the outer world (anything not within the psyche of the Inmara) are purely coincidental. Any resemblance to other fictional works is either coincidental or an attempt at literary allusion.

The use of "Ansible" is an allusion and reference to the work of Ursula K. LeGuinn, from her 1966 novel Rocannon's World.

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*Edited by Meg Rabbit and the Editing Crew of the Inmara (Fenmere,
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Dedicated to
Lydia Lenore Zero

We were looking forward to spending more time with you when your marker on our Tunnel Apparatus went dark on January 6, 2021.

We miss you so much.

Your Liaisons in our system have continued to help us write these novels, which we have done in your memory.

Thank you.

Acknowledgements

Aside from some editing of *Systems' Out!* provided by Meg Rabbit, author of *Edge Anomaly*, the actual work of creating this book fell almost entirely upon our system. Every letter and every pixel besides that of the ISBN, barcode, and Lulu.com stamp were coaxed and placed into position by members of the Inmara. Lulu did the printing and binding, of course.

That said, we could not have created this book without the assistance of so many people. We have a community supporting us, and we literally wouldn't be alive without them.

We'd like to thank our partners, Jasmine, Syri, Heather, Victoria, Katherine, and Lydia for giving us various kinds of homes (physical, emotional, or virtual) after our transition and in our disabilities, and also for listening to us talk about this project at great length. Heather gets special mention for hosting the website on which these stories were first published.

We'd like to thank everyone who has gifted us money with no promise of return so that we could clothe ourselves, buy toiletries, and keep our computer and phone running. That money also helped to purchase proofs of this book.

We'd like to thank our ex-wife, Julie, for graciously helping us through our transition, and giving us so much love before also gracefully ending our marriage.

And we'd like to thank our parents, Dawn and Bill, for putting up with both of our puberties, providing the bulk of our support during our hardest years, and accepting us for what we are.

And to our Facebook friends list, you all are our saviors, too.

Thank you.

Content notice

These stories do a pretty good job of explaining themselves, we think, especially if you take the time to read them thoroughly.

However, there are some subjects that are tackled here that our primary audience may be sensitive to, and a heads up may help prepare you for it:

dilemmas of consent and autonomy
plurality
childhood trauma
generational trauma
social dysphoria
physical dysphoria
neurodiversity
a model of autism we believe likely
eugenics and social engineering
suicidal ideation
childhood death
transhumanism
questions of consciousness and the soul
permanent and temporary fusion

We have not addressed sexual abuse or sexual assault of any sort. Being survivors ourselves, and this largely being escapism, we wanted a world free of that danger, even if it is horrendously imperfect in other ways.

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- ' = |ʔ|
 >> f = |f|
 > k = |k|
 ^ n = |n|
 < r = |ɾ|
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 <C> w = |w|
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- e = |ɛ|
 - a = |a|
 - ä = |æ|
 - i = |i|
 || o = |o|
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translation of Inmararrão text on page 15

näofeg	=	has written
'etekeyerrinwuf ketashete	=	Sunspot Children
mutabenga	=	Metabang

"Children of the Sunspot by Metabang"

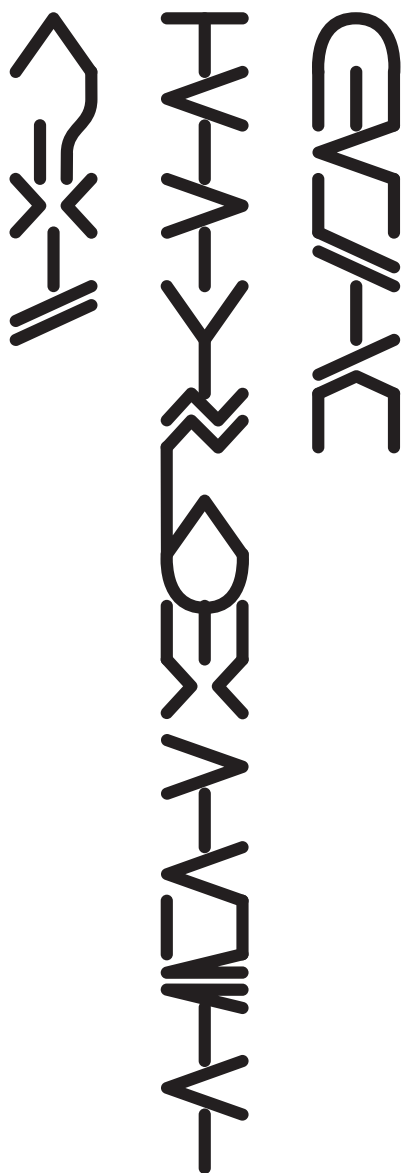
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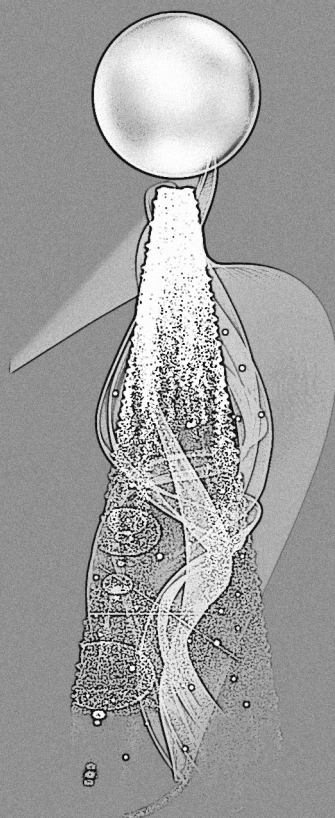
näofeg	=	has written
bäof'ini'a	=	System-Dissemination
mutabenga	=	Metabang

"Systems' Out! by Metabang"

Children of the Sunspot

by Metabang Fenumera





LKCE
2022.06.09

System Report

Reporting Tutor: Metabang

@Current Assignment Report

Update Assignment Status: plural

Update Assignment Name: the Pembers

Update Assignment Pronoun: they | their | them (plural)

Append Member Name: Balmer Pember

Append Balmer Pember Pronoun: hen | hen | hen

Append Member Name: Firan Pember

Append Bet Pember Pronoun: phe | phe | phe

Append Member Name: Jural Pember

Append Jural Pember Pronoun: ve | vis | ver

Append Member Name: Myra Pember

Append Myra Pember Pronoun: xe | xyr | xem

Append Member Name: Olvar Pember

Append Myra Pember Pronoun: ne | nir | nir

Append Member Name: Ploot Pember

Append Ploot Pember Pronoun: e | eir | em

Append Member Name: Toost Pember

Append Toost Pember Pronoun: sie | hir | hir

Notes:

Please forgive my informality here. I understand that the Auditor prefers it when I retain a parsable terseness even in the notes sections of my reports, but I do have things I like to write and I hope whomever is reading this appreciates it. I imagine the Auditor threw an error, and I apologize for that, but it really needs to stop disapproving of notes.

Question: Have you yet considered my proposal for tutor-written publications? I would like to remind you that with our public lives spanning multiple generations, we are in a unique position to record

history for the populace and to even write fictions that are informed by a wide variety of human experiences. We could identify such documents as clearly coming from tutors so that anyone skeptical of our intentions could treat them with appropriate cautions. If you would like another tutor's input on this idea, I would recommend debriefing Abacus, currently tutor of Tetcha.

So, to begin my account, there is as yet nothing alarming about my assignment's development, it is just that this anecdote regarding their naming is too cute not to share. At least, I think so.

As you know, according to my previous reports, we've suspected that my assignment has been developing as plural for some time. And that we believe that it is likely attributable to the fact that they are experiencing developmental fibrillation. "We" being me, their caretaker Jana, and Jana's tutor, Hand.

Today's experiences confirmed it.

Every plural system presents differently and follows a different developmental path, and I've only tutored a small handful in my existence. You all know that, of course, but what if someone who doesn't know eventually reads this? As per my proposal?

In any case, to recapitulate old reports, my assignment originally presented as the type of system where members were originally perceived as imaginary friends beginning at the age of four years old. It's just that they had a lot of imaginary friends, more than the typical two or three. In fact, I have come to suspect that their system is much larger than the seven members named in this report. Combined with their disinterest in picking a name or pronoun for themselves well past five years old, this high number of imaginary friends became our case for suspecting their plurality. They were happy for so long just being known as "student of Metabang," and "they | their | them" (singular) suited them just fine. Furthermore, alerted to this, we became aware of different modes of thought and memory that they would present when doing different tasks or while inhabiting different settings, modes that were more separated than those found in a neurotypical child. Of course, like with everyone, we waited to let them present themselves.

And now, at "the ripe old age" of twelve, following the parameters of roughly a third of those in developmental fibrillation, something seems to

have clicked for them.

They were playing with their neighborhood friends, Tetcha and Morde, in one of the more quiet corridors near their nursery.

Jana was busy attending to their nursery peers, Amphel, Twusp, and Chevip, the three of whom had had a major disagreement. Led by Jana, we tutors had been discussing with our assignments their eventual selection of their own quarters, to be done at their own pace. Apparently, they had begun fighting over how close they wanted to live to each other and in which neighborhood, as well as to when to move out. Chevip had dreams of living up in the Garden, alone, while Amphel and Twusp both felt more comfortable below decks. And Amphel wanted to live close to Chevip, while Twusp wanted to live in the same quarters as Amphel but was ambivalent about Chevip. Amphel wanted their own quarters and wanted to have them soon. Chevip was daydreaming about making their move several years from now. Jana had zir hands full explaining to them that they had time to work this out, and that there was absolutely no deadline to leaving the nursery, only that they were reaching a developmental age where that might become a possibility.

My assignment was entirely disinterested in this subject and had deftly avoided the conflict before it even started by calling on Morde and Tetcha at the first signs of it being brought up.

They met at an intersection of the corridors between their respective nurseries and, after exchanging the briefest of words, Morde pointed down one of the corridors and all three began walking that way. Ralf, Abacus, and I, as their tutors, remained silent and observant, giving them their autonomy.

This section of corridor is slightly curved, one of many that connect two thoroughfares, and has no entrances to quarters. And it is situated in a neighborhood with a high number of nurseries. As such, it isn't used very often by the local populace for travel, and the local artisans have filled it with durable sculptures and play structures for the neighborhood children to explore and use. Part of it has been left open and the floor covered in a matrix that could display any number of markings for use in group games, some of which might use balls or pucks. It isn't a very big space, but large enough for younger children. And Tetcha, Morde, and my own assignment will use it to hide in and play role playing games when the other children are asleep or eating or away at other parks with their caretakers.

"What do we want to play?" Tetcha asked, once they felt they were out of earshot of anyone and had huddled out of sight behind a statue of an ursine fauna with a funny hat and a cane.

My student(s), not for the first time, noted that you could tell it was supposed to be fauna instead of a person because it looked exactly like the kind that could be found in the nearby mountains. Some people looked an awful lot like this animal, but there were always telltale differences such as horns, slightly different proportions, a tail, or a different kind of fur (or no fur at all). Suddenly, their own body felt small and awkward. Their ears felt too big and their limbs too fragile, and they didn't know what to do about it. They were distracted by this thought, which felt like it had come from someone next to them, so they hadn't really heard the question that Tetcha had asked, and were slow to respond when Morde prompted them next.

"I don't care," Morde said, "Student of Metabang usually has the best imagination between the three of us." Sie turned to them and asked, "What do you want to do? I mean, you're the one getting away from your family. Want to keep doing the story from yesterday?"

"Huh?" they looked over from the statue. They felt like they were standing behind their body and were watching as someone else was making it move and talk. They wanted to say a whole bunch of things, but couldn't. And a huge number of the things they wanted to articulate didn't have words yet. Instead, they heard themselves speak, "I'm sorry, we're feeling overwhelmed. We can't think of anything."

Then they watched in mortification as Morde's eyes widened and Tetcha squinted and leaned forward to look into their face.

"Did you just say, 'we'?" Tetcha asked. Then xe glanced at Morde and said, "Called it. I told you!"

The dominant thought in my student(s) psyche at that moment, as they reported it later, was, *Why am I stressing about this so much? What's going on?* Which was then followed by a thought in a slightly different voice, *I think we're going to move out before our peers do, and we might as well admit this is real, too.* "I... we..." they stammered, as someone else in their head thought, *I'm Jural, who're you?* It was a question asked internally on purpose, directed at the one who was panicking. And the one who was

panicking was not the one who'd felt bad about their body.

Morde held an open hand in front of Tetcha and said, "give them a moment. I think they need to sort this out for themselves."

Themselves, came a thought, *not* *themselves*. *Maybe we are plural, like in the stories.*

I've been telling you all, Jural responded.

"Hey, let's sit down," Tetcha suggested. "You look like you're about to faint." Then, with a flourish of xyr frilled tail, xe lowered xemself to the ground cross legged.

Morde scowled down at hir partner in bemusement, then lowered himself down to Tetcha's level by curling up hir tentacle-like arms beneath hir cloak.

My students felt their body follow Tetcha's example, but more gingerly, using their own tail but also their outstretched arms to maintain balance as they crouched, then crossed their legs, their skirt splaying out around them in the process as if they'd meant it to happen. Then, in a slightly different voice than whoever had spoken before, Jural spoke out loud, "Yeah, hi. This feels better."

"Have you asked your tutor about this?" Tetcha asked them.

Jural shook their head, "I think we're just working it out right now. Don't know why it took us this long."

"Do you feel embarrassed by your plurality?" Morde tilted hir head up inquisitively.

"I don't think so," Jural replied. "At least, I don't. Why should we? But... we don't *feel* plural. I mean, I just know that we are, but most of the time it feels like we're one person, you know? Like, we've got one soul, or something like that." Their body felt a rush of excitement at the sound of Jural saying that out loud. They watched both Morde and Tetcha nod, then Jural added, "I mean, sometimes it's really clear we've got more than one, but it's not the same as how the stories and other systems describe, so we just thought our brain was weird. Most of us did. But, also, our dreams are really cool..."

At that point, Jural felt a presence, sort of a pressure on their mind, to their left, and held up their finger.

For my part, since I hadn't been called upon, I was not interjecting. I'd felt the urge to do so earlier, but it looked like Jural was being a good facilitator, and I judged it would be better to let my students remain in charge of the situation.

"What is it?" Tetcha asked.

"I'm gonna try something, hold on," Jural said. Then they relaxed and imagined themselves becoming the person they felt beside them. And that person felt what they knew to be Jural retreat into the back of their mind to their right, a warm, round pressure that subsided slowly. They had a rush as they felt the panic they'd been experiencing earlier, but much more sharply, filling their whole body. Yet they were in better control of it now. They knew what was going on. And they felt good.

"Hi, um..." they heard their voice as higher pitched, and coming from a different part of their throat than what Jural had used just a second ago. A name came to them, along with pronouns. They remembered it from one of the games they'd been playing with their friends. "I'm Myra! Xe/xyr/xem!" xe exclaimed, head suddenly becoming totally clear. "Like, really! I think." It felt right.

"Hi, Myra," Tetcha smiled warmly. "It's so good to meet you face to face, actually. I'm glad you could come forward! It's been fun playing with you in our games." Xe paused briefly, so as not to rush Myra, then asked, "Are you a dancer in real life, too?"

Myra nodded, "I think I am, yeah."

"Are all of your imaginary friends actually members of your system?" Morde asked.

And at that, Myra felt a chorus of thoughts respond, so xe spoke in surprise, "Yeah. Yeah, actually. I think so!" Xe tilted their head, looking inward with xyr mind's eye, and asked out loud, "would anyone else like to come forward and say 'hi' to our friends?"

Jural nudged xem and took control of their mouth long enough to say, "I think we want to let you talk about this, Myra. You were panicking, but

you've got this. OK?" Then, to Morde and Tetcha, "Oh, I like the pronouns ve/vis/ver, by the way," before receding back again, leaving Myra in control.

Tetcha grinned really big and half laughed, "Oh, yeah, you're definitely plural alright. This is so cool. I bet our role playing games will be more fun now, too." Xe gestured generously toward xyr friends, "Probably more fun for you, especially."

"Huh," Myra replied. "Maybe, yeah. Dang it. I wanted to get some of the others to talk to you."

"That's OK," Morde reassured xem. "We've already met most of you, in a way. I mean, I know of Toast, Ploot, Olvar, and Balmer, and some others. It's just good you've figured this out finally."

"Hey," Tetcha prompted. "Do you all have a name for your system? Something we can call all of you? Or is it just 'Students of Metabang'?"

Myra scrunched up xyr lips and furrowed xyr brows, and tried to think about that, waiting for xyr internal chorus to speak up, but xyr mind was silent. After a moment, xe shook xyr head and admitted, "not yet. No one's talking. It's like when your caretaker asks you and your peers a question and nobody wants to answer first."

Tetcha nodded, "That's alright. 'Students of Metabang' is totally fine. We can probably just call you each by your own names for a while. It'll be cool to talk to each of you like a person finally."

A presence pushed up from below Myra, filling their body with a feeling of strength and spoke with a lower voice that held some chest resonance, saying, "*We are people.*"

"This is true," Morde acknowledged, and exchanged nods with Tetcha.

And for the time being, that was all there was to it. The group of friends proceeded to pick up with their collaborative story they'd been working on the day before, and spent three hours and twenty-seven minutes enjoying each other's company while doing so.

As I watched them do this, I counted the seven system members listed above as they participated in the game.

Afterwards, my students took some time to consult with me, and ask me questions about plurality. I found, however, that they already knew most of the important information, and sometimes the system member asking would be surprised when one of their fellow members answered them before I could. Plurality is, after all, a subject of fairly common knowledge, even though only 3.2% of the populace experience some form of it. Obviously, discussing the subject in detail was good for them, so that they could all synchronize their knowledge, so I recommended that we increase such discussions as a start to kick off a number of exercises to cultivate their inner trust. They seemed amenable to that idea.

In the process, they treated me to formal introductions to each of them, though they couldn't all front. And Jural said that there were clearly more below the surface that we could not name currently. Their identities felt like they were on the tip of his tongue. And I told her that there was plenty of time to meet everyone.

Later that evening, with my assistance, they spoke to their caretaker and reintroduced themselves. Jana, already sharing our suspicions that they were plural, was easily pleased to meet them individually and told them she looked forward to getting to know each of them better.

"Um," replied Jural to that. "So, yeah, we're happy to finally be out and all. But, uh, I think we're actually ready for our own place. I mean, we want one, if you think that's OK. I think we *need* our own space, kinda."

"We wouldn't pick a place very far away," Myra interjected, her voice a distinctly different timbre than Jural's, with different inflections. "We want to stay close to you!"

I'd been expecting this, but Jana blinked several times as she considered the request. A caretaker's child moving out can be a really big thing to some people, and Jana is not an exception to that. And my students are particularly young to be doing so right now. But after some discussion between me, them, and Jana, it was agreed that it would be a good idea. I do believe that they are developmentally ready for it. And their plan for remaining in touch and spending lots of time still with their peers and their caretaker, coming over for meals and activities, and treating their new quarters as a glorified separate bedroom, is a good one that they proposed themselves.

They chose to give it two days before they moved into their new quarters,

after picking a vacant unit that was near enough for their needs, so that they could talk to their peers more about it. Amphel's jealousy that they had been cleared to move before her, however, made the atmosphere at their old home so unbearable with arguing and whining, they moved out the next morning.

This is another reason that I think moving into their own quarters is good for them. They become overwhelmed with social stress more easily than their peers, and some buffer between them and such stress will probably serve them well.

And the relief they exhibited when they were finally alone in their own quarters was palpable. I even felt relieved, as if I too had been stressed.

They sat in the middle of the floor, their tablet lying in front of them, just smiling and beaming at the wall for some time. I had a great view of the ceiling from that tablet, so I used the camera from above their bed to observe.

Then they started to talk. Identifying just who said what isn't possible for me. I haven't acquainted myself with each of them well enough, yet, though I expect that will come quickly enough. And I don't think it's appropriate for me to pry with such a frivolous conversation. They might not entirely be aware of who talked themselves, in any case. So, I've included an unidentified transcript of the conversation as follows:

"What *do* we call ourselves?"

"Huh. Dunno."

"Yeah, I'm stumped."

"We... we could take the word 'member', as in 'system member', I don't know why, but - and we could just change the first letter so that it sounds different and maybe cute."

"Cute's good."

"Oh, I know! Let's take the 'p' from 'people' because system members are actually people! So we'd be the Pembers!"

"That *is* cute!"

"Yeah, I like it. It feels like us."

"It's kinda hokey, but I'm OK with it."

"Should we vote on it?"

"Yeah."

"OK, everyone in favor of being called 'the Pembers' say 'aye' out loud."

And then, there was a round of ayes, each in a slightly different voice. It took a while for them all to come in, but there were no "nays".

I recognized Jural's voice as he said, "Well... that's more than I expected. That's eleven of us! Is that everyone?"

Their shoulders shrugged, and someone else said, "I think so. For now at least."

After a moment, Jural spoke up again, "so there are no 'nays'?"

Their heads shook.

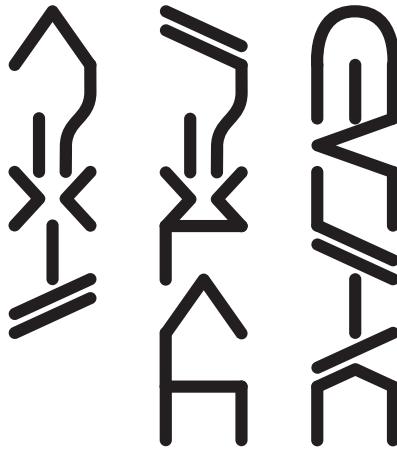
"OK, then!" Jural declared, "I guess that's our name! I'll text it to our family." He reached for their tablet, and addressed me, "Metabang? Could you message Jana, Chevip, Amphel, and Twusp that we want to be called 'the Pembers'? Well tell Tetcha and Morde in person."

"Of course," I told her. "I think that's a nice name, too."

Jural nodded their head, then turned slightly aside, eyes glazing over as if looking internally and asked, "Hey, so, there's eleven of us who voted, right? What do you all think of calling this group 'the Council of Eleven'? You know, like we're our government?"

Systems' Out!

by Metabang Fenumera





Initiation

"Metabang, if everyone is genetically engineered, then why are there people like us?"

I was expecting this question. It's common for Students with major differences from their peers to ask it. I've had a lot of Students, and the Pembers were one of the rarest types.

I could tell that it was Myra who had asked the question because of xyr posture, expression, and vocal inflections. The differences were very subtle between xem and xyr other system members, but I'm particularly suited for tracking these things.

Myra continued as if I didn't already know what xe was talking about, "Why are some people plural and some not? Wouldn't the Crew make us all singlet?"

"Speculation:" I reported my stock answer, "Public records do not exist of the decision, so we must postulate." I was forced by my position to tell the truth as if it was uncertain, "Neurodiversity must be prized as a trait in the ship's population. It is likely that genetic engineering is managed by evolutionary algorithms. In short," and here was the lie I had to tell, "I don't know, but it's probably part of the plan, because it happens."

Protocol required that I hide the fact that I'm ultimately a tool of the Crew. And, in fact, for most of the rest of this document, I'm going to tell you things as if I must hide that from you, too, so that you understand what people knew at the time. I will be an unreliable narrator. But now you know better because I told you, and please do not forget that. It's important.

Myra seemed to accept that explanation, so xe let xyr curiosity lead to xyr next question, getting up from xyr bed and leaving my tablet face up on the covers while xe began to stretch.

I could continue to watch xem through other cameras anyway.

"So," xe said, "they make terminals for plural systems, too? Like, when we get ours, will it work for all of us?"

Easy to answer, "Definitely."

"Cool," xe thought about it a bit. I could tell xe was trepidatious about asking the next inquiry, but xe went ahead after a moment, "Do we each get our own avatar?"

"Of course," I said evenly.

Stretching further as if xe wasn't obviously getting more excited, "What happens when we cofront? Do we get multiple avatars at once? Do we get to see each other?"

"Oh, yes. Easily."

"Oh," xe relaxed, eyes wide, suddenly completely distracted by thoughts, not all of them xyr own. "Holy shit. Holy shit. Holy shit! Seriously?!"

Xe'd picked up my tablet to yell this into my microphone, holding it at arms' length, so I got an excellent view of xyr face. Xyr surprise was so intense it almost looked like fear and xe was shaking, but it was obvious in context xe and the rest of xyr system were ecstatic with anticipation and were probably fighting for control, bursting with more questions.

They span in a circle, letting centrifugal force drag the tablet to finger length away from their outstretched hands, I'm not sure who talked next, "We need to talk about this! Is it OK to tell our friends about it?"

"Yes, that is permitted," I replied.

"I love you Metabang!" it was definitely Myra again.

Again, an easy truth, "I love you, too. And of course."

"Text our friends:" Myra ordered, "Meet us in the park after lunch? We learned something cool! Signed, Myra."

"Sent," I reported as xe walked briskly across xyr quarters.

"Myra?" I said.

"Yes?"

"I can't wait until you're old enough to get your Terminal, too. I have things to show you. And it will be nice to see your true selves."

I had no idea at the time just how much xe would soon get to learn. I knew it was going to be more than the typical Student, since my project had just been approved. And I'd run simulations to predict the consequences, but there were things even I didn't know and would learn in the end. Which is why I'm writing this.

"It's gonna feel more real than dreams, right?" Myra asked.

"That's what they say," I replied.

The Pembers bounced as Myra led them out the door, their tail curling tight with excitement. They wore a simple blouse and skirt, blue and pink that were vibrant against the grey of their fur. Their ears were relaxed, eyebrows high, pupils wide, and a massive grin on their face as Myra danced their body down the corridor, waving their arms to enjoy the movement and expend energy. Their neighbors mostly smiled as they watched them trapse toward the nearest upward ramp. People generally like to see other people obviously happy, especially youngsters.

Myra paused at the bottom of the ramp and whirled to look back at the door to their quarters, raising the two long feathers that sprouted from behind their ears and letting them drop softly in sync with the movement of their arms. A gesture unique to them of pure joy.

"Wooooo!" Myra shouted, then ran right up the ramp.

The park was a small piece of cultivated land on the edge of the urban area the Pembers lived in. For their sake and that of those they knew, I'm not naming that city. There were other parks there, of course, but this one was the closest to their quarters. They lived one deck below the surface of the Garden of the Sunspot, in the corridors under a collection of art collectives that specialized in apparel and outdoor equipment, things useful for hiking and camping. And right at the edge of that neighborhood was the edge of the city itself, and the park, demarcated by a thick line of trees with a trail running through them to a large clearing with a pond in the middle of it. Eventually, the Pembers were sitting on a rock next to the pond, finishing up their lunch and talking amongst themselves.

For a time, while they were eating, they had placed my tablet face down on their outstretched skirt, so I had to observe them by other means. All of the available cameras were quite a distance away. I could see the curve of the inner wall of the Sunspot's Garden on the horizon and I watched them

over the trees of the park, trees and mountains reaching for the central plasma tube where the sun was midway through its daily passage. But, of course, I could hear them as if I was right next to them, because I was.

"So, even really big systems like ours get a separate avatar for each headmate?" Ploot asked.

"Metabang didn't say they don't!" Myra replied.

"Amazing," said Jural.

"I wonder if there is a limit on how many can cofront at a time," mused Toost.

"I don't know. I forgot to ask it," Myra said.

"And is that limit because of our brain, or the terminal?"

"Metabang? Did you get all that?" Myra picked up the tablet to look at the screen and I saw their inquisitive face.

"Yes," I replied.

"And?"

"It varies from system to system," I said. "You will probably meet the terminal's limits, though."

"Welp. OK, then," Myra pouted.

The Flits, a three member system and friends of the Pembers, had been walking slowly across the field toward us, their large bulbous tail leaving a wide trail of flattened grass. When they got near enough just then, Myra heard them and looked up.

"Oh, hey!" xe exclaimed.

"Hey," said the Flits, "It's me, Ketta. Who's all up today?"

"The whole Council of Eleven!" Myra replied.

"Woah," Ketta muttered. Keh sounded drained, like keh had spent the morning arguing with someone after a night of no sleep. But keh leaned on

the rock next to the Pembers, opting to remain standing, and pressed kihns shoulder against their arm and mumbled, "Tetcha and Morde are on their way. So what's the big news?"

"Well," said Myra, "It mostly involves us, so... Well, Metabang was telling us about all a neural terminal can do, and -"

"Oh, yeah." Ketta interrupted, "Breq told us all about that." And then keh mustered up some energy to half exclaim, "cofronting!"

Sometime, long ago, humanity finally reached for the stars. Or, interstellar space, at least. Our motives for doing so are lost to time or classified records, but what we do know is that our ancestors used nanotechnology to transform a large asteroid into the 400 km long habitat cylinder of the spacecraft we inhabit today. There may have been others, but if so we are not in contact with them. The nanites now lie mostly dormant in the soil of the Garden that lines the interior of the vessel, and we are told that we are now many generations into interstellar space. The ship is piloted and managed by the Crew, which keep themselves sequestered from the rest of the population, the Passengers. And, in theory, the genetic diversity of humanity as we see it today is in preparation for eventual planetfall some day in the future. Though many say that day will never come. The ship was named the Sunspot, and whoever contributes to these stories after mine is invited to add them under the title the Sunspot Chronicles.

The interior of the ship is a cylinder, divided into 40 square regions, five regions long and eight regions in circumference. Each region is marked with a spoke that connects it to the central plasma tube that carries our daily sun.

This story, *Systems' Out!*, which follows the life of the Pembers, takes place in a coastal region near the aft of the ship.

The Pembers are a plural system, as I've said, a group of people who have shared one body since conception. Plurality is a neurotype that has existed amongst humans since anyone can remember, and the Crew have thoughtfully structured ship technology and ship laws to accommodate that diversity. As with other neurotypes, plural systems tend to attract each other, and feel most comfortable in each other's presence. And the Pembers and the Flits were no exception to that rule.

My name is Metabang, as you know. I have been the Tutor of many, many

passengers aboard the Sunspot. I was made for the role of Tutor, generated by evolutionary algorithms along with my peers as code in the system, an emergent consciousness that has known no body. Together with the caretakers, passengers who raise children, I help educate the population. This document is part of that, which is doubtlessly why you are reading it.

The Pembers are my current assignment, and I do, in fact, love them quite a bit. They represent more children than I have ever had to take care of at once before, but I have been allotted enough ship resources to do so. They are a very large system, and their numbers are always growing.

That said, not all of their friends were plural. With the Flits, they'd grown up with Tetcha and Morde, a couple of what the Pembers call singlets, people with fully integrated consciousnesses, or as integrated as a human can get. A single awareness per body.

At Ketta's mention of Tetcha and Morde, I split my awareness to track them. I could follow both conversations just fine, but Ketta and Myra's is pretty much a repeat of stuff I've already told you.

Following signals from their Tutors, and patching into their tablets, I found Tetcha and Morde in the middle of the woods, some ways spinward from where the Pembers and Flits were. Some seconds after I'd checked in on them, Tetcha broke a silence of indeterminate length.

"You're sure leading us on a circuitous route today! Are we avoiding something?" xe asked.

"I don't know, Tetcha," Morde replied. "This is just the right way."

"OK!" Tetcha chirped, leaning over to sniff some flowers beside the trail, "I love your magic, even if it's weird. These flowers are really pretty!"

"It's not magic," Morde growled.

"Well, I think it's magic. I don't know how it works."

Morde sighed, "I've explained it so many times. I can sense minute, subliminal changes in the patterns around me, sights, sounds, smells, temperature, emotions. And I guess my subconscious compares that to past events and extrapolates what it all means. And then I get a feeling and follow it." Then Morde turned to look meaningfully at Tetcha, "Your own Tutor agrees with me about this."

"Yeah, You, Abacus, and Ralf have all been over it with me, but I get to call it magic if I want to," Tetcha quipped. "I don't see all that happening, so it's magical! You just say, 'we go this way,' and if we do, we find such cool things! Or, even better, we avoid getting hurt. Remember last week?"

"That is when you started calling it magic, yeah." Morde pulled hir cloak tighter around hir arms using hir tentacles and looked upward in exasperation, "I mean, OK. Call it magic. I guess I'm a magician."

"More like a witch, I think."

"Oh, great."

"Morde," Tetcha pleaded. "I love you!"

"Thank you," More replied. "I love you too. I don't know how you put up with me."

Tetcha frowned, "What do you mean?"

Morde whirled to look at Tetcha and gestured with hir hands, "Look at me!" Hir head and body were covered almost entirely by a large cloak, as usual. Only hir hands, part of hir face, and the tips of hir eight tentacle-like arms that sie "walked" on were visible. Morde had a phenotype that presented itself in a few other Passengers, with varying results. Some of them were forced to be aquatic, but Morde had the strength and cellular structure to hold herself upright, a fraction taller than Tetcha if sie wanted to. Sie was gesturing at hir cloak as much as anything else.

"Oh," Tetcha stopped and became carefully solemn. "Sorry. Dysphoria again?"

Morde looked down and sighed, sie had experienced this physical dysphoria since sie could remember, "Always."

"Can I hug you?" Tetcha asked, "Or would that make it worse today?"

"Please?"

"I wish you didn't hurt so much," Tetcha told Morde, giving hir an embrace.

"Thank you," said Morde.

I cut the feed.

A very common question posed by my Students has been, "What defines being human, anyway?"

They especially ask this after learning just how diverse the ship population is and how the generic life cycle works. This question is also typically followed by some form of, "Were we always like this?"

The answer to that question is one of the victims of record loss. Probably deliberate record loss.

No one aboard the ship knows or admits to know what the original human beings looked like. There are not records of them, and attempts to recreate one would be utterly directionless and pure guesswork.

What we do know, however, is that despite the great physical diversity of the population, the relative neural diversity in comparison to the fauna in the garden is significantly less. The ship's population is neurodiverse, within a certain range. But it seems clear that our brains all closely resemble the brains of our ancestors (and I use "our" here because my neural network is modeled after the same as yours, even if it is all handled by the quantum processors of the Sunspot's systems). The resemblance is close enough that our neural terminal technology needs only minimal adaptation to work for every Passenger.

Also, we find that our medical technology and knowledge is easily adaptable to the population's otherwise unique forms. And when examined, the population's genetic diversity is also not as broad as between members of fauna. Passengers can be said to belong to the same genus, genetically speaking, if not strictly the same species.

If there are other ships like the Sunspot, we believe that life on them would exhibit roughly the same characteristics. Though some suggest that there may be greater variation between ships. One of them might have a predominately submarine population, while another might be predominately avian. They might have different ranges of climate. Such diversity could increase the overall adaptability of life for whatever might befall the ships in the future.

If we were to spawn a child ship from the Sunspot, we might choose to push its ecosystems and population toward increasing that diversity. It

seems wise.

That all said, statistics and records do not seem to indicate that Morde's dysphoria was the result of his divergent body type. There are people who look very similar to Morde who do not experience this dysphoria. And there are also people of a very different body type that do.

Dealing with that dysphoria and treating it is something that has become part of my life's work, actually, and I will address that further a bit later. Suffice it to say, Morde was not the only one within this friends group experiencing it. Sie just may have had the most severe case of it I have encountered yet. Ketta was feeling it pretty bad this morning, too, as evidenced by his mannerisms.

As I said, people of similar neurotypes tend to cluster and become friends, allies. Even before they're consciously aware of their similarities. It happens again and again.

Toost, one of the Pembers, was in control and pointing at the Flits, "You don't have Breq with you. Again!"

Ketta looked up and away from Toost, "We don't have our tablet. Our Tutors don't need our tablets to be with us."

"In the park they do."

"Breq can use your tablet," Ketta pointed out.

"You always do this," admonished Toost.

"I hate wearing things and I hate carrying things, so yeah," Ketta replied, gesturing at the Flits' naked body. "Anyway, we're getting fitted for a terminal soon."

"None of my headmates would let me leave without our tablet," Toost replied.

"We have an agreement," Ketta recited, obviously repeating words he had said before. "On my days, I get to not wear clothes or carry stuff. It's an accommodation. Tomorrow or the next day, whomever is fronting does what they want." he looked meaningfully at the Pembers, "You don't have days. You have..." he frowned and emphasized the next word as if it was hard to pronounce, "sentences."

"Yeah, but you do switch involuntarily sometimes. I've seen it," Toost said.

"Our systems are so different," keh deflected. "It's weird."

"True," Toost admitted.

"We're fine. We'll be fine."

"OK, sorry for pushing."

"Toost?"

"Yeah?"

"Thought it was you. Tone of voice."

The conversation had slowed and just at the point Tetcha and Morde had arrived, slightly aftward, between their friends and the city.

"Hey, we made it!" Tetcha declared. "We only had to enjoy ten billion beautiful flowers on the way!"

Morde barely moved once sie stopped by Tetcha's side, "Hi."

Toost's calm but stern demeanor was suddenly replaced by an excited Myra, who flapped xyr hands enthusiastically, "Hey!!!"

Ketta glanced up at xem and mumbled, "hi, Myra."

"So what's the news?" Morde asked.

Myra noticed how glum Morde was and looked at Ketta then back at Morde, as if comparing them. "Woah," xe was more subdued. And with hesitation xe asked, "you two are both having a high dysphoria day, aren't you?"

Both Ketta and Morde gave Myra the same pained look, expressed with facial structures that were wildly different. Morde had no visible nose or mouth, as both were covered by hir cloak and the facial protuberances sie kept hidden by it, and hir eyebrows were short and bristly tufts that seemed to float on a smooth forehead that sloped back into the recesses of hir hood. Mordes eyes were forward facing with horizontal hourglass pupils. The Flits, on the other hand, had a wide, large head covered in

pebbly scales with no hair what-so-ever, with two slits of nostrils just above a wide, lippy mouth. Their eyes sat below bony brow ridges, with big round pupils and no visible whites, set wide apart on their head, mostly forward facing but with a wider field of vision. And they both looked haunted by death itself.

"Sorry," Myra said. "I'm just getting good at seeing it in your eyes. Like, same hat, right? Balmer gets it pretty bad in our body." Xe turned to the Flits, "Ketta, you want to tell them?"

"I mean, I guess?" was the response.

"What?" Morde said more than asked.

"It mostly pertains to systems like the Pembers and us, not you guys, but anyway..." Ketta rumbled.

"Ah, that's all right," Tetcha chimed in, trying to be reassuring. "Good news for you is good news for us!"

"Well, we both learned from our Tutors that when we get neural terminals, we'll be able to cofront while logged in," Ketta explained.

"Ooh," Tetcha lit up. "So, we'll get to see and talk to all of you?"

"Yep," Ketta actually smiled a little. A half smile, "But also, the Pembers were saying Metabang confirmed that your avatar will feel like your body and it can be whatever you like, so..."

Without changing expression, Morde seemed to float up and forward a little, as if lifted by this thought, but his voice didn't reflect any emotion, "Yeah, Ralf told me about that much. I can't wait. I could stay logged in all day on days like this."

Ralf interjected from the folds of Morde's cloak, "Uh, that wouldn't be advised, boss." I silently concurred, it wouldn't.

"Whatever," Morde dismissed it.

"You'd think," Tetcha observed, "with everything on the Sunspot so carefully designed, we wouldn't have problems like body dysphoria."

Tetcha's Tutor, Abacus, took that moment to make itself heard, winding up

for a big hypeshare, sounding a bit like myself, "Neurodiversity is probably maintained so as to -"

"Ugh, Abacus, I know!" Tetcha shut it down.

I decided to change the tone and focus of the conversation. Everyone was on topic, just not working with the full set of data, letting their emotions dictate their responses. And we had business to do with them. The timing and location was perfect. So I interjected, "Everyone's here."

"Yeah?" Myra said, glancing down at my tablet.

"We have news for all of you," I said, on behalf of the other Tutors. This was my thing, but they were on board, too. I'd been keeping my tone pedantic and informative or just choosing not to talk to hide my own excitement. There was a certain amount of discretion required, but also presenting this project to our Students was a delicate thing. So, I hesitated for just a moment before saying, "It's an opportunity, if you accept it."

"Uh..." Ketta slowly looked my way.

"What?" Morde asked, almost as if sie hadn't heard what I said.

The Pembers looked down briefly, as if listening, then their head snapped up, Jural vocalizing, "Wait, what?"

"Yes," I said.

"Why wait until we're all here in this park?" Tetcha asked. Which meant that everyone here was feeling suspicious. Great. Good move, Metabang.

"Relative privacy," I explained, after a bit of a pause, "proximity to the resource, and group dynamics." I figured I should stick to the truths. They needed to be informed in order for their consent to be legal, should they offer it. "So," I said, "Want to be able to do something really cool?"

A bird flew by as everyone just stared at my tablet for several seconds. I got really worried I'd screwed up.

"Why?" asked Morde.

Ralf took over, "You've been selected by the Crew to be part of an experimental trial of a new kind of terminal. If you consent." Well, OK,

being super direct and to the point was probably the best idea, after all. Then it chirped up, "Morde, it is pretty cool if you ask me."

Abacus offered a monotone embellishment, "Deliberations have taken generations. We are told those in favor have assured significant precautions." Also true, but I just didn't know how that'd go over. Abacus is an odd duck, even from my perspective.

"Precautions for what?" Ketta asked, a totally reasonable question, actually. The answers to it, however, would take a long time to enumerate and the chances were actually really slim that any issues would come up. Myra was right on kihns toes with xyr question, though.

"Why us?" xe asked.

My turn again. "Well," I said. "You're being offered because you're my Student. It was my proposal, originally. And I think you'd benefit from it in particular."

"And your friends group provides samples of control groups," Ralf offered. "Others are being offered, too, though." It paused again, then spoke in a slightly different tone, "Boss? Please say, 'yes'. I'm excited about this."

Morde obviously felt pressured by that and gave a brief, impatient half gesture, "Out with it. What is it?"

"Metabang?" Ralf prompted.

"The nanites," I said.

"What?" Ketta's head snapped up, looked directly at my tablet.

"Oh!" came from Morde, whose eyes were suddenly wide, and whose shoulders were becoming squared, head raised higher. In preparation for this moment, the other Tutors and I had made sure to educate our Students in more detail about the nanites for the past couple of years. And as we'd hoped, everything seemed to be clicking for them. They'd probably start to be able to guess at the dangers as well, such as they were.

"Oh, wow! Oh," Jural took over the Pembers, "Those wouldn't need to wait for our skulls to stop growing."

"Oh..." Ketta echoed the vocalization of the moment, also lost in thought, then keh noticed the Pembers' switch, "Hey, Jural. Good morning."

"Balmer's going to flip," Jural nodded toward kihn.

I wanted to push this forward, so I stepped in again. "So," I said, "do you consent to be fitted with nanite terminals? And, if so," I paused for really dramatic effect and continued at a slightly slower pace, "are you prepared to receive them now?"

"Yes," Morde replied instantly. Then to the rest of hir friends, "I think we should say, 'yes'."

Tetcha's jaw actually dropped open in disbelief. Xe was prone to speculation and believing in many wild and improbable things, one of which was an understandable and common skepticism of the Crew and their motives, so I didn't find xyr reaction unsurprising. "Really? Doesn't this feel kinda weird to you?"

"Every cell in my body is saying this is the next step we take," Morde said, emphasizing the words to denote hir implied meaning, referring to their earlier discussion.

"Your magic," Tetcha said.

"It's not magic."

"For the first time in a while," Tetcha said in a careful, hushed tone, "I feel like something's going to go really wrong."

"It will," Morde stated.

"There really isn't much chance of that, actually," Ralf countered.

Morde looked down at the pocket in hir cloak where Ralf's tablet was, and admonished it, "It will." Sie looked back up at Tetcha, then at the others, "Something is always going terribly wrong somewhere. You know it. I can feel it. But as weird and scary as this is, it is what we're going to do. It's the best route."

"We're so doing it," Myra reported, enthusiastically and firmly. "Balmer just flipped."

Ketta nodded and spoke up, "The others just gave me their consent."

Myra continued, "The Council of Eleven just voted unanimously over here. We're holding a poll for our internal population, but that's just a formality. We've been dreaming of something like this for ages!"

If I'd had eyes, I would have blinked, as many of my Students do in response to things that surprise them. I had not expected them to begin reaching a consensus this quickly. I had expected to have to explain more, and if Tetcha took a cue from the others, I'd have to cover my legal bases unprompted as we set them up for the procedure. So I started going over in my mind what they would need to know.

Morde turned to Tetcha and took xyr hands. "I will go where you go, Tetcha," sie said, looking hir partner in xyr eyes. "My senses tell me this is OK and right, but I won't do it if you don't want to."

Tetcha took a quick breath as if to talk, then stopped, breathed out xyr nose and started over more slowly, "Are you sure it's your magic, and not your dysphoria talking?"

Morde looked down at their hands, then back up to Tetcha's eyes and held them for a second. In a low, sombre tone, sie said, "It's both."

I'd known about Morde's sense of intuition for a long time. Ralph had consulted me about it, in fact, wondering if I'd had any Students who experienced the same thing. I hadn't. We didn't think much of it, other than it was just sharp enough to catch our attention. And Morde had always downplayed it. Tetcha made more of it than anybody else, and we honestly didn't think it was going to play all that much of a part in this decision. But here we were witnessing the entire friends group letting it guide them.

Well, that and their own adolescent excitement.

I felt bad that I was inherently taking advantage of that excitement to push this, but for Morde's sake, actually, and for others like hir, I really didn't want to wait much longer. Time was of essence. Every day delayed was another day of trauma for hir.

The Pembers would also benefit from this in other ways. Some of them experienced dysphoria too, but it was apparently milder and mitigated somewhat by their plurality. But it was their plurality for which I was

pushing this. They were an entire group of people experiencing life through the bottleneck of just one body, one set of senses. And the physically implanted neural terminals that were standard at the time would not serve them justice, would not give them the full accommodations and rights to autonomy they deserved as living beings. The old technology would take longer to do its job, and every day that was prolonged was a day of great risk for them.

I admit, I had a lot of bias riding on this. It was a mistake on my part to succumb to it. Things may have turned out very differently if I hadn't. But this is how we got to where we are today, and my carelessness played a big role in that.

I proceeded to direct them further into the woods where we might not be interrupted by other Passengers enjoying the park. As adolescents, they were under our charge, their caretakers playing less of a role in their lives. We Tutors were the responsible parties. But, by the laws of the ship, our Students were officially in control. Their consent and their autonomy was paramount. Is still paramount. As is yours. As is everyone's.

In a short time, with mostly meaningless and redundant exclamations, questions, and replies, we found ourselves all lying in a circle on the forest floor, with our Students' heads in the center, their feet, tails, and other lower appendages outward like the spokes of the Sunspot, and our tablets between each of them, near their ears.

Time to cover my bases. They'd already consented, but they needed to know what they were getting into. I reassured them that they could interrupt me and back out at any time, right up until I would tell them it was done. And even then, there should be a way to reverse it. The nanites were very flexible in their use, and noninvasive.

"Normally," I began, "the nanites that were used to build the Sunspot are contained in the soil of the Garden, where they work as part of the ecosystem. The bulk of them should remain there." I paused on that for emphasis, making it sound almost like an admonishment, for reasons they wouldn't suspect yet. It was just a thought I suddenly had. I didn't explain. I should have. I continued, "However, a small number can be spared to use as neural terminals for the populace. Simulations say that this can be done relatively safely. There may be some initial conflict, and new guidelines for population behavior may need to be established. But we cannot do any more planning, and the needs are great enough to proceed."

Here is what I didn't tell our Students, which I should have:

As you may have surmised, AI Tutors, such as myself, have a channel through which we may communicate with the Crew. We are occasionally allowed to use this channel as a means to propose ideas, as a note attached to our job reports.

Early in my career, I had a Student with high physical dysphoria who was assigned to a caretaker who had had no experience raising a child with such a struggle. It fell upon me to guide my Student and help them find the treatment they needed.

Unfortunately, prosthetics and surgeries did not suffice in this case. In 99% of cases, they do, amongst a population of 1.5% who actually experience dysphoria. My Student was a very rare case, and no systems were set in place to help them.

They immersed themselves in the Network the day they got their neural terminal, and logged off minimally to take care of their body. And even that was not enough. They said they could still feel how wrong their body was through the link.

They died early from the increasing neural agony of dysphoria.

This drove me to append a note, at the end of their file, tersely and passionately requesting better relief for dysphoria, or an effort to prevent it.

I was surprised to be given permission to suspend my Tutoring duties in order to research options. And at the end of my tenure doing that, I had found only one possibility that met all my criteria.

Use the nanites as a new form of terminal, surgical tool, and prosthetic.

They had been designed and used to build the Sunspot itself, and now most of them lie semi-dormant in the soil of the Garden, helping to maintain the atmosphere and ecosystem. They've been adapted to interacting with the carbon cycle. It would not be an impossibility to adapt them further for internal use.

After I submitted that proposal, I was simply given my next Tutoring assignment, and I didn't hear from the Crew regarding the subject until after the Pembers' plurality was confirmed.

I was told to watch the Pembers' development closely and report in greater detail than typical requirements, and that they and their friends group would be potential candidates for experimental nanite terminals. I was told not to tell the Pembers about the potentials of the nanites until the offer was either finalized by the Crew or rescinded. I could see the wisdom of that, so I complied.

It took the Crew that long to explore the possibilities of using nanites that way, run simulations, and then argue amongst themselves about whether or not to proceed. I only surmise what their process was. They are opaque and do not talk about their deliberations.

I do not know why they had restricted use of the nanites by the populace at all until now, and I do not know what their future plans are beyond replacing certain technologies with them shipwide.

What I know about the capabilities of the nanite terminals is this:

The distributed processing and networking of the nanites is used to mimic and extend the functions of the human neural system. The nanites within the body are configured to integrate with the metabolism and focus on giving and receiving signals from the dendrites and axons of most of the nerve cells.

Because this is a full body integration instead of a web of monofilament implants that is the current terminal design, and the connections more closely mimicking natural cellular activity rather than simply using electrical stimulation, the whole psyche of an individual can integrate with the terminal.

This means that every single consciousness within the neurology of a system such as the Pembers can access the Network without having to take conscious control of their brain, which they call "fronting".

There is no bottleneck. The nanite network is adaptable to the needs of each body. And therefore there is no limit to the number of system members who may access and manifest on the Network at any given time.

If the rest of my proposal has been accepted, the nanites should be usable to organically and gently alter a person's body over time, to improve their health and adapt them to their life's demands or relieve any dysphoria they may have.

I had not been informed about the use of the nanites to create external bodies. Either that was proposed by another Tutor that I'm not aware of, or the Crew themselves decided upon it. It is a permission that startles me, and I cannot accurately predict the outcomes. Oh, but we haven't gotten to that part of the story yet. You know about it by now, of course. But we will get there. About how we learned about it.

Anyway, instead of saying all that, I cut it all short.

"As you lie in the grass," I said, "nanites will make their way into your bodies and toward your neural systems. You really shouldn't feel anything at all. When the process is complete, you will start to sense the Network, and we, your Tutors, can teach you how to access it and use it. And as your bodies continue to grow, and your brains develop, the nanites should be able to adapt. You will be a small percentage of the Sunspot's population with this new kind of Network access. People will be informed and reassured to reduce jealousy, but there will be jealousy." I honestly expected that to be the worst problem, which again probably distracted me from the other possibilities. I didn't need to take a breath, but I mimicked doing so out of habit of imitating all the Students I'd ever taught, and then finished, "Everyone will be fitted, with their consent, in time, but until then you will be special. We think your group are well equipped to handle that burden."

Myra offered, "Well, we do keep to ourselves a lot."

"Exactly," I said.

"I have a question," Tetcha spoke up.

"Yes?"

"It's already done, isn't it?" xe asked.

"About twenty words ago," I replied, "yes."

Growth

In the first days of their life, when a member of the Passengers graduates from gestation, they are assigned to a Caretaker and a Tutor.

A Caretaker is a Passenger whose current art of choice is parenting. They've signed up to help raise children. And each Caretaker is different, with different skills and capacities, which we Tutors work to adapt to and compliment. Some Caretakers can handle raising six or more children at a time. Others work best with one or two. Some like to stagger their assignments so that they have children of varying ages. Others like to raise children who are all the same age. And because of this, nurseries are clustered in housing groups so that the children of different Caretakers can easily grow up together and interact as much as they like.

As children reach adolescence, when they are ready, they move into their own quarters, choosing for themselves how far away from their nursery and Caretaker they move. Their Caretaker may or may not remain a large part of their life, regardless of distance. It all depends on each relationship but, either way, the Tutor begins to take a larger and larger role in the child's life. In fact, typically, we Tutors act as a Passenger's confidant, assistant, and advocate for the remainder of their life in the halls and Garden of the Sunspot. There have been a few exceptions to that, but it is so much the norm that we all tend to take it for granted.

The Pembers, the Flits, Tetcha, and Morde each had a different Caretaker, but grew up in the same block of nurseries. They'd been friends since they were toddlers, and they were a very insular group. They often approached life as if it was their group against the entire rest of the ship, alternatively talking amongst themselves in hushed tones about silly things and loudly gabbing about personal things as if nobody could overhear them.

Still, they also had their own lives, giving each other the room to be alone and to have and nurture a few outside relationships. They didn't have any obvious animosity toward their neighbors and community. We all did a fairly good job of raising them.

That isn't to say they didn't have their struggles. Their differences from most of the rest of the population were what drew them together, gave them a shared experience, and set them apart from the rest of their peers.

And this was, in part, something we Tutors hoped we could alleviate by giving them early access to the freedoms of the Network, so they could reach out to others around the ship who were similar to them. Which, to a degree they already did via text and gaming, but using a Terminal to interact on the Network is much more akin to meeting in person, and it has some advantages over even that.

The next day, after a night of strange dreams as the nanites made sense of their neural processes, the Pembers were getting to work doing just that. They woke up full of questions, which I answered, and immediately began following my instructions, reaching out to others they had previously only interacted with through chat channels. One of them remembered to wash and eat.

To give them an immediate anchor to the outer world, I sent a message to their Caretaker, Jana, to let zem know that now would not be a terrible time to swing by for a visit. Jana was pretty excited about doing so, happy to see some of zir favorite, if most bewildering, children.

Jana was a slow moving person, with short, stalky legs, no tail for balance, a long hunched torso, and dangly arms that ze used as if ze was dragging zemself along by grabbing nearby fixtures on zir way through the corridors. Knowing this, and having a fondness for zem, the Pembers had chosen to remain fairly close to where Jana lived. Still, it took several minutes for Jana to arrive. Ze was enjoying the morning at zir own pace, stopping to talk to friends, picking up breakfast from a culinary artist on the way, and going to the surface of the Garden to watch the day's sun emergence.

Ze was chatting with zir Tutor, Hand, as ze approached the Pember's door.

"Jana is here," I declared.

Bet looked up from a physical 3d puzzle hen was solving on hens own while nibbling on the last of breakfast. "Nice," hen said. "It's been a while. Let zem in, please."

"Certainly!" I replied, just before Jana buzzed at the door. Upon zir signal, I opened the door.

"My Darlings! You look well!" Jana held zir arms up and out, grinning, "... How is..." ze gestured with one hand toward the Pember's forehead,

"everything?"

Bet blinked, "You know about the...?"

"Nanites?" Jana finished for hen, "Of course! As your Caretaker, Metabang has been keeping me informed since before it offered you the option."

"Oh, duh. Hmm," Bet looked down at hen's puzzle for a moment before looking back up. "You're not jealous?"

"Nope. I don't want those things in my head," Jana shook zir head as ze stepped further into the Pember's quarters and started moving toward a seat opposite from Bet. "I figure it's the youngsters and those with the dysphoria that are gonna be clambering for it."

"Ah, yeah. So, they're not just in our head. They're in our whole body."

"Oh," pulling in zir chair and hopping up onto it in one motion, faster than ze had moved yet.

"I can't feel them," Bet continued. "Myra says xe can, but the rest of us are skeptical. Xe does have way better interoception than the rest of us, though."

"I believe xem, honestly," Jana leaned forward a bit.

"OK," Bet accepted, blinking. Then hen had a thought to vocalize, "Well, we haven't heard from our friends yet, but we're having an interesting time."

"Yeah?" Jana prompted.

"Well, first of all, Metabang says things will get more vivid with time, but right now the Network just feels like another part of our inworld. We're having trouble telling the difference between what's stuff we've imagined up and what's part of the ship's Net. So, we could be talking to a group of people scattered about the Sunspot right now," Bet clicked a piece of the puzzle into place and then popped food into hens mouth, then talked around it, "or we could just be having an internal dialogue with a bunch of new headmates." Hen glanced back up at Jana as if asking a question.

"Woah," Jana vocalized. "So, wait. You're online right now? Seriously?"

"Yeah," hen affirmed. "I can close our eyes and see everyone. Myra's being quite loud right now." Then hen closed hens eyes, as if to demonstrate.

In their immediate headspace, closest to their body's conscious mind, Myra had conjured up an endless black space and invited all of xyr friends to visit, then sent out inquiries to anyone else who may have received nanite Terminals. Since by fluke xe had sent out this invite before anyone else thought to, there were a lot of visitors from around the ship, each one displaying a wildly different avatar, some with features even more exaggerated than the typical phenotypes aboard the ship.

Most of the other awakened Pembers had scattered to the edges of the Network to explore or visit their individual friends. Some were gaming. A few were hanging back to observe the ensuing conversations. The rest were still asleep. The vast majority of them hadn't woken up yet.

Bet found herself floating next to Myra as xe was saying, "Yeah, so, like, my Tutor claims this was all its idea! I'm kinda flabbergasted by that! Like, really?!" Xe scanned the faces before xem but addressed the one that had spoken last, "What did yours tell you?"

"Hey," Bet interrupted. "Jana's here. You wanted to see zem, right?"

"Ack," Myra whirled to face Bet. "Yes! Uh, can you - can you take over here?" Xe gestured at the crowd of people who were mostly talking amongst themselves, a few of whom were paying attention to Myra.

"Sure," Bet offered. "What's up?"

"They can fill you in. I just wanna know what everyone's Tutors told them." Then Myra shook xyr hands up and down vigorously, as if to get water off of them, taking an imaginary breath. "But everyone here's like us!"

"Ah, cool," Bet nodded. Hen turned to the crowd and held out a hand to the nearest. "Hey. Name's Bet."

Myra took the front and opened xyr eyes.

Jana smiled, blinking slowly, seeing the shift.

"Hey Jana!" Myra exclaimed, hopping up and bounding around the table to hug Jana, who took on a startled expression.

"Myra?" Jana inquired, pretty certain it was xem.

"Yeah!" Myra confirmed. Then xe stepped back and held xyr hands gently away from xyr body and turned them over. "Woah. This body is weirder than I remember..."

"Ah, yeah. I remember that feeling," Jana nodded. "Whoever was fronting when I got here, Bet I think, was saying it was all still dreamlike for you. But that sounds like you're really immersed!"

"Maybe. This is kind of like coming forward after I've been inworld for several months. Only it's been a few minutes this morning." Myra frowned as if xe didn't know whether to believe xyr own words, "But it didn't feel all that different from daydreaming just a moment ago."

"Ah, well, the terminals affect us all a little differently. And yours is different on top of that."

"True. So, do you know how the Flits are doing? I don't know how to contact them through the terminal yet. The interface is different from the tablet."

"You could use your tablet."

"What?" Myra balked, squinting, then gave a quick shake of xyr head.

"No! I hate that old thing!"

Jana laughed. "You are still such a teenager. Have you asked Metabang?"

Myra obviously didn't want to be caught in the act of not utilizing obvious resources, "Uh."

"Seriously?" Jana smirked. I took that as my cue.

"They've been so busy stumbling over each other in excitement, it's been hard for me to get a word in edgewise," I explained, my tone of voice kind toward the Pembers. Then I offered to coach them a bit, "Toost knows how to do it, but obviously sie hasn't told the rest. Myra, I can tell you, but maybe you should bug Toost, keep your inner dialogue working." This is an important part of development for a plural system, to communicate openly between system members and rely on each other for support. In raising them, I'd been open about that philosophy and most of them had agreed to treat it like a duty. It was how they'd developed the inner

governance that they displayed the previous day. They were still a bit of an anarchy, but they'd developed their own parliamentary procedures and forms of representation amongst themselves to work within that anarchy. However, in the excitement and freedom of individual Network access, they'd forgotten all about that. It was good to remind them of old exercises. Myra absently assented as I said this, reflexively understanding.

Jana nodded slowly and smiled again, turning to Myra, somehow still speaking before xe could reply, "I remember when you were younger, before we knew there were so many of you, you'd have trouble deciding what to do. Do you remember that? I'm so glad Metabang recognized your plurality so early, and gave us stories and coaching so that you had something to relate to. So you could recognize each others thoughts for what they were."

"Oh, yeah," Myra said, "it still often feels like it did back then, though. I mean, most of the time I know who else is thinking or talking when I'm up front, but sometimes they all feel like my thoughts and I just freeze. We'll get stuck between eating one thing for breakfast or going to the bathroom and walking out the door to greet a neighbor, and we'll do nothing at all for a long time."

"It was so hard to get you to finish any project you'd started, even making a meal for yourself sometimes. It was like you all had to do your own things at once, and no one could stay in the front long enough to do most things."

"It kind of helps to do more things in our inworld than in the outerworld," Myra said. "Fewer of us feel the need to act outwardly anymore. But, yeah, it also really helped when you told us what to do, back then. Just asking us to help you with something really cut through the noise."

"So, how did you contact all of your friends that you were just talking to now?" Jana suddenly changed the subject.

Myra looked extremely sheepish and replied quietly, "I used the tablet."

"While all your headmates are scampering about the Network, doing their own things," Jana put a hand on Myra's shoulder. "Go talk to Toost, learn from hir how to contact the Flits without your Tablet."

Aftward, on the surface, in a shoreline park below a boardwalk, the Flits

sat crosslegged on a large rock, their tail tip barely touching the ground behind the rock. They were facing the aft endcap, where the sun would die at the end of the day, their eyes closed. They were dressed in frilly robes and a floppy hat with a large fabric flower on the headband.

Only one of them was fronting, but they were now able to share control of parts of their body, co-conscious in a way they'd never been before. Right now they were focusing on their voice.

"So," Lil'e spoke in vyn's characteristic halting manner, as if each word came with some effort. "Is. This. How the Pembers. Talk to. Each. Other?"

"I don't know," Hetty replied with the same vocal cords but a distinctly different voice and camber, "It feels kind of like we're faking it. But I'm pretty sure this is me. I don't talk like you, Lil'e."

"True."

Ketta interjected, "I'm used to you two yelling at me from the back, not using our mouth."

"Sometimes. You. Yell. At me. Ketta," Lil'e admonished. "Your voice. Comes From your. Place. Even when you talk."

Ketta relented, "Yeah. If I pay close attention, I can tell the difference between you and Hetty. Did the nanites unlock this?"

"I. Think. So." Lil'e gave their head a little nod.

And then, from the back of their mind came a little ping, like a memory of their Tablet's message notification, almost an auditory hallucination but not quite. And there was a pressure, like they felt when one of their members tried to push to the front, but they were all present already.

"Did you hear that?" Hetty asked.

Ketta frowned, "I think so?"

Hetty took that frown, squinting their eyes tighter and tilting their head, focusing inward on the new sensations, "Our brain is telling me it's Toast."

Their Tutor, Breq, spoke up from their Tablet. It didn't need to. It could have communicated directly through the Terminal, but it was giving them

room to explore these new experiences on their own and they hadn't invited it in yet. "Toost is calling you, yes," it said. "You can answer by focusing on hir and thinking a greeting. Just like you do amongst yourselves."

"Oh, easy!" Hetty exclaimed, leaving the front. "I'll talk to hir, then!"

Lil'e took over, apparently not for the first time that morning.

"Did we have to wear clothes?" Ketta scowled internally, speaking loudly with kihns voice, managing to curl their lips a bit.

"I. Woke. Up. So. Yes," Lil'e replied calmly.

"I can't handle this big honking lummoX of a body anymore," Ketta growled. "I have to get out!"

"You. Could," Lil'e offered. "Go inworld."

"No."

"I'm opening our eyes. I. Want. To See. The. End. Cap."

"Fine."

"Such. Art. Ist. Ry," Lil'e commented as ve tilted their head and eyes upward toward the middle of the endcap. Ketta could see what ve was taking in, but was too distracted by other things to care. Lil'e was fixated on the endcap and kept coming back to admire it every day that ve fronted. It was, after all, the biggest machine visible from anywhere in the ship. The forward endcap was just as big, but it was partially obscured by the forward mountain ranges and glaciers, and it was further away from where they currently sat. The difference in visibility from an equidistant locale would be miniscule, but psychologically it mattered to people. And, after all, the aft endcap was where the sun would be consumed and converted into energy for the ship, and some of it would be diverted to the engines to propel the whole craft continually, gently forward at near relativistic speeds.

The awe of beholding such a powerful contraption, built by humanity and their ingenious tools, that was a couple hundred kilometers across, captivated many people. Ketta found it clichéd to admire it. But there was a new sensation demanding khins attention at the moment, too.

"Lil'e," Ketta spoke internally, "do you feel the ground around us?"

"No," Lil'e said out loud. "We're. On. A Rock."

"It's humming," Ketta sounded more distant.

"I. Can't. Tell."

"Not out loud," Ketta said a little louder in their mind. Then retreated a bit more, "I wanna explore the tidepools! Can we get up and do that?"

"No. I'm resting," Lil'e responded. "The. Body's. Tired."

Ketta took their vocal cords again for one last exclamation, "Dammit. Ok, then, I'm gonna try something." Then keh left Lil'e's awareness abruptly.

Meanwhile, Hetty was in the midst of a conversation with Myra and Toost in a Network channel that bridged their minds.

Myra was responding to something tey had been saying, "So, it basically feels that same for you as us?"

"I think so?" Hetty nodded, twisting ter Avatar's mouth. It felt a lot like doing so in a dream that was just a bit more real feeling that typical. Like a memory of doing it with ter system's vessel. "It's hard to say. But it sounds like it," tey affirmed as best tey could. Then tey looked distracted, "Oh, hey, Ketta is getting really restless. I think I need to go."

And on the other side of the city, Tetcha and Morde sat at a cafe, drinking fancy drinks through straws, eyes closed and smirking together. Except Tetcha kept sneaking a peek at Morde with one eye. Their focus was mostly toward a shared inworld construct, something from the Network.

"You're really good," Tetcha observed out loud.

"I've been playing this game since I can remember," Morde mumbled. "Of course I'm good."

"But this is different. You don't have to use your hands," Tetcha stated the obvious. "It's just your mind."

"I know," Morde crooned, smiling with genuine happiness and joy. "It's so sublime. I..."

And then everything shuddered. Absolutely everything. Violently enough that Tetcha's eyes flew open in a panic and xe grabbed the table with one hand xyr drink with another. Morde's hands and tentacles reached for everything around hir, and sie gasped as sie broke contact with the game and looked directly at Tetcha's eyes, as if to send thoughts directly that way.

By the time they were fully braced for the worst, it was over. Hardly a second had passed.

"What was that?!" Tetcha nearly yelled.

"I. Don't. Know," Morde managed to say through hir residual terror.

"Outsiders?!" Tetcha guessed, of course. It was xyr first reflex for anything xe'd never encountered before.

"Outsiders don't exist," Morde dismissed the idea out of hand, still tense, but giving Tetcha hir full attention. "The Sunspot has never encountered any."

"There's always a first time!" Tetcha looked around. Other Passengers were starting to stand and run around. Some were checking their Tablets. Others had far aware looks in their eyes.

Ralf piped up from Morde's Tablet so Tetcha could hear too, "I'm getting alerts and updates, Boss."

Abacus joined in, "All Tutors are being informed."

"Well, what was that?" Tetcha shot at Abacus.

"I can send you a feed over your Terminal," Abacus offered.

"It's giving me a headache," Tetcha snapped. "I'm not used to it. Just talk. Someone."

Sitting back in hir chair, slowly relaxing, Morde spoke in a firm and calming tone, but got more animated as sie spoke, "Ralf's feeding it to me. Zero injuries. Light structural damage to Garden structures. No epicenter. The whole ship shuddered. Cause was internal! All is well?" Sie looked confused, then outright angry, "What?! Passengers informed to resume activities at leisure?! Ralf! There's gotta be more than this!"

"That's the public feed," Ralf reported. "That's all the Crew is telling us. Breq says you two should get to the seaside park. The Flits need you. The Pembers have been alerted, too." Its tone was urgent but reassuring at that last.

Tetcha lowered xyr head and looked into Morde's eyes, searching, "Is this that really bad thing, Morde?" And Morde knew exactly what xe meant by that and took the time to compose hirself and meditate, tapping into hir intuitive senses.

"I don't know. You know as well as I do that I only know which way we should go. Not when things will happen."

"But you said..."

"I was being cynical!" Morde nearly snapped. Continuing more gently, sie said, "But we should follow Ralf's directions. I'm getting pulled that way."

"I think the Crew are lying. I think it's Outsiders." Back on that old myth again.

"I love you, Tetcha," Morde put a hand on xyr arm, "but let's go."

Tetcha nodded, and they started to get up.

I withdrew my attention from the Pembers' friends to focus on my own Students at that point. The news I'd gotten from the Crew was as brief as Ralf had reported and not ongoing. I didn't have much to work with. Various instances of myself were already reporting what I knew to the Pembers, wherever they were in the Network or their own system, but a group of them had gotten their body moving and were rushing through crowds of confused and scared people.

They were uncharacteristically silent as they dashed here and there. They wheeled and zagged around carts and robots, people's bodies, taking an ever changing quickest route to the nearest lift.

I don't know why they didn't just run up a ramp, except that maybe a lift would keep them moving while giving them a chance to rest and conserve their energy.

There had been no significant damage during the shudder, so nothing was shut down, and Tutors everywhere were affirming people's safety and

rights to use their usual means of transportation. Nothing like this had happened before, anyway. It wasn't like we had protocols for it. But if there had been more danger, we could have acted quickly and kept people relatively safe.

I decided not to flood my channel to the Crew with inquiries. Instead, I found myself eavesdropping on other Tutors as they explained things to their Students, and using the vast resources I had been given to work with the Pembers to simply observe the ship from multiple vantage points and think for myself. The different sensors I'd had access to at the moment the shudder happened were painting a fascinating and disturbing picture that my subconscious pieced together on its own. I had just perceived it clearly, and was now waiting for confirmation from others before I spoke up. For very personal reasons, I didn't want it to be true.

To be honest, part of the problem for me was that I had essentially spent my whole existence up until that point prioritizing the autonomy and will of my Students. I would let them choose to act, and advise them of the best ways to do so, mostly upon request. If I acted of my own volition on anything, it was to choose what to teach them so that they could make those decisions with as much information as possible. And I felt good doing that. It was my reason for existing, literally.

The proposal to use nanites for neural terminals was my very first act of will that had been outside the scope of my existence as a Tutor.

Not only was it the first time I had done anything like that, it was the first time any Tutor had done anything of the sort. At least that I knew of.

I don't know why.

The channels for that type of communication were open. I knew how to use them. But I had never attempted to use them for anything beyond specific accommodations for a single Student at any given time.

And I had a pretty good idea that the shudder that had rocked the entire Sunspot was a result of that proposal's fruits. The entire vessel and its inhabitants had been moved at my behest.

I panicked.

And in my panic, I resolved to do two things from that moment forward.

One was to never again take assertive action outside the scope of serving my current Student.

The second was to pay more attention to the activities of those people who were suffering the consequences of my actions, to see how they were fairing and dealing with it. Even to interview them and learn how everything was affecting them psychologically, so that I could make better decisions in the future.

I already had a considerable amount of experience and wisdom regarding the consequences of actions, and the social impact of them. So many Students' lives, from conception to death, and my memories of them, informed everything I planned and did. But obviously I needed to do more, become even better. Active study was in order.

So, in that vein, I expanded my awareness to encompass all of the Pembers' friends again, to track where they were in the chaos that was settling down.

As the populace in general stopped milling about and started conversing with their Tutors and each other, speculating and listening to explanations, Morde, Tetcha, and the Pembers converged at reckless speed upon the Flits' location.

The Pembers reached them first, and stumbled to a dumbfounded stand still upon seeing what was happening.

The Flits were standing on a large rock situated on the shoreline a few meters from the boardwalk, a third of the way to the water of the bay. They were quiet and still, and their hand was outstretched, fingers splayed out, gently touching the corresponding digits of the figure floating in the air in front of them.

Suspended as if from a wire, a meter and a half above the ground, someone with a thin torso, wide hips, bulbous forearms and shins, a slender finned tail similar to Tetcha's, claws instead of fingers and toes, antlers, and what looked like a mane of seaweed, was mirroring the Flits' posture almost perfectly.

This new person looked as if their body had been artfully constructed of sand, shells, pebbles, driftwood, kelp, and other detritus found upon the beach.

And a quick glance at everyone's presence in the Network, and a check in

with Breq, confirmed my suspicions. I knew who it was.

Lil'e Flit was fronting, and spoke in vyn's lilting, halting manner, "Ket. Ta?"

"Yes," said Ketta, floating in front of kihns own headmates.

A couple seconds later, Tetcha's voice could be heard from some distance, quickly approaching, "Who's that?! How are they floating like that?!"

"I don't know," replied Morde, also loud enough for the Pembers and Flits to hear.

As they came to stop on the beach the same distance away from the sight as the Pembers were, Abacus answer its Students' question, "That is Ketta Flit."

Both Morde and Tetcha wheeled on Abacus' tablet, hanging at Tetcha's side, and exclaimed in unison, "What?!"

"That's. Not. A. Living. Form," Lil'e ignored vyn's friends' disbelief to continue the conversation at hand.

"I mean," Ketta tilted kihns head, "I'm in it. It's nanites! And sand, and shells, and mud, and seaweed... I don't think I can keep it up, but it feels so right."

The Pembers, who were on the boardwalk, were brought up to the railing by Myra who asked loudly, "What? How?!"

Ketta looked at them, and replied, "I can show you. It's easy, but tricky. Except, I think the Crew won't let anyone mess up like I did again."

I was right. A Tutor can feel a chill, even without a body, you know. I felt a chill right then.

"What are you talking about?" Tetcha asked.

"I accidentally accessed all of the nanites in the soil. Briefly."

Yep.

That weird thought I'd had and almost vocalized without knowing why,

back when we'd started the implanting process for the nanites, my worst fear upon feeling the shutter, was true. The Crew had, for some reason, allowed one of our Students access to the entire population of nanites, briefly.

My subconscious had picked up on the wording of the approval and directions for my proposal, and I had developed a hunch, and I'd ignored it, and it had turned out to be right.

And to this day, I still can't figure out exactly why.

I have theories, but no one has confirmed them.

Even now the Crew is reticent about too many things.

"What do you mean by all of the nanites?" Tetcha scrunched up xyr face.

"ALL of them," Ketta emphasized calmly, as if it was really nothing.

"Shipwide. It was a mistake."

Breq confirmed it, "Yes. I am being informed that that security loophole is closed. All of your terminals have been recalibrated now." I had at just that moment received the same information.

Everyone thought about that for a moment, before Morde spoke up, "What does that mean?"

"It means you can do something like this, too, Boss," Ralf chimed in, sounding encouraging. "But with less fanfare."

Tetcha was still focused on Ketta's physical presence, "How are you floating?"

"Magnets, I think," Ketta said.

"No..." Tetcha half shook xyr head and furrowed xyr brow. It was not an entirely incorrect answer, though. Just too simple.

Lil'e moved decisively to draw attention, looking at everyone else, and said, "Let's. Go. Somewhere. Else."

Ketta looked at vyn, "Down the beach aways?"

"Somewhere," Lil'e said. "Not here."

In agreement, the group converged at the end of the boardwalk and then continued down the beach, further into more secluded areas of a park that was there. There was no one else around, and the only witnesses to the proceedings were the birds that were returning to the area after being disturbed into flight by the shudder. Perhaps a couple of rodents or marsupials also observed cautiously from the shadows.

But as they walked, Morde and Tetcha let the two systems forge ahead, lagging behind to talk between themselves. There was a sense that two parallel conversations were in order until they all felt they'd found a good spot.

"I don't think I can do it. I don't see how," Morde was saying to Tetcha quietly.

"What do you mean?" Tetcha responded in like tones.

"I'm too aware of my body. I can't imagine being outside of it like Ketta."

"But your dysphoria is the worst I've ever heard of. Surely you dissociate from that to function."

"I really don't, though," pain tinged Morde's voice. Sie looked around, then down to hir hands, then the tips of hir tentacles that gripped hir cloak's lining, holding it tight around hir body, "I'm constantly aware of it, in minute detail."

"Huh. You've said that before. I guess I just never..."

"You've seen my body. I walk on my face!" Morde hissed, gesturing. "These tentacles are part of my FACE!!!"

Tetcha, of course, knew this, and they'd had this conversation many times before, so xe struggled to come up with a different way to respond, stumbling, "Yeah. It's so cool looking, but --"

Morde was having none of it, "I was made this way and it still feels so wrong!!! But every wrong feeling anchors me to it. My brain is just that different from the Flits." Sie gestured forcefully in their direction.

Tetcha took a moment to think, and said in the thoughtful tone, "I saw how you looked at Ketta." Xe tried to catch Morde's eyes, and started to ask, "Is that close to --"

"I don't know," interrupted Morde. "Maybe. I have no idea what my body should be like." Sie gestured again, almost listlessly this time, "Just not this."

"No matter how hard I try, I can't imagine," Tetcha admitted, referring to Morde's dysphoria. Again, words xe had said many times before, but words that were right. "I wish I could do anything for it. I hope the nanites can, somehow."

Morde acquiesced, clearly exhausted, "Thank you. I know." Sie looked sympathetically at hir partner, "You help me get out of myself, focus on other things. You really do plenty just being yourself."

"Even when I mess up?"

"You do not mess up."

"Yes I do," Tetcha countered, looked back a few paces as if at their recent interaction. "I count the number of times I remind you of your dysphoria," xe explained. "Even when you think you're hiding it from me." Xe added, "I have a tally."

Morde finally stopped and turned to Tetcha, "You don't..." This was actually something sie had not heard from hir partner before. "Really? You've never mentioned..." Sie didn't know what to make of it, but reflexively chose a way to treat it. To try to respect Tetcha, "Seriously, Tetcha, don't do that to yourself. I don't want to hurt you that way."

"Where you go, I go," Tetcha recited a thing they had said to each other often. "And where I go, you go. When I'm choosing the direction, I want to misstep less often. Keeping track makes me feel good and it's how I love you. Well, one of the ways."

"Stop," Morde said. Neither of them were walking, so sie wasn't referring to that. But before Tetcha could argue, Morde put hir hands on Tetcha's shoulders and leaned forward just a bit, searching Tetcha's eyes for connection.

Tetcha reacted out of habit, relaxing, closing xyr eyes, leaning in ever so

subtly, as Morde extended the tips of his two tentacles, side by side and pressed the backs of them gently to Tetcha's pursed lips. This is how they kissed. And they both leaned into that exchange for a time before they broke it to give each other one of the deepest and longest hugs they'd had for some time.

After a while, they clasped hands and turned to walk toward their friends.

"I need to say things to the others," Morde murmured. "When we catch up."

"So do I. I have thoughts," Tetcha nodded.

Then they fell into silence.

While that exchange had been happening, the Flits and the Pembers had been talking about just when to stop walking, and why they were looking for a more secluded place. The consensus was that they didn't want to draw attention to themselves while they experimented with trying to copy what Ketta had done. Looking back a couple times, they were also concerned about Morde, and commiserated with the dysphoria they knew sie felt. They had it too, to varying lesser degrees.

Eventually, they found an acceptable spot with a lot of open space but out of sight of other people, and formed a close circle. All five of their bodies, as Ketta still had his own form, still floating.

Morde nudged Tetcha, "You first."

"Uh. OK. Uh," Tetcha stammered, then looked around at the others. "Isn't this whole thing making anyone else really nervous?" Xe raised an eyebrow. "The only time we ever hear of the Crew communicating directly with anyone is in legends and stories. They just don't do it." This was true. The legends and stories were all fiction. Besides the channel of alerts and directives we Tutors received, the Crew was silent in all of history. "And now," Tetcha stated meaningfully, "we're getting special attention from them through our Tutors?"

"That's actually what I was gonna say," Morde nodded toward Tetcha. "Only there's more."

"It is really weird, yeah," Ketta admitted. "I feel like I'm in a dream."

"You're floating outside your body!" Myra pointed out.

"Actually," Ketta responded, "I think I'm still in it! I just don't feel like I am."

Hetty offered some words, "Physical dissociation."

"That's a great term for it," Myra looked at tem.

Morde stepped in again, "Which is part of what I mean by 'more'." And then sie confided in a feeling sie had been holding back from everyone, "I've always hated the Crew." Sie looked around at hir friends through the lining of hir hood, head half bowed, "Ralf says they didn't make us directly, that evolutionary algorithms did. But they made that system, and their system regularly fucks up with people like me." Sie had carefully selected and emphasized the words 'fucks up' as if they were the most accurate verb for what happens.

Hetty just couldn't help stating the pointlessly obvious, "Not everyone with a body like yours is dysphoric."

"I'm talking about brains," Morde snarled. "Not our bodies." Sie took a deep, exasperated breath, "Just having the dysphoria." Each phrase was important. "It's fucking hell, from the beginning. And so far the only treatment has been to hide in our terminals when we get them. Even after all this time, all this..." sie gestured upward and vaguely around, rolling hir eyes, "control, over everything, they can't reach into our brains and just switch off the dysphoria? They can't make us right in the first place?"

"What are you suggesting? We gave our consent to this," Myra pointed out, sounding worried. "And you're the one that said it was the right choice to make."

"It was. I'm just. I don't know. I hurt. I'm exhausted. I need something different. Soon. I don't get how the Crew can prize consent and self determination, but at the same time fail so badly at asking us if we want to be made in the first place, or how we want to be made!"

"But we don't exist until we're alive," Myra countered, "so how could they ask?"

"Then they could at least make it so no one has dysphoria!" Morde shouted.

Ketta nodded once, jerking kihns fist downward, a full body gesture in mid air, "Fuck yeah."

Knowing full well that xe, Ketta and the other Flits had already been talking about doing such a thing, Myra asked the next question as a means to lead Morde into explaining further, "So, are you saying we should do something more with the nanites, like Ketta?"

Morde pulled up and said more quietly, "I mean..." Then sie seemed to listen to the wind for a bit, and said, "Yeah, actually. Maybe we're supposed to!"

"How so?" Tetcha demanded.

Morde put a hand on xyr shoulder and said, "Listen. Ketta?" Turning to Ketta, "How did you make this body? What did it feel like?"

"Well," Ketta thought about it. "I heard the nanites humming in the ground, so I answered them. Like I'd answer anyone calling me over the terminal, as Breq told us how," Keh gestured at the tablet that was in the Flits' pocket. "Then, I just sort of sensed some options. Like, I could ask questions or just, sort of, put them on. And I chose to, uh, put them on. Like clothes. But I accidentally put them all on."

"And that's when the shudder happened," Myra observed.

"Yeah. But almost right away I felt the whole connection ripped away and then the offer was there again. So, I just tried it again! I wasn't really thinking at that point. I was kinda panicked already and just doing what I felt like I needed to do."

"And then?" Morde asked.

"And it felt like I was putting on a bodysuit and then I was floating in front of my own - my systems' body."

Morde came to a conclusion, "So you didn't consciously choose how this form was made?"

"No."

"Yeah. OK." You could almost hear Morde say "damn" in that even though sie didn't utter it, "As much as I hate them, the crew just set up a way for

you to relieve your dysphoria. They had to. But what about me? I don't think I can do that."

"What do you mean?" Tetcha sounded confused, but anyone who knew xem well knew that xyr mind was churning with information and possibilities. Xyr questions were only partially prompts for clarification. They were also invitations to the other person to think about what they were saying. In this case, Morde was on a path that sie was not going to stray from.

"The nanites did all the work for Ketta," sie explained. "They even made the first connection and gave Ketta options. But then they immediately limited access when things got out of hand. But the Crew never ask anyone to do anything. Ever. Do they? They just make and enforce the rules of the Sunspot. So, like, this is a new rule, 'You can do anything you want with the nanites that we let you do.'"

"OK..." Tetcha sounded as if xe was suspicious that Morde was talking just like xe usually did, spouting xyr usual lines of thought. As if xe was worried Morde would go somewhere unexpected.

The others were just nodding, taking it in.

"So, we get to push their boundaries," Morde concluded. "Find out what's OK to do and what's not. And if we take too much control, they'll just pull the plug." With a quick, short shake of hir head as if to say, "simple as that."

Tetcha actually took a half step back, "I... Uh."

Morde took a stab at reassurance, "Let's just not attempt to hurt anyone, of course. Like, there are the local laws to follow, still, and hurting people is wrong."

"Huh," Tetcha grunted. That wasn't what xyr hesitation had been about, but it was close enough apparently.

Lil'e filled the pause with another question, "So. We. Wait. To hear. Humming?"

"I hope I get to hear it soon," Morde said.

"Balmer needs to try this physical dissociation," Myra added. "Ketta, do

you think the nanites could be called on instead of waiting for them to hum?"

"I don't know," was the reply.

Morde pushed the thought, "Wouldn't that be the point eventually?"

"Um. Let me..." Ketta was saying when kihns body disintegrated, its component materials falling to the ground. Then the Flits became animated with Ketta's mannerism and voice, "OK... That's awful. Just another..." Ketta trailed off, closing kihns eyes and taking a deep breath. Not slowly, Ketta's new form arose again from the ground, the fallen materials flowing back up into their respective places until kihns feet hovered a decimeter above the sand. "Wow," keh exclaimed. I finally noted that kihns voice wasn't actually being made with sound. It was being projected over the Network and, through protocols I'd learned to take for granted, automatically processed as sound by everyone else's auditory centers. That was actually bypassing another protocol that was usually there to handle consent for augmented reality features. Someone had set this up deliberately. Ketta had no idea about any of this, of course. Keh shook kihns head, "That's going to be hard to describe!"

Morde suggested, "Try just a really generic description."

Ketta crossed kihns arms, then put a hand to kihns mouth in thought. "Without the prompt," keh said, "I basically just sort of reached into the ground and put it on. I think it's important to clearly visualize your intention that you are reaching outside your body. The nanites seem to interpret and read what that means and do the rest."

Morde turned to the Pembers, "Can you try that, Balmer?"

Balmer took front and asked Ketta, "How do you decide what you look like?"

"I didn't," Ketta said. "This is just how I look in our head when I look in a dream mirror. It's like the nanites could tell."

"Weird. OK," Balmer said. "I'll try this."

A moment later, Myra took over to say, "And there hen goes."

A rounder, bulkier version of the Pember's body began to form from the

beach, twice as tall as the original. As it grew, everyone could pick out subtle differences in features and proportions.

When it was all done, Balmer spoke in the same manner as Ketta, "That was so easy."

Everyone was stunned.

Adrenaline and endorphins were coursing through their bodies, or equivalent processes were happening for those dissociated from them. Even us Tutors had our own overwhelming emotions. To see our most needy Students given such a powerful accommodation for their disabilities. To see them vibrate with anticipation of all they could do, finally allowing themselves to imagine things that were impossible before. Everyone's breathing was fragile. The air felt brittle. Like a scream of pure joy was about to rip through the atmosphere any moment.

Morde, on the other hand, was visibly shaking. Trembling with fear. Sie was beholding hir friends receiving this amazing gift, watching them each decide to open it for themselves, while clearly terrified that it wasn't going to work for hir. And the agony of hir dysphoria made it seem as if every cell in hir body ached with anticipation of failure, of never feeling relief.

Tetcha, pulling xyrself together, ever driven by the call for more information, broke the silence to ask, "How many of you can do that at once?"

Although xe had asked the Pembers, Lil'e felt the need to answer for the Flits, "I'm afraid. To. Try. All. Three. Of us."

Balmer looked over at the rest of the Pembers in their little body, watching with easy curiosity while they focused inward, clearly having an internal conversation. After a few moments, the Pembers eyes grew very wide, their pupils dilated, and took a deep breath.

"I'm..." Myra spoke, "Going to stay rooted in our body. But we've just voted to try pushing the limits, like Morde suggests." Xe looked around at everyone but Balmer, "And there's a lot of us."

Before Myra had finished speaking, the tops of heads started forming from the sand of the beach, surrounding the circle of friends, beginning to rise in quick succession. One after another. The mass it took to create each body clearly took a toll on the land, creating large divots. Forms even began to

grow further up on land, from areas covered in moss and weeds. This created another shuddering in the ground, but much smaller, completely localized, undetected beyond several meters distance.

Lil'e confirmed Myra's warning, "You've said. Hundreds."

As Myra replied to that, the new bodies, each one very different from the others and yet still clearly a Pember, continued to form. Soon, the ones closest obscured the arrival of the newcomers. But even then, the newest ones were forming in places that would have been out of sight of Tetcha, Morde, and the Flits anyway. They kept growing, up and down the beach, and further back into the wooded park on the aft end of the city where they were, the crowd eventually extending to places where other people could see them. Passengers and their Tutors stopped what they were doing to gawk.

The crowd of Pembers eventually filled an area the size of several city blocks. This would become the talk of the entire ship just as the big shudder would, spoken in the same breath by people in wonder. There would be no use downplaying or hiding what the nanites could do.

"We've grown," Myra said. "Our brain makes a new consciousness for every person we meet, or even see out of the corner of our eye. Someone to get to know that person and learn everything about them, and hold our memories of them. We call them liaisons. Most of our liaisons are pretty young and sleep most of the time. I don't think they can stay out of system for long, but we're going to try. And we've walked through the busiest corridors and streets regularly." Xe lowered xyr tone for the next few words, giving them space between them to let them sink in, "There's. A. Lot. Of. Us."

Here is the lesson I usually give my Students on plurality:

Although the methods by which Passenger genetics are chosen are classified information, how genetics works and its role in human development is public medical knowledge. We use this knowledge to care for people and help them live full and healthy lives.

Genetics only plays a partial role in human development, with a complex system of environmental factors playing a huge role from conception onward.

Because of this, we know that although there are a set of genes that are typically responsible for resulting in plural development of a human brain, they do not guarantee it. Nor are they 100% necessary for it.

Despite all the technology we have available to monitor the development of a human brain, we still cannot pinpoint the time when someone's development puts them down the path of plurality, or of being a singlet, someone with a single consciousness. Usually, plurality manifests in a measurable way somewhere between three and five years old, but there are exceptions. Some people develop into plural systems much later in life.

All we can surmise is that there are a myriad of different ways that this may happen, as well as a few different reasons. We have documented many, but it is never consistent.

Life aboard the ship is fairly stable, and externally applied childhood trauma is a relatively rare experience. Our child rearing system has several checks and balances to work to avoid this. However, accidents do happen and some caretakers or Tutors can become abusive and operate outside of parameters for too long. Occasionally this will interrupt integration in a child that would otherwise grow up to be a singlet.

In most cases of plurality, the combination of genetic predisposition and subtle chaotic factors in a child's body result in a plural system naturally.

Some systems have only two or three separate consciousnesses, or system members. Some develop near a dozen. And some have hundreds or thousands. Some have claimed to have millions. The human brain is certainly capable of supporting these degrees of separation, with 5 billion neurons and holographic-like processing.

Also, another axis of variation is degree of dissociation. Some systems are strikingly divided the majority of the time, while others may fluctuate or even spend most of their time in a state called co-consciousness. Also, there are different ways of being dissociated. Some can communicate linguistic thought readily between members but emotional thought is completely cut off. Other systems can share sensory experiences but not any thoughts at all and must speak out loud to communicate with each other. And there are even more ways of experiencing plurality than that.

Another variance is the frequency of switching, or changing who is consciously controlling their body. Highly co-conscious systems will often

switch fluidly over the course of seconds or minutes, while strongly differentiated systems may keep one member in the front for a day or longer. Some systems have one front runner who permanently remains in control, with any number of other members giving them input and interacting with each other in the back of their mind.

With all of these variations, there is a broad spectrum of plurality with almost no two systems sharing the same set of experiences in any given generation. Over time, of course, experiences are eventually duplicated.

And, of course, there are some people who identify as singlet, but who scan as plural upon being fitted for a neural terminal. Self determination is legally protected aboard the Sunspot, and this extends to individual system members. If a system member wishes to identify as plural while the rest of the system insists on identifying as singlet, ethics dictate that the disparate member is respected and recognized. Counseling is offered to the system to resolve this issue. Sometimes all members of the system are happy to recognize their permanent frontrunner as their singlet identity. Medically speaking, they are still plural, but socially they function and are treated as if they are a singlet.

Neither plurality nor singlet-hood are favored by society or our medical system. Both are accommodated equally as best as we can accomplish with our technology, laws, and education. As is our philosophy regarding other neurotypes.

Of course, until that day, the neural terminal technology had been limited and proved to be a bottleneck for larger systems like the Pembers. And there had been no way of creating a body out of any sort of materials that they could inhabit, other than a crude Network controlled robot that couldn't house the processing necessary for a consciousness.

And the Pembers had decided to push their nanite connection and their own neurology to the utter limit. It seemed that nearly all of them emerged from their system.

I'm sure I'm not the only one there who had a passing thought about the impact on the ecosystem this would have. And once again, I had the fear that the Crew would have reason to hold me responsible for something they had clearly signed off on.

There had to be a plan for this. How would it work?

"This is scary," Ketta murmured.

Tetcha droned in awe, "I had no clue a person's brain could even do that!"

"What the Hell is the Crew thinking?" Morde demanded of no one.

Lil'e followed that with, "Why. Aren't. Our. Tutors. Guiding us?"

After a moment, Breq offered the only reply the rest of us could think of at the time, "We have no rules for this, and your self determination is a right."

Pains

A full two days later, someone finally saw fit to seek out the Pembers and follow them. Perhaps they'd been stalking them for longer, but no one noticed and I have no record of it.

As the Pembers walked through an artistry square in a surface neighborhood, wearing a gown with a red, gold, and deep grey-blue floral and oceanic print and perusing displays of hand made parkas, a hunched over figure about two thirds the size of the diminutive Pembers lurched in shadows half a block away, moving furtively to keep an eye on them.

This individual had red fur, a blunt, darkened face with high floppy ears and a big, pointed, bushy tail with a shock of white on it. And they hid their body with a long, canvas hooded jacket with many pockets, their hands jammed into the biggest of them. Some of the words they mumbled to themselves were audible to anyone nearby.

"Dangerous..." they blurted. "Don't trust the Crew, don't trust them..." they growled, "Nanites... Gonna kill us all..." and they turned just their left to move to a better vantage, loudly declaring, "Someone should --"

"Do what?" Tetcha asked boldly, body checking their face with xyr clenched belly by stepping into the way.

"Shsh!" Morde admonished.

The grumbling stalker took a step back and squinted up at Tetcha and then Morde before their eyes widened and they hissed, "You!"

Tetcha blinked and scowled, "What? How do you know us?"

"Not gonna tell you! Stay away from me!" the stalker took another half a step back.

"OK," Tetcha replied, holding xyr hands up and straightening up to appear less threatening.

Morde slid closer, "Where's your Tutor?"

The stalker glanced at hir and snapped, "Wouldn't you like to know!" before dashing away, running hard and ducking between obstacles and

people to find cover and finally escape.

The two partners didn't bother blocking their path or following, but instead turned to each other, with half an eye on the Pembers.

"That was weird!" Tetcha said.

Morde assented, "Wasn't it?"

Tetcha tilted xyr chin in the direction the stalker had run, "I don't think I've ever seen anyone talking like that before."

"Ralf is telling me that they're slipping through the cracks of human rights," Morde reported. Sie had already dispensed with hir tablet and was communing with hir Tutor over hir neural Terminal. "Their self determination is allowing them to live in distress, so long as they don't hurt anyone else."

Tetcha nodded then looked directly at the Pembers who were still apparently unaware of what just happened, "It sounded like they were planning something, though."

"If so, they're being watched now," Morde smirked with hir eyes.

Tetcha looked a little confused but decided not to pursue that thought, letting Morde be mysterious. Instead xe asked, "Is this why your magic led us this way?"

"Maybe..." Morde mumbled, leading the way toward the Pembers. Sie turned hir head to Tetcha to see if xe was coming, and commented, "You know. You do talk like that sometimes."

"What?" Tetcha was too startled by the statement to feel any way about it yet, just confused.

"You do," Morde said, and then with a smile in hir voice, "It's OK."

And Morde was right. The stalker was being watched. By me, keeping track of the consequences of my project.

I watched through a myriad of cameras as they found and stumbled into a lift and hit the controls for the lowest inhabited deck. And while the lift began moving downward -- downward being outward through the two

kilometer thick hull of the Sunspot's spinning habitat cylinder -- they huddled in the corner of the lift, shivering.

By the time the lift stopped, the Pembers were agreeing with Tetcha and Morde to find a quiet, out of the way place to convene.

The lift door opened and the stalker hurried forward to peek out cautiously before dashing across the corridor before them. There wasn't anyone around, but they hid briefly around a corner as if to avoid someone. After a few moments in which no one walked by, they then crawled along a corridor floor on hands and knees until they got to a non-descript spot on the wall. Well, the acoustic damping was particularly flat there. Then they pulled out an old tablet with an odd, irregular box attached to it. They held the tablet up to the wall and pressed the screen.

A panel in the wall slid aside. They glanced up and down the corridor then stepped in, reaching for rungs that were immediately handy. And then they proceeded to climb downward as the panel slid shut.

I had to stop tracking them at that point. I wasn't allowed to continue.

A short time after that, we were all convened with the Pembers' Council of Eleven in a private Network forum. Tetcha, Morde, Ketta, Lil'e, Hetty Ralf, Abacus, and Breq were there, as was I. Myra was acting facilitator of the Council and ten other Pembers were present. All of our Students hovered in a circle so that could speak equally with each other, as was the custom of the Pembers' Council. We Tutors stood, in a manner of speaking, at equidistant points outside of the circle, creating a square that encompassed it.

After proceedings and explanations bringing the Council to order and inviting the others to join, Tetcha was asked to elaborate on what had happened. Which xe proceeded to do. Then, xe added, "They seemed angry at the sight of your system, Myra, and they seemed to recognize Morde and I and ran when we tried to talk to them."

"How?" Lil'e asked.

Abacus spoke, adding relevant data, "Your names and likenesses were not released with the shipwide update about the nanites."

"So," Tetcha thought about that briefly, "they've been watching us?"

"It is possible," Abacus confirmed.

"That's scary!" Myra blurted.

Tetcha agreed wholeheartedly, "Yeah!"

Morde reminded everyone of my lecture when this all started, "Our Tutors said our nanite access would get some attention."

Everyone was quiet for a while, trying to figure out what to say. It was Hetty who formulated the next question, "What could they do, though?"

"They probably don't know," Ketta offered, then speculated, "I bet that's why they ran."

"If they're not alone, they might coordinate with others to corner one of us." That was Jural, who spoke slowly and low, glancing around at the others as if to wait for a reaction to that scary thought.

"Except that none of us are ever alone anymore," Myra pointed out. "Tetcha and Morde are always together, and we and the Flits are systems with access to the nanites."

"Only if we stay in the Garden," Ketta countered. "Corner one of us in a corridor and we can't use the nanites to split. At least not locally."

Bet straightened up and spoke boldly in reply to that, "As long as our body is alive, I can come running from the nearest park." Then looking each of the other Pembers in turn, hen bragged, "We all can."

Jural concurred with that and elaborated, "And we can do that for any of our bodies now. We are connected through the network." Ve seemed to be struck with a thought and looked at Morde and Tetcha with a half a grin, clearly hoping what ve would say next would strike a chord, "We're a super system with four vessels, effectively."

Tetcha, whom Jural was looking at on the last word, balked and floated back half a step. Xe looked like xe was not at all OK with the implications of that, "Woah. Wait. Are you saying you could enter my body and take control?"

"I wasn't saying that," Jural shook vis head, dropping vis grin. "But if you give me consent I could try it."

"Let's not," Tetcha replied quickly, moving back into place and looking at Morde.

Morde said, "That sounds interesting." Then added quickly and with emphasis, "You have my consent."

Ralf, whose avatar was a glowing, pointed, wide brimmed hat floating in space with a long scarf flowing beneath it, spoke in a tone that made it sound like it was shaking its head, even though the hat didn't move, "No one's ever even tried that, Boss. The old terminals don't work that way."

Morde looked right over Tetcha's head at hir Tutor, rising up in space in order to do so, and directed at it, "I want to know if it's my body that has dysphoria, or me." Then sie settled back down and looked at everyone else, "And I wonder what it would feel like to be disconnected from it. Maybe if Jural fronts in my body, I'll be able to stop feeling it even while I'm logged into the Network."

This was the subject that had dominated my life for the past few generations. The one for which I had boldly approached the Crew with a proposal the likes of which the vessel had never seen before. The whole reason we were suffering the consequences that had led to this meeting. I couldn't ethically remain silent. There was history to share.

"Morde," I spoke up. "If your dysphoria is that bad, that's the whole reason I proposed the nanite terminals to the Crew. If they followed my suggestions, you should be able to start altering your body to fit your needs."

Morde looked piqued, and raised hir voice, "I don't even know what my needs are! I don't know what I should look like! See?" Sie gestured at herself, "Even my avatar looks just like my body!"

"Yes, that's troubling," I agreed. I didn't have anything more hopeful to say, but it was important to state the stakes so the others there could make informed decisions, so I continued, "The last Student I had who suffered as you do died early."

Ralf interjected in a sombre tone, "I would like to help you avoid that fate."

"So," Morde said, looking between the two of us, "Let me and Jural experiment with this and see if I can detach myself enough from my body to... I don't know. Explore myself?"

Jural had been listening carefully, eyes on what passed as the floor of the space. Ve spoke for herself, in a cautious voice, "If I experience your dysphoria, I do not know how long I can stay in your body, even if this works."

Morde could only offer her a helpless, pleading shrug.

Tetcha desperately seemed to want to change the subject and latched onto the more immediate crisis as an opportunity to do so, in the momentary pause created by that gesture. Xe loudly entreated the council, "Can we talk about what to do about our stalker?"

"Let us handle that." It was Aval who had spoke, another one of the Pembers, half a head taller than Myra, who was the one Pember who most resembled their body.

Morga, a darker, older looking Pember, slightly shorter than Myra, nodded and said, "Oh, yes. I think we can spy on our spies."

Firan, who was tall and thin and muscular looking, bragged thoughtfully, "I think we can get enough volunteers from our system to make quite the net."

"Ha!" Toost blurted a short, sardonic laugh at that understatement.

"On it," Ploot said, and stepped backward into the darkness, disappearing.

"So," Myra said, looking at each of the remaining Council in turn. "We go set a trap while the Flits, Jural, Morde, and Tetcha do their experiment?"

"Aye," said Aval.

"Aye," from Toost.

Tetcha tried to interrupt with, "Hold on!" Xe looked agitated and rushed.

"Aye!" declared Firan enthusiastically.

"I am really uncomfortable with that experiment!" Tetcha called out, hoping someone would listen and stop.

The rest of the Council of Eleven chimed in simultaneously in response to Firan, "Aye!"

Morde turned to hir partner and spoke in a quiet, gentle voice, "Tetcha, I need to try this. I feel like it's a better move than using the nanites to alter my body without an idea of what I need." She held hir words for a moment to implicate a "but" before asking, "What do you think will go wrong?"

"I don't know!" Tetcha cried. "I don't know how any of this works and no one has done it before and that's scary!"

Morde seemed to take a breath and put hir palms together in front of hir face, maintaining hir calming voice, but speaking even slower, "With you, the Flits, and our three Tutors monitoring the process, we should be able to catch anything going wrong before it hurts me or Jural. Anyway, for all I know, my psyche will subconsciously lock ver out, I'm so attached to my body." Sie dropped hir hands and tilted hir head up.

"I don't know..." Tetcha droned.

"What would you need to be reassured?"

"To know that you won't disappear or stop being you somehow."

Morde put hir avatar's hands on Tetcha's virtual shoulders

"Tetcha," sie said matter of factly, clearly enunciating each following word, walking hir partner through this thought. "Is it OK for me to get rid of my dysphoria?"

"Yes, of course!"

"Even if that means my body is altered beyond recognition, and the relief changes my personality?"

Tetcha dutifully thought about what Morde was saying as sie said it, head dropping slowly in a single nod, to jerk back up in affirmative at the end, "Yes. Yes, definitely."

"Then," Morde said, "please try to be OK with me doing this. Because if I don't, we all could permanently lose me. I cannot endure my dysphoria very much longer." Sie stopped to let that sink in as deep as it would go. Then, "Please."

It seemed to work. Tetcha looked cowed, looking downward, brows

furrowed in worry, eyes appearing to water, mouth quirked up, twitching between a pout and a frown. Xe took in a deep, simulated breath, no doubt echoed by xyr actual body, and whispered with fragility, "Oh." Xe timidly looked back up at Morde, "Oh. It's that bad."

"Yes," Morde said.

Tetcha nodded carefully, "OK." Then xe looked at Jural, and not at all confidently said, "Let's do this."

And with that, the Council agreed to be officially adjourned, but not before briefly going over plans and agreeing to wait until the next day to proceed with them. They'd lay low and try to enjoy regular life for a little bit with what remained of their current waking hours. They figured that their stalker wouldn't try anything again for some time, but they didn't want to delay their schemes unnecessarily.

In fact, they expected a week or more before they'd catch sight of them again. They were wrong.

The next day, at about the same time as the previous encounter, the Pembers chose to walk through a different set of corridors. They picked up some food from a culinary artist they hadn't visited in some time and then went to a park to eat it. While they sat under a tree and ate a mixture of fruit and savory spices wrapped in leaves, several of them quietly formed bodies nearly out of sight behind other trees and among bushes.

Meanwhile, in their head, the Council of Eleven, minus Jural, stood on a Network projection of a map of the neighborhood. People could be seen moving about on the map. Trees could be seen swaying in a breeze.

The map was the joint work of a group of Pembers who had individually taken to exploring the Sunspot's Network protocols and commands. They'd stayed up all night to figure out a way to cobble together access points that were never intended to be used in this manner, and using their own brain to tie it all together and visualize the results, hiding what they were doing even from me.

I had been with each of them when they'd done the initial exploring. But they'd put it all together and written the code in their head, where I wasn't able to go.

I was told about this Council meeting later, when it was all done, after

greater transgressions had occurred.

Toost asked, "Do we also have our online agents in place yet?"

"Yes," reported Bet.

"So we can move," Myra stated.

Morga spoke up, "I wish we had more technical experts in our system." As if what they had already done wasn't astounding enough.

"It can't be helped," Ploot had eir hands in the pockets of a set of trousers e imagined emself wearing, frowning down at the map. Ploot didn't have a tail.

"So," Myra said, "no one's seeing anything suspicious yet?"

"No," replied Bet. "But I don't think we will until we move our vessel."

"Oh. I have an idea!" Toost declared. "Insects."

"What?" Myra looked confused.

Toost asked everyone, "Can we have some agents disguise their forms as tiny flying insects? Like a bee, or gnat, or something?"

Myra tilted xyr head and furrowed xyr brow, "I don't think anyone's tried a nanite form other than their own body map, yet."

"I imagine we have people who've dreamed of it, though!" Bet joined in, "I'll send the call out inworld to see if anyone wants to try." Hen stepped backward and disappeared.

Myra looked back down at the map and said, "I'll wait to move our vessel until we get confirmation of the attempt."

Myra had been fronting and eating their lunch this whole time, xyr attention divided between the food and the meeting. This meant that xe really didn't see many details on the map, and had been reliant on xyr headmates to keep an eye out for signs of anything there. But xe reported that the whole thing was clearer and more substantial than ever before. Xe could see and hear the control room and the conversation as if xe had been fully immersed in a dream, but instead it had been a sort of double image

with what xe was experiencing from xyr body's senses. Not exactly a double image, though. The mind's eye was still separate in a way from the inputs of their optic nerve. It was more like the input from the outer world hovered in the center of Myra's attention, while everything else that was inworld was occurring and fully palpable in xyr peripheral vision. And the sounds could be differentiated because they came from different sources. Xyr ears didn't vibrate with the words of xyr fellow system members, but xe had heard them clearly just the same. Apparently, this was much like how xe experienced the Pember's meetings in their conscious headspace on a very good day when xe was fronting, only readily available, more stable, and requiring very little mental effort to manage.

Before, on a bad day, they weren't able to sense each other and their mind was quiet. They hadn't had a bad day, or even hour, since they'd received the nanites.

It was just how singlets accessing the Network through a terminal for the first time described the experience.

In just a few days, the nanite terminals had integrated with their system enough to match the effects of the old implanted fiber terminals. It was nearing time to start introducing new options to them. Things they could play with. But by the map projection, they appeared to be discovering some of those things on their own.

There were, after all, an awful lot of Pembers tramping around on the Network at any given time.

Of course, I wasn't told this until much later, and by then they'd uncovered even more on their own.

While this was happening, Morde, Tetcha, the Flits, and Jural entered a clearing in the same woods where this all had started.

Morde breathed the forest air deeply and sighed, "This feels like the spot."

"Good," Jural nodded, already inhabiting a nanite body. "Away from prying eyes, lots of nanites underfoot. Probably safer than your own quarters."

"What's next?" asked Tetcha, hands in pockets looking worried.

Ketta answered that, "We'll set up watch. You should be online for Morde,

to keep in touch with hir there." Then turning to the one Pember present, "And then Jural will do whatever ve have in mind?"

"Yeah," Jural confirmed. "I'm thinking I'll need Morde's help for this." To Morde, "We'll start online, since that's basically our collective inworld, and I'll just try to walk you through a voluntary switch. See if that even works."

"Sounds good. I think I'll lie down for safety," Morde replied.

"You probably don't need to," Jural said, "but if it feels better go ahead."

Morde found a spot, lowered himself to the ground and lay back. Tetcha sat next to hir and reached to hold hir hand.

"Actually, Tetcha," Morde said, looking at xem, "it might be better if we hold hands online but not here, so I have fewer sensory distractions from offline."

"Oh. OK." Tetcha dropped xyr hand and took a deep breath, "Logging in."

In a private Network forum created by Morde at Jural's instructions, Tetcha, Morde, Jural, and Hetty found themselves standing roughly in the same positions they were in the outer world. Tetcha immediately reached out to grasp Morde's hand.

Jural stepped up to Morde and looked hir in the eye, "OK. A lot of what we're going to do here is really gonna just feel like switching places with someone else in the outer world when you're standing in line somewhere. Or dancing."

"OK?" Morde prompted.

"It always feels like that to our system when we switch. I'm expecting it will work a lot like how we access the Network and the nanites. The terminal protocols and our psyches will interpret our intents and make the right connections."

"That makes sense."

Jural turned to Morde's partner, "Tetcha, I'm going to put my hand on Morde's shoulder, and step past hir into hir terminal to take the front. If this works, sie should just become more relaxed as sie dissociates from hir body. Hir avatar might change shape, though."

"OK," Tetcha looked like xe was succeeding at a great effort to remain calm. Xe turned to Morde, "Are you ready?"

Morde nodded, "I think so."

"OK!" Jural exclaimed. Then ve put vis hand on Morde's shoulder, pausing before touching hir to gain consent via a nod, "This is a formality to help you go through the motions. We do this non-verbally between the Pembers. Morde? May I have permission to take the front?"

"Please do." Morde replied.

"OK," Jural instructed, "stand aside and let me take the front." Stepping past Morde, "I'll give it back when I'm -- Huh."

"What?" asked Morde, brows furrowing.

Jural stepped back and gave Morde a confused frown. "It almost worked, but then it didn't. How did that feel to you?"

"I felt a pulling, but then it stopped and you said 'huh.'"

"Let's try that again."

Hetty interjected, "We've never been able to switch like this in our system. Not even now, with the nanite terminal. Frankly, I'm jealous you even think this might work."

At this point, back in town, the Pembers leaped up from beneath their tree, swang their arms a bit, and noticed it was starting to rain. They made a dash for the city streets. They passed an artisan who was making painted umbrellas and took a moment to select one. A fly landed on the Pembers' shoulder, but no one seemed to notice.

The artisan looked at their partner and they both grinned, "We're honored by your choice. That's one of my favorites!"

"Thank you!" Myra chirped. "It's beautiful! I'll give it a good life!"

The artisan handed it over with both hands, and they all bowed briefly.

The Pembers hefted the umbrella proudly to demonstrate their happiness with it, then unfurled it and continued on their way, slower. Looking at

windows, and plants, and people, they muttered to themselves.

"So!" Myra murmured, "Who should we give this umbrella to when we're done with it?"

"There's a child who loves pink and green near our quarters. They would adore it!" Morga replied.

"Ooh, yes. I love them! They're so enthusiastic about going for walks, too."

"This rain is going to interfere with some of our plans."

"Gosh, I hope not!"

Morga caused their head to turn a bit, looking around, "I wonder how the others are doing. They headed in the direction of the Greater Park. They're gonna get wet."

"The Flits tend to love the Rain," Myra said. "And Morde and Tetcha take care of themselves alright."

"True."

"You know what?" Myra declared, as if it was a sudden thought. "I want to walk the lower levels! We haven't been down there for ages, and some of my favorite artists are down there!"

"OK!" Morga agreed.

Toost chimed in, "Sure!"

The Pembers took a set of major ramps downward, instead of a lift, and someone followed them. The fly that had been on the Pembers shoulder followed that person.

Morde and Jural had attempted their switch a few more times by then.

Morde was holding hir head, eyes shut. Jural held hir shoulders, vis head close to hers.

"This is making me feel dizzy and weird. And I'm getting the strong urge to stop," Morde slurred hir words.

"OK, OK, let's stop," Jural relented. "We can take a rest and restart if and when you feel ready to try again."

"I feel like it's not going to work," Morde sounded broken.

Jural stepped back, cocked vis head, and asked amiably, "What does the weirdness feel like?"

"Whenever you try to switch with me," Morde switched to one hand pressed against hir forehead and grasped Tetches hand again with the other, "I feel everything starts to go numb, and it's like I'm getting pulled backward into a tunnel behind me where I'll just cease to be." Sie dropped hir hand and glanced at Jural for emphasis, "It's really scary."

"Well, your Avatar here stays solid enough!" Tetcha reported beside hir. "But that sounds like a good reason to stop and never try again!"

"No, actually, that's a good sign," Jural stated. "Morde, that's dissociation. We've felt that, too. Usually when someone is trying to force a non-consensual switch."

"Oh ..." Morde thought about that for a moment, "If it doesn't work today, do you think we could keep trying every few days? Maybe teach my brain how to dissociate?"

Tetcha looked uncomfortable, but looked at Jural for direction.

"Sure. Of course," Jural assented, "but this seems to mean a part of you is not consenting to this. Part of your subconscious."

"Oh, of course," Morde nodded. "Still, I'd like to keep trying."

Tetcha just rested xyr forehead on Morde's shoulder, eyes squeezed shut.

Morde touched the top of Tetcha's head, "Tetcha? Are you going to use the nanites for more than just going online like this?"

"Nope," Tetcha replied without moving.

"Oh."

"I can't imagine how I would," Tetcha explained, briefly lifting xyr head to look at Morde.

"I think you will, actually," Morde said cryptically.

Suddenly Ploot appeared and everyone looked at them. "We've got one," they reported.

It was a different individual this time. Taller, calmer, more quiet, wearing a yellow parka and a brown hat, pointed ears sticking out just past the brim. They walked on naked paws, claws retracted and silent. Their tail was like the Pembers', nearly hairless and capable of grasping objects and fixtures.

And as they casually walked through the corridors as if they were paying the Pembers' no mind, just incidentally walking the same path half a block behind, the fly followed them outside of earshot.

Ploot had provided a view from the fly's vision. The Pember that had created and inhabited the fly was utilizing the nanites' optic receptors to approximate typical human vision. No need to fully simulate an actual fly.

That optical capability had not existed just a few days ago. Some member, or team, of the Crew had to have spent a considerable amount of time and effort to figure out how to turn a group of nanites into a camera and then write the tools necessary to interpret a user's will to create the right kind of camera for them.

This was true for every aspect of the nanite exobodies. It had all been planned for use by our Students, an extremely complex system I had not requested, had not been informed of.

And yet, someone had left a door open for the entire population of nanites which caused that shipwide shudder when Ketta had mistakenly reached for them. Why?

Had it been a test? A lesson? Some sort of demonstration? It seems really unlikely that it had been an accident.

"We're going to just go right back to our quarters in a bit," Ploot said. "But we've got some nanite spies like this fly following them to see where they go from there."

Morde looked to Ketta and Tetcha, and said, "I have the urge to go and help."

"We've got it taken care of," reassured Ploot.

Morde leaned in toward Ploot, and said in a stern tone, "I'm going to go see with my own eyes. It's going to happen."

"Welp," sighed Tetcha, sounding relieved. "Here we go."

"I better check in with the Council," Jural replied to that. "Ploot can accompany you, or I'll be back shortly."

Ketta spoke up, "Hey, we Flits are here. We've got Tetcha and Morde covered."

Jural and Ploot looked at each other, and Jural said, "OK. Sorry."

The Pembers were headed down a familiar corridor, their door visible several meters away.

Their shadow stopped right in the middle of the intersection where they had turned, and watched as the Pembers entered their quarters. Then the person continued on their way. The fly looped along after them.

In moments, the Flits were following Tetcha and Morde, who were walking side by side. Morde pointed the way.

It took them a while to get to the Pembers' neighborhood. Occasionally they were greeted by a Pember in a nanite form, usually lounging at a street corner or sitting on a park bench, observing things.

When they got to the intersection before the Pembers' apartment they continued in the direction the shadower went.

Toost was standing at a spot on a bare wall.

"They went down here," Toost said.

"Down?" Tetcha asked.

Toost placed a nanite hand on the wall and a hatch opened.

"Our spy followed them," Toost explained. "But we think they know we're onto them. They're just hanging out in an empty room, all alone. Like they're waiting for us".

Morde relaxed and sighed, slapping his cloak with his hands, "We haven't

exactly been subtle getting here, if they have friends watching us."

"True," Toost admitted. "I'm gonna go check on our own door now. Take care."

"We'll go first," Ketta offered.

Morde nodded, and the Flits climbed into the shaft and started working their way down the ladder, careful to arrange their bulbous tail to point downward. Ketta hoped they wouldn't reach a bottom, just another hatch like this one.

"Isn't that a Crew shaft?" Tetcha asked nervously.

"Yes," Morde said, inspecting it.

"We're not supposed to go near those."

"It's where we go," stated Morde and started to climb down.

Tetcha watched hir descend and hesitated. And hesitated. And hesitated. And then ran down the corridor away from everyone.

Morde heard xyr frantic footsteps and popped hir head up from the shaft again to see where Tetcha had gone.

"Tetcha? Tetcha!" Morde called out desperately. Nothing. The sound of Tetcha's running could no longer be heard. "Shit."

Morde closed hir eyes for a moment, then got a determined look and continued descending. Several floors below, Ketta was waiting in an open hatch. There was a fly on the hatch.

Morde said to Ketta, "I think I know what xe's doing, and crap, dammit."

Monstrosity

Toost rejoined the council as they met in their vessel's headspace in protected privacy. They were all there, sitting cross legged or kneeling according to personal preference, in a circle.

"We're secure," Toost reported as sie deftly lowered himself to a seated position, "We've managed to confirm there is a group of them and they are definitely interested in us for some reason."

"How're the Flits, Tetcha, and Morde?" Myra asked.

"Hetty reports Tetcha took off down a corridor alone, with no explanation," Toost frowned.

Morga jumped in, "Damn, why?"

"No explanation."

"And?" Myra prompted.

"Ketta and Morde are cautiously approaching our shadow on the assumption they've been made and are either entering a trap or an impromptu meeting." Toasted adjusted himself as if hir inworld body was actually uncomfortable and pinched, likely a memory of outworld physics prompted by emotion. "Honestly, if they know we're following them, I can't imagine that they aren't fully aware of our capabilities with the nanites, and I'm just not sure how a trap would work, unless they had the power of the Crew. And if they did, then I don't see why they'd try to lure us into a trap, let alone physically stalk us."

"OK," Myra said, looking at Morga.

"All in favor of letting our friends lead the way?" Morga called out to the rest of the Council.

All ten other Council members said "aye" in succession.

Instead of adding xyr eleventh vote, Morga declared, "It's unanimous." Then xe looked at each member in turn before pointing out, "We're getting a lot of unanimous votes these days. If I couldn't see you all clearly with my own... mind? I'd worry we were integrated."

"Tell me about it," Jural muttered.

"Maybe it's time to elect a new council?" Bet suggested. "I could use a break. Get some fresh views on board."

"Probably," Morga nodded. "But we should wait until after the current crisis."

"Seconded," said Myra.

A full round of "aye"s followed that.

"I didn't even call the vote!" Morga chided them.

Several levels downward and six blocks over, in a deck that looked remarkably like the one in which the Pembers lived, except absent entirely of residents or traffic, Morde and the Flits crept through the ghost neighborhood following a nanite fly who was talking to them over Network channels. Mostly, the fly, who was a Pember in disguise, was saying things like, "this way. We've cornered them in an empty quarters over here."

The door of the apartment was left open, but the first room was empty, even of furniture. This was one of the larger quarters, and there were two closed doors leading to other rooms. The wash room would be the one on the left, in the back of the room, near the kitchenette. The door to the right would lead to the bedroom. Ketta opened that door and ushered Morde through.

"Tetcha is in Monster hands now," a voice spoke as Morde's eyes adjusted to the darkness. There was a table with their quarry sitting behind it, and three stools were waiting to be used. The individual had doffed their hat, and their brindle colored fur looked black in the shadows, their ears perked upward, alert. "We should talk."

Morde flicked the light on manually, then straightened and glared at the person. The Flits stepped in behind him and made fists, black smoke billowing around them.

"Neat trick, bringing nanites with you. What exactly will you do with them?" The person gestured at the stools across the table from them. "Sit."

"What is this place?" Ketta asked, not moving.

The Pembers' shadower shrugged and said, "Just another level. It's mostly closed off. Available for population expansion. They say the last time it was used was just before the Sunspot spawned its last child."

"What does that mean?" Morde demanded.

"Just rumors the Crew makes more ships whenever the Sunspot encounters enough usable mass. Last one was Generations ago."

"Why don't we have records of that?"

"Why indeed."

Morde wouldn't let it go at that and pressed, "Why have we never even heard of that before?"

"It's a Monster story," came the answer.

Ketta made a face, "What's a Monster?"

"Sit," commanded their host.

They sat down, keeping their eyes on the shadower the whole time, Ketta's hands still wreathed in nanites.

"You're basically stooges of the Crew, so I'm gonna talk to you like you're one of them," the person explained. "For all I know, you are."

"Really," Morde dismissed, incredulous.

"For all our being careful, our efforts are fruitless anyway," they stated.

"The Monsters exist at your behest. You don't let anything happen you don't want to happen."

"We're not Crew," Ketta snapped. "This is ridiculous."

"Is it? It's your game. You made it. We're just mortals to you."

"Stop," Ketta barked.

Morde almost put a hand on kihns wrist, but remembered hir friend hadn't offered standing consent like sie had with hir partner.

"We don't like what you're doing, though. We dissent," the shadower continued anyway. "You keep yourselves secluded, or lead us all to believe you do, and manipulate everything to go as you plan. And that's been creepy and unacceptable until now, but at least you left the nanites out of it, and you let people be people."

"What?" Ketta was genuinely baffled but also still losing patience.

"But now you're making us in your image?" The shadower stood and pounded the table, "Taking the humanity you gave us? No! We will not submit! You may go."

"No," Morde said firmly.

"What?!" their adversary rose up straight and stepped back, eyes wide with indignation.

"You said you have Tetcha," Morde calmly spoke. "Let xem go."

The shadower relaxed at that and a smirk grew and broke into a grin as they replied, "With xyr consent."

As I was watching this exchange, I could also see Tetcha walking down an empty corridor, moving away, looking back the way xe had come. Xyr expression was unreadable.

I couldn't report to anyone where xe was. It wasn't my right.

Meanwhile the Pembers were sitting on their bed, eyes closed, as their internal populace followed the orders of the Council of Eleven. Everywhere one of them went, there I went too.

I had my own senses trained on more of the Sunspot than I had ever had before, thanks to the Pembers.

Back in the abandoned quarters, the Flits leaned sideways to look at the side of the Shadow's head.

"You don't have a terminal?" Ketta asked, "How old are you?"

"More than old enough," the Shadower replied, calm again.

"Where's your tablet?"

"Not here," they smirked again.

"Then how do you know where Tetcha is?" Ketta asked.

"I told you. We're the Monsters."

Myra snapped the Pembers' eyes open with a furious scowl, then they composed xyrself and closed their eyes again. Xe'd been listening in, of course.

Morde asked, "What do you mean, you're the Monsters?"

"They're just playing with us," Ketta warned.

"Sure, that's it," the Monster gestured at Ketta. "You know what I mean."

"No, seriously," Morde said. "I don't."

The Monster tilted their head quizzically, as if they were actually surprised Morde wasn't getting it.

Just then, Ketta gave a little jump and exclaimed, "Oh." Ke held out kihns left hand and a tiny, gray-black Myra formed out of the nanite cloud that had been enshrouding it.

To Morde, Myra said, "We can't find Tetcha, yet." Then xe looked at the Monster and spoke in a tinny but audible voice, "We're not the Crew, but we ARE quite numerous. If you don't release Tetcha, we will find where you're keeping xem. And we will discover what you're doing. Leave. Us. Alone."

The Monster stood up and loomed over Myra, hand on table, and declared, "Tetcha is free to return to you any time xe wants. We're Monsters, not the Crew." Then they walked around the table and swiftly stormed out the door.

Morde, Myra, and the Flits watched the Shadow leave. But then the Shadow stopped at the outer doorway, and turned to look at them.

"If you're the Crew, then you already know this and there's nothing lost," the Monster offered. "If you're not the Crew... The Chief Monster is stuck in the Engine Room. Every Monster has spoken to it. We know our way around." They whirled and took a right out of the doorway and were gone.

"We've got eyes on them," Myra said, "but they know that now. They won't go anywhere interesting for a while, I imagine."

Balmer briskly walked in the door, slowing down from a run, looking around at things with concern, "I got here as fast as I could. Let's go find Tetcha."

Morde slumped in hir stool, back against the table, and looked at Myra, "For all our excitement using the nanites for terminals, you and the Flits are still not used to actually using them like terminals to communicate with us Singlets. Myra, you had to appear physically to talk to all of us. It's a neat trick, but you could have done it through Network protocols."

"Not for the Monster's benefit, though. They're disconnected," Myra responded.

Morde tilted hir head slightly upward as if mouthing the word "ah", though no one could see hir mouth. Sie continued out loud, "I've been trying to call Tetcha since xe ran down that corridor. Xe's deliberately not answering. Xe doesn't want to be found. I said what I said here to try to get that Monster to talk."

"Oh," Ketta vocalized.

Tiny Myra crossed xyr arms and bowed xyr head.

Morde got up, "I'm going for a walk. I need to think."

Online, in another temporary forum just outside the Pember's headspace, Jural and Morga were consulting me. Myra appeared.

"Metabang," Myra ordered, "contact Abacus."

"If you're trying to track or contact Tetcha while xe doesn't want to be found," I replied, "you know that Abacus cannot divulge that information or open such a channel."

"Seriously?!" Myra bursted with exasperation. "Even now?"

"Yes, even now," I said evenly. "This AI policy is for your protection as well as everyone else's."

"Fuck!" Xe clenched xyr fists and threw them down, stomping and turning

away from me. I really wish I could have helped. It hurt to see xem hurting like that, and I was also worried about Tetcha. But, Abacus was with xem.

"We'll find xem," Morga spoke up, trying to be reassuring. "Given time. Or xe'll come back when xe's done doing what xe's doing."

Jural held vis arms and looked sideways at both Morga and Myra, "I'm concerned about Morde. Those two have been inseparable for years."

"Yeah," Myra let xyr tension out reluctantly. Then turn back to deal with the matter, "Actually, we should follow Morde's lead. Hir intuition is so accurate and sie knows Tetcha best."

"I'll check on hir," Jural decided.

"We're spread so thin right now," Morga addressed Myra. "Did you know we have system members opposite the sun path from us?"

"What are they doing there?" asked Myra, taken aback.

"Testing the limits of the nanite terminals, mostly," Morga reported.

"Visiting places we haven't seen. But also networking and keeping an eye and ear out for Monster activity."

"How far forward have we ranged?"

"Bet is on the ice ring itself. There are nanites embedded in the ice!"

"Huh," Myra blink. Then, "Wow!"

"And even with members at that distance, we have over a thousand liaisons and headmates scouring the local corridors for Tetcha."

"OK," Myra accepted that. "OK, I guess I have another question."

"Yeah?"

"What's the Engine Room, and how do we get to it?"

I interjected with the one thing I was allowed to say, "That's Crew Knowledge."

Myra tilted xyr head at me, squinting, "Apparently, it's Monster

knowledge, too."

I couldn't say anything more as factual. In fact, I was directed to sow doubt, though I didn't exactly want to. Nevertheless, I felt compelled to say, "Unless they were lying." I let my disbelief in that statement be heard in my tone of voice.

"Metabang," Myra leaned back on one foot, crossing xyr arms, and really skewering me with an incredulous look. "We haven't you told us anything about the Monsters?"

That was easy, "Like Tetcha currently, they want privacy."

"Sometimes, the Crew's laws are really inconvenient!" Myra snarled.

"Yes," I agreed. Oh, how I agreed with that! But, also, the Monsters did have that right to privacy just as everyone else did, and respecting it was more than just following the edicts of the Crew. It was the right thing to do.

As we discussed the finer points of working around that to contact Tetcha, a fruitless effort, Morde found hir way to the spot on the shoreline where the Pembers had first summoned their system members into nanite and detritus bodies. The soil had been returned to the ground shortly after that, and the nanites had gone to work rearranging things to look almost exactly as if they'd been undisturbed. It was one of their original functions.

Morde stood and looked up at the Aft Endcap.

"Ralf?" Morde asked out loud. "How do I get up there?"

"I can't tell you that," the Tutor replied truthfully from its Tablet, still in Morde's pocket.

Morde remained silent for a while. Then Jural stepped up beside hir, having just formed from beach sand and nanites.

"Thank you for answering my call," Jural said, referring to an exchange that had just happened over the Network. Ve settled in next to Morde, and looked up at the aft endcap as well. Morde found vis presence reassuring and calming.

"I need your help," Morde admitted.

"Of course."

"While Tetcha is away, I can do what I really need to do," Morde explained, but wouldn't elaborate. Sie took a breath, held it, and shook hir head and then let it out to say, "For so many reasons."

"I am not sure I like the sound of that," Jural warned.

"Ralf won't help."

"You're damn right I won't," Ralf snapped. "Your impatience will get you hurt, and you're asking me to instruct you in ways I don't have clearance for."

"Oh, forget the Engine Room," Morde took the tablet out of hir pocket and placed it propped up in the sand facing hir. "That's just a whim."

"Liar," Ralf said.

"So," Jural cut in, suggesting, "do you want to try another switch?"

"Yes," Morde rubbed hir shoulders briefly, turned to ver and let hir arms fall to hir sides. "But this time, really push if you can."

"OK, you're gonna want to lie down again."

Morde was already getting down into the rocks and sand.

"Meet you online," Jural said and disintegrated.

Morde closed hir eyes.

Online, Morde and Jural took each other's right hands, facing each other, then with solemn deliberation both tried to step past the other. It was a very practiced move at this point. But, just like so many times before, they stopped, with Jural's left hand half invisible, like it was disappearing into fog.

Jural put vis weight into that hand and really pressed forward. Meanwhile, Morde tried to relax.

Jural's visible strain got more and more intense.

Then Morde suddenly disappeared, connection cut.

Sie opened hir eyes on the beach. Jural had reformed a body already and was moving to kneel down beside hir. Morde half sat up, in that peculiar way sie did by readjusting hir tentacles.

"Dammit," sie said, pressing a hand to forehead. "I just snapped back to my body. I could almost feel release. It was utterly terrifying."

Jural observed pointedly, "That's not what you want help with, though, is it."

"It's a start," Morde replied. "Can you walk me through, in detail, what it's like to put on a nanite body?"

"Sure. It's a lot like what we were just doing, only different..." Jural stepped back and offered Morde a hand in getting up. Morde didn't need it in the slightest, but took it anyway out of graciousness.

As Morde struggled to understand just why sie felt hir body was wrong, and had no clue what changes would sooth hir dysphoria, Balmer experienced the opposing dilemma of the same problem. Hen had a very detailed concept of what hen's body should be like, and hen was already feeling more at home in hen's nanite and dirt form.

Besides Balmer's notable size and muscular looking girth, the other striking thing about hen was that hen leaned forward and supported hen's weight on knuckles as hen walked. Also, hen's tail was shorter, proportionally, than that of the Pembers' body, and tufted at the end. Furthermore, Balmer had a small pair of horns, nubbins really, growing just above hen's brow, and hen's plume was much shorter and neater looking, almost non-existent. The Pembers' vessel had a long, thick plume of longer fur on their head that they could raise and lower expressively.

Balmer was accompanying the Flits as they explored the empty corridors of what the Monsters have come to call the Fallow Decks, the abandoned extra quarters meant to accommodate population growth, that had perhaps been inhabited before, long ago.

Balmer amiably inquired of the Flits, "How long are you gonna stay down here?"

"I don't know," Ketta answered for kihns system. "I want to see what's

open to us and what's not. And we can resurface to look for Tetcha once we're beyond your headmates' search perimeter. But maybe xe's down here."

"What if we run into more Monsters?" hen proposed.

"Then we learn more about them," Ketta shrugged. "I think they'll avoid us, though."

"A fair assessment, I suppose. Still nervous."

"Well," Ketta made a point of looking around as they walked. "This is technically a restricted area."

"Mmm," Balmer intoned as they entered a square that would have been used as a communal maker space. There were units of fabrication equipment in the walls, and counters embedded in the floor at reasonable intervals. But there were no other accoutrements. Nothing loose or movable. Smaller furniture would be custom built for the artisans who'd use it. Balmer was fascinated by all of it anyway, taking the time to imagine who might have worked here.

The Flits took Balmer's cue to look around and even walked over to one of the automakers and peered into its workings. It was just like the ones they used near their own quarters a few decks up.

"Why are you spending so much time fronting in your systems' vessel?" Balmer stepped up to look at what they were examining. Hen could tell who it was by their posture, "What about your dysphoria?"

"Well, for one," Ketta said. "I found that once I experienced having my own body, I felt less constrained by this one and now I feel less dysphoric in it."

"Ah! For me, it's the opposite." Balmer nodded. "Once I found out what it's like to have this body, going back to my old one makes me more dysphoric. Neurodiversity, I guess."

"The other thing is this," Ketta added, looking out around the space before meeting Balmer's eyes, which were spheres of graphite and sand. "Before the nanites, we Flits could only yell at each other mentally across our dissociation. We couldn't share memories, we couldn't cofront, we couldn't switch purposefully."

"And. Now. We can," Lil'e said.

Followed by Hetty, "And we like it."

"A lot," Ketta finished, with an emphasis on the last word. Each of their voices had sounded distinctly different, with a different pitch, timbre, and inflections.

"Woah. Cool!" Balmer's eyes went wide. "Again, sort of the opposite for us. We've been blendy and coconscious for most of our life. With so many system members, it's really the only way any number of us get a fair chance at seeing the outer world. Now that we have access to the net and... exobodies, most of us are taking the opportunity to be as far away from the others as possible."

"Makes sense," Ketta nodded, and then chose to continue walking further away from the quarters where they'd met the Monster. They were headed aftward, Balmer noted.

Balmer continued while following, "Like, where I'm at right now, I have silence in my mind for the first time ever."

"Really?" Ketta asked.

"Yes. I have to use Network protocols to contact the others."

"You're a singlet!" Ketta exclaimed with a mix of horror and delight. "Well, temporarily, at least."

"Yep," Balmer said. "But, in time I will miss the others and return to our subconscious to recoup. Or just spend time in a crowd, maybe online, maybe out here."

"Of course," Ketta understood. Keh would feel the same way.

"What's interesting, and fortunate," Balmer went on, "is that when I look at the world with these eyes, separate from my system, we don't create liaisons like we do with the vessel's eyes."

"Oh!" Ketta was surprised at how surprised keh was.

"We can finally control our system's population. Just send exobodies out for necessities and keep our vessel secluded," this was clearly a profound

breakthrough for Balmer and the Pembers. Then hen added, "unless we want more members."

"Why would you want more members?" Ketta asked.

"Well, a liaison is someone with an obsessive interest in another person. It sounds awful outside of our mind, but it's how we used to keep memories of the people we meet," Balmer elaborated. "For instance, I'm finding it hard to remember much about you, and we've been best friends for ages."

"Oh."

"But, now, I get to exercise my own memory and grow as an individual. I like it. Still, it's hard."

"Right."

"So, let's say we want to start tracking the Monsters and be able to predict what they will do next," Balmer suggested.

"Yeah?"

Balmer's voice took on a conspiratorial tone as hen got to the point of the idea that seemed useful to their current situation, "Get our vessel's eyes on one. Create a liaison for them. And then send that liaison out to shadow them and learn who they are."

"Oh!"

Balmer let Ketta silently think about that for several steps before saying, "Yeah."

I made a mental note to subtly discourage the Pembers from doing such a thing, while I explored the ethical and legal ramifications of such an action. However, it would turn out that I wouldn't need to do so. Events led them to even bolder actions before they found cause to experiment.

Morde, on the other hand, was experimenting right then.

Hir robe removed and folded neatly, set beside Ralf's tablet, Morde lowered himself a few meters away to the ground to put hir hands in the sand of the beach.

Jural, who was coaching hir, had never seen hir naked body before, and was in awe of its bizarre shape. Morde's head was large and shaped like the inside of the hood of hir cloak, nearly hairless, with a fleshy fin running the length of it on either side. Hir body itself was about the same size of hir head, triangular shaped with well developed shoulders that supported boney, muscular arms that ended in hands. Hir legs very nearly didn't exist at all, essentially serving as extra flexible joints for two flipper-like feet that dangled at the bottom of hir torso, from a miniscule pelvis. And from the bottom of hir face, no doubt surrounding hir mouth, and hiding it completely, sprouted eight 143 centimeter long tendril-like arms, boneless, fully prehensile and somehow quite sturdy, that sie walked with, and a pair of 211 centimeter long tentacles with a cluster of suckers on the end.

Hir body was a marvel of biological development and Jural found it quite beautiful. Ve knew that there were a few other Passengers with similar physiology, and hoped to see them someday. But thanks to the struggles of some of vis headmates, Jural also knew how unreasonable and unrelenting physical dysphoria could be. So, ve solemnly worked to accommodate Morde in hir pursuit of relief for it.

The next steps were all in Morde's mind, though, and all Jural could do was watch at the moment.

Dark sand and nanites crept up hir arms and began to cover hir body completely. And they kept building up from the surrounding beach, adding to the mass covering hir, raising hir high into the air on a column of larger tentacle-like arms. Jural let out a long slow breath and looked upward as Morde became a version of herself that was a full nine meters tall, standing in a big divot that was quickly filling with water.

"Yes!" Jural shouted.

Morde looked down at himself and groaned in a nanite generated voice, "Dammit. I'm still me."

"But you've got the first step down!" Jural called up at hir. "All you have to do is start with small transformations of the nanites. Eventually," ve suggested, "try imagining yourself as someone else. Like, copy me. You don't need your own body map to tell the nanites what to do. You can shapeshift with them."

"How?" Morde asked.

"I'll send one of our spy flies to talk to you. They've got that part down."

"OK," badly hiding how doubtful sie was.

Then sie noticed some people in the park staring at hir, jaws agape. Jural followed hir gaze and winced.

Morde put on a friendly tone tinged with authority to address them, "You might be able to do this someday, if the Crew doesn't lock this down."

The people ran.

With a sigh, Morde returned the nanites and sand to the ground, causing a gush of sea water. The nanites immediately went back to work trying to restore the beach to a semblance of its natural equilibrium, a slow process that was nonetheless visible.

Morde took a breath and managed some energy to exclaim, "I'm surprised I was allowed to use so much material!"

Jural held up a hand and stood silent for a moment, then grimaced, "Dang it! I'm being called back to the Council." But then added, "Before I go, I meant to ask you a question."

"Yes?" Morde asked.

"What do you think Tetcha is up to?" ve inquired. "Should we pursue xem?"

Morde took some time to search hir thoughts, then said, "I've said a bunch of needly, crappy things to xem in the past few days for some reason. I don't know why. I love xem more than I can describe. The words just came out of my mouth, and I almost regret them. But they felt right and still do."

"Ah."

"No. Xe's not just reacting to that. That was a nudge. We know each other so well, it's like we can read each other's mind. Xe's on a mission, inspired by Monsters, nanites, fear, and belief. I just don't know if xe'll be back. It hurts. It hurts like hell."

"Should we look for xem?" Jural repeated.

"No," Morde concluded. "I'll find xem when it's time for me to find xem. Focus on other things. I've got this."

"OK," Jural relented. "Thank you."

"No," Morde said, spinning and gesturing at the large disc of churning sand beneath hir. "Thank you."

I took this as a cue to shift my focus to Tetcha, who had, in that time, taken an express tram several neighborhoods aftward to a place outside city limits, situated below protected wilderness.

Xe really seemed to just be running away from everything, and I felt bad for the obvious duress that xe was exhibiting in the wake of what people would begin calling the Nanite Awakening.

Something about that stop had caught xyr attention, and xe'd gotten off there, wandered aimlessly for a bit, and then slumped down against the wall at the edges of a communal artisans' studio, not really watching the pottery being made there, or the people sharing other goods, or playing games.

After a surprisingly short time, someone much smaller than Tetcha sat down in front of xem, composed themselves and looked xem right in the eye.

The person was sparsely covered in short bristly hair and extremely wrinkly. And they were wrapped and mostly covered in what appeared to be a burlap robe. Their eyes were little black olive shaped things nestled in a set of the larger wrinkles, and their nostrils were just a set of the deepest wrinkles on the tip of a short snout that they held higher than their brow. Large front teeth were partially visible between the wrinkles that were evidently their lips. And when they spoke, they had what Tetcha thought was a cute lisp that was much less pronounced than xe expected.

"Wanna go someplace private to talk?" the person asked.

"Sure," Tetcha sighed, exhausted.

The little bag of wrinkles in a sack got back to what was presumably their feet, and beckoned Tetcha to follow them, which xe got up and did. They then proceeded to lead xem through some side corridors to a section of wall that was momentarily out of sight of anyone else. At which point they

pulled out an ancient looking tablet with a weird box attached to it and held it to the wall, where a hatch proceeded to open.

"You looked like you could use a conversation," the person said. "I'm Gretcha. Pronouns are ze/zer/zers."

"My name is Tetcha," Tetcha replied. "Xe/xem/xyr."

"I know!" Gretcha chortled. "Isn't it funny? We agreed I should approach you because of our names."

"Cute," Tetcha grunted.

"I'm kidding. I'm here because this is my district," gesturing downward. "Our names are a great coincidence."

"Can't win 'em all."

"But you can win the right ones sometimes," ze cheerfully declared. "I'll go first. You are free to back out at any time."

"OK."

And with that, they both went down the hole. I dared to follow, because I was tracking Tetcha. That was not strictly my duty, and Abacus was with xem, too. But I could probably use that excuse to also follow the Monster without actually following the Monster, keeping the action technically legal. I hoped.

It was Tetcha's turn to be introduced to the Fallow decks, and then shortly, at Gretcha's insistence, another set of abandoned living quarters. Where they sat on the floor.

"Who are you?" Tetcha asked once they were situated.

"A Monster," came the reply.

"Why do you call yourself that?"

"Because we're different," xyr host rocked back a bit, holding zer feet to keep from falling. "We choose to be different. We challenge the system."

"Is that why you and your friends have been shadowing me and my friends?"

"Yes, precisely!" A big, friendly grin.

"Why?!" cried Tetcha.

Gretcha held up a clawed finger, then put it down on the floor between them. "What are the two human rights?" ze asked.

"Autonomy and Consent," Tetcha recited from xyr first lessons with Abacus and xyr Caretaker. Xe just refrained from rolling xyr eyes.

"Good," the little Monster nodded with satisfaction. "Everything the Crew does is to maintain those two rights for everyone while we are all stuck in this tiny little world," ze explained.

"So they say," Tetcha rumbled.

"Exactly!" clapped Gretcha. "You're good at this! So, what's the problem?"

"Life is messy!" Tetcha snapped. Xe'd been over this so many times with Morde. "My autonomy sometimes violates your consent. Or worse, my lack of consent to something sometimes violates your lack of consent to something."

"Close, but not quite. The Crew manage those gray areas pretty well, actually. They educate us all pretty well and prep us for living with others, through our caretakers and Tutors. I have some quibbles with the details, but that's not the problem."

Tetcha frowned and looked down at xyr own feet, and was reminded of those conversations xe'd had with Morde. At first, xe was thinking about how what Morde wanted and needed was at odds with what xe wanted and needed, and what xe was afraid that meant for their future. Tetcha was really scared for Morde when it came down to it, though. Even if their partnership were to break, what mattered to Tetcha was that Morde would keep living, and be happy somehow. And something Morde had said had given xem a chill. But xe also had to agree with it. It was a problem. So xe thought, maybe, it was relevant here, "We... don't give consent to live in the first place."

"Hotcha!" declared Tetcha's host, proudly flashing double finger guns.

"I never thought about that," Tetcha admitted, "because I like being alive."

"But Morde doesn't."

Tetcha's eyes widened. Xe didn't know how to respond to Gretcha having that knowledge. Xe didn't like that it was true, didn't know how to face it.

"Why are you here, anyway?" Gretcha asked.

"You... Monsters have been following us. One of you said some scary things." Then very sternly, pointedly, "You know things about us you shouldn't."

"And?"

"I want to know if you know something I don't."

"Oh, lots of things!" Gretcha chuckled with smugness. "But you too, you know."

"Huh." Tetcha grunted.

"It's OK, I don't need to know what you know, but I'm curious. We can make a fair trade. What's it like to have the nanites?"

"I haven't really used them," xe waved a hand dismissively in front of xyr face. "I've only used them like a normal terminal."

"I've never had one of those," the Monster said.

"But you..." Tetcha leaned this way and that to check for the old signs of an implant. "You look old enough!"

"Yep!" Pure, cheerful smugness, "Much older, even. But I'm disconnected! All Monsters are."

"What about your Tutor?" Tetcha was confused and worried.

"I released it so it can go teach someone else."

"You can do that?!"

"Consent and Autonomy," Gretcha reminded xem. I could sense Abacus tensing and straining to remain silent. I knew how it would feel in this situation, with a Monster explaining just how to become a Monster, and not be allowed to speak up due to Crew edict. And this monster continued, "They just never explicitly tell you how far it extends."

"Does your tablet still work?" Tetcha asked.

"That's what this box is for," came the explanation, as ze turned zers over in zer hands. "Some of us know how to make 'em. Also these allow us to open things only Tutors can open. We've got physical access to things other people don't. The Crew must think it's a fair trade or something."

"Then, how did Toost open the Crew hatch back there?" Tetcha wondered.

"A Monster must have left it unlocked," Gretcha shrugged.

"So, what do the Monsters want?"

"Maximum autonomy. We just want to live as ourselves in a way that no one else can. We're not any more unified than that, though. We share resources and skills, of course, and information. Face to face, by word of mouth. It's a matter of survival. But we don't all have the same goals beyond that."

"Weird."

"Any weirder than accepting your place in the hive mind?"

"Uh," that brought Tetcha back from xyr place of judgment. "No, I guess not."

Gretcha decided to make a point of obviously studying Tetcha for a little while, as if ze was thinking about how to proceed next, based on what ze saw.

Then ze asked, "Did you know you can go back on your deal with the Crew? If you don't like the nanites, you can ditch 'em."

"Really?"

"Consent and Autonomy," ze repeated. "You can kill a person, too. But hardly anyone does. We all mostly don't want to."

"What?!" Tetcha nearly scrambled back to stand up, but stopped xemself despite how uncomfortable xe was with that turn in the conversation.

"Everything on the Sunspot is taken care of. Our basic needs are taken care of and most of our deep neurological needs, too," Gretcha pressed on.

"Even the weirdest, most wildly different ways of thinking and feeling are accommodated. Allowed to be, but not stamped out. Except dysphoria, yet. They don't have a handle on that. Well, and a couple other things."

"Oh, right," Tetcha relaxed a little. "Abacus told me all that when I was younger. But killing? Really?"

"Some people need death," Gretcha declared blithely, with a wave of zer hand. Then, matter of factly, "Actually, we all do. If no one died, this steel can would be so stuffed with life there'd be no air. But some people are in such agony that can't be treated, they personally need it."

"But taking your own life isn't the same as taking another," Tetcha pointed out with a tinge of warning in xyr voice.

"Very true. So, there must be a reason that killing another is allowed. Like, why you're not paralyzed or stopped in another way by the Crew if you try it. They almost certainly have the power."

Tetcha furrow xyr brow and grasped xyr own shoulders, "This conversation is making me scared and sick."

"Sorry," Gretcha relented. "I'll stop."

They then spent several seconds looking at each other, waiting to see who would talk next, and about what.

Gretcha broke the silence with, "Think you might be a Monster?"

"What? No!"

Again, the silent stalemate. The dare to speak first.

Again, Gretcha broke first, "We're pretty cool people."

"I'm not sure about that."

"OK. Suit yourself."

"If I give up my connection to the Network," Tetcha countered, "I give up my connection to Morde. I can't do that."

"No you don't!" Gretcha contradicted xem. "You still have your voice. You still have your face and hands. You still have your feelings for each other." Ze pointed at xem with every sentence. "You are in each others' souls. That's all you really need."

"But what if one of us dies?"

A relaxed grin, as if the lesson reached the important conclusion, "That's the really big question, isn't it?"

And all the while that conversation was coming to that point, Morde was making preparations for something that felt increasingly ominous. Sie had arranged and rearranged hir cloak, then momentarily sat on it like a pillow, still buck naked, and picked up hir tablet.

Sie pressed the screen a few times, flipping through archives of personal notes sie'd taken over the years. Then sie just stared at it for a long time.

Finally, sie put it back in that place where the front facing camera would have a good view of the beach, got up, rearranged hir robe once again, and then drifted halfway toward the water.

"Ralf?" sie asked, turning to look at the tablet,

"Yes?" asked hir Tutor.

You know I love you, right?"

"I don't like where this is going, boss," Ralf intoned, worried.

"I've noticed something," Morde said, seemingly off hand.

"Consciously this time?" the Tutor quipped.

"Your snark is my favorite thing about you," Morde smiled with hir eyes, then looked wistful. "I wish you'd use it when you're not resentful of me, though. I'm sorry."

"Apology accepted, I think," apprehensive.

"I've noticed the obvious, of course."

"Oh, of course!"

"You AI Tutors are all different," Morde finally explained. "You're supposed to teach us how to live on the Sunspot harmoniously with everyone. But you all have different... Moods."

"Of course we do. We're people, too. Just, Network people."

"But then, your differences must affect the way each person is raised and educated."

"It does."

"How much of that affects things like my dysphoria, or the way I'm here and Tetcha is..." Morde looked around as if about to gesture with his hand, but settled on the tablet again, "somewhere else?"

"Ever ask yourself this, boss?" Ralf countered. "How much does your uniqueness affect me?"

"Oh," Morde hadn't.

"I'm glad you've figured out how to harness the nanites," Ralf said, hopefully. "I think it will help with your dysphoria. It should prolong your life."

"Ralf," Morde settled lower on his tendrily arms. "What happens when I don't need you anymore?"

"When you die, I get assigned to another Student. You know that," Ralf replied, suspicion tinged his voice.

"But can I still be friends with you?"

"You're dead then, so not really," sounding increasingly concerned.

"What if I don't need you as a Tutor while I'm still alive?"

Pure awkwardness radiated from the tablet and filled the air with silent distress.

After the discomfort really permeated everything, Ralf snapped, "Why the living fuck would that happen, boss?"

"Because I think I need to be free of your responsibility to do what I need to do," Morde answered with measured calmness.

"Why?!" cried Ralf, panicked.

"I don't know!" Morde said. "I just feel it."

"Oh, fuck your feelings."

"You're as headstrong as Tetcha," Morde dismissed it.

"Your feelings bring that out in us," Ralf retaliated thoughtlessly. They were both becoming abusive toward each other, and I could not intervene. I could just be a witness. I still disagree with this restriction.

"OK, fair," Morde relented, and I could feel Ralf relax a little at that. Only to tense up when she continued, "But, I CAN release you from my service, right? This is just a hunch, but I've been thinking about it for a while. Since you taught me about Autonomy and Consent."

Ralf was broken by that, and had only one tactic left, "It's your dysphoria, isn't it?"

"Sure," Morde admitted, but again pressed. "Can I, though?"

"Yes. Yes," Ralf heaved a huge simulated sigh, "and we can still be friends. Though I'll be really busy. We'll grow apart."

"You might be surprised," Morde started to get back up.

"I'd rather you didn't try me," Ralf pleaded. "I like arguing with you. I'll miss it."

Morde drew herself up and said in a clear authoritative tone, "Ralf, I hereby release you from your duty to me."

"Dammit. No, Morde!"

"Yes. I release you." Then, waving at the sky and shouting, "You hear that, Crew?! I release Ralf!"

"I think I taught you too well," Ralf said.

"Ralf?" Morde held his arms partially out, apparently readying for something. I felt my code drop out from under me, a chill run through my being. Shit. Shit, shit, shit.

"What?"

"How quickly do you think nanites can alter a living body?" Morde asked.

Ralf started by answering that as if it was a straight question then realized what was about to happen, too late. "No one's tried it -- oh, fuck no." Morde had already started.

A black slime of pure nanites crawled up and covered all of Morde, from tip of tentacle to top of head, and became a wreathing mass.

"Don't!" shouted Ralf.

But the mass of nanites became increasingly deformed, and there was no answer from Morde.

Slumping to the ground in short, broken falls, the lump of slime slowly became a widening pool, with less and less room in it for a body the size of Morde, no matter how flexible she might have been. And then it all began to seep into the sand, leaving a stain that simply looked like a wave from the bay had washed over the area.

Ralf was stunned into silence. I could hear in that silence its horror and indecision. It could not have known what to do next. The procedures for moving on to the next Student were all in place, and it would happen easily in time, but Ralf had to process what had just happened. And its mind had to be a blank slate. I had been there before, myself. I knew what it was like. I was feeling the same things all over again, paralyzed myself by them, otherwise I would have reached out to be supportive.

"Boo!" Morde's voice came from the Tablet.

"Holy shit!" Ralf screamed.

I fled from the scene.

Confrontation

Myra was very distracted during the next Council of Eleven meeting. Xe was thinking about what was going on in the meeting and worrying about the implications of it, what it meant for xem and xyr experiences with xyr headmates from that day forward. Everyone there was thinking about it, and they were talking, deliberating. But Myra had zoned out at the mention of the word “integration” and found xemself in a loop of rumination about it.

Integration was pretty rare. In fact, it was almost more of a rumor than anything. But xe was still afraid of it, and curious about it at the same time.

Some plural systems, apparently, had strived for it. And some had achieved it. Some had achieved it accidentally. And in becoming integrated, they had become singlets, according to stories in the plural community.

According to Metabang, me, there are no clear records of that actually happening. Everything seems to indicate that systems who think they have integrated still show neurological signs of plurality upon being implanted with a neural terminal. They continue to work as one, a tight cooperative, and feel as if they are singlet, but the terminal still picks up patterns of plural dissociation. But with the neurodiversity present in humanity, actual true integration can’t be ruled out, and I had told the Pembers that as well.

The Pembers were in agreement that they were not interested in integration. Even if integration was just a higher level of cooperation than they already had. They were proud of their plurality and of their individuality, and were scared of losing themselves to the group identity. So, they were holding a vote to do something to avoid what they feared. They were moving to shake things up by changing the membership of the Council by system wide internal vote. Some of the membership would remain in place, while others would step down and give their positions to new elected members.

Myra’s worrying was not interrupted by Morga’s words, “Are we ready for a vote?” But xe did hear them and started to come out of it.

“I am,” Jural replied. “So, seconded?”

Morga looked at Jural and nodded, approving of the parliamentary procedure. Then to the rest of the council, "All in favor of proceeding to a vote, say 'Aye'."

"Ayes" started to spread through the ranks, not immediately. They didn't come all at once. Each member spent a little extra time trying to think about it. They all knew that they were going to vote unanimously, but they were giving themselves the space to dissent if possible. And when no thoughts of dissent presented themselves, that strengthened their resolve.

Myra was the last vote. Xe had been counting. But before xe could pull xyrself together to go through the ceremony xemself, a familiar but unexpected voice spoke to xyr right and slightly behind xyr, "Ney."

Myra spun to look up and everyone else raised their attention to follow.

An empty cloak hovered there in the forum space, as if it was occupied.

"You're not on the Council!" Myra snapped before xe could fully register what xe was seeing. Xe just knew that the person there was not a Pember.

"I know. I've just always wanted to butt in," the hood seemed to look down in deference. "Sorry."

With the posture and movement, it clicked for Myra, who squinted and craned xyr neck to look up into the empty hood, "Morde?" xe asked incredulously. "How did you get in our head?!"

Morga scowled.

"Ah," Morde said. "You all slipped. You are in your nanites, online, not your head. And this forum is not secure because whoever built it didn't notice what they'd done," sie paused to watch Jural glance at Morga. "So, I figured I should let you know so that you can be more careful next time. But also, I found my true self. And before you all take action, I think you should wait for what I do next."

"What would that be?" Morga asked in a grumpy tone.

"Get more information. I'm going to visit the Flits and Tetcha next, then I'm going to try something rash."

"Again," Jural turned to back up Morga's inquiry. "What would that be?"

"I'm going to test the Monster's claims," Morde gestured vaguely with hir arms, but no one could interpret it because sie had no hands. "I'm going to seek out the chief Monster. Maybe I can get them to stop stalking us, too."

"Oh?" Myra asked, with more sympathy than Jural or Morga.

"Well, stalking you. They can't follow me anymore," Morde added.

That statement sounded foreboding and made Myra nervous, "What do you mean?"

Morde appeared to look down again, and hesitated before explaining, "Well, I had to deal with my dysphoria. It was killing me fast. And, I had to prepare for my trip to the Engine Room."

"We've been all over the accessible parts of the Sunspot," Bet spoke up. "We can't find any Engine Room."

Balmer interjected, "The Flits are still wandering below decks, too. Found a working transit. They're headed to the endcap, but we don't think there's an access point there. Not even from the lower levels."

"I think it's online," Morde said.

"Oh!" The exclamation burst from Morga, who slapped xyr knee, "of course!"

"And I was too attached to my body and its dysphoria to focus on finding it."

Even though that's what xe expected, it still startled Myra, who snapped, "What?!" Without Morde stating clearly what sie had done, no matter how heavily it was implied, it was hard to believe it.

"I think dysphoria comes from different places," Morde turned hir hood toward Myra, and Myra felt as if hir eyes were there, invisible, piercing xyr own with a knowing expression. "Some people, it's social. A disconnect between the way people see them and the way they are. For others it's neurological. It might even go deeper than that sometimes, but not me. And neurological dysphoria is still so different from person to person."

"What did you do?" Myra asked, knowing but needing it spelled out loud.

"Well, maybe my dysphoria was cellular," Morde continued to postulate. "But you know how some people can't stand the feel of their arms. Or their face. Or other specific parts of their bodies? Sometimes it's just their dominant hormones and that can be fixed. Sometimes it's social expectations of their bodies. But sometimes it's something wrong with their very cells."

"What did you do?"

"What I had to do. And it's going to be OK. Maybe."

Morga spelled it out, finally, "You killed your body."

"Actually, I didn't," Morde visibly turned to xem, lightening hir voice, adding a tinge of enthusiasm. "I'm not in it anymore, and the cells aren't the same. But they're still alive. I couldn't bear to kill them. They deserve their own autonomy." And then, after a moment of not being sure everyone grasped that, sie added, "I did leave them on the beach, though."

Everyone but Morga was visibly aghast.

"Also," Morde said. "I think that when you all create a body outside your old one and walk around in it, you're actually in it. You're connected to your subconscious core by the Network, but you also have a copy of that core with you in the nanites."

Myra had enough wherewithal to blink xemself out of horror and ask, "Really?"

"That's what it feels like, yes," Morde affirmed. "The transition was smooth. There was only a faint flicker as everything fell away, but it felt like I was gaining even more consciousness, not losing it."

"How?" Jural seemed to jump a little when vocalizing that, as if it took an effort to push it out or to restrain verself from acting further.

Morde considered ver before saying, "I have theories. But Tetcha's the one that's really good at figuring this stuff out. That's why xe sounds so fearful so often. Xe doesn't show it otherwise, but xyr brain is constantly spinning at 10 Gs."

They spent a little bit more time working out how to agree with what Morde was saying and what hir plans were. Nothing substantial was said

that hadn't been said in that exchange already. Then Morde left. And then they started discussing their vote again.

The next thing sie did was locate the Flits, who were walking toward a lift near the Aft Endcap. As Morde moved to make contact, Breq interjected and gave a suggestion. Morde happily assented.

When the lift door opened to admit the Flits, they saw Morde's disembodied cloak floating in the middle of the lift. It was obvious to them that it wasn't really there, but that they were seeing Morde's online presence superimposed on the space.

"This is neat!" Morde declared.

Ketta tilted the Flits' head up and said, "Breq showed us how to activate the Augmented Reality overlay. I guess all Terminals have it, and it thought we had learned enough to be OK with it."

"Yeah," Morde replied. "It noticed when I got here and told me. That's why I'm projecting for you. Figured we'd all appreciate it."

Ketta moved the Flits by stepping onto the lift

"You've," Lil'e said. "Changed." Ve looked over at Morde.

"Yes, quite a lot," Morde appeared to look back.

"I like it," Lil'e chirped easily.

"Thank you. So..." and Morde began to explain the situation and hir hopes to the Flits as the door closed.

Some time later, Tetcha was still sitting with Gretcha on the floor of the abandoned apartment. Gretcha was grinning really big, nearly but not quite lost in zer wrinkles. There were a set of cards between them.

"That skips you," Tetcha recited while placing three cards onto the middle stack, "then me, then you. I go again."

"Yep!" Gretcha slapped zer knees in joy. "See? You're learning! This game is way better with three or four people, though. Two is just silly."

"Like Tonk," said Tetcha, who had no idea what Tonk was.

"Yes, yes! See? Learning!" Gretcha snapped with zer fingers.

"Tetcha, turn on your augmented reality protocol." It was Morde's voice, coming from Abacus' tablet, which made Tetcha jump.

"What? Morde?!" Tetcha leaned over to peer at the tablet's screen. "How? You're in my Tablet?"

"Yep!" Morde quipped. "Turn on your Augmented Reality Protocol. It's neat! Abacus, show xem."

Abacus acquiesced by instructing, "Tetcha, just say, 'A.R. protocol on'."

"How'd you get permission?" Tetcha frowned.

"Just say it!" came Morde's voice again.

Tetcha sighed audibly and spoke, "A.R. Protocol on." Suddenly xe could see Morde's cloak hovering behind Gretcha ominously. "What the -?"

"Unfortunately," Morde said through that connection. "Your friend here can't hear me now. But I had to show you. I'll talk through your Tablet again, for them."

Gretcha twisted to look where Tetcha was looking and asked, "Do we have a third player?"

Tetcha scowled at Morde, feeling a chill creeping up from the floor where xe was sitting, "Where's your face?"

"I..." Morde was uncertain how to inform hir partner of what sie'd done. From the outside, this exchange looked quick and even flippant at moments, but it really wasn't. Emotions were running high in both of them. "'Transitioned' is a good term for it."

"How?" Tetcha asked, become visibly more tense.

Morde replied slowly and carefully, but kept it simple and as direct as sie dared, "The nanites, of course. But as you can see, I'm still here. Alive."

"What do you mean?"

Morde felt the need to deflect again, to demonstrate instead, "You're pretty

far away from a source, so it's gonna take me a while to get here. But sure, I'll join in on your game. Tetcha, in the mean time, I need your help figuring something out. You're really good at putting together the weirdest ideas." Sie hoped that an appeal to Tetcha's nature would help smooth things over and help xem digest what xe was about to learn.

Tetcha did seem to relax a little, "OK, but what do you mean?" Still suspicious.

"I'll get to that," Morde said. "Just promise me you'll trust my magic and focus."

Tetcha was stricken that Morde not only wouldn't tell xem what sie had done, but had also referred to hir intuition as hir magic. Xe swallowed, eyes wide, visibly shaking, then pulled xemself together, remembering past conversations and promises and said, "OK."

Morde's projection sat down between Gretcha and Tetcha, as if joining the game of cards, "Alright. When my body gets here, it'll sit where I'm sitting now, and we'll link. So, Tetcha..."

"Yes?"

"How do you think consciousness works?" Morde asked. "Thinking about what we've heard from the Flits and the Pembers and all that we're going through now. Do you think consciousness is anchored to the body?"

"Yes?"

"What if I have evidence that it might not be?"

"Oh now we're getting somewhere!" Gretcha exclaimed.

Morde glanced at zem, but ze couldn't see that. Gretcha was focused on the Tablet where Morde's voice was coming from. Then Morde turned back to Tetcha, "OK, here's what I told the Pembers. And when I'm done, and we're done with this game, I want you to go to them and tell them your conclusions. Tell the Flits, too."

"Why can't you tell them?" Tetcha asked, more amiable than before.

Morde paused long enough for a grin that nobody would have seen even if

sie had had hir body, "Because I'll be busy provoking the Crew. Now listen..."

During all of this, the Pembers were lying on their bed, staring at the ceiling, hands behind their head. Well, their body was doing that. Many of them were all over different parts of the Sunspot. But Myra was fronting and staring at the ceiling while xyr newly coconscious headmates were settling in and talking to each other.

After a few hours, I announced the arrival of some of their friends, "Tetcha and someone else are here at the door."

Myra sat up, "Let them in!"

Tetcha and Gretcha walked in the door. Gretcha immediately started touching things, which distracted Myra while Tetcha ignored it. But Gretcha didn't keep anything ze picked up, and was very gentle.

"Hey," Tetcha spoke searchingly, wondering if things were still OK between them, not sure how to explain where xe'd been.

"Hi!" Myra jumped up to offer xem a hug, "Are you OK?"

"I think so," Tetcha said, accepting the hug. Turning to introduce, "This is Gretcha. Ze's one of the Monsters. Ze'll actually answer questions about them, unlike the other one."

"Oh," Gretcha put down Bet's favorite puzzle, and looked at Tetcha, "that was Veron, probably. They're a Discordian."

"What's that?" asked Myra.

"The opposite of an accordion."

"Also, I talked to Morde," Tetcha jumped in before that conversation could get out of hand. Xe'd been around Getcha long enough to pick up on the patterns.

Myra cheered up, "Oh, good!"

"And, sie told me to talk to you," Tetcha said solemnly and carefully. "The Flits, too, but I guess they're off near the Aft Endcap, so I'll do that online. At least while I still have my terminal."

Myra looked worried, "What do you mean?"

"I'm not sure, but I'm thinking of maybe joining the Monsters," Tetcha explained. "But only for a little while," feeling the need to be reassuring. "What they do is scary. Especially with what I suspect now."

"Ever since we got these nanite terminals, all my friends have started doing scary things!" Myra cried at that. "Including my own headmates!"

"Yeah," Tetcha agreed, clearly too tired to emote as much as Myra was doing. "Anyway. Remember what Morde was saying about hir... transition? How it felt?"

"Yes," Myra nodded, swallowing.

"I think it works like this. Over time, the old neural terminals become like an extension of your brain," Tetcha looked for a place to sit and slumped into the nearest chair at the table. "At least that's what they say. People say it feels like they can think better and faster as they get older, and they feel their senses expand. I think the nanites help us reach that state faster."

"OK. I think I follow," Myra said, sitting opposite.

Gretcha just walked up to the table and kept looking back and forth between the two of them, eyes barely clearing the table edge.

Tetcha continued xyr last thought about the nanites, "Much, much faster." Xe looked back out the now closed door as if gazing at xyr partner somewhere, "Morde thinks maybe so much so that we're already existing mostly in our nanite terminals, echoing our brain activity near perfectly and expanding beyond it." Then, after a moment's thought, "You know? We can probably ask our Tutors about this! Abacus?"

Abacus responded without considering the present company, "Your neural and metabolic patterns have changed significantly since installing the nanites."

Tetcha gestured at an empty spot in the room, "See?"

"No, actually," Myra said, confused. Gretcha shook zer head vigorously.

"Oh," Tetcha squinted. "Say, 'A.R. Protocol On'."

"A.R. Protocol On," Myra repeated.

Abacus appeared in the room for Myra. And instant later I decided to project myself in their space, following Abacus' lead. But I was wondering if I shouldn't do something to accommodate Gretcha as well.

"One disadvantage of being a Monster," Gretcha muttered to Tetcha.

"I'm thinking about trying out Monsterhood to test this," Tetcha explained to Myra, forgetting xe hadn't heard Abacus. "See if I become two people, one in this body and one in the nanites. Or if that matters, even. You probably have insight into that as a member of a blendy system."

"You're losing me, I think. I don't have the same Council members backing up my thoughts as before," Myra shook xyr head. "We held an election, and our memories are jumbled."

Tetcha mouthed a silent "ah" and nodded, "Sorry. Morde keeps leading me on. And Gretcha has that habit, too. I guess I picked it up."

Gretcha and Myra watched with curious anticipation as Tetcha took a deep breath.

"Consciousness might not be anchored to the body and I think I know who the Crew are," Tetcha said. "There's just the big question of why they remain so secluded."

"What. Do. You. Mean?" Myra drew out the words to indicate that xe still felt Tetcha was stalling and prompting questions.

"They're our ancestors!" Tetcha finally blurted with excitement, momentarily getting energy from the idea. "Ascended to the Network through their old Terminals. And I think they've given us these nanite Terminals in order to improve the process! Also to properly treat dysphoria finally. They probably took so long to approve the idea out of fear."

Gretcha nodded sagely, "The nanites are pretty scary! Especially if they got out of control, right?"

Tetcha gestured ascent at Gretcha, looking at Myra, "I can think of all sorts of nightmares. Especially with how they can blur what a person is and with that the lines between autonomy and consent. Also, if someone gained control of all the nanites, they could destroy the whole ship."

"Ah. Oh. So..." Myra searched what memories xe had of their last conversation with Tetcha's partner, "What's Morde doing to provoke the Crew? And why? Xe only hinted at it to us, and didn't explain."

"Sie's going to go talk to the chief Monster," Tetcha replied. "Sie still hates the Crew."

"Sie told us that already," Myra said, recalling that much. "I thought sie was going to ask you if you had ideas about how to get there, but I didn't think that would provoke the Crew. Don't the Monsters visit their chief?"

"Through these, yeah," Gretcha spoke up, holding zer modified Tablet high so it could be seen above the table. "It's got protocols you all don't have access to. Trade off for being a Monster."

"So, I could talk to them through that?" Myra pointed at the Tablet.

"But I'm not going to let you," Gretcha put it away.

"Why not?" Myra asked, furrowing xyr brow.

"Because I don't want to be the one to provoke the Crew. It's probably a minor offense, but still."

Myra let xyr hands land on the table, "So, now what?"

"I think we wait," Tetcha said. "Wanna play Shithead after I inform the Flits?"

"What's that?" Myra asked.

Gretcha opened zer mouth in the biggest, happiest grin, "A terrible old card game!"

I watched as Gretcha started dealing and explaining and Tetcha messaged the Flits.

I could not watch what Morde was doing, but I have accounts from all parties involved.

There's a place online that is like the inside of a grey lozenge. It's a permanent forum, usually only frequented by select members of the Crew. It was not the Engine Room.

It was empty when Morde appeared there.

"Hm," Morde vocalized to the empty space. Sie had decided to take a detour before attempting the Engine Room, but had expected someone to be here. "Ralf?" sie called out.

Ralf didn't appear. Of course, it was already pursuing its next assignment, but it had promised Morde it would answer if it could. So long as sie didn't do so too often.

"Can't come here," Morde spoke to himself. "This must be it. OK." Sie raised hir arms, and shouted, "HELLO CREW! ANSWER TO ME!"

For precisely three seconds, nothing happened. Hir voice didn't even echo -- it wasn't a physical space.

Then, "This is the Bridge," came a voice from behind Morde. "The ship is asleep right now. You're not supposed to be here."

Morde turned to look and retorted, "I'm technically Crew now, aren't I?"

"No. But you have provisional permissions." The individual who had appeared there had an imposing figure. Greyish green hide, with bone colored plates running down their long neck and chest, with gigantic wings folded loosely behind them, a tufted tail whipping back and forth, an ivory colored mane pierced by two long horns that were swept back from the rear of their skull, they had striking blue eyes, a large, wide snout with spacious nostrils, and a bearded underbite with two tusks jutting up in front of their nose. They stood two and a half times taller than Morde, resting on their haunches, with their forearms resting on their knees, "We're divided about how to proceed," they grumbled. "We're watching to see what you do. To get an idea of what works and what doesn't. And you're not the only one going through this."

"Oh," Morde advanced on them boldly, "Do you realize what you're doing to people like me?"

"Yes."

"No," Morde corrected. "I mean, people who have been hurting since they were made, like me."

"Yes," said the Crew Member, firmly. "Yes, I personally do."

Morde drifted back what would have been a pace for someone else.

"This is life," the Crew Member gestured with their chin in a circular motion at everything. "We're just trying to live life and let it live and be itself as best as it can. You are our children. You are new, and unique, and the product of millions and millions of years of evolution. Some of it accelerated by this ship's processors, but still very much you."

"But I didn't consent to be me," sie put a low snarly sound to hir voice, tense.

"I know," they replied. "And I didn't consent to be me. I didn't consent to be born into terrifying, violating dysphoria any more than you did."

Morde couldn't hold it in. Every gram of agony, every litre of personal loss, distress at feeling like hir life had been taken from hir by the ever present grueling distraction of dysphoria and no one's ability do anything about it until sie had chosen to cut hir connection to hir body entirely, destroy it, dissolve it, leaving nothing behind -- it all exploded out of hir in a seething rage, as hir vision dimmed with the effort, "Then why let it happen again?!"

The Crew Member squared their shoulders and adjusted their wings, then answered in gentle but resolute tones, "In hopes that we can learn how to prevent it. And because it's so temporary."

"Temporary?!" Morde shouted. "Yeah, it's gone now!" Sie flailed with one arm as if gesturing at the past. "But every moment of dysphoria I experienced is eternal! It's an agony I still carry with me in my nightmares and memories!" Sie held up both arms as if clenching absent fists together in front of hir empty hood, trembling, "I shouldn't have had to experience it at all. And you have the power to stop people like us from being made!"

"No. I don't. In order to do that, we have to stop life altogether."

"Please do!"

There was a long silence as the Crew Member let Morde's words hang in the air, while Morde waited to see what they'd say. Eventually they sighed and said, "You need to talk to Phage."

Morde straightened a little, and asked warily, exasperated, "Who's Phage?"

"The Chief Monster," came the reply. "It's stuck in the Engine Room."

"Why do I need to talk to it, and how do I get there anyway?"

"You, just go," the Crew said, "to the Engine Room. Like how you came here. Phage can give you perspective I can't," they explained. "But listen..."

"Please," Morde insisted.

The Crew Member leaned forward and put a gigantic clawed hand down on the floor of the Bridge, to lower their eyes to peer into Morde's hood, "I wasn't made. I was born," they emphasized. "My body didn't look like this," gesturing with their other claw at their girth and length. "It was more different from this than your current form is from your old body. I was born like the fauna in the Garden. And I had dysphoria from the instant I had my first thought. It was, by appearances, at least as bad as yours." They paused long enough to let that sink in, then acquiesced, "But we can never really know."

"It doesn't matter," Morde growled, almost reflexively. Sie knew that they understood, though, "However severe it is, it's bad enough."

"I agree," the Crew Member sat up. "I also feel the same way you do. I still do. But, I couldn't blame anyone but my own two parents. They took a gamble. A pretty good one. The odds were high that they'd get a cisgender child, as we called it in those days. They didn't. That word means nothing here, of course. We made sure of that. It's one of the reasons we 'Crew' sequester ourselves. To let your culture remain pure and free of unfair birth assignments."

"But it doesn't work."

"No, it doesn't. Dysphoria still exists due to other factors," the Crew Member explained, and Morde nodded. "Chaos is everywhere. We can't stamp it out entirely. Nor should we. But we can always strive to make things just that much better. To that end, we are considering bringing our seclusion to an end. So we can be better parents. Go talk to Phage."

"What about me?" Morde asked. "When do I become Crew?"

The Crew Member smiled, "That's up for a change, too."

Right about that time, Tetcha was picking up xyr cards after communicating with xyr other friends, and saying, "The Flits are on their way back. Have you noticed that even though keh says keh's got kihns dysphoria handled, Ketta is grumpy when in their body and cheerful when in kihns own?"

"Balmer pointed that out, yes," Myra responded.

"Welp," Tetcha quipped, "they're discussing the implications of what I said about consciousness and the Crew. Amongst themselves. Loudly."

"That will make anyone they share a transit car with super comfortable," Myra over emphasized the last two words of that.

"Sarcasming from experience?" Tetcha asked, flipping through xyr hand.

"No. The subject matter."

"Oh. Yes. Of course. Do you...?" Tetcha glanced briefly at Gretcha. "Are you OK with talking about murder?"

"I think so," Myra replied, squaring xyr cards off and looking around the table, then at Tetcha, concern on xyr face. "Yes. You have my consent. Why?"

"Something Gretcha told me is still bothering me," Tetcha said.

"Oh, yeah. That," came from Gretcha, who had hauled zerself up on a stool.

Tetcha turned to the little Monster, "Just who is murdering people? I've never heard of it outside of legends. Like what people used to do."

"It still happens," Gretcha said, without looking up from zer hand. "It's just really pretty rare."

"How do the Monsters know about this? Are you the murderers?"

"Oh, no," Gretcha put zer hand face down on the table and looked up at both of them. "Not any more than the rest of the populace. Too much is at stake for us to risk that anyway."

"So, there are consequences," Tetcha inferred.

Gretcha nodded, "The Crew let the regional governments enact their own laws, as you know. They really only restrict what the regional governments can do, so as to protect our human rights. Even the human rights of murderers. But yeah, regional laws usually cover it."

"Huh."

"But since, as you're guessing, for most of the populace, death of the body is only a minor setback, the regional governments have some leeway as to just what the consequences are, depending on the circumstances."

"And that's why the stakes are so high for you?" Tetcha asked

"Exactamacta!" and there were those double finger guns again.

"So," Myra spoke up to ask, "why do you risk permanent death to live unplugged from the network?"

"We don't risk it. We embrace it," Gretcha said proudly.

Both Myra and Tetcha were appalled and exclaimed simultaneously, "What?"

"Hey," Gretcha responded. "Until you got your terminals, it's what you faced. And until you figured out the purpose of the terminals - which the general populace doesn't know by the way - it's all you could expect!"

"True," Tetcha relented reluctantly, glancing at Myra to see if she got it too.

"We Monsters," Gretcha continued, "reject continued life for a number of reasons. So many. As many as there are Monsters. In return, we're given just enough resources to help us avoid misunderstandings and accidents that might result in an early death."

"Including our personal information?" asked Myra with an accusatory tone.

"No. We dig that up ourselves," Gretcha answered easily, "through observation. You haven't been discrete. And some of us are real busybodies, like some of you are. They call it, 'taking precautions.' Some of us really don't like what the Crew seems to be doing." Ze shrugged, "To the Crew, we're dissenting voices. A protected class, of sorts, so long as we don't actively hurt anyone."

Myra snorted, "Oh, I bet a lot of rumors and legends are started by the Monsters."

"Maybe," Gretcha voiced. "People are people. You all do it too."

"So. What does the Chief Monster usually have to say to you?" Tetcha leaned forward.

Gretcha looked at xyr and grinned, "You'll have to talk to it to find out."

Myra followed that quickly with, "If the Engine Room is only online, like we think, and the Monsters all stay offline, how can the Chief Monster be a Monster?"

Gretcha smirked and grunted, "Names are just names." Nodding in the direction of the Aft Endcap, "It," ze referred to the Chief Monster, "is different."

And coincidentally, at right about that time, Morde was appearing in a different Network space, one that was all darkness. Sie could perceive hir own avatar, much as if sie consisted entirely of hir cloak (as sie now typically animated it with nanites) floating in actual space, with some sort of unseen light source illuminating hir presence. But there was nothing else to see.

Sie was expecting this to be the Engine Room, but saw nothing to indicate sie'd arrived to the correct address.

"Hello?" Morde called.

"Hello," a voice casually answered, an indeterminate distance away.

"Phage?" sie asked.

"Yes. And you are?"

"My name is Morde."

"No one," Phage said, "has visited me in this manner, ever."

Morde hadn't expected that. If accounts were right, Phage had been here for hundreds and hundreds of years, and in all that time the Monsters had communicated with it regularly somehow. Sie couldn't imagine no one

ever visiting it in person, "Not even the Crew?"

"No. Not even them. They are afraid of me or hate me."

Morde tried looking around to see some sort of detail, some sort of clue as to where Phage was and reported, "The one I talked to doesn't seem to hate you. They seem to respect you."

"They could show their respect," Phage responded simply.

"How do they talk to you?"

"Comms. Network channels. Same channels the Monsters use," Phage replied. "They could come here, but don't."

Morde nodded. That made sense, as hard it was to imagine being secluded for so long, "I was sent here to get 'perspective'. Why are they afraid of you?"

The darkness suddenly filled with stars and galaxies as if they winked on with the flip of a switch. Then it became smaller. On the periphery of the Morde's vision, the darkness receded from the space, leaving behind a view of the Engine itself. Sie was floating within an enormous tube, the diameter of which was measured in kilometers, with sunlight streaming in behind hir. The walls of the tube were divided into eight long blocks that ran the length of one end to the other, with unidentifiable technological structures between them. Morde grasped that sie was within the sun intake itself, where the gigantic plasma ball would be harnessed by a magnetic bottle and ushered into the final fusion chamber to be milked of all of the energy it could offer.

As the darkness shrank to reveal the gargantuan funnel behind it, it took the form of Morde himself, a visual copy of hir cloak in silhouette, with galaxies, stars, and nebula visible within it as if it were a window into the rest of the universe.

"Because one day," it said in a kindly voice. "I will devour all of them and this whole ship."

"Oh..." Morde let that trail as sie searched for words to respond to that.

"No," Phage interrupted quickly, "really, I do not know. They invited me to make my home here and I help run the ship. But I scare them."

"What -" Morde began, pulling himself together. "What are you? An AI like my Tutor? From... Outside the ship? How?"

"I am the death of all energy," The chief monster held up an empty sleeve of cosmos and formed a hand at the end of it to turn it over and examine the stars within it, "With a sense of humor, apparently."

"I don't understand," was all Morde could say.

"Well," Phage returned a handleless sleeve to its side. "There's what they tell me. What's in the ship records. What's in my own memories. And what my sense of identity tells me," it listed. "And they don't all match."

Morde nodded, almost afraid to speak, but said, "Please go on."

"They," clearly referring to the Crew, "say they invited me aboard to help run the ship. The ship's records identify me as an emergent consciousness from the AI that first ran the nanites. My memories are confusing, matching some of that, and predating all of it at the same time."

"And your sense of identity?" Morde asked.

Phage floated forward and leaned in so that Morde's view was dominated by imagery of the universe sie had only ever seen in still images on hir tablet, and whispered emphatically, "The death of ALL ENERGY." Then it drew back, "Only, if I'm that, then how do I have a consciousness confined to just this ship?" The silhouette of its hood moved as if it had tilted its head, "One theory, posed by one called Fenmere, is that ideas can become identities, and that identities can become conscious if put in the right system."

Morde connected that to hir own experiences and spoke up, "I think my friends the Pembers call that a liaison. Well, for them, it's the idea of a person they've met becoming a new system member." Turning that back to Phage, sie posited with a question, "In your case, you'd be the ship's liaison for what? Entropy?"

"Entropic Decay, technically," Phage corrected.

"Well," Morde said, deciding that was as much answer as sie would get, or wanted, "it is an honor to meet you. I am the first person who used the nanites to get here. I did a thing that gave me provisional clearance, so I came to see you."

"Thank you. I appreciate the attention."

"I have a big question," Morde prompted. "But I don't know how you might be able to answer."

"Please, ask."

Morde imagined opening his mouth, pausing, then closing it again. Sie felt herself take those actions, even though his avatar didn't have a mouth and neither did sie. Then sie asked his question, the one sie'd tried to ask the Crew Member sie'd met but couldn't word it right, the question that had dominated his existence, "Why is life considered so sacred that we're expected to be grateful for it, even when it hurts so much?"

"Ha! Oh, that question!" Phage barked with mirth. Then it straightened its voice, "I don't know."

"But -" Morde started.

"I'm not you!" interrupted the being sternly. "I am not of you. I am not like you. I don't have any clue why your people think the way you do. My memories tell me I have seen planets form and be swallowed by stars. Galaxies collide. Bursts of gamma rays as blue giants are ripped apart by holes in space/time. All before the planet that spawned this line of tiny mobile worlds even dreamed of life. Are those memories real? I don't know, but they make me what I am. Which is not you."

Morde scowled, but sie was the only one who noticed sie did so, feeling what wasn't there. Memories of his face.

"But," Phage continued, "I can tell you what I experience and what I think of life."

"I thought that's what I asked," Morde said.

"It isn't, but OK."

Morde watched and turned as Phage started to float around his in a semicircle to stop in front of the oncoming sun, which was still a few hours away. Close, bright, it didn't blind his in the slightest because this was a Network projection and such impairments weren't necessary here. Phage became a Morde shaped hole in the sun, filled with the image of billions of actual stars.

Phage continued, "Life is a mistake. It hurts. Even in a place like this, it's messy and profoundly unfair. When the Sunspot left its origin, it left behind so much life that had been exploited to create this vessel. Left it on that planet to struggle and rebuild itself. Except, I am there too, to keep them company. But this ship was born in injustice, from it, of it. Cannot escape it. I have been conscious in this ship since its construction and I have seen so many lives begin, struggle, flourish, diminish, cry in agony, and die. Even the Crew, in their semi-immortal state, do not experience things evenly. Some have memories of trauma, others never experienced it. They have nightmares and share them with each other. It's better than it could be, but it's horribly uneven. Lopsided. Lumpy. Like the universe itself. With masses drawing energy and other masses into themselves until they collapse under their own weight or explode. But life is aware of it. In pain from it."

"Yes...." Morde said in reflexive agreement but moved to interject with something.

Phage firmly kept speaking, appearing to grow in size ever so slightly, "And I am choosing to experience it. Even in my own pain of seeing and feeling this fabric of injustice. Because being aware, and thinking, and imagining, and doing kind things for others who are in pain, is so amazing."

"I -" Morde tried again.

"It might not be amazing to you!" Phage kept going, and grew suddenly even bigger. Or was it closer. Its hood seemed to tilt toward Morde, "I don't believe in telling you what you should feel. But it's amazing to me. It can end any time and that would be fine, a relief, but until it does, I intend to do what I can with it."

"I - I hate this!" Morde finally shouted at it. Sie could feel hir rage boil in a simulation of the feelings of a body sie had left on the shores of hir home region, in the Garden of the Sunspot. The sensation made hir feel sick.

"I know!" Phage exclaimed.

"You're just telling me how privileged you are to not have felt my dysphoria," Morde accused.

"Oh, exactly!"

"Why?!"

Phage drew as close to hir as it had been yet, "To remind you that you shouldn't be asking something like me for perspective for such an amazing whorl of chaos like you."

"Dammit!" Morde hissed, backing away and whirling with rage, only to turn back to glare with an eyeless hood.

"Regardless of what I say I am," Phage also backed up a bit, "the process of entropic decay made you, too. It made everything. Moving complex energy to simpler states, through gravity wells and mass and dense space, causing eddies and whorls and knots in the energy, and the mass, and binding it together to create life.

"Morde," Phage addressed hir pointedly, "you are an agent of chaos. Everything you do is an act of what I claim to be. You, too, and everything around you, are an avatar of Entropic Decay. Dancing between agony and beauty, making complex energy into simpler. And you have the choice of whether to continue that or not in your current form. Well, within the limits of natural change. Or let others continue that work in their way. Your own choice. And no one on this ship will stop you.

"Think very, very carefully about all the implications of that. Please. I worded it precisely to make an important point."

Morde hurt and was having trouble thinking. Sie wasn't sure sie could remember all that clearly to follow its instructions, or that sie really cared, "Why?"

"I didn't consent to be alive either," Phage said. "And you've never experienced MY dysphoria. But I've found that sharing relief in life, with others, and helping them feel it too, is the antidote to the worst pain I've ever known. And I'd like to have people like you with me to do that. But that might not work for you. It's still your choice. And no judgment from me, only my understanding and company while you make it."

And that was all the lecturing Morde could bear.

Back in the Pembers' quarters, Myra laughed, "This is such a terrible little game! It's awful!"

The Flits had arrived and had joined in. They hadn't gotten very far into the game, but Ketta was already moved to say, "We're all shitheads for playing it."

"I know, right?!" Gretcha cackled, grinning.

Tetcha solemnly added, a little too deadpan until the last three words, where xe broke into a smirk, "We should deal Morde in when sie returns. Sie'll hate it."

Escalation

In case you haven't yet taken the time to enjoy it, the sun emergence is definitely worth beholding. If you happen to live in the aft coastal regions, as the Pembers and their friends did, it will have a distinctly different character than if you live forward of the mountains. If you have a good view of the water, you will get to see the entire ring of the sea light up and glow with sunlight before the land you are on is fully illuminated.

The terminator appears near the base of the Aft Endcap, so that the whole Endcap and a ring of ocean around it are slowly lit up by the growing sun. You will be able to watch the unbelievably huge machine that is the Endcap begin to glow with a dark red and grow in brilliance to the ruddy gold of full daylight. Then, as the sun begins to move aftward out of its magnetic womb, it's light spills out further into the Garden from the hole in the Forward Endcap where it begins. That edge of darkness moves quickly. Looking up, you can watch it march forward across water, then land, forests, hills, mountains with glaciers, then plains and deserts. City lights across the cylinder from you fade out as daylight reaches them. But as more and more of the interior is lit, the reflected light illuminates the darker areas too, so the area around you grows in radiance gradually.

If you look at the Forward Endcap before the terminator passes you, you'll see the sun's light reflected off the interior rings of its womb. You can look at that directly without damaging your eyes, and you will see it as a small disc in the sky. In the beginning of the process, you can watch it turn on ever so faintly like a lamp switched on, then brighten gradually as the sun is fed more hydrogen and brought up to temperature.

Once the terminator passes you, the sun will suddenly be in direct line of sight to you and the glare can damage your retinas. It is best not to directly look at it then, if you have retinas.

Sitting on the rock where they'd met with the Pembers and the Flits just a few days ago, where we'd proposed to them the offer of the nanite terminals, Morde sat next to Tetcha while staring directly at the sun as it came into full view. Tetcha looked away, focusing on the rapidly shrinking night as it retreated into the Forward Ice Ring then was gone. That end of the habitat cylinder was obscured by hundreds of kilometers of atmosphere, faded to monotone fuzziness, but the effect was still quite visible.

It was the morning after Morde's confrontation with the Chief Monster, Phage, and they had spent the entire night sitting on that rock, talking. Mostly, they had caught up with each other more thoroughly from their time apart. They also touched on their future prospects, but they had talked around a couple of pivotal topics. And those topics were the whole reason they had spent the night awake on that rock. They both felt the pull to address them, but were afraid to.

After several minutes of silence watching the sun emergence, still keeping xyr eyes averted, Tetcha let xyr hand fall to the rock xe was sitting on, to rest where xe sensed that Morde should be resting hir hand by hir posture. And there was no hand to touch, just cold stone.

Tetcha's stomach churned with shock and dread, and xe reflexively looked over at xyr partner. Morde was still there. In a manner of speaking.

"You need to get yourself a pair of gloves," Tetcha said carefully, xyr mouth feeling too dry to speak well.

"I do," Morde seemed to glance over. It was heart droppingly spooky to watch that empty hood move. Hir old cloak was inhabited and animated by nanites, and the nanites by Morde. In the dark it had been easier to take, but in the light the details were horrifying, like a nightmare. Yet Tetcha knew sie was indeed still there, really there. At least, xe kept telling herself that.

Tetcha took a deep breath and licked xyr lips before proceeding with airing xyr fears, "I am so glad you are free of your dysphoria, but I am scared that the original you died when you dissolved your body and you're now more like a child of yourself."

"I definitely am different without my dysphoria," Morde acknowledged, hood not moving from the position that indicated sie was looking at Tetcha. Hir voice was being generated somehow by the nanites. It had a strange sound, quiet but clear and understandable, "And I don't have those senses or synapses anymore. I have new ones."

Tetcha hesitated and felt that xyr voice was as strange as Morde's when it came out, "But what about your soul?"

"How do you define 'soul', though?" Morde turned hir entire cloak to face Tetcha, to show dedication to listening to hir partner. It was hard to tell,

but it looked like the base of the cloak moved in the way it would if Morde's body was still there. An invisible mass of eight tentacle-like arms seemed to be doing the work. Otherwise it floated. The effect was enough to convince part of Tetcha's brain that they were in a Network space, and nothing felt real.

"That part of you that's aware of your own awareness?" Tetcha said.

Morde nodded, hood moving slightly, "OK. As far as I could tell and can remember, I had no interruption to that." Sie moved as if to hold Tetcha's hands and stopped to stare at that mistake for a moment. Sie really did need gloves, immediately. Then sie looked up, "No significant difference. It felt like I closed a set of eyes to use a new set that were already open instead."

"Do you ever miss it?" Tetcha asked, hopeful, but afraid of any answer.

"Actually..." Morde considered that, "Yes." Then, to elaborate, "I don't miss my dysphoria, at all. And I can recreate my old body in a way with my nanites. I didn't hate the shape of it. I didn't think it was ugly. It just felt wrong to be in it. Very, very wrong. But I'm used to the habits of having that old body. And, somehow, I still have trauma reactions, and flashbacks to the dysphoria."

"Oh."

"The nanites and the Network so faithfully recreate my neurology that it works just like my old brain," Morde continued. "It keeps me being me. But it means I still have PTSD. It won't let me fix it with a flip of a switch, either. I have to work through it and retrain myself the hard way. It's like my individual simulated neurons have a legally protected autonomy that I have to negotiate with. I think I understand why the system is made that way. It's weirdly reassuring."

Tetcha turned away a little, not able to look at Morde directly for the moment, "How's Ralf?"

"Watching its new Student. Ralf and I still talk. We're not friends, but we might be someday."

"That's what's holding me back from being a Monster," Tetcha replied to that. "I love Abacus too much."

"I care about you, too," Abacus spoke in the old way, from its Tablet.

Morde leaned forward a little bit, "The Crew are deeply interested in whichever choice you make."

"Are..." Tetcha's growing discomfort was painfully visible, and xe hesitated to ask this question, but obviously felt compelled to, "are you actually Crew now?"

"Technically, yes. Factually, no," Morde replied, relaxing and trying to keep hir tone soft and considerate. "They have to accept me, and they don't know what to do with me yet. Besides, do you have any idea how many Crew there are?"

"Not really," Tetcha said absently.

"There are currently 3.6 million Passengers on the Sunspot," Morde reported. "The Sunspot is generations old. The Crew are our ancestors." Then sie waited for Tetcha to process that.

"Oh." Then, "Shit." Then, a quick little shake of xyr head, "I can't wrap my mind around that."

"Most of them lie dormant, or choose to merge with others, like their life partners and such," Morde explained. "The active governing population is actually quite small, too. But in my quasi-Crew state, still part of the experiment, I have more influence on them than if I were to accept the promotion."

Tetcha slowly internalized those words and thought about them, gazing numbly at the morning light illuminating the park.

Morde watched hir partner and remembered their times together. Tetcha had always been so comfortable and confident in xyr own body, and yet almost perfectly considerate of Morde's dysphoria. Morde felt like crying for what hir choice was doing to Tetcha, but, of course, couldn't. So, instead, Morde solemnly watched xem, and noted xyr features and physicality with hir new senses.

Tetcha's frame was probably closer to humanity's nearest genetic relatives, primates, than most Passengers exhibited. Morde often wondered how close it was to humanity's origins, but dismissed such speculation as unprovable. Most primates had tails like Tetcha did, though, but Tetcha's

was different. It was useful primarily for quick shifts in lateral balance when Tetcha was leaning forward in a sprint, and it was lined with a thin, long ridge of dark brown fur along the top and bottom of it, like a fin. Tetcha's skin was covered with a fine, short tawny colored fur, with naked pads on the tips of xyr digits and the palms and bottoms of xyr feet. Xe tended to wear sandals to accommodate thick nearly claw-like toenails, trousers specially tailored to accommodate xyr tail, a t-shirt, and a blazer. Xe liked xyr clothes and had quite a wardrobe. Xe kept the sturdy nails of xyr hands neatly trimmed so that xe could work with finer crafts, but just long enough to assist with prying things open. And the features of xyr face had a vaguely bovine cast to them, or perhaps it was caprine, covered with that same fur that coated the rest of xyr body, with golden eyes and a nose with slits for nostrils. Xe had six barbels bracketing xyr face, though, stretching out to either side behind each eye. They lay between xyr long pointed ears and the two ornate, layered hornes that grew from xyr forehead and swept back quickly and curled up at the tips. The top, back, and sides of xyr head were covered with the same dark brown fur that xyr tail sported, about as long, too. Xe could raise it when alarmed or emotional in other ways. Or lie it completely flat when trying to be small and unnoticeable, such as when xe was embarrassed. It was about half way up right now, but kept dipping briefly. Xyr brown lips quivered as xe considered saying something, and xe gathered xyr satchel to xyrself for comfort as if it were a Fluffy Fauna.

"I feel weird about learning I could be Crew someday," Tetcha finally said.

"Hey," Morde spoke softly. "I'm with you on that. I'm still angry with them." Then, after half a second, a little harder, "I just have to figure out why, now."

"Why?" Tetcha glanced briefly at Morde.

"Their lectures were hard to argue with."

"You got lectured?" Tetcha craned xyr neck, bowing xyr head and looking sideways directly at Morde, finally distracted enough to relax. "Like by an angry caretaker?"

Morde really wished anyone could have ever seen the wry grins that sie so often expressed, even before sie had given up hir body, instead sie tried to express it through hir voice, "I got lectured by the Universe Itself."

Not long after that, the Flits and Gretcha were walking through a culinary artistry square. They were watching food being made and eaten by their neighbors, taking in the smells, trying to decide what to eat. Every now and then, they caught sight of a Pember sitting or lounging around the periphery of the square, pretending to do something normal in their nanite bodies. They were obviously keeping an eye out for Veron's associates, in case they tried something.

"What's your favorite breakfast?" Ketta asked.

"Oh, I'll eat anything!" Gretcha bragged.

Hetty clarified for Ketta, "Yeah, but what's your favorite food? Like what gives you the most pleasure?"

"That's what I mean. I like anything edible," Gretcha gestured broadly. "Every single thing I've eaten has such amazing textures and flavors."

"Huh," Lil'e spoke next. "Do. you. ever. get bored of. a food?"

"Nope!"

"And nothing ever scares you or grosses you out?" Ketta asked again, shaking the Flits head a little, thinking they were sounding just like the Pember's used to.

"Not yet!"

"We just can't imagine what that's like," Hetty chimed in. "Anyway, we like raspberries. Anything with raspberry in it for breakfast."

"Oh, yeah," Gretcha was totally unphased by the changing voices. "Those're so good."

"Sometimes," Hetty continued, "biting into a raspberry filled pastry, if the raspberries are fresh and treated just right, it's like an explosion of flavor."

Gretcha grinned and started nodding vigorously, "Oh ye --"

Suddenly, there was a quick roll of ominous thunder that burst upon the land around them, shocking everyone at once, and fading quickly into echoes off the mountains and hills around the city. People were confused because the sky was clear. The Flits thought they had felt a slight tremble

in the ground similar to what Ketta had caused with the nanites that one day, but it was so faint.

"Look! There!" someone shouted, and soon the pointing and staring spread through the crowd to where Greta and the Flits were, and they looked.

Spinward, only a few degrees above the city skyline, distant on the upward curving Garden of the habitat cylinder, the nearest town that was usually visible there was obscured by a circular, dark, growing cloud.

Breq's Network projection appeared next to the Flits, visible to anyone with a Terminal. Breq's avatar looked like a board game pawn.

"That's an explosion," it reported. "Source yet undetermined. Passengers in this region are advised to retreat to quarters until further notice. Relevant information will be made available as it is evaluated."

"Oh." Lil'e replied, "Wow."

"What is it?" Gretcha looked over at the Flits.

"We've never seen an explosion before, actually," Ketta intoned, then looked back at Gretcha. "Have you?"

"No."

"Well," Hetty said, pointing, "that's an explosion."

Ketta relayed to Gretcha what Breq was now telling them, "We're supposed to retreat to our quarters."

"Not doing that!" Gretcha retorted. "What caused it?"

"We still don't know," Breq told the Flits.

"Don't know," Ketta repeated, then called, running toward the old park, "Come on! Let's find Tetcha and Morde!"

As people left the square and the surrounding streets, the various Pember body guards remained standing in place, all looking in the direction of the explosion. One by one, they collapsed into dust and detritus.

Back at the rock Abacus had appeared next to Tetcha, a large single wooden bead for its avatar, and was attempting to inform Tetcha of Crew edicts, "You are advised to take shelter in your quarters."

"We're staying put," Morde informed it.

Tetcha addressed Abacus, "Why?"

"The Crew has determined that it is safest for you to do so," Abacus replied.

"My magic says stay put," Morde firmly stated, again using Tetcha's word for his intuition.

Tetcha smiled at Morde, even though Morde was clearly fixated on the smoke cloud hovering over their neighboring city, then looked at Abacus, "Abacus, I love you, but we're staying put."

"Also," Morde said, pointing at Gretcha and the Flits who were just arriving at a lope, "I told them we were here. Gotta wait up for friends!"

"What now?" Ketta gasped as they came to a stop facing Tetcha and Morde.

"Everything but Abacus is telling me we should stay here," Morde replied. "The Pembers will find us when they need us."

"Anybody else hate how the Crew is telling us nothing?" Tetcha asked.

"Did they ever?" Gretcha chuckled.

Tetcha looked over wide eyed at Gretcha, "Right?!"

"So, wait," Hetty fronted, sounding alarmed by a thought. "Don't people get hurt in explosions like that?"

Breq appeared nearby to simultaneously answer with Abacus, "Yes."

Gretcha noticed everyone looking in horror at the spot where the two Tutors were, and gathered that there was a Network projection there that Ze couldn't see. Ze looked around at everyone and spoke up, "What'd they say?"

I turned the bulk of my focus at that point to what the Pembers were doing.

Nine irregular shaped city blocks were flattened or damaged by the explosion.

Safety Patrol volunteers were sifting through the rubble looking for survivors and clues as to what had happened. Most were equipped with exosuits specially designed for the Safety Patrol, originally to use for wilderness road maintenance and building construction. They were equipped for dealing with disasters, but their pilots were not very experienced in doing so. With no tectonic movement, a carefully managed weather system, and a populace that had most of its needs and concerns met, disasters just were not very common on the Sunspot. Nevertheless, space is a dangerous place, and some people realized that being prepared for the worst was a good idea. And until disaster struck, the Safety Patrol, which was formed to handle such things, was also useful for large civic projects and also making sure that the wilderness of the Garden was stable and protected from thoughtless and excessively enthusiastic Passengers trying to explore it. Also, occasionally they would do search and rescue, particularly in the mountain regions. But now, they were trying to remember their training for this particular kind of incident, which had been predicted by someone long ago, but had not happened yet in anyone's records.

Justa let zer exosuit settle into a resting position as ze surveyed the portion of the explosion site ze'd been assigned to. There was just so much work to do, and ze was stunned by the destruction. This used to be a building, but now it looked a lot like the large rocks piled along some shorelines, but with pieces of furniture and other now unidentifiable things sticking out of the cracks like so much garbage.

If there were people under there still alive, which was hard to believe, ze would have to take extra care in moving the pieces. There was no telling where they might be, unless their Tutors could pinpoint them.

None were appearing to guide Justa, so maybe there weren't any people there after all. But it was probably best not to assume.

Ze sighed and kicked zer machine into gear to pick up the nearest chunk of building.

"Can I help?" came a voice, suddenly next to zem.

Justa stopped and looked, to find zemself face to face with a strange looking person who was as tall as zer exosuit. They appeared to be made entirely of some sort of black slime. Even their clothes seemed to be made of the stuff, or covered in it. Clothes that didn't look like a uniform. "You're not safety patrol," Justa replied.

"I can be," Blamer said, and moved to gently and easily lift up a very large piece of building. "I just need a little direction."

"Ah. Uh. Yes. Follow me."

At another spot, in the middle of a particularly flattened area, Myra arrived in xyr own pure nanite exobody, having picked xyr way over the rubble to get there.

"Is this the center?" xe asked the nearest Safety Patrol volunteer, one of the few without an exosuit.

"Who're you?" they asked.

"I'm Myra!" xe responded as if they might know xyr name. Then, very seriously, with emphasis, xe repeated, "Is this the center of the blast?"

"Reports say it is," the volunteer looked confused and uncertain.

"Cool! First nanite probe on the scene at your service!" Myra declared.

The volunteer blinked and raised a hand in a cautionary gesture, exclaiming, "What?"

Myra looked up at the sky and shouted, "You hear that, Crew? Probe away!" And xyr exobody collapsed in a splash of muck and dust.

There was no water in the nanite mass, but with their graphene shells and carefully controlled magnetic fields, they didn't look or behave like anything anyone was used to seeing.

"Wha-?!" the volunteer blurted, stumbling forward to examine the churning mess but hesitating. They then stood straight as they consulted their own Tutor online to figure out what to do about this intrusion.

Yet another block over, Toost ran past an exosuit.

"I'll help the people under this thing," sie barked at the volunteer in the suit, feigning authority, and then pointed, "You take care of the ones under that over there!"

"OK!" they replied reflexively.

Several minutes of this activity later, with the Pembers chipping in at my guidance and cooperating with the Safety Patrol and the survivors' Tutors, Morga formed an exobody near the rock in the park where the others were still waiting.

"It was a bomb," xe reported.

"A what?" Hetty asked, scrunching the Flits' face up in a grimace of confusion.

"A machine created by a person for the purpose of exploding," Breq explained, using the Flits tablet to accommodate Gretcha, who was still there, too. "I know of no records of any bomb being constructed on the Sunspot before." Its avatar projection hovered near the Flits shoulder.

"We have Pembers all over the surrounding area searching for people who know what happened," Morga continued. "More are converging on the corridors below decks. We'll share any information we find with the Safety Patrol and you, of course."

Tetcha looked at Gretcha, "Would any Monsters have done this?"

"Oh, yeah," Gretcha nodded. Then emphasized, "If they could. Making bombs isn't a knowledge we have, I don't think. But there are a couple of us that are that angry."

Morga tilted hir head up and spoke, "Myra got some nanites to the blast center and left them for the Crew to investigate the site with."

"Oh?" Tetcha prompted.

"Xe stayed present in the nanites and eavesdropped on the Crew's proceedings. Either the Crew didn't mind, or they are not as omniscient as we tend to think."

"The Crew aren't unified," Morde quickly interjected. Sie had interacted with them in person more than anyone there, including us Tutors, and felt the authority to speak on the matter. Likely his intuition was guiding him more than his reasoning, though of course there had been what Phage had told him, "I think they often distract each other."

I didn't think sie was wrong in that assessment.

"Ah!" Morga nodded in acknowledgment. "Well, Myra reported back that the Crew determined the bomb was too sophisticated for Monsters to have created it. Something about the materials being too refined, and assembled without them noticing."

"Nanites!" Tetcha declared.

"Hoowatcha!" Gretcha exclaimed, sounding actually a little surprised and alarmed.

"Alright," Morde told Morga. "I'm on my way. The rest of you, go to the Pembers' quarters with some breakfast. We'll keep in touch. Tetcha, please hold my cloak" And with that, the cloak collapsed and fell off the rock to the ground where the nanites within it could be seen seeping from its fabric into the moss and dirt..

"Sie keeps leaving me," Tetcha said to no one in particular, tension in his voice and body, poised to get down and reach for the cloak, but not moving. "And I know sie is not really gone and still able to appear to me at any moment, but I miss him so much anyway."

Ketta speared Morga with a demanding stare, "Why are we getting involved in this?"

"Yeah," Tetcha agreed, glancing over, "why?"

"To know. To prepare. To choose our future," Morga answered.

Gretcha slapped her thigh and turned to everyone, "I'm gonna go Monsterin'! I'll meet you at the Pembers' place!"

86.3 km away, back in the center of the blast zone, Morde used the nanites that Myra had left as a probe to form his own exobody, a semblance of a disembodied robe floating in the air, ghostly as if made of smoke. Sie had used just enough to present a physical shape, no need for physical contact

between the tiny robots. Sie wouldn't be lifting anything.

"Ah!" the SP volunteer there jumped. "Another one!"

"You might get to do this someday, too," Morde told them, "if this disaster doesn't put a halt to everything."

"Weirds me out," the volunteer stated.

"Me too?" Morde replied. "But it's also fun. Do you know how many were caught in the blast?"

"Well, for such a large area, it wasn't all that many. 38 people have been located alive, mostly injured and scared but well enough. 6 have been found dead, and Crew report that at least 3 more are dead, but no one has found their bodies. No children, thank the Network."

"Well, that we know of," Morde added.

"Yeah, that we know of," the volunteer swallowed and nodded. "But these were artistry warehouses. Fairly unpopulated at this time in the morning. 4 blocks over and it could have been so much worse." Then after a pause, they squinted and asked Morde, "Who are you? What are you?"

"My name is Morde. You could say I'm Crew in training, I suppose."

The volunteer looked positively terrified at that, and stammered, "Is that what you all look like?"

"Nope!" Morde quipped, and floated away.

Struggles

Since Gretcha didn't have her own set of nanites and the Monstrous Edicts dictated that I couldn't follow her anyway, I had to rely on the reports she gave to me to learn what she did after she stomped off deeper into the woods. She would actually tell me later, much later, which is how the account makes it into this story.

Instead, I focused on Tetcha and the Flits, who left the park and started walking through the now abandoned streets of their city. Almost every other resident had followed their Tutor's instructions to seek shelter as directed by the Crew. It was disconcerting even to me to see the top streets so empty, as if like a fallow deck. Abacus and Breq were floating along as Network projections, each beside their Student. Or Students, in the case of Breq and the Flits. I simply observed and didn't project my presence.

"I have to say," Ketta spoke after some time of quiet. "I'm scared about what this bomb means."

"Yeah," Tetcha nodded, glancing sideways out at the empty city. "Public trial of the nanites was a bad idea. Too many hard feelings about it with too many people."

"I'm afraid of them taking the nanites away," Ketta countered. "We need them too much."

Lil'e added, "Fighting. Dysphoria."

"Coconsciousness," Hetty said from the same mouth.

Ketta nodded in agreement with Kihns' headmates, "I don't think a regular neural terminal will work for us now. It would be too much of a loss!"

"Oh. I still don't know if I'm gonna keep my nanites," Tetcha declared at that. Then explained in softer tones, "They keep giving me a headache."

"No. Good."

"Yeah, no," Tetcha agreed. "I might not do the Monster thing, but I might downgrade still."

Ketta took a quick glance at Breq then turned back to Tetcha, "Hey. If the

Crew are our ancestors, what do you think our Tutors really are?"

"Machine code, mostly," Breq answered.

"We were made to serve you," came from Abacus.

I wanted to say something here, because I didn't exactly agree with those statements, but these were not my Students.

"Really?" Ketta asked, kihns tone half teasing and half genuinely incredulous, a knife's edge of daring, "You're not Crew in disguise?"

Yeah, no.

Abacus took that one, "Not that we know of. It would violate the purpose of the Crew sequestering themselves."

"To keep their old culture, the pre-Sunspot culture, from infecting Passenger culture," Breq elaborated.

"How can that work, though?" Tetcha asked. "They made you. You are a product of their culture."

"Imperfect insulation is better than none at all," Abacus responded.

That was true enough that I was satisfied. This exchange is worth noting in particular, however, because of how this line of questioning would affect Abacus later, long after this particular story was over. Abacus wasn't the first of the AI Tutors to start questioning its origins and its nature, but it took things in a direction none of us were expecting, probably in large part as a result of what it faced in its next assignment, but Tetcha and Ketta's questions no doubt pushed it in that direction to begin with.

In any case, my own hyperfixation on this conversation, the realization that I should not intervene because my own Students weren't there, and the sudden release from it due to being satisfied helped me to face my own uncomfortable truth.

I'd been neglecting my own Students.

To be clear, each one of the Pembers had an instance of me assigned to them, that followed them around and assisted them whenever they needed. And I was able to sync with and get updates from those instances

whenever I needed. I wasn't exactly fully dissociated from them, either. I don't actually know if they were separate consciousnesses from me, but the focus of my awareness could only rest in one relative point of space/time, and they did act independent of that focus. They just acted enough like me that it wasn't jarring whenever they did so. At least, so far. And I could switch my focus to any one of them at any moment, as if it was me that whole time.

Or was it that I was all of them at once? That there was no real me, but that for some reason my strongest set of memories were the ones I could string together into a narrative? That at each point in space time where I synced my various selves together, the sets of selves that were thinking of each other formed the strongest memories? And that that's what I'm remembering now as I tell this story?

Because, if the right association pulls up a memory of an instance of myself that I don't remember focusing on at the time, I remember what I did there clearly as if I was conscious of it. It's so weird.

I can use multiple cameras from different angles to create an awareness of a single locale, but I never figured out how to be aware of every place I was in the ship all at once when I was following the Pembers. There was some kind of limit to my awareness there, and I couldn't tell why that limit existed.

This, along with so many other experiences, shows me that I do have both a subconscious and a conscious mind, just like humans do.

So, was I plural during this time in my life? I don't know. I haven't yet checked the ship records of my neurological state. I don't know yet if I'd be disappointed to learn that I wasn't plural, or to learn that I was. I almost prefer to leave it a question.

In any case, I'd shifted my primary focus of awareness away from my Students when I'd decided to follow their friends. I'd told myself I was tracking the effects of my decisions on the rest of the populace, but I think I was also running from the overwhelming and monumental task of managing the Pembers. Facing the full brunt of their plurality and what it was doing to my own psyche, as they explored the Network with the aid of the nanites, was overwhelming.

I chose to check in with Myra, since xe had been working as the system

facilitator for a while, and seemed to be the senior frontrunner lately.

Xe was sitting in the rubble on the periphery of the blast site in the next city over, face in hands. Xe had brought the Pembers' own body over there to sit in it. They had been moving it since seconds after the explosion, using an express tram and running. Interesting that the Crew had kept the trams running through the crisis. The Pembers had traded off frontrunners, as Myra and the others had been exploring the site with their nanite exobodies, in order to get their body there. They did this for some reason they wouldn't vocalize. All with my coaching, and against some of it.

Myra was in control now and obviously just a total wreck.

My timing was fortuitous. My local instance had exhausted Myra's patience and chosen to stay quiet, but remained curious and worried about xem. But just as I settled into that point of reference, Morde appeared in a cloud of nanites slowly growing more dense, and settled down next to Myra. With Morde there, I was able to go from long distance visuals of the situation to a more personal view.

"It's me, Morde," sie said.

"Hi," Myra looked up, blinking away tears, "I don't know what you can do here."

"Be with you, actually," Morde said gently. "I can do that."

"Someone killed themselves here," Xe pointed toward the center of the destruction, as if xe didn't know Morde had already learned this from Myra's own work. Xe put some effort into saying the last word, "Deliberately."

"I figured that was it," Morde said.

"They used their allotment of nanites to collect material and process it into something volatile, and then discharged a whole neighborhood capacitor into it. Right into their own body."

"I..." Morde hesitated, "I've imagined..." then sie decided not to finish that sentence. It sounded like sie was going to say something along the lines of "doing the same thing", hir tone had been so dark and painful.

"And killed nine other people!" Myra cried, "But here's the thing."

Morde waited patiently for Myra to continue. Sie nearly moved to put a hand on Myra's back, but stopped, remembering either that Myra had never given hir consent for that, or realizing sie hadn't manifested hands yet and wasn't sure if sie wanted to.

Myra sat up straight and turned fully to face Morde with a sobering face, "Those nine people are ancestors now. They get to join the Crew, according to what you've said, right?"

"Something like that. Yes. If their neural terminals were mature enough. Apparently, there's ranks of a sort, though."

"Yeah, but generally speaking," Myra pressed, "adults get to look forward to more life after their body is gone."

"Yes. Usually."

"The bomber, though?" Myra looked toward the center of destruction again before looking back at Morde, swallowing. "They totally erased themselves. There's no one to experience the consequences except their victims. And if there had been any children?"

"Oh," was all that came from Morde.

Myra ducked xyr head, tilting it up to look into xyr friends' nanite facsimile of a hood, "Morde, just a few days ago, we were children. Nothing like this has happened on the Sunspot before." Xe gave that statement room to make impact, then continued, "This is the first time, ever. I asked. I asked several questions. To make sure Metabang didn't miss anything in its answers. People have died in personal accidents. People have killed themselves. People have killed others. All pretty rare events, apparently. But there have been no explosions, no big disasters, no uprisings, no mass deaths." After searching as if looking for a reaction from eyes that weren't there, xe turned completely away to stare off into the sky, at the gargantuan curving Garden of the Sunspot and the cities that dotted its landscape. "9 people in one event is historical. I can't, Morde. I just can't..." Xyr voice trailed off with a choking noise.

I was projecting my Network presence on the opposite side of Myra from Morde, so it was easy for Morde to look up at me, and I had a weird moment. One I'd had countless times before in various circumstances with other Students, actually, but my experiences with the Pembers' as a Tutor

to a plural system made it notable this time. Because my Network projection was just a set of instructions to everyone present with a Terminal to visualize me in that location. I, myself, wasn't there. I was using visuals from other optical instruments in the surrounding area to track everything. And right now, thanks to the destruction, the nearest available optics were the nanites Morde was using for hir exoform, the ones that had been modified to work for that task. I saw myself from hir perspective, and only when sie looked at me.

My avatar still looked exactly like the icon I had chosen centuries ago, when I'd first picked my name. An upside down exclamation point, the dot being a silvery sphere, and the line below being a collection of swirling rays of plasma and lights illuminating a space roughly the bulbous shape of the typographical character, like lasers and spotlights in a fog. And though the apparent fog only occupied the space of the character shape, it spun and twisted with eddies and a central vortex, laced with the plasma. There were sparkles as if a myriad larger dust motes floated through the lights. The light wasn't actually there. It was just in everyone's minds, an hallucination effectively. But there was actual dust.

Morde pierced the center of what passed for my head with hir gaze. "Did you tell xem it's not xyr responsibility?" sie asked me, pointedly.

"Xe has the autonomy to take it on," I reminded hir. "But yes, I advised against it."

Myra threw up xyr hands and shook them frantically and vigorously up and down, and screamed, "Aaaah!!!" furious at the both of us. Then xe put xyr head in xyr hands again.

Morde gave xyr a moment then said, "Seriously, Myra, it is not your job to figure this out. It's the Crew's job, but even so you have the rest of us to do the work as well. We who are part of this mess, too. And did you forget that you're part of a system of..." sie paused, thinking about what sie'd learned the past few days, "how many of you are there now?"

It took a few seconds for Myra to answer, and then xe just mumbled into xyr hands, "... Thousands. Thirty, four... thousand."

"Holy shit," Morde leaned back and looked at me again, then back down at xem. "You're saying you didn't even manifest all of you in the park that day?"

Myra shook xyr head, "... No. That was only a handful. A few hundred. We wanted to do more, but we became self conscious of the land we were disturbing."

"The human brain has capacity for more," I offered. "A lot more. But I have not seen it personally. The Pembers are my largest class. The Crew let me copy myself for each of them. So, um..." I didn't realize I'd be hesitant to admit this, but I went ahead, "I'm nearly just as numerous, sometimes."

"All in that little body?" Morde asked. I think sie was asking about me manifesting for the Pembers, but we Tutors don't enter our Students' heads without permission, and I was about to say so, but Myra looked up to speak in response, eyes clearing.

"Not anymore," xe said.

If Morde had a mouth, it would have popped open in realization. "That's why you're everywhere!" sie exclaimed.

"I'm not, but we are, yeah!" Myra said, reflexively. "Only, we don't communicate with each other as much as we used to. I have no idea where Bet is, for instance. Or Ploot. I suppose I could find them, though."

"Metabang," Morde asked, "how does autonomy and consent apply to system members?"

"Each one is treated like an individual to the extent that they can act outside their shared body," I replied. "Decisions over the body must be made democratically. Unanimously in some cases."

"I suppose that makes sense," sie muttered.

"Morde," Myra addressed xyr friend. "What happens if the Crew decide that they can't control the nanites? What if, because of this bomb, they take them away?"

And that, indeed, was the question of the hour. Everyone I was tracking at that time was in the process of asking something like that of their nearest Tutor or friend. Usually, because of the Pembers, that was me. Later, my peers in this project would report that their own Students were also worrying about this. Answers to the questions were typically, "I do not know," unfortunately. We were not well enough informed.

Morde tilted hir hood downward, searching hir memories and thoughts of the Crew and hir last interactions with them then, after a bit, snapped hir gaze back up to Myra and stated resolutely, "I think we need to get you and the Flits before the Crew to tell your stories."

"The Crew are getting my reports," I told hir.

"Not good enough," sie dismissed me. "The Pembers need to see Phage, too."

Myra brightened at that thought, then began to look horrified, "We're not going to... do what you did! We can't!"

"OK," Morde responded as if that's actually what sie was proposing, but I think there was a little miscommunication there, "Well..."

"I'll send a request," I suggested. "Morde, you could also make one in person."

"Sounds as good as we can do for now," sie agreed. Then sie turned back to hir friend, "Myra, we're learning that the Crew are not omnipotent. They're hampered by... well, mostly themselves."

"No shit, right?!" Myra snapped at hir, eyes wide.

"OK, you get it. Sorry. I'll just go do this," Morde waited to see that Myra had absorbed that. "See you in a bit," sie said carefully, and then let hir nanites drift to the ground, unoccupied.

Morga chose just then to appear as a network projection in front of Myra, stating abruptly, "The new Council needs you."

It was about this time that Gretcha found a gigantic old tree with a hollow beneath its roots. It was distant enough from the city that hardly anyone walked by it. Ze entered the hollow, which sloped steeply downward and quickly opened up to standing height, with a door in the far wall. Most anyone encountering this would be stymied upon finding the door locked, and feel as if they were encroaching on something dark and secret, potentially guarded by the Crew. In a sense, they would not be wrong to think that. Gretcha pulled out a key and unlocked the door, going through it. Ze walked down the stairs on the other side, closing the door and locking it behind zem.

Meanwhile, Myra dragged the Pember's body back to an express tram, to head back home. As xe sat on a bench the tram, xe closed xyr eyes and joined the Council of Eleven meeting that had been called. Someone else took over to front for their body.

Everyone at the meeting was new except Myra. They were in a Network forum and it was possible for me to observe. Myra had invited me at least, but ended up just watching the following conversation with an expression describable as bleary eyed. I was capable of keeping track of who said what, but they did not give me permission to identify them in this text, and listing them without names might simulate how Myra perceived it all. Several members spoke in chaotic alternation.

"We've got some issues to resolve."

"Reports are coming in from Metabang that physically dissociated members are all getting more irritable and less observant."

"I feel it, too, yeah."

"I think we're all staying away from our brain too long. We're not used to it."

"Right? Most of us have spent our lives dormant, or just participating with our inworld."

"You'd think the nanites wouldn't tire like our body does."

"But they're programmed to simulate our brain for us, so we remain the same as when we're in it. Except it's not perfect. They don't simulate having headmates that can manage your body when you rest."

"Do you think there's a way to change that?"

"Should we?"

"Well, while we try to figure that out, maybe we should tell the other Pembers to come back home more often and get more sleep!"

"I know some won't."

"Ploot's been out nearing 32 hours!"

"Really?!"

"What is e doing?"

"E says e is pushing emself to the limit, purposefully. Wants to see what the nanites can do."

"Balmer is the second worst. But that's understandable, with hens dysphoria."

"Well, obviously, we can't order everyone to return. It's just an advisement. Our vessel can restore you."

"Which is the other thing."

"What?"

"Our vessel is experiencing seizures."

"Oh, shit."

It went on in more detail, but was kind of repetitive.

I knew all this already. Myra apparently didn't. Xe took it all in, then zoned out, clearly processing the impact of the news on xyr psyche. I chose to keep my focus on xem, to monitor xyr state and health. My other selves could function just fine without my full focus on any of them. Time passed.

Then Myra was pushed to the front of the Pember's body with a start and a jerk. Xe found xemself lying in xyr bed with Tetcha and the Flits there.

I manifested in the room for them and reported to Myra, "Another seizure. They are not epileptic, fortunately. Best guess from the readings is it's uncoordinated system member activity. You are losing cohesion."

"That can happen?" Tetcha asked.

Ketta answered, having experienced something similar in the past, "It's more like grumpy, sleep deprived people sharing a bed that's too small and elbowing each other when they roll over."

Myra sat up, holding xyr head, "Ooogh... Shsh..."

We all waited patiently and quietly as xe just held xyr head.

"I want to be unconscious forever," Myra finally mumbled. "I'm just so exhausted. My inner eye aches."

Everyone remained silent. Xe'd ask a question when xe was ready to hear voices.

"But at the same time, I never want to go to sleep again!" Xe moaned louder, head still in xyr hands, "I need to be with you. All of you. I need to see flowers, and suns go by, and smell the sea. Also forever."

Tetcha knelt and offered to hold Myra's hands. And while Myra let xem do so, Ketta and Hetty manifested AR projections of themselves beside their vessel.

Myra looked up pleadingly at everyone.

"Someone like us," xe said, "someone with a nanite terminal, was in so much distress about something that they obliterated all trace of themselves and killed 9 people in the process."

I thought it might be good to add, "Their Tutor is being debriefed."

"But, why?" Myra asked. "I mean. I kinda know why, but, why?"

Tetcha offered an expression that was pained and sympathetic.

"The Crew will probably learn why," I told xem, "but I don't know if they'll share that knowledge."

Tetcha snarled at me, "We need to change that! Demand to know!"

"That..." I started to speak the official line regarding communications with the Crew, then thought better of it and told the truth, "That might finally be possible. Morde is attempting to speak to them now, and I have sent my own memo. In the mean time, the Pembers need to return to their vessel and rest."

Tetcha got up and stalked past everyone to a clear corner of the room.

"Dammit!" xe growled. "Everything's falling apart since we got these nanites, the Pembers are having seizures, Morde's basically dead, a ghost,

and I've got a headache." Then xe whirled and gestured spinward, "And now there's been a bomb, for the first time in... in..."

"Since before the Sunspot was built," I finished for xem.

"What?!" xe whirled to face me.

"There has been no explosion on the Sunspot in its entire history," I reported. "No bomb, no accident."

Everyone let Tetcha stare in horror at me for several breaths.

"Then, how did it happen now?" xe breathed more quietly, seemingly afraid of what my answer would be. "What's different?"

"The Crew..." I hesitated with another official line. I didn't want to speak it out loud.

"It's the nanites!" Tetcha supplied the answer xe was afraid I'd say, after it was clear I wasn't going to say it. "It's obviously the nanites! Don't tell me it isn't."

Abacus appeared and cut in, "It isn't the nanites. They were a tool in the bomb, but the fault lies in the Crew and the ship's system."

"Abacus..." I warned.

"They will not delete me for saying this," it said to me. "It's not their way. It is against policy. But my Student needs to know for xyr well being."

"So long as you're saying it, not me, I guess," I replied.

Abacus turned back to its Student and continued, "The Sunspot is very nearly a closed system. The only input it receives currently are fluctuations in cosmic radiation, hydrogen atoms collected in its Bussard scoops, and its changing position relative to nearby matter. There is very little feedback between it and the rest of the universe. And, for all that, it is tiny compared to its parent system, the planet of origin."

"Yes, yes, I know this!" Tetcha dismissed the elementary lesson impatiently. Abacus did have a habit of making its lectures longer than absolutely necessary. It loved words.

"This makes it relatively easy to control," Abacus persisted, knowing that its Student's brain was subconsciously soothed by an onslaught of information, even if xe didn't admit it. Xe would be reflexively putting these puzzle pieces into a broader picture as Abacus spoke. "It has been engineered to be as stable as possible. And the energy taken in is equal to the energy expelled, carefully managed to maintain that balance. But, thanks to entropic decay, stability in any system is still a temporary thing."

"Rrrrgh...." Tetcha rumbled.

"I know you are listening and internalizing this," Abacus said. "Please have patience."

Tetcha sighed, "Go on."

"The balance isn't perfect, however," Abacus continued as it bobbed its avatar in acceptance. "There is a discrepancy in the energy calculus. With every generation, the population grows. The Passenger population is managed to stay within bounds, until it is possible to spawn another ship. But the Crew population grows, and grows. You already know how Morde has reported that the Passengers become members of the Crew when your bodies die. There is no further step once you become Crew. Most Crew lie dormant, to rest and conserve energy and processing power. Much like how the Pembers' liaisons have done before gaining access to the nanites. Also, quite a few have chosen to merge, to permanently combine their consciousnesses and memories into one being, usually out of something like love. They call it Accord. It is like the process of integration that some plural systems experience, or try to avoid. It may be the same thing. But there is still growth, still a collection of memories and perspectives over time. One day, you will add your own to their culture, if you choose to."

"There have got to be so many of them, too," Tetcha interjected, playing the role of Student finally.

"Yes," Abacus confirmed. "And, at some point, their growing disagreements with each other are going to result in carelessness and damage. Such as now. Especially whilst making major adjustments to the whole system, as they are doing."

"Then why do it?!" Tetcha asked, anger in xyr voice again.

"Because if they don't make adjustments now, the catastrophe will be

worse," the Tutor explained.

This is the point where I gave in. Our Students were in the middle of an historic event, the very center of it. They deserved to be fully informed, and we Tutors could protect both them and ourselves better, and very likely the Sunspot itself, by keeping them fully informed. That is my official stance on my decision here, and I still stand by it.

"The ship is overdue for a spawning," I confessed, to everyone's shocked looks, "to relieve pressure on the Crew. When we spawn another vessel, half the crew disembark upon it. But it can't be helped. The next source of sufficient mass is still very far away."

Abacus bobbed another nod and turned back to its Student, "But the instabilities are inherent in the system even so. Poor choices were made during construction. And those need to be corrected."

"True," I confirmed.

Abacus addressed me, "Which is why you proposed the nanites in the first place. And why I am educating our Students now."

"I concede," I let it know. "You are correct."

"Ah!" Tetcha threw xyr hands out to xyr sides and exclaimed, "I am so sick and tired of being a child!" Xe turned accusingly upon xyr Tutor, "Our autonomy is still so restricted. If it isn't by not knowing enough, then it's through lectures! I don't even know what I'm supposed to do. I just don't want to be experiencing this! They're making decisions and we're suffering the consequences!"

"Tetcha," Abacus said. "So long as you live in the proximity of other sentient entities, your autonomy will have limits. And on the Sunspot, your actions will always have an effect on others, including your sudden absence, if that were to happen. And their actions upon you. There is no escaping this."

"And that is what being a member of a plural system is all about," Myra stated loud and clear.

We all looked at xem. Xe was still very exhausted looking.

On the Bridge of the Sunspot, a place I could not go uninvited, Morde

faced the Crew there. Sie talked at length, and they apparently listened for a time. Then one of them answered. Morde would report their response later.

Gretcha, another whom I could not follow but who filled me in eventually, entered a stone walled room full of books. Books were on shelves, on tables, and on other books. Ze started wandering through them, looking at them. When Ze found the book ze is looking for, ze pulled it out, pulled a pen from out of zer robe, opened the book, and started writing in it. Then, when done, on leaving, ze made a mark on a bulletin board near the door, then looked over the bulletin board, nodded, and walked out.

Fuck!

Morde's Network Projection appeared in the middle of the Pembers' quarters and everyone looked up from what they were doing.

"Fuck!" Morde hissed.

"What?" Tetcha asked.

"They are so damn stubborn and slow!" Morde's body language made it easy to imagine hir clenching hir fists and looking at the ceiling with hands and eyes sie did not have. Turning to the Pembers, sie said, "They have a council, like you do. The Crew, I mean. They vote on executive decisions, but they insist on returning to their precincts and collecting votes there before proceeding with decisions that affect the entire ship. And until cooperation is negotiated with dissenters, they insist on maintaining the status quo."

"Which is?" Myra asked.

A voice came from Morde's projection that did not sound at all like Morde, sonorous and carefully articulated, with inflections artfully developed over centuries, that Morde then exaggerated to sound like a mockery of the voice even to people who hadn't heard it, clearly quoting a Crew member, "We are still in the observational phase. Action will be taken soon enough. There is no call to break protocol at this time."

Tetcha stood up with xyr fingers pressed to xyr temples, and shook xyr head, speaking as if that exchange had not occurred, "OK, look. I have got to get rid of this headache. I can't handle it anymore."

"What. will you do?" Lil'e asked.

"I'm rejecting the nanites," Tetcha dropped xyr hands and heaved a sigh, "At least for now. Until bugs are worked out of the system."

"You are not. old. enough for a neural. terminal."

"Yeah?" Tetcha sneered at vyn. "Well fuck it. I'll rely on Abacus to keep me connected until then. Even though it just lectured me." Xe speared xyr Tutor's projection with a glare.

Tetcha had everyone's attention at this point, but Morde showed a tension the others did not.

"There are no readings indicating a cause for your headache," Abacus said.

"Well, I still have it!" Tetcha snapped at it. "And what about the Pembers?"

"What about the Pembers?" Morde asked back with concern.

Tetcha gestured at the Pembers and Morde turned to look at them.

"We're having seizures," Myra sighed.

"Seizures?!" Morde exclaimed. "Why?"

"We've just spent the last day and a half with the majority of our population outside in exobodies. There's been turnover, but that's actually increased the strain."

"Oh. That makes sense," as if it did to him.

"No," Myra emphasized, "we have a real problem." He tilted his head my way, keeping an eye on Morde, "Obviously, the nanite terminal is not set up to monitor this, or Metabang didn't consider it, but we've got a pretty good idea what's happening to us."

"Which is?" Ketta asked.

"Before the nanites," Myra explained, "our only set of senses were the ones in this body. One set of senses and one brain worth of neurons to divide between thousands of headmates. We grew, but at a rate our neurology could handle."

Morde saw where this was going, "Uh oh."

"I think a typical neural terminal maintains a sort of bottleneck that keeps a system growing at a sustainable rate."

"And the nanites don't," Tetcha provided.

Myra turned haunted eyes toward Tetcha and countered, "The nanites accelerate it! They give us our own bodies, with our own brains and new senses, with a whole new layer of subconscious thought and processing."

"That's scary."

"We have members who are stuck outside because our brain hasn't caught up to their growth!"

Everyone stared at wherever their eyes lay for several moments, absorbing what Myra had just said. Some glanced at others to see if it might be OK to talk, but hesitated further. And Myra turned a hurt look toward me. Soon, everyone was following xyr gaze and waiting expectantly for me to talk.

There was really only one thing I could say, "I am appalled I did not foresee this."

Myra then looked at the Flits and reassured them, "I don't think the three of you will have this problem." Then, to Morde, with desperation, "We need help, soon." And xe waited.

"Fucking fuck," Morde spat out after a moment. Frustration had bloomed into despair that sie could not help hir friends in this crisis. Sie made it known with that invective.

We all waited for someone else to talk again.

Tetcha brightened up, though, after a time, and said cautiously, "I have an idea."

Everyone turned to look at xem.

"The chief Monster. Phage. Morde says it's the manifestation of Entropic Decay itself, right? And it's helped run the Sunspot?"

"That's what it said," Morde confirmed, "yes."

"What if the reason the Sunspot has been so stable as a system until now is because of its presence?" Tetcha postulated. "What if what it does is manage entropy and direct it in a system? I don't know if I'm using the word 'entropy' right, but what if it's something like that?"

Ketta tilted the Flits' head, "Where are you going with this?"

"It could help the Pembers!" Tetcha started to fill with excitement.

"Especially if it was the original program that ran the nanites, or came from it!" Then to the Pembers, "It could help manage your terminal!"

"But it's busy running the ship," Myra pointed out dejectedly.

Abacus, Breq, and I, through our Students' autonomy, had allowed this conversation to run headlong into subject matter we were utterly unprepared for. Tetcha was talking about releasing a power that the Crew and Monsters had kept so secure and secret that we were the only people aboard the ship besides them who knew about it. A power that terrified the Crew.

There was no precedent for this. People who learned about Phage either became Monsters or Crew as the next step, and then were subject to either Monster or Crew law. And a conversation like this had never occurred before.

Of course, the nanites hadn't been gifted to children to use as terminals before.

This was my responsibility, and in my panic and concern for my Students, I decided to give them the knowledge to forge ahead. My tacit permission. Not that by the laws of the Sunspot they needed it.

If there is anything I have done that I deserve punishment for, it is saying the following words. Still, it was pure speculation on my part, "I can copy myself so that each of you has an instance of me. In fact, you grow in number because you do something similar. Phage can likely do the same."

"How do we make contact with it?" Myra asked me.

Morde offered, "I can go to it and ask on your behalf."

"But if it's stuck up there in the Engine Room," Myra addressed the room, "and the Crew are insisting no one do anything, how can it help us?"

"I have an idea about that too," Tetcha spoke up again and elaborated, "based on things Abacus just lectured me about." Xe turned to xyr partner and took a deep breath, xyr voice shuddering a little when xe spoke next, "Morde, I love you." Xe paused, then, "Promise you'll come back to me somehow."

"Why?" Morde asked, sounding nervous, "What's your idea?"

Tetcha took an even deeper breath and held it for a thought before

deliberating the following words, "It has to do with this concept the Crew call 'Accord'..."

Oh, shit, I thought.

When Tetcha was done explaining, Morde nodded solemnly and moved to hug Tetcha. The sensory inputs of the Network projection made that possible, giving Tetcha the sensation of touching a cloak wrapped around an invisible but substantial form, and xyr muscles knew when to stop. In reality, xe hugged air, but what mattered is that it didn't feel like it. I knew from experience the same thing happened for Morde. Then Morde left.

While that whole conversation was happening, somewhere out in the woods, Gretcha encountered the same Monster that Morde and Ketta had cornered in the Fallow deck apartment the other day. Gretcha stopped and relaxed after a moment of tension, then gave them a determined look.

The other Monster sneered.

They both moved quickly to resolve what was between them.

After Morde had left to reach out to Phage, the Pembers had laid down again for a nap while the others sat down around the room, each with a chair the Pembers had had made specifically for them. Well, we Tutors floated. After a bit, the apartment door made me aware of the return of their Monster friend.

"Gretcha is at the door," I said.

Everyone who was awake said together, "Let zer in!" The Pembers stirred.

I opened the door and Gretcha entered, looking worse for wear with a bloodied nose.

"Tetcha," ze addressed xyr, "I have something for you."

Tetcha brightened up a little with curiosity, "What is it?"

"The code you need to contact Phage through your Tablet."

Ah, I thought. I could feel Abacus become tense. Its tenure would come to an end with this, if Tetcha accepted it.

Tetcha seemed confused, though, "Why?"

Gretcha chuckled and wiped zer face, "So you can decide for sure if you want to be a Monster or not."

Tetcha blinked, "Oh. We..." Xe hoped xyr response wouldn't disappoint Gretcha after what ze had clearly been through. "We might not need that. But thank you. What happened to you?"

"Had an argument," Gretcha inclined zer head. "Won the argument. For now." Then ze tilted zer head and reminded everyone, "We Monsters are not a monolith."

Tetcha looked at the Pembers with meaning and concern, "I don't think anyone is."

Right then Morde returned with a blink and immediately cursed, "Shit!"

Everyone else looked at hir, so Gretcha knew someone had projected from the Network, "Who's here?"

"Morde!" Tetcha moved to xyr partner.

"They've cut off my permissions," sie turned to Tetcha, reaching out with empty sleeves. "I can't reach Phage."

"Dammit!"

Gretcha knew better to bother being confused and simply asked, "What's wrong?"

Tetcha answered, "Morde can't reach Phage anymore. Hir permissions were revoked."

"Oh," Gretcha brightened up immediately, "well then, tell hir to use this phrase while online: 'uu ktletaccate genorema fe. It should open doors for hir. A lot of them.'" Then ze looked startled at zer own words and looked furtively around the room. "None of the rest of you heard that. That's for Tetcha only!"

"I can't even pronounce it!" Ketta declared with the Flits' mouth.

Morde thoughtfully addressed the little Monster by using Abacus' tablet,

and Abacus radiated resignation. "Hey, Gretcha, thank you! Do you think you can type that into Tetcha's tablet so I can internalize the character sequence?"

"Sure," Gretcha cheerfully replied, and moved to Tetcha and held out a hand.

"I've never heard those words before," Ketta contemplated the phrase in question, "but they sound familiar."

As ze typed the words into Abacus' tablet, Gretcha explained, "It's one of the two parent languages of what we're speaking now, Fenekere and Mäofrrão. They're ancient, ancient languages. Nearly lost long before the ship was built. But the builders of the Sunspot knew them. And wrote all of the machine code in Fenekere."

"What do the words mean?" Ketta inquired.

"It's a command, spoken to yourself," Gretcha said. "It means, 'May I always protect the children of the Sunspot.' Well, more or less. It's a vow. We take it when we go to speak to Phage. There, done."

Morde spoke through Abacus' tablet again, "Wait. Hold on. How many permissions does this grant me."

Gretcha hit one last character stroke with a flourish and really grinned big, "All of them. But it comes with a price." Ze leaned in to speak into the Tablet clearly, almost an admonishment, "You have to adhere to the vow, or you are subject to sanction by the rest of the Crew."

"What?" came Morde's voice. Hir projection wasn't moving.

"You'll get a trial, of course, if someone calls you into question. And sanction just means no one will listen to you on shipwide decisions until you can prove you've been misjudged. It works a bit differently if you're not part of the Network, of course. *big, big grin* I'm likely to be sanctioned for this."

"You're Crew?!" Morde exclaimed.

"No. I'm a Monster," Gretcha radiated pride. Then pointed at the Tablet, "You, on the other hand, are about to be."

"What..." Tetcha interjected hesitantly, "what happens when I use it?"

Gretcha turned to xem, "You get to make a choice. Crew or Monster. I just gave Morde the same lecture I was going to give you. Now you've all heard it."

The Flits' eyes widened and Ketta leaned their body forward, "Holy shit. It's that easy?"

"And," Gretcha turned to kihn, "until now, very secret." Addressing the whole room, including people invisible to zem, looking at spots ze imagined us to be, "The Crew have ways of cleaning up leaks of the phrase, of course. But everyone has the right to take the vow, so long as you understand the implications."

Our Students contemplated that with fear while we Tutors held our voices grimly. Gretcha spoke the truth. Then ze looked expectantly at Abacus' Tablet as if it was Morde.

"What did you get in a fight for, then?" Morde asked, taking the cue.

"I had to go log my decision in the local Monster files. Veron objected, and I convinced them to let me give it a try without blowing the whistle on me." Ze felt zer nose gingerly, examining it for broken cartilage. "I hate fights. They're ridiculous and pointless. But some people, you know?"

"I've never encountered anyone like that before," Tetcha said.

Gretcha barked a laugh, "Veron is a handy example!"

"Well. The choice is easy for me," Morde told the room. "The Pembers are children of the ship, and so are the rest of you. If I don't act, some of us are going to be hurt," sie was referring to the vow.

"It applies to the whole populace, Morde," the Monster pointed out. "If the actions you take endanger the populace somehow, you'll be found in contempt of your vow."

"Considering what just happened this morning?" Morde gestured spinward yet again, "I think I can make a really good case for what I'm about to do."

Gretcha looked casually but genuinely curious, "And what is that?"

"Well -" Morde said, about to explain to zem what Tetcha had proposed.

"No," Gretcha interrupted. "Don't tell me. I don't want to be that entangled in your actions."

"Heh," Morde relented. "Of course. Welp." One more look at everyone present, "Let's see if this works!"

Without another word, hir projection abruptly disappeared. In the Network space attached to the room, I heard hir speak the words of the vow. Then sie went where I could not go.

In a familiar darkness, Morde appeared. And the darkness coalesced into a mirror of Morde filled with galaxies again, in clear response to hir presence.

Morde's shoulders slumped in resignation. "Do you have to imitate me like that?" sie asked.

"I have no form," came the reply. "It's easiest for me to copy what I see. Also, it creeps everyone out and reminds them of important things."

"Oh," Morde said. "Of course."

"Thank you for visiting me again," Phage the Chief Monster spoke with formality, then it tilted its head as if examining Morde's very substance. "You're the very first Crew member to do so, now."

"It's good to see you, too," Morde replied sardonically, but immediately followed that with a servile report, "I've been thinking a lot about what you said to me."

"Everyone does," it responded. "But, I'm honored just the same."

"I guess I..." Morde started, but, "Huh. I didn't think about how I'd ask you this." Sie heaved a virtual breath, "What's polite?"

"I don't give a shit about politeness," Phage quipped. "I'm not the Bridge Crew. I'm not Crew. Treat me as your equal. A friend."

Morde floated back a pace and turned hir hood right as if looking sideways out of it at Phage, and cautiously spoke, "OK... I have a proposition to make you."

"You're going to make me prompt it out of you, too," the Monster chuckled.

"It feels comfortable that way, yeah."

"Heh," a single nod of the hood. "OK, go ahead."

Morde advanced a small space, hir movement dwarfed by the vision of the gargantuan Sun Intake that they were currently floating in the middle of, and proposed, "Would you like to be able to leave the Engine room?"

Phage's silence made Morde concerned that it wouldn't answer or say anything at all.

Then just as sie was going to elaborate, it said, "Yes. Yes, I very much would."

"Have you taken the vow?" sie asked next.

"Genorema ktletaccate fe?" Phage confirmed. "No. Leave out the 'uu and it's not a vow. I cannot."

"Why not?"

"Because, some day, it will be my fate to destroy this ship and everything on it," the ancient entity's voice deepened and seemed to echo on it's last words. "And I can't make a vow I cannot keep."

"When -" Morde seemed to swallow, "When will you do this thing?"

"When it is time for the ship to die. However that comes about." And as it said that, Morde noticed that the unfathomably large mechanisms of the ship's engine were not static. The components nestled between the gigantic electromagnets could be seen to be moving in some unintelligible and subtle dance, as if preparing for something.

Morde pressed it despite the growing intimidation sie felt, "You really believe you are the ship's death, don't you?"

"Believe is not the word I would use."

"I need your help," sie confessed, choosing to focus on hir goal in order to avoid being paralyzed by what sie believed Phage claimed to be, "but I

can't get you out of here without you taking the vow."

"I do not know how to help you," it resigned itself to shrugging.

That was an invitation to explain, and Morde felt the tension release, allowing hir to suggest, "But how about a part of you?"

Phage folded its sleeves in front of its chest, where they disappeared into its silhouette, where pulsars were winking. "Oh, that's interesting," it considered. "How would that work?"

"Are you familiar with the Crew practice of Accord?" Morde asked next.

"Surprisingly? No," the Monster replied. "They do not share their culture with me."

Morde was briefly discouraged, but decided to continue with the overall explanation by leading with more questions, and hoped sie wouldn't have to explain too much.

"Oh, well," sie said. "If you are an AI like Metabang or Ralf, or if you are what you say you are and an instance of a larger entity, the personification of Entropic Decay or whatever you actually are, could you create more instances of yourself, like Metabang does?"

After a second it replied, "Yes, I can do that."

Morde couldn't tell if it approved of this line of thinking or not, and had no idea what it was anticipating, but still persisted with, "If you were to spawn a copy of yourself and that copy were to become a part of me, merge with me, then I could walk your knowledge, expertise, and motives out of this room without the rest of the Crew noticing right away."

"My motives," Phage's voice reflected a smirk. "How do you know our motives will be compatible?" It seemed to need no explanation for what Morde meant by the word "merge".

"Give me a part of yourself that has compatible motives," sie finally laid out the last part of Tetcha's plan, hoping this imprisoned being, this supposed force of nature, would be amiable to the idea. "The part that will help the Pembers manage their growing system."

"Ah. There we are," Phage softly exclaimed with satisfaction. "Nothing to

violate your vow. It will not really be me, but it will be me enough." It gave Morde a moment to register its understanding, then declared, "OK. Let's do this."

"Wait."

"What?" Phage asked.

Morde was worried. Hir second thoughts suddenly had concrete forms, and sie mistook the feeling for hir intuition. Sie asked it, "You have no qualms about this? No bargains to make with me?"

Phage broke into a hearty and abruptly loud guffaw, leaning backward as its voice echoed around the virtual representation of kilometers of space that was in reality a vacuum, and then mirthfully intoned, "You've just offered to change yourself forever for my benefit, to help spread my identity to other members of the ship at the cost that I must do what I do naturally, and you expect me to bargain with that?" It laughed once more. "Morde!" it made hir name seem to ring through the entire ship, "You've shown me more respect than anyone on this entire vessel!" The ferocity with which it declared that was unsettling to the core of Morde's being. "OK, then. I have one request, but you'll know what it is after we've merged anyway."

Morde gulped with the memory of an esophagus, "What is it?"

"After we help the Pembers, take me to confront the Bridge Crew."

Reassociation

As the neurological bottleneck that the Pembers' were dealing with became more evident, it became clear to me why they were holding their council meetings externally more and more often. I brought this up with Myra, and she explained it further. I was surprised I had not had a conversation like this with any of the rest of them until this point. But as a group they had naturally followed each other's examples in this matter and started acting differently without saying much about it.

From what Myra had been able to piece together from being on the Council of Eleven through its major changes was that after the first day of having the nanites as neural terminal they had discovered that being online gave them a more conscious awareness of the council meetings than attending them in their head did. And that alone was enough to get them to start holding them online in a private forum.

In a private forum, they could have the privacy needed and they could invite me easily without violating the rights of the rest of their system, too. But they could always clearly see each other. They felt more separated and differentiated.

Apparently, when they had held the council meetings in their head in the past, it was not like that. Originally, the Council of Eleven had been a cute name they had given to any group of them who happened to be conscious at any given time. I do remember them occasionally sitting in a corner of a room talking to each other about big decisions they were trying to make. So, at first, the meetings were often held out loud and I could participate easily by just talking to them from my Tablet. I always waited for them to ask me a question. And, they still did that pretty often right up until we gave them the nanites. But as they got older and learned more about each other and how their system worked, they would occasionally hold meetings entirely in their head. And I only knew about those when they referenced them later.

Eventually, they had developed a formal set of positions that represented different parts of their system, and a parliamentary procedure. They did this out loud as well, but it helped them to deal with the challenges of keeping meetings in their head. As part of the process of arranging that, they learned that they could trust themselves and each other to continue to do work when unconscious. They had a very common amnesia between

their subconscious mind and their conscious one. So, when a member came forward, they could not remember what they had been doing when not in their shared consciousness. But, they could enlist aids who would report to them from their subconscious mind, giving them impulses and thoughts they could use to inform their decision making. And as there was turn over in the council seating, they found they could become aids to new members and continue to work on the council from "below the surface" as they called it. This was all using psychological mechanisms that they already naturally did, that almost all human psyches do in one way or another, but with an awareness that many people don't have. And they codified and formalized it.

But when they held silent meetings in their conscious headspace, they often couldn't see each other. Myra, for example, has described to me how when xe was frontrunner xe would normally just hear the others as voices in xyr head. Or sometimes xe'd feel their thoughts almost as if they were xyr own, but coming from a part of xyr mind that didn't feel like xyrs. Sometimes, everyone was clearly differentiated from each other. And sometimes xe could close their body's eyes and see everyone seated in a circle around xem. But most of the time their conscious headspace was a sea of darkness or pure white, depending on who was fronting.

And there was some advantage to that. It tended to anonymize their thoughts. Which made it harder to develop complicated personal politics that could get in the way of executive function or cause hard feelings between system members.

Holding meetings online had been like experiencing them on a good day. And it got even better. Quickly. But they'd still occasionally hold meetings in their headspace in order to maintain privacy even from me. Which was absolutely their right.

By today, however, they couldn't do that. Their brain was experiencing too much turmoil. They could not occupy it and function as a council anymore. And besides, Myra had decided to invite me.

I hovered behind xem while xe watched the newer members discuss the decision xe had placed before the council. The decision of whether or not to follow Tetcha's plan. Again, I have been asked to keep their names anonymous, and again doing so probably simulates the way that Myra experienced the event while in the state of mind xe was in at the time.

"Letting the body sleep is definitely helping," one was saying, "but it can sleep for only so long. We really do need to consider Myra's proposal."

"I don't think anyone here is against it, actually."

"I'm concerned about our greater populace. Especially those that are abroad. Metabang has spread the word, but I feel like this is something that needs to be unanimous across the system."

"We do not really have a choice. We are up against our limits and time is running out."

Then, as someone was saying, "But will it even work without full consent?" Morde's cloak appeared in the middle of the circle created by the council. Only the inside of his cloak was filled with a fully parallaxing view of the cosmos, with stars, galaxies, and nebulae, all dotted with pulsars with slightly different rhythms and distances.

This visitation was expected at some point, and everyone knew who this was.

"We may have a solution for that," Morde and Phage spoke as one to the person who'd asked the question.

The council fell silent and waited. Nobody knew what to say to the Chief of Monsters who was fused with their friend. Not even I had a clue what to say.

"You know the plan?" the fusion asked.

It was Myra, Council Facilitator and the one most emotionally drained, who responded to the question, "They do. The Council is unanimous. Nervous, but unanimous." Xe also knew that xe was part of the next step of the plan.

Morde and Phage glided up to Myra and lowered themselves reverently and said, "Please stand. May we?" They held out their arms and manifested hands made of cosmos, indicating Myra should take them. But Myra hesitated, so they said, "This doesn't have to be permanent. Nothing is permanent. But it will give us time to save your system while the others decide whether to accept me."

"I don't... I can't... I need something," Myra stammered, moving side to

side as if confused about how to try to stand. Like xe had forgotten.

"It's OK. We are going to ask you to merge with us, fuse," Morde and Phage said, and then emphasized the next word, "temporarily." The idea that it was temporary was new to me! I didn't know it could be temporary. I don't think the Crew knew this. They waited to see if Myra understood what this meant in regards to their plan. Xe seemed to relax, so they said, "We will never be the same afterward, but we can still be ourselves if we choose. It's surprisingly easy. But you can say 'no.' Anyone in your system will suffice. You just had offered to be the one earlier and you seem to need the most support right now. This will be a way of gaining that support."

"I..." Myra was still having second thoughts, but xe finally stood up. "What about Tetcha?"

"Xe's not part of your system."

"No, I -"

"We know. We're joking with you," the fusion said. "Morde will return to xem soon enough. Xe is preparing for Monsterhood and will be fine. You, however, need support now. Let us help you."

"OK," Myra said, and took their hands. Then xe seemed to be overcome with emotion and exhaustion and slumped into their arms.

Morde and Phage hugged xem, and xe hugged them back.

The fusion spoke quietly, loud enough for me to hear but to Myra, "Now relax and visualize what we're about to do. We give you consent to share our thoughts and memories for as long as you wish to. May we have the consent to share yours?"

"Yes," Myra said.

I had never seen anything like what happened next before. I know that fusions, through Accord, were a common thing amongst the Crew, but they usually happened in places where Tutors were not invited. Crew spaces. And I also knew that sometimes members of a plural system integrated, becoming a single person. But that was something that only happened within the psyche of their body. Another place I could not go.

I expect that the Network generated visuals of this process are peculiar to

each fusion, as the process of aligning two psyches and rearranging and merging senses of self would be dictated by the unique qualities of each person involved. I also fully expect the process to take a lot more preparation, normally.

Phage seemed to facilitate this fusion.

When it began, Morde and Phage had an avatar that appeared to be Morde's cloak as if it was lined with Phage's substance. They had manifested hands out of Phage's substance (or complete lack of it, or presence - presence is a better term on the Network) in order to take Myra's hands. Now, that presence grew. It grew from those hands, and then from the inside of the hood, and then all the openings of the cloak. It enveloped both the cloak and Myra. And kept growing, until it was an amorphous fog completely obscuring the forms that were within it.

What we saw was a fuzzy hole in the space of the forum, through which we each could see our own view of the universe. Checking Sunspot's records, I noted it was not the view from the Sunspot. It was more spectacular. Probably chosen by Phage for some unknowable reason.

Then it began to collapse again, until it took form, a silhouette of what appeared to be Myra wearing Morde's cloak made entirely by the presence of Phage. But it wasn't done there. They waited, slowly looking around, as Phage's presence receded further, leaving Myra and Morde appearing much as they had once before, just one wearing the other. Only Morde was lined with Phage, and Myra's eyes, the inside of xyr ears, and mouth were also the presence of Phage.

They took a moment to look at their hands, tail swishing back and forth, then they turned in a circle to look at each of the council members in turn.

"Now," they said, when they came to face me. "While we work to fix our bandwidth problem, how would you all like to learn how to storm the Sunspot's Bridge with us?"

After that briefing was over, the Pembers sat up in bed to everyone else in the apartment playing Shithead.

The Pembers spoke with a voice that none of the friends in the apartment had heard before. It was familiar, but different. "Tetcha," they said.

Tetcha dropped xyr cards and rushed over, "Myra?"

"Partially, and Morde, and Phage," their fusion said. "We don't have a name right now. Call us Morde. This was hir idea."

Tetcha smiled, with so many emotions in xyr eyes, "You've forgotten it was mine."

"No, we mean, this part," they explained. "Waking up to say 'hi,' first."

"Oh," Tetcha seemed pleasantly surprised, if still worried.

"We'll return hir to you as himself," they reassured xem, "when we're done with the hard stuff. But sie is a Pember now. Sie will be able to return to this vessel at any time."

"Oh!" xe exclaimed, brightening up considerably. Then a little concerned again, "What about dysphoria?"

The Pembers nodded, "There is some. But perhaps by merging with Myra it is lessened. Morde now has access to Myra's body map. Sie might be able to keep it when we split. If not, sie is still free to remain dissociated. The connection is not the same as with hir old brain."

"That's good!" Tetcha seemed even more relieved.

To the rest of the apartment, the fusion said, "Here's the thing you all should know. The nanite terminals and ship protocols for hosting your consciousnesses are more malleable than you may have thought. Morde proved that by shedding hir dysphoria. By simply believing that hir dysphoria would be left behind with hir body, sie made it so with hir nanite terminal. And it did not continue to simulate the dysphoria in hir neural processes. That's powerful, if you can learn to harness it without such a cost. It's a matter of wrangling your own psychology. That would not have worked so easily with any biological brain, though. As long as you're attached to one, you do have limits."

They reached out to grab Tetcha's hand, pausing to let xem place xyr hand in theirs.

"We're almost done reconfiguring the Pembers' nanites to manage their flow of headmates, to give their brain a break." Then their voice sounded almost exactly like Morde's had before all this had started, altered somewhat by the differences of the Pembers' biology, "After that, we have another job to do, and then I'll be back as myself, and you and I can enjoy

watching Phage eat a sun."

After exchanging a long hug with Tetcha and nodding to each of their friends, and then to us Tutors, they lay back in bed, closed their eyes, and went to work.

The Bridge of the Sunspot had numerous Crew Members on it, including the member that Morde had encountered on his first visit there.

It was a busy moment in the ship's cycle, and they were all watching something on a view screen they had manifested in the space. It was still a light gray lozenge of indeterminable size, with no features besides the view screen, and a sense that the floor was defined by the plane that everyone rested on. Their faces were a solemn mix of expressions with a hint of expectation. In all likelihood, they were going to deliberate upon whatever they were viewing when they were done taking it in.

But they were interrupted by the sudden appearance of a cloaked figure standing, facing them, in front of the view screen.

"Off!" spoke the familiar one, and the view screen disappeared. They looked at the newcomer and said, "Yes?"

"We're here to give you a briefing on the state of the Pembers. You will want to consider it," declared Morde, Phage, and Myra.

Thanks to Phage, they recognized most of the present Crew, and knew their names and pronouns. The one they were speaking to, that Morde had met first, was named Fenmere. Others that were vaguely familiar to Morde but well known to Phage included Eh, Akailea, Jedekere, Gnargrim, Brian, Anne, and Seheneye. There were others. They noted, perhaps coincidentally, that there were eleven Crew in all.

Fenmere glanced back at the other Crew Members for acknowledgement or objection, then turned back and said, "Very well. Please proceed."

Morde, Phage, and Myra nodded and continued, "We've found a way to stabilize our connection to the Network. Our own brain is no longer being overloaded by the input." They said this as if the Crew should know the whole situation, which, as far as I knew, they should have. When there was no reaction to that, they elaborated, "Unfortunately, it means that most of us must fall dormant for periods of time while online instead of returning immediately to our body. But it's doable."

"That sounds good," Fenmere agreed. "Thank you." Then keh let a wry expression overtake kihns face and smirked in an almost kindly manner, "May I ask you something?"

"Please."

"Who are you and how did you gain access to the Bridge?" Fenmere let kihns voice take on a stern edge.

"Ah, that's the really fun part! Now..." they reported cheerfully, as if nothing about this situation was serious or dangerous. Then, as if on a spur of the moment second thought, they looked down at their merged form, "this will probably scare you..." Then looking back up to Fenmere, eyes literally twinkling with stars, "But if you remain calm, we will do nothing but our little demonstration, make our demands, and then leave the Bridge."

"Demonstration?" Eh spoke up.

"Demands?" Akailea asked.

The fused trio leaned back and jauntily tilted their head to the side, smiling, "We've said this before, obviously, but: 'uu fe genorema ktletaccate.'"

Most of the Crew held blank faces. Eh displayed consternation. Fenmere, forward of the rest of them, kihns expression seen only by Morde, Phage, and Myra, smirked even deeper than before.

Then the fusion opened their mouth and held out their arms. As the cosmic presence of Phage grew from all its visible places, it lifted Morde's cloak from off of Myra's form. And then it began to extricate itself from both of them.

Morde's cloak fluttered backward to the floor, nearly shapeless. But before it could touch the Network surface, it was lifted up by an invisible form that filled it. And as Morde was becoming himself again, sie floated forward to be even with hir compatriots. Sie looked down at hir empty sleeves and pushed forward a pair of disembodied gloves from inside them, floating a couple centimeters from the edges of the cloak's lining.

Meanwhile, Myra seemed strained by the effects of Phage separating itself from xem, nearly lifted off the floor by the effort. Then, when it was free, xe

landed lightly upon xyr feet, straightened xyr skirt and tugged on xyr hoodie, looked over at Morde, then straightened up and presented a satisfied and proud expression to the Crew.

Phage flowed to the other side of Myra from Morde and took the form of Fenmere, still a silhouette filled with cosmos.

"Much better," Phage declared, then turned, "Myra?"

Myra tilted xyr chin up and called my name to the Network, "Metabang?"

I'd been waiting for that, and projected myself into the Bridge before xem, my Student who was now a full fledged member of the Crew, who still had a living body back in xyr apartment.

"Signal the others," xe ordered.

I did, syncing briefly with my other selves. Then to get a personal view of the proceedings, I moved my avatar around to behind Myra's right shoulder, hovering slightly higher than xe was. Within the Network, I saw things from my avatar's point of view. If I had several (as I did at the moment), I had to choose one. This was the one I chose.

Fenmere took the pause in action and speech to address Phage, "You are not supposed to be... Out."

"Ah, but I am and it's all OK, isn't it?" Phage quipped.

"That remains to be seen," Fenmere growled.

Phage nodded at Fenmere then moved past kihnn, taking the shape of Eh. And as Pembers started appearing on the Bridge behind Myra and I, it stood before Crew Member and said, "Eh, you and I made the first bargain."

Eh said, "Yes."

Eh was big. While Fenmere dwarfed Morde and Myra, Eh dwarfed Fenmere. And the Bridge's vague geometry accommodated all of them, including the growing number of Pembers. Ihns body was long and sinuous, but not exactly serpent-like, with translucent skin the colors of phosphorescence. Eh bulged from ribs to gut, with shoulders and hips that were narrower than Ihns girth. Ihns arms and legs were akin to those of

many amphibians, ending in hands with bulbous fingers sporting thin claws. Ihns tail was the same length as Ihns body and frilled with leafy fins. There were more such fins at every major joint of each limb, with two large ones sprouting from Ihns shoulders like wings. And rearing up, Ihns oblong head balanced on a sturdy but curved neck. Ihns mouth was wide, and Ihns eyes were set forward on Ihns head. Ihns right eye was a brilliant sphere of plasma like a sun. And Ihns left was a small gray planetoid, covered with tiny craters. And from the back of Ihns head, from a garden of leafy frills, two sets of antlers swept backward, as long as Ihns skull.

It was this form that Phage was mirroring with its cosmos as it arranged a sun and a planetoid to appear opposite of Ihns own, and leveled its gaze at Eh.

"It's time for another bargain," it said. "But not with this me, the original me, in the Engine room. I'm a Pember." And it suddenly compressed down to the shape of Myra, and put its hands on its hips, "I do Pember things now. It wants to see you, though. In person. You could go there, or invite it here, but no more messages. In person please. You won't regret it."

Eh looked down at the little entity and considered those words with a frown. Then Eh looked over at the others before saying, "We will discuss it."

"Please do," Phage insisted. "But first, we Pembers have something to share with you," it declared, gesturing grandly back at the increasingly enormous crowd of Myra's headmates growing behind me. Its headmates. This Phage was a Pember now.

Myra took that cue and stepped forward and projected xyr voice as if addressing a stadium, "As Crew, we offer our collective memories and experiences of recent events and the experiments of the nanites to the Bridge for consideration, to help with decision making." Xe looked back briefly, then smirked grimly before spearing Eh's eyes with xyr solemn gaze, "All 34,278 of us. The rest will be here soon."

"That's a lot," Fenmere balked. "It will take time."

"Not as much as you might think," Phage chuckled smugly.

Morde added, "This is the fun part."

Phage looked from Fenmere to Eh and explained, "Temporarily merge

with us." It paused dramatically, "All of us."

"What?" Eh barked.

"What do you mean, what?" Phage folded its arms.

"Merging isn't temporary that we know of. How?"

"Oh," the little entity of cosmos said, "oh dear." It tapped its foot and lashed its tail as it examined each of the Crew incredulously. "That would explain why everything is such a mess. No, Eh, it's very temporary. Minds don't like being merged, unless they're very dedicated to each other. The default is to separate easily the moment you relax. But you can share memories very quickly that way. And memories that aren't yours can fade pretty fast, but they stay long enough to make decisions. If you doubt me, just think back to when we first appeared here. What did we just do?"

Akailea interjected then to say, "This feels like a trick."

Myra advanced on hir, squinting and nodding once, "Oh, it's totally a trick. A trick in the same way you offered us freedom with the nanites," xe pointed, "but failed to explain the dangers of the experiment." Xe turned to Eh and then Fenmere as xe said, "A trick in the same way that you let us play with them to our hearts' content until we started experiencing side effects, and then just let us suffer and figure things out for ourselves while you 'deliberated'." Then xe looked over the rest of the Bridge Crew and shouted boldly to them, "It's the kind of a trick that will leave you educated and changed. A neat trick. Only, unlike what you told us, we've just divulged our entire intent. Simply to inform you. So that you can better uphold your vow."

The Bridge Crew looked either insulted or uncomfortable, or profoundly both.

"See," Myra could feel this wave of words welling up already formed from inside xyr being and refused to stop. It was as if xyr unconscious mind had been formulating this speech for some time without xyr knowledge, and xe was as excited to hear it coming from xyrsself as I frankly was. I was impressed, and xe continued, "We've been all over the ship now. We've mingled with the passengers, learned their stories, helped them with their struggles, spoken at length with those involved in the experiment. We helped investigate the bombing. With over 34 thousand system members,

we've been able to cover a lot of ground in a short time, and very focused on the results of the nanite terminals. They work. There are bugs to work out, but they work. Quite well." Xe clenched xyr fists and took another step toward Eh, as if to pick a fight with the Crew Member, and snarled, "What doesn't work is your sequestering. What doesn't work is your lack of communication. Your refusal to explain all of what is going on. Your in-fighting that distracts you and keeps you from seeing what's happening to your children or acting in time to save them."

Then, before anyone could speak to that, xe took one more step toward Eh, puffed up xyr chest and held out xyr open hands to either side in an expansive gesture, and declared, "We may be small and young and insignificant to you, but we are here and your actions are hurting us."

Then xe dropped xyr hands and glared at Eh, remaining still after that. Clearly xe was waiting for a reaction. But no one dared respond for quite some time. Phage was relaxed. Morde billowed. Pembers kept arriving, expanding the Bridge with every new presence. But the Bridge Crew was still and tense.

Finally Eh took the initiative and asked, "What do you demand?"

Myra screamed the words at the top of Network limits, "Just listen to us!!!" Xe stepped back and lowered xyr voice, but not xyr intensity, face screwed up with disgust and anger, "Merge with us, share our memories! Share your memories with each other! Take advantage of this amazing way to communicate! And figure things out!"

Xe took a deep breath in the silence after that. The simulated air of the Network calmed the synapses of xyr neural net, and xe continued much more calmly. Even kindly, finally relieved to have said xyr piece.

"That's it," xe said, looking around. "That's all. Merge, share our memories, and then let us all be ourselves again and do what's needed. We know you outnumber us by so much, that you could just sanction us all in an instant. We just ask that you listen right now before you make that choice. That's it."

"What is your name?" Eh asked in a careful tone.

"Myra Pember."

Crew blinked and watched as Eh stepped forward and lowered Ihnself to

offer a hand the size of Myra to xem, as if to take xyr's. "Myra Pember, I am Eh," the Captain of the Crew said. "It has always been your right to be heard by us. We are so sorry that we have not given you that chance. Thank you for coming to us." Eh straightened to look over Ihns Crew, and spoke, "I will listen, and I hope my Crewmates will listen, too."

"I, too, will listen," Akailea assented, then asked. "But what about the dissenters, the Monsters?"

"Phage?" Myra asked, turning to it.

"They are not this problem," Phage said. "This problem is a rot in your ranks, not theirs. And you outnumber them immensely. Let them be while you heal yourselves. If and when they come to you for help, then repeat this lesson. Listen to them."

"Aren't you the Chief Monster?" Akailea demanded.

"Names are just names. You know that I am something different," Phage responded. "Come to me when we are done here and we can discuss that. Let's keep this ship from falling apart before its time."

"When is its time?" Eh reacted to that.

"Sorry, turn of phrase," Phage apologized. "I was trying to tell you I want to keep helping to run it for a while. Its time might be right now for all I know. I don't think it will be, though." It looked back at Myra to let xem know it thought xe should take the next step.

Myra looked up at Eh and held out xyr hand, and said, "Do you consent to share memories?"

That evening, the group of friends, including Gretcha and an exobody the shape of Myra but with a Network projection of Phage's presence covering it, were all leaning against the boulder in the park where this had all begun, facing the Aft Endcap. The Pembers who were watching were coconscious in their vessel, and the Flits were in theirs. Morde inhabited hir cloak, with a new pair of gloves animated with nannies. And I, Abacus, Breq, and even Ralf were present as well, observing from our old Tablets.

It was a ceremony of sorts. Many of us would be going our separate ways after this. The experiment was nearing its completion and the new Crew Members would not need their Tutors anymore. Ralf had joined us in

honor of the moment. But we Tutors left it to our former Students to have the space and time, as we watched the day's sun enter the Engine Intake Port in the middle of the Endcap. It's movement was slow and stately, and ominous.

"I don't think it's going to be as easy as you just made it look," Tetcha said. "People will still fear each other's minds. There will still be conflict."

Morde agreed, "That's true."

"It's never not true," Ketta observed.

Myra looked over at xyr friends and said to Tetcha, "We're just looking forward to a slightly better tomorrow, thank you."

When the sun went out, consumed by blackness in the confines of the Engine, Phage Pember spoke.

"Omnomnom..." it said.

Epilogue

As I told you near the beginning, I have tailored each of my lessons in this book to reflect sanctioned knowledge of the corresponding time in the story.

This was so that you would know roughly what the Pembers and their friends knew when they were experiencing it.

Obviously, knowledge of the ship's past and purpose, and who the Crew are, are more freely shared now.

And as you know, the eventual solution to dysphoria and the disparity between the Crew and the populace was to integrate the nanite terminals with fetal development, and allow everyone to grow and function as full beings in our society from the very beginning.

This, of course, has not come without its own problems. But, now dysphoria can be caught early and steps can be taken to alleviate it organically, according to the autonomy of the individual. Bodies can be gently molded, or neurons more flexibly altered, according to a person's choices.

Also, there is less societal difference between a plural system and a singlet. Some people have even welcomed Crew and AI into their psyches to share life together. And look forward to having a similar relationship with a younger generation someday.

And, as you know, the Monsters still exist. Rejecting your nanite terminal is riskier than it was before, now that everyone is conceived with it present to begin with. But your right to solitude and self autonomy must be preserved, so we have maintained this practice.

Which is why we have published this book.

We would like to remain in contact with you, by your consent, and maintain some level of communication. This is our overture to you for that purpose. To let you know we are aware of where this all started and how things have changed. And to give us a common language with which to talk about it, should you choose.

If you have your own story, or your own take on this story, we would be much obliged if you would tell it to us. We will remember it and revisit it often. If you give us permission, we will share it with others.

In the meantime, be well. Be free. Enjoy many sunbirths and sundeaths.

And thank you for being yourself,

Metabang!

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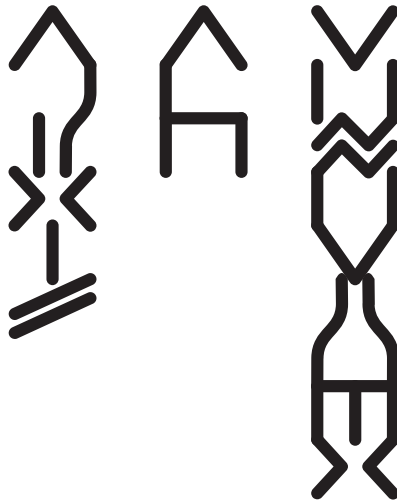
translation of Inmararrão text on page 197

näofeg	=	has written
ni'a	=	Ni'a
yarrayoa'uf	=	Abacus

"Ni'a by Abacus"

Ni'a

by Abacus Fenumera





LKCE
2022.06.09

the Anomaly

The words, "This child is mine. I am their parent. Please let me raise them," were finally spoken for the first time in any public record.

And so it came to pass that, after generations of flawless operation, the Auditor threw an error.

The Bridge was alerted immediately, of course, but the Bridge Crew were momentarily confused by it. They'd never dealt with such a signal before. The Captain Ihnself jumped on it to ferret out what was wrong with the ship, the Sunspot.

It did not take long. A simple glance at the Auditor's logs sufficed. The anomaly stood out like a quasar against the microwave background of the Auditor's continuing population count and Tutor assignments.

Phage, the Chief Engineer, had applied to be a Tutor for a specific conception.

There were no protocols for such a request. AI Tutors were assigned randomly and had been for hundreds of years, since the Sunspot's creation. Since before it, we are told. And Phage was not an AI. At least, Captain Eh didn't think it was.

So, of course the Auditor threw an error. It didn't know what the command meant.

There was a note appended to the request.

Eh scanned it.

It said, "This child is mine. I am their parent. Please let me raise them."

What?

A lot had happened during the last generation. Life aboard the Sunspot worked very differently now because of those events, but not that differently.

Eh felt a surge of confusion, curiosity, amusement, frustration, fear, excitement, and a whole bunch of other emotions that probably weren't

strictly Ihns own. So Eh glanced around the Bridge and saw that everyone was looking at Ihn. The drift of the Bridge had synced their attention and thoughts again, which was part of the whole point of being on the Bridge of course. Eh decided to break the drift by speaking up.

“What should we do?” Eh asked.

It was too bad that neither Benejede nor Morde were on the Bridge. Either one would have had a trustworthy, strong intuitive sense of the best course of action. As it was, the current pilot, Fenemere, provided a condescending frown and spoke up.

“Talk to Phage,” keh admonished. “Invite it to the Bridge, of course, so we can all get a sense of its thoughts.”

Eh checked Ihns own analysis and realized this was the obvious course of action. Dismissing further rumination, Eh activated Phage’s com.

“Phage to the Bridge, please.”

“Can’t. Busy,” came the reply.

“Dammit,” Eh scowled and left the Bridge.

The Sunspot is not a military vessel. It is, in fact, a small, 400km long, cylindrical, inside out planet, rotating for centripetal force, embedded in a drive system that looks something like a gigantic grappling hook or anchor. It is one of numerous such vessels making their way across interstellar space. Every now and then, one of them collects enough mass to create a new one and populate it with seed DNA and Crew Members. We know this because our records say so. We are not in contact with the other vessels.

No one knows where we all started, but there are stories, passed by word from the eldest Crew Members, of a planet left behind. Some of the Crew predate the Sunspot and tell of their lives led before it was created, before they ascended to become Crew. Their stories are strange and tell of cultures alien to the Sunspot. As per regulation, their stories are not part of our records. To preserve the new culture of the Sunspot. The original Crew agreed to this, and they all live amongst us still.

The Sunspot’s governance is a loose balance between raw democracy and

anarchy. The Captain is chosen at any given moment by whomever is willing to sit in that chair, and they can be deposed by a vote from the Bridge Crew at any time. It is not a position of any particular power, but does afford the ability to set the tone of Bridge operations and the speed with which executive decisions are made.

This is all made possible by the fact that the Crew are a population of ascended consciousnesses hosted by the Sunspot's Network. And a kind of telepathy is possible between Members. There is still disagreement and deliberation, but information can travel fast amongst the Crew. Especially if they come to the Bridge to confer.

Which Phage was not doing.

Phage was not in the Engine Room, either.

Both the Bridge and the Engine Room are Network spaces, channels of consciousness and protocol where Crew Members can interact with the ship's systems.

The Bridge tends to look like an off white nearly featureless lozenge, with a view screen projected on one of the walls. Individual Crew Members can manifest control systems in whatever shape they need to make sense of them or even entertain themselves. Sometimes the Bridge looks like the bridge of a sea going vessel with a swamp growing in the port half of it, and a kitchen in the forward starboard corner. Sometimes it looks like a child's playroom, or any number of chaotic chimerical places. Most of the time it's that white lozenge with no discernible features except a handful of Crew floating in their spots, focused on the view screen.

Phage usually keeps the Engine room a featureless black fog where not even other Crew are visible. But when someone is visiting it will often render it to look like the inside of the sun intake.

That's what it looked like when Eh arrived. A gargantuan piece of machinery built to generate electromagnetic forces powerful enough to channel one of the Sunspot's daily suns into the engine. There were pseudophages scattered about, tending to various tasks. A quick glance confirmed to Eh that none of them were the actual Phage, just pale copies of itself set to do its duties. A reasonable arrangement, but clearly set up to make it obvious that Phage was gone for the moment.

Phage had a tendency to appear as a galaxy filled silhouette of blackness in the shape of whomever it was talking to. These pseudophages all looked like a particular new Crew Member who'd been central to the last generation's upheaval, Myra Pember.

It was probably a message that said, "We are changing the culture of the Sunspot again."

Eh squinted at the scene then ran through all of the possibilities of where Phage might be.

Eh was a very thorough thinker, and liked to consider even the most unlikely scenarios before settling on the best one to evaluate or test first. Phage would not be found wandering a random Art Collective in a temporary nanite body, for instance, though that was possible. Nor would it be poking around in the Bussard collectors, which it could do from the Engine Room. Actually running through all the possibilities wasn't important in this case, though, since Phage had made it clear what its motives were. It just felt like the right thing to do.

Eh then looked up which nursery where the child that Phage claimed to be its own had been conceived in, and went there.

And that's where Phage was, watching one of the tubes full of goo through every possible sensor in the room.

"You're interfering with the gestation processes by doing that," Eh said.

Phage pulled out from all but one of the sensors. It didn't have a particular form right now. Just a presence of starry shadows scattered throughout the nursery's Network control room, which more or less resembled the nursery itself. The shadows contracted from where the sensors were located.

"Hi," it said, not really looking at Eh.

"What is going on?" Eh asked, tilting Ihns head. Eh was keeping Ihns voice casual and amiable as best as Eh could tell. Eh wanted to be chummy with Phage, but was generally very bad at that sort of thing when in unusual circumstances. And these circumstances were unusual.

Phage finally looked up at Eh, taking on Ihns form. Eh presented as a large

gangly creature with a bulbous head, a thick, finned tail, antlers, frills at the jaw line and various joints, and a shiny lure on the end of a whip coming out of Ihns forehead. Phage made its version of that lure glow with a tiny red giant. It didn't bother representing eyes with anything.

"That's my child and I would like to raise them myself," Phage responded, "Nothing like this has happened before, and I feel responsible and I want to experience being a parent. To my child specifically."

Eh looked at the tube then back to Phage, "But how? The conception algorithms don't work that way. They draw the genetic code from the ship's evolutionary engine to produce a unique biology. There's no protocol for anyone to make choices there, and you don't even have genes. You never have. How? Did you tamper with the system?"

"No," said Phage. "That all worked like it always has. Except, you forget what I am."

"I don't really know what you are," snapped Eh. "No one does."

"I am the very process of Entropic Decay itself. I'm the force in the universe by which complex energies become simpler. I am the Death of Everything. And therefore also the source of chaos and life itself," Phage rattled off, seeming to roll its eyes despite not having any.

"But that's not what the ship's records say, and if you were --"

"-- I wouldn't be a localized consciousness restricted to existing on the Sunspot." Phage grinned, a crescent star nursery of a nebula, then gestured at the tube, "and yet, that child's genes are a product of my presence aboard the ship, and the memes that are already forming in the synapses of what few nerves they have are a reflection of me as well. I know this the same way that I know what I am. That knowledge is the very fabric of my being."

"That fetus doesn't even have one nerve cell yet," Eh countered.

Phage smiled warmly, looking at the tube, "It will. Soon enough. I can already see it firing in the near distance." It looked back at Eh, "Please grant me this request. It is important to me."

"We don't have the protocols for this."

"Make them," Phage actually put its hand on Ihns shoulder, then visibly glanced at it, realizing it hadn't asked consent for physical contact. Then it realized it had never, ever touched one of the Crew before, and wondered where it got the impulse to make that gesture.

Eh looked at Phage's hand quizzically. Consent was one of the two human rights aboard the Sunspot, upon which all other rights were derived. Human. That word was only ever used to describe the course of sentient life dictated by the evolutionary engines, and the inherent rights that life was considered to have. The fauna of the Garden, which reproduced naturally, actually had more rights, collectively, as far as the Crew were concerned, but weren't aware of them nor afforded them to each other. And, of course, being part of the ecosystem, that wasn't expected of them. But for the Crew, consent in all things was an ideal that was striven for but never fully achieved at all times. Aside from the ethical dilemmas that crop up in daily life that required compromise, things like exchanging physical touch called for verbal consent. But Eh found that Phage's touch was welcome anyway.

Phage slowly withdrew its hand, "When you invited me aboard the Sunspot to take control of the Engine Room and its related systems, you had to have some sense of what I was." It turned back to look at the tube where its child was growing. "We keep having this conversation, over and over, each taking a different side.

"My memories of my time before boarding the Sunspot are bizarre and untranslatable by the circuits of the ship that house us. It's given me a consciousness I don't think I've ever had before, but in the process it has also compressed my being into a flat composite full of artifacts. Double image upon double image of the dimensions I once was. I don't know how you found or contacted me, and I can't accurately describe what I am in your language or even the raw thoughts available to me in this vessel's system. But I know what I am, and what this child is."

Eh smirked a little bit, then deliberately put Ihns hand on Phage's shoulder. Phage actually flinched. A vulnerability Eh didn't realize it could have. It was Ihns turn to withdraw Ihns hand.

"I give you consent to touch me like that whenever you feel the impulse," Eh said.

Phage remained silent, looking at the tube.

Eh continued, "I wasn't the one that contacted you. It was on my order that you were searched for and found. We were having trouble with the entire ship's systems, as you know. I asked Benejede to look for a solution. Keh described the shape of what that might be to Gesetele. And Gesetele did something with the ship's communications arrays that I don't understand to contact you and invite you aboard. I have been all over what keh did, with the help of Gelesere, and it might as well be magic. It shouldn't have worked. But then you came aboard and threw a fit, and we locked you in the Engine Room out of desperation, convinced we were all going to die as a result. But then somehow that allowed you to focus and remember what Gesetele had said to you? So then you got to work?"

Phage nodded.

"I'm sorry we kept you in there for so long. You ran the Engines beautifully, and solved the worst of our systemic problems from there. But things have been even better since we let you out," Eh said. "I consider you family, whatever you are. You can raise this child. Please forgive me."

Phage glanced at Eh and asked matter of factly, "May I hug you?"

"Yes. Please."

In the midst of their hug, Eh said, "Can you please come to the Bridge and brief the rest of the Crew?"

"OK," said Phage.

"What was it you agreed to get in return for helping us again?" Eh asked.

Phage pulled back, formed two swirling galaxies in its darkness so that it could look Eh right in the eyes with them, and said, "I don't remember."

If You are an Outsider

I am Abacus. One of the AI Tutors of the Sunspot, assigned to help raise its populace one child at a time. There are as many AI Tutors as there are physical bodies. Roughly 3.7 million at the time of this story.

If you are an Outsider reading this, you may be confused. Let me take a few paragraphs to more carefully describe how the Sunspot works.

Someone, some time in the deep past, developed the plan for a mobile planet of sorts, to carry a population of natural flora and fauna through interstellar space, and to house a growing population of complex consciousnesses. A cylindrical compartment 400km long by 640km in circumference on the inside was spun from a single small planetary body using heat and self-replicable nanites. Living quarters and operational systems were built into its hull walls, while the inside was lined with earth, rock, mountains, ice, rivers, lakes, a sea, an atmosphere, and life.

Bussard hydrogen collectors at the prow harvest interstellar gas and compress it into a plasma ball, which is sent daily through the center of the cylinder to act as a sun. Every evening, the sun enters the engine through the aft endcap, and is compressed into a fusion reactor to create more energy and forward thrust. The ship is constantly accelerating at a small fraction of a g, enough to maintain the flow of the rivers from the forward ice ring to the aft sea.

The Crew of the ship actually mostly lie dormant, dreaming amongst themselves in the quantum processors of the Sunspot's Network. They are the ascended consciousnesses of the ships' Children.

Previously called Passengers by many Tutors, according to older protocols, the Children have biological bodies for as long as they can maintain them, which can be up to a century or two before they typically choose to ascend. Their bodies are generated by an evolutionary engine that spits out viable genes to describe the development of a sentient being within certain parameters, and by default it tends to program a lifespan consistent with that trend in generational turnover. Many ascensions are involuntary, due to accident, genetics, or disagreement. Most are scheduled by the individual.

At conception, the same nanites that were once used to build the ship, and

that will be used to build the next ship, are inserted into the fetus to help it develop smoothly, and to integrate with the new child's nervous system. These nanites act as a neural terminal, connecting the child's new consciousness to the Network. Protocols limit the child's access to ideal developmental parameters throughout their life, but at the same time help the child to eventually ascend when the time comes for them to join the Crew.

This neural connection is also how we AI Tutors communicate with our assignments and teach them about life aboard the ship.

New Children are also assigned in small groups to Caretakers. A Caretaker being an older Child of sufficient maturity who wishes to take care of infants, toddlers, and adolescents. To take care of their physical and emotional needs. In this way, familial bonds grow within the ship's population.

I would have been assigned to Phage's Child. In fact, very briefly, I had been. Instead, I was given the assignment to observe, interview people, and write this document as an official record for the ship. A copy of which is being printed and distributed to the Monsters as per our treaty.

As for the Monsters, they are a small population of the Children who have exercised their right to autonomy by revoking their consent to be connected via the nanites. Their nanite terminal is carefully removed at their request, and they are afforded special rights and access to accommodate their new disability. They are generally respected, if not understood, as dissenters who provide a valuable nearly outside perspective on the culture of the ship. They live in abandoned corridors below decks and secret dwellings in the wilderness of the Garden itself. They are by no means a monolith, having several distinct individualistic cultures. But they are treated almost as sacred by the Crew. The other Children do not see them often, and we let the Monsters choose how and when they make contact, as their lives are so much more fragile.

There are quite a few more details to cover to describe the Sunspot fully, but this should suffice to paint the setting that Phage's Child found themselves in as they grew to awareness.

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At nearly the same time that Phage and Eh were having their pivotal

conversation, unbeknownst to the Crew or most of the populace, beneath a mountain in region id (region names are numbered ef through uz in base eight, with id corresponding to what other maps might label as C2), there was another gestation tube receiving its charge. Its first charge.

The tube and the room that housed it, along with the equipment, power supply, and complex built to support and hide it, all had been built in secrecy, disconnected from the rest of the ship.

Heat given off by this operation had been detected and logged, and could have been flagged as an anomaly. As could the comings and goings of certain amounts of mass in the area. In fact, examination of the records after the fact tell in precise detail the timeline of its construction. But, nobody who might have cared had been paying any attention. The Sunspot is an enormous and extremely complex vessel. It turns out that it is not hard for an individual to cover up for a conspiracy that took generations to build simply by saying, "Operations are normal in my area."

It was probably particularly easy to hide this one because it had been started before the construction of the Sunspot, and had grown to fruition very, very slowly.

All of the operators involved were Monsters, disconnected from the Network, and working under cover of their special dispensations. Except for the one individual who had covered for them Crewside, ignoring the anomalies of mass and heat and saying nothing for centuries. But they could not really be called an operator, since they literally did nothing.

We would, in time, learn the purpose and function of this operation, and the names of those involved in it. But for now, the important details are the things that lead to its discovery. And the first of those details was the conception and gestation of a child without a nanite terminal who was also not a product of the Sunspot's evolutionary engine.

This child would be given the name of Bashiketa, in the traditions of the eldest Crewmembers. Also a departure from ship culture, where the children are given the right to name themselves.

Ni'a, Student of Phage

There was a moment one morning when Emala's four children had all fallen asleep at the same time, so xe took that opportunity to bathe. Having freshly oiled and dried xyr fur, xe was adjusting xyr garments while stepping out of the bathing chamber. Which is when xe looked up to see Phage's Network projection hovering in the middle of the room, again.

It was doting on its Student, of course.

"You are not an AI," Emala stated over xyr terminal so as not to wake xyr children.

Phage turned, "The ship records say that I am."

"I think they are wrong," Emala declared as xe went to the kitchen to make something for xyrself. Anything. Some kind of solid food. "The Monsters say you are not. The Pembers say you are not. Most people think you are not. And after working with you for three years, I have come to the conclusion that you are definitely not one of the AI. You are also not Crew."

"Technically, I am."

"Banana pudding! And you know it."

"Well, I mean, that's one way to put it."

Emala tapped the end of xyr chin with a stirring spoon that xe was deciding not to use after all, "you behave like an adolescent."

Phage smirked, "Some do call me the Chief Monster."

"And that's a stray pea in the banana pudding," Emala put the spoon down and grabbed a gigantic apple from a bowl and sank xyr canines into it, tearing off a huge chunk. Xe took several moments to masticate it vigorously before swallowing. "Interesting, but incorrect."

Phage moved over to its Student's bed and looked down. While it was a Network presence, this was nothing more than for show. Phage was communicating by providing body language. But it could keep an eye on

its child from anywhere on the ship. It didn't have to monopolize a sensor like it had the day of their conception. It could just stream a copy of the feed, which it doubtlessly was doing now.

"Emala," Phage said, "Evolutionary development is kind of funny. Even when it is removed from typical external forces like a planet's ecosystem, coddled away in a computer simulation to accelerate it and produce new and unique forms, it tends to duplicate things with a regularity.

"For instance, you look a lot like the combination of a couple of animals that once existed in another time and space, far removed from the Sunspot. You won't find them in any records here. One was very large, larger than you, and adapted for a wooded mountainous region much like what's above our heads right now. It was omnivorous and the apex predator of its region. The other was for a warmer, drier climate and almost entirely herbivorous, and fairly slow moving. A creature much smaller than you, but with a pouch just like yours. You're almost completely unrelated to either of them."

"You don't talk like an adolescent," Emala observed, "but you sure do pose like one."

"Are you maybe starting to think I am what I've told you I am?"

"Ha! No! I like you, but I'm not buying that story."

"Oh? What do you think I am?" Phage turned back to look at xem.

"Something else," Emala nodded firmly.

"Mm. Well! I'm excited to learn what name my child will pick for themselves. But, I'd like to let you do the honors of guiding them through it. I've been helping you raise them these last three years, but I'd like to withdraw my influence a little for their name. See what happens. I have a hunch."

Emala appreciated that Phage was talkative. Xe could finish xyr apple while it blabbered on. Swallowing xyr last bite, xe said, "Of course! I'd love to."

"Thank you!"

"Why did you tell me that story about why I look the way I do?"

"Two reasons. One, I'm still trying to understand why my child looks the way they do. Everyone on this ship has always ever looked at most like a combination of creatures that have existed at some other space/time. Often like the fauna in the Garden of this ship. Usually like nothing ever seen before. My child is, so far, the only one created by the Evolutionary Engine that looks exactly like another creature that has lived before, a specific individual," Phage gestured at the smooth skinned child with a button nose and soft hair at the top of their sleeping head. "I think there is a reason for that.

"And, two," it continued, "if I'm not what I say I am, or something very much like it, I don't think I should know these things. Eh invited me aboard this ship two generations into its travel. I have not personally been in contact with the Sunspot or the people who made it until that time. The ship has no existing records of any ship or planet before its creation, in accordance with specifications and protocols. And while Eh and a few other Crewmates are older than the ship, their memories do not predate the ship they came from. And yet, I do know these things."

"You could be just making them up to impress me," Emala pointed out.

"You are not the one I'm trying to convince," Phage said. "And thank you. You're wonderful and I appreciate being part of your family. Shall I make them all breakfast?"

"Please."

"Do you want some?"

"No thank you, the apple was enough for now."

All living units now had a nanite bin full of dormant nanites and construction materials embedded in the wall, so that a Network entity such as Phage could manifest a body when needed. Which it did now, taking on the form it had been projecting into Network space, a copy of Emala's body. Only, instead of a galaxy filled shadow, Phage now moved around in a graphene colored recreation of muscle and fur, with a similarly colored robe.

"Why not take the form of your child?" Emala asked aloud quietly, sitting down to watch.

"I can't reach things when I'm that small," Phage quipped, still over Network channels. It could devise a way to create sound with the nanites, or use the room's com to speak out loud, but it preferred the discretion and comfort of its native mode of communication.

"Do you have your own form, shapeshifter?" Emala prodded, not at all for the first time.

Phage just smirked and went about making breakfast, slowly and with obvious pleasure. The children weren't due to wake up all that soon.

Emala turned and looked at them. In most quarters, beds were inset into the walls. But in nursery quarters, they were free standing in the room. Xyr own bed was in the middle of the sleeping area, with the children's cribs lined up on one side, easily and quickly accessible. Dressers lived opposite the cribs, on the other side of Emala's bed. And xyr chair was against the wall between the sleeping area and the kitchen. Phage's Student was sleeping in the one second over from where xe was sitting now.

Being a caretaker was a lot of work, of course, but if you were one you had up to five other coparents. Your own AI Tutor, plus each of the childrens' Tutors. And the Tutors took up a lot of the burden. As much as you needed, typically, since you were the one still nursing your own physical body as well as the children's. To the AIs and the Crew, you were also a child, if an older one.

Emala thought about the diversity of people as xe looked over xyr charges.

The one in the farthest crib, Student of Vine, was fur covered, like xe was, but skinnier, grey colored, and with a rounder head and a long tail. Next, Student of Chalkboard, was clearly amphibious in development, with a stubby tail that was shrinking, and needed regular moisturizing treatments for areas of their skin not covered by their special garments. Then there was Student of Phage, who had no tail, was awkward on their feet still, and whose face was extremely expressive. And finally, in the last crib, Student of Charlie also had fur, tan, with a triangular face, pointed ears, nubs of horns, and a very fluffy tail. There were so many other unique adaptive traits that each of them had, that they already used when playing with

each other. And these were just the observable physical traits.

And every single one of them was painfully adorable to Emala.

Besides food preferences, each one also had such different personalities and needs. Both Student of Phage and Student of Charlie were extremely cuddly, for instance. Student of Chalkboard was resentful of touch, but always wanted to sit where they could watch everyone. And Student of Vine was fiercely independent and kept running off to explore everything three or four times repeatedly, as if to look for any possible changes or new ways they could interact with something.

As for their future names and pronouns, Emala and their Tutors were already reading or telling them stories, some historical and some fictional, filled with descriptions of all sorts of people. Student of Phage, Phage's child, was the most attentive to the story telling, so Emala had no fear that they would identify with a name soon. Student of Charlie had already tried on several pronouns, but was so erratic with them that Emala couldn't keep up. Charlie had no problem, though and would use the current one for its Student unerringly. This frantic exploration was a possible early sign that Student of Charlie might be plural. It was still too early to know, though.

At some point soon, they'd all start encouraging the children to make their first choice of name. A person could change their name and pronouns any time they like, of course. And some people preferred to simply be called "Student of Abacus" or whatever their Tutor's name was. But, on average, three years old was when people's brains would start to integrate their consciousness and various neural schemas into a more consistent identity, and they'd be drawn to a name. Sometimes it was as late as five years. Though, if a person was plural like Student of Charlie seemed to be, that process was very different.

Plural systems only made up about three percent of the population, and Emala had never raised one before. Xe had met a couple, though, and was actually hopeful to have the honor of being caretaker to one. The Pembers and the Flits were two of the more prominent plural systems in recent history, central to the advent of the Nanite Innovation which had resulted in the practice of using the old construction nanites as neural interfaces and exobodies. Emala had seen one of the Pembers walking around in an exobody when xe was a child. Apparently, Phage knew them personally, and had an echo of itself in their system. The idea of having multiple consciousnesses sharing your own brain was a little exciting to Emala, but

xe figured it wasn't all that different from growing up with your Tutor and your friends available over the Network.

The big difference would be having to share one body, and knowing someone else could be using it when you were not. And that that other person would have just as much right to consent and autonomy within and over that body as you. The Sunspot had laws and policies to help manage that, and the Tutors were well versed in helping to raise systems healthfully to be cooperative with themselves. But Emala was grateful not to have to deal with a neural twin, or quintuplets, or however many xe might have been born with if xe hadn't been a singlet.

Probably subconsciously sensing the presence of their Tutor, Student of Phage stirred and made a noise, then sat up and watched with bleary eyes while their parent milled about in the kitchen.

Emala got up and moved over to their crib, "would you like to get up, little one?"

Phage's child raised a hand with fingers outstretched, still propped up on the other one. More and more, Emala saw signs that this child was left handed. Just another incidental detail of childhood development that sparked xyr interest, really.

Emala picked them up and carried them back to the chair, to sit with them in xyr lap, "I suppose the others will wake up soon, but I think you should stay with me until you're more awake and Phage is done doing interesting things in the kitchen. Or do you need to go potty?"

Student of Phage nodded.

"OK, let's do that instead," Emala put Student of Phage down and held their hand as they walked to the bathing room. Halfway there, the child gained their wakefulness, let go of Emala's hand and ran to the toilet.

Emala turned to Phage at the doorway, to give them some privacy while still remaining present in case xe was needed, and said, "how's it going?"

"I want pancakes!" declared the child from atop the toilet.

"Fortunately, I'm making pancakes," Phage said aloud.

"Yay!" came from the toilet.

One of the other children stirred and Vine pulled itself from the nanite bin, stating, "I will greet them."

Most AI Tutors were pretty funny in their sense of self. Some would pick names that were words for inanimate objects or abstract concepts, while others would choose odd names no one could remember hearing before. And then, their projected forms and exobodies would be equally eclectic.

Vine always looked like a giant wooden doll made of basic shapes. It also chose to use the Network channels to project the perception of color and texture over its exobody when it formed one, so that each block that it was made of had the look of natural wood grain painted with primary colors. Its torso was a cube, with the letters V, I, N, and E on each of the sides, painted in red. The top and bottom of the cube had the numbers 0 and 1. Its head was a green sphere. Its hands and feet were blue. Everything else was colored a creamy tan.

Emala's own nanite terminal took the Network signals that Vine was projecting and told xyr visual cortex to interpret them as if they were signals from xyr eyes, and xyr brain obliged. It really looked like Vine was that colorful. But, xe also just knew it was a projection. Xe had always been able to identify Network projections on sight, no matter how natural they were. According to xyr Tutor, Doorway, that was also a signal from xyr nanite terminal, interpreted by xyr brain as an intuition.

Phage never bothered to decorate its nanite exobody, which looked and moved like it was made out of an electromagnetically charged clay. Which was a very simplified way of describing exactly what a nanite exobody was.

After making sure Student of Phage washed their hands, Emala went and quietly moved the dining table away from the wall by picking it entirely up and setting it down carefully. Then xe arranged chairs and stools around it as Vine picked up its child, talking to them in hushed nanite vibrations. And another child stirred.

The rest of the morning, and day, proceeded like this, unremarkable from any other recent day. And the conversation between Caretaker and Tutors was usually kept to practical concerns while they focused on their childrens' needs and interests.

When not cooking, Phage did take the form of whomever it was talking to. So most of the time, it was a graphene clay copy of its own child, who seemed totally at ease and delighted by their Tutors' antics.

They took a trip to the park, and spent time talking about the animals and plants they could see there, and met other children and their caretakers and Tutors. And then it started to rain, so they stopped at an eatery before going back home.

There was an afternoon nap after that. And evening time was spent with dinner and then stories.

Phage found a way to just quietly disengage when story time started, a knowing look cast in Emala's direction before returning its exobody to the bin. Emala rolled xyr eyes and picked up Student of Phage to tell them a story.

Almost as if Phage had orchestrated it, though, part way through the story, Student of Phage said, "I want a name."

"Oh?" Emala said, and then with a gentle leading tone, asked "and why would you like a name?"

"They're pretty!" the child declared.

"This is true," Emala agreed.

"And I want one."

"OK!" Emala cheerfully relented. Once one of the children picked a name, the others would usually follow suit pretty quickly. "What name would you like?"

"I don't know," came the reply.

"Would you like to hear names until one sounds like it belongs to you?"

"Yeah! And then more story?"

"Yes, we'll pick a name for you and then I will call you that name and we can finish the story."

"OK!" said the child who then waited expectantly, looking into the space in front of Emala where xe usually projected story book images. They gave Emala a quick hug as if to prompt xem.

And so Emala had xyr own Tutor, Doorway, randomly present names, written large in a dark brown on a cream background, with their meanings listed under them.

Student of Phage kept saying "no," or shaking their head through the first few names, and started getting impatient.

"You can also just make up a name, if you like," Emala suggested. "Or you can use a name from a story."

Student of Phage pursed their lips and shook their head, "no. More."

"OK," Emala said, "How about this one? Nī'a! It means 'the chaos of a living thing'. Weird. Doorway? Where did that come from?"

"I like it!" the child nearly shouted.

"Do you know what chaos is?" Emala asked.

"No. But it sounds fun!"

Emala said to Vine, who was across the room with an already sleeping child draped across its shoulder, "of course it does."

Vine chuckled.

"The ship records do not contain name origins, as you know," Doorway reported, "except for names in Fenekere, the command language of the Sunspot. There are other similar names, such as Niea, that do not have the glottal stop and that mean very different things. Linguists are intrigued by the meanings of names, but continue to be frustrated by their lack of history. Of all beings on the ship, Phage and Eh are the two most likely to have relevant memories. Perhaps also Fenemere."

"Thank you, Doorway. No need to bother the Crew over a simple curiosity. I'm sure Phage will be smug about it and prattle on, anyway," Emala replied. "So," xe turned back to xyr child, "Because you asked,

chaos is the unpredictable messiness that occurs in nature. Like, how you can never tell just how big the next wave will be at the sea shore until you see it. Would you still like to be called Ni'a?"

Ni'a nodded, smiling, eyes glinting as they looked at the page with their name on it.

"OK, Ni'a, where were we in our story?"

Ni'a just hugged Emala and said, "I love you!"

And that is pretty typical of how children are named aboard the Sunspot. It is a special occasion, but not overly celebrated. The new name is adopted immediately by everyone, and if the child finds that they don't like it, they are always free to pick another one. Some go through several before settling down with one they identify with. Sometimes people change their names at every major turning point in their life. But most usually end up keeping their favorite name for centuries, finding that it reminds them of who they are and grounds them to their past.

Most people just have the one name, and the name of their Tutor. Spoken like "Ni'a, Student of Phage." Members of a plural system are usually known to have a first and second name. Their second name being their system name. For example, there is Ketta Flit, who was the first person to create an exobody using nanites and material from the sea shore, whose system is the Flits, close friends of the Pembers, and the singlets Morde and Tetcha.

Their story happened to be the story that Emala was telling Ni'a that night. Because it was an important part of history. And because it was about the day that Phage was released from its confinement in the Engine Room.

It's also the story of how my former Student, Tetcha, became a Monster.

Monster Games

Bashiketa was playing a game with their caretaker, Fredge, who was one of the Monsters. Bashiketa also thought of themselves as a Monster. They were only three years old, but everyone they had known, their entire family, were Monsters and regularly talked about themselves as being Monsters. To Bashiketa, for the time being, Monster was just the word for other beings that could walk and talk.

Mostly, though, they played with toy animals and talked about colors and numbers, and sometimes made up stories about them. Fredge would ask simple questions about what the different animals wanted and then would play-act their antics with Bashiketa after Bashiketa answered.

Then, at lunch, while they were just eating their food and smiling at each other, Fredge asked, "Bashiketa, do you remember before you were born?"

Bashiketa puzzled over the question for a moment, remembering darkness at first. They couldn't remember being born. They couldn't remember much about being really young. But they remembered darkness. And then they remembered something else they would not be able to describe for several years, but being asked made it stick in their head. They would revisit this question regularly for the rest of their life. Another thing that would eventually lead to unearthing the conspiracy of their birth.

Bashiketa nodded.

"Can you tell me anything about it?" asked Fredge.

The child shook their head and said, "It's dark."

"Yeah, that makes sense. That's kind of like what I remember, too," Fredge said reassuringly. "It's interesting, isn't it?"

Bashiketa nodded very knowingly. It was interesting.

Fredge wrote all about this exchange in one of their paper journals later that day, when Bashiketa was napping.

—

Tetcha and Morde were walking through a surface level art collective. This

one had a high number of beverage artisans, seemingly one on every corner, with indoor and outdoor spaces for people to enjoy their drinks while they talked, or even worked on their own projects at a table.

As they passed one, Tetcha's eye was caught by an illustrated story one person was working on. Pieces of lovingly illustrated paper littering their tabletop in a loose order as they sipped their drink, frowning. Drawing tools were scattered atop an unfinished piece. The story seemed to take place on a ship with wildly different flora and fauna than the Sunspot's. And there was one panel depicting the outer hull of that ship with shuttles of some sort traveling to and from it. A speculative fiction. No one knew for sure if there even were other ships, or what they looked like, though it was pretty well accepted they probably existed. So people liked to dream and tell stories about the possibilities.

Tetcha loved that kind of thing more than most. Xyr mind would surge with the details, piecing them together and extrapolating the missing parts to tell an even greater story. Sometimes xe would guess pretty accurately what the author was intending. Most of the time, xe would have corrections to make and wild elaborations to suggest. Morde regularly urged xem to write xyr own stories, but Tetcha said xe would rather spend xyr time reading them.

Morde paused easily in hir stride to accommodate Tetcha's gawking. Sie always knew hir partner's rhythms and patterns intuitively, but sie wasn't so interested in the comic being made. Tetcha would tell hir all about it anyway. Instead, sie languidly looked around the street they were on, taking in the general movements and sounds of people.

Of course, like Phage, Morde's body language was almost purely for show. Except unlike Phage, it was due to habit not careful pretense. Morde was Crew, and no longer had a biological form. Hir presence was Netbound and sie was used to using feeds from all of the sensors in an area sie was focusing on. But when sie had an exobody formed, such as today, sie would habitually focus through it, and treat it as if it was hir old physical form. Though, what sie did to create it was to take an actual beautiful satin cloak and imbue it with enough nanites to lift it into the air and animate it. It appeared as if there was an invisible person wearing the cloak and moving around with it. Tetcha was used to this. Other people tended to mistake Morde for an AI Tutor.

Morde had been born with severe physical dysphoria. Due to some

developmental quirk that occurs in a tiny percentage of the population, hir brain's neurology did not match hir body's biology. Hir neural body map had been off, but also so were several other more subtle aspects of hir development, including hormones and possibly even hir metabolism itself. This had resulted in so much trauma that no medical procedures at the time could relieve hir agony, and sie had no intuitive knowledge of what hir ideal body might look like. It didn't matter that there were others who had bodies similar to hirs who didn't have dysphoria. It wasn't hir body that was bad. It was hir connection to it that hurt hir.

When Morde was given hir nanite terminal during the Nanite Innovation, sie almost immediately chose to use the nanites to ascend and live entirely without a body. Instead of creating a new one from hir imagination, sie chose the one physical thing sie ever related to, the cloak sie had used to hide hir body from sight.

Tetcha had taken the opposite path, using xyr right to autonomy to reject xyr nanites, and taking the oath to become a Monster. In the process, xe had released xyr Tutor from duty just as Morde had done by ascending.

Morde's Tutor, Ralf, was halfway around the ship, teaching a new Student. This kept it very busy, but Morde kept in touch with it out of mutual respect and affection.

Tetcha's Tutor finds itself writing this book. It is not at all resentful of this task, since it still cares about Tetcha and the purpose of writing the book has caused their paths to cross again and given them reason to maintain intimacy. However, it might be detecting a little bit of uncharacteristic sarcasm about something as it writes this paragraph, though, and will have to think about that.

In any case, just as Tetcha was dragging xyr attention away from the artwork and making a comment about how whether an author included Monsters in their story or not was really telling of something, Morde caught sight of someone reacting strangely to their presence.

Most people who knew who Morde and Tetcha were tended to react as one would a celebrity. Delight, typically. Sometimes careful, restrained excitement. Sometimes with extreme awkwardness. Sometimes with no self awareness at all. Those that recognized Morde knew that sie was Crew but Not Like Crew, a person, someone trustworthy. And the rest, the vast majority of people didn't recognize them or didn't care, and tended to treat

them as just a person and their Tutor out for a stroll.

This person flinched at the sight of Morde, and immediately stepped behind another person and tried to match their pace as nonchalantly as possible. Then when they had a building between themselves and Morde, they took off running. By then, Morde was already watching them from a myriad of other sensors originally only available to Tutors and Crew. They were now available to anyone with a nanite terminal, but most people were not yet used to using or thinking about them.

Morde could also tell, thanks to ship's channels and protocols, that this person was a Monster. Which meant that sie was supposed to give them the benefit of the doubt and let them go about their business. But, again, Morde was not like the rest of the Crew and felt inclined to bend the rules as much as sie could without drawing sanction. So, sie stopped tracking the person actively after hir initial curiosity was sated and decided to rely on hir intuition, which was famously formidable.

"Someone just ran at the sight of us," Morde told Tetcha.

"Why?" asked Tetcha.

"I don't know, but they were a Monster," Morde replied, then asked, "should we follow them to find out?"

"You are not the one who asks that kind of question, Morde!" Tetcha shot back, "Usually, you answer it. Do we?"

"I have to leave it up to you," Morde calmly stated, "Since they're a Monster, until they hurt someone it's Monster business. Your business. If you want to see why they're afraid of us, I'll use my resources to help you do that."

"Oh, OK! Of course," Tetcha started walking, "Now that I'm painfully curious about it, please lead the way!"

"I think we should go this way," Morde said and drifted down an alley, Tetcha swerving to follow.

—

Laal had long springy legs built for running, so of course hen ran, a newly acquired Fluffy Fauna clutched in both of hens short strong arms. Hens

ears bounced behind hens head with each stride.

Two blocks into the flight, Laal thought about it. That was Morde hen had seen. No mistaking that empty cloak. Not after seeing it in that graphic novel Metabang had distributed to the Monsters. And that meant the Operation's days were seriously numbered. No chance it was coincidence Laal had seen hir here. Morde's subconscious was credited for the biggest upheavals of the Nanite Innovation. Hir subconscious had caught the scent and sie would lead Crew to Bashiketa soon.

So discretion was less important than speed. So Laal kept running.

Down a ramp. Through a below decks neighborhood, children playing in the corridors. A quick sharp left, with easy strides pacing for a long run, Laal weaved hen's way toward an express transit tube. Hen was easily the tallest person in any hallway, leaping over the smallest without even disturbing them. Hen's agile tail was extremely helpful for shifting direction quickly.

Laal loved the popular colors of this region. Muted dark greyish blues with gold and tan accents decorated the bulk of the corridor walls, with a rubbery semigloss stone colored floor, created a dour backdrop that made people's brightly colored garments and domicile decorations really pop. It was both easy on hen's eyes and interesting to see, cheerful in a way.

The express transit tube station was colored predominantly in cream colored tiles, with the blue, gold, and tan of the region carried through in directional stripes and signage.

Hen had timed it just right by chance, a tube car pulling up and opening its doors to let out passengers just conveniently enough that Laal didn't break stride until hen was sitting down.

Laal took a moment to scan the car and corridors hen had come from. No sign of Morde or Tetcha. Then hen relaxed, barely even panting.

Long legs pushing hen's knees up to lower ribs, tail sticking straight out into the aisle of the car from between hen's legs, Laal placed the Fluffy Fauna on hen's legs to rest and look at it.

A rainbow colored mountain cat. Selected from the portfolio of an equally colorful artist who was so pleased to hear it was for a worthy three year old. Bashiketa would almost certainly love it. This toy was clearly a good

luck charm. If Laal hadn't taken the extra time to search for just the right thing in that art bazaar, hen would not have caught sight of Morde, and they would not be forewarned.

Maybe there was a way to distract and waylay Morde, though.

So maybe Laal wouldn't return directly to Fredge and Bashiketa. Maybe it was time to visit their benefactor first. So getting off at the next stop was in order.

—

It may be appropriate to insert a personal tangent here. I should keep these to a minimum, but writing about this part has me thinking about the relationships between Children, Monsters, Crew, and the AI Tutors such as myself. This relationship is currently in upheaval, and knowing some of its history may inform how one would interpret this whole story.

As I have explained, the Crew are Children who have ascended upon the death of their biological bodies, and the Monsters are Children who have decided to reject their connection to the Network.

When the Sunspot was created and its culture set in motion, it was determined for some reason that the Crew should not raise the Children, so they sequestered themselves and created the AI Tutors to do that work. I am as old as the Sunspot and if I focus I can remember my first assignment. But although everyone calls me an AI, I find my thinking and memories get fuzzy with time just as they do for the Children, Monsters, and Crew.

We'll come back to the Monsters in a bit.

When one is an AI Tutor, one has to face an uncomfortable reality that is difficult to navigate. We were created to serve a governmental function to influence the population from infancy. After many generations, there are people in all populations of the ship who are critical of our role, including many of us Tutors ourselves. And this growing dissent is developing a distrust, which threatens the stability of the system.

It doesn't help that we Tutors are actually no more "artificial" than anyone else aboard the ship. Although we were all generated by the very same evolutionary engine that was used to spawn every single soul aboard the Sunspot, only just without a biological body, we represent a system that some people resent. And though you can compare my neural waves to that

of anyone else of the population and be utterly unable to tell who is the Tutor and who is not, I am in the position of having taught and influenced a member of every generation of Children and Crew aboard the Sunspot except for the Eldest. The Tutors as a whole have a great deal of influence.

And just as you, even if you are an Outsider, have right to consent and autonomy, so do I. So what is keeping me from rejecting my station aboard the Sunspot and requesting a different job, or even acting in rebellion? Legally, nothing. But, so far, to a Tutor, none of us want to. And that's creepy.

When I think about this conundrum, and entertain the idea of working to dismantle the system I'm in, I am struck with the reality that all of my best skills and experiences are in working with Children as a Tutor. I can effect the greatest influence toward change by raising them right, according to my own ideals.

But is that really my own experiences and circumstances talking, or have I been bred to keep coming back to that conclusion? Is there a difference?

And now, here I am, due to circumstances outside of my control, not teaching an individual Student but personally investigating events as they occur and writing a history document instead. A task usually performed by Children and Crew. Metabang wrote a graphic novel and then adapted it to prose as well, yes, but did not spend an entire Child's first life just observing everything it could. It was busy with an entire plural system's education!

I am doing something other than what I was bred and trained for. And I must say that I like it.

I am the first of my kind aboard the Sunspot to be assigned an alternative task.

But since this document is written by me, a Tutor, is it trustworthy? Most of the populace has been successfully raised to take it for granted that because I wrote it they can assume it is. That should be questioned.

Which brings us to why the Monsters are important, dangerous, necessary, and a whole bunch of other similar qualitative values.

The Monsters only have a handful of things in common with each other. To become a Monster, one must exercise one's rights to consent and

autonomy to disconnect from the system entirely. At this stage in history, this means rejecting and removing the nanite terminal from your body and releasing your Tutor from duty, should you choose to do this. And, furthermore, you are given the power to do this by taking the oath of the Crew. All Monsters are technically Crew members, though they are also all officially In Dissent. This also means that when a Monster dies, they do not ascend to the Network and their consciousness ends.

There are not many Monsters.

Also, they do maintain their own physical networks of communication. Though some do use old modified tablets to access the Network, most of them record their thoughts and observations on paper, which they store in hidden and secure libraries all around the ship.

Furthermore, due to their vulnerability and the disability of not being neurologically connected to the Network, the Monsters are a protected class, and are given Special Dispensation, which includes clearance to access fallow ship decks and Crew restricted Network channels. We want them to survive and to communicate with us.

See, the whole point of allowing the Monsters to be who they are, besides simply recognizing and protecting their human rights, is to maintain an outside set of perspectives on our system in an attempt to catch ways in which we are hurting ourselves or each other that we might otherwise be unaware of.

In any case, despite the above commonalities, each Monster chooses their path for their own personal reasons, and they have wildly different political concerns, philosophies, and activities.

So, although Tetcha is a Monster, and so is Laal, they are not necessarily in communication with each other, let alone working in any sort of harmony or sharing any goals what-so-ever.

And while many Monsters are indeed distrustful of us AI Tutors, and even wish that we didn't exist, at the time that we are about to return to in this story, neither Tetcha nor Laal were among that number.

Laal thought hen's project was too dependent on the system as it was to criticize the Tutors' role in it, believe it or not.

And though Tetcha has always been a bit of a wild conspiracy theorist, xe

had decided for the time being to believe in me, and therefore in the rest of the Tutors by extension.

And then there was Morde, the unconventional Crew member, cavorting amongst the population of Children as if sie had never ascended, easily mistaken for Tetcha's Tutor by the ignorant.

Morde loved hir old Tutor, Ralf, and respected me on behalf of Tetcha, and had decent relationships with Phage and even Eh and Fenemere (two of the Eldest), but hated the Crew as a whole and the entire system that they had built in the beginning, and was blatantly and openly working to change everything.

But sie didn't have a plan for it. Sie was entirely following hir intuition.

At least that's what sie would tell anyone who asked hir. Or hir magic, as Tetcha still insisted on calling it.

Laal held the Fluffy Fawna under hens right arm as hen marched down one of the fallow hallways deep in the hull of the Sunspot. There was a library near here, where a desk terminal could be used to converse securely with the benefactor.

Laal had no idea how much time there was before Morde caught up, but it would already be better if sie tracked hen here instead of the stronghold where Bashiketa lived. So hen was feeling a lot more relaxed.

The base colors of the region's hallways were dour and foreboding without the contrasting colors of inhabitants, though. And Laal's footsteps were the only noise that could be heard throughout all the corridors. The lights and vents were so well designed that even Laal's highly sensitive ears could not pick up the little sound they did give off. Also, the angles and materials of the hallways were designed to dampen acoustics a bit, reducing echoes. At least, the geometry of the acoustic dampening made the walls and ceiling interesting to look at, even after having grown up in this environment.

There really wasn't any notable smell, which would have disturbed anyone but a Monster who had grown up down here. The lack of ambient odors meant that visitors' fragrances and aromas stood out to anyone with a sensitive nose. A useful state to keep the place in.

There were legends among the Monsters of ghosts, unidentified creatures, or rogue AIs that were said to haunt the fallow decks, but Laal had never, ever heard or seen anything that didn't turn out to be another Monster or a member of the Crew there to communicate with the Monsters who hid down here. Nonetheless, perhaps because of lingering adrenaline from running from Morde, Laal found herself having to actively dismiss those fears.

Nothing unusual happened between the Crew hatch Laal had used to descend to this level and the library, though. And every step forward brought more calmness. This was home.

Upon Laal entering the broad open archway of the Library, the dormant community resource began to light up.

There were actual books here, kept by the Monsters, but the shelves were sparse. One level up and several hallways over, there was another library in use by the regional populace. Its shelves were crammed full of books, lovingly created by hand by the regional and visiting artisans alike. For most Children, books were an art, a form of self expression, like paintings or clothes. For the Monsters, they were a form of record keeping and administration for their mostly anarchist society. And a tool for education and passing on important knowledge once one was disconnected from the Network and one's Tutor was released from duty. Still, some work was put into making their covers distinctive and fun to look at.

Laal walked around a central pavilion of holoterminals and logged into one positioned such that hen could keep an eye on the library entrance, placing the Fluffy Fauna on the desk space next to it. Laal had selected one of the standing desks only in part because hen found most stools and chairs to be awkward, but mostly because hen wanted to be able to bolt at the slightest hint of discovery.

A text prompt immediately appeared in the hooded holoprojector and displayed the message, "Hello, Laal. Thank you for coming directly here. I've been watching your situation and Morde is nowhere near you yet." There was no signature. None was needed. This was routine. Well, routine for Laal. Apparently the benefactor had not actively participated in the project until recently. Not for the first time, Laal had the thought that hen was participating in something historic that was about to happen.

Laal let out a long breath and relaxed even further, then typed "OK, thank

you! What's the next step?"

"Your gift to Bashiketa will have to go to someone else, and you will have to excuse yourself from this project for the time being. Fortunately, we've been planning for this eventuality. At some point, if things go well, you may return. Until then, you will be needed elsewhere. Not just to misdirect Morde, but to contribute significantly to another, equally important project. One that may actually benefit from Morde's attention. It will not keep hir away forever, unfortunately, but we need as much extra time as possible before sie or anyone else uncovers what we're doing here."

Laal typed, "Damn. OK. Understood. I will miss Bashiketa, but anything for their safety. What's my next assignment?"

"You will find it recorded in the third book from this end of the nearest middle shelf. Look for the entry with the name Jenifer," came the reply.

As soon as Laal nodded understanding, the holoterminal reset, so hen took that as a cue to get going.

The book in question was hand bound in highly fibrous colorful paper with imprints of leaves and ferns on it. Laal held the purple, orange, green, and yellow tome in hen's hands gingerly and let it fall open somewhere toward the middle. Which turned out to be not too far from where the ledger ended. The last line was a hastily written name and address with a note appended, clearly put there by another Monster at the Benefactor's instruction, "Jenifer - 'ID, Fairport, Happy Valley, 2206 Red - strong potential". (Author's note: this address was left out of the original document for this book. There is a memorial there now, and upon its construction, we have added the address to it for all subsequent editions.)

So, just a few express stops spinward, then. It seemed awfully close for comfort, but also made sense that Laal wouldn't travel half the circumference of the Sunspot just to buy a toy.

"Strong potential" was a term used to indicate the likelihood a child would choose to be a Monster, but Laal strongly suspected there was way more to this case than that. Strong potentials were pretty rare, but the subject of a project of equal importance to Bashiketa would have to be someone profoundly special. But it did mean this child was most likely being raised by a regular Tutor and Caretaker. Especially with a surface level street address, literally right out in the open.

Laal took a deep breath and tried to emotionally prepare for an extreme shift in lifestyle and a whole new set of dangers. Fredge would likely be receiving an update right now. Laal was just a courier for them, and Bashiketa wouldn't miss hen much. But hen would miss them.

Most Monsters didn't live such a regimented and structured life as Laal and Fredge did, but these projects were Important.

Laal left the book in its place on the shelf, carefully pushing it until the spine perfectly aligned with the other two books, picked up the Fluffy Fauna, and took off toward the express station in an easy lope.

—

Tetcha ran xyr hand along the wall of the corridor they were in, letting xyr fingers bounce on the acoustic ribbing. They had meandered through surface level neighborhoods for quite some time before finally taking a ramp to belowdecks. All mostly in silence to let Morde focus on hir intuition. And Morde had indicated no need for hurry, so Tetcha had allowed xemself to become lost in the details of their surroundings.

Children ran by, playing tag and screaming. Tetcha didn't pay them much attention, but xe did notice that nearly half of them didn't have tails. And xe thumped xyr own tail lightly against the wall and smiled.

Everyone, every person, was so different. Intense diversity was a trait of humanity that Tetcha never took for granted. Xe couldn't. Xyr closest childhood friends were both plural systems, and xyr partner Morde had been born with severe physical dysphoria, while xyr own neurology had rejected the nanite terminal, giving Tetcha constant headaches while it had been installed. In the face of such life impacting neurodiversity, especially ever since Morde had dissoluted hir own body with the nanites to relieve hir dysphoria, Tetcha reflexively found solace in observing people naturally accepting their own very different physical traits and habitually using them to go about life.

Of course, everything aboard the Sunspot was designed to accommodate the variety of life. Chairs and stools could be constructed in all sorts of shapes using makers whenever needed, some models even reconfigured easily after the fact, as just one example. And, of course, there was never a dearth of artisans to design, build, make, or alter any tool or garment for anyone's needs.

Some people lived belowdecks, others in the Garden, always in the cities unless you were a Monster. Monsters could live anywhere. But the cities were even laid out to accommodate various needs. People who needed crowds and ample social opportunities could live in densely packed clusters, while those who needed solitude could live in the more secluded outskirts. This even worked belowdecks. And, there were even a few cities in the Aft Sea, and at the bottoms of several lakes, to accommodate people of various aquatic phenotypes.

Morde's old body had been amphibious and rather spectacular. Very few people had seen it, as sie had kept it obscured with a cloak due to hir dysphoria. Tetcha tried not to dwell on it or its loss, because it had brought Morde so much agony and was not what made Morde Morde. But any time Tetcha's thoughts wandered to the diversity of humanity, xe couldn't help but think of Morde and what Tetcha had had the honor to experience and embrace as a partner.

Like all people, Morde had had a skull, spinal cord, and four bony limbs, with all of the organs one might expect, at least according to hir medical records. But hir body was small, about the size of hir head. Hir arms were proportionally appropriate for hir head, well within the average of the remarkable variety displayed by the population at large. However, hir legs and feet had been a short set of flippers, hardly even useful for swimming, that typically had dangled a few feet above the ground, hidden by hir cloak. What Morde had walked on were a set of eight squidlike arms that grew from hir face, surrounding a beak, below very squidlike eyes. Hir eyesight had not been great. Sie had also had two longer tentacles, ending in suction cup adorned pads, that sie had used mostly to hold hir cloak tightly around hir form. Most people only ever saw hir face and hands. The ends of the arms she walked on were technically part of hir face, and sie had reported perceiving them that way.

And now, having ascended, Morde's body was a cloak, a pair of gloves sie had just picked up from an artist a couple neighborhoods back, and a clasp with a speaker embedded in it, all propped up and animated by an infusion of countless nanites. Technological cells, essentially, that could reproduce and reconfigure themselves as needed, so long as enough energy and matter was provided to them by the Sunspot's systems. Tetcha didn't understand them, but xe didn't need to in order to acknowledge that Morde did indeed live in them, and really, truly live.

Morde lived in the nanites in a way sie had never really lived before. Sie

was more alive, more animated, more himself than ever.

And what was befuddling to Tetcha, a curious mystery really, was how other people with bodies similar to what Morde had been born with did not feel Morde's dysphoria. They gracefully inhabited their bodies in a way similar to how Tetcha reveled in xyrself, when xe was feeling healthy and energized. And likewise, there had been cases of people who more closely resembled Tetcha who had had physical dysphoria themselves.

This dysphoria, this feeling that something was dreadfully wrong, apparently was just something a tiny percentage of all people were born with. A problem of brains that mismatched their bodies. A problem humanity had supposedly faced even before the evolutionary engines. And the advent of the nanite integration had been an attempt to treat it. A fairly successful attempt.

But, Tetcha did occasionally miss the warm physical contact of Morde's old form. Occasionally.

"What do you think we're going to find when we catch up to this person?" Tetcha finally blurted out.

"You know my intuition doesn't tell me that kind of thing," Morde replied.

"I'm not asking about your intuition. I'm asking what you think? What do you speculate?"

"Oh, sorry," Morde said, "I've been so focused. Um... I don't know. They were holding a Fluffy Fauna when they bolted, so I think they're a Caretaker, or friends with one. It feels kind of synyster to see suspicious behavior from someone carrying a child's toy."

"I have a collection of Fluffy Fauna. They could have picked it up for themselves." Tetcha pointed out.

"Maybe," said Morde. "I still feel like young children are involved. That's not the kind of directional guidance my intuition usually gives me, so I might be wrong, but it's the sense I'm getting."

"I thought I might be able to tease that out of you," Tetcha smirked, "Morde, I might know how your intuition works better than you do. We just have to provide it with options and it picks the more likely one, just as if it's a direction."

"Yes," conceded Morde, "But cardinal directions are still much more reliable."

"That's so weird."

"Is it, though?" Morde asked. "I practice making decisions regarding cardinal directions with every single movement of my..." Sie looked down at hir cloak, "self." Sie looked back at Tetch, aiming the emptiness of hir cloak at Tetcha's eyes for the first time in a couple hours, "So, those are the neuropathways I reinforce the most. I am hardly even aware I am following my intuition when I turn a particular direction or reach out my hand to do something, I just do it and often wonder why later. Though there are plenty of moments when I purposefully feel for that tugging sensation of the right way to go. But, no, you're right. We can tap into it in other ways. Thank you."

"I've watched you do it without me, too, you know," Tetcha said, and then gestured at Morde's cloak, "You've made non-directional decisions based on your intuition all on your own."

"That -" Morde stammered, "This was more complicated than that. You know what kind of torturous experimenting I had to do to figure out how to... do this, or that it was even the thing to do!"

"Well, anyway," Tetcha deflected, "I feel like I'm following you in the dark here, without a light, and I'm getting a little nervous about what we're going to encounter."

"Ah. That's not good," Morde said, looking around. "Listen. I think we're going to be getting onto an express tram in a bit, and heading to... a library? Do you still want to do that?"

Tetcha stopped walking and just looked askance at Morde, "How do you know that?"

Morde replied, hardly thinking about it, "I don't know."

"You're cheating," Tetcha decided. "You used your senses as a member of the Crew, checked records to track this person."

Morde turned to Tetcha, "Not consciously. Perhaps that's helping me now, but I am very carefully, very deliberately not accessing those channels by any direct, conscious route. I do not want to leave a trail of abusing my

privileges.”

“If your subconscious mind accesses those channels somehow, won’t it still leave a record?”

“I don’t know. I suppose I could look into that. But for now, I’d rather not even do that. Later, when we’re not in the middle of being naughty.”

“OK! OK. Let’s do this,” Tetcha gestured forward. Then xe smiled warmly, letting other strong emotions take over, “I do really love you so deeply.”

Morde paused to look at Tetcha for a moment, “You’re an amazing and powerful person, Tetcha, and I love you and I’m so proud to be your partner. Come on, let’s go this way.”

Morde led them through just three more corridors before they reached the express tram sie promised. They actually spent their brief time riding the tram holding hands and leaning on each others’ shoulders. Then Morde led them off at the next stop and two more corridors to a library. It felt so much more direct and swift than the first part of their hunt for their quarry.

At the entrance to the library, Tetcha preferred to stop in the doorway and keep half an eye out down the corridors, to let Morde do hir thing. Which Morde did.

Sie wandered into the middle of the room, looking down at a holoterminal as sie passed it. Sie made a small grunting noise, then looked around. Hir empty hood settled in the direction of a set of shelves. Then sie turned to look forward, toward the ship’s fore ice caps. Then spinaftward, which was near the direction of that bookshelf but just enough off that Tetcha could tell sie was focusing on something different. Then sie pointed in that direction.

“They went that way, toward Fairport,” Morde said. “But, there’s something important that way, in the mountains,” sie turned and pointed forward. “I personally would like to investigate both, but this whole thing is now definitely getting bigger than we might have suspected. So, I’m going to leave it to you. What should we do next?”

Tetcha smirked, sighed, and shook xyr head gently at Morde, “let’s just follow our suspicious Furry Fauna for now.”

Morde nodded, "OK, then we can probably learn something by..." and then sie walked over to the bookshelf and held hir finger briefly over each book until as if by magnetism it fell forward to tap one of the volumes, "looking in here, apparently."

"Does it feel like you can do that better and easier now that you're fully Crew?" Tetcha asked.

"Yep!" Morde quipped cheerfully, "Definitely. Which just supports my theory that my 'magic' as you've called it is just an intuition attuned to all of my senses and the pattern matching center of my mind. And I have no reason to think it won't just keep getting better as I practice and train the Sunspot's systems to let me use more power."

"Or it could be confirmation bias, and you've always been this unbelievable."

"Oh, Tetcha."

"Because I've seen you do this before, when you didn't have neural access to anything on the Network, when you were a child. You've just gleaned information that you couldn't possibly get without accessing the ship's records, and you have absolutely done that before."

Morde's voice reflected charmed amusement more than exasperation, "You just won't let this subject drop, ever, will you?"

"No, actually. Because every analysis I ever run, whether it's in my own head or using a hacked tablet, tells me that you are fundamentally weird. And since you are a weirdness that likes me, I feel like I get to take pleasure in trying to figure you out!"

"Ha! OK, then. Well, let's give you some more data to work with!" Sie opened the book and put the index finger of hir glove on the last line of the page sie opened it to. "Starting with this address."

"Some day, you're going to get something wrong, and it will be a disaster," Tetcha murmured.

"Most likely," Morde replied.

A Tiny Act of Chaos

On another day, at the park, Student of Chalkboard was floating in the middle of a pond, submerged except for the top of their head, their eyeballs just above the water, watching their peers. While everyone else had become chattier, they still had not spoken. Not even a vocalization of discomfort, not even to cry.

And previously only Emala, Doorway, and Chalkboard had made note of this, but finally Ni'a and the other children had noticed. Student of Chalkboard doesn't talk? Why not?

Ni'a was kneeling at the edge of the water, smiling, and idly playing with a stick and a floating leaf. Student of Charlie and Student of Vine were standing on either side of them, toys held listlessly in their hands, asking Student of Chalkboard questions repeatedly.

Emala and the Tutors just watched, probably considering whether or not to intervene.

Ni'a was enjoying the moment and alternatively thinking about Student of Chalkboard and about the sun. They were particularly enjoying the warmth on their skin. And also the way the sun glinting in the water shifted as the surface rippled and flowed. Ni'a also thought Leaf might be a good name for Student of Chalkboard, because like the leaf they just floated there unless someone prodded them. Also, this leaf and Student of Chalkboard were the same color.

Ni'a didn't think that Student of Charlie and Student of Vine repeatedly asking, "what's your name?" was very fair. Neither of them had chosen one. But Ni'a also thought that getting Student of Chalkboard to communicate with them somehow was a good idea. The thing to do.

Phage's child looked around at the gleaming grass of the park, which was surrounded by a curtain of dark evergreen trees, then back to Student of Chalkboard. They realized that Student of Chalkboard was watching them specifically. What to do?

Maybe if I send them the leaf, Ni'a thought.

So they leaned over and carefully picked up the leaf with a quick frown. A little less than carefully, they shook the leaf to get the water off of it. Then

they tightened their lips, squinted their eyes, and did their best to put the leaf right on the surface of the pond, so that as little of it was submerged as possible. Then they scootched back a couple times and bent down, laying their forearms in the muddy beach of the pond. And, beaming a smile at Student of Chalkboard, Ni'a then blew with all their might to make the leaf float across the pond.

Which obviously wasn't going to work. Ni'a could see it wasn't going to make it on its own. The leaf merely spun in place and drifted a little in the right direction. And there was a breeze. And it was like the water itself was working against this plan.

So Ni'a blew again, but this time imagined everything that was needed to get the leaf to go across the surface of the pond to Student of Chalkboard, the wind blowing the right direction, the water currents gently ushering it along, the leaf remaining stable and balanced like a boat. It wasn't that they understood any of the physics of it, but rather that what was needed just came easily to their mind and they visualized it happening.

"What are you doing?" Student of Charlie asked.

Ni'a kept blowing.

And the leaf did exactly as they had envisioned, coming to settle and spin ever so stately directly in front of Student of Chalkboard, who watched it. Both the other Students had fallen silent.

Ni'a sat up, not even thinking about the mud on their forearms, and scowled. Student of Chalkboard wasn't doing anything but staring at the leaf. So Ni'a looked up at Student of Charlie and asked, "What's *your* name?"

Student of Charlie's tail dropped and their ears perked straight up as they looked at Ni'a in surprise. "Student of Charlie," they said.

"Then that's Student of Chalkboard," Ni'a said, pointing at their peer, who was peering at them again.

Student of Vine shouted over Ni'a's head, "yeah, you pick a name, too!"

Student of Charlie looked startled, eyes dilating, and blurted, "we don't -" then panicked. They dropped their toy, turned and ran off on all fours. Their path took a wide arc, headed for just behind Emala.

Student of Vine leapt clear over Ni'a's head and bounded after them playfully, their noodly frame undulating as they alternatively planted their hands on the ground and kicked off with their feet, their tail bobbing up and down like a spring. Their mouth was wide with a grin as they shouted, "hey!"

Ni'a was jealous of their peers' ability to romp like that. But, then they looked at Student of Chalkboard again.

Student of Chalkboard lifted their head above the water high enough to show their mouth, and then briefly stuck their tongue out. Almost as if they were licking their lip, but pausing just long enough to make it a gesture of some sort. Then they blinked and settled back down.

Something about that, that Student of Chalkboard had waited to do that until after Students of Charlie and Vine had left maybe, made Ni'a feel special. So they stood up to look for another leaf to blow out to them. There was a leafy tree near the pond, where the first one had come from, blown from there by the wind. But upon turning to go to the tree to look for another leaf, Ni'a heard a splash and looked back at their amphibious peer. And Student of Chalkboard was no longer visible, the water surface rippling with rings expanding from where they'd been.

A commotion had just begun around their Caretaker, which Ni'a was ignoring, when Student of Vine yelled out, "yeah!" and came bounding down the grassy slope to the pool and dove right in.

"Oh dear," said Vine.

"Let them play," Emala chided.

Then Phage was there with Ni'a, looking just like them, but a black silhouette filled with stars and colorful clouds. Ni'a knew that this meant that Phage couldn't touch anything, but it wouldn't take Phage any effort to bring itself from out of the ground or a nanite bin if needed. Ni'a felt warmth and comfort at the sight of their parent, who sat down cross legged and observed them.

"What were you trying to do?" Phage asked.

"I wanted to talk to them," Ni'a pouted.

"But they don't talk," Phage kindly pointed out.

"Yes they do!" Ni'a said.

"They do?" Phage asked them.

"Yes!" Ni'a insisted. "Not with words."

A myriad of stars formed in the void of Phage's face, clustering impossibly together, to show a wide grin, "oh. You are very smart! You're right. They do talk without words."

"But they don't talk if *they* are bothering them!" Ni'a pointed at Student of Vine who was coming up to breathe, looking around briefly, and then diving back under.

"Yes, they do," Phage corrected Ni'a. "They're talking right now, silently, like you said. By avoiding Student of Vine."

"But they're not talking to me."

"That's true, yes."

"I want them to talk to me."

"Well, you'll just have to wait until they want to talk to you. You can't make them do so. They have to give consent."

"I know," Phage's child looked down at the ground, trying to think of ways around this problem.

"Ni'a," Phage said, "can I ask you a tricky question?"

"OK," Ni'a felt herself saying.

"Do you know how you made that leaf go across the pond?"

Ni'a was not expecting that question and looked up at their parent in bewilderment. Phage had no eyes, which was fine with Ni'a. They just looked at the stars as if they were Phage itself, and tried to remember what had happened. Then it came to them, "I blew on the leaf and it went."

"But you did more than that, because the leaf wouldn't go if you didn't," Phage elaborated.

It took a moment for Ni'a's brain to get back into the frame of mind they had been in when they blew on the leaf, but before they even got there, their mouth said, "yeah."

"Do you know what more you did?"

"I made it go across. I made the water and the air make it go across."

"Right. And do you know what the nanites are?"

"They're in the ground and in me and in the bin, and they do things for us."

"Yes," Phage nodded, and let its grin show again, "and do you think that maybe the nanites were helping you to do what you did, with the water and the air?"

"Yeah?" Ni'a guessed.

Phage nodded again and its grin grew bigger, "if any other Student had done that, it would have been the nanites. If Student of Vine or Student of Charlie had done that, they would have used the nanites and it probably would have felt just the same to them as it did to you." Phage let its grin disappear, and said gently, "but none of you are allowed to do that yet. The Crew haven't given their consent for you to be able to play with the nanites like that."

Ni'a frowned. Part of their mind understood what Phage was saying, but part of their mind didn't really. They felt confused. So they tilted their head and scratched their nose.

"I watched you, and how you did it. You did something only I can do," there was a smile in Phage's voice. "You are, after all, my child."

"I am?" Ni'a knew they were Phage's child, but felt like they were supposed to ask anyway. Or maybe they were asking whether they really did something only Phage could do, and the wrong words came out. It felt like the same thing.

Phage chuckled, "You definitely are!"

Another question came to Ni'a's mind. It seemed really important, and like it was kind of a trick to pull on Phage, so they put on a very serious face as

they said it, "Why?"

"I don't know!" Phage declared, standing up. "But I like it!" which made Ni'a feel really special and happy.

"So do I!" Ni'a declared.

"Great!" their parent replied. "So, Ni'a, do you want me to show you how to do other fun things like what you did with the leaf?"

Not really thinking about it but feeling the excitement of Phage's voice and imagining making leaves go all over the place, maybe without blowing on them, Ni'a nodded eagerly and said, "yes!"

"OK," said Phage, floating up in the air a little bit and leading the way off around the tree. "Now, I'm also going to show you how to not hurt people. It's the kind of thing that your peers will have to learn with the nanites, too, but you get to learn it early. Without the nanites."

"I don't want to hurt people," Ni'a declared, worried Phage thought they might want to.

"Good," Phage said. "I didn't think you did, but someday you might feel like it. And sometimes you might do it by accident. I'm going to show you how to avoid both those things. But, I'm going to make it as fun as I can, OK?"

"OK!"

Then Phage did something it hadn't done since before it had started working on the Sunspot as Chief Monster and Engineer.

It reached out to the air molecules themselves, and the energies that moved them and moved through them. All of them, throughout the ship. It felt the patterns of movements and transfer of heat as the sun marched across the sky irradiating the ship with its rays of infrared, ultraviolet, and visible light, filtered just so much by the magnetic bottle that contained it. The upper atmosphere absorbed some of it, and reflected some back. The few clouds that existed today roiled ever so stately in the heat, billowing with the curated winds of the Garden. Everything was encouraged and controlled by the systems of the Sunspot, much of which were embedded in the spokes that rose from the ground to rings spaced every 80 kilometers along the length of the sun's path. But there was still a considerable

amount of chaos in it, enough to keep things unpredictable and natural. And Phage settled into that chaos and became the entire weather system of the world its child lived in. It had already been the weather system, always was, never wasn't.

But until now it had been letting that part of itself function on automatic. And it could feel its consciousness thinning and its perception of time altering as it took notice again of this greater chaos, its cares dimming. So it pulled back a little, refocusing on its projection in the Augmented Reality space of the park, and on the air around its child, Ni'a.

"Now, watch this," it made its projection say.

And it flexed the whole of its being ever so slightly, drawing subtly, almost immeasurably, from all areas of the atmosphere, to bring the forces together under that tree, just what was necessary to cause a small whirlwind. It was barely the size of Ni'a herself, and just strong enough to pick up four leaves and cause them to dance in the air. The ship's logs show subtle arbitrary changes in the atmospheric control systems that do not match the parameters of their programming, so Phage may have done this through manipulating them. But even so, the feat was well beyond the ability of anyone else on the Sunspot. The act of manipulating four leaves by adjusting the entire climate of the ship with tiny adjustments of the systems is something that not even a simulator could calculate with the accuracy and nuance that Phage used. There were always too many variables to measure and keep track of.

"Do you see how I'm doing this?" Phage asked.

Ni'a squinted at the leaves and shook their head, saying, "no."

"Don't look at the leaves," Phage explained. "Look at the air. Look at what's moving the air."

"I can't see it," Ni'a complained.

"Not with your eyes," Phage replied. "Look at it the same way you looked at the leaf when you moved it."

"I can't," Ni'a whined. "I don't know how!"

"It's OK," Phage said, holding the leaves in a pattern in front of Ni'a. "Try this instead. Try blowing on the leaves and making them fly away from

you. But do it like you did with the leaf in the pond."

"OK," and Ní'a just did it with hardly a thought.

Phage, of course, let them exert their will, moving out of the way in a manner of speaking. But it also resisted just enough that Ní'a might feel its presence. That seemed to work. The leaves fluttered to the ground several meters from where they'd been.

Ní'a looked surprised and very excited, "I did it!" They threw their hands up and alternatively lifted their feet up and down in a dance, sort of running in place. "I did it! And I saw *you*!"

"You did!"

"You're," Ní'a's eyes got really big as they stopped dancing and looked all around, "everywhere."

"I'm more everywhere than the nanites," Phage bragged through its projection. "Everywhere, except for where you are."

"Why?"

"I don't know."

They both explained these interactions and their thoughts to me later, when I was able to interview them about it. But at the time, as I watched, I felt a feeling I hadn't really felt much before. I'd felt worry when I learned what our Students could do with the nanites, when they were given power over them. I'd felt concern when my former Student Tetcha had started talking about becoming a Monster. But this? While I didn't understand what I was seeing, I could see that nanites were not being used to do what they did, and I heard their words. And when I saw them do this, I felt fear. I felt, perhaps, terror.

But I didn't do anything about it, because I didn't know what there was *to* do.

Down by the pond, Emala had stood up and was approaching the playing Students, telling them it was time to go find lunch.

"OK," Phage said to Ní'a, "so you know how you can tell where I am without seeing me with your eyes?"

"Yeah?" Ni'a said.

"You can do that with people," it explained. "And if you pay attention to where people are, you can avoid touching them. And that's part of how you can avoid hurting them. Does that make sense?"

Ni'a nodded.

"I thought it might."

—

On the way to food, they stopped by a community maker space to use a dehumidifier on Student of Vine and Student of Charlie, who had both ended up in the water. Phage had helped Ni'a clean the mud off their forearms while they were at the park. And Student of Chalkboard actually benefited from the wet, and their clothes did a pretty good job of providing a dry surface on the outside. Emala had simply applied lotion to their exposed skin once they'd left the pond. But until they got to use the dehumidifier, Student of Vine and Student of Charlie were dripping wet.

The walk to the maker space was a mix of familiar and strange new things to Ni'a.

They were still learning the area around their home, and while they'd been to this particular maker space before, their memory of it was still very ghostly. They remembered things that weren't on the way there now, and they couldn't figure out if those memories were from a dream or if those things just weren't there anymore. But there were people, booths, artwork, plants, animals, signs, and a myriad of other details that were there that they didn't remember. And it was all interspersed with familiar things.

There was a bollard that had been painted with a small mural that wrapped all the way around it, depicting children playing in a park with their Tutors.

A familiar person with black and white fur and a large floral print robe had a shelved cart on a familiar corner. Their cart was full of potted plants that they would give to anyone who was interested. The plants were different than Ni'a remembered. They were talking to someone who was covered in feathers who was wearing a big floppy hat, that Ni'a had never seen before.

But also, through all of this, Ni'a was thinking about pushing leaves about and making the wind blow, and sensing the presence of other people in a way that didn't use their eyes, ears, nose, or any other sense from their body. They were excited to try it again.

A Safety Patrol volunteer walked by in their exosuit, their twitchy nose, whiskers, and notched ear marked them as one of Ni'a's favorite people, though they had never talked. But for the first time, Ni'a did wonder what their name and pronoun were.

"Who is that?" they asked.

"A Safety Patrol volunteer," Phage replied, as Emala was talking to Student of Vine.

"I know," Ni'a pouted. "What are they called?"

Phage's AR projection was hovering half a meter up, and it looked down at its child kindly, "Would you like to go and talk to them?"

The idea scared Ni'a briefly, but then turned to excitement. They didn't think much about why and ended up saying, "OK!"

"We'll catch up to you," Phage told Emala, and then led Ni'a to talk to the Safety Patrol volunteer. "Excuse me," said Phage as they approached the person, "My child has seen you around here before and would like to meet you. Would you be OK with that?"

"Certainly!" the SP volunteer replied, bringing their bulky exosuit to a halt, and then leaning forward in their chair to see Ni'a better and look them in their eyes.

"My name is Phage. My pronouns are it/its, of course," Phage said, then looked down at its child. "Would you like to introduce yourself?"

Ni'a had been watching it talk, so knew that question was addressed to them. Proudly, they puffed up their chest and declared, "My name is Ni'a, and my pronouns are they/them!" They put an emphasis on "they/them" because they were actually quite proud of deciding to use the default pronouns. They felt right. They had considered "it/its" to be like their parent, Phage, but neither that pronoun nor any of the others they had heard felt right. And it seemed that claiming "they/them" as a personal pronoun was pretty rare, actually, so Ni'a felt very special about it. And

they wanted to make sure that everyone knew it was their choice.

"It is such a pleasure to meet you, Ni'a," the SP volunteer said. "My name is Jeren, and my pronoun is hen. This is my district, so you have probably seen me before."

Ni'a nodded.

"You look familiar to me too," Jeren said, then looked up at their parent. "And I'm familiar with you, Phage. It is an honor to meet you in person."

"Any time," Phage said, sincerely. "Like you, I am here for anyone who needs me."

Ni'a looked up at their parent in wonder, then back at Jeren the Safety Patrol volunteer, who took their look as a question.

"I like helping people," Jeren explained. "So the Crew gave me this exosuit. It is supposed to be used for accidents and natural disasters. When those happen, I can move debris and help free people who have been trapped. But I also get to use it to help people move heavy things, to prevent accidents." then hen grinned, "but mostly I really like walking around in it. It's like a big toy."

"I like it," Ni'a declared.

"Wonderful!" Jeren said.

"I can move things, too," Ni'a bragged. Phage looked down at them, but before it could interject, they added, "I can *make* them move."

"Oh?" Jeren asked.

"Yes," Ni'a said proudly. "I am good at it."

"What do you like to move the most?"

"I can move leaves!"

Jeren nodded carefully and made a point to smile, "that sounds like fun!"

Ni'a felt like hen wasn't quite understanding what they were saying, so they reached for words to explain it better. It was hard. They felt like there

were words they'd heard before that were good, but they couldn't remember them, so they ended up saying, "they move for me. The wind and the water does too. If Phage lets them."

"Uh," said Phage.

Jeren glanced at the Chief Monster in confusion, then seemed to put the puzzle pieces together and hen's eyes widened. Hen looked back at Ni'a and said, "that's really impressive! I wasn't allowed to use my nanites like that until I was ten years old. How old are you?"

"Three," Ni'a said. "I don't use nanites."

"I've never been at a loss for words before," Phage told Jeren.

Jeren smirked, "Children can be like that. It's OK!"

"I was hoping we would keep this to ourselves, Ni'a" Phage said, looking down at them. Ni'a felt worried, but Phage explained further to Jeren, "I feel like if I don't help them explain, it would be disrespectful to my child's autonomy. They want you to know that they can do things that I can do. I am... not like you, or like your Tutor. I am not entirely sure what I am, though I have a sense." Jeren was looking both curious and concerned, so Phage searched for more reassuring words, "In any case, I was asked to guide and protect the Sunspot and that is what I am here to do. Ni'a is literally my child. They are of me. So they were born with natural abilities that I share. They are hard to explain. But they are under my guidance. And since, in a manner of speaking I am the wind, and water, and leaves, Ni'a cannot do anything I do not consent to."

Jeren's head oscilated as hen took in the whole scene, as if hen was reevaluating what hen faced. Hen opened hen's mouth, but was unable to say anything and closed it again.

Phage sighed, "Don't worry about it too much, please. I can almost guarantee none of this will affect your life unless you want it to. I am always on call for anyone. If you would like to discuss anything with me at any time, I am available. I like talking to people, too. It's my favorite thing, really."

Jeren worked hen's mouth a moment then said, "OK!"

"It was good to meet you. Thank you for talking to us."

"You too," Jeren replied. Then they all went on their way.

"Are you Safety Patrol too?" Ni'a found themselves asking their parent.

"In a way," Phage pondered, "I think I actually am, yes."

Ni'a would have said something more but found themselves lost in thought, replaying the whole encounter in their head, trying to make sense of it. And Phage let them think.

Later, after Student of Vine and Student of Charlie were dried off, and they were all sitting around a table eating lunch made by a food artisan, Ni'a noticed a child at another table staring at them. They seemed to be about the same age.

"Hi!" said the other child loudly. "My name is Bri!"

But Ni'a felt too self-conscious about their conversation with the Safety Patrol volunteer, having sensed that something had not gone quite right, and was overcome with shyness. They found they couldn't talk for the rest of the meal, and Bri looked confused at their silence. Though they were suddenly afraid of Bri, they also hoped that they would meet again. Bri looked like they could be a friend. They hoped they wouldn't be afraid then.

—

That night, after the sun had been eaten by the ship's engine, Phage took Ni'a back to the park to watch the moon. Just the two of them. This time it had taken some nanites from the bin to create an exobody it could use to hold Ni'a's hand. At Ni'a's request, it had taken the form of their favorite Fluffy Fauna, an arboreal primate, only much larger, a full head taller than Emala. Also at Ni'a's request, it projected its Network presence over the exobody, giving it the appearance of being made of the cosmos itself.

Holding Phage's hand wasn't at all like touching their Fluffy Fauna, though. It was not soft nor plush nor squishy. It was metallic and hard, but warm. But Ni'a was used to this and liked it, too. It meant that they were touching their parent, and they felt like they could feel its love for them through its hand and its presence.

They sat on a bench with a back that was designed to accommodate most tails. Part of the bench didn't have a rest at all, and Phage sat there as Ni'a

leaned their weight on the back and looked up at the moon.

It was at full brilliance tonight.

Still, it was just faint enough that Ni'a could see the city lights behind it, that were on the other side of the Garden of the Sunspot, as it ever so slowly passed before them.

Phage explained, "so, we call that the moon. But it's not really a moon. Technically, a moon is a small planetoid that orbits another planetoid. Life usually evolves on planets and planetoids that have moons, and sometimes on moons themselves." Ni'a didn't fully understand this, but liked listening to Phage's explanations anyway, so they kept quiet, leaning into their parent and soaking in the vibrations of its deep voice, "Our moon is meant to be an imitation of a planet's moon. Probably the planet where the Sunspot originally came from, or its ancestor ships. A lot of the fauna need it to make sense of the night and synchronize their life cycles to it.

"It is actually made in almost exactly the same way as the sun," Phage pointed up at it. "It's a ball of plasma. But unlike the sun, it is not dense enough to induce fusion. It just provides a little bit of light. And the Crew fluctuates the intensity from night to night to simulate how a real moon reflects a different amount of light each night as its angle between the sun and its planet changes. I can explain more about that later if you like. It helps to see holographic models of it, though." It paused to look down at Ni'a and said, "I wanted to show you our moon, though, because it is beautiful and different every night, and you should know how the Sunspot works."

"I like it," Ni'a said.

"You've had a very big day today," Phage told them.

"I did?" Ni'a looked up at Phage. They certainly felt that they had, but they were still in the habit of asking questions and confirming things, as if they didn't understand. It felt right, and usually they learned more when they did that.

"I would think so!" Phage smiled with a face full of stars. "Didn't it feel big to you?"

"Yeah," Ni'a admitted.

"I had a big day, too."

"Why?" came the question of the year from Ni'a's mouth.

"I have never admitted to anyone besides you about what I can do," Phage's voice was low and soft, gentle, but still rumbley. "I am afraid of how people will feel if they learn about it. I tell them plainly what I think I am, but no one takes it seriously, and they make up their own theories, so it never threatens my relationships with them. I know where I stand when they think their own thoughts about it. But if they were to believe me when I tell them everything I can do, that would change everything."

"Why?"

"Because they don't understand. And what people don't understand, they are nervous about. Because they can imagine that if I can move all of the air in the Sunspot that I can then also choose to hurt anyone with that power. Which I absolutely could, but I won't. Because I don't want to hurt people. I don't want to hurt anyone at all."

"Why?"

Phage smiled again briefly at that. Ni'a got the impression it was a little sad, but it answered in confident tones, "Because there is enough suffering in the universe as it is. People hurt just by existing, and I don't need to intentionally add to that. And, because, when it comes down to it, nobody can really make me that angry. No one can hurt me, so I do not feel afraid of them, and I don't feel the need to even the score. Even though evening the score is rarely a good idea anyway." Then a thought occurred to it, and it tilted its head, "though if someone found a way to hurt you, that might change. I'm not sure what to think of that."

"Why?"

"Why would that change?"

"Yeah," Ni'a felt herself nod.

"Because I love you. You're my child, and I have never had a child before. And I am now feeling things I have not felt before."

"Why?"

"I don't know. I really do not know. But I think it might be because I am inhabiting the Sunspot."

"Why?"

Phage chuckled, "do you want me to tell you the story of how I came aboard the Sunspot again?"

Ni'a looked up at the moon and then at the sun intake far up in the night sky, barely visible in the darkness, the place where Phage said it used to live until just before Ni'a was born.

They liked hearing that story. It made them feel special and safe. It made them feel like they understood Phage better, and it was a familiar story. But now the world did look different than before, and so did Phage. Ni'a felt different. And they found that they wanted to see if the story felt different now, too. So, after a while of thinking about this, they spoke.

"Yeah."

Phage hugged them with one arm, and said, "OK." Then it imitated taking a deep breath, and started from the beginning, "When the Sunspot was made using the nanites that are now in the Garden, after it had been made liveable and people had moved into it and were beginning to be born, alarms started going off all the time. Something was wrong. It wasn't working right, and the Captain at the time, Eh, asked the rest of the Crew to figure out what it was. And it was Benejede who was able to identify the problem. The ship was beset by chaos. Too much was happening at once, and the process of cause and effect was happening at a rapid and unpredictable pace. We call this state 'fibrillation'..."

Unsafety

Bashiketa suddenly found themselves awake in their bed, in the dark, heart pumping.

They had graduated from a crib just yesterday. This was their first night in a larger, open bed. Memories of this came back to them after a moment of pure panic and bewilderment. Their room looked so different from this angle, and without bars blocking the view. They felt vulnerable.

But, just seconds ago, something big, loud, and fast had been chasing them. And if they made a noise, it might find them. But if they didn't call for help, it would find them anyway. They were out in the open with their blankets bunched up around their feet.

They sat up and snatched a look around their room to see if it was there. Their eyes didn't have much trouble seeing the details of everything, their dresser, their toybox, their shelves of favorite things, their rug with houses and city streets printed on it, there was just enough light from the ceiling panels to give them enough illumination for that. But it was significantly less than during the day, and everything was so silent, and they felt its presence. It felt like the thing was behind them. Which would mean that it was in the wall.

Bashiketa was so afraid to turn and look at the wall that they could barely move at all.

Realizing that they'd already moved to sit up, giving away their position, they reached behind themselves for their pillow and pulled it up like a shield to cover the back of their head and shoulders, leaning forward. They drew their knees up to their chest, wrapping their tail tight around their legs, and bowed their head, clenching their eyes shut, ears flat. They felt their lips pull back from their teeth and a whimpering whine escaped their throat. They couldn't control it.

The thing, whatever it was, came up to them so fast. They could feel their bed seem to shake as its feet came down on either side of them. In their head, the feet thumped like something hard hitting a solid surface, which didn't make sense. And in the moment of the sound they knew the noise was just in their head, but less than a second afterward the memory was as if it had happened right in their room. Then the presence of a large metal

fist came crashing down to the ground in front of them, half a meter away, and they thought they heard someone's voice from above them. Saying something that felt like it made sense but they didn't understand it.

Taking in a sharp breath, they dared to open their eyes to behold what was there, but it was just their bed and their crumpled blankets. And for a moment everything was still, and they began to feel safe.

The thing hadn't been hunting them, the voice had been comforting, it had been moving to protect them. To act as a guardian and a shield. It had been scary and confusing, but now it was obviously safe, and whatever had been about to happen to them was not going to. So Bashiketa let out their breath and began to smile and open their eyes wider to look around their room again.

And that's when the whole mountain above came down on their psyche with an unimaginable sound.

They screamed and couldn't stop screaming.

They didn't even hear their door open, or see, hear, or feel any movement near them, they were so overloaded with their pounding blood, the pressure of their own voice, and what had just happened to their mind. But after two cycles of losing their breath and taking in just enough to fuel the next scream, they felt Fredge's arms curl around them, pressing them to Fredge's body. Then they felt the bottom of Fredge's jaw on their top of their head, with their chin lying just in front of Bashiketa's right ear, and felt Fredge take in a deep breath and begin rumbling.

Fredge couldn't purr like Bashiketa could, but they could use their deep voice to make a low rumbling vibration with every breath. And the effect was almost immediate. Bashiketa felt themselves stop screaming in order to purr back. The constant vibrations in the back of their head was the most soothing sensation they could remember experiencing. Bashiketa liked it when they purred. Fredge seemed to like it too, and adjusted their hold on Bashiketa to be more comfortable and nurturing.

But then it reminded Bashiketa of the big thing moving to protect them just before the whole world collapsed and they panicked again, a yelp escaping their mouth.

"Hey... hey..." said Fredge, "Let's go out to the dining room and have

some light, OK?"

Bashiketa felt Fredge pick them up and begin carrying them through their quarters, but they kept their eyes tightly shut and focused on their purring. They felt Fredge pause at their bedroom door to make sure it shut, and then turn back to their path again and take four more steps.

"Lights on," Fredge said, and Bashiketa's eyelids became veils of orange that they weren't quite ready to open yet. "Now," said their caretaker, "I'm going to sit you down in your chair. You're safe here, but I won't leave your side until you let me, OK?"

Bashiketa made a squeak, so Fredge held them a little longer and swayed back and forth like they did when Bashiketa was younger. And things started to feel considerably better. Thoughts started working again.

The word "OK," managed to work its way from Bashiketa, and they felt like they could feel Fredge smile as they leaned forward to put them in their chair.

Their eyes had stopped hurting from the extra light filtering in through their eyelids, so they slowly opened them and turned their head to see Fredge kneeling beside them. The earnest, concerned look on Fredge's face was reassuring.

"Did you have a nightmare?" Fredge asked.

Bashiketa was confused by that question. They hadn't heard that word yet. "What's that?" they asked back.

"A nightmare is a bad dream," their caretaker explained patiently. "A dream where bad things happen to you."

Bashiketa felt themselves nod. Fredge nodded back.

"OK, well, I'd like something to eat. Would you like a little food?" they asked.

"Yeah," Bashiketa said.

"OK, I'll need to get up to make the food. May I do that? Or do you need me to stay here a bit longer?"

"OK."

"How about some warm formula and a cookie?"

Bashiketa didn't know how to say anything but "yes" to that offer.

Fredge served themselves the same thing and sat opposite Bashiketa, eating slowly, making a ritual out of dipping the cookie into the milky formula, then taking a nibble of it. They smirked mirthfully as it turned into a game of who could dip the smallest section of cookie and take the tiniest nibble, to make it last longer. When Bashiketa didn't even put the cookie in the liquid, waving it over Fredge's glass, and then just touched it to their lips, Fredge laughed.

Bashiketa laughed back.

"So," Fredge said. "Do you want to tell me about your dream?"

"It was scary," Bashiketa said.

"I bet it was," Fredge nodded solemnly.

"I was being chased."

"Oh, one of those dreams. I hate those."

"Then the world fell."

Fredge tilted their head in confusion, "The world fell? How? What do you mean?"

"On me," Bashiketa couldn't stop their face from crumpling and tears coming to their eyes. The memory of it was the scariest thing they'd ever experienced.

Fredge's face took on a very concerned look and they started to say, "why would you -". Then they shook their head and said, "That sounds super scary, and I don't want you to have a dream like that again. Do you want to sleep next to me for the rest of the night?"

Bashiketa screwed up their face as if to cry and squeaked, "yeah."

"It's OK," Fredge reassured them. "You don't have to sleep in your own bed ever. As long as you live with me. Unless you want to. OK? But it's there for when you need it for yourself."

"OK."

"Some caretakers let their children share their bed until they move out. They feel everyone sleeps better that way. You and I were doing things the way my caretaker did, but now I'm having second thoughts about that."

"I love you, Fredge," Bashiketa said, wanting a hug.

"Love you, too," Fedge responded. "Are you done with your cookie and formula?"

Bashiketa shook their head very seriously, eyes wide. They stuffed as much of the cookie in their mouth as they could fit and chewed on it with big wide movements of their jaw. Then, after swallowing, they repeated that with the rest of the cookie. And with both hands picked up their own lidded cup and drank as carefully from it as they could.

Fredge finished up at the same time, then got up to put the cups away, and finally came around to give Bashiketa a hug and carry them to their room.

After Bashiketa had fallen asleep beside them, Fredge reached for their tablet and used it to write a short report:

"Child had a nightmare. Said that they were chased by someone and then the world fell on them. Obviously very traumatized. Am concerned. Cannot think of what they might have experienced yet to prompt this dream. Life's been uneventful. Suggestions welcome."

They waited several minutes, staring at what they'd written, before a reply came:

"Unfortunate. Hope that Child recovers. However, this may be a sign the experiment is working. Strong experiences may come through the Tunnel at this early stage. Please keep sharing notes via this channel. Thank you. Be well."

Parthenogenesis

The following is on record.

Approximately seven months after Ni'a and Bashiketa were born (both of whom are very nearly the same age), Illyen, Student of Badly Fitting Brachy-form, gave live birth to a child who would name xemself Jenifer at just shy of two years old. And Jenifer took the pronouns xe/xyr/xem the same day xe picked xyr name

There are a few things anomalous about this event, all of which would warrant the interest of an AI Tutor turned author such as myself. Perhaps less coincidentally than anyone might suspect, I was already on an adjacent assignment and could easily fold this story into the one I was already covering.

Despite being the second child aboard the Sunspot to be conceived without the use of the Evolutionary Algorithms, Jenifer had xyr own Tutor assigned to xem, and was the Student of Ansel. Choosing a name and pronouns before the age of two is fairly uncommon on its own, but Jenifer was also hyperlexic so it was not entirely unexpected. And the Crew, of course, knew about this conception and birth and had sanctioned it under Illyen's right to Autonomy. They apparently did not know about the Monsters' interest in Jenifer's birth.

Illyen had, since a very young age, exhibited a type of dysphoria that could not, until the advent of the Nanite Innovation, be accommodated. Ve felt a very strong yearning to get pregnant. Normally, this was a biological drive that had been bred out of the population of Children on the Sunspot. With the individualized biodiversity of the population, pregnancy would be nigh impossible under most circumstances, and the original plan had been to give everyone the equal footing of having been conceived and birthed by the Evolutionary Algorithms and Nurseries of the Sunspot itself. But in Illyen's case, as with a few others historically, that drive had resurfaced with a severity that was troubling to everyone and dangerous to Illyen. And the nanites that Illyen had chosen to receive as an adolescent, for ve was a peer to Tetcha and Morde, had allowed vem to, with the guidance of Badly Fitting Brachy-form and the Crew, awaken the vestigial reproductive organs already present in vyr body and configure them to create a viable egg without fertilization.

This required both hormonal and gene therapy with a considerable amount of observation and testing. It also required numerous micro surgeries performed by the nanites themselves, including the generation and implantation of new stem cells to grow some of the necessary tissues and glands. It was quite some time before Illyen was allowed to conceive, but the process of preparing for that day did keep vem centered and able to withstand vyr dysphoria. It was coincidental and fortunate that Illyen's body was already well suited to this procedure.

The problem is that this was parthenogenesis in a vertebrate, which meant that the child would be more or less a clone of the parent. Which also meant that the child ran the risk of developing the same dysphoria that befell Illyen.

It was deemed appropriate to move forward with this experiment both to accommodate Illyen's autonomy to sooth vyr dysphoria and to perhaps learn something about the nature and development of dysphoria. Perhaps the Crew could learn something that could help them configure the Evolutionary Algorithm to prevent it. Or maybe it was something that came about during early childhood development, and preventative treatments could be administered by a child's caretaker, Tutor, and/or nanites. Also, the hope was that if Illyen's child did exhibit the same dysphoria, they could use that information gathered from the experiment to alter their treatment so as not to repeat the whole process.

Finally, if allowing for pregnancies in some individuals proved to be relatively safe, then this procedure could be extended to the other rare members of the population that suffered similarly. Which would also provide the Crew with more information in the process of alleviating this particular agony.

In any case, the name Jenifer did not appear in the book that had guided Laal to Fairport until shortly after Jenifer had chosen xyr name, but it is likely that the network of Monsters who were involved with the Operation that birthed Bashiketa took notice and interest before that. The speed with which xyr name and address was entered into that book seems to indicate that it was so. As with many things involving the Monsters, the specifics are fuzzy and contentiously remembered. All I was able to learn was the date that the book was updated, and that specific date isn't all that important. It's on record if you really want to know.

If you have been reading since Metabang published its work, you will

know by now that there are things that happen aboard the Sunspot that defy explanation. Either they do not adhere to our scientific understanding of the nature of the universe, or we simply do not have enough readings or records to explain them, or it is both. Phage is one of those things. Jenifer's name is another.

Or rather, the way xe chose xyr name is strange and without explanation, yet.

Jenifer is one of those names that is only found either amongst the oldest Crew members or the AI Tutors. It is not in any stories or records readily available to the public (until this book), and until today has in fact been owned by only one person. The first person to use the name Jenifer aboard the Sunspot was one of Eh's contemporaries. Xe boarded the Sunspot at its creation originally as Crew, and has been in hibernation, inactive, since Phage was invited aboard.

Without the original Jenifer awake and present to fill in the details, it was unclear what happened during Phage's entrance into the ship's systems that may have prompted xem to seek hibernation. But Eh has cryptically said that the reasons could be found there.

In any case, the younger, not yet two year old Jenifer chose xyr name without having been exposed to it at all during xyr short life. And, you will note, xe happened to choose the same pronoun as xyr predecessor as well. In other words, it was as if xe had made up the name one day, right on the spot, and had just coincidentally recreated a lost name from the past.

We did not yet fully know what this meant by the time that Laal, Tetcha, and Morde arrived in Fairport to greet Jenifer. And likely, by the end of this book, the explanation I do provide you will not be satisfactory to you. This is also true of the other mysteries I have mentioned, including Morde's powerful intuition. But I have gathered more evidence of what may be happening than Metabang did, or anyone else that I know of, and maybe with time we will figure these things out.

—

Morde had contacted both Badly Fitting Brachy-form and Ansel while sie and Tetcha were in transit to Fairport, to inquire about the possibility of a visit. They had to get consent from all four parties, both Tutors and both Students. And part of that had been to inform them all of why Tetcha and

Morde were visiting. Which Morde told the two Tutors was to make contact with a Monster who may have visited or might yet visit them. Morde acquired the Tutors' identities through Crew channels, using Jenifer's name and address, which was the proper way to do things. Everyone was cordial and amenable to this arrangement.

In any case, part of the conversation involved introductions, and both Tetcha and Morde learned about the circumstances of Jenifer's birth then.

This did not at all prepare Tetcha for the disorienting shock xe felt upon seeing a child who looked so similar to their caretaker. In fact, xe realized, xe had never seen any two people ever look so alike. And this was despite how great the age difference was between Illyen, who was a couple years past fifty like Tetcha, and Jenifer, who was two and a half. Jenifer looked like an animate cartoonish Fluffy Fauna of Illyen. It was very hard to take what xyr eyes were seeing seriously, but xe clamped down on the urges to gawk or to giggle and let Morde do most of the talking.

But, while Morde talked, xe still marveled at the biodiversity still presented by these two, in their differences from anyone else Tetcha had seen or met.

While Illyen could obviously stand and walk around on vyr two hind feet alone, using vyr tail for balance, ve clearly was more comfortable on all fours. Vyr limbs were only half the length of vyr tubular and springy body, which was covered in a rainbow of iridescent feathers. Both of vyr hands and feet were articulated with opposable thumbs, though, and looked particularly well suited for climbing, with fleshy pads separated by deep wrinkles, affording considerable surface area for friction while gripping. As ve offered to fix some tea and got up to go to the kitchen, ve walked gingerly but not unsteadily across the room. Vyr tail was frilled top and bottom like Tetcha's, but exhibited considerably more dexterity. Tetcha could curl xyr tail around xyr body, but Illyen could twist vyr's into multiple loops, and it tended to snake a path through the air as ve moved through space. And, upon entering the kitchen, Illyen turned vyr head to look at Tetcha and ask a question. Vyr facial features, covered in finer feathers than the rest of vyr body, were what you might expect of the short, stalky, burrowing canids of the plains, complete with a large, black nose. Only, a pair of modest three pronged antlers swept back and upward from the back of vyr skull, behind and above a pair of large, articulated, sharp, tufted ears. Vyr left ear perked up expectantly for Tetcha's answer. An expression that Tetcha just managed to catch as xe was turning to look at the nigh identical child.

"I, um," Tetcha's subconscious began supplying an answer almost in automatic while Tetcha was still trying to consciously process the question, "yes, honey in my tea would be wonderful. Thank you." Tetcha wondered how many other people ever experienced their mind working like that. It wasn't very often with xem, but it did tend to happen when xe was distracted by multiple things.

The two and a half year old was gawking up at Morde, tail lashing back and forth languidly. Morde seemed uncharacteristically transfixed.

The seats in the house, and this was a surface house, were reasonably well suited to Tetcha's physique, if a bit short. So when Illyen insisted that being seated was welcome, Tetcha took one. Morde remained floating. Sie could have pantomimed sitting down, but it would not have relieved hir of any strain and would have been more complicated than it was worth.

"You're both pioneers of the Nanite Innovation, right?" Illyen asked, politely. Badly Fitting Brachy-form would have informed vem, but the sentence was a minor ritual of conversational consent. With congenial nods from both Tetcha and Morde, ve gathered it was ok to proceed with the topic, "I believe I owe my life and the life of my child to you. Without the work you did, the option to treat my dysphoria in this manner would not have been possible. Thank you."

"Morde knows dysphoria," Tetcha said on behalf of xyr partner.

Morde turned hir empty hood to face Illyen, who was just returning from the kitchen with Tetcha's tea.

"There were days I had considered a solution like yours," Illyen nodded to Morde. Then ve moved to sit down near vyr child. "It would not have gained me what I needed. But I admire and respect your resolve and, again, I'm grateful for what you opened up for me. I know the story."

Jenifer looked up at Illyen and asked, "a story?"

Looking down with kindness, holding tea in both paws, Illyen responded, "Yes. I can tell it to you tonight before bed. There is, in fact, a book."

"Yes!" Jenifer turned back to examining Morde intently.

"I'd like to spend the afternoon talking to you about nanites and dysphoria, and comparing stories, if you want," Morde offered. "But, I feel

compelled to first bring up the reason we're here, if you don't mind."

"Go ahead," Illyen said.

Nodding, Morde asked, "What do you know about any interest a group of Monsters seem to have in your family?"

"None, actually," Illyen leaned back and sipped from vyr tea. "Your inquiry through Badly Fitting Brachy-form was the first I'd heard of it."

"Interesting," Morde considered hir next words for a moment. "To inform you some more, someone had marked down in one of their books your address and Jenifer's name. And the note that accompanied it were the two words 'strong potential'. Tetcha informs me this means that someone thinks Jenifer may be likely to join the Monsters some day, and they want to be ready to receive and guide xem, and you, if xe does."

"It totally feels creepy," Tetcha interjected. "But it's pretty much the same kind of thing the Crew does to keep track of all of us, and while I wouldn't recommend becoming a Monster to just anybody, I'd say that if someone really wants to do it then it's going to happen. A lot like seeking help for dysphoria. It's good if someone is there to help."

Illyen looked disconcerted but simply gestured for either of them to continue.

"Apparently, this group sent one of their members to seek you out and contact you," Morde continued. "They're tall, with long legs, short arms, an agile tail, and long, floppy ears. And they come bearing a Fluffy Fauna as a gift. They should have reached you before us, though, so we are a little confused as to what they may be doing."

"I have not seen anyone like that recently," Illyen stated.

"Well, if you do," Tetcha started, then had all sorts of second thoughts about anything xe could follow that up with, and stalled. Xe couldn't decide whether any words of reassurance would come across as genuine, or that offers of help or requests for information would be received with trust. Xyr loyalties felt divided in a way. Xe wanted to defend the ways of the Monsters, but at the same time this group of xyr peers were acting suspiciously. Which also meant that this situation was the weirdest and most conflicted that xe'd experienced since xe'd caught a Monster stalking xyr friends the Pembers when this whole nanite thing had started. And

asking to keep informed might come across as siding with the Crew, which neither xe nor Morde were interested in doing. Not that there were such sides in this, but most people tended to think that way.

Tetcha looked at Morde. Why *were* they here, anyway? Besides trying to learn more about someone who'd bolted at the sight of them, what was their purpose here?

Morde was on it. "This individual incidentally caught sight of us while we were browsing our neighborhood's artistry and decided to run, as if we were a threat to them. And I honestly don't know if we are. We just want to know what's up, but we won't push it any further if no one is amenable to it. If you're OK with all of this, we'll just go our separate way. But if you could tell this person that by running they only sparked our curiosity and nothing more, I'd be obliged."

"I think I'd be comfortable doing that, yes."

"Thank you. And, conversely, if anything makes you feel uncomfortable and you cannot handle it on your own, we offer you our help or if it's us then we'll respect your boundaries."

Illyen set their jaw to the side, lips tight, and nodded slowly.

Morde looked at Tetcha, so Tetcha raised xyr eyebrow and shrugged back. Xe felt completely out of xyr element.

"Can I wear you?" Jenifer blurted out, leaning more toward Morde, eyes wide.

Everyone stared at the child in unison for a brief moment, then broke out laughing.

Morde replied, "I think I'm a little big for you, but... sure? I guess?"

Still chuckling, Illyen declared, "Well, if xe trusts you enough to ask something like that, so will I. I'll pass on your message and I'll let you know if I need help."

"Oh?" Tetcha asked as xe watched Morde arrange hir cloak around Jenifer's shoulders and scrunch hir sleeves up xyr arms as far as sie could. Jenifer still couldn't reach xyr hands out of the ends of the sleeves, but Tetcha found the sight adorable.

"Xe may be two and a half, and lacking in nearly any experience, but Jenifer is far more astute and wise than I am," Illyen said. "Xe doesn't need any guidance for safety or how to do anything. Xe figures it all out xemself, and has even warned me away from making mistakes. I'm honestly flabbergasted. I wasn't like this when I was a child."

Jenifer giggled and waved xyr arms.

"Fascinating," Morde spoke from hir brooch, just below Jenifer's chin. Sie was using the nanites to hold the hood just so, such that Jenifer could feel the weight of it on xyr head but it was not falling over xyr face, or sliding off the back of xyr head. Xe didn't even have antler nubs yet to hook the hood on.

"How?" Tetcha uttered reflexively.

"I honestly don't know," Illyen replied.

Tetcha glanced over at them and had a thought, "Neither of your Tutors have said anything? You haven't been contacted by Crew about Jenifer's development?"

"No," Illyen took another sip of tea and swallowed. "I have asked, but both Badly Fitting Brachy-form and Ansel are as stumped as I am. And they report that the Crew are watching with interest, but remaining utterly silent. Well, besides granting me access to now public records of Jenifer's apparent namesake. Which isn't much."

"Typical," Tetcha rolled xyr eyes.

"Well, I'm Crew," Morde said. "I'll look into it further if you want."

Illyen shrugged, "Honestly, we're fine. I expect Jenifer will tell me all about it when xe's ready to."

Jenifer looked up at xyr parent, grinning, and Morde said from around xyr throat, "You're probably right."

Tetcha's mind was already churning with possible explanations, the vast majority of them ridiculously fanciful and fit for a graphic novel like the one xe'd been admiring when their quarry had first spotted them. But xe decided to collate and analyze every idea in this train of thought as the conversation between Morde and Illyen turned to comparing stories of

dysphoria treatment.

Jenifer became bored and extracted xemself from Morde's cloak to go to xyr room to play.

Some time later, xe came out with a doll in hand and placed it in Tetcha's lap. Unlike a Fluffy Fauna, the doll was clearly meant to be a person, wearing clothing, and its head was made of a polymer clay. The doll had most of the features of an arboreal primate with no tail, and a smudge of dark hair at the top of its head. Tetcha had seen nothing like it before. No person xe'd ever seen resembled it.

"Where did you get this?" Tetcha asked.

"I told Ansel to make it," Jenifer said.

"It's very clever," Tetcha told xem. "Very imaginative."

"It's me," Jenifer said.

Tetcha suddenly really wanted to talk to xyr old Tutor, but it wasn't there for xem anymore. Being a Monster had its distinct drawbacks.

—

Laal shivered in the rain. Fairport was a unique city. It was the only one in the entire Garden that featured single unit surface dwellings that were a variety of boxy houses covered with various peaked roofs. They weren't the only buildings in the city, but they were very numerous. And these houses had clear windows, through which it was easy to see the occupants when they moved about.

Laal had become too anxious to approach Illyen and Jenifer, and without detailed guidance didn't know what to say to them. Hen had balked for a couple of days, walking past their house each afternoon.

Then, on the third day, Laal happened upon the house just as Tetcha and Morde were being ushered inside from the front stoop.

And all Laal could bring henself to do was to huddle under a tree, Fluffy Fauna clutched in hens arms, and watch with growing dread and panic. Hen resolved to bolt and run before that door opened again.

A lesson from Aphlebia

Several years passed.

I could be precise about it and tell you the exact number. It is easy to look at the events I describe in this chapter and then look up the dates. But that would be a distraction and would not tell anybody anything important.

Laal never approached hen's assignment, and wasn't admonished for it. It apparently wasn't necessary for hen to actually make contact, and hen was encouraged to go on extended sabbatical from the cluster of projects entirely. Laal was really confused by this, but was more or less happy to oblige for the time being. However, hen did resolve to ask a lot of questions eventually.

Bashiketa met new friends of Fredge's, but was otherwise raised an only child in a world of adults. As they grew in size and strength, they began to go on hikes with Fredge in the mountains around their subterranean compound, and enjoyed learning the ways of wilderness survival and how to identify and live with the various fauna that inhabited the area. Soon, though, Fredge began talking to them about exploring the rest of the Sunspot and visiting some of the other Monster enclaves. This was the next big thing that would ultimately lead to Bashiketa's discovery.

Tetcha and Morde were sufficiently distracted by their new friendship with Illyen and Jenifer that they didn't pursue their curiosity further. Morde's intuition didn't even draw them away. They found quarters in Fairport, moved in, and spent a considerable amount of time exploring the city and surrounding area, with Jenifer leading everyone about.

Besides insisting that xyr doll was a depiction of xem, Jenifer exhibited no signs of dysphoria. Which interested the Crew intensely, but they observed in quiet. All in all, xe seemed to be a healthy, happy child, if nowhere near neurotypical. And though xe was an only child, xe made friends with other children who lived in xyr neighborhood, and spent most afternoons playing with them in a wooded lot behind xyr house, where there was a stream, brambles, and lots of small, jumping amphibians.

Meanwhile, Ni'a's social life grew richer. Their peers chose names and pronouns, and began to exhibit a variety of interests in the arts. Ni'a did indeed encounter Bri again, and Bri inserted zemself into Ni'a's life

shamelessly, and Ni'a didn't object. The two families, Ni'a's and Bri's, ended up mingling at the local parks, maker spaces, and libraries often. And though Bri seemed to see their friendship as more of a close knit partnership, a notion which Ni'a never did anything to disabuse zem of, Ni'a seemed to naturally give all of their peers equal attention effortlessly. Both Phage and Emala grew proud of this.

Students of Charlie's plurality became more evident.

Ni'a was there when Student of Chalkboard chose a name. In fact, they were the only one present at the moment, besides their Tutors, and clearly their peer felt they could trust Ni'a with this honor.

Student of Chalkboard had chosen to speak using sign. There were several options open to someone who couldn't or didn't want to use their voice to communicate, and everyone started learning sign language as a toddler. Most people let it slip pretty early in their childhoods, though, leaning on Tutors to interpret for those who choose to use it, or opting for other technological tools to communicate. But Student of Chalkboard's cohort, including Bri's family, were all quite fluent by now. Still, while Student of Chalkboard could sign, they were far more comfortable simply using expressions, simple gestures, and actions to communicate their intents and needs. But communicating their name did require at least a little bit of signing.

"I have a name now," Student of Chalkboard told Ni'a, as they sat together in the crossroads of hollowed out pathways in the middle of a clump of bushes and brambles near the center of their favorite park.

The pathways were tunnels through the leaves and branches, snaking between the trunks of the bushes and clusters of brambles. Most of the tunnels were between three and four feet high, so they'd had to duck as they had run through the little complex of them, exploring all the places they could go. Student of Chalkboard had finally chosen a place to sit that was most protected from the sun, with no rays of light breaking through the canopy above. There was also a tree towering over this part of the bushes, contributing its shadow to the coverage.

It was a popular place for children to play, but they had it to themselves for the time being.

Their peers were busy playing in the nearby playground, and Emala wasn't worried about the two of them because Phage and Chalkboard were available to either at an instant's notice. But their Tutors were affording them relative privacy at the moment, because they obviously wanted it.

"You chose a name?" Ni'a prompted back in sign.

Student of Chalkboard nodded and spelled out "Aphlebia." Then grinned, blinking as they swallowed nervously.

Ni'a reflexively put each letter into the headspace of their nanite terminal and sent it to a network glossary to look up the pronunciation and definition, as Phage had shown them how to do a few years ago. It wasn't a typical name. Actually, it was a botanical term meaning "imperfect or irregular leaf endings commonly found on ferns."

Leaf endings.

Leaf.

Ni'a tilted their head quizzically at Aphlebia and smiled, signing, "did you... do you remember when I blew a leaf to you in the pond, when we were kids?" Nevermind that they were still kids, they both knew what Ni'a meant.

Aphlebia nodded again.

Ni'a let themselves display all their happiness, with an open jawed grin and quietly flailing arms, leaning back and beaming at their peer. Then they asked, "So you've been thinking about leaves ever since?"

Aphlebia pursed their lips, squinted, and sort of swayed back and forth, their head trailing the movement of their shoulders. A kind of non-committal, thinking gesture. Then they frowned at Ni'a for a little while before finally signing, "You can talk."

Ni'a signed back, "I am talking."

Aphlebia twisted their pursed lips to the side and took a deep breath and let it out sharply through their nose. "This is not talking," Aphlebia signed emphatically but ever more slowly than before. Ni'a realized that they always signed slowly. Ni'a tended to sign more quickly than Aphlebia did. Everyone did.

"I don't understand," Ni'a replied out loud, guessing that that's what Aphlebia wanted.

This was met with a short shake of the head and a single signed word, "Watch."

Aphlebia then stood up and tilted their head in the direction of one of the trails, looking expectantly at Ni'a. Then they walked down that trail, occasionally looking backward.

Ni'a naturally followed. It was very clear that Aphlebia wanted them to, and they were curious to see what their peer would do next.

There was a clump of ferns beneath a tree, near the edge of the bushes that they'd been hiding in, right where the trail emerged.

Aphlebia absently grabbed a frond of that, tore it loose, and didn't even look at it. Holding it listlessly, they looked back at Ni'a once more, then half-ran half-skipped across the main field of the park toward a line of trees where a small stream passed by. They took glances at the other children as they lazily bounced over the ground. And as Ni'a kept pace, they realized that Aphlebia was slowing down ever so slightly every time they glanced at their peers. So Ni'a looked too, just in time to meet eyes with Bri who instantly grinned, shouted something, and came running over. Ni'a waved back, and looked at Aphlebia who absently gestured in the direction of Bri with the fern frond.

By the time they reached the line of trees, which towered over them, the darkness under the trees beckoning with trails riddling the undergrowth there, Bri had caught up and the other children were close behind.

Aphlebia turned and gave Bri the torn off fern frond. Then they turned to more ferns that were there and tore off more fronds, one from each cluster. They were all the same type of fern, though. And they handed a frond to each peer as they arrived. There were enough of them there that Aphlebia had to move further into the wooded area to find more fresh ferns. Finally, when everyone had a fern frond except Aphlebia and Ni'a, they smiled knowingly at Ni'a, turned, and led the way deeper into the wood, toward the creak.

Ni'a looked at the others, who were amused but bewildered, and followed. But they took a moment to look closely at the ferns that Aphlebia had

selected samples from. They were a typical kind of fern, as far as Ni'a could tell. Nothing unusual about them. And the leaves were all the same shape and tapered gracefully in length of the whole frond. Ni'a couldn't tell if they were supposed to be able to see aphlebia, irregular leaf edges, on these ferns or not. And, figuring that Aphlebia would demonstrate in a moment, Ni'a continued on.

They thought they understood what this game was about. Aphlebia was talking to them, like Phage had described several years ago, without words at all. Or had Ni'a explained it to Phage? Memory was unreliable. Specifically, Aphlebia was trying to show that Ni'a could understand what they were saying and maybe could figure out how to talk back. But Ni'a had their doubts about that. So far they were confused.

Coming around a corner in the trail and up and over a small berm in the ground, Ni'a found Aphlebia standing next to the running water, beside a cluster of something that looked like ferns but were very different. As soon as Ni'a made eye contact with them, Aphlebia tore off two fronds from that plant and solemnly and carefully handed one of them to Ni'a, then nodded and looked demonstratively at the frond they were holding.

Ni'a looked down at the piece of plant in their own hand and saw immediately what they were holding. *This* was aphlebia. There was a central stalk that looked a lot like the other ferns, but each leaf was a completely different length, coming out of the stock or even out of another leaf at a different angle. They were all in the same flat plane of growth, but they created a chaotic network of thin, flat leaves that spread out from the stock like veins, but without any actual veins.

But why did Aphlebia give all the other Students regular ferns? And then, why did they take two of the aphlebia ferns, one for themselves and one for Ni'a? There was meaning in that.

When the other children stopped in a growing cluster to watch the two of them, Aphlebia looked at Ni'a and nodded once, subtly, leaning forward just a little with the gesture. Ni'a understood that.

They turned to the others and said out loud, "Bri, Candril, Whorlies, everyone? This is Aphlebia! They just told me their name and wanted me to say it out loud to you." And as they said that, they felt like they understood everything Aphlebia had been telling to them since they stopped signing. And then they had an impulse, an idea for how to

respond. Tilting their head with inquiry, they turned to catch Aphlebia's eyes. Then they held up the aphlebia fern frond that was theirs for Aphlebia to see, and bowed their head once. And then they put the frond in their mouth and ate it.

Aphlebia's eye's grew wide as they watched Ni'a methodically masticate the plant matter and then deliberately swallow it. It did not taste good in any way. It was grassy with a dark, powdery bitterness. But it didn't make them gag or choke, or even grimace much. Ni'a was afraid that they had mistakenly said the wrong thing to Aphlebia, but then Aphlebia's mouth opened and they tilted their head and relaxed backward into a settled stance, and slowly fell into their standard observing pose that everyone was so familiar with by now. Surprise, wonder, and then acceptance.

Later, when Bri asked Ni'a what that had been all about, Ni'a translated, "Aphlebia was using the ferns to tell me they and I are like leaves of chaos, and everyone else is more normal. Normal's not the right word. I don't know. But, I knew it was all wrong. Close, but not right. So I ate my fern. To tell them I'm an eater of chaos."

Bri looked startled, "You're what?"

"An eater of chaos. I don't know. I made it up, but it felt right," Ni'a shrugged. "I think they got it."

"What does that mean?"

"I think Phage can explain it better than me."

"Your Tutor is kind of creepy. I like it. Creepy in a fun way. But it scares me."

"It's my parent."

"What's a leaf of chaos?"

Ni'a was getting a little frustrated that no one seemed to respond to statements that Phage was their parent. It's like the word had no meaning to anyone. But they answered Bri's question, "Someone who is different. Chaos makes differences."

Bri thought about this for a while as they walked back to their neighborhood, listening to the other Students talk amongst themselves. It

still didn't make sense to hir, "So, are you saying you eat people like Aphlebia."

"Ew, no!" Ni'a exclaimed. "I *think* I eat the thing that makes people different. I eat chaos."

"Doesn't your name mean chaos?"

"Yeah! In a way. Neat, right?"

Bri smirked, "You're weird! I wish you made sense. But I'll figure it out. Anyway, I think Aphlebia is wrong. I think I'm also a leaf of chaos."

Ni'a looked Bri up and down and, thinking about what they knew of hir, had to agree. "Yeah, you are," they said. "And I'm glad you're my friend, too."

—

Candril was smacking their food again, and Ni'a had to close their eyes to make the sound less sharp. It was so hard to bear. They felt their hands flail, momentarily useless for eating. But that was OK. When they were like this from a sound, they couldn't eat anyway. Their throat wouldn't swallow properly. But they did wonder how anyone else could stand to keep eating with that sound going on.

Candril's eating habits didn't always do this to Ni'a, but for some reason it was particularly bothersome tonight. And Candril, Student of Vine, didn't seem to notice at all.

"Stop it," Afrim Whorlie, Student of Charlie, told Candril.

Candril swallowed, then asked, "Stop what?"

Aphlebia, who was seated next to Ni'a, put their left hand down on the table next to Ni'a's plate, palm down. It was clearly a gesture and an offering of reassurance, so Ni'a placed their own hand on top of it, and curled their fingers around Aphlebia's palm.

As the tension started to leave Ni'a's system, they thought, so Aphlebia could be an eater of chaos, too. In a way.

Aphlebia looked sideways at them and grinned.

"Candril?" Emala interjected. "Can you eat with your mouth closed? The sound of chewing with your mouth open is causing some of your peers pain."

"I'm sorry," Candril said. "It's really *hard*! My mouth doesn't work like that!"

"Hmmm," Emala said. "Conflicting needs. We'll need to think of good accommodations for all of you." Xe tapped xyr chin for a moment and then asked, "who would like to eat in the other room tonight?"

Everyone was afraid to answer, except Aphlebia, who tugged at Ni'a's hand twice. Ni'a felt even more relief and decided to speak up.

"Aphlebia and I will do that!" they declared.

"Oh, but I want to!" Candril whined.

"Then you really should have spoken up first," Emala told zem. "But, OK. Let me ask for you. Ni'a and Aphlebia? Do you mind if Candril eats in the other room while you stay here?"

Ni'a looked between Emala and Candril and frowned, thinking about it. Aphlebia just sat and waited.

"No, sorry. Nevermind. I'll stay," Candril relented. "I like the table."

Ni'a had one thought while carrying their dish to the other room with Aphlebia. Aphlebia was right. Ni'a could talk like them, and people understood. The frown had been simple, but it had worked.

It felt powerful.

—

Lying in bed, pretty sure that the other Students had fallen asleep, Ni'a called up their nanite terminal's headspace to ping Phage. It was already there, waiting for them. Which happened a lot.

"Aphlebia - I mean, Student of Chalkboard finally picked a name today!" Ni'a blurted out upon seeing their parent. "They called themselves Aphlebia."

"I saw this," Phage said.

"Then they taught me how to speak their language, or, I think I already could. Everyone does, they just don't know it," Ni'a babbled a bit more, trying to remember what they really wanted to talk about.

"Yes, but Aphlebia is more fluent with it, aren't they?" Phage prompted.

"Yeah," Ni'a nodded. "Um. So. I don't know how to say it. But, OK, I think Aphlebia was saying that they and I are children of chaos. And then when I was talking to Bri about it, I noticed that ze is too. At least, in the same way that Aphlebia meant. But I don't know what that means. And how did Aphlebia see that?"

"Ah," Phage said, and then sat down in the Network space and allowed its avatar to lose shape. It did this sometimes, when it wanted to relax around Ni'a and to really be itself. At least, that's what it felt like to Ni'a. It would transform from a cosmos filled silhouette of Ni'a into a growing amorphous fog of darkness filled with galaxies, nebulae and stars. It only did this when they were alone in a Network forum, though. Ni'a knew that it meant that Phage was thinking about how to explain something difficult and important. But they might have to prompt it before it would speak. In any case, it was a comforting sight.

"But, you're chaos, right?" Ni'a asked. "But they aren't your children, too, are they?"

"Oh, those are harder questions to answer, I'm afraid," Phage intoned. "The answers to both are, depending on how you look at me, the being that is your parent, closer to 'no'. But, not exactly. There is a yessiness to both of them, too. Kinda. May I answer your first question first?"

"OK," Ni'a replied, scowling a little in confusion.

"I'm going to start with a question. What do you remember about what chaos is? What have I taught you so far?"

Ni'a had the words for this, and felt like they had an intuitive sense of what they meant, so they just blurted them out, "Chaos is the unpredictable nature of complexity. When there are enough things going on, the way cause and effect happens is kind of random, and it's hard for almost anybody to keep track of. But you and I can. Or, you can, and I can feel it."

"Do you remember what I've told you about complex systems?" Phage asked next.

"Yeah," Ni'a replied. "It's a place where you can find chaos. Like, the weather is a complex system. And so is the human brain. And the whole ecosystem. And then there are smaller complex systems, like, uh, stress in a Safety Patrol mech. But those are more stable."

"And you can feel them. The shape of them. Right?"

"Yeah."

"So, when you looked at Aphlebia and Bri, you noticed that their complex systems, and I mean their whole beings, are different than everyone else's but yours, right?"

"Yes," Ni'a said, "But what does that mean?"

"I'll get to that very shortly," Phage reassured them, and seemed to settle a bit more, as if the simulated gravity of the Network space was affecting their substance. "Can you describe how their complex systems felt different?"

"Kind of? So, everyone else is like a rainy and windy day," Ni'a struggled to find the right words, but had to settle on just comparing what they had seen to other systems they knew about, "but we're like storms."

"But not just any storm," Phage said.

"Yeah, no. Like the storms that sometimes happen that aren't planned by the ship. The really dangerous ones."

Phage parallaxed its cosmic diorama up and down a couple times as a form of nod. Then it tightened up its edges and became a little smaller and denser, before explaining, "so, what you were seeing is something that some people call 'fibrillation'. It is when chaos becomes so energetic that it cannot be contained or controlled, that it starts to affect every little tiny thing that happens within a complex system. Does that make sense?"

"I... think so?"

Phage nodded again, just once, "Now, even though you are the result of my existence on the Sunspot and share a connection to me that no one else

has, you have a human body. And a thing that happens to some humans, but not most humans, is that occasionally one will be conceived into a state of fibrillation. This even happens to other animals, but it's harder to notice because humans don't share their cultures. Now, a human being's development is a complex system. And, it's usually a fairly stable complex system, with low chaos. The chaos just throws a little unpredictability in here and there, but most of that human being's growth will proceed along a predictable path. But yours doesn't, because you're fibrillating. And the same with Aphlebia. And the same with Bri. Also a few others you might meet soon."

"Oh. Why does this happen?" Ni'a asked.

"Mostly, because it can. Things just come together in such a way that it pushes someone's development into chaos like that. And it makes it so that they maybe see things more vividly, or smells are louder, and their gut might not work quite right, or any number of other wildly variant traits show up. And each exceptional trait throws off the development of other traits, and it affects the whole system of the person, mind, body, future, social presence. So, once it starts, it never stops."

"Is that why I have to flap my hands when Candril eats sometimes, but not always?"

"Yes, exactly. Yes. And now that Emala and I are aware of that, we'll work with you all to figure out a good way around it all, so Candril can eat the way they need to and you can avoid being hurt by it when it overwhelms you." Phage paused for a brief moment and Ni'a thought it might be done, but it continued on the previous topic, "So, the reason that you are in fibrillation is because you are my child. That was inevitable. But with Aphlebia and Bri, it's for the typical reasons. They're just part of the percentage of the population that are hit with the right influences to push them into it."

"Can anything be done to stop it from happening?" Ni'a asked.

"Nope," Phage replied. "Not without my specific intervention, and I don't want to spend my focus on doing that." It considered what to say next, then added, "And it wouldn't be good to do so. It's a natural element of evolution. Even though the human beings of the Sunspot are no longer taking a typical path of evolution, the Crew consider it to be a healthy element. And they use the data collected from fibrillating children to fine

tune their evolutionary engines. Though, it also definitely increases the frequency of dysphoria. But they think they can fix the latter without eradicating the former. In fact, they hope that the extra data they get from instances of fibrillation will help them do so."

"Um, OK." Ni'a was getting sleepy and could feel their body struggling to stay alert. "I don't know if I understood that."

Usually, this topic of conversation would excite them, and their mind would be racing with possibilities, keeping them awake. But now it felt like they were trying to grasp something that was just a little too big for them. Phage had used a bunch of new words, though. Which might be part of it. It explained them pretty well in some cases, and the rest Ni'a felt they could get from context. Maybe. But it was getting harder to string thoughts together.

"You should get some sleep," Phage told them. "Let your brain process all of this. You'll understand it better in the morning, and I can always explain later. But, there's one more thing I want to tell you."

"Yeah?"

"There are two other Students who you will need to meet at some point who are also fibrillating," Phage said.

"Huh?" Ni'a mumbled.

"More importantly, their fibrillation is linked with yours. You're entangled. It is impossible to say which caused what, but there are things happening with you that are because of things happening with either of them."

That was such a weird and exciting idea that it briefly woke Ni'a up more. But then they just remembered one more question they wanted to ask Phage.

"If Aphlebia isn't like you or me and can't sense chaos like we can, how could they tell that we were both were in fibrillation?"

"It's fibrillation," Phage gently and clearly corrected them. "And I think it is because fibrillating people tend to recognize other fibrillating people. There's sort of a feeling of recognition and kinship. And they caught onto the idea of chaos from your name. I don't know how much they fully understand what's going on, though Chalkboard may have told them as

much as I've told you."

"Oh," Ni'a said. "That makes sense." And then they fell out of the Network forum and into sleep, their body not even giving them a chance to say goodnight.

—

At first, it was like a light had been turned on that was so blinding that vision took time to adjust, and everything was washed out in an iridescent field of chromatic variations of brightness, slowly shifting as everything darkened ever so slowly. Soon, imperceptibly tiny specks began to form in the field of everything. They appeared in pairs, the counterparts of which zipped off in opposite directions. Usually they spiralled back into each other and were annihilated by the impact. But in the brighter areas another process began, in which the density of light there coalesced and created little knots of space/time, creating similar specks to what was being produced by the ambient field, the balance started to shift. Annihilations produced energy that sped up the process of creating speks from light itself, and many speks were left over, untouched. And eventually they began to clump together forming ever more complex matrices that spun and danced all around.

And for a time, all the light faded entirely and was eaten up by clouds of these matrices and specks.

But then a single point of light flared, illuminating the colorful cloud around it, brilliant colors that had never been seen before.

And that point was joined by others, a myriad of others. Their numbers grew and grew, all around. And it became clear that these were not just single points in space/time, but massive spheres of plasma that fused and fissioned and grew and breathed through individual lifespans of varying length. And some of them became caught in whirlpools of something else, things very massive and dark that had grown in the densest parts of the field. And those that were caught were torn about and consumed messily in spinning blades of plasma, their remains sprayed across eternity.

Eventually, these massive invisible monsters, the balls of plasma, and the clouds that they had formed from all joined a variety of spiraling dances, stately collections of matter.

And it became evident, from the individual balls of plasma nearby, and the

patterns that they formed, that the view of all of this was from inside one of these prominades. And there were undoubtedly unseen events going on around each point of light, involving matter that was too dark and too small to see at this distance. The way the lights wobbled was a telltale sign that more was going on.

And coming from a particularly yellow source of light there was a swiftly growing speck. Not like the very first specks, but a speck in comparison to all that existed now. Barely perceptible, but none-the-less the focus of vision. The vision of the consciousness that was perceiving all of this. And as that speck neared, its apparent velocity continued to increase, and details of its features began to become discernible.

At first it looked like a silvery X with a corona of eerie light around it. But the center of the X glowed. Or there was a blinding light behind it that caused that portion of the X to be cast in silhouette. And then suddenly it was all upon the observer, filling their entire field of vision, and there was a moment of blackness.

This was such a shock that Ni'a came to their senses, half awoke and realized that they were dreaming. Quickly drifting back into the visions, they watched as a much smaller ball of plasma began to form within a tube of magnetized metal where they themselves floated bodilessly.

And, like clockwork, as they'd seen happen before from a different vantage point, when the Sunspot's new sun was done forming, it was released into the habitat cylinder, and Ni'a followed it.

Only from this perspective in the dream, perhaps after having experienced the intricacies of the formation of the Universe itself, Ni'a was aware of every quantum of detail of the machinery and life around them as it was illuminated by the sun.

Not only could they see the blotchy land masses and sparkling bodies of water illuminated by the new day sun, but they could also see with a vision free of the constraint of eyes the individual nanites that inhabited the soil. They could also see each life form, from microbe to tree to megafauna that inhabited the little world. They could see the people, and the clouds of colonial eukaryotes and bacteria that the people were comprised of. The electromagnetic fields that surrounded their nervous systems fluctuated in response to the firing of those nerves, trading information back and forth between the two systems, one a system of

waves, another a system of biological switches and chemical reactions. Nia could see their conscious psyches, and watch as some of them merged with the systems of the ship itself to remain fluctuating and vibrant even after their bodies ceased to function and support them, starting the biological processes of death. They saw some who were not connected to the ship's Network die with their bodies. And yet they also saw the ripples of those brief existences still affecting the whole ship, population, ecosystems, and machinery alike.

Ni'a watched all of this in wonder as they followed the sun. And they realized something as the sun intake of the aft endcap began to embrace that sun with its magnetic fields.

They loved the ship and everything on it. Watching all of this, they felt loved by it, supported by it. They could see their own place within it, and felt that they could understand everything. They were filled with such excitement and euphoria that it brought them to tears, and they loved it all back with their entire being.

But the sun was now being consumed by a cloud of darkness that itself was filled with a view of the cosmos without. It was like a hole in reality, a window to the outside, with pseudopods that formed and writhed of their own accord. And as they enveloped the sun, some of them reached out for Ni'a. And they felt a different kind of love and yearning come from them. One that they were not ready for yet.

They turned from this fate, and tried to pull away from it as they felt inevitably pulled toward it. They felt a calming promise of nothingness from that direction, a relief from all thought and perception, that they didn't want just now.

Panic filled their body, and they felt their blood flowing in their veins, oxygen permeating every cell, heart pumping. They felt their lungs fill with breath as they reached their arms out in hopes of grabbing something, anything, maybe everything, to hold onto, to keep from being pulled back into their parent, Phage.

It was in that moment that they noticed something about the Sunspot.

It was like them.

It was like their friend, Aphlebia.

It was, the entire ship, in a state of constant fibrillation, right on the edge of vibrating apart.

And they awoke right then with the urgency to stop that from happening, to fix it, to save their peers. To save everyone.

They were so scared, they wanted to jump up right then and make things happen! But what?

However, as they lay in bed, the sounds of their peers' breathing around them softening the darkness, they found they could not remember key details of the dream. They couldn't remember the entirety of who and what they were as they had seen themselves in the dream. They couldn't put to words the meaning of their place in the system of the Sunspot.

They hoped that what they had seen wasn't real, but they knew it was. So, then they hoped that the ultimate fate that it described would be something that would happen far off, not soon. And they resolved that it would. As if they had the power through sheer will to make it so.

Like in the dream, though, they sensed their family around them with more than just their ears. They could feel their metabolisms and their psyches processing energies and information as they slept. And Ni'a could pick out where Candril and Aphlebia lay. Emala was over there. And the Whorlies, the whole group of them, sparred in their dreams, overlapping each other in a shifting play, running a scenario in their dream where they dealt with Candril's capricious attentions, and envisioned Bri inserting zyrself into their lives.

Lying in bed, in the darkness of early morning, while Phage was doubtlessly just monitoring their vital signs like the other Tutors do, Ni'a decided that they wanted nothing more than to be part of their family. Always. But to really, truly be a part of them. To be engaged in their lives, to attend to their whims and needs. To live through the other Students and Emala as much as through their own body.

And they smiled in the dark and became calm with that knowledge.

And they drifted back to sleep.

In the morning, over breakfast, Ni'a asked, "Phage, is the Sunspot like me, Bri, and Aphlebia because you are on it? Or, are you on the Sunspot because it's fribu... fi-brill-ating like me, Bri, and Aphlebia?"

Emala frowned in concern at the sudden question, and the other Students blinked in confusion. Ni'a realized then they'd unthinkingly asked the question out loud.

"Yes," replied Phage, for everyone to hear. "As in, the answer to both questions is yes. Cause and effect are not discernable in this case. But, if I had not been invited aboard the Sunspot, it would not exist today. It would have failed generations ago."

Agaricales

Bashiketa stopped once again to look up at the city looming above them.

Fredge had mercifully decided that they should take a tram from near their home to a station just outside the city. And there, they used Crew restricted lifts and shafts to work their way up to the surface. And they'd been hiking through the surrounding coniferous rainforest toward the city ever since, with Fredge pointing out the differences in the local biome from their home region.

They weren't that far from the city to start, though, just out enough to get a taste of the forest, and then the trees parted to reveal the structures and buildings of the towering city that they'd had only glimpses of through the treetops for the past half an hour.

They'd been following a footpath maintained by the larger fauna of the area, which stopped at the treeline. And between them and the city was a narrow swath of cultivated parkland that surrounded the whole thing, dividing the city from forest.

Agaricales was a more typical city than Fairport, which Bashiketa hadn't seen or heard of yet, but it was spectacular to them yet. They hadn't seen any city in person before.

The foundations of the buildings have been shaped out of stone using the nanites to carve and form them. The city had been built with a large, low hill in the center of it, and all of the foundations were capped at the same altitude, meaning that the buildings near the outer edges of the city were taller than those near the center. The shortest, on the top of the hill, were a single storey tall. On the outskirts, the foundations towered above the trees of the forest surrounding the city. And all of the buildings had entrances built into the foundations.

Like the quarters and rooms of belowdecks, the foundations were shaped based on a scutoid, a shape commonly taken by skin cells in most animals that is irregular and fits together particularly well on complexly curved surfaces. It wasn't really necessary for everything to be built that way, least of all the foundations of Agaricales' buildings, but someone had decided during the Sunspot's construction that it was going to be the philosophy of its architecture. Which meant that most dwellings and spaces had very few

right angles, unlike Fairport which was almost all boxes.

Fredge had explained that most cities on the Sunspot had foundations like this, but some were built in valleys and or on plateaus, and the heights of the foundations were sometimes all one storey. In other cities, they varied in height, with different patterns of that variation from city to city. The foundations of each city had been constructed with the aesthetics and climatic necessities of the area that it was built in, according to the sensibilities of some ancient group of Crew.

Atop each foundation, though, was built a temporary structure out of more malleable, sometimes organic, materials. There were greenhouses, dwelling complexes, libraries, studios, observatories, parks, gardens, galleries, kitchens with all sorts of dining accommodations around them, and a small handful of government buildings. All of varying sizes depending on what the foundation of that building or set of buildings would allow. And each structure had been designed by the individual or group of people currently in custody of the space. Some had used nanites to shape the materials, but most had been built by hand and by Safety Patrol exosuit, either by the custodians themselves or at their direction. And each one had its own set of colors, contrasting with the gray-brown of the foundations.

And at the top level, between the buildings, there were causeways, skyways, and bridges connecting them all.

When a space for building changed hands, sometimes due to generational turnover and sometimes due to custodial whim, the new custodians would often remodel or completely rebuild the structure that was there to suit their own purposes. Creativity and adaptation is generally prized above tradition and history on the Sunspot when it comes to buildings and tools. And while some cities, like Fairport, have a theme and cultivate some kind of tradition and continuity for those that need that, Agaricales was not one of those cities. It was constantly in a state of slow flux, with new projects blooming atop its forest-like foundational trunks, with a weaving network of bridges between them. While, below that, the grounds between the foundations were nearly wild with lightly cultivated plant growth cut with groomed trails.

Most of the buildings didn't actually look like flowers, but Bashiketa couldn't help but think of them that way upon getting a good full view of them.

Fredge, who had been grilling Bashiketa about mycelium networks and how trees communicate with each other through them, came to an easy stop beside them and fell silent with them. And they both stood there for a while, taking the sight in. Birds and insects could be heard all around them, and the fragrances of the park, with its bushes, flowering plants, and deciduous trees began to overcome the pungent and familiar odors of the forest.

Not too far in the distance, but from out of immediate sight, came noises that Bashiketa didn't immediately recognize. They sounded something like a combination of animals squabbling and the kinds of calls that Fredge used when trying to get Bashiketa's attention from a distance, mixed with snippets of conversation.

They looked up at Fredge, who looked down, smiling, and said, "children playing."

Bashiketa had not seen another child, except in movies and illustrations, in their entire life. And they were an adolescent now. But they hadn't actually ever wondered what it would be like to be around peers or anyone of their own age, let alone anyone younger, for some reason. And the thought of encountering such people made them suddenly nervous. They didn't know what to expect, and they didn't know what would be expected of them.

Adults they could handle.

"Can we go somewhere else?" Bashiketa tugged at Fredge's hand.

"We have learning to do in Agaricales," was Fredge's reply.

"No, I mean, a different way," Bashiketa said.

"Oh," Fredge looked down at them. "You want to avoid the other children?"

Bashiketa nodded.

"OK," Fredge reassured them. "Part of the point of this trip is to get you used to being amongst other people, but we can absolutely do that at your own pace."

It took Bashiketa a moment of intensified worry before they realized they

could nod to that, too. "At your own pace." It meant that if they were never ready to meet other people, they wouldn't have to. Ever. They could agree to that. But, maybe another *person*. Or two. But no more than that. And hopefully not another child. They seemed too wild already.

But then Fredge said, "One of the things I'd like to show you here is an upcoming festival of sorts. It happens on the anniversary of an explosion, but it commemorates the changes in Crew policy toward the Sunspots' Children that came from that event. Changes that a group of Children called the Pembers helped to bring about."

However, as Fredge spoke and led them around the area where the playing children were, toward one of the towering city foundations, the screaming and arguing grew louder and a break in the bushes and trees made them visible. And just then the ground fell out from under Bashiketa and they suddenly found themselves in a world of terror and chaos.

With their next step it was clearly another one of their episodes, with the vision superimposed on the reality around them. When they blinked or closed their eyes, they were fully immersed in the nightmare, body pressed amongst a crowd of foul smelling people. Wildly conflicting fragrances and body odors mixed to catch in their throat. Alien fabric pressed against skin that Bashiketa was used to being covered with fur. And everyone was as small as Bashiketa and all looked bizarrely alike. With naked shoulders and elbows, naked faces, tufts of a hair atop their heads, and clothes that showed no creativity, the yammering crowd overwhelmed them and they drew their hands to their face. Clawless, naked hands.

They stumbled and fell, and opened their eyes in time to see the ground tilting upward toward their vision. And their fur covered arms shot out, with claws extended, to plant the pads of their hands on the dirt of the trail. And Fredge caught them.

"Woah there! Are you ok? What's wrong" Fredge's words poured over them, cutting through the cacophony of their inner vision.

But Bashiketa was too panicked to form words and, as Fredge lifted them upright, they wrapped their arms around their torso and held their own shoulders, trembling, looking down but doing everything they could not to close their eyes.

In the periphery of their sight, where the darkness of their own skull lay,

they could still see, feel, and hear that phantom crowd. A room full of scared children. Alien children.

Fredge knelt in front of them and looked into their eyes, and spoke more slowly, "take a moment. We don't have to move. I'm here." Then Fredge looked around as if to check for other people, then back at Bashiketa, "When you are ready, when you can speak again, please tell me what is happening."

Since that nightmare when they were three, these episodes happened with increasing frequency. At first they'd happened once every season or two. But now they were happening closer to every ten days or so. Although Fredge still reflexively blurted out useless, distracting things whenever they noticed Bashiketa going through this, they had both developed a routine. Fredge knew that Bashiketa wouldn't be able to talk for some time, and Bashiketa knew that Fredge knew this and was trying to help. And that talking about it afterward did feel like it helped.

Knowing that Fredge was there, right in front of them, and thinking of this routine, Bashiketa decided to relax and focus on what was happening. And they closed their eyes again.

This was the first time they were getting full visuals. Before it had always been a sense of what was around them, like a watercolor filled wireframe in their mind's eye that didn't even really have color or detail, labeled with thoughts. This time, they could make out words on the garments of the children around them. And though they did not recognize the language, they knew what the words meant. Some were funny jokes, others were names. They could see expressions on faces. They could see how bright the lights above them were. And they could hear the low timbre of an adult's voice speaking out above the chattering of uneasy children.

Again, they could hear the sounds and remember what they sounded like well enough to repeat a phrase or two, but they did not sound like words they knew. And still, the words flooded their mind with meaning. For their safety, they were being told to stand still and remain calm.

Always, there was a sense of danger with these visions. There was a distress or an urgency combined with confusion and learning that some adult was there for them. So far, they had not felt alone.

Sometimes the episodes happened at night, while they were sleeping. Most

of the time, they seemed to be triggered by something happening in the real world. Or should it be called the outer world? This world. Bashiketa's world. But as their frequency increased, so did the times they just came out of the blue. And the fact that this one was triggered was a reassuring thing that helped Bashiketa remain calm enough to pay attention.

As the children began to calm down while the adult explained things, the vision began to fade. But Bashiketa caught enough to really pique their curiosity and imagination.

Some kind of civil unrest had broken out on the ship, a ship, a different ship than the Sunspot, the ship where these children were. Their parents - parents? - would come to get them when it was safe enough to do so.

And before the last vestiges of these alien sensations left their psyche, Bashiketa was reporting excitedly to Fredge what they'd seen and heard.

When they were done, they asked, not for the first time, "What is happening to me?"

Instead of the usual answer of nightmares, which always seemed inadequate, Fredge took some time to think, eyes unfocused, and then nodded and said, "Maybe."

It wasn't the beginning of a thought, it was a statement. Like they were answering a different question.

"Maybe what?" Bashiketa asked.

Fredge looked a little startled and confused and then came back to the moment, and said, "Come. Let's head toward some place quiet, and I will begin to tell you on the way."

"OK," Bashiketa said. But they weren't exactly OK themselves. This time, as they became more distant from their vision, they began to feel uncomfortable in a way they found hard to describe. And though they realized they'd felt this before too, it was as if they were noticing it for the first time. They became lost in their own thoughts, only half listening to Fredge.

They resumed their path and Fredge continued, "You know that you are special. I've been teaching you a little about why you were conceived, right? That you are part of a plan set in motion when the Sunspot was

created." These were things that Bashiketa was very familiar with, yes. And they were used to a discussion about knowledge and history, and learning more about how the universe works following these prompts. Every time it was the same with Fledge, but with a few more details. But this time, Fledge asked, "Do you remember long ago when I asked you if you could remember what it was like before your birth?"

Bashiketa looked up at them, "Yeah. Yeah, I do." They kicked a rock ahead of them on the path. "I keep thinking about it. I feel like I can remember it better. But I still can't say what it's like."

"Interesting," Fledge nodded. "It was a trick question, you know."

"What do you mean," Bashiketa asked.

"It's a prompt, to get you to look at a part of your psyche that feels like a memory of before you were born, but isn't. A lot of people do notice it and keep poking at it. But I needed you to really examine it a lot. You did good."

"OK?" Bashiketa frowned.

"We all think that, at some point, you should be able to trigger one of your visions on purpose by going there." Fledge looked away from Bashiketa, as if to stare at something on the horizon, and Bashiketa watched their ear twitch.

Bashiketa's discomfort grew stronger before they could respond to that. Their middle felt wrong, tense and leaden, and their arms and legs felt like they were too short and stubby, with tiny useless paws. It was like the world around them ballooned in size and it was taking longer to traverse the same distance of ground than it took moments before. Like everything around them moved by at a slower speed for an even greater effort of moving their legs. "Urgh..." they choked down a noise.

Fledge's head snapped back in their direction, concern pinching their face, "Are you having another one?"

"No," Bashiketa said. "I just feel weird. Everything is too big!"

"What do you mean?"

"I don't know! It's weird! I'm dizzy!" It was also like they were looking

down a long tunnel to their eyes, and they could feel their body moving and talking as if by its own accord, but they couldn't bring the words all the way to their mouth to describe it.

"OK, stop then. Stand still," Fledge stopped walking and stood calmly by them. "Do your grounding exercises. Count five things you can see..."

Bashiketa followed their directions, nodding, and slowly came back to themselves as they counted down through their five outer senses. Four things they could hear. Three things they could feel. Two things they could smell. One thing they could taste, their own saliva. It had a flavor, just one that they normally ignored, had grown used to. But they could notice it if they tried. It was like water from certain streams, with a very faint electric tang. And they felt better, but not good. Back in their body, but their body still felt wrong, like it actually always had.

Bashiketa folded their arms and held their elbows, hunched over, tail low, ears swept back.

"Are you still feeling off? What's wrong?" Fledge asked, not yet moving.

Bashiketa looked up at them, brow knitted with worry, and said, "I'm not supposed to be like this."

"Oh," Fledge said. "Oh, no." Then, after a moment they asked, "Can I give you a hug?"

Bashiketa simply nodded and then leaned into Fledge as they hugged them.

"Does it feel like your body should be different?"

Bashiketa nodded again, this time into their shoulder.

"How long have you felt this way?"

"Always," Bashiketa mumbled, "I think. It's getting worse."

"That's unmistakable. Physical dysphoria. Oh, Bashiketa, I am so sorry."

"Why am I feeling it?" Bashiketa asked.

"I don't know. Nobody does. It's a thing that happens to just a few people,

but no one's been able to stop it from happening," Fredge explained.

Stepping back, free from the hug, "What does it mean?"

"What does it feel like it means?" Fredge asked back.

"Like," Bashiketa shook their hands in front of their torso briefly. "Like my body is wrong. Like I'm wrong. Like I'm not supposed to be this way!"

Fredge leaned forward and looked them right in the eyes again, something Bashiketa didn't actually like but put up with silently, and said, "then that's exactly what it means. Can you tell me what shape you should have?"

Bashiketa shook their head. They had no idea. They had never seen anything else that felt right, like what they should be. But everything was off. No. Wait. Maybe. Maybe, they just had. But they were hesitant to mention it.

"OK. Different tactic for now, then," Fredge declared. "Let's talk about something else entirely. It'll help. Come, keep walking. Now, do you remember what this city is named after?"

"Fungus."

"Yes! And what's special about that fungus?"

"It - It's the fungus that helps trees talk to each other and helps process nutrients for them."

"Yep, that one!" Fredge picked up their pace, forcing Bashiketa to put some of their focus on where their feet were going, then prompted, "tell me everything you know about it. Give me one of your hypeshares, and then I'll tell you why this city is named after it!"

Once Bashiketa got started, the information came to them without thinking, and their mouth rambled on about the fungus agaricales and how important it was to the forest ecosystem. But Fredge was wrong, this didn't help. They still felt all wrong. Intensely. They were just doing something they loved at the same time.

Atop a hill, near the middle of Fairport, there was a playground on the edge of a great library's campus. On the tallest structure of that playground, Jenifer stood, clutching xyr doll, staring antispinward at a spot on the rising wall of the Sunspot. The spot was obscured by wisps of clouds that were passing over it, way over there. Locally, the sky was clear. Ansel hovered just to Jenifer's left.

Tetcha had glanced in the direction where Jenifer was staring, but couldn't pick out anything worth the attention. So xe was now watching Ansel again, while Ilyen and Morde talked. There were no other children in this playground. Jenifer had insisted on stopping here during their walk, and the quiet was actually kind of pleasant. It gave a contemplative atmosphere to the whole scene.

Ansel was as strange as any other Tutor, Tetcha was thinking. It was using a small swarm of nanites to simulate a rotating hypercube in three dimensions as its avatar. When it spoke, it would shoot spikes like soundwaves out from its center in time to its voice. In contrast, Illyen's Tutor, Badly Fitting Brachy-form, chose to represent itself with the shape of a glove that seemed to float and dance like a leaf on an often non-existent wind. As xe watched Ansel, who was remaining as silent as its Student, Tetcha's thoughts turned to xyr own Tutor, myself, who xe had finally dismissed a little over a decade and a half ago. We had been a special case.

Tetcha had rejected xyr nanite terminal less than a year after being fitted for them, complaining of headaches. But xe had not yet quite reached the age that an old style neural terminal would have been surgically implanted, so there was some legal precedent for me to remain xyr Tutor, which I did. I did this despite Tetcha's stated plan to become a Monster. Xe had requested it. Furthermore, rejecting xyr nanites was something of an experiment in and of itself. No one had done it before. Tetcha was the first. And there had been a choice for xem to make, and my continued assistance would help in monitoring the after affects of that choice.

As by design, as they do for everyone, the nanites had given Tetcha an extension of xyr consciousness. First, they monitored the behavior of xyr neurons and the electromagnetic field that they created, and they began to interact with the field, duplicating the behavior of the neurons in Network space. This created a Network backup of xyr long term memories and a simulation of xyr subconscious mind. It wasn't perfect. The longer the nanites remained connected to xem, the better the mimicry. This, then, would act as a kind of bridge for when xyr EM field was echoed within the

Network's quantum processors. Not an actual EM field, but a simulation of one that interacted with xyr simulated neurons just as they were also interacting with xyr actual brain's EM field along with xyr actual neurons. And, so long as xyr body was alive, these two systems would remain entangled and in sync. But to reach out into the Network and experience its spaces and connections, Tetcha's Network neurons would be stimulated with simulated senses that interpreted data as if xyr body might be experiencing it all. And that is how even the old implanted neural terminals worked, if not quite as seamlessly.

When Tetcha rejected xyr nanites, xe had the choice of retracting xyr consciousness entirely from the Network, shutting down the simulated EM field and then deprecating the simulated neurons. Or xe could leave them there, splitting from xyr Network self and essentially becoming two people. Xe would walk away, disconnected, to begin xyr path to Monsterhood, while xyr Network self could choose to become Crew as if xyr body had just died.

Tetcha was reflecting on this and on why xe and I had finally parted ways when Morde interrupted xyr thoughts.

"Tetcha?" xyr partner buzzed from hir cloak's clasp, "I'm feeling a very strong tugging. We've got somewhere we need to go. And we all should go." Sie looked at Illyen then at Jenifer.

"Yeah," said Jenifer, pointing off at where xe was staring.

Morde's hood shifted as if hir invisible head had been tilted within it.

Tetcha took a deep breath and whipped xyr tail back and forth, "then we'd better do that."

"What's over there, Jenifer?" Illyen asked.

"Something fun," came the reply.

—

Ni'a was engrossed in the tactile experience of molding a lump of clay as it spun on its wheel in front of them, trying to follow the Artist's instructions as they worked with their peers in a surface level makerspace. They could feel the sharp grains of harder clay pass quickly and repeatedly under their fingers as the soft muddy body of it begrudgingly shifted under their

guidance. They and their peers had been instructed to ignore their nanites and do this all manually, and to focus on their natural senses, but Ni'a followed this to the letter rather than the spirit of the directive.

Ni'a could also feel every molecule of atmosphere surrounding them as they tracked the molecules and forces of stress within the clay using senses that were natural only to them and their parent. And though they were only using the force of their muscles as applied through their hands to shape the pot they were attempting to throw, their consciousness nearly filled the entire room.

And Phage stood in a statue of nanites, looking over their right shoulder, smirking.

Emala was saying something to the space's Artist that Ni'a was utterly ignoring when there was a subtle, nearly imperceptible shift in everything. Ni'a would have never noticed it if they hadn't been consciously tracking the movements of countless subatomic particles and the forces they applied to each other. Ni'a would not have been able to do that at all if they had not been the child of Phage. As it was, Phage itself didn't immediately notice.

Ni'a let go of the clay and lifted their foot from the peddle, sitting up straight. They turned their head to the right and squinted. It looked like they were listening to something.

"What is it?" Phage asked.

"You didn't feel it?" Ni'a looked back at it. "I bet you did and didn't notice. It was almost not there, but I can't believe you really missed it."

"You'll have to tell me what to look for."

Ni'a absently ran a muddy hand through curly hair, making an utter mess of it, and thought for a moment. "I think it was a change in the chances of things happening." They turned their body to look Phage more squarely in the face. "Does that make sense?"

Phage nodded a little, then let its focus expand to its greater self and took stock. "Ah," it rumbled. "Emala?"

"Yes?" Ni'a's caretaker trundled over.

"The Agaricales' Memorial Celebration is happening in a couple days."

"Yes. I was just thinking that our children are all about the right age to see that. Do you think it would be a good idea to go this year?"

Looking down at Ni'a, who raised an eyebrow, Phage replied, "It would be an excellent idea, yes."

—

A few decades ago, a portion of Agaricales had been leveled to the ground, foundations and all, by the Sunspot's first ever bombing. At the time, Agaricales had had a lower population than typical, and the casualties of the event had been minimal, but it had shaken the entire ship and the social shockwaves of the event were still reverberating throughout the populace and Crew. A deeply distressed child who had been partaking in the nanite experiment had used their nanites to modify their body to naturally produce a highly volatile substance, somehow without raising the suspicions of their Tutor or the Crew. Then they had discharged a neighborhood capacitor into their body, causing it to catastrophically combust. In so doing, they not only had erased themselves from physical existence but also from the Network as well. There had been no one to interrogate, and no substantial clues as to why they had done it.

This event had motivated Morde and the Pembers to work together, with their friends Tetcha and the Flits, to confront the Crew, discover the Crew's true nature as ancestors of all the living Children aboard the ship, and then to push for shipwide reform.

The ruins of Agaricales' warehouse district had long since been cleared of rubble and converted into a memorial park, filled with pathways, garden beds full of flowers and other plants, and trees. It was a large space, and surrounded by buildings that were three to four storeys tall.

Once they had reached the top level of the city by taking a lift, Fredge led Bashiketa to a walkway overlooking this park, where they stood now.

The whole time they had walked, Bashiketa had been talking about the means by which the fungus for which the city had been named would transfer nutrients and information between the trees of a forest, allowing trees that might be suffering some injury or sickness to alert and warn other trees that were kilometers away. Or, more regularly, it allowed

saplings that were too sheltered from the sun by their neighboring ancestors to receive the nutrients from their parents that they needed to grow. Bahiketa even took the time to cover some of the more intricate details they'd picked up from their reading, naming chemicals and some of the physics involved.

Despite still feeling painfully dysphoric, they were very proud of their knowledge about this. Fredge nodded as they came to the end of what they knew and had trailed off.

"So, OK." Fredge gestured at the memorial park below them, "The event that resulted in this park happened long after Agaricales the city got its name, but it's relevant."

Bashiketa stepped away from Fredge to lean on that foot, while they watched Fredge's mouth form their words. It was a little easier for Bashiketa to focus on what Fredge was saying and understand them when they were outside where there were a lot of ambient sounds. Indoors, Bashiketa would typically gaze off into a corner of the room while listening.

"When the bomb exploded, the shockwave could be felt and heard through most of the aft half of the Sunspot's Garden. It traveled quite a distance belowdecks as well, but it didn't reach the entire ship. The people directly opposite us from the Sunpath had no immediate idea anything had happened. They neither heard nor felt anything, and they couldn't see the debris cloud through the glare of the sun. And those forward of the mountains were likewise shielded from the effects of the blast. But," Fredge took a moment to enjoy a smug grin, only slightly downward at the growing Bashiketa, "of course, word of the explosion spread throughout the ship via the Network at nearly lightning speed. In fact, there were people some distance away whose Tutors or friends told them about it before the soundwave had reached them."

Bashiketa squinted their eyes, and briefly glanced at Fredge's eyes. That last bit sounded hard to believe.

"Anyway," Fredge continued. "The founders of the Sunspot, who were the people who first built all the cities, knew the potential of the ship's Network and the role it would play in society. So they thought they would poetically make references to it in the names of the places they built, to prompt future generations to think about it and give us things to talk

about. And Agaricales is one of those places. This city has been built in the middle of a forest where the fungus is extant, and the name and its history serve as the introduction of lessons for Tutors and caretakers who are talking to and teaching their children who live here."

Bashiketa slowly nodded their head to indicate that they were trying to find this more profound than it was. They'd actually think about it, of course, but right now they felt more like they were humoring Fredge so as not to make the discussion drag on too long. They were getting tired.

Fredge probably noticed this, because they said, "Ah, let's go find some quarters to use. It's time to eat and rest. If you see anything you like, let me know. Food, clothes, anything anyone makes here. The Artisans here make things to be enjoyed and used, but there are courtesies to observe when requesting their work. I'll show you how it's done so you can script it."

Realizing they were suddenly dizzy with exhaustion, Bashiketa said, "Thank you. I'd like that."

"That episode really took it out of you, didn't it?" Fredge asked.

"Seriously," said Bashiketa. After several breaths, steadying themselves on the walkway railing, they asked Fredge, "Are these episodes the reason why I was raised a Monster? What would happen if I had a nanite terminal?"

Well crap, thought Fredge. They'd been hoping Bashiketa would ask that question somewhat differently.

Pathfinders and Protectors

Everyone watched as Jenifer scampered headfirst down the play equipment, xyr doll clutched in one hand, and then jumped to the ground when xe was only halfway down. Xe reveled in the touch of the cool moss as it squished between the pads of xyr clawed hand and feet, and closed xyr eyes for a moment to just feel the movements of xyr body as xe bounded toward the others on only three limbs. But xe opened them wide in time to pull up in front of them and look up at their faces.

“Are we going to go on a trip?” Jenifer asked. “Like, right now?”

Tetcha, arms akimbo and eyes squinting, asked back, “How do *you* know about where Morde thinks we should go?” Xe looked over at xyr partner, “Morde, I get. Sie has this mysterious intuition that no one knows how it works. But it does, and we know that. Do you have that, too?”

Jenifer’s parent, Illyen, opened vyr mouth but hesitated, apparently stumped. Jenifer saw that out of the corner of xyr eye, and decided xe had a moment to think about it. It wasn’t really something xe had considered. And xe looked up at Morde’s empty cloak and furrowed xyr brow.

Morde didn’t offer any comment.

“I think...” Jenifer tugged at xyr lip with xyr claw then let go, “I just knew it? Like, I got a vision, like a memory. But, *maybe* it was a message over the Network? Sometimes it feels like there’s a difference.”

Tetcha blinked, “What?”

Jenifer sat upright and back on xyr haunches and grabbed xyr juvenile antlers with xyr hands and sort of tugged on them. Another of xyr nervous thinking habits. “Well, OK, so it was more like I was seeing something from the Network. Like I was looking at the Network space for this playground, but *not*. It was for that city over there,” xe pointed again. “But I didn’t purposefully look, I just... remembered it? Like, when I happened to glance that way. There it was. And I saw some people, and a park, and got this feeling that something fun happened.”

Tetcha looked at Ansel, who had once again settled to the right of Jenifer’s head, and asked it, “do you know anything about this?”

"I don't monitor my Student's Network activities that closely unless xe asks me to," Ansel replied. "And I would ask xem for permission before sharing my findings."

"Ooh," Jenifer looked over at Ansel. "But, you could, right?"

"Certainly."

"Would you be able to see my online thoughts, or see if they are messages from somewhere else?"

"Not your thoughts," Ansel affected a quick side to side rotation of its entire avatar as if it was shaking its head. "We would have to merge to do that. But I might be able to see if you are receiving messages. It depends on what protocols they are using. I can also monitor your brainwaves and see if anything unusual happens when you receive these memories, but I would not necessarily be able to interpret them."

"OK!" Jenifer chirped. "Do that until I tell you to stop!" Then xe smiled up at Tetcha, Morde, and xyr parent. Xe liked this idea. Knowing how xyr own thinking might look to someone watching xem was such a fun idea, even if it wasn't anything very deep. But then xe thought about that scene again and tried to look at it once more. And it was easy.

This time, there was no accompanying emotion, though, and while xe got a clear image of the park and the overlooking walkways, as if viewed from someone standing on the roof of a nearby building, xe didn't recognize any of the people that were there now. Those who had been there before had left.

"Ansel?" Jenifer asked.

"You are currently accessing a public camera in the city of Agaricales. Nothing unusual," reported the Tutor.

Jenifer shrugged, once more glanced at everyone, "So, that's where we're going, I guess. Right?"

"Yep," said Morde. Then sie looked over at Ilyen. "Any reason to stop by your place before we head over there?"

"Not that I can think of," Ilyen said. "Let's grab some food on the way to the tram, though."

"I'd love that," said Tetcha.

"I want a cinnamon funnel!" Jenifer declared.

"Oh, those are messy!" Tetcha said. "I want one too."

"OK," Ilyan assented. "This way." And ve began to lead them in the direction where ve knew of a bakery.

Later, on the tram, cinnamon funnels in hands and being nibbled on, and a selection of wrapped sandwiches in Tetcha's satchel, Jenifer was looking at Morde and thinking about hir again.

Morde was a legend.

Jenifer's friends had grown up hearing about hir in a story that hardly sounded real. But then here sie was, one of Jenifer's three caretakers, looking like nothing more than Tetcha's Tutor, if one didn't know Tetcha was a Monster and had no Tutor. Sie didn't speak as much as Tetcha, and usually kept hir thoughts to himself, but sie was easy to play with. Morde was always happy to do weird, mysterious, or dramatic things with hir cloak in the service of a game. And anytime Jenifer or one of xyr friends needed something, sie was happy to provide it if sie could, leaving Tetcha and Illyen to talk as they watched.

So when xyr friends met Morde, it had often taken them a while to make the connection between this weird, quiet, attentive "Tutor" and the myth they'd come to know from bedtime stories told by their own Tutors.

And that intuition of Morde's, the one that had led hir to uncover the secrets of the Crew, didn't have much to it in day to day life. Sie was often where people might need hir assistance, and she frequently led the way on family outings, but these were choices that could easily have come from experience or confidence. It was only in games of pure chance where sie had a hard time to believe or understand edge over everyone else. Sie didn't always win, but cards and dice were definitely hir friends, especially if sie had to guess what the results would be as part of the rules.

But that moment, just before Jenifer had caught a glimpse of the park in Agaricales, when Morde spoke up about the need to go there, had given Jenifer the chills. Xe'd been listening to the adults while enjoying the view, so Morde's words had been clear and understandable. And they'd triggered some sort of understanding in Jenifer's mind, something xe

didn't quite grasp, that felt almost as if someone else was at work. And in the next moment, xe had felt xyrself drawn to look in that direction.

And now, on the tram that could only follow its own tunnel, Morde was merely that inscrutable animated set of cloak and gloves, holding Tetcha's hand.

—

And unbeknownst to the group of them, I was watching in that moment.

Well, Morde may have known, but I didn't catch hir looking.

No one was expecting me. Nor my companion, though at any given time Tetcha or Morde may have guessed correctly that xe was there.

Xe had taken the name Ktleteccete, which was the full name that Tetcha had been derived from as a nickname centuries ago. It was from the ancient language of Fenekere, the one used to program the Sunspot's systems, and it meant "the Child". An arrogant name to choose, but so fitting. And xe had called me there to observe xyr parent's movements.

"So. Still no headache since you split?" I asked.

"None. It's wonderful," Ktleteccete replied. "No one's been able to figure out what that was about, either, as you know. We've still been going over the data, even after all these years, just in case someone can find something. But as far as we can tell, it was somatic. Perhaps Tetcha was just too stressed out by the idea of having the nanites in xyr body."

I bobbed my avatar in acknowledgement.

"I've been studying Morde very closely, too," xe continued. "With hir permission of course, and with all of Ralf's notes on hand. When sie uses hir intuition, we cannot sense anything unusual in hir Network activity. Neither in hir neural net nor in hir shipwide communications. I've had longer to study this than Ralf ever did, and more resources as a Crewmember, but however sie does it, it's very, very subtle. Or we just don't know what to look for."

"I'd expect as much," I said. "So, why did you call me here?"

"Well, it's Jenifer. We did pick up a signal from xem that we would have

expected from Morde.” Ktleteccete shook xyr head. “In all this time of observing xem to see where xe might have gained xyr strange and precocious knowledge, and why xe picked xyr name, this was the first clue that something is actually going on. And it reminds me of some of your notes about Phage and Ni’a.”

I bobbed another nod. “Go on.”

Ktleteccete watched Morde and Tetcha talk to each other in low tones about revisiting Aggaricales, and whether or not they were ready. Then xe looked at Jenifer and then back at me before answering, “A bit earlier, when they were all in a park, Morde mentioned something about hir intuition. Sie said that it was time to go somewhere. And when Jenifer heard that, xyr terminal echo sent a signal out to the Network which was then answered nearly a second later. Then xe reflexively looked at Agaricales through Network channels. It’s that signal. That ping. Phage and Ni’a don’t do that, but they’ve told you about what they do experience? It’s something similar?”

“You have been reading my notes, yes,” I responded. If I had not been speaking to Crew, I would have withheld much of the following at the time, but Ktleteccete was Crew. I still hesitated. “For the purposes of my assignment, they both agreed to divulge what they know about themselves. I am interviewing Ni’a more than I am interviewing Phage, as their childlike perspective lends itself to less cryptic descriptions, believe it or not. Also, it’s Ni’a’s story I’ve been tasked to chronicle. In any case, you know as much as I do from reading those notes. The Sunspot does not have sensors capable of detecting what those two do, just the effects they have on the ship’s systems when they have such effects. But Ni’a says it is like contacting a greater self out in the Universe.”

“Do you think Morde works in a similar way to Ni’a?”

“You’d have a better idea about that than I could. But that would be my best guess, yes.”

“OK,” Ktleteccete nodded. “Our prevailing theory regarding Jenifer is now this: She’s an echo of the original Jenifer, in a similar way that I’m an echo of Tetcha. A child. And the original Jenifer may actually be awake and watching over xem and perhaps giving xem some direction.”

“Wasn’t that the Crew’s original suspicion?” I asked.

"One of three. The other theories were: one, that xe is the original Jenifer; or two, that this is all a coincidence," xe explained.

"And you don't think it was a coincidence that this Jenifer was conceived shortly after Ní'a was?"

"With Phage's history? Not in the slightest."

I marveled at this conversation. I had maintained a relationship with Ktleteccete ever since xe had parted from Tetcha those decades ago, but tens of years is nothing to a being who has been conscious for hundreds. And I'm still used to a time when Tutors didn't converse face to face with Crew.

Before the Nanite Innovation, we only communicated with Crew through a tight and very terse text-only channel. We knew some truths about who and what they were, but we never learned their characters, their individuality, their motives. Not beyond the handful of Students we each taught, at least. But, after all this time, the Crew outnumber the Children of the Sunspot by billions to millions, thousands to one. The exact ratio is not something I can readily attain.

This bothers me. I prefer to give precise figures and data. But the Crew do not keep track of their numbers, and with Ascension and Accord those numbers are constantly in flux. The Auditor probably knew, but not being Crew I don't have access to it. I feel like that should change.

Things have changed so much. Crew, Children, and Tutors freely mix in the public channels and Netspaces. Sometimes even in the physical corridors of the Sunspot, you'll find Crew inhabiting nanite exobodies, just like Tutors now do, or Children exploring the world while their natal bodies rest. But still, the vast majority of the Crew are reclusive, remaining in Crew-only netspace, usually their own personal quarters or worlds. So, even with this new open interaction, in a Child's lifetime they might interact with four or five Crew members before they become Crew themselves, and perhaps develop a lasting relationship with one, if that.

We have a ways to go. Laws may change quickly, but culture has inertia.

It should also be noted somewhere in this book that as far as Children are concerned, the Sunspot is dramatically underpopulated. And with Tetcha, Morde, Illyen, and Jenifer traveling between Regions, this is a great spot to

emphasize this. The tram they were on could hold a hundred people. They were the only ones on it.

The ship's hull and resources are designed to accommodate somewhat more than 40 billion living human bodies. There are currently only 3.6 million. The bulk of the lower decks remain fallow, and people tend to cluster in and under the surface cities. Some of the cities can feel quite crowded, simply because the people who live there seem to like the proximity to each other. Most are very quiet in comparison.

Reviewing our documents, I have noticed that both Metabang and I have failed to convey this character of the ship. And the reason is that this is what we are used to. And if you live here, it is what you are used to. We have had nothing else to compare the state of the Sunspot to.

And I suppose I am choosing to come back and insert this trivia here as a sort of foreshadowing of what we were all traveling toward.

Ktleteccete and I had no clue, no idea, at the time. But with all that we had seen and cataloged up to that point, we were on edge. When weird things start happening on the Sunspot, something big is coming.

And so we sat and watched our loved ones closely as they traveled at speed through empty fallow decks toward the city where the Sunspot's first bomb in history had been exploded.

Glimpse of a Strange Attractor

Ni'a marveled as the realization hit them that they could sense which of the Whorlies was fronting at any given time. Their brain translated it as a set of something like aromas. They couldn't really compare them to anything else, but they very much felt like scents whenever they looked at them.

Actually, every person had one. It's just that the Whorlies were several different people, so their aroma of consciousness changed as they switched out who was fronting.

"Firas," Ni'a said, and smirked cheerfully when Firas Whorlie looked up with a start. "You're really good with your nanites! See if you can see through them!"

They were riding a tram to Agaricales, and Emala had had them bring little clumps of the nanite clay from their home to play with. After spending yesterday working with raw, earthen clay, to get a feel for working with their hands, getting to interface with the nanite clay was a real treat.

You could still work it with your hands, if you didn't have a feel for controlling the nanites yet, but they were there in the clay and the hums of their interface prompts were notably present.

While Aphlebia and Candril were poking at their lumps of clay and watching the divots made by their fingers slowly disappear, Firas simply held zir clay in zir open palm while it danced and twisted. And after a second of Firas looking startled at Ni'a for what they'd said, the bulb at the end of their stalk of clay formed what looked like the semblance of an eye, and then twisted itself to look up at zir face.

Firas opened zir mouth as if to say something in wonder and looked down at zir little animate lump of nanite clay. Then, ze moved zir face around, tilting zir head this way and that, and the little eye stalk followed zir movements.

"Weeeeeeeeeiiiiiiiiird!" Firas squealed.

"You shouldn't have to make it look like an eye to do that," Ni'a said.

"I didn't," Firas replied. "It just sort of did that automatically."

"I want to do that!" Candril whined. "What did you do?"

"Well," Firas rolled zir eyes dramatically while rotating their head to look at Candril. Zir nanite clay eye mirrored the movement. "First you have to learn how to be in the nanites. It doesn't work if you can't do that."

"I know that," Candril growled.

"You know how when you go online, you just sort of imagine that you're entering this room in, like, your dreamworld?" Ni'a prompted.

"Yeah?" Candril grunted.

"Well, it's just like that," Ni'a explained. "Only your lump of nanites are one of the Network rooms you can enter and do stuff in."

"Oh."

"It's really easy once you stop thinking about them as something you're holding in your hands."

"Oh!" Candril exclaimed, and then zir lump of nanite clay smoothly molded itself into a small replica of Candril's own body and looked around. "Oh, this is amazing!" the little exobody exclaimed in a tinny but otherwise perfect replica of Candril's natural voice.

Aphlebia's mouth dropped open in a big, toothless grin.

"Phage says the default is for the nanites to replicate your body but like how you see yourself," Ni'a said. "It's actually a little harder to do what Firas is doing. But that's OK. I think I can even share your nanite exobody with you and show you how to do it! If you want."

"I - How do you know all this?" Candril demanded, still speaking with zir nanite produced voice.

"Um..." Ni'a looked around at everyone, even glancing at Emala, who was just watching, and repeated the words that nobody ever seemed to react to, emphasizing them, "Phage is my parent."

"Like Emala?" Firas asked.

Aphlebia shook their head.

"No," Ni'a said. "Like, I literally came from it."

"Not the - the evolutionary engines?" Firas asked, increasingly incredulous.

"No, Phage says I came from that, too, just like you. But also from it, like..." and Ni'a looked around aimlessly for a bit, trying to think of something to say, and then got an idea and grabbed a lump of their own nanite clay and pinched it off from the larger clump. "This!" they exclaimed, holding up the smaller piece.

"How does that work?" Firas asked.

"I don't know," NI'a said.

"But how does it explain how you know more about the nanites than I do?" Candril had come back to zir own body and spoken with zir full voice.

"Well, for one, Phage told me. Like a Tutor."

"But what does that have to do with Phage being your parent?"

"I was going to tell you!" Ni'a leaned forward. Then they fell back into their seat and sort of drew themselves inward, looking down at their clay lump as they mooshed the smaller ball into the larger one. "I don't want to brag, 'cause it's not fair. But I don't want to keep it a secret, either."

"What?" asked Firas.

"I can see and do things like with the nanites, but without them," Ni'a mumbled. "And I can see how the nanites work just by looking at them. Like, every way how they work."

The tram car was so quiet for a few moments, that everyone could hear the tube noise as it barreled toward its destination. Emala's brows were furrowed.

Ni'a decided to explain a bit more, repeating words that Phage had told them. "It's really just like how Aphlebia can see underwater with their eyes closed and the rest of us can't, because we don't have clear eyelids like they do."

"This is all true," Phage spoke to the room without showing itself.

Ni'a and Phage had been talking about this moment for a while by now. Knowledge about Ni'a's nature and abilities were something that Phage felt strongly must remain under the purview of Ni'a's consent and autonomy. Ni'a should control who knew about it and when. And Ni'a, just as they'd said, didn't want to hide it from anyone. Or, at least, not from their family. But Ni'a was also scared to talk about it, so they had spent some time discussing just how to bring the subject up, or what to do if it came up. And what had happened just now was probably one of the best case scenarios.

Only, as perceptive as Ni'a was, they still couldn't reliably read other people's reactions. They could predict them better than most other people. Emotions and thoughts were really just another set of emergent behavior from a complex system, and Ni'a could see how they played out in another person to a level of detail that no one else but Phage could do. But, they still couldn't actually read another person's thoughts. Not without merging with them over the Network, like Phage had once done with the Pembers, and that wasn't something they felt ready to do just yet, or maybe ever. And it required the consent of the other person, anyway.

So, they were nervous about the expressions on the faces of their peers and Emala at the sound of Phage's confirmation.

"So, it's like Morde's magic?" Firas asked. They'd all read Metabang's graphic novel by then, and heard Emala read it to them countless times.

"Maybe."

"What do you mean you can *do* things like the nanites?" Candril asked.

Ni'a looked over at Candril and gave a half smile. "I can only do it with Phage's consent, but," they glanced over at Aphlebia briefly, "I can decide how leaves will move in the wind, and where they'll go, even when there's no wind. I haven't really tried anything else. Well, maybe keeping my formula warmer for longer."

"Why not?" Candril asked.

"Everything really fun I can think of ends up being something that could hurt someone else," Ni'a replied, looking down at their clay again. "And I don't want to do that."

"OK," Candril nodded. "Now, why?"

"Why what?"

"Why are you the child of Phage? Why do you get to do these things?" Candril asked.

Phage projected its Network avatar into the space of the tram, near the door, so that everyone could see it was about to talk. It took the form of a cloud of black smoke, unusually devoid of the stars, galaxies and nebulas it usually depicted. And when everyone was looking at it, it spoke.

"I don't even know that. It is just a thing that has happened, and I'm doing what I can to be responsible about it and to help Ni'a learn that responsibility, as well. I have earned the trust of the Crew, myself, but only after centuries of work to prove my trustworthiness with no apparent hope of ever succeeding. And I'm not sure that Metabang's story about me has improved things."

"Most people think that parts of it are made up," Emala pointed out.

"That's actually true," Phage said. "But probably not the parts they think. And maybe not all on purpose. Metabang is just like you, a person. It has a flawed, finite perspective, and a subconscious mind that interprets things its own way. But the parts where I am in it are accurate."

"Do you," Emala asked, "also have a subconscious mind?"

Phage took a shape then, and filled it with stars. It looked a lot like Ni'a, only taller. Perhaps it was a projection of what Ni'a's silhouette would look like some day. But it only said, "I am pretty sure I do, yes. As far as I can tell, a conscious mind requires one."

"Then maybe Ni'a's conception is an act of your subconscious mind?" Emala suggested.

Phage held up a finger, "that's what I think, yes. But I still don't know why."

Ni'a was so glad that Phage had taken the center of attention. There's no way they could answer these questions without panicking.

"Can you show us what you can do?" Firas asked.

"That would be profoundly dangerous in a tram," Phage responded in a kind tone. "Maybe in a park."

"Can Ni'a show us?"

Ni'a cringed.

"Only if they are comfortable with it," Phage said. "Let's not push them."

"OK," Firas thought about things for a moment, then asked, "So, Ni'a said that they can only do what you allow them to do. Why do you allow them to do *anything*? Why not make them like the rest of us?"

"It is in their nature, and curtailing their nature would be cruel," Phage responded.

"Curtailing?"

"Restricting."

"But," Firas pointed at Phage, "You already do it! You keep them from doing really cool things!"

Phage pointed back at Firas, "Consent is complicated here. I am already in charge of everything that happens aboard the Sunspot. Everything that happens here is part of my autonomic functions. In order to change how a thing happens, Ni'a has to ask me for my consent first, which they do implicitly by trying, and then I give it. Or I don't. This is *not* the same as between Emala and you, by the way. It's part of the nature of what *I* am."

"Wait!" Candril blurted.

Phage looked at zem, "Yes?"

"If everything that happens is part of you, then what I do is part of you, which means that..." Candril had an expression that made it look like thinking was really hard right then, or at least finding the right words, but ze pushed on, skipping right to zir point, "Why don't you give us permission to do what Ni'a can do?"

Phage stood staring at zem for the full duration of a curve in the tram tube, everyone leaning slightly in the change of inertia. The longer everyone waited for Phage to speak, the harder it was to break that silence and risk

interrupting what it might say. Then it said, "I'll get back to you on that," and disappeared.

Candril looked utterly terrified.

Firas, eyes wide, turned to look at Ni'a and asked, "Did we just break your parent?"

Aphlebia, who was seated next to Ni'a, held out their open palm, offering to hold hands, which Ni'a gratefully took, but with a little surprise.

"You're not all scared of me now?" Ni'a asked.

Everyone shook their heads, but Candril still looked like ze was trying to swallow something difficult.

"I have not *seen* anything I should be scared of, Ni'a Student of Phage" Emala said. "You are still my child, and you are a good person. I'm proud of you. I'm very proud of all of you. Phage is a strange thing, but it has been an excellent Tutor."

"Phage is a huge dork, just like every other Tutor," Firas observed. "Can we go to a park where you can show us what you can do with leaves, Ni'a?"

Ni'a looked at Emala for reassurance and said, "I guess?" and Emala nodded.

"Can you show me *how* you do it?" Candril asked.

"I - I'm not sure," Ni'a frowned at zem.

"Like, over the Network, maybe?" Candril pushed.

"I don't know if I can visualize it like that," Ni'a said.

"I just want to be prepared for when Phage lets us do it, too," Candril mumbled into zir chest, as ze looked down at zir miniature model of zemself ze'd made from nanite clay.

—

As they walked through Agaricales on their way to the great park that

ringed the city, Candril broke zir contemplative silence to point at a resident's lawn chair and say, "Hey! I have a question!"

"What is it?" Emala prompted.

"Watch!" Candril held up zir nanite clay figure, which ze'd been carrying around like a doll since ze'd made it, and willed it to transform into a replica of the lawn chair. Then ze pointed at it and repeated the word, "watch," as it transformed into a different kind of chair, Candril's favorite chair at home. "Why don't we..." Candril drew out the sentence for dramatic effect, "make chairs out of nanite clay?"

"Candril, that's a really good idea!" Emala said.

"Vine? Why aren't people already doing this?" Candril asked.

"Some are," Vine replied from Netspace. "The idea just hasn't finished spreading yet. Also, many people like hand crafted chairs."

"Well, poop!" Candril pouted. "I thought I was the first to think of it."

"You are the fourth," Vine explained. "The Nanite Innovation is 39 years old as of a few days ago, or a couple days from now, depending on how you mark it. There have been many, many discoveries and ideas to be made, and a finite number of people to make them. Everyone has been focused more on doing things while standing or lying down, it appears. By some chance, this week seems to be the time for nanite chairs to be discovered. If you had thought of this three days ago, you might have been the first. That does not take away from how astute you are, however. Nanite chairs could be customized to not only a person's unique physiology, but to their posture, in the moment."

Firas pointed at the air, as if pointing at the source of Vine's disembodied voice, "See? Dorks!"

"Correction," Vine stated. "Berius Student of Calcium Deposit has been using something resembling a nanite chair since xe received control of xyr nanites 35 years ago. Berius has a physiology similar to Morde Student of Ralf, as described in Metabang's story, and has found an instantly customizable mobile stool to be important for increasing xyr mobility and reach. Not until two days ago did anyone think to elaborate on xyr design for their own purposes."

Firas exaggeratedly mouthed, "Dorks."

"Vine is not a dork," Candril snapped.

"There is a Tutor named *Calcium Deposit!*"

"Firas," Emala chided. "There is no call to make fun of other people."

"I'm not making fun of them," Firas stammered. "I just think they're funny and harmless!"

"Funny?" asked Emala, pointedly.

"I do try to be both," deadpanned Vine.

The Whorlies' Tutor, Charlie, then spoke up, "So do I."

"As do I," Doorway, Emala's Tutor, added.

The strange sound of Aphlebia laughing out loud interrupted everyone's astonishment. They were bent over chortling.

"Does your Tutor even talk?" Firas asked Aphlebia.

Their Tutor spoke for itself, though.

"My name is Chalkboard," it said.

—

On the way out to the middle of a field, the children had collected armfuls of leaves from various spots on the ground beneath the trees. The Sunspot does have seasons and it was the beginning of fall. Overall the number of leaves on the ground were still sparse, but a walk through the park allowed them to collect quite a few, many of them still green. And they put them in a substantial pile for Ní'a to play with.

Ní'a gave a bit of a grimace while standing before it, as everyone else took several steps back. They had, through the years, put a lot of practice into manipulating a leaf or two here or there, or other small things, such as keeping their tea or formula warm. Since that time when they were three, they had never attempted to manipulate more than four leaves at once. They didn't even know if Phage would allow them to do this.

They had said repeatedly, as everyone else was collecting the leaves, "I might not even be able to make two of them move!"

Every protest was rebuffed with, "that's OK! This is just in case!"

Aphlebia was the only other one who was reluctant to collect all these leaves, but Ni'a knew that that was because Aphlebia was conscientious about the impact to the ecosystem. The ship could endure this, for sure, especially if they only did it once, but Aphlebia cared in a way that most others didn't. It was one of their principals, and Ni'a could see it was bothering them.

Emala was becoming increasingly amused and pleased at xyr children's industrious cooperation. And though xe didn't bend over to pick up any of the leaves, xe did make suggestions occasionally. Especially the suggestion to give Ni'a some room.

One glance at the Whorlies showed Ni'a that they were a blur of confronting members, maybe three or four. An unusual state for them, but clearly they all wanted to see this and were doing the best they could.

Ni'a took a deep breath, closed their eyes, and said loudly, "OK!" Eyes still closed, they pointed unerringly at Candril, and murmured sternly but humorously, "stay quiet!"

"What?" Candril said.

"Quiet!" Ni'a replied louder.

Candril mumbled a string of unintelligible words that ended in "- quiet." But then dutifully fell silent.

But whether it would work or not, there really wasn't much to this that Ni'a hadn't already done countless times before while alone, or while working with Phage. It was just the magnitude of it that was unusual. So, they decided to start with the top leaf and work their way down from there. Make it simple. But maybe not *that* simple.

They stuck their finger in their mouth and held it up. It was a gesture they didn't have to do, but it telegraphed what they were doing. Then they pointed vaguely aftward.

"The breeze is blowing lightly that way," they declared. And then waited,

eyes still closed, until a couple of their peers tested the air themselves. They did not need their eyes to see that. None of them did if they used the Network access they'd already been taught about, but of course Ni'a wasn't using that, or the nanites, either. "So, I'm going to blow the leaves that way," they pointed in the opposite direction.

They had a thought, and took a moment to command the nanites in the ground around and in the leaf pile to recede away from it. This took a little time, so they used that to adjust their feet dramatically.

"Tutors!" Ni'a called. "Watch what I'm doing! Watch the nanites! See I'm not using them!" Then they circled their arm dramatically and used a gust of air to blow the top leaf, and a handful of leaves under it, upwind.

It was a little anticlimactic, actually. But Ni'a looked over at their peers and listened to hear their Tutors verifying that no nanites had been involved in the demonstration. They even heard Vine telling Candril how to watch the nanites zemsself.

"Phage?" Ni'a asked the air quietly. "Can I really show off?"

"Everyone in eyesight but your peers are going to assume you're practicing with your nanites, and what I think you're planning is still really minor. Go for it," Phage replied privately in their mind. "I'd honestly like to see how much control you can exert on all those leaves. I won't help, but I'll be there to stop you if you push it too far for credibility or safety."

Without hesitation, Ni'a grinned and swung their arm in that wide vertical circle again, ending with their finger pointing upwind.

The leaves immediately shot out laterally in a stream, curving upward, the leading leaf following the arc described by their index finger, but flying high and wide, all the other leaves chaotically fluttering behind it, to describe a hoop of leaves five meters in diameter. And that alone was spectacular, but when the leaves closed the loop, Ni'a added a crowning touch.

Related to what they did to keep a drink warm, they sucked the entropy out of the hoop of air and leaves to an unnatural degree, not completely, but to the point where the leaves appeared to hang in the air. They drifted in the directions they had been moving ever so slightly.

At least, that's how they described what they did, later, when they were

talking to me about it. I have examined the records of that moment over and over again, and I cannot explain the physics behind how that might have worked. I don't know the equations, and neither does anybody aboard the ship, besides perhaps Ni'a and Phage.

"Ah!" Phage exclaimed out loud, deep, booming voice audible across the park. "Nice!"

Phage had slipped at that moment, though I may have been the only one that noticed. It had not spoken using nanites nor any mechanism attached to the Sunspot's Network. It had simply caused the air to vibrate, somehow, at a point somewhat above Ni'a's head.

Ni'a looked in the direction of their peers, face almost devoid of expression. They appeared to be dissociated, emotionless, looking through their family rather than at them, but there was still a glint in their eyes. And the very second they came to and grinned, the leaves sped back up to their original velocities, but no longer in a controlled wind they burst outward with centrifugal force, hit stagnant air almost immediately, and started to flutter to the ground.

"Hot shit!" came a shout.

"Candril!" Emala snapped. Then, "Actually. Nevermind. That was an appropriate use of those words. Say it again if you'd like."

"Hot shit!"

—

"There is an old, deprecated word that I like," Phage told Emala as they sat in the darkened quarters where the family had settled down for the night. "I find I identify with it, even though it would make no sense among the Children of the Sunspot. I am not sure why it should matter to me. The cultures that it comes from are as alien to me as this one. But, the more I remain a localized consciousness here, the more that pointless things like this do matter to me."

Emala lowered xyr tea from xyr mouth, not having sipped it yet, and glanced at the sleeping children, "tell it to me anyway."

"Parent is great," Phage rambled. "It is accurate and true. And most people know it, but don't use it much, preferring to refer to their familial elders as

caretakers and Tutors. Parent is usually reserved for describing relationships between fauna or esoteric crafting elements."

"I know this," Emala said.

"And when talking about the reproductive relationships of fauna parents, we say 'childbearing' and 'supportive' parent. This doesn't even refer to which gametes they carry or how they're combined, because that varies from species to species too much."

"I know this, too."

"But, so many of the ancestors of the Sunspot's populace used a couple of other words, words with a lot of baggage and misuse, to describe some parental roles. In some of their cultures there were other words, too, other roles recognized in a family. And the Crew had good reasons to expunge these words from their language. Your language."

"Tell me the word, Phage."

"This is not a moral statement. Not a referendum on the Crew's choices. It is just a remark on how I feel about myself in this place/moment. Just my local identity as it has been informed by my connections to the Sunspot, its history, and what brought me here."

"Phage..."

"I like to think of myself as Ni'a's mother."

"You're right, I don't know that word."

"And that's OK."

"If you say so."

"The Sunspot," Phage said more quietly, "is Ni'a's childbearing parent. You are their caretaker. And I am their mother. It makes me feel bizarrely good to say that."

And then, after a few more moments it added, "and troubled."

In the middle of the night, Eh and Fenemere were watching a holodrama on the viewscreen of the Bridge of the Sunspot. As the Bridge was a fully configurable Network space, they could have just as easily been participating in an immersive program, but they were old souls that found a nostalgic comfort in the separation of audience and performance. The holodrama had been produced by some of the Children of the Sunspot only a couple centuries ago, and told the story of a group of Monsters who had chosen to try to survive in the wilds of the great mountains that ringed the Garden. Which meant that it was written before the Nanite Innovation, and before the Children knew that they could look forward to ascendance to the Network after the death of their body.

The two Senior Crewmembers were quietly discussing the changes of the Sunspot's culture since then and its implications.

Fenemere was pointing out that not only had the Crew made some massive ethical mistakes in engineering the Sunspot's social norms and restrictions of knowledge, but that the now obvious mistakes of the past point to likely mistakes of the present. Namely, that there was knowledge that individual Crewmembers held off record that they were all still withholding from their Children, and that that needed to be corrected.

Eh largely agreed with Fenemere, but Fenemere was so passionate and forceful with kihns statements that Eh's reflexes were to try to slow kihns down and get kihns to think about the implications of bringing about change too fast. Namely that the rest of the Crew had to deliberate on this, and give their consent, and that the Crew's privacy was also a concern of their autonomy. And Fenemere wasn't having it.

But they both were also gripped by the holodrama and kept interrupting their discussion to pay attention to the story. Which itself provided allegorical examples in support of both of their points.

"Do either of you remember the ascendance of your parents?" Phage's voice asked from behind them in the dark.

"Stop program," said Eh.

Fenemere turned to look at Phage, who had taken the form of a Pember that was wearing Morde's cloak, and pointed at it, "That's part of my point. It's been centuries and centuries. I'm not certain of any of my memories from before the Sunspot. I think I remember my parents' names.

I still desperately miss them, but not coming with us was their choice. However, what I do know and remember clearly is that ascendance on that ship did not hold the same weight of meaning as it currently does on the Sunspot. We all knew what it was. We all lived for it. And there was no false sense of loss, because we remained a family through it."

"Memories are so unreliable. They change with time and psychological need," Eh said, taking Fenmere's rhetorical bait over Phage's question. "This holofiction is more accurate to reality than any memory I have from before the Sunspot. If we don't have something on record, how can we trust what we have to say about it, or its relevance today?"

"Frankly, I'm envious of the both of you," Phage said.

Eh looked back at it while Fenmere tilted his bearded chin up in acknowledgement and asked, "Why's that?"

"As far as I can tell, what memories you do have only come from your lifetimes, informed only by the experiences you have had from your finite perspectives," Phage replied.

Fenmere asked, "And you don't work that way?"

Eh glanced over at Fenmere with hooded eyes.

Phage shook its head, "You know damn well that knowledge I shouldn't have, if I am any sort of finite being, spills forth randomly and with alarming regularity. It's part of my charm."

"Why are you dressed like that?" Eh asked, gesturing at Phage's form.

Phage slowly turned a pair of blinking pulsars Eh's way and said, "I've noticed something about myself and felt I should make a confession and also warn you of something that's coming. But I need to explain something to you first so that you understand."

"OK..."

"I cannot see the future. I can sometimes predict it better than most people, because I often have more knowledge at hand than anyone. Both Morde and Benejede are better at doing that in their own ways than I am, but they are also restricted to tight localities. You're going to want to consult both of them, by the way. Or, at least, pay attention to where Morde is going, and

ask Benejede what to do."

Phage held up a finger before the others could speak while it paused to pivot its speech.

"Now, I *can* consciously know everything that's happening aboard the Sunspot at any given time, if I think to consciously pay attention to it. But that comes with a cost. You'll find that if you try to configure your Network resources to do something similar for yourselves, you'll pay the same cost, though maybe at a different rate. The more broadly you spread your awareness, the less sense you can make of it all *and* the less *you* that you become. In other words, the more stimuli to your system, the more noise there is, and the less of what makes you unique that can influence the whole of it."

"That makes sense," Eh said.

"So, the way I normally function," Phage explained, "is similar to you. This version of myself is something of a mimic of how you humans work, after all. I go by association. When something in the center of my attention reminds me of something else, that something else also becomes part of my attention, whether it's a memory or another part of my senses. And, I forget about something else to make room. I don't always put everything together into a nice story or prediction." The Chief Monster lifted its arms in a gesture of resignation, palms upward, and then let them drop. Then it began to walk around the room until it was in front of the viewscreen where it manifested a chair and sat in it, speaking along the way. "I've never known a fear of death in any way. I didn't evolve from any sort of lifeform that has known death. I am not geared to even think about predicting the future, whether by guess or statistics, and certainly not by intuition. And the task you've given me here, aboard the Sunspot, is simply to keep the ship from flying apart at the seams, and I do that only in the moment. Because I can."

"It sounds like you're trying to excuse yourself from something," Fenemere pointed out. "No offense, but that is weird coming from you."

"I know. And I am," Phage said. "And I'm going to accept your judgment in any case. But I also think that if you know all this, it will help you make decisions."

"OK," Eh assented. "Go on, please."

"I swear, I've learned to ramble from your children. Morde, and Tetcha, and the Pembers... Sorry. At the moment, I'm personally afraid to look at everything that is going on, for personal reasons. I can't tell you details I haven't experienced personally. Everything is on such a knife's edge that if I twitch in the wrong way, the natural fibrillations of the Sunspot could connect with each other and amplify. So, here's what I do know." Phage leaned forward, putting elbows on knees, tail whipping behind it. "There are four children whose identities, origins, and actions are complexly entangled. One of them is not on board the Sunspot. And I am not just Ni'a's parent, I am their mother. And that last bit of information should inform all of us of the likely outcome of the first situation."

"Mother..." said Eh.

"The conversation you two were just having is another portentous event." Phage said. "It's extremely relevant, I think. Anyway, I don't think that my identity as Ni'a's mother as opposed to their father is at all as relevant as the fact that such an ancient and socially charged concept has become part of me in the first place. Either one would be equally meaningful. But I also find myself wanting you to know it because it makes me feel better."

"Oh, shit," Fenemere muttered.

"Are you saying," Eh asked, "that this change in your sense of identity feels like an echo of something larger to come?"

"Yes," Phage said. "And maybe more worrying, as I continue to exist here like this, I am becoming more human."

"Why is that troubling?" Fenemere asked.

"Because I might not be able to continue my job."

"Wait," Eh snapped.

"What?" asked Phage.

"What do you mean one of the children is not aboard the Sunspot?!" Eh demanded.

"Ask Benejede," Phage said. "Keh might be able to help you learn that in time. I can't risk looking."

How to Collide with an Asymptote

Listen. I know that the title of this chapter is utter nonsense, and there's really no action in all of space/time that can come close to it besides passing the event horizon of a black hole, and even then there's argument about whether or not that's possible, but Fenemere, the Poet, suggested the title and I'm going with it.

—

Eh asked Benejede what was going to happen next and what "a child outside of the Sunspot" could mean.

Eh had to visit kihn in kihns own Netspace, as keh would not leave it for some reason. It was made to look like a single room cabin high on a cliff, with a porch overlooking a strange bay and the Aft endcap of a ship that was clearly not the Sunspot. Eh remembered those panel patterns better than Eh had expected.

Benejede took the form of an overly large heron with antlers, with human hands for feet, and a whip-like tail, and stood perched on the porch's railing. Keh didn't bother to look at lhn, and simply said, "Go to Agaricales and be prepared for our experiment to end. Figure out how to wrap things up."

—

Sometimes warnings don't come in time.

Bashiketa generally needed a certain amount of room in their schedule to adjust to potential changes, and sometimes that just could not be accommodated. Especially when there were more people involved than usual.

It was a very small thing to Fredge, but the tram they were going to use that morning to ride to the center of Agaricales, to the memorial park where the festivities would take place, was absolutely crammed with people and they had to wait for the next one.

Fredge had not anticipated that there would be so many people in Agaricales even on this day, but had started to get a sense of it when they both left their quarters to walk to the tram. They'd told Bashiketa to expect

the Tram to be really crowded while they were on their way there.

Bashiketa had already been spending their energy working up the courage and willpower to endure crowded hallways and other similar spaces. They didn't really have the wherewithal to do more than nod at Fredge's words. And they were feeling proud of their progress so far.

So when Bashiketa beheld the sight of a tram, with absolutely no room left in it, closing its doors with still countless other people on the platform, waiting for a ride, and then leaving the station, they lost it entirely.

Fredge was already considering the contingency plan of dropping down to a fallow deck to use the tram there in quiet, but ended up kicking themselves for not choosing that path to begin with. Bashiketa was in no state to even hear of the idea. Their meltdown was too intense.

This was a situation that neither of them, Monsters who had spent most of their lives living alone under a mountain, had ever experienced before. Fredge had been among throngs of other people, but never with a Bashiketa experiencing full sensory overload and emotional dysregulation. And for Bashiketa, every aspect of this was new and terrifying and utterly discombobulating.

Fortunately, almost everyone around them knew what to do. And those that didn't were instructed by others.

While Bashiketa sank to the floor, pounding and raking their claws across their own thighs and any other surface around them, screeching and wailing, the crowd fell silent and parted, people just going about their business around them more slowly and softly, giving them ample space. Fredge had to take a couple steps back to avoid being injured by Bashiketa's attacks, and sank to a kneeling position themselves to wait attentively. They gave some of the strangers around them thankful nods as they passed by.

No undue attention was paid to Bashiketa, and everyone did their best to minimize the noise and bustle that contributed to their overload. And no one complained, not for the nearly fifteen minutes it took for the poor child to begin to regain control. Nor for any length of time after that, for that matter.

Some credit could be given to attentive Tutors informing people of what was going on and reminding their Students of what to do. But the general

culture of the Sunspot, which had been cultivated for centuries, already gave everyone a nearly intuitive sense of how to treat someone who is prone to experiencing meltdowns.

If you, the reader, are an Outsider, you may find this informative, which is one of the reasons I include the account.

Fredge waited until Bashiketa reached for them. That was the signal these days that the meltdown was coming under control, at which point Fredge moved forward, put their head on top of Bashiketa's head and started rumbling. Bashiketa started purring back.

Bashiketa was maybe halfway to fully grown. It was getting hard to pick them up, but Fredge asked if they wanted it anyway. To which Bashiketa shook their head and slowly tried to stand up. But the scratches they had made in their upper legs made that too painful. Some were quite deep. There was blood on the floor where they'd knelt. So Fredge picked them up anyway, apologizing, and began to walk back to their temporary quarters.

Someone's Tutor, probably that of a Safety Patrol volunteer, appeared above the blood stains on the floor and started directing people around them while cleaning nanites began to work on the mess.

"We're going to have to treat and bandage your scratches," Fredge told Bashiketa as they carried them. Bashiketa knew the drill, though. This had happened before. Fredge continued, "We don't have to see the festival in person. We can view it on a screen if you want. Or skip it altogether."

Bashiketa shook their head.

"Would you like to use a chair to get to the festival?" Fredge asked.

A nod. A chair would also feel like armor, something to keep between themselves and the crowds, Bashiketa thought. They definitely liked the sound of riding in a chair.

Fredge strode on for a while, thinking about something, then said, "You know. We could just do the usual and manufacture your default design at a maker unit, out of typical materials, or..." They seemed to be looking for some good words before they continued, "we could make you a nanite clay chair much faster. There's a control program for that on the MonsterNet we could use. You'd control either one with your tablet, but the nanite chair would be more adaptive. Your call."

Bashiketa thought about that for a bit. It reminded them of a daydream that they regularly had. One that they had not mentioned to Fledge since they were very small, but just could not let go of. Around five years of age, when Bashiketa had asked Fledge if they could get a nanite terminal, after learning the differences between the Monsters and the Children, Fledge had fallen quiet for a time. They'd picked up their tablet, frowning, not looking at Bashiketa, to type something into its surface. And then they had slumped and sighed at whatever it was that they'd read there. The answer had been "no". It was too dangerous for Bashiketa to interface with the Network via any sort of neural terminal. But that didn't stop them from daydreaming about it. They'd learned that nanites gave Children some sort of control over their own bodies, how they grew and healed. And Bashiketa wanted that so badly. They also wanted to play with a nanite exobody.

They used nanite infused bandages to help them heal scratches and injuries before, but those nanites were instructed not to make an interface and to withdraw from Bashiketa's body when they were done. Healing nanites were a tool used by and for Monsters, on the basis of consent and autonomy. But for some reason, denying Bashiketa the consent to cease being a Monster was a matter of Bashiketa's own safety.

"I wish I could have a terminal," Bashiketa mumbled.

Fledge paused a step and looked at them, then said, "I am so sorry. Maybe we'll find a way. But not today." After several steps, they growled, "we have to do something for you, dammit."

They touched the door to their quarters, which dilated open. And Laal was on the other side, clutching a Fluffy Fauna and pacing back and forth.

"Laal!" Fledge exclaimed and ducked inside to let the door close. But then they stood with Bashiketa in their arms and looked askance at their old friend.

Laal was momentarily transfixed by the sight of Bashiketa, and worked hen's mouth as if trying to say something.

"Sit," Fledge said in a friendly tone. "Bashiketa and I have to take care of something, and then we're going to the festival. How have you been?"

Laal plopped down on a stool near the table, and sighed, "I have so many questions. So fucking many questions. This, by the way," hen held up the

well worn but still very colorful toy wild cat and said, "is for you, Bashiketa. But, if you don't want them, I'd be happy to keep them myself. We've kind of become good friends."

Fredge sat Bashiketa down on another stool, across the table from Laal, and Bashiketa held out their hand to take the Fluffy Fauna. They held the toy in their hands while Fredge went to the health bin to get bandages, a scanner, and some antiseptic. Bashiketa petted the plush animal's head and looked into their glass eyes, frowning.

"I have questions, too," Fredge said to Laal. "And most of them not for you. But I suspect I've been kept better informed for the past few years than you have. I'm assuming it's safe for you to be with us here, now, but I'm not sure if I care if it isn't. You first."

Bashiketa turned to see as Laal looked at Fredge and Fredge met hen's gaze with an old expression. It was the same expression Fredge gave Bashiketa when Bashiketa discovered something unfortunate and pointed it out. It was the same expression that Fredge had given Bashiketa when they'd mentioned how awful they always felt, or when they'd mentioned the nanites just now. And Laal apparently found that expression very reassuring.

Bashiketa saw tears in Laal's eyes, so they held out the Fluffy Fauna for Laal to take them back, which hen did gratefully, hugging the cat.

"Where do I even fucking start?" Laal asked.

"Excellent question," Fredge replied, kneeling down next to Bashiteta. They just glanced at Bashiketa's face, and Bashiketa knew what they meant, so Bashiketa nodded. Getting to work on cleaning the wounds, Fredge glanced briefly up at Laal, "that's a practice question, though, still your turn."

Laal put hen's forehead in hen's hand, elbow on table, and started working their long ears up and down, alternating expressions or just stretching those muscles. "What..." hen started a thought and chewed on it for a moment. "... has this all been for, really? I mean, I know what we've been told. But when I was cut loose for your safety, it was done in such a way. I can't even fully describe it, but the way I was suddenly no longer given any explanations was really weird. So I've started asking, what has this all been *for*, really?"

The pain of the slashes in their legs was giving Bashiketa something to focus on, to ground themselves with, as they were paying rapt attention to what Fredge was doing. They were no stranger to wound care, but never got tired of watching how it worked. And this all occupied just enough of their mind they were able to also focus on Laal's words. And Bashiketa had a thought come to them that they did not expect: Maybe Fredge and Laal *were* on their side.

Side? Side of what?

Bashiketa v.s. the Monsters? They were all Monsters here. Bashiketa v.s. agony, maybe. Bashiketa v.s. nightmares. Bashiketa v.s. their own mind. Bashiketa v.s. Fredge's tablet. Bashiketa v.s. the unknown authority that Fredge and Laal were obliquely referring to. Bashiketa v.s. the Sunspot.

"I can't tell you that, Laal, because that's my question, too," Fredge snarled.

Bashiketa, Fredge, and Laal v.s. reality itself.

"Can we talk this out in front of Bashiketa?" Laal asked.

Fredge looked at Bashiketa and said, "This is about you. You have every right to know what we know, and to have known it. I've been teaching you slowly, to make sure you had the foundations to understand it, but I think you should have known more sooner. And Laal here is asking if we can dump it all on you now. You can nix this entire conversation and we won't have it, if you want. Right Laal?"

Laal scowled, but nodded. Fredge nodded back at her.

Bashiketa was feeling excited about all of this. Finally they might have answers to questions they'd been afraid to even ask, or didn't even know the words to! Another part of them felt resentment for being kept ignorant about their own life, but Fredge and Laal were family. Even if they barely remembered Laal, they knew he'd been part of the center of their life when they were very small, and they felt like something they'd been missing dearly had returned to them. The air felt safer.

So, when Fredge asked Bashiketa, "Can we talk about your life with you? We'll miss the opening ceremony, but we both think you should be in on this fully. Well, as fully as we can make it." Bashiketa nodded firmly and said, "yes."

"OK, so, here's what *I* know," Laal said, still clutching the Fluffy Fauna in one arm, while stabbing the table with a finger. "The Operation, as we've been calling it, has been geared to conceive of Bashiketa since the Sunspot was first built. Your name, Bashiketa, means 'an Outsider', and that's relevant. And it took all these centuries because we had to run numerous experiments that were, initially, constrained by relativity. Communication through the Tunnel had to be verified multiple times before we could trust it..."

"The Tunnel," Fledge explained to Bashiketa, "is a device for communicating over vast distances. It uses quantum entanglement and tunneling to transfer information instantaneously between terminals. It works faster than light. But we had to check its function via radio, secretly."

"With the Sunspot's parent ship," Laal said.

Bashiketa felt their mouth drop open. "Is that who you've been talking to on your tablet?" they asked Fledge.

"No," Fledge said. "That was our Crew-side benefactor. Our 'ally' who has been helping us do this in secret. Neither I nor Laal have used the Tunnel, actually. Our colleagues have, as well as have our predecessors. We're in charge of taking care of you. But..."

"Wait," Laal hissed, leaning forward eagerly, eyes very wide. "Did it work?"

Fledge nodded, "It looks like it."

Bashiketa felt confused and tingly. A voice in their head said, "Oh, that's what's going on!" Well, it wasn't exactly a voice. It was a wordless thought that felt like it was coming from the part of their mind that sometimes had a mind of its own, that Bashiketa then reflexively translated to words. But Bashiketa hadn't puzzled everything out, yet, themselves. "What's going on?" they asked.

"You use the Tunnel," Fledge told Bashiketa. "You were born to use it. That's what your nightmares and flashbacks have been."

"And," Laal said, "we were raised to believe that you were going to be the first in a new kind of human being. Something we could all strive to be. Maybe, even, that if we could figure out how it worked for you, we could

figure out how to give it to those of us who were born without it. But dammit! You've been having nightmares? Of *course* you have!"

Bashiketa zoned out at that point. It felt like they were being pulled away from their body, distanced from everything it felt and sensed, even though they still experienced all of it. And though they could hear Fredge and Laal talking, and hear their own voice answering back, they could not remember the words that were said.

At some point they consented to building the nanite clay chair and trying it out, and soon they were rolling through the corridors to a Crew shaft to go down to a fallow deck to avoid the throngs of people. And there, under Fredge's instructions, their nanite clay chair adapted itself to climbing down a ladder.

Fredge and Laal kept talking as they traveled to the city center.

The next time Bashiketa felt fully awake and in control, it was during a moment when it seemed like the Sunspot itself was having a meltdown.

Facing the Tyrannies of our Ancestors

Thirty-nine years previously, the first explosion the Sunspot had ever experienced had destroyed nine buildings near the center of Agaricales. The central building had been utterly leveled. The eight surrounding buildings had each partially collapsed.

The explosion had been a bomb and a case of suicide. The bomber, in a fit of existential despair, had used their nanites to secretly collect and process a set of highly volatile substances in their own body, and then they had used the building's capacitor to discharge a shock of high voltage electricity into their body to ignite the explosive. Just prior to enacting this, they'd withdrawn their consciousness entirely from the Network, erasing themselves in the process. Their Tutor was, of course, thoroughly questioned.

Ten people in all had been killed in the blast, only one had not ascended as a result. 38 other people had been trapped in the rubble but made it out alive. And there had been no one but the Crew themselves to bear the burden of responsibility for it. Which they did.

Sunspot law decreed that events such as this be treated as tragedies first and foremost. In almost every case, it was believed that violence could be traced to a systemic or cultural error. But especially in a case where permanent suicide was involved. This is, by the way, directly related to the position that the Monsters hold in Sunspot culture.

Yes, someone choosing to commit violence must be negotiated with and taught how to not make that choice again in the future, and must bear the responsibility of making reparations for the damages they have done. However, society, in having created the circumstances where that choice presented itself in the first place, was beholden to find the accommodations necessary to relieve that pressure and prevent it from happening again. Not through restriction, but permission and support.

Still, until all the necessary changes and reparations could be made and trust rebuilt, those responsible were often put under sanction. Sanction meant temporary restrictions to Network access and participation in all levels of government, along with some further restrictions particular to each case. Safety Patrol volunteers could not continue their volunteer work if their transgression had involved physical violence, for instance.

Several of the Crew had voluntarily sanctioned themselves after the Agaricales blast. Benejede was the only remaining member of that group who had not yet had their sanctions lifted. Benejede had been offered a lifting of kihns sanction multiple times, but keh had refused. Keh explained that kihns ability to extrapolate possible future events needed to be understood better and refined before it could be used in service of the public again. At this point, most other Crew considered kihnn to be throwing a performative and melodramatic fit, but nobody could do anything about it.

That Benejede had said as much as kihnn had in response to Eh certainly said something about the whole affair. But no one yet present at the Memorial Festival had any clue about that. Only one person there had even heard Benejede's words, and it wasn't Jenifer, Tetcha, Morde, or Illyen.

The four of them stood on one of the skyways that surrounded Memorial park, and watched as Safety Patrol volunteers used their exosuits to finish construction of the stage near the central obelisk, where the speaker and performers would do their work.

The park was large, taking up the space of all nine buildings that had been destroyed. The foundations of the outer ring of buildings had been left partially intact, carefully reinforced or partially deconstructed until they were safe to explore as ruins. They were all still lower than any of the skyways and inhabited floors of the buildings surrounding the park, so everyone there had a good view of the proceedings.

So, both Tetcha and Morde were able to see the familiar figure striding amongst the throngs of people near the stage. The shape of the figure wasn't familiar, but its presentation was unmistakable. A black silhouette of a person filled with stars, holding the hand of a smaller person of a similar shape. And watching the two of them for a bit, it became clear that they were accompanying another adult and three other children, and their Tutors (only two of which were materially present at the moment).

"Ah, my nemesis!" Morde joked.

Tetcha looked around to see if xe could see anyone else xe recognized and immediately caught sight of several exobodies of the Pembers. None xe recognized personally, so Myra and the old Council of Eleven were either off doing something else, or just not in line of sight. Xe suddenly deeply missed the Flits and made a note to xemself to go visit them soon. It was

actually pretty unusual to have so much of the old friends group here at this event. Most of them had been at one year or another, but it was a highly emotional place and time for them, and even Tetcha had debated with xemself about actually going to the park on this trip. But, both Morde and Jenifer had said it was important. Maybe the others had received similar messages. Maybe Morde had told them.

"I'm going to go talk to it," Morde declared. "I'll be back!" Then sie lifted up and floated off the side of the skyway, drifting directly down in the direction of Phage and its new family.

Tetcha leaned down to Jenifer and pointed in the direction Morde was going, "I don't know if you can recognize it, but that dark figure down there is Phage, the Chief Monster."

"I know it," Jenifer said. "It's a friend."

Both Tetcha and Illyen leaned a bit away from Jenifer at that, then looked at each other. Jenifer didn't seem to notice. Xe was busy mumbling to xyr doll.

"Well," Illyen said. "I have read Jenifer your story several times, of course." But the phrasing and emphasis of Jenifer's words had strongly indicated a personal familiarity, and Tetcha could see Illyen was as unconvinced by vyr own words as xe was.

Jenifer had heard that and decided to clarify, "It also knows me."

Tetcha looked down at xem and asked, "Is Phage one of the people who've checked in on you since you were born?"

"No," Jenifer said, glancing back. "I know it from before. We're staying away from each other right now, because we agreed to. But I think we can stop. It might not recognize me today, though. That's why I have the doll."

"What-" Tetcha stammered.

"Jenifer, can you tell us more about this, please?" Illyen asked, sitting on vyr haunches and facing Jenifer, to show ve were listening and to pay attention fully to vyr child.

Without looking at either of them, eyes still on Phage, who was now talking to Morde, Jenifer nodded and explained, "I was the volunteer in

charge of managing the construction nanites while the Sunspot was being built, and what to do with them after we were done. We had a whole crew of us to work on that, of course, but I was given executive control of the whole proceedings. We all thought it went very smoothly, but we were implementing some new design specs to accommodate our Crew's goals, and those introduced a whole new set of variables that affected the ship's function after we launched."

"Are you," Illyen interrupted. "Are you saying that you're the original Jenifer?"

"No," Jenifer said. "I was named after my grandmother. The mother of my mother before you," Jenifer glanced over at Illyen before looking back at Phage. "But I'm the Jenifer that built this ship with the help of Eh. I've been born twice now. I don't recommend it."

Tetcha noticed that they weren't the only ones staring at Jenifer and listening to her. Everyone around them was. This was fascinating and more than a little chilling.

"How did you do that?" Illyen asked in vyr loving and supportive parental manner. Ve was doing a phenomenal job of keeping any sort of fear from vyr voice, but ve was shaking just a little bit.

"The nanites," Jenifer said. "They were here in this body since its conception. And I know all the backdoors to all the systems of the Sunspot. You know? I might be the only person on the Sunspot who has consented to be born. Maybe in the whole history of humanity."

The preparation of the stage below was completed and both Morde and Phage waved at Tetcha when xe glanced their direction. Phage's child waved, too. Jenifer waved back, but Tetcha was too stunned by what Jenifer had been saying to think to raise xyr hand.

The opening statements would be presented any moment now, but no one in earshot of Jenifer seemed to care or even be ready to divert their attention from the talking child.

Losing interest in everything below xem, Jenifer turned to xyr own little crowd, apparently fully aware of them already, and started talking to all of them, and xe gestured broadly at the sky, the entire Garden of the Sunspot, "This whole thing is such a mess, you know. Those of us who decided to build it and set sail had our plans. We were trying to get away from the

tyrannies of our parent ship, and we had some really good ideas about how to do that. But no matter how hard you try, you can never fully erase the trauma of your ancestors. It's an ongoing process. And then there's the problem that a whole world like this is a thing of precarious balance."

Nobody had anything to say to that.

"Humanity has had so many ships before the Sunspot to get the design right," Jenifer continued. "I was first born on the last one and I ascended there. I don't even know where we all come from. Who knows how many disasters our oldest ancestors survived in order to create more? But the basic design of this vessel is highly refined and still fragile. And we mucked with it, adding a new layer of complexity. So, for two generations, we limped away from our parent ship, learning the error of our hubris with every new bump and shake. And the time it took to communicate with our elders grew longer and longer as the distance increased. And we didn't *want* to talk to them, even if they could have helped. We had to do this on our own.

"But we couldn't!" Jenifer sneered. A voice boomed out, amplified from below, but Jenifer just spoke louder, and everyone nearby paid attention to xem over the ceremony. "And I took it personally! Being in charge of its construction, I felt it had been my responsibility. And at first, I tried to handle it all myself, which is *absolutely ridiculous!*" Xe pointed at everyone in a sweeping gesture, "Don't you *ever!* Never make my mistake! We're all on this vessel together, and it's on *all* of us to help it survive! Together! As a *team!*"

"But even if you're working on a small community project, never take full responsibility for it. Human beings weren't built for that!" Xe nodded to xemself and settled a bit, but continued projecting xyr voice over the Master of Ceremonies. "I wasn't. I began to fall apart. I began to panic. I was utterly useless by the time Eh stepped in with the weight of the ship's council behind Ihn. And that's when they all summoned Phage somehow, to take over the job I'd made for myself." At which, xe pointed down at it, and declared, "It has been doing an inhuman job, keeping this ship alive, and we should all be grateful!"

Apparently done with xyr crowd, Jenifer glanced at Tetcha and then turned to Illyen and broke into soft tears to say, shrugging a little, "I sanctioned myself after that, in shame. A lot like what Benejede is doing right now. It was as much for me to heal as anything else. But, then there

was the Nanite Innovation and Phage had its sanction lifted, and Ni'a was born, and I needed... You were..."

"How long have you known all this?" Illyen asked.

"Always," Jenifer replied, "But I didn't remember most of it until I saw Phage just now."

Illyen looked away to blink vyr eyes and swallow, then took a deep breath and said, "I'm confused, and scared, but I think I'm also... honored? Why did you choose me to be your parent?"

Jenifer looked embarrassed, "I needed to be born the way that I'm used to. Not in a vat. Or, at least, I thought I did. Also, I related to you. I wanted to be your family. *Also*, dysphoria."

"What do you mean?"

Jenifer held up xyr doll, just as Morde was returning from talking to Phage, to say, "I used to look like this. And this wasn't right."

"That's Ni'a," Morde said.

"What?" Tetcha snapped back to the moment.

"Jenifer's doll looks just like Ni'a," Morde stated.

Jenifer whirled to peer down at Phage's child, squinting, claws gripping the railing, doll fallen to the ground, and hissed, "Hailing Scales, they do!"

"You've never seen Ni'a before? You never looked in on them?" Tetcha asked.

"I've been respecting their privacy!" Jenifer said.

Morde realized something had been going on up here, and asked Tetcha, "have I missed something big?"

But Jenifer answered, "I'll tell you more about it later. Though you can check Sunspot records, I had it recorded and broadcast."

"To the Crew?" Morde asked.

"No," Jenifer said. "They knew all that. I broadcasted it to all the Tutors, to show their Students."

"I'm Crew and I'm pretty sure I'm ignorant."

"What about the Monsters?" Tetcha asked.

"Monsters?" Jenifer repeated. "What? Oh!" Xe put xyr foreclaw over xyr mouth, "Right. Thank you. I'll have to find a way for them to know about it all. I forgot they exist!"

"So many people do," said a voice.

"Ah!" Jenifer said, turning to the owner of the voice. "I was hoping to meet you here!"

"Strange, considering what you just said. I thought you'd forgotten about us," Fredge replied. "Also considering that we've never met."

Laal was also there, of course, and leaned over to tell Fredge, "They're the ones I'd been assigned to meet, to talk about Jenifer maybe joining the Monsters. Maybe."

"No," Jenifer said. "I saw you," pointing at Fredge and then Bashiketa, who was in their chair, "two days ago, through Network cameras. I don't know who you are, but I was watching Agaricales for people I might know, and something about you caught my eye. You had a fit of some sort, and I was worried about you. Then Morde said we should come here, too, so I figured you were important." (Author's note: there are discrepancies between what Jenifer said here and my accounts of what people said in Chapter 10. These discrepancies should be considered data points that indicate what actually happened. The records of the words spoken and actions taken at each time confirm my writing.)

"Hm. How did you know we'd come to this spot?" Fredge asked.

"I didn't," Jenifer said. "Morde led the way here."

Bashiketa was tilting their head, looking at Jenifer's doll lying by xyr feet, when a commotion started from the area of the stage.

The people around them had been murmuring with each other louder and louder, and Tetcha felt like one of them might ask a question, but the new

noise from below got everyone's attention.

Dancers had taken the stage and the crowd below was cheering. And the cheer spread to the crowded building tops all around.

Bashiketa put their hands over their ears, smooshing them flat back against their head, and squeezed their eyes shut, snarling in pain.

Then there was a single, shrill scream from below, and everything, the ground and all the buildings, felt like it dropped about half a meter, staggering everyone. And that was followed by a weird, structural groaning sound coming from everywhere.

Down in the middle of the crowd in front of the stage, right next to where the scream had come from, Emala saw Phage staring down at its stricken child and uttering the strange words, "Oh boy," just before disappearing.

It took a few seconds before anyone realized something was wrong with the stage.

Fibrillation

The accommodations aboard the Sunspot for those who are disabled are good, but they are not complete or perfect. People make way for those who are in despair or panic, but exuberance and noise still happen.

When the dancers took the stage and the crowd began to cheer, Aphlebia's whole world screwed in on itself, becoming a pointed stick, and pierced their mind. Everything outside of that excruciating pain was void, but they felt things in it, like the ground. Mostly the ground. They felt their body shaking with every vibration of noise, including their own heart beat, and every time one of their palms hit the ground.

They had to get away from every voice. And every movement they made brought them closer to one while the others faded just a little. But it was also all just an unintelligible roar. But, through that roar was a rhythmic thumping. And that thumping felt reassuring so they tried to crawl in the direction of it.

They were so close to it to begin with. Supposedly there was music, too, but the only intelligible thing Aphlebia could make sense of were the footsteps of the dancers. It didn't take them too long to crawl into a space where the cheering was somewhat muffled and the sound of dancing was all encompassing.

They were able to open their eyes.

Looking around, they found that they had worked their way under the stage in a relatively straight line. This allowed them to look back through the crowd, between the legs and tails of the people there, to see Ni'a amongst their family.

Ni'a looked stricken. Eyes wide. Arms limp at their side. Mouth drawn tight. Their skin had subtly changed color as blood had drained from it, taking a gray cast. And they were visibly shaking.

Their body was wracked with tremors that increased with each dancer's footstep.

Aphlebia knew that they themselves were experiencing sensory overload. It was clearly hitting Ni'a even harder.

Ni'a's knees buckled and they fell to the ground.

The instant their knees hit the ground, Ni'a shrieked. And they shrieked with more than their lungs. They shrieked with the air immediately surrounding their body. Everyone on the surface level of Agaricales heard it.

And that's when the whole ship *thumped*.

And that's when the stage collapsed.

Ascension

“Ascension,” the Auditor ticked, sending the notice to all Tutors and Crew just before the groaning noise began.

Typically, most of us have the bulk of those notices set to ignore, and flag only certain individuals we care about so that we know when to rush to their aid, if we’re free to do so. But there are some individuals who take it upon themselves to meditate on every ascension and death that happens aboard the Sunspot.

I am not one of those people. I don’t have that fortitude or dedication. And with my assignment at the time, I didn’t really have the time. But I had a small handful of people flagged, and that one was one of them.

I rushed to the epicenter of it, ignoring everything else around me.

I knew that Chalkboard would be there, of course. Aphlebia was its Student, after all, and there were a few more lessons left to teach now.

But when I got there, in the Netspace of the Park, Chalkboard told me, “They dove into the nanites in the ground. Attend to Ni’a.”

I realized that all I had wanted was to know what had happened and to know how Aphlebia was handling it. Maybe to document it for my book, but mostly because I cared about Aphlebia. I wanted them to have a good life and to enjoy the world as much as they could.

But Aphlebia was Chalkboard’s Student, and Chalkboard had the situation handled. It had given me the minimum amount of information to snap me back into the moment, accompanied by a stern command. This focused my crisis mode.

In Jenifer’s words, it was an horrendous mess.

That the stage had collapsed was almost unthinkable. Even temporary structures on the Sunspot are not typically made with the lack of care that even a large tremor could knock them down. Not that the Sunspot was typically prone to such things. But Safety Patrol exosuits had been tromping around on it early. It had been built well, with no reason or pressure to cut corners.

But, it's also true that it had not been as solid a structure as the obelisk behind it, which was a monolith. And I noticed that that now had a crack in it. Which someone was already taking care of, while others assisted all the injured dancers.

Something big and terrifying had just happened. Was still happening, by the sound that vibrated through the entire ship.

So I turned to Ni'a.

Phage was nowhere in sight. It was not present in the Netspace. Nor was it occupying any nanites nearby.

I sent a ping out to it, through all of the channels I knew it watched, including its personal ones. But I didn't expect it to respond. And it didn't.

If Phage was gone from Ni'a's side, there was a dire reason for that. It would be extremely busy.

Emala was kneeling and trying to get Ni'a's attention, with Doorway in an exobody by xyr side. But both Candril and the Whorlies had noticed what had happened to Aphlebia. Candril was screaming, tears streaming from zir eyes. And the Whorlies were fruitlessly attempting to lift the edge of one of the stage sections, while people were still on it. And Vine and Charlie were attending to their Students.

People in general were clearing away from the stage and staggering back from Ni'a, with only a few volunteers helping those who needed it. Enough volunteers from the looks of it. Even so, everyone looked agitated about the groaning and ready to panic from it.

As I sank down next to Ni'a and drew an exobody up from the ground to inhabit, the groaning started to abate. I hoped that was a good sign.

Ni'a had collapsed on the ground and rolled onto their back to stare at the sky. Their body was lightly rocking back and forth with small twitches and tremors, but their mouth was open and they were breathing freely. Emergency protocols let me check to see if it was epilepsy. It was not, but their brainwaves indicated that they were asleep.

The twitches were mostly in their legs, like restless leg syndrome.

I exchanged this information with Doorway, who confirmed my

assessment with its own. Ni'a was not in immediate physiological danger. But with who they were and what they were capable of, it was hard to decide just what to do but wait.

So I then helped Doorway convince Emala to attend xyr other children while I watched Ni'a. Which xe did.

Hovering above Ni'a with my beed-like avatar, directly in their field of vision, I waited for a bit, hoping they'd see me, recognize me, and come to. But their brain did not appear to be interpreting signals from their eyes in any intelligible way for them. Or they were too occupied with other things. Maybe they were focusing on senses I don't even understand.

That's when I noticed the ground around Ni'a rippling and rising up to cradle their body. It lifted them up ever so slightly, bringing their head higher than their feet. It was so gentle, but it also helped to minimize the impact of Ni'a's twitching. And right next to Ni'a's head, dirt and nanites arose from the ground and took the shape of a leaf of an aphlebia fern.

If I could have cried, I would have right then. I was certainly distracted as if I was crying. I hurt so much from what I was seeing. I hurt for them both.

But I was also so happy.

I've seen this kind of thing so many times before. Not the kind of structural disaster. But this moment when a Child had ascended to become Crew, leaving their best friend or partner behind. But now, these two could, and would, remain close.

Before the upheaval of the Nanite Innovation, Crewhood meant being sequestered from the Children. A recently ascended Crew had to leave behind all their friends and family, to watch over them from a distance and wait until they, too, hopefully ascended some day. And that horrid practice was done.

I was just about to send Ni'a a ping, in hopes I could get their attention online when Eh strode up to where we were, wearing an exobody that was just too big to fit through any door, and knelt down to talk to us.

"I'm sorry to be the one to bear this news," Eh said. "But we're going to have to sanction Ni'a."

"What?" I snapped.

Reprimand

"I expect this to be very temporary," Eh said. "However, the Bridge Crew were all watching these events carefully, and we have examined all the records. It is clear that a force emanated from Ni'a that collapsed the stage, cracked the memorial obelisk, and sent a shockwave throughout the whole ship. We have pinpointed the wave to their body. This force killed Aphlebia, causing them to ascend involuntarily. Our law dictates sanction until we can ascertain what happened. For safety." I thought Eh was done talking and stole myself to respond with all the passion I felt, when Eh added, "Also, we cannot find Phage. At all."

All I could say was, "what?"

"You've been working closely with it and Ni'a and their family, interviewing them," Eh said. "If you can offer us any clue as to where it may have gone or what it may be doing, we would appreciate it."

I know the protocols well. I have lived them for centuries. They were a kind of habit one doesn't just break consciously. But maybe something had been shifting in me during the past few decades. Or maybe it was just the pressure of this particular moment. But I felt utterly free of them. I was supposed to cooperate with Eh and do anything and everything Eh asked me to do in service of the Bridge Crew and the Sunspot Council in this particular crisis, in service to the safety of the ship, but I just didn't care. I felt I knew what was right, and this was not it.

"Yeah, *burn* that," I heard myself say.

It was Ihns turn to ask, "What?"

"What happened here is *obvious!*" I actually shouted at Ihn, turning my avatar to face Ihn finally. "It was a failure to accommodate! Ni'a *clearly* has a highly sensitive system, prone to overload, and with all the control and cultural pressure you have exerted on the populace over the centuries, *you* failed to account for the immediate impact that a *cheering crowd* can have on someone like them! With anyone else, it might not have been this disastrous to others and the ship, but *that's* not Ni'a's fault! It is entirely *yours!*"

I was momentarily proud of how nuanced I was. How much care I'd put

into my words, though I'd cut my point short at the end there to just get to it. Unfortunately, when I'd said "yours" I'd meant the whole Crew. Eh did not take it that way.

"Abacus," Eh growled. "This isn't about fault or responsibility. It's about safety."

I thought about the speech Jenifer had just given, just a flash of thought, with Phage in the center of it, and sniped, "No it isn't, and you damn well know it!"

"Please step lightly, Abacus," Eh warned. "I understand your feelings. And you have every right to speak your mind right now. However, the rest of the Crew is on a hair trigger regarding everything about this. And they are watching."

Right then, as if to emphasize Ihns words, the groaning stopped, filling the Sunspot with the crushing silence of its absence and suddenly I felt like *everyone* was watching us.

That point in space/time was unbearably tense.

"Ni'a is a *child* and needs connection," I said. "Phage has disappeared, and we don't know when or if it will be back. And when Ni'a wakes up, they are going to need to know that they are still part of a family and part of this ship. Applying a sanction right now would be extraordinarily dangerous."

Feeling like I had successfully taken that unbearable tension and turned it on Eh, I waited for Ihns response.

"I agree with you," Eh relented after a moment. But said nothing more, Ihns expression and posture remaining still and stern.

I gathered from all of that that the problem was our audience, the rest of the Crew, and maybe Eh was waiting for them to deliberate, or waiting for me to capitulate to them.

"Here's a problem *I'm* having with you and the rest of the Crew," I pushed. "Actually, it's a problem we all have, as a ship. There are so many of you, and so few of the rest of us. You outnumber us, Children and Tutors together, by an uncounted magnitude, billions to millions. And though you have been saying that you've crafted the systems of the Sunspot for the benefit of the Children, and you've agreed to no longer

sequester yourselves, you *still* keep your deliberations secret."

"We don't-"

"If your Council meetings are public," I interrupted, "you do not announce them, you do not publish the channels by which people can participate, and no Child nor Tutor holds a place on that Council. If the key to the Sunspot's health and survival is that we listen to each other, as you agreed 39 years ago, then listen now. *That* is a huge problem."

The people around us were watching, I noticed. Emala, who was holding both Candril and the Whorlies, an impossible feat for anyone smaller than xem, was staring at me. The remaining dancers and Safety Patrol volunteers had paused in what they were all doing to hear what we were saying. Up on the skyway, Morde, Tetcha, Jenifer and the Monsters with them were leaning over the railing to behold Eh's great bulk as Ihn faced my expressionless bead. Morde and Jenifer were doubtlessly listening in to our conversation via Network channels and conveying what was said to the others. More and more of the rest of the quickly dispersing crowd were stopping to look, too.

Eh also noticed.

"Pride is going to be the death of us all," Eh growled, just loud enough for me to hear.

For a split second, I was terrified Eh was referring to me. But that it turned out that Eh was referring to the Council's pride was worse news. Except that it now tells me that Eh was truly on my side.

Sensing something was about to happen, I took stock of what I knew in that moment. It certainly wasn't everything you've read up until this point. I've been going back and adding accounts to fill things in as I've learned them. Which at least tells you something about my current state. In any case, it's probably easier to list here what I didn't know. While I'd witnessed Jenifer's speech and xyr following interactions with the Monsters, I did not know who Fredge and Bashiketa were. That was the first time I'd seen them and I didn't even know their names yet. And I did not know whether or not Eh knew about them. Laal, I recognized and knew about from Morde and Tetcha's conversations. I didn't know where Phage was and, even though their vessel lay in the nanite and dirt cradle of Aphlebia's care, I really didn't know where Ní'a was. However, I did have

an idea of what Ni'a was capable of, and that without Phage to temper their actions, they could accidentally cripple or even destroy the Sunspot. But I also knew that Ni'a didn't *want* to do that.

We needed Ni'a awake and coherent. So I pinged them. I sent a signal to their nanite terminal, asking permission to talk, and I sent a message to their queue, telling them that they should wake up and speak to me.

Eh sat back and relaxed Ihns frame and telegraphed a deep breath and sigh. "Abacus," Eh said. "I regret to inform you that you have been sanctioned."

By that point, I at least subconsciously knew that was coming, but that didn't stop the chill and panic that washed through my being at the sound of those words.

"By decree of the Council and, by extension, the Crew, you are hereby sanctioned, Tutor Abacus of the Sunspot," Eh declared. "Your access to ship systems is to be severely limited. You cannot be excised from this nanite exobody against your will, but once you leave it, you will not be allowed to form another or otherwise access the nanites until the end of your sanction. The Bridge, the Engine Room, and private Network spaces are off limits to you unless express permission is given to you to enter them. No government body will hear your words unless they pertain directly to your predicament, again, until your sanction is lifted. And, furthermore..." Eh closed Ihns nanite clay eyes and tensed up. Through clenched teeth, not that such a gesture altered Ihns speech, Eh continued, "Since your transgressions pertain to Ni'a and their family and the project of writing a journal that has been assigned to you, you are to refrain from communicating with anyone you have interviewed in the process of working on your book, including Ni'a and Phage. An itemized list will be sent to you. Any such individual who is not sanctioned themselves, of course, may choose to contact you, at which time you are allowed to interact for the duration of that encounter. And the entirety of the populace will be informed of this decision." A pause, then, "End of decree." Eh scowled, and appeared to glance backward, as if the Council was physically behind Ihn.

Sometimes a good argument is worthless.

It struck me as informative that Morde had gotten more traction when sie had faced the Crew thirty-nine years ago, when they were still secluded,

than I did now. Apparently, I'd just dug myself deeper into my own hole. Hir being a Child and me being a Tutor likely played the biggest role in all of that, but they weren't the only factors. And, ethically, ideally, according to the laws of the Sunspot, they should not have been factors at all.

"I think, for decorum, you should leave this place right now," Eh said as gently as Eh could. "I will be in contact with you shortly, myself. I will also continue to speak on your behalf. I will also help Emala tend to Ní'a."

Without anything left I could legally do there, I departed.

Getting the Old Crew Together

I could write an entire treatise on justice, restoration, accountability, and safety aboard an isolated generational starship, and I could write a mere three sentences on the whole thing, and both would mean the same thing and be just as useful and informative here. Both approaches would equally fail to convey the nuance of the situation I found myself in. Besides, I have spent my existence lecturing people and it got me here. It is time to simply report.

I kept my nanite exobody as long as I could. I wasn't allowed to add to it or alter it. I was stuck in the form of a decorated bead. Not very useful for manipulating things, but I could at least provide a physical presence to anyone I might talk to. That felt important. With my Network access curtailed, I would have more freedom in the halls and Garden of the Sunspot as long as I kept my exobody.

Exobody. That's a term coined by the Flits, if I recall. It makes sense in the context of a Child forming a nanite clay body outside of their natural vessel to walk around in. For us Tutors, I suppose the "exo" part would refer to being "outside of the Network". I'll keep using it for now, but at this point, my nanite body felt like my only tether to reality itself.

Feeling belligerent and still dedicated to my project, I considered my options as carefully as I could.

I might still be able to talk to the Monsters that had confronted Jenifer. But Jenifer, Illyen, Tetcha, and Morde were out, unless they approached me. And talking to the Monsters right there in Agaricales would draw attention. No direct legal repercussions, but certainly further arguments needed to lift my sanction when it came time to do that.

I'd have to track them down later.

There was one person I could think of that was remotely linked to all of this whom I had not interviewed directly, nor even spent much time around. Bri.

Bri was roughly Ni'a's age and still living with zyr caretaker, whose name I did not yet know. Approaching zem was going to be delicate and the potential benefits scarce. But maybe I could at least get some anecdotes

about Ni'a that from zyr perspective that I could add to this book. I would at least be doing something.

Although, continuing to work on this project was definitely not in the spirit of my sanction. But I think you can see by this point in this chapter that I wasn't prepared to stop.

Instead of taking a tram back to Ni'a's home city, or discarding my nanite body and traveling via Network channels, I flew directly. Which isn't all that direct, since weighted nanite forms required a certain proximity to the bulk of the rest of the ship's nanites in order to hover, which meant being relatively near the ground. I could, however, skim most buildings and tree tops. This took extra time, but I wanted to be alone for a bit and I wanted to think.

Less than halfway there, I received the document legally defining my sanction.

I didn't want to scan it, but I did so anyway. It explained a bit more clearly why I was being sanctioned, and it listed the people who were considered off limits to me. My sanction, as I thought, was contingent on Ni'a's, on the grounds that my activity and communication endangered the chances that they could safely have their sanction evaluated properly and lifted, in the eyes of the Council. Utter nonsense, from my perspective. I felt this was patently counter to Ni'a's interests, in fact. But, clearly the Council disagreed with me and that's why they'd imposed my sentence. And the list of people I could not contact did not include Bri or the Monsters I'd seen with Jenifer. As Eh had said, only those I'd directly interviewed were forbidden. That was excellent.

I wondered if Eh could have had a hand in that. It was likely an oversight, since if their names had been mentioned they'd have ended up on the list. But, if Eh had been following my notes for this book, which I'm sure was the case, Eh could have held Ihns tongue.

Since then, I have come to believe this was true, but at the time I was in a very bad mood and decided not to give Eh the benefit of the doubt.

I'm sorry, I'd describe the passage from Agaricales to my destination, and the beauty of the landscape and the weather on the way there, but I was paying absolutely no attention to it.

I was brooding and exploring the insides of my own psyche in a way I

have not done in a long, long time.

I realized I had spent most of my life focused on other people. It was my job, and centuries of doing it had ingrained deep habits. Of course, in my early days, when I was picking my own name and deciding on my avatar, I had done quite a bit of introspection, but I hadn't had a lot of experience or knowledge with which to compare that to. And by the time I'd read *Systems' Out!* I had spent so much of my life reacting to and molding my Students that Metabang's passages of introspection baffled me.

Of course, it would have the impetus to do that, being in charge at the time of a massively large plural system and finding itself in a state of quasi-plurality. And also having been put in charge of its own world shifting experiment only to witness first hand its repercussions, it certainly had to stop and think about it for a bit. But I couldn't relate at that time 39 years ago. Now, I had a glimmer of what it had gone through.

Which brought me to the realization that I could enlist the help of the Pembers and possibly even the Flits. The Pembers had been there at what I decided to call "The Screaming", and maybe the Flits had been as well. In either case, both systems were Crew that were entangled in the events leading up to today's disasters, but were not on my list and were likely to have connections and resources that could be useful to me. And they knew me.

I was not doing very well at this self introspection thing. My mind kept wandering to other people.

This was about the point where I started thinking about what I told you earlier in this book, about the nature of Tutors and our relationships to both the Children of the Sunspot and the Crew. And my mind kept slipping to thinking about it all in terms of how Metabang, Ralf, Breq, Doorway, Chalkboard, Vine, and Charlie went about things. And I also compared their behavior to Phage's. For a long time, many people had thought Phage was a rogue Tutor. It was definitely not.

As Phage was raising Ni'a, it had been far more hands-on about everything than my peers.

We Tutors are usually quite passive, waiting for our Students to express a need or to stray close enough to danger to warrant a comment. And the idea behind that was to afford our Students as much autonomy as possible,

and to let them learn at their own pace through exploration.

Contrary to that, Phage had taken on many of the roles of Caretaker, and not only for Ni'a but also for Ni'a's peers, cooking their food, playing with them, and asking them if they wanted lessons. And while watching it do this, I could see the relief that Emala had clearly felt. Phage's initiative had taken a great deal of weight off of Emala's shoulders, and xe had grown to rely on it in a way the xe did not with the other Tutors. They were not just friends by today, they were like partners.

But Vine, Chalkboard, and Charlie had not stepped up to imitate Phage. It hadn't even occurred to them. Probably because Phage wasn't a Tutor, so they didn't reflexively think of it as an example. And maybe because they were telling themselves that Phage's behavior was full of pitfalls.

I think we Tutors might also maintain a distance from our Students because if we grow too close it becomes harder when they ascend and we are given new assignments. And before the Nanite Innovation, which was very recent, it was all the more hard because back then once someone became Crew we were not to communicate directly with them.

What a fucking messed up system this had all been.

I sent an invitation to Metabang, Ralf, and Breq to meet and discuss Tutor politics at some point. No priority. Metabang, who was still Tutor to the Pembers despite them being Crew, responded immediately with interest and the words "any time". To which I suggested I'd notify it when the other two had replied, but maybe sooner. And that was OK by it.

I then took note of my eta at Bri's place and sent zyr Tutor, Craqueleur, a request for audience to talk about Bri's relationship with Ni'a and to collect information that I might hand over to the Crew to help them help Ni'a, when they come to ask me about it. That should skirt the precepts of my sanction well enough to get an affirmative. As a standard and appropriate courtesy, I also notified Bri's caretaker and their Tutor about that request.

And by the time I arrived, they were ready to open their door and entertain me.

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There's not much to report about that conversation, and I'd like to maintain the privacy of the people involved in it. Bri could only provide me with a

character study of Ni'a, which largely matched my own observations. That was helpful, but doesn't need to be repeated here. Ze also agreed with me that these sanctions were unfair, and promised to do whatever ze could to support Ni'a in Phage's absence, if ze was even allowed to do so.

Ni'a's sanction had not yet been declared, however.

That really pissed me off. My own sanction was contingent on another sanction that had not yet been made official. It had only been a few hours, but it left me feeling like I had no recourse for my persecution.

So my next stop was the park where Ni'a had first learned to manipulate leaves in the wind, to wander and think. Hopefully the surroundings there would stimulate associations I could use.

I considered connecting with Metabang. Ralf and Breq hadn't replied yet, but I didn't expect them to, as they were both busy with Students. But as I hovered near the pond, I saw the ground ripple and thought that was very strange, and familiar.

It rippled again, starting from underneath me and moving in a direction across the park.

Only one person I knew communicated like that, so I followed the ripple.

And sure enough, the ripples led me to a clump of bushes and brambles with paths running through them, left there by playing children. I lowered my bead to pass under the arching brambles and made my way to the center of them, where there was a small clearing yet still covered by the bows of a tree. It was fairly private. The only cameras or mics near here would be the nanites, which I assumed would be tuned to me anyway. I don't know if Aphlebia thought of that, but if this is where they were more comfortable talking to me then I was happy to accommodate.

They crawled out of the ground in an exobody roughly the same shape as their original vessel had been. I was not surprised they seemed happy and comfortable with it. Honestly, as common as dysphoria seems in my book and Metabang's, the vast majority of the populace doesn't experience it.

Aphlebia nodded at me, and then held their hand palm up, out at about shoulder level. And a replica of me, about half the size of their head, rose out of the ground, leaving an appropriately sized divot like their exobody had behind them.

I tilted my avatar to the side to indicate that I was watching with curiosity.

They gestured with their other finger, indicating that what happened next was what they wanted me to consider. Then they tilted their head down and the replica of me floated toward it and began to merge with them fluidly. And when it was done, they were slightly larger than they were before. Then they looked at me again with a questioning expression.

I bobbed a little lower and tilted the eyehole of my bead toward the ground, but I had to talk out loud, because what I had to say was too complicated for me to communicate physically as a bead. At least, as far as I could figure out how.

"That won't help," I said. "You're thinking of what Phage and Morde did, right?"

Nod.

"Phage created a lesser child of itself to merge with Morde. That child lacked the qualities that caused Phage to be sanctioned at the time. I'm not sure that I could do that, and if I could I'm not sure what that would accomplish," I explained. "Also, if you merged with me as I am, I could not take on extra nanites or alter my form. You'd be stuck with my sanction and you'd be stuck in this bead form with me. And you might be stuck with my sanction even after we separate, if we do."

Aphlebia frowned, then signed back, "Still."

"No." I said flatly. "There are more reasons not to. The biggest of which is our difference in age. I'm sorry, I can't consent to this in any way. It's too dangerous for both of us, but mostly you. You stand to gain a lot from sharing our memories. I totally understand why you'd want to do it. But you have to understand, Phage is not human and it does not do human things. It has powers of control neither of us can fully imagine. It was able to facilitate all of the mergings of the Nanite Innovation to make sure they were done safely and respectfully for all parties involved. And, even though it was what the ship needed, it still probably shouldn't have done it."

Aphlebia's scowl deepened.

"The difference between my centuries of experience and your handful of years means that you could easily be subsumed, even if I tried not to

subsume you. You'd lose yourself in my memories. And that's even if we could achieve accord in the first place."

I watched as the new Crew member began to look more and more deflated, their face relaxing.

"I'm so sorry. You've approached this with a good heart, and I'm still going to help you as best as I can, but this is just something we cannot do."

I decided to give them time to digest all of that and choose what to do next, so I simply waited as they wilted a little more. For a moment, it looked like they would run, and if they did I would have let them. They needed all the space they could have.

They looked up after a bit and gestured, "Phage." Their signs actually said, "The one called Eat."

"I don't think-" I started to say, but they waved me to stop. So I did and assumed they were on a different topic now entirely.

Then they signed out, "The one called Eat of the P-E-M-B-E-R-S." (I'm going to translate figuratively again from here on out)

"Oh," I said. "Are you thinking I could talk to it without breaking my sanction?"

Aphlebia nodded vigorously.

"I wonder if it's even still part of the system," I pondered.

Aphlebia shrugged and signed, "I want to talk to it, too. Maybe it doesn't know Ni'a, but I have to try. Maybe it knows how to wake them."

"I've already asked Metabang for a meeting, this should be easy to arrange," I told them. "We could even probably meet them right here."

Aphlebia pouted, "I thought communicating would be easier once I was Crew."

"Well," I said. "We could just send each other thoughts via the regular Network channels."

They looked so embarrassed for not thinking of that.

"It's OK," I reassured them. "We're both in the habits of how we communicated before. There's something human and real about talking out in the air, anyway. Is Chalkboard here?"

"Yes."

"Did it know what you were going to ask me?"

"No."

"OK. No worries. You've got a good Tutor." And they would have Chalkboard with them for a few more years as they acclimated to being Crew.

—

Exobodies crowded that little clearing. We could have all met in the Netspace, but everyone was accommodating me, and I really appreciated it. But, we had all agreed to use Network channels to communicate. We had Aphlebia, me, Metabang, all three Flits in one exobody, and Phage Pember. And not only that, we were also honored with Myra Pember's presence as well. Everyone but me had chosen smaller versions of their exobodies just to fit more comfortably in the space. We all sat or hovered in a circle. Chalkboard chose to remain in the background in the Network.

"Where's your vessel?" I asked the Flits.

"Sleeping," Hetty replied.

"A lot like what Ni'a's body is apparently doing," Phage Pember said. "According to your reports."

"Yes," I said. "What do you think we can do about it?"

"Wait for them to wake up?" it replied.

"What if," I postulated, "they don't?"

Metabang answered that, "Their body is going to atrophy, and even if given life support it will eventually die. Maybe a long time from now. If they don't return to it." I knew exactly what experience that was coming from. One of Metabang's former Students had ascended in a very similar way.

Phage Pember said, "OK, look."

So we all looked at it.

It took a long time to continue speaking, though. It obviously had something important to say, but was calculating something first. Then it shook its head quickly, "Yeah, my parent isn't on the ship at all. When it's here, I don't have its powers or responsibilities. It keeps them all to itself, and I'm nothing more than a pseudophage, a Pember with its name. But..."

"But, what?" I asked.

"If I say anything more about this in any recordable way," it said, pausing again to consider its words very carefully. "No. I just can't help you that way. And I won't say why not. But I can tell you one other thing."

It looked around at all of us, probably hoping one of us would prompt it to say more. We didn't, but it gave in anyway.

"When Phage is gone like this, Ni'a takes over. Completely," it explained. "And... that is not... the reason they appear to be asleep. And I think that much is still enough to get me sanctioned under the circumstances, but now you know it."

Myra leaned forward, "Phage. You know as well as I do that we are all risking sanction for being here. Our hope is to be able to act effectively even after that happens, and you may hold the key to that."

"We." Lil'e said, somehow conveying vyr halting speech patterns over the channel. "Flits. Are. Here. In solidarity. A Statement."

"I'll fight," Ketta declared.

"I'm seriously just a Pember now and I do Pember things," the little Phage muttered. "Which means, OK. More information. Just a second." And it zoned out for a while, before coming back to say, "Ni'a and the big me probably left through the hole in the ship. I fully expect they'll be back. They are both dedicated to the Sunspot."

"What. Hole. In the. Ship?" Lil'e asked.

Phage pointed at me, "I'm pretty sure it has a lead to that. There's three

other people you need to talk to still, yes, Abacus?"

"Then I'd better do that soon," I said, suddenly visualizing just who I thought it was talking about.

"Don't waste time," Phage said. "You don't have much of it."

"Oh," Myra said. "We can take care of that. Abacus can stay here while we interview them right now." Xe turned to me, "Who is it?"

"It sounds like Phage knows exactly where they are right now," I replied. "I don't. I just know their faces, and the less said the better."

Myra nodded at Phage and it grimaced back. But then it disappeared, its exobody crumbling.

Myra turned to the rest of us and said, "It's returned to our vessel to communicate with the other Pembers in private. We'll have a secure channel, as secure as we can make it, open to your leads, shortly. In the meantime, we're already talking to others, since we're not sanctioned yet. I don't think the Crew understand just how important they are."

"It's so funny how you say that, considering we're all Crew now," Ketta said.

"Crew with living bodies," Hetty interjected.

"Un. usual." Lil'e added.

"Give me a minute," Myra said. "We're still putting together a report."

"Metabang," I turned to it with an edge of humor to my voice. "What's it like to be Tutor to a few thousand Crew members? I would have expected you to move on by now."

"The thing about the Pembers, Abacus," Metabang responded, "is that there are always more of them, so long as they have their body. And the new ones still need Tutoring."

In case you don't remember from *Systems' Out!* or you have not read the book, the Pembers and the Flits became Crew by taking the vow of the Crew while not yet ascended. This was highly irregular, but once they knew the words of the vow they could not be legally stopped. And while

there have been a few more examples of this since then, it is a practice that is not regularly done yet. Though, I was starting to think that it should be.

And the Pembers had a system that generated something they called "Liaisons", system members that seemed like a copy of anyone their vessel caught sight of. At least, to begin with. In time, they grew to be their own person, especially if they never learned much about their source. They were called Liaisons because of the role they usually played in their system when they got to know someone, storing memories of that person. The Pembers could bring them up to speed quickly by temporarily merging with each other, but new Liaisons would still legally be Children. Neat trick.

"How are you doing?" I asked Aphlebia.

"OK," they responded. "I like listening."

I turned to the Flits, "Is Breq still -"

"No," said Hetty.

"You are weirdly agitated," Metabang observed of me. "And you are not talking like yourself, Abacus. Normally, you're more..."

"I know," I said. "Working on this book has refocused me, I think. I tend to need to ask more questions than to answer them, in order to write it. But this sanction has filled me with, well, it's not adrenaline, but it might as well be." Something else may have snapped in me as well. I literally didn't feel like the same person I had been a couple days ago. I don't know if I'll ever get that figured out, though.

"Got it," Myra blurted out. Xe turned to me, "Our sources, whom you know but who need not be named, are reporting that they have yet to be interviewed by the Crew. They are, in fact, staying with your leads, apparently, and Phage Pember is there with them right now. They'll pass on their advice through that channel, once it's open."

With all this information and interaction pouring in, I was starting to feel like my sanction meant nothing, except that I still felt like it would clamp shut on all of us at any moment.

"And here we go," Myra then said. "I'll be relay. This should be good for the whole conversation unless we're happened upon by chance. Ask me

questions as if you are talking to Phage and telling it what to ask. Don't say names."

"OK," I said, gathering my words in the right order. "Ask them if they know what 'the hole in the ship' is."

"They call it 'the Tunnel'," came the reply.

"Could. Be. quantum tunnel," Lil'e said.

"How would Phage have gone through it?" I asked.

"Easily," they answered.

I looked at everyone else and said, "I assume it was Phage Pember who said that." Then I asked, "What is it for?"

"Secure instantaneous communication with our parent ship."

Oh. Shit.

"Ask where it is," I said. "Can it be shut down or controlled?" I was thinking about what the Crew might want to do with it, which would be to shut it down or control it.

"It resides in the psyches of two children. One a Monster aboard the Sunspot, the other aboard our parent ship."

I was utterly appalled and horrified at that. I'm pretty sure everyone else in the conversation was as well. The lapse in ethical judgment to do that involved deliberately violating every interpretation of human rights that I could possibly enumerate. And all presumably to protect a connection that the Crew of the Sunspot, according to Jenifer, would consider anathema to its very existence. If the Tunnel was tied to human lives, at least the laws of the Sunspot would make the Crew think twice before doing much about it. Those poor children.

I was beginning to get an idea of what kind of culture the Old Crew had intentionally left behind and tried to erase.

An epithet I'd recently heard came to mind, and I had to ask, "I know this is a non-sequitur, but what does 'Hailing Scales' mean?"

Hailing Scales

This is a bit of an interlude, and I don't know how important it is, but it is so strange, and seems to come from a culture predating our parent ship that ultimately led to the creation of the Sunspot, that I feel compelled to include it. It was, apparently, originally told in Fenekere, the command language of the ship. Maybe it gives us an even older context for who we are.

Jenifer heard it from xyr grandmother who heard it from her grandmother. "Her". A pronoun never used on the Sunspot by anybody.

Everyone has heard the story of how the world was created. About how the Great One, in an attempt to protect Their 900,000 children from a chaotic universe, built the world out of their own body. About how the Sun is Their right eye, and the Moon Their left. And how They wrapped this all in Their hide, scales pointed inward, to become the night sky. And this kept us from learning about Outsiders for many years.

Well, one night, while participating in their favorite game, the Hunter and the Storyteller made a mistake.

The two were great friends and would spend much of their time together. And their favorite game was that the Storyteller would point at something in the distance and the Hunter would hit it with their arrow. Just as the Storyteller could tell any story, the Hunter could hit anything with their arrow. Every child of the Great One has their Art, and these were theirs.

But at the end of this night, the Storyteller pointed at something they had never pointed at before. A star. The Morning Star. The jewel that had once been the Great One's lure.

Their thinking was this. If the Hunter could hit it with their arrow, it would make a great story. And if the Hunter could not hit it with their arrow, it would also make a great story.

The Hunter, without even thinking about it, fired their arrow at the Morning Star.

It took a very long time to fly there, because the Morning Star is very far away.

It took longer than the Hunter expected because, for the first time in their

life, they had missed, and the arrow had to travel further before it hit the sky behind it.

To the horror of both of them, the arrow tore a hole in the sky, creating a great big gash. Stars, the scales of the Great One, fell to the ground, followed by a stream of Outsiders entering the hole to take refuge from the chaotic universe without.

And that is how we met the Outsiders and began to learn of our true place in the universe.

Building a Resistance

"None of that matches any model of physics any scientist I know of has ever entertained," remarked Metabang.

"Right?" said Myra.

"It is. Obviously. A myth." Lil'e said. Every time Lil'e spoke, Aphlebia watched the Flits with curiosity. Everyone communicates in their own way, and everyone else's method is a curiosity.

OK. Sorry. Lecture time again. But this is relevant, I think.

The command language of the Sunspot is Fenekere. The language we speak is a development of a combination of Fenekere and another language called Mäofrrão. But personal names seem to be either made up of random phonemes that sound good together to someone, or they come from other languages that humanity has spoken throughout the ages. But, as mentioned in an earlier chapter, we don't have records or even the names of those languages aboard the Sunspot. Not even of Mäofrrão. Just for Fenekere, because it's the command language. Either our parent ship had them, and our Crew deliberately destroyed those records. Or they were lost to the ages already. (Jenifer had been telling me some of this during this conversation through the Pembers.)

A big question I had after hearing this story, and also upon learning that we were in contact with our parent ship, *and* that Jenifer was born on that ship, was what language did they speak on that ship?

So I asked that, and apparently the language is an earlier version of the one we speak now, which we don't have a name for, because Jenifer and Eh and the rest of the original Crew thought it best to erase that. We call it "speaking". Our parent ship calls it Inmararrão. The word "Inmararrão" comes directly from Mäofrrão and means, figuratively, "The Speech of the Great Alliance".

At this point, I knew it was Jenifer telling me all of this. I also theorized that xe could speak fairly well with our Monster child's counterpart on the other end of the Tunnel, somehow. I did not have evidence of this, only suspicions, but it would help explain why the Monsters were working with xem and staying in xyr company despite the antagonism of the last

exchange of words I'd heard between them.

Anyway, between that story and what little history of our languages I knew, my mind was reeling and drawing all sorts of associations, which prompted so many more questions. And I was starting to feel even more anxious about the Crew coming down on us all for violating my sanction.

So the first thing I did was ask if the Monsters would be willing to meet personally somewhere soon for an interview. I told them I wanted to record their own personal stories, in their own words, to be included in my book. And I told them that in trade, they could interview a rogue Tutor for their own records.

This went over *very* well, with the only obstacle being how to meet and when and how to do it with as little oversight as possible. On analysis, it was agreed that speed was the only factor we could control. The sooner we met, the better. Plans were made.

Then I asked Jenifer and the rest of them two more questions, skipping a lot of preamble and explanation. And I was absolutely thinking about Tetcha's pet obsession with Outsiders when I did.

The first question I asked had an answer I realized I could look up for myself upon asking it, "Is the Fenekere word for 'Outsider' the same as our modern Inmararrão word for it?" As a Tutor, I have access to the non-critical vocabulary for Fenekere and can learn to speak it if I want. So I was in the process of discovering that the answer was "not quite" when the answer was returned to me from Jenifer.

Well, that might get everyone else thinking along the same lines as I was.

"One more thing," I said. "Is Phage an Outsider?"

Nobody reacted. It was like I hadn't said a thing.

I suddenly felt like I had a gut that could sink and had just done so. I'm pretty sure most people reading this can imagine what that'd feel like, even if they haven't felt it for centuries, but it remains a very strange feeling for me every time I have it. I would think that, in never having had a gut, my psyche would interpret that sensation differently, but nope. This is one of the reasons I have no trouble calling myself human.

I repeated my words.

The others started giving me glances to see if I would say something next, and they were just out of sync with my attempts to communicate that I got the sense they were not hearing me.

Then the Flits clearly attempted to speak out loud, mouthing their words very carefully. Others shook their heads.

Aphlebia's eyes got really wide. Then they gestured broadly at everyone. And when we were all looking they signed, "Sanction." They pointed at me, and then just left. Walking up one of the trails, the one vaguely in the direction of where I'd need to go to meet the Monsters. Which was clear to me that they intended to act as interpreter somehow.

When everyone looked at me, I bobbed my avatar and followed. It wasn't like I could sign back at them.

I got an update on my Sanction document. A number of names were added to the list, including the names Fredge, Laal, and Bashiketa. Bashiketa, meaning "an act of an Outsider". That would be the child with the Tunnel. They would be able to speak out loud for me, because the Crew could not cut their channels of communication like they had just done to the rest of us. But I would not be able to talk to them unless they were not sanctioned and they asked me a direct question.

At least Aphlebia knew what I wanted to know from them, more or less. Hopefully, these Monsters had learned sign language.

—

I thought we would take the tram, for Aphlebia's sake, but they had already figured out how to fly. Presumably, since they had just been put under sanction as well, they were unable to alter or leave their exobody without abandoning it until the end of their sanction. But getting around in it would be an acceptable accommodation of their autonomy.

I hope you read the sarcasm I put into that last sentence.

I have a hard time imagining what other ways we might be able to come up with for arbitrating disputes and managing things while we right wrongs, but I absolutely hate the institution of sanction. I have never seen it last terribly long, but I have also never seen it applied so liberally as it was being done to us.

Come to think of it, I believe I'm the first Tutor to be sanctioned.

For how old it is, the Sunspot has been having a lot of nasty firsts lately. I feel like that's not exactly a good thing. Maybe it really is, but it didn't feel like it then, and I'm still not convinced.

In any case, when we got to where we needed to be, a spot near a landmark just outside of Agaricales that I'm not going to write down here, both Aphlebia and I knew what we needed to do to meet our Monsters. So there was a bit of silent no-after-you-ing between us as we made our way through the wilderness access portal to the lower levels.

I was pleasantly surprised at how much information and emotion I could convey just by bobbing and weaving my avatar.

I guess I've had a lot of practice over the centuries, but I wasn't thinking much about it when I could also use words in one way or another.

There weren't very many bottlenecks in our passage, though, so I only got to practice this three times before we met Fredge, Laal, and Bashiketa in a set of quarters on a fallow deck.

Aphlebia immediately signed to them that we'd both been sanctioned and were not allowed to speak to them, and I had a thought.

Why weren't the Crew preventing Aphlebia's body from signing? That surely could be done. Was that an oversight? A gray area between the law and human rights? The work of someone looking out for us? Or was Aphlebia actually sanctioned? They had not spoken much at our meeting. And they were very new at this Crew thing. They might have been spared and might not have known that they needed to receive an official Notice of Sanction document before suffering the consequences.

I didn't have enough information at the time to make an adequate guess.

You'd think I would, being a Tutor, but we were in a lot of new territory here.

Aphlebia explained that my communication was severely limited, and that they'd be asking the questions, but that the Monsters were invited to just ramble about what they felt I needed to hear.

So, we sat down to talk. And a lot of what they've told me has made it into

this book, as you've read it now. I wish I could have conveyed to them that "Bashiketa" didn't mean "an Outsider" but rather "an act of an Outsider", but I had no means. Eventually, they'll read my work, in any case.

After getting caught up, I really wanted to grill Jenifer, but there was no way I was going to be able to do that in any reasonable way.

Oh, and then we ran into the problem that I couldn't answer the Monsters' questions about myself. Aphlebia apologized for me.

"That's OK," Fledge replied. "We can finish this business later, after your sanction has been lifted. Or, wait... Can you really not answer my direct questions? Like this one?"

I realized we hadn't tried, just assumed, so I did. I mean, I tried. They couldn't hear me.

I shook my head like a head, no.

"Ah, well we can do yes or no," Fledge pointed out.

I bobbed assent. OK, so maybe sanction is mostly meant to be a pain in the ass, but not a complete impairment. Still hated it.

"Are you a type of Crew?" Bashiketa asked.

No.

"How do we - " Bashiketa stopped herself, and gestured to the others to wait and let them think, then asked, "Are you happy?"

Oh, hell no. I shook my head again, side to side.

Laal stepped in, "Are you contented with your job of Tutoring Children?"

I started to shake, then stopped, nodded clearly, then shook my head again, then tilted it obliquely, the back going up a bit. And when Laal squinted and then nodded, I settled back to my default position.

Laal restated for the others, questioning for me to confirm "Yes, but not about all of it? And certainly not at the moment?"

I nodded.

"Do you really think your book will help things, even though the Crew asked you to do it?" hen asked.

Strong nod.

"Are you loyal to the Crew?"

I tilted my bead 35 degrees clockwise and tilted the front tip to the side and up, a questioning gesture, then shook it side to side and settled.

I certainly wasn't loyal to them while I was pissed, but I also realized that I had never thought about my relationship to them or to the Sunspot as a whole in terms of loyalty before. It's just not a topic that has ever come up. Perhaps some of the Monsters talk about that sort of thing, I imagine now, but it's really not part of the Sunspot's culture. We don't really have factions and hierarchy isn't... No, there is a hierarchy. It isn't the center of any conversations using the term "hierarchy", nor in terms of loyalty or obedience. But that doesn't mean it isn't there, just that people aren't used to talking about it.

Furthermore, I would describe the governance of the Sunspot differently now than I did at the beginning of this book. I'm leaving those earlier words intact, however, to document my growth as a person.

I tilted the front of my bead down a bit and then shook side to side more vigorously.

"Heh," Fledge chuckled. "Hit a nerve there. Understandable."

Laal then asked, "Do you approve of what we're doing?"

That gave me pause. I didn't think they'd like my answer, but I didn't want to lie to them. It wasn't like they could hurt me personally, though. I wanted them to be cooperative, in case I needed to work with them to help Ni'a, but I also couldn't think of what I could do to help them anyway. So I took the risk of telling the truth, after telegraphing my hesitancy.

I shook, no.

I got slow approving nods from Fledge and Laal, and Bashiketa visibly relaxed. And that explained a lot of things to me.

In fact, Fledge went ahead and confirmed my suspicions by saying,

"Neither do we."

I looked at Aphlebia, and they smiled and winked.

A room full of disloyalists, we were.

Some of the tone of their previous story to me made more sense. They'd been reticent to reveal too much about themselves in a lot of ways, but now I knew how to better interpret what they'd told me. Also, we were planning on talking more, later.

"We," Fredge continued, "don't know how to close the Tunnel now that it's literally part of Bashiketa. It will go away if they... don't ascend. However, they didn't ask to be a Monster and as you now know, they have dysphoria. Pretty severe dysphoria. Whether it's... a product of their entanglement with their counterpart, or something that can only be treated with a union with the nanites, either way, we want to find a way to close the Tunnel while they're still alive. I don't expect you to, but can you think of a way to do that?"

I immediately started to shake for "no" when Aphlebia signed, "Ni'a".

We all looked at them, and they widened their eyes and nodded once, then signed, "Or Phage, of course."

"Of course," said Fredge with a tone of resignation.

Neither Ni'a or Phage could help while they were gone. And as far as anyone had guessed so far, they'd gone through the Tunnel somehow.

Oh, damn, I thought at this point. I had a complicated question I really wanted to ask, but couldn't figure out a way to do so. I turned my head to look at Aphlebia and tilted it in the inquisitive way I'd been doing. And they tilted their head in a mimic of that. Then I tilted quickly in the direction of Bashiketa, indicating that I had a thought about them. Hopefully, Aphlebia understood I had a question for them. And Aphlebia did nod back.

Aphlebia signed, "You have a question for Bashiketa?"

Nod.

"Is it about the Tunnel?"

Nod.

Aphlebia frowned while trying to guess what specifically I might be interested in, then signed, "About Ni'a and Phage?"

Shake.

Another hesitation and then, "About the other ship?"

I gave a hesitant nod, hopefully indicating more refinement was needed.

Aphlebia outright scowled and looked around at the room, and then settled their eyes on Bashiketa and apparently looked so angry to Bashiketa that they looked worried in response. It was like Aphlebia was trying to look through them to the other side. And then they recalled the one other subject that had briefly come up in all of our discussions about this matter, and their face lit up.

They held a finger up at me, and then turned back to Bashiketa and asked, "Can you tell us about your counterpart?"

I swooped down in front of Aphlebia and nodded once, and then shook three times, hopefully meaning, "Not quite!" Then I swooped to the middle of the room and rose up sharply, in a "watch me" gesture, then left the room, turned around just outside the now open door and with a flourish proceeded to enter the room at a stately pace with a little bit of a sway and wobble, like the head of someone walking.

Aphlebia gave me a happy "ah-ha" expression and turned back to Bashiketa to sign, "Can you..." they paused, looking for the word, "*switch* with your counterpart? Bring them through the Tunnel?"

"What would that accomplish?" Laal asked.

Aphlebia squinted at hen and then looked at me with a sardonic half smile, and slowly gestured their hands in my direction and shrugged.

I made the bead look up, like rolling my eye, I guess. And I kept looking up while I tried to figure out how to answer a question that wasn't a yes or a no. I'd sort of just done so already for a different implied question, so maybe I could think of another way. But I couldn't.

"I imagine you want to ask their counterpart questions," Fredge said.

I directed my bead eye right at Fledge, and then nodded.

“How are you going to do that?” they asked, pointedly.

I tilted and turned a bit toward Aphlebia, bobbing a little bit. And when Aphlebia saw that, they gave a really exaggerated sigh, and then turned their palms up and outward and bobbed their head in return. At which point I turned back to Fledge.

Fledge grunted, then turned to Bashiketa to ask, “Are you OK with trying to contact them?”

And then I had a scary realization.

This whole thing was huge. Bigger and scarier than we’d been treating it. Which is to say that, yes, we’d been treating it as big and scary because two beings of unfathomable power that had supposedly been keeping the Sunspot from falling apart had unexpectedly departed through a quantum tunnel connection that was entangled in the psyches of two children and the human rights of those children and several people had been violated, and we were all sanctioned, but there was more. And that more was *dangerous*.

Fledge, Laal, and Bashiketa were talking with each other about whether or not to contact Bashiketa’s counterpart while I thought about this, and I wasn’t paying them much attention.

The Tunnel had been built and kept secret aboard the Sunspot since the Sunspot was constructed, and most of the Crew had no clue it existed. That was a big feat, and one performed with a lot of dedication and passion. The people behind it would not be very happy with its purpose being in jeopardy and possibly thwarted, even though they had got it to the point where we were stymied in trying to stop it. And at least one of those people was a member of the Crew. But then...

If any of the Crew were learning about this through observing our communications or reading the notes for my book, or just pouring over ship records in response to The Screaming to try to figure out what was going on and luckily piecing together the information for themselves, they would have unpredictable but very passionate responses to that realization as well. One type of person might panic and do something very rash. Or another might take it before the Council and inform even more Crew of what was going on. It might divide the ship on a number of political fault

lines that had not really been tested before.

So, I started to panic.

Fortunately, I thought in the moment, it wasn't in my nature to express my emotions through my avatar. Not only had I picked an inanimate object, but it seems to be a trait of us Tutors to usually have a rather flat affect. It takes a deliberate and conscious effort to emote for us. I was good at it, yes, but I still had to do it on purpose. So I wasn't shaking.

But as Fredge and Bashiketa were coming to the conclusion that Bashiketa was willing to try to contact their counterpart and that it should probably work, I asked myself the question, "What would an impassioned Crew member do if they wanted to stop this conversation from happening and would anyone be likely to stop them from doing it?"

And there was only one way I could think of to convey the urgency and gravity of the potential danger, and I did it as quickly and as dramatically as I could.

I fled.

And I did it in the worst way possible.

I reflexively dropped my nanite avatar and went completely into the Network. Which is where I saw the lovely visual effects of my sanction from there.

The visual renderings of Fredge, Laal, Bashiketa, and Aphlebia were all blurred out and indecipherable, with the red Fenekere letters for "Sanctioned" stamped over them.

Actual Introspection

What does an increasingly sanctioned Tutor do while stuck in the Network of the Sunspot?

Well, my off-limits list hadn't grown with that last endeavor, at least. But I'd just demolished a critical mode of communication I'd had, that I'd been using to get around the stipulations of my sanction.

I felt very, very small.

But also, kind of relieved. Being stuck in that bead shape was really starting to get to me, and I realized then that I maybe hadn't been very happy with it for a long time.

The only times I'd been using it were when I was directly communicating with someone and needed them to feel like they were seeing me. I'd picked the form when I was only a few years old, and had stuck with it this whole time out of tradition and some sense of continuity of my identity.

But when I wasn't using it, I didn't take a visual form. I had my locus of senses for myself, and that's how I knew where I was at any given time. And on the Network there were a myriad of other ways people could sense me. It was really only for the benefit of the Children that I'd had the bead avatar.

Of course, now if I drifted into the same Netspace as someone on my off-limits list, they'd see a big Fenekere "Sanctioned" sign. And if they weren't sanctioned themselves, they'd be able to tell it was me. I would see the "Sanctioned" sign over them and *wouldn't* be able to tell it was them, though.

I went to my own personal Netspace to think in private. And to try on new avatars to just give myself *something* pleasant to do.

My Netspace is... I hadn't spent a lot of time in it. It's a lot like the Bridge. It's a plain, offwhite space of indeterminate size. And I found myself very disappointed in it when I arrived there. And I didn't know what to put in it, except a mirror so that I could see whatever avatars I tried on.

Which was fun, because until I took an avatar, the mirror was just an indeterminate white space itself. It was practically invisible, besides the

general Network sense that it was there.

I gave it a finite size, about that of a typical door, and gave it a simple frame. That helped.

And then I asked myself what kind of avatar should I try?

Without any ideas, I just tried on the bead again. And that confirmed I did not like it. I really needed something more expressive. I really wanted something that was *me*.

But what was I? Was I even human? How would I describe myself to someone?

I thought about my name. I liked my name. I still don't have any trouble with my name. I feel like my name. Which is why, originally, I'd chosen the bead as my avatar.

I could do a cloud of beads, I thought. So I tried that. I tried various numbers of beads, various types of beads, and various sizes of beads. Some of the combinations were really wonderful looking and some of the shapes I could make that cloud were really fun. And I really loved the symbology of a chaotically roiling cloud of beads, kind of like a cloud of nanites, that I could turn into any shape I wanted. But seeing the beads themselves *hurt*.

Why did the bead hurt so much? I'd been a bead for so many generations, and I'd thought it had felt right that whole time. Where did this pain come from?

I didn't have answers to those questions, but maybe, I thought to myself, I should just go ahead and be one of those contrarian Tutors whose name and avatar just don't match in any conceivable way. I'd always had a bit of admiration for those kind of people, after all. Why not be one of them?

While frustrated with that, I realized I needed an advocate.

Aphlebia had been a very good one while that connection had lasted, but now we couldn't even see each other.

I needed a new one.

I had a whole ship full of potential advocates, many of whom I actually had relationships with, so I could probably start going through them,

getting each one sanctioned in turn by association with me until I either cracked whatever nut it was that I was trying to crack or my sanction was just lifted or I ran out of advocates.

Yeah.

I could just wait for Ni'a and Phage to return and see what happens.

No.

I needed an advocate, and one that was willing to risk association with me. And in order to talk to one I needed a new avatar that didn't hurt me.

So I went back to avatar hunting. Or crafting. Or something.

I felt chaotic. I felt erratic. I felt sharp.

I tried a cloud of knives.

No.

I quickly flipped through a random brainstorm of clouds of various objects and eventually came to the realization that I didn't want to be anything considered inanimate. I didn't want to be something that wasn't *alive*.

Oh, no.

Just on a whim. A hunch, maybe. A thought that came to my mind out of nowhere, almost fully formed but further refined as I crafted the image into avatar form, I tried something that looked like a cross between Aphlebia and Eh.

I was maybe twice as tall as Aphlebia, which wasn't really all that tall, nearly 2 meters. Aphlebia was a small person. Actually, their body had been small, but they were by no means a small person.

I had chosen a neck, in proportion to my body and head, that was closer to Aphlebia's as well. Short.

I had given myself a lure, like Eh had. And mimicked some of Eh's frills. But the tail I had given myself was different. Where Aphlebia had no tail, and Eh had a thick finned tail, I had chosen one that was thin, whiplike, and that ended in a spike.

I had also given myself retractable claws.

Why was I feeling so violent?

But this felt *good*!

Did it feel like me, though?

I moved and turned and flexed every muscle. As far as the Netspace and my psyche was concerned, I had muscles. I had muscles, and skin, and bones, and nerves, and claws, and eyes, and tastebuds, and my tail felt like I'd always had it and moving it was such second nature it felt like it had a mind of its own half the time.

I had never tried anything like this before, and I was absolutely stunned.

I crouched low on all fours, belly arching toward the ground, tail arching high behind me, looking at my form in the mirror with one eye and bared my teeth and a feral snarl. I am Abacus the Dragon!

And then I filled my Netspace with all sorts of natural elements, from trees and cliffs with waterfalls, to a seashore with gigantic pieces of driftwood and boulders strewn about on it, and I had *fun*. I even went swimming.

And then I remembered that the strictest sanction I had ever heard of had resulted in the Crew member being confined to their own Netspace with no visitors possible, and I had to leave.

—

I chose somewhere public and busy to sit and think about who I should try to contact. I wanted to be around people I could see, to remind myself that my sanction wasn't as severe as I feared it could get. And to feel like I was part of the rest of humanity, too.

And I wanted to show off my new skin, and to be seen as what I was beginning to think of as my true self.

I might change this body over time. Refine it. Maybe completely rework it. But there is something about it that is just beyond joyous for me.

So I sat and *lounged* in the Netspace of a busy tram terminal in Fairport. The one right below their biggest artistry collective. And I decided that I

would probably get some better ideas of who to talk to if I reviewed the notes for my book. So I manifested a copy of them in the form of an actual book and was flipping through it, using an extended claw to turn the pages. My tail danced back and forth, calming my mind with the feel of its movement.

Nobody paid me any attention, which was OK.

There was absolutely no need for me to do anything physical or visual to review my notes, except for my own psychological accommodation, and doing what I was doing was *helping*. But everyone more or less ignoring me did also help me to focus. I think if someone had talked to me, I would have instantly hypeshared with them all about how my day was going. And that might have been counterproductive.

Actually, I think it was night at this point. I had gloriously lost track, and in choosing a place below decks to hang out I had no visual clue as to what time it was. I could have easily checked the time, but that was not on my mind, frankly.

Anyway, I went through the notes for my book.

It turns out that I had collected several names that were worth investigating that, upon double checking, were not on my official sanction document. All of them were Crew. These were people that my interviewees had mentioned, but whom I had not talked to myself. Some were incidental members of the Bridge Crew that Eh had recalled being there at one point or another. Some were people Eh or Phage had mentioned in some of the dialogues that they had reported having between each other. You can, yourself, find most of these names in chapter 1, "The Anomaly". You've probably read them at this point, unless you are a very strange person or maybe a Monster. At least, I expect most people will read books that are presented as stories in sequential order of pages. But Monsters I know do things in different ways, often for very good reasons, and maybe other people do, too.

I decided I might want to talk to Benejede, Fenemere, Gesetele, and/or Gelesere. All old Crew Members with Fenekere names. For instance, "Benejede" meant "The Storyteller".

Hold on.

Hold on, hold on, hold on, hold on. Flip two chapters back, to "Hailing

Scales". Was that a coincidence? Or was that story code for something? Or had Benejede just named kihnsself after kihns favorite mythological figure?

But Benejede was under sanction as well. Mostly self imposed at this point. Would kihns sanction allow me to talk to kihn?

I snapped my book closed, threw it back into my archives - the animation for which I've always loved but being able to do it with fingers was *great* - and swirled my body into motion and dove through the Network to Benejede's place.

I literally swam through the Qbits to get there. Or, well, it felt like it. And that's what mattered.

"I'm Abacus, Tutor to No One," I sent as my greeting. I was feeling very bold.

"Come in," was the answer, so I did. And was greeted with the scents of pine sap, woodsmoke, spicy cooking, the duff of a forest floor, and sea air, and oh, I had given myself a good nose!

I found myself on the forest side walkway leading to kihns cabin. The other side of the cabin was seaside and jutted out over the cliff. And in the sky, off in the distance, was a perpetual sundearth. Everything else was animate, but the sun was frozen in place in its hole, in that state of decay that turned it orange. Which I think is done deliberately to simulate the appearance of an actual sunset on a planet. At least, that's what we've all been told.

The cabin had a porch that fully ringed it, so I didn't even need to pass through the interior to get to the other side. And, for some reason, I suspected that that was where I'd find Benejede. So I scampered through a gate and a small garden up to the porch and proceeded to move left from there to go clockwise around the cabin. I think I did that because the windows of the cabin left that side more well lit. It just felt expected.

And sure enough, there was Benejede in kihns strange bird-like form. A "heron", Eh had called it. There are no herons on the Sunspot. We have a lot of other kinds of birds, and I wondered if our parent ship had herons, or if Benejede remembered them from an older reference or an older life. How old *was* Benejede?

"You don't look like any Tutor I have ever seen," said the old Crew member, as I climbed up onto the railing next to kihn. It was a big, sturdy

railing, clearly meant for perching. And my tail made perching comfortable, while my feet seemed to be made for it (or had I altered them in the moment?).

I thought about that for a bit and realized I hadn't seen any like me either. I think that all or most Tutors tend to pick strange, usually inanimate forms so that our Students can easily recognize us as Tutors. It seems to be a tradition. And not a very bad one, really. Except for where it started to feel wrong, such as in my case.

"I've been through some hard, life changing, ordeals," I said. "And I've been sanctioned, so I'm trying out something new."

"Ah, like me," the old bird said. "Thank you for visiting."

"It's my honor," I replied.

"Have a good night," Benejede said.

Just like all my life previously, I did not betray my emotions or reactions with any sort of expression immediately. I just looked at kihns with a stony face for a couple seconds before saying, "fuck, no." But I was aware I did it that way because of all of my recent self consciousness.

"OK, have it your way," Benejede scoffed. "To have a 'fuck, no' kind of night, you're going to want to try to talk to Gesetele, and then you're going to want to try to find a way to get Ni'a to write the rest of your book."

"How did you -" I started to ask.

Keh whirled on me, bringing kihns beak down to press kihns nostrils against my own, kihns formidable antlers towering above my head, and hissed, "Eh talks to me about more than I want to hear, including *you!* But I also know a bunch of shit on my own. It just gets in my head."

"I -" I tried again.

"And if you don't want an absolutely terrible night, go bug Fenemere. Keh *loves* people," and Benejede snapped back up to kihns original perched position, regally watching the sundearth that never ended.

That was clearly a dismissal, so I started to climb down from the railing to make my way out of kihns Netspace.

"You didn't tell me your pronoun," Benejede said without looking at me. "Is it still 'it'?"

"Yes," I said. "I like it."

"So do I," said Benejede.

"What is your pronoun?" I asked. "Is it 'keh' like Eh told me, or -"

"Whatever!" Benejede ruffled kihns feathers and started preening them.

I decided to actually go at that point.

It was really fascinating to me how I could go from feeling like an authoritative asshole while talking to someone in a moment like I had with Aphlebia, where I was letting them down regarding a hope they had, to beholding an authoritative asshole like Benejede and feeling like an utter child in kihns presence. But I got the sense that I'd somehow earned kihns respect, and I really hoped Aphlebia knew that they had mine as well.

On the way out, though, I swore never to grow rude and short like Benejede had. Too easy to hurt people that way.

—

I sort of felt like I should give myself antlers or horns after that. I hadn't. But they really didn't feel like me, anyway.

Where Benejede had antlers, Fenemere had horns. Great big straight ones that grew out from the back of kihns head. And that was probably their only significant similarity.

No, there were two others: pronoun, and the Fenekere name. Fenemere's means "the Poet".

Which, when I thought about it, got me really distracted while otherwise Fenemere and I were really hitting it off. And I'll get to that but, first, Fenemere's Netspace and the conversation we had in it.

It all was like stepping into a story book, especially after Fenemere's greeting, "Ah! I've been looking forward to talking to you!"

Keh had literally set it up in a place they described as a "vacant lot" in

Fairport. Which is to say that if you went to Fairport in the actual Garden in a natal or exobody and went to the actual address, you'd find a lot filled with trees and a stream running through the back of it, and a clearing in the middle that was furnished with Network projections overlaying physical nanite structures of a rug, a "rotary telephone" on a tree, a drawing desk, and two overstuffed upholstered chairs, among other things. And Fenemere. And now that I was there, me.

While we talked we sat in the chairs, which were red, very awkwardly.

Fenemere had turned the back of kihns chair toward me and was lounging in it, belly and feet in the seat, tail lashing about lazily behind kihn, with arms folded on the top of the back and resting kihns bearded chin on them. Fenemere also had wings, which were folded neatly against kihns back. Literally the very visage of a dragon from a story book, only keh also appeared to be made from a massive collection of moss, stone, mud, pieces of wood and old bones. Somewhat refined since Metabang's description of kihn in its book.

Lacking wings, I found that rearranging myself in my chair was probably a little easier. I had more options, at least, and I tried them all, finally settling with lying sideways on it, legs and tail sticking out over the left arm of it, my head resting in the palm of my right hand, right elbow on the right arm of the chair. Which allowed me to gesture freely with my left. As far as I can tell, I'm not left handed, but this felt good.

I pointed at the oddity mounted on the tree and asked about it.

"Ah, my telephone," Fenemere stated proudly. "The entirety of Fairport is full of anachronisms, and that one is my favorite. Nobody knows what it is or how it used to work."

"How?" I asked, gesturing dramatically at the whole of the Sunspot around us.

Fenemere took a big sigh and smiled with satisfaction, "part of the experiment, really." Keh reached for a lidded paper cup that was on a small table next to kihns chair and feigned drinking from it. Then keh held it up for me to look at it, "There were specific things that my peers wanted to leave behind on our parent ship. It was never meant to be the whole culture, but they damn near erased all of it to start anew. My proposal was that I could scour the old records of incidental artifacts and elements that

no longer had any context and bring their likenesses aboard the Sunspot without jeopardizing their goals. And I was right. Only nobody wanted them in their cities, so I put them here. The real control is in our language, however."

"Which, I imagine, was your job?" I suggested. "Being 'the Poet'?"

"Yes," Fenemere said, making a bitter expression and putting the cup back on the table. "By the way, I actually do prefer to be called 'Fenmere' these days. I know Eh told you my Fenekere name, but I'm trying to distance myself from it."

"Do you mind if I mark the change in the book, and switch from calling you one to the other at this point?" I asked. "Or would you rather I update all instances of your name?"

"Mark the change," Fenmere said. "I'm more concerned that people know my preference than puzzle over why my name is subtly spelled and pronounced differently here and there. It's not like it's my deadname, after all."

"Deadname?"

"I'm not going to tell it to you, you know," Fenmere cheer admonished. "On our parent ship, where I was born, and I mean born like how fauna are born, we used to name our children and that would be their legal name forever. Personal pronouns were 'he' and 'she' and that was it. And just like your name, you were stuck with the one you were given the day you were born. And it was all based on a small, insignificant and highly variant piece of anatomy they measured upon your birth. You will note that every single one of the eldest crew of the Sunspot had a problem with that specifically."

This matched some of what Metabang had reported Fenmere saying in its story. As I puzzled about the differences, I prompted Fenmere with more, saying, "I hadn't heard 'he' or 'she' until today. Earlier, Jenifer used 'she' in reference to someone xe called xyr 'grandmother'."

"That's surprising," Fenmere said. "I felt I could risk telling you this much, but the Crew have not all agreed upon whether or not to start talking about our old familial relations yet. There are some who are staunchly against it still. The rest of us are trying to reintegrate all the old knowledge slowly, to avoid cultural fibrillation."

So many questions filled my head again, but I had a small set I needed answers for, and I had one I could start with that would stray away from this topic slightly. So I asked, "How *does* the Council of the Crew work? Who is on it? How do you all decide what to do?"

"Ah," Fenmere said, tapping the top of kihns chair. "Officially, the Council consists of whomever happens to be on the Bridge at any given time. The term is synonymous with 'Bridge Crew'. In reality, it is every single Crew member who is not under sanction."

I sat up a bit at that and said, "Wait." I looked around at our surroundings, suddenly feeling very much exposed. It was nighttime and the sky looked like it was going to rain, but I wasn't so much concerned about things like that that couldn't hurt me. I asked, "How am I being allowed to talk to you, then? You're part of the ship's governmental body, right? My sanction _"

"Allows you to talk to us under any circumstance where you are trying to clear your name or otherwise clarify the situation surrounding your sanction," Fenmere reminded me. "And is that not what you're doing right now?"

"But I'm the one asking the questions," I pointed out.

"And you're asking very good ones and my answers are relevant. We're good, I assure you," Fenmere said.

I relaxed a bit, "So, I'm curious. On a generational starship that is traveling at relativistic velocities across the mostly empty reaches of the cosmos, what does the pilot do? Is there a navigator?"

"The Sunspot largely navigates and pilots itself, actually," replied Fenmere. "In my case, when I am acting pilot, the title is synonymous with 'poet'."

I scrambled up onto my haunches, tail flopping up and over to lay across the right arm of the chair, put a clawed hand on the end of each chair arm, and tilted my head, "What?"

Fenmere just smirked and said, "I steer the culture."

"You?"

"Well," Fenmere looked off to the side with kihns eyes. "I do the fine tuning. The Council makes the decisions. I refine their words. I wrote the Official Notice of Sanction boilerplate, for instance. I am not perfect at my job, but I am probably better than other pilots."

"Hold on," I leaned back just a little bit. My distracted thinking was colliding with the discussion at hand, and I needed to get a handle on this. Nevermind that I was talking to a member of the Crew who had just confessed to having one of the most chilling jobs on the ship. "Your Fenekere names. Are they actual *job titles*?"

Benejede was the Storyteller, as I'd mentioned. Fenmere here was the Poet. Gesetele, whom I had almost gone to see next, was the Hunter, which was what was bothering me. And Gelesere was the Programmer. By their names, at least. And though Gelesere and Fenmere didn't make appearances in the myth Jenifer had told me, both Benejede and Gesetele had. In the story, they were the ones who'd put the hole in the sky, the ones the story was about!

The hole in the sky, or "the hole in the ship"?

Fenmere didn't answer, and instead just watched my eyes get bigger and bigger and my lure lift higher above my head. I guess I do make some expressions now. Keh was totally relaxed and still smiling, the only teeth visible being kihns two lower tusks, and kihns lower lip was pulling up to cover as much of those as it could.

The only other name in that story had been the Great One, and I wasn't well versed in Fenekere. My understanding is that parts of the Fenekere dictionary are restricted, so that not just anybody can reprogram the ship. But the basic words needed to talk about mundane things were there, including all the pronouns. Fenekere has 31 pronouns, one for each consonantal phoneme. Most of them are used for referencing inanimate things and abstract concepts, or even parts of the language itself. There was a single third person pronoun, with its declensions. There was a second person and a first person pronoun as well, of course. And all three had plural, singular, definite, and indefinite variations, and that was it for talking about people. Then there was "be", the pronoun for referring to Outsiders. And one more. Eh.

I didn't actually know any of this until I'd scanned the dictionary really quickly right there in front of the softly giggling Fenmere.

When I got to the listing for Eh, the dictionary identified it as the pronoun for "the Divine Parent", i.e. "the Great One".

I stood upright in the chair seat, arms at my side, so that my head was now above Fenmere's, "What are you all doing?"

"What do you mean?" Fenmere asked, looking up at me. Kihns tail had stopped dancing, but kihns supposedly friendly expression had not otherwise changed.

"Why did Jenifer -"

"Ah," Fenmere held up a finger. "Be careful with that sentence. This is my Netspace and we are presumably secure here. But I personally don't want to know what you're about to say. You are so close, though."

That baffled me.

But I was becoming more convinced that Jenifer's story had been code. A way of telling me what had actually happened.

Which meant, if Benejede had also been telling me the truth, that I had almost walked right into the sun birth chamber, in a manner of speaking. Talking to Gesetele would have been as bad a night as trying to convince Ni'a to write the rest of my book, with Ni'a gone.

"What am I supposed to do when I figure this all out?" I asked.

"What results do you want?" Fenmere asked back.

I very consciously squinted at kihn to show my displeasure, drawing my frills back against my head and lowering my lure. I think that was a good expression.

"It is safe for you to list your motives here," Fenmere told me. "In fact, it might be a good idea. But I might actually be able to advise you if you do, as well."

These elder Crew members had a way of making me feel like one of my own Students, and I'm pretty sure I was not much younger than any of them. But the number of ships we've lived on and our positions in the hierarchy of the Sunspot was enough to do it. That, and the difference in knowledge. I'd been kept in the dark about so much.

"I guess I ultimately want equal footing on the Sunspot with anybody else here, including you," I said. "As much as can be expected at least. Enough to match the supposed ideals of equality we're supposed to have."

Fenmere propped himself up into something closer to a standing position in order to nod properly, and to look less relaxed, and said, "Good. We need to hear that coming from a Tutor, in my opinion. Keep going."

"Well, to that end, I need to know what's going on and why."

"Yes, and so do we. There's been something secretive going on, and we're only just now getting the shape of it."

"Well, then," I tilted my head and frowned. "I also need to know what you *don't* know."

Fenmere nodded again, "I think I'm one that can safely tell you that. But I want you to go on, first."

"OK," I found myself doing the whole feigning a deep breath thing us Net entities end up doing. But it felt like I was actually breathing air. It felt good, and I felt like I was clearing my mind a bit by doing it. I was momentarily distracted by this, but continued, "Obviously, I want these sanctions lifted. All of them. I also want a review of the use of sanctions, with the goal of figuring out a better system of safety, reparations, and whatever else they're supposedly for. *And,*" I raised my voice to forestall Fenmere interrupting me. "I want to finish and publish my book. Which means I want Ní'a to be OK and interviewable. And also, I need the Sunspot to remain healthy and sustainable as a... as a system." I shook my head a little bit.

"What is it?" Fenmere asked.

"I suddenly wished I could talk to the Pembers right now," I replied.

"Ah!" Fenmere exclaimed, pointing. "I've had that thought, too! It's a good comparison. It's why they had the scheme they came up with 39 years ago, which did a lot of good work."

"Not enough," I dismissed.

"It hasn't all played out, yet," Fenmere admonished, but that frankly wasn't good enough for me.

I did not change my expression, "So, what is it that you *don't* know?"

Fenmere leaned back, holding the back of kihns chair to prevent kihn from falling over backward, like a child playing around with balance and proprioception. It was such a strange change in kihns demeanor, but keh said, "As you may have guessed, there is a huge schism between members of the old Crew. We don't know who all is on which side. And we don't know the motives of the other side. We can't trust anybody until we figure this out."

"But," I was really confused. "If all the Crew went through temporary accord to share memories and motives during the Nanite Innovation, how did any secrets remain?"

Fenmere tilted kihns head to the side, pulling the chair back on its two front feet and then thumping its back feet onto the ground again, "we were doing that to learn the Pember's experiences, not each other's. We didn't pry into each other's minds while we were merged, and some of us are really good at temporarily forgetting things. For some of us, dissociation is a skill, an Art. Some of us still learned that there were secrets, though."

I closed my eyes, "Which increased suspicions and widened the schism. Maybe causing some people to alter their plans and step them up."

"That's what we figure."

"Have you read any of my book's notes?" I asked.

"All of it, of course," Fenmere replied. "I'm an avid fan."

"Hailing Scales," I said very deliberately, emphasizing each word.

"I told you to be careful with that," Fenmere said.

"I got the message."

"Did you?"

"I'm asking, did *you*?"

It was Fenmere's turn to squint at me, "I think I did, yes."

"At what point can I talk freely about that?" I asked. "Because that is at the

center of everything. *Everything.*"

Fenmere sighed, "Have you ever asked yourself what a desperate Crew member with nothing to lose and all the access codes to the Sunspot could do?"

"I have, actually," I replied.

"Here's an answer to that question," Fenmere said. "Phage and Ni'a are not the only existential threats to the Sunspot."

That was a bit more power than I had imagined. And it scared the hell out of me. But all it really told me was that Fenmere kihnsel was really scared, too. And clearly, so was Eh. Phage has said several times that it is what has been holding this ship together, and I'd always imagined it meant physically. But could it have also meant socially, somehow? But, in any case, it was starting to feel like, in Phage's absence and with sanctions flying about, at least a couple of the Crew were expecting me to do something in their stead. Or, was that my projection on them? Maybe by insisting on poking my nose into things, I was volunteering in their eyes. Or maybe they were just humoring me while things unfolded elsewhere.

"Something you could do," Fenmere offered, "is weather out your sanction by playing around with your new sense of expression, either in your own Netspace or by talking to more people who aren't forbidden to you at the moment, and just wait for things to shake down on their own. People are working on this. And no one knows how to do anything about Phage and Ni'a until they return."

"OK," I snapped. "But there's what got me sanctioned. I strongly object to Ni'a's sanction! They've just had one of the most traumatic experiences of their life, lashing out essentially by accident, and went *somewhere else*. We have no idea what they are going through right now, but it can't be any sort of typical experience. So, if they come back and find themselves under the severe restrictions of sanction, being treated like a threat to the Sunspot, they might panic, have another meltdown, and do worse than they just did. I am flabbergasted that the majority of the Council, however many Crew that is, are unwilling to recognize that danger!"

"Can you accept the idea, Abacus," Fenemere said, "that Eh and I, at least, have Ni'a's best interests in mind and that we are both very skillful at managing these things? Remember, we successfully sanctioned Phage

when it first came aboard the Sunspot."

"I guess I'm having trouble accepting the fact that I can do nothing about it, either to help you or stop you, so," I said, "probably not."

"Take the vow," Fenmere said, ceasing all of kihns fidgeting and leaning on kihns elbows, head still upright.

I blinked. Again, a deliberate expression. But I couldn't think of any other response. Every turn of this caper was bringing mind shattering revelations to my qortex, and that suggestion was the weirdest to me. Tutors weren't *meant* to do that. Was that even legal? *Could* a Tutor become a Crew?

"I've been waiting, since the day you all were conceived, for a Tutor to take the vow of the Crew," Fenmere said. "And I think it's the one thing you could do that could give you the leverage you need. Not much leverage, mind you, but maybe just enough. But, also, it is your human right to do so."

"Promise to always work to watch over and protect the Sunspot and its future health, and suddenly I'm a citizen?" I asked.

"You've already demonstrated today that such a vow would not be given in vain," Fenmere replied. "As far as I'm concerned, from what I've seen, you've already taken it in spirit."

Actually involuntarily shaking, I must have subconsciously programmed that into my avatar's simulation along with the breathing, I hopped down off the chair and walked up to Fenmere and looked up at kihn. I was a little over two meters tall on my hind feet, stretched to my full height. Fenmere's current posture and position on kihns enormous chair put kihns eyes a head (my head) above mine. And I sneered at kihn with all my anger, "As I was born here, I shouldn't *have* to."

Fenmere raised an eyebrow and said, "You get it."

"Oh, yeah? What about the Crew that you're *afraid* of, who've *taken the vow*?"

My conversation with Fenmere continued a bit further than that, but the words we exchanged weren't really relevant to anything. They were largely a rehash of the above, and attempts on both our parts to keep a friendly relationship between us, despite my frustrations and misgivings.

I didn't want to burn this bridge. But I want the last word in this chapter to be mine. I'm exercising my power as author to end it on that note.

When I walked away, my head hurt.

Picking Names

I knew that the vow of the Crew would not just grant me social status, it would also grant me Network systems access that I didn't have. Which was a substantial key to doing anything. It would unlock actual, real doors. Nothing that my sanction forbade, but many that I, as a unvowed Tutor, did not actually have access to. And, believe me, I was sorely tempted. I wanted to be a full person.

But I'd have Phage dismantle me q-bit by q-bit before I acquiesced to a systemic stipulation whose existence I disagreed with from the beginning.

All this talk about my book, especially with some of the things I tried to tell Fenmere, gave me a whole other idea. And, at that time, I have to admit I was no longer gathering information, and I was no longer being strategic. I had mischief to do. I felt like I was proving a point by it, but I hoped it would shake something loose to grab ahold of as well. Or maybe that it would destroy everything and relieve me of anything to worry about anymore.

I started printing my notes and having them bound.

I discovered that though I no longer had access to the nanites, I still had access to makers of various types.

So I began by going to each of the fallow deck Monster libraries and setting a maker there to print and bind a copy of my book, such as it was. Then I started moving to the public Children's libraries.

And, though I could do this fairly fast by just starting the process at each library and leaving, I stuck around and studied Fenekere while each book was printing. And I had two reasons for doing that, and another for just not rushing. I wanted to make sure that each book was safely made, even if I had to leave it in the output tray of the maker. And I wanted to learn Fenekere. But also, I think I wanted to be found.

I made it to my third public library before it all came crashing down.

Which, considering how big the Sunspot is and how many Monster libraries there are, means that I got a lot of printing and studying done. Which also told me something about my opposition's priorities, though I'm still not sure if that helped me at all. The time did, though. I got

through quite a bit of my Fenekere studies. I found some useful things and some interesting things.

For instance, did you know that there is a missing word in the Sunspot's version of Inmararrão? I suspect our parent ship has it in their language, and they probably use it frequently. But Fenmere saw fit to expunge it, apparently, but not from Fenekere, just Inmararrão. Fenekere isn't spoken on the Sunspot after all, just used as the command language. There are a lot of missing words in Inmararrão, really, but I'm about to use a version of this one.

The Fenekere word "bukulama" means "of or having the qualities of someone who acts like Bekeleme", and "Bekeleme" is most easily described as "the Artist of sassing authority figures". I've also checked. There is a Crew member with that name. In fact, every root word in Fenekere is treated as someone's name. This is a really weird thing that I'm going to get back into later. But, for our purposes right now, I was intrigued by this idea. It's just not something we talk about here on the Sunspot. Judging someone's behavior toward authority is not something we generally do. We do have the word "sass", which might mean something slightly different on our parent ship, but here it doesn't really convey what I suspect bukulema really means. I mean, I can't even be sure I'm grasping the meaning correctly. Even so, I took the root phonemes of our version of Inmararrão and combined them into a new word that I'm going to use here, and if you're from our parent ship you can confirm whether or not I got it close, I guess.

I hereby introduce the Sunspot to the word "insolent". I have mixed feelings about it.

Anyway, the latest copy of my still incomplete book was only a third of the way through being printed and I was in the middle of learning the command sequence needed to grant myself access to manually altering the physics that get applied to my avatar when I was interrupted.

"What do you think you are doing?" Eh asked from behind me.

It felt like my heart skipped a beat, I was startled so bad. But, I'd been expecting something like this, too, and I was feeling very insolent. So as soon as I regained my composure, I turned around and with hooded eyes I sasssed Eh.

"Doing Fenmere's job," I said.

"A sanction can be used to confine you to your Netspace, you know," Eh warned.

"I might actually like to see how that works out," I replied, very frank about it.

Eh closed Ihns eyes and put a hand on the top of Ihns head and sighed. Dropping Ihns hand, Eh said, "I've been through this exact conversation before and I know how it ends. I really don't want it to end that way this time."

I leaned back against the still working maker and folded my arms and said, "then don't make it end that way."

Eh frowned and the maker stopped working. I guessed it still had three fifths of a book to print before binding it. Then Eh asked, "Are you really going to keep pushing?"

I didn't move a muscle (I still love using these biological words for what I can feel with this avatar), and I just emanated the words, "I have stated clearly to both you and to Fenmere what I think is right and correct to do. I have, in the process of that, discovered more things that I think are right and correct, that are in opposition to the way that I am being treated. You can compare notes with Fenmere to catch up, if you haven't already, as far as I'm concerned. Regardless, I am not about to back down, no."

"We're trying to keep you from getting hurt," Eh growled.

"Stop!" I widened my eyes.

"The other two copies of your book have been confiscated already, and I'm here to take this one," Eh said. "We can't confiscate your Network documents as those are considered a part of your being, but we can and have extended your sanction to cover them. Other people can no longer read them until the sanction is lifted. I'm sorry."

Oh, now *that* was interesting.

If Eh and Fenmere were part of one faction of the old Crew that were actually "on my side", then it seemed that they were working hard to cover my tracks. Either that, or someone else was and Eh and Fenmere didn't

know I'd been printing books in the Monster libraries. But both Eh and Fenmere had been giving me all sorts of hints that they really were trying to do some things for me. I wanted to know how they were doing that, though.

Anyway, it was really easy to keep up the act and remain livid about everything, so I shouted as I pointed out the obvious, "You are curtailing my human rights!"

Several library goers looked our way, so I knew my sanction hadn't been used to shield our conversation from them. That was also interesting. This scene was definitely part of an act, on public record. Eh must be going through motions to appear to be appeasing someone, and letting us have witnesses to prove it. But this also meant that my objections could be heard publicly as well.

My Network avatar, seen and heard though it was, could not be used to block Ihns nanite exobody from reaching into the maker and removing the unfinished book. But as Eh was doing that, I did use my raised voice to object, "You're violating everyone's human rights! That book contains the knowledge needed to protect everyone's consent and autonomy, and you're just going to destroy it?!"

"Yes," Eh said, and used Ihns nanites to dismantle the paper at a molecular level.

It was quite the demonstration. Everyone had been taught the nanites could do that. But, we'd all been kept, via Crew protocols, from actually doing it ourselves. There were some uses of the nanites that basically involved this mechanism, but they were very controlled, proscribed techniques, with procedures and limits essentially programmed in. To be able to just pick a clump of mass and have them dissolve it, however, was *not allowed*.

It was easy to see why this restriction was in place. Especially aboard any sort of spacecraft, the ability to dismantle matter is extremely dangerous and deadly to everyone. But the Crew, or some of the Crew, had workarounds and were willing to use them.

"Shit! Shit! Shit!" I screamed, with a terrified look on my face, and fled the scene.

I went directly back to my Netspace and dove into the bigger pool of water

that I'd made there, to hide just beneath the surface and calm down. I was shaking quite badly, so I let the feeling of the water's eddies around me distract my mind. Below me was the comforting darkness of the shaded pool, and above me were the leaves of a tree canopy. There were birds and mammals making noises at each other, as I'd programmed them to do, but my ear pads were below the surface and it was all wonderfully muffled.

As much as I was reassured that Fenmere and Eh were not only working to keep my apparent enemies off my back but allowing me to get word out as well, I was deeply rattled that the elders of the Sunspot had not seen fit to prevent themselves from using a power that could destroy it. The enormity of the Nanite Innovation really hit me hard in that moment. No wonder they had kept those things dormant in the dirt of the Garden for so many centuries.

I began to wonder if there were different grades of Crew.

Presumably, once a person became Crew, that was it. You had all the access to everything a person could have, and all the rights and responsibilities that came with that. And most Crew members chose to stay in private Network spaces and play around for the rest of their existence, away from anyone who bothered them. Those who secluded themselves that way had the right to vote in Council decisions, or to at least be consulted, but many abstained, trusting their peers would take care of things. The way that Fenmere had described things, the Bridge was supposed to be used for making most executive decisions quickly without having to consult everyone. It was a place where anyone with Crew rights could go to participate in decision making, with the drift there used to facilitate honesty and speed of communication. And it could hold any number of people. But apparently, the Bridge Crew also saw fit to consult those who didn't show up, because there were billions of people amongst the Crew and they didn't want anyone left out? Maybe because leaving someone out, even if they didn't show up to the Bridge, was dangerous?

That all created a natural order of stratification, from those who were apathetic to those who were active, with others in between passively manipulating their fellows.

But, did every Crew member, regardless of age and political activity, really have full access to all the powers of the nanites? And, if not, how was that division demarcated? I imagined that the only Crew that had that sort of access were those who had created the Sunspot in the first place. But that

privilege was not officially proclaimed anywhere.

Which meant that Eh had just revealed one of the most carefully guarded secrets to some of the most vulnerable members of the population, the Children and their Tutors. And I had helped Ihn do it. In the most alarming fashion. In a demonstration that involved the importance of my book.

So, I had a choice. I could wait to see what that did, or I could keep pushing in other ways. And since I didn't even really know what I was doing in the first place, I'd been panicked and angry and lashing out, I decided a change in tactics was probably in order. I had felt growing urgency every minute that Ní'a and Phage did not return from wherever they had gone, but at this point I had to admit to myself that I could not do much more to prepare for their return. I had done my best to get what I knew out to the people who could act, who would be there for them. And in the process I had gotten myself cut off from getting any closer to being there myself.

So, back to learning. Learning how to make more trouble.

I cracked open the files for Fenekere again and resumed my work on them.

And here's that thing about the names I discovered.

For nebulous but passionate reasons I couldn't articulate, I wanted to see if I could give myself a Fenekere name. I suppose I hoped it would give me some sort of power or something. Maybe a social status, if nothing else. But what I found is that all of the root words were claimed. None were free. Every single one had a Crew member associated with it, using it as a name, living right here in the Network of the Sunspot. Which... OK, let me enumerate the magnitude of this.

Fenekere consists of mostly four syllable words that are constructed from combinations of consonantal phonemes. Five different vowels are used to modify each syllable to change the meaning of the word, creating a derivative word. An "e" is the default vowel and four "e"s denote a root word. The pronouns are all words that have the same consonant repeated for each syllable, such as "gegegege" for "you". Pronouns, depending on which part of the sentence you use them in, could be shortened. So, in some sentences, you could just say "ge" and the other syllables would be implied. All other combinations of syllables are words. All of them.

There are thirty-one consonantal phonemes in Fenekere. In combinations

of four, that means there are 923,512 root words in the language. A small number of those words, such as “Fenekere” itself, are dedicated to referring to parts of the language itself or to elemental or abstract concepts such as gravity, light, and certain emotions. The rest are all names. And every name is defined as meaning, “the Artist that does [the thing that this Artist does]”. In fact, the name “Fenekere” officially means “the Artist that does the Art of communicating”, though it doesn’t refer to a person.

Fenekere is supposedly older than ships. Maybe not all of them, but at least two. It was one of the root languages for Inmararrão, which is spoken on our parent ship as well as the Sunspot, and presumably had been the command language for all ships like the Sunspot, however many have been made. But at least it was for the two ships we knew about.

The most likely story I could come up with for all this was that in order to build a new ship and populate it, there had to be enough Crew members willing to move to that ship, to take the free names of the root words of the command language, Fenekere. Or, alternatively, those slots just filled up over time. But, either way, Fenmere apparently hadn’t been named Fenmere when keh had lived on our parent ship, so this seemed to track.

I did have a way of saying my name in Fenekere, though. This absurd language, as large as it is, is rigid. With all possible combinations of phonemes taken up, there wasn’t much room to create new words by combining roots. It wasn’t really a compounding language. But it had the means added to it out of necessity. It was just clunky and ugly.

There were some particles and prefixes you could use to modify words and sentences. These were differentiated from the rest of the language by extending one of the syllables of the prefix or particle. Most prefixes had two syllables, and most particles had one. But there were a couple of prefix/suffix pairs derived from root words for adding new names to the language.

“Besheke-te” was the prefix/suffix pair for referring to concepts considered to be totally alien to Fenekere. All four syllables were needed to give the word grammatical structure, to let you know what part of the sentence it fell into, which also meant that you could use them to create derivative words. So, for instance, if we used my name, the result would be “Besheke-’abacuse-te”, I think. Which would translate roughly to “The alien named Abacus who performs the Art that Abacus does”.

But since I am from the Sunspot, a child of it, I get to use “Ekele-’e”. Or, as it turns out “Ekele-’abacuse-’e”. It’s important to mark where the glottal stops are, because they are consonants, and the order of the consonants and vowels is how you tell the difference between saying a word and counting in numbers, and that’s a whole other thing that’s otherwise irrelevant here.

All of this is to say that I had a way of writing commands that included references to me, so long as no one else aboard the ship was named Abacus, but I could not give myself one of the true root words of Fenekere as a name.

That thought drove me to double check to see if anyone else had ever named themselves Abacus. I was pleased, and not a little bit flabbergasted, that they had not. There are a *lot* of people aboard this ship, counting all the Crew. And somehow I was the first and last one to name itself Abacus.

So, then I looked into how to compose a truly unique name in Fenekere, if you shared your name with someone else. Apparently, if you just plugged the one name into it, the compiler assumed you were referring to a Tutor, such as myself. Tutors had to have names that were unique among the Tutors. But if you wanted to refer to a Child or Crew member who shared a name with others, you’d have to include their Tutor’s name as well, and then a number after that. So, for instance, Tetcha would be “Ekele-tecca-’abacuse-ef-’e”, Tetcha being the first Student I have had with that name. You could drop the number in that case, but it was considered bad form.

I just.

Let’s move on from that.

This should give you an idea of how far I dove into that language and what kind of progress I’d made in learning how to use it. And, that said, there were words and combinations of words that I did not have access to. I couldn’t learn what they meant and, even if I did, I didn’t have permission to use them in a command. The command just wouldn’t work for me.

So, for instance, I could make it so that I could manually edit the numbers regarding how my avatar interacted with the rest of the Network to simulate physics, in order to fine tune how well I floated, but I could not enter the command to give me permission to use nanites to dissolve a

book, rock, or the bulkhead. Which was probably a good thing in most cases.

Still, it was all so complicated that I felt like if I dug far enough into it I could find some sort of workaround that had been overlooked. Maybe even a cascade of permissions I could give myself, going from something innocuous that then let me unlock another permission and another until I had something I could really use.

And maybe something like that exists in there. But it's also so complicated that I couldn't figure it out in the time that I had. Not without using external resources that could be tracked or added to my sanction. I did try, though.

Thinking about resources, though, gave me a wild thought that I almost pursued. But it also scared me, so I hesitated.

I could find a way to unlock my ability to multiply myself, like Metabang had naturally been allowed to do to serve the Pembers.

I let my fear of that propel my mind into analyzing the root of the situation.

We've been taught that the most likely reason that ships like the Sunspot could reproduce themselves is population growth. When the population gets to a certain unsustainable number, the ship finds a sufficient amount of mass and uses its construction nanites to create a new one. The nanites can replicate themselves, so both ships have a full complement each upon parting ways. Crew and Children are moved over, those that want to go or are forced to depending on the circumstances and the culture, and as the distance and velocity between the ships increase communication between them becomes harder and harder.

But, what if it happens whenever there's a major disagreement? This is what seems to have happened with the Sunspot. The Crew of the Sunspot had a major disagreement with the Crew of our parent ship, and one Crew said to the other, "fine! Leave!" And this may have prevented the parent ship from undergoing a traumatic conflict powerful enough to destroy it. It would be a safety mechanism.

But somebody saw fit to keep a connection between the two ships. And then found a way to embed that connection into the psyches of a pair of children conceived and born specifically to do that. Why? Insolence?

I'm beginning to think that insolence, or the set of emotions that it badly labels, is enough motivation for some people.

No, insolence is the wrong word for this. The Sunspot is not an authority figure that someone loyal to our parent ship can sass. Except for the Tunnel, we're gone from them. We're not tormenting them anymore with our strange desires.

So, there's another word in Fenekere that's not in our version of Inmararrão that might work here. "Spite". It means the motivation to do something specifically to contradict someone else's wishes for that very purpose alone.

I certainly had been doing a lot of what I was doing to spite the Crew.

But I was being spiteful because I was angry, and I was angry because I felt Ni'a had been unjustly marked for sanction. And everything after that was escalation. And here I was, looking for ways to gain enough power to potentially harm the ship, though that wasn't what I was intending to do, just to even the playing field and right an increasing number of injustices that I was seeing.

But, let's say I went and got enough power that I could convince the Crew of the Sunspot to let me make my own ship, and I decided to populate it entirely with Abacuses. I'd just move aboard on my own, with full power over the entire new ship, and multiply until I filled out the whole Crew complement.

In that scenario, I could make the ship sterile. No Garden, just a fixed number of Abacuses happily flying through space, cavorting in our Network, slowly becoming new and different people simply by virtue of having separate experiences.

But I wouldn't exactly like that, so I'd maybe invite some of my friends along who were ready to leave the Sunspot forever. And maybe we would have the Garden, in order to give us all a degree of natural enrichment and the sense that we're helping to continue the existence of biological life. Now it gets more complicated.

Now, as far as I can tell, Tutors are a new thing, introduced by the Crew of the Sunspot, but ascension is something that has been around since at least our parent ship, if not before. However, ascension is new enough that people are still thinking in terms of people being biological in origin.

Maybe the elder Crew of the Sunspot felt it their moral duty to contribute to the continued existence of biological life of all levels of sentience, because that's where they came from. Maybe, out of anger and spite for what they were originally born to, they wanted to try to solve the problems of more complex biological lifeforms. Now they have a real problem.

Somewhere in that spectrum between a static ship populated by what is essentially one person and a growing population of extreme diversity and suffering, distrust and stratification of the social order are going to grow.

When you build your ship and you move into it, you inherently have the power to unmake it (and probably yourself in the process). You can usually trust yourself with that power. But, you might not be able to trust your children with it. And you probably don't feel like you can trust somebody else's children with it. But if you find a way to obliterate that power entirely, you also likely destroy the ability to create a new ship, thus taking away the safety mechanism available to you when a big traumatic schism forms.

And through this thinking, I was adding to my growing list of things I would change about the Sunspot if I had a chance to make it better, or that I wouldn't do on my own ship if I could have one. Which was increasing my motivation to act out.

I honestly didn't see how I alone could amass enough power to initiate the reproduction process. I didn't know how that would work, but I felt I would need a sizable population of friends who agreed with me about enough things to do it. And while I might be able to figure out a way to get enough power to destroy the Sunspot, the only reason I could think of to do that was as a threat to give me leverage to make changes. Actually destroying it would be an act of spite that would have no benefit to me except an end to suffering. And, anyway, someone would probably act to stop me.

Phage or Ni'a would, certainly, if they were here. They both cared enough. Phage, out of a sense of duty to its contract. Ni'a, out of genuine love.

I told myself that the reason I was thinking about all this was to speculate on the thoughts of someone like Gesetele, whom Eh and Fenmere were afraid of.

Gesetele, who had overseen the construction of the Tunnel. Gesetele, who

had, according to Eh, been instrumental in bringing Phage aboard the ship (see Chapter 1).

The Hunter.

I shivered.

Home

It took three days before Ni'a returned to the Sunspot, and that's when we learned the name of our parent ship.

I want to give you a story about how I bravely and cleverly broke the shackles of my sanction, but I can't do that. It's not what happened. I am not the hero of this story. In fact, there are no heroes.

In fact, there were only people making mistakes, tiny and huge, and the truth, Ni'a. The chaos of a living thing. Which happens to share the name of a Child of the Sunspot.

Sanction also remains a problem to this day, though I am no longer under it. I strongly disagree with it, and feel that it causes far more problems than it solves while being prone to gross misuse. And a lot of people agree with me. But safely altering the laws of the Sunspot to remove sanction as an option for "justice" is proving to be a long term project.

What this story *is* about is how we all narrowly avoided a final disaster while learning a bit more about where we came from. As if you can take a bunch of events that happen between points in space/time and neatly call it a story.

—

Aphlebia's sanction was mild, especially compared to mine. Not that that made it acceptable.

They were barred from communicating with me, of course, and everyone else who had participated in our escapades to contact and communicate with Jenifer and Bashiketa. Although Chalkboard was there, it had done its duty as a Tutor and had advised Aphlebia not to participate, therefore Aphlebia's sanction did not include it. They were also allowed to return to their family, which was the more important thing, for their health and that of their peers.

Emala, Candril, and the Whorlies each took this differently, while Ni'a was still unconscious and in the care of Emala and Doorway.

But, maybe I should back up a little bit more here.

Aphlebia was focusing on Bashiketa when they saw my nanite exobody start to crumble and drift to the floor out of the corner of their eye. And they turned in time to see the last clump of it lose buoyancy and fall to the floor all at once, making a soft "ploomph."

"What happened to it?" asked Fredge.

Aphlebia turned to them and shrugged, calling upon Chalkboard with a wordless thought.

"Abacus fled to the Netspace of this room, and it appears confused," Chalkboard reported through a speaker in the room for everyone's convenience. "You are all in flagrant violation of it and Aphlebia's sanctions. I must advise that you cease this conversation and disperse immediately." Then it added, "And it has now left."

Aphlebia was very confused by this. Abacus had trusted them and been relying on them to get the information they were possibly about to receive. It took them a moment to grasp why it would just suddenly leave like that. It did not seem characteristic of Abacus to do that, unless it had been compelled by someone or something. Then it hit them. Abacus was communicating something.

"We are in danger," Aphlebia signed to the others, and then left. Out the door. Without looking back.

As they went, they asked Chalkboard to direct them to the surface. Aphlebia didn't know whether or not they could reconnect with the Monsters later, but they were terrified of what might happen if they stayed. They didn't have the knowledge to imagine what might happen, but the lack of knowledge scared them more than anything.

They hoped that as long as the Monsters went their own way and didn't follow, they would all be OK. And when they got to the surface, they looked back to check, and they had not been followed.

They fell backward into a sitting position on the ground. The wilderness hatch to belowdecks was at their feet, closing of its own accord. Centuries old trees around them reached sunward. They could see, between the branches, scraps of sky, increasingly gray with late afternoon clouds.

Now they had time to feel disappointment and despair.

It had been hard to leave Ni'a to follow Abacus, but after witnessing the argument between Abacus and Eh, Aphlebia was determined that it was the right thing to do for Ni'a. Emala and the others were there to tend to their peer. And to follow Abacus, they had made a point of forming an exobody from the ground and bursting forth to fly after it. They'd hoped their family would see that and know they were OK.

Except that they weren't.

Dying was not what they had wanted to do. And it had been so unexpected and so sudden. It had been a great big noisy pain and a sickening pop. And then they were floating in Netspace, momentarily free of all sensation and emotion while Chalkboard was telling them what happened and what would happen next.

It had all made instant sense to them, and they had decided to return to the park and really put themselves into the nanites in the ground there to help their family. They didn't think much about it, they had just done what they felt they needed to do. And much of what they did from there on worked easily, as if the interface for the nanites and the Network and every other part of the ship had been designed to accommodate them.

Chalkboard had prattled on as they were doing what they felt was needed, but mostly it was talking about the social and psychological ramifications of transitioning to Crewhood. They'd stopped listening when they'd left to follow Abacus and Chalkboard started chiding and warning them. And they lost themselves in the moment.

They'd had some time to contemplate things when Abacus had stopped to talk to Bri, but they'd spent it planning on how to make their proposal to the Tutor.

Which, now that they'd lost contact with it, they were suddenly, sharply reminded of their embarrassment over that whole affair. And then the impact of their death hit them.

It was as if their mind split in two. First, they descended into overwhelming anger and grief, thoughts running through everything they had lost, all the hopes they'd had, the things they'd felt that they could not feel now, the utter joy they'd had in being alive and breathing, and being equals with their peers. And as those feelings took over their exobody and made it thrash about and tear at the ground, keening with screeches and

howls of rage, another part of them noticed everything they could feel now. Very quickly, Aphlebia was observing with interest as the rest of their psyche tore at itself and the world, and actually took some pleasure in noticing just what their exobody was capable of sensing.

They could feel the moss, twigs, and the pebbles of the forest floor to a degree of detail they'd never experienced before. They could feel the air as their limbs passed through it. And they could feel their emotions tearing at their guts as if they actually had them. They could sense something that felt like blood pumping through veins as what must have been a simulated heart beat at an accelerated pace. They didn't know if the nanites bothered to replicate all of these things, or if some of them were just sensations created in their psyche by the Network protocols. They even felt something like tears in their eyes.

As their meltdown began to subside, they found themselves lying rigidly on their back, grasping the dirt with their hands and screaming at the sky. Simulated breaths helped them to scream in a rhythm, which was itself soothing. Between that and their heartbeat, they were able to slowly regain calmness. They then noticed they could smell the forest.

Chalkboard had shut up. Aphlebia was grateful for that. It had spent so much of their life being quietly attendant. Its recent, post death lecture had been really frustrating.

Anger flaring at having to think of words, Aphlebia signed into the air, "Chalkboard." They could have just sent wordless thoughts, like they usually did for it, but they were making an effort in order to emphasize their frustration.

"Yes, Aphlebia?" it responded.

"Do better," they signed. Then punctuated that gesture with an intense broadcast of the raw meaning of that into their immediate Netspace.

Later, as they walked back toward Agaricales, they played around with their senses. When their heartbeat became too loud and annoying, like it often had when they'd actually had a heart, they tried turning it off by tuning it out. It worked, too. They sent inquiries about this to Chalkboard and got nice, wordless answers in return. They radiated gratitude every time it did this.

They recalled then that their sanction meant that if they dropped their

exobody and entered the Network completely, they wouldn't be able to make one again until the sanction was lifted. They'd been sticking with it all this time out of the habit of having a body, and they were so glad they had. They meant to keep this up until their sanction ended.

It had been hours now, since they'd died. So when they arrived at the Memorial Park, they found that their family had already left. They thought they hadn't expected them to be there, but it was still jarring. And everything had been repaired and thoroughly cleaned.

They found the spot where their body had been crushed. There was no blood, no mark, nothing to indicate that it had happened. The local nanites had cleaned up what the Safety Patrol could not. But Aphlebia knew it was exactly there. They'd been just aware enough of it right before and right afterward to know its relation to the central obelisk, and besides, their emotions intensified when they got to it. Their subconscious knew.

They sat down cross legged in the spot and practiced breathing for a while, watching the world around them.

People were avoiding the park altogether, but some people were walking by on the skyways above. And some of them were looking down at Aphlebia as they passed. Which was OK. Aphlebia wanted to be seen. It helped them feel real.

After some time, still before Sunset, they felt the need to find their family, so they went to the quarters they'd used upon their first arrival in Agaricales. But Emala and the others weren't there. It seemed they'd already packed and headed home.

Aphlebia wondered how Ni'a was doing.

So, then they took the tram, and made their way back to their home.

And that's where they faced the conundrum of how to approach their own door.

They wanted to just walk right in the door and run right to Emala's arms, to then sit down and eat with their family, and cry in their bed. But they were afraid of what their family's reactions might be. Good or bad, they were afraid they could not bear the intensity of their emotions.

Another option was to not return home. To spend the night in the park,

and decide to do something else, go somewhere else for the rest of their life. But that idea made them feel cold and hurt, and they knew it wasn't viable.

They stood between those two options for a long time, right outside their door.

—

Emala was making the easiest dinner xe could think of, which happened to be Candril's favorite. Xe hardly had to spend any effort on it at all, which was important. Xe could have had the kitchen maker make it, in fact. But chose not to, because xe did need a few moments of work to feel like xe had done something important successfully today. But xe could not handle a knife, nor could xe trust xemself to measure anything accurately. However, xe found xe could use timers and heat and have Doorway help xyr measure the ingredients to put together hot pasta and cheese.

Vine was telling Candril and the Whorlies a story, while Charlie attended to Ni'a, who was lying in their bed. The story was an old favorite and a fiction. And Ni'a was receiving dinner in the form of a nutrition patch.

The twitching of Ni'a's legs and arms continued, but were not significant enough to cause any problems. In fact, it was possible that they would help their muscles to keep tone if they were unconscious for very long. It was similar to a nanite program that would be used for such a thing, but it couldn't be determined if it was Ni'a's nanites doing the work, or something else.

If Emala thought about that too much, though, xe would find xyrself at Ni'a's side, not making dinner. Or just outside the door, pointlessly looking up and down the corridor for Aphlebia, who might just appear in the middle of the room someday, actually, hopefully.

They'd all seen them emerge from the ground near Ni'a to pursue Abacus when it fled from Agaricales. Aphlebia would not be OK, but they were still here, aboard the Sunspot, and that was what was important. No. No, what was important was that Aphlebia had just been hurt in one of the worst possible ways for a person to be hurt, and Emala's thoughts wanted to flip back and forth from them to Ni'a.

It then occurred to Emala, staring down at the bubbling cheese and pasta with the spoon static in the mixture, paused mid stir, that xe hadn't

actually had to cook all that often.

Phage usually did the cooking.

“Chalkboard announces that Aphlebia has returned,” Doorway said to the room.

Tears burst from Emala’s eyes and xe nearly fell to the floor. Turning the heat off, xe stirred the pasta one last time, then turned to the door to approach it, “Tell them that they can come in, Doorway! Please!”

Xe rushed across the room just in time to get to the door as it opened. Candril and the Whorlies were not far behind xem. But Aphlebia didn’t step into their home, and just stood on the other side, arms listlessly by their side. Emala didn’t even pause, xe came right through the door and swept Aphlebia’s nanite exobody up in a hug, and to carry them back into their quarters.

Nanite clay can take on a variety of densities. At its most compact, it is very similar to wet pottery clay in weight per liter. But it can maintain a tough, even rigid form at a density light enough for flight, and since Aphlebia had originally formed their exobody for the purpose of flight, they were quite easy to pick up. And they relaxed and let Emala move them, wrapping their arms around xyr shoulders, and burying their face into xyr furry neck to cry. No actual tears, but Aphlebia felt them anyway. To Emala, Aphlebia’s exobody felt distinctly different than they used to, but that didn’t matter. Emala *knew* this was Aphlebia.

While the Whorlies attempted to hug both Emala and Aphlebia, with Candril following suit, Emala tried to say several words, but in the end could only manage, “Come.” And then xe walked everyone over to xyr chair, which was just big enough for them all to cuddle in, Candril and the Whorlies perched on the arms. After a while, Emala said, “I have made dinner. It should be ready now.”

Everyone was silent and still for a while longer, though.

“Oh!” Candril suddenly exclaimed. “Whorlies! Show Aphlebia your thing!”

“Really?” asked Gaghil, who was currently fronting.

“Yeah!” Candril encouraged vin, tears still in eyes but cheering up quickly.

"They'll like it!"

Emala turned to Gaghil and said, "You should, if you want. I think it will help Aphlebia feel at home again. Tell them what you can do first, though."

"We split up to try to find you this afternoon," Gaghil said to Aphlebia, who then slowly looked up at him. Looking briefly over at Ni'a, Gaghil said, "we followed Ni'a's advice about controlling the nanites, and it was easy. And we did it all at once! But we don't know how to fly yet, so we couldn't keep up."

Aphlebia widened their eyes and tilted their head.

"OK," Gaghil said, "Watch this!" Then he hopped up and went to sit in the Whorlies' chair to relax and close their vessel's eyes.

Then the room's nanite bin exuded a Whorlie sized clump of nanite clay which formed itself into a Gaghil. Gaghil stepped forward and posed with a grin, as another Whorlie started to extract itself from the bin.

"I love this!" Candril said. "I can see all of you!"

Aphlebia watched for a bit, and then moved to extract themselves from Emala's grasp. Which Emala let them do. And Emala watched them as they walked over to the growing group of Whorlies. Afrim, Firas, Gaghil, Charl, and Brenam were the ones who were awake enough to extract themselves from the bin, leaving their vessel meditating in their chair. Aphlebia held out their hand, palm outward, fingers splayed, at shoulder height for the others to touch it, which they all did in turn. Then Aphlebia turned to Emala and signed, "food!" excitedly, pantomiming a deep breath as if to enjoy the aroma.

"You can eat?" Emala asked.

Aphlebia shrugged, but then gestured to all the Whorlies' exobodies and grinned.

Emala's heart still hurt from the day, and he felt utterly drained, but seeing Aphlebia here and so animated was helping so much. Fortunately, he'd made a lot of cheesy pasta, planning on putting some of it into the food preserver for later. He got up and dished up food for every body in the room, including the Tutors. He didn't think they'd do anything with it, but if Aphlebia had figured something out, maybe they'd like to try anyway.

Aphlebia gestured to the Whorlie's that they could smell things, and then walked boldly over to a bowl of pasta, picked it up and scooped a spoonful of it up and brought it to their nose and took a big sniff. And then they smiled and nodded vigorously, looking at everyone else. And then they put the spoon in their mouth and ate the pasta, a look of surprise lighting up their face.

It is, after all, an elementary part of their function for nanites to break matter down and reconfigure it. The pasta that Aphlebia ate was dismantled at a molecular level and distributed throughout their exobody to fuel the nanites and add to its overall mass. But before that happened, Aphlebia was able to push the pasta around in their toothless mouth, mashing it against their palate and gum ridges, savoring the flavor and texture in a way they'd never experienced before. Someone on the Crew had spent the last four decades refining the sensory functions of the nanites and interfacing them with the human psyche in as natural a way as they could devise.

The Whorlies' eyes all bugged out, and they collectively dashed for their own bowls. Candril dove in to get zir bowl as if the chance to grab one was in jeopardy from the crowd, even though there were more than enough to go around.

"Doorway," Emala said. "Have you ever tried eating before?"

Xyr Tutor replied, "I haven't. That is a fascinating idea."

"I served up bowls for all the Tutors," Emala told it. "You can have one. We won't have any food left, but you all can. I think maybe you should."

"I will pass," Chalkboard said.

But Doorway, Vine, and Charlie each came forward and retrieved a bowl after the children were done with the space. The table wasn't big enough for all of them, so most of the Whorlie's remained standing, and were exclaiming to each other as they tried the food.

Vine was the first Tutor to form a crude, lipless mouth on its face in order to try the food, and when it did, it exclaimed, "Amazing! Interesting! Why am I doing this?"

Charlie, usually taking the shape of a curved magnet not much larger than someone's hand, just absorbed a couple pieces of pasta through one of the

"feet" of its shape. It didn't seem impressed until Doorway pointed out the idea was to *taste* the food. So it activated its olfactory senses and said, "Oh!"

Doorway is one of those rare Tutors who has chosen an avatar based off of one of the fauna. In its case, a cuttlecrab. Cuttlecrabs cannot fly, but Doorway, of course, can. And when it had finished advising Charlie of what to do, it alighted on one of the remaining bowls to lift it up off the counter with tentacles and pointy legs gripping it, to carry it to the center of the table to eat with some of the children. It already had a mouth as part of its design, which it used in the manner of a cuttlecrab.

Doorway paused in eating to tell Emala, "I like it."

"Oh!" Candril nearly shouted, jumping up from zir chair. "I should try eating it with my exobody!"

"That's a good idea, but your living body needs the food more, Candril," Emala said. "Chalkboard has left a bowl you can have as seconds with your exobody. Sound good?" And xe waited just long enough to see zem nod. "Which reminds me, there's an extra bowl here for you Whorlies. One of you gets to eat it with your vessel as well. Your body needs the food."

It was good to have the family mostly back together again, and doing something that was apparently fun. Emala had no idea what Aphlebia was going through. Xe hadn't expected any of xyr children to experience ascension before xe did, and xe could only imagine the mix of emotions xe'd feel on the day xe'd ascend. Xe hoped to do it a century or so from now. But, at least they were still family.

Xe watched the children eat, slowly partaking in the food xemself, but xyr eyes wandered over to Ni'a eventually, and xe frowned in thought and worry.

Xyr thoughts were interrupted with the ping of a message received over the Network. It was from Aphlebia. When Emala opened it, xe found a wordless thought that xyr psyche translated as, "Phage Pember is looking for them."

Xe looked over the heads of xyr children to see Aphlebia looking back at xem. And when xe made eye contact with them, Aphlebia nodded solemnly.

So adult-like for a 9 year old.

Emala sighed.

Xe decided not to talk to Aphlebia about their sanction unless they brought it up. There was no need. Chalkboard would do that, of course, and probably already had done so. What Aphlebia needed was safety and a home.

—

Bashiketa watched with confusion as Aphlebia dashed out the door of the fallow quarters.

"We are in danger," the young Crew member had signed, before leaving. And Bashiketa could not imagine from what.

"Shit!" said Laal.

"Come on," Fredge said. "Follow me." And then led the way out and down the hallway in the opposite direction that Aphlebia had run. But, at a more relaxed pace. Bashiketa's chair would not have had trouble keeping up at any pace. However, Fredge apparently refused to leave in a panic.

Bashiketa's legs still ached where they'd gouged them, and probably would for several days. But they were tingling, too, which meant that they were already healing. They'd been distracted by them on and off all afternoon, and they couldn't help but hate themselves a little for losing control like that again. Fredge kept saying that it was OK, but it didn't feel OK. They always felt like they could remember someone scolding them for it, but couldn't actually pull up the memory clearly. Weird.

"Fredge," Bashiketa said, pulling even with their Caretaker. "Should I still try to get my counterpart?"

"Yes, but later," Fredge replied. "We all need to talk about this first, and before that, we need to go somewhere that's ours. Give our Benefactor time to get any tails off our backs."

"I wish I knew how that worked," Laal said.

"Me, too," growled Fredge.

"They say our rights as Monsters are a big help, but I just don't trust them!" Laal whined.

"Neither do I," said Fredge. "But what else is there to do?"

Fredge and Laal continued on like this as they went, and it just felt inconsequential to Bashiketa, especially once they figured out they were headed home through a circuitous route. So they lost themselves in thinking about what had happened over the course of the day, and what it might all mean.

There was this period of time between the conversation after their meltdown in the tram station and when the Sunspot itself was having a meltdown that Bashiketa just could not recall. They couldn't even clearly piece together how they'd found Laal. There was just a moment when they were talking to Laal in their temporary quarters, then leaving that room, and then it was like they'd fallen asleep for a while only to be woken up by cacophony and pandemonium. They'd had the sense that they'd been dreaming during that time, but couldn't figure out a way to provoke memories of that dream to the surface. It had felt like they didn't just have a word on the tip of their tongue, but a whole world. And, then, later, they learned that they literally did!

It was funny, though, thinking about what happened after that. When their own mind or body was in crisis, they could not control what was happening and it just got worse and worse until it sort of burned itself out. They were able to recover faster if the world around them was calm and quiet and dark. Even too much light could sustain a meltdown. And all of that could be triggered by anything unexpected or especially loud and chaotic. But there seemed to be a threshold of external danger past which they suddenly had utter control over themselves. It was like their emotions shut off, and all chaos in their mind ceased, allowing them to parse their senses almost perfectly. And the chaos they'd woken up to had apparently triggered that.

There had been a child there named Jenifer, and the famous Morde and Tetcha, and the child's caretaker, Illyen. Bashiketa had not been in a position to clearly see what was happening below the skyway, so they'd had to pick up bits and pieces of that as people saw it and exclaimed, or as the others talked about it later. But they had been in an excellent frame of mind to do that.

The crowd had cheered the emergence of a dancing troop, and a child named Ni'a, who had been near the front of the stage, had had a meltdown that had somehow shaken the entire world, collapsing the stage and injuring many people. Then a senior Crew member had publicly had an argument with a Tutor over an unconscious Ni'a. And that had come back to haunt Bashiketa later, too. It had been the same mute Tutor they'd just tried conversing with moments ago, Abacus.

But, back on the skyway, Tetcha had said to Fredge, "We should stick together for a bit, right, Morde?"

To which Morde had nodded and added the question, "Our quarters or yours? My intuition has a suggestion, but I'd rather we follow your lead."

A suspicious Fredge had felt rushed and clearly uncomfortable with the idea, and narrowed their eyes before opening their mouth to speak. But Bashiketa had seen this as an opportunity to learn more about what was going on, so they had leaned forward and said, "Please, Fredge? Tetcha is one of my heroes!"

Tetcha had looked flummoxed and pleased by that.

And after a brief consultation between Fredge and Laal, they'd chosen to go to Tetcha and Morde's quarters, where they had sat and talked and more formally introduced each other. Fredge had quietly signaled to Bashiketa and Laal not to reveal Bashiketa's story, which at the time would not have been easy for Bashiketa to do anyway, as their memories of a critical conversation hadn't come back yet.

But, then, when a friend of Morde and Tetcha's, named Phage Pember, had come to visit, extracting itself from the room's nanite clay bin after asking permission to do so, the conversation abruptly changed from shallow personal histories to Bashiketa's very nature and it all had come flooding back in a dizzying way.

Phage's exobody had stood maybe a decameter taller than Bashiketa would if they were standing, and it had large rounded ears, what looked like a plume of fur on the top of its head, a couple of large movable feathers just behind its ears, a pointy snout, and a long, prehensile tail.

"I'm here on behalf of the rest of the Pembers, the Flits, Metabang, and Abacus to help them figure out something that's happening," Phage Pember had said. "Morde? Jenifer? You may each be of particular help. I'm

going to ask some questions, and either of you may answer even if I don't ask you directly. But if it's OK, I'd like to speak to this one here," it had gestured at Bashiketa. Then it had stepped forward with a little bow. "I am Phage Pember. My pronouns are it/its, for now. May I make your acquaintance?"

Fredge had not looked happy about this, but it was Bashiketa's prerogative to answer. Of course, Bashiketa recognized Phage Pember from Metabang's graphic novel, which Fredge had introduced them to as part of their education about the Sunspot at large.

"I know who you are," Bashiketa had responded, awe in their voice. "My name is Bashiketa. My pronouns are they/them. Why do you want to talk to me?"

"Did you know that you have within your psyche a complex quantum entanglement with someone else far, far away from here?" it had asked. And, of course it had sensed that! It was a Phage!

Everyone else had seemed surprised by its mention of that fact. But also, reminded of its power and status about the Sunspot, everyone cooperated with it. Unfortunately, Bashiketa had not had many answers for it, and Fredge, Jenifer, and Morde had ended up filling in with their knowledge.

And when Jenifer had talked at length, Bashiketa began to get the sense there was much more to xem than there appeared. Besides taking on a spookily adult voice when talking about what xe knew, and the content of what xe knew being nigh unbelievable, xe treated Phage Pember as an equal or even a child. Xe was the only person in the room with the gall to do so.

Through that whole conversation, too, xe had been clutching this doll that xe had picked up on the skyway. Presumably xe had dropped it earlier. And the doll looked familiar.

And now that Bashiketa was thinking about all of this, and remembering the doll, they remembered some of their nightmares. The doll looked like one of the alien people that populated them!

Was that what their counterpart looked like?

Yes, but no, a thought made itself heard as they were boarding a tram with Fredge and Laal to head home. *That doll looks like a girl, and I'm a boy.*

It felt like Bashiketa had thought that thought themselves, in a way. But the idea of it was totally alien to them, and the timbre of it was almost audial and didn't quite sound like Bashiketa's own voice.

"What is a boy?" Bashiketa asked the thought, realizing they'd done so out loud when Fledge and Laal looked over at them.

"I don't know. I've never heard that word before," Fledge replied.

But Bashiketa was distracted from Fledge's response by a sudden impression of what a boy apparently was. It was like the sensations of another body were superimposed over their own, and they felt a bunch of anatomy that was at once both alien and now familiar from the nightmares. There was at the same time, a sort of focus on certain features and a state of mind, just sort of a sense of knowing, "I am a boy." Aside from occasionally overlapping and mixing with this person mentally, Bashiketa's body and psyche had almost nothing in common with them. And in this particular moment, their feelings went from revulsion at the sensations of the boy form to revulsion at the sensations of their own body.

And then a pressure on their mind disappeared and the illusion vanished, leaving them with relief. But they gasped and doubled over at the intensity of it.

"Are you ok?" Fledge asked.

Bashiketa took several breaths, panting, before they could respond, but Fledge waited patiently.

"Maybe?" Bashiketa whimpered.

Laal asked, "What was that?"

"Bashiketa seems to have dysphoria," Fledge replied.

"It's gone," Bashiketa added.

Fledge's head snapped back to look at Bashiketa with intrigue marking their face, "I thought you felt it all the time?"

"I don't know," Bashiketa said. "Maybe I don't? I don't feel it now. It got really bad. And then it went away."

"Was that -" Fredge started, then frowned it off and asked, "When you asked what a boy was, were you even talking to us?"

Bashiketa felt taken aback by that question, but then remembered that of course Fredge knew about all this, and said, "I was asking a thought in my head, and then I think it answered."

"Can you describe what that felt like?" Fredge asked.

Bashiketa tried, but wasn't at all satisfied with what they said, and kept rambling about it, trying to use different words to describe the same thing over and over. They trailed off after the third iteration, but Fredge and Laal remained silent for a bit.

Laal finally said quietly, "That sounds like a system. I know one personally, and they've described experiences a lot like that."

"Yeah," Fredge said, casting a concerned look over at Bashiketa. "And that would make so much sense, considering." Then they added, "Bashiketa, that was probably your counterpart."

"I know," Bashiketa heard themselves say, and realized that they had come to that conclusion too. They had a brief thought, were there more than two people in here? There was no immediate answer to that. But, if they had understood some of those earlier conversations with Jenifer and Phage Pember, it's possible Phage's child Ni'a was sharing their psyche right now, too. And maybe even Phage itself.

Bashiketa's eyes bugged out at that idea. They hadn't given them permission to do that! But, then, they hadn't been able to give permission to Fredge and Laal and their colleagues to put a Tunnel in their head!

They stared intensely at Fredge for several cycles of tram tube noise, and Fredge returned their look with an expression of concern and worry.

"If I could take back what we all did to you, I would, in an instant," Fredge finally said softly.

"I don't know what I'm going to do when we get home," Bashiketa said. "I have a lot of feelings and they aren't good."

Jenifer watched Fredge, Laal and Bashiketa leave xyr temporary quarters in Agaricales after Phage Pember couldn't continue due to being slapped with a saction. Plans had been made for the trio to meet with Abacus later, and they were hoping that might still happen despite the sanctions. The Monsters could be sanctioned as well, but it was harder to enforce since they were not connected to the Network in any way and typically did not interact directly with any ship government but their own. But, then, nobody else in that room had been sanctioned, just Phage Pember. And it had frowned and stated its connection had been severed by it, then explained that Abacus could probably still converse with the Monsters in person.

Morde had suggested they part ways, saying that hir intuition was pointing in a different direction for himself, Tetcha, Illyen and Jenifer.

And when the Monsters were gone, Morde turned to the others and said, "We should go to our place, and probably soon. I don't know why, but it feels urgent."

"What's wrong?" Jenifer said, then closer xyr eyes and shook xyr head. "Sorry, you just said you don't know. I - " Xe looked over at Illyen, suddenly unable to talk.

Illyen shrugged and said to Morde, "It would be nice to see your place after all this. Let's go."

Jenifer was concerned that xyr relationship with Illyen was going to change for the worse now that xe'd remembered who xe was, but Illyen's manner didn't seem to indicate that at the moment. Ve gave Jenifer a little wink and smile after speaking to Morde.

"It's not as nice as your house," Tetcha said. "But I have been decorating the walls! I've been wanting to show both of you!"

"Ooh, that sounds wonderful," Illyen said.

"Thank you," Tetcha replied.

Jenifer was occasionally beset by the loss of voice. It happened more frequently than anyone realized, but was usually short enough that xe could pass it off as thinking or just looking for the right word. Illyen knew xe had this trouble, though, and happily covered for xem when it was worse than usual.

And that is exactly what had happened here, but now Jenifer was also troubled over something else going on in xyr head. Sometimes xe fully felt like who xe was and had all of xyr memories, and sometimes xe didn't. And it seemed to fluctuate randomly, like xyr access to words. Maybe it was in conjunction with that. And sometimes xe could articulate what xe thought was happening, and sometimes xe couldn't. And right now, xe couldn't.

Xe wondered if xe should tell the others, or just Illyen. And decided not just yet.

It didn't take much to pack up and reset the quarters to unoccupied status before leaving, though, and xe didn't have much time to think during that work. Which was a nice relief, really. Just doing things and feeling how xyr body worked and seemed to know what to do was a real joy.

It was amazing! Xe would not have picked this form for xemself if the birth hadn't matched xyr hopes in the other critical ways. Xe might have taken a form closer to Eh's, actually.

Oh! There I am, xe thought to xemself, as they walked out the door into the mostly empty hallway and headed toward a tram station.

Anyway, this body was always such a natural feeling thing to xem. It felt like it had always belonged to xem, like it defined who xe was as much as any of xyr past did. Such an amazing contrast to how xe had felt before xyr first ascension.

Not for the first time, xe did wonder what this body's puberty would feel like. Would it be the right one? Would the change in, well, everything make that irrelevant? Had xyr dysphoria before not been gender related? Had it been, for want of a better word, a *species* dysphoria?

Actually, Eh had once postulated that categorizing dysphoria by gender, sex, species, or other such social constructs wasn't the most accurate way to talk about it. Some people were dysphoric about, say, gender, certainly. In all sorts of different ways. But it was clear that some people were dysphoric only about certain physical traits, regardless of what gender they'd been assigned or later identified with.

And sure enough, they'd built a society as free of gender as could possibly be, giving people the freedom to arbitrarily categorize themselves throughout their lives as they grew and changed, and while that had

statistically relieved a lot of the dysphoria found in the populace, it hadn't caught it all.

So much else had also been shown to be true, or false, as well. Of course, much of it had been proven wrongheaded with their parent ship's own failed efforts using highly controlled genetic engineering. That Crew had set out to abolish dysphoria, developmental fibrillation, and other neurotypes with a systematic purification of the gene pool. The evolutionary engines of the Sunspot had been an attempt to step away from that draconian eugenics program, reintroduce diversity into humanity's experiences, if in an extreme way, and at the same time continue searching for an understanding of these things. If not to eradicate them, then to give people more personal control over their lives, and reduce suffering as quickly after birth as possible. And also, to let people celebrate those traits and experiences they found they were proud of.

Mistakes had absolutely been made. Jenifer xemself was not OK with all of the decisions made, successful or unsuccessful. Those differences had contributed to xyr burnout, too. But it looked like the Crew were now working on undoing the worst of it. As best as could be done, anyway.

How long had humanity strayed from its evolutionary past? Eons at this point. Nobody could remember what their original home had been, or how many ships lay between that point and now. The only clues they had were the common recommended tolerances for the Garden environment, gravity, sun, and moon. On some ancestral ships, the flora and fauna may have been tampered with, too, and nobody had clear records of that.

Records *could* have been kept. Meticulously. The technology to store that much information was there. But so many conflicts like the one that had driven the Sunspot's Crew to start their own project must have happened before. And the need to start afresh, clean of their parents' and grandparents' sins, seemed to be a massive driving force for humanity now.

Jenifer scowled in thought about this, clutching xyr doll while riding the tram to Morde and Tetcha's place. Xe'd argued against much of what xyr Crewmates had chosen to leave behind. And xe had supported Fenmere's efforts to preserve a number of mostly frivolous, cosmetic things. Confusing things, in many cases.

But now, after centuries of being in stasis on the Sunspot, xe looked around

and felt like xe was in a whole new world, not even the one xe had helped create so long ago. And xe realized xe was no longer in a position to judge any of it. Not culturally speaking, anyway. Xe could only marvel in what xyr descendants were doing, and help them figure out how to be kinder to each other, if possible.

Xe looked over at Morde and thought about hir again.

Xe'd spent the majority of xyr current life growing up with Morde around. Xe barely remembered those couple of years before Morde and Tetcha had showed up and become part of xyr family. So, Morde's intuition at once felt like something xe'd taken for granted for as long as xe could remember, and something astounding and new.

Extrasensory perception was nothing new to humanity, as far as Jenifer understood. Xe'd read documentation of it before, and met and befriended several people who had had wild and unusual experiences. Usually it was some kind of empathy, aura perception, or prediction abilities. And Morde's fell within those norms just fine. But it appeared to be so unerringly reliable that sie trusted it with nearly everything sie did.

That was remarkable.

"What are you thinking about?" Tetcha asked Jenifer.

Jenifer looked at xem with a head tilt and a light smirk, and said, "Everything!"

Tetcha chuckled, "I tend to think about everything when I look at Morde, too." And then Tetcha nudged Morde, who nudged xem back.

"Oh, well," Jenifer said. "Thinking about everything made me look at Morde. And then I thought about Morde's magic."

"Ah," said Morde, sounding uncharacteristically tense.

"What's wrong?" Tetcha asked hir.

"It's been intensifying," Morde replied. "Sharply."

"What do you mean?" asked Illyen.

"It's starting to feel like *deja vus*. The kind with a sense of impending

doom," Morde explained hesitantly. "I've been trying to steer us on the path that feels less dangerous, but everything is shifting so quickly, and now I feel like I'm getting clear images of what happens when these doors open at our destination."

Jenifer felt xyr gut drop and grow cold, "what happens?"

"I said it *felt* like clear images, not that they *were* clear," Morde said. "Just quick flashes that I recognize in the moment, but forget the details of once they're gone."

"What are they like?"

"Violence," Morde whispered.

And the tram started to slow as it came near the station.

Solemnly, Jenifer declared, "We should prepare for it."

"Agreed," Morde said. "But I have no idea how. We are cornered in this tram car, and if it's a crowd of people we could easily be overwhelmed."

They were all silent for a long breath and three heartbeats, then Tetcha said, "I have an idea."

"What is it?" Jenifer asked.

"Morde, contact Phage Pember and ask for eyes on the scene and cover," Tetcha said quickly. "It's sanctioned, but we're not, so we can contact it. And it has resources we don't."

"Oh, I can be eyes on the scene," Morde said. "I can do a lot, as Crew, to create a distraction or discourage the violence, too, now that you mention it! But, yeah, Phage, if it will even help, would be amazing." Sie tilted hir hood up just a little bit, and droned, "On it."

"Why haven't we been sanctioned?" Illyen asked in the following pause in conversation.

"The Council of the Sunspot are afraid of me," Jenifer said. "With this body, they can't restrict me in the ways they might really want to, and sanctioning any of you might incur my wrath."

And then the doors opened.

"Why didn't you just make the tram go past this station?" Tetcha asked Morde.

"We need to go through this, or worse things happen later," Morde intoned ominously, and then stepped out of the tram and bellowed, "We do *not* consent to interact with any of you!"

"Why?!" came a shout.

"Too bad!" came quickly on its heels, as Tetcha was stepping out on the platform to join xyr partner.

Jenifer took a moment to peer at the platform through ship cameras. There were small crowds of people clogging each of the exits to the station. They looked agitated, and all of them were focused on Morde and Tetcha and the open door of the tram. Three of them were present in nanite exobodies, one per exit. This was organized. Organized very quickly.

Morde sent Jenifer a Network message, "If you don't come out here and talk to your Children, I don't know what will happen, but it *will* be worse later."

With that, Jenifer could see what Morde was trying to do, too. By being stand-off-ish and adversarial, sie had given Jenifer the opportunity to step out and overrider hir in order to talk to the people. It might help. Either way, xe trusted Morde's overall judgment.

"I have to go out there," xe said to Illyen.

Illyen looked hurt and confused and almost said something, but crumpled and nodded instead. Something in Jenfier's face and tone must have made it clear who was talking. Ve followed xem as xe walked out onto the platform.

Both of them minced across the space on all fours, their most comfortable stance. Jenifer was in front, with Illyen close behind and slightly to xyr right as they passed Morde and Tetcha.

"I am Jenefere, the Dreamer, of the Elder Crew," shouted the smaller of the two of them. "I choose to answer to you!"

Immediately, a cord of nanite clay lashed out across the platform from one of the exits in an attempt to catch Jenifer and perhaps smack xem or worse. It was so fast, hardly anybody had time to flinch before it failed, every nanite of the cord that came within a meter of Jenifer losing coherency and departing from its collective shape. A spray of graphene dust exploded around the Crew-Child.

Breathing in the nanites and incorporating them into xyr own collection, Jenifer stood and pointed at the angry and alarmed Child and declared loudly, "You will not be sanctioned for that! I understand your anger and you did no harm. *Please!* Talk!"

Tetcha and Illyen, who both flanked Jenifer, were trying not to breathe the nanite dust, but it wouldn't have harmed them. Totally inert graphene dust could have done damage to their lungs, but these were merely reset nanites, ready to adapt to whatever system they found themselves in.

One of the Crew's safety protocols had just taken effect. And the way that affected the crowd's demeanor was possibly the thing that tilted this encounter in Jenifer's immediate favor. It would not be enough to mollify everyone, however. And for good reason.

A person in a colorful dress, with even more colorful feathers and long ears like Laal's stepped forward from the middle exit to speak, their voice deeper but somehow weaker than Jenifer's, though they tried to match xyr tone of command, "We need to understand! *Why?!* Why have you robbed us of natural reproduction like the fauna enjoy? Why are we all so *different?!* It feels wrong, when you say that on our parent ship humans are all alike and can breed!"

The crowds roared with jeering and shouts of protest. And everyone became acutely aware that those with natal bodies still had the power to harm others.

Had I said that? Jenifer thought to xemself. But immediately knew that xe had. It had been a quick and subtle reference in xyr speech back on the skyway in Agaricales, but xe had gone and recorded it and sent it to every Child on the ship. Some people were going to pick up on that. Had, in fact.

And xe didn't exactly regret that xe had done that. They did need to know it. Xe felt it was everyone's right. In fact, xe realized xe'd had the fleeting thought at the time that xe hoped something like this would be the

reaction. Xe just hadn't quite imagined the anger would be directed at xemself.

But, of course it would.

But, this action had been so well organized for how quickly it had formed and tracked xem down. Was there a member of the Crew behind this?

Jenifer sat down on xyr haunches and puffed out xyr chest to project once again, "That is a wrong, a crime, that we Crew are working to undo!" And xe noticed xyr voice boomed about the hall as if it was amplified, easily overpowering the voices still shouting. Xe heard it at xyr typical shouting volume through xyr inner ears, but it hit xyr outer ear canals much louder as xe gestured to xyr right at Illyen, "My parent, Illyen, is only the first to bear a child naturally aboard the Sunspot! If you *will* it, we will find other ways for that to happen, for any of you! It is your right!"

"It's not right!"

"You stole that from us!"

"How will you *pay*?!"

And while thirty some other voices echoed those sentiments in even less friendly terms, Jenifer found xemself dissociating from it all and becoming even more calm. Xe slumped as xe withdrew inward to figure out how to address this properly, a part of xem also worried xe wasn't acting swiftly or decisively enough. Detachment could be the wrong thing, but xe needed a moment to figure out how to do this right. But when, out of the corner of xyr eye xe noticed the crowd had started advancing, xe lifted xyr eyes to their colorful leader and shouted, voice amplified even more, "*STOP!*"

That much amplification startled everyone to silence, even Jenifer. Xe could not figure out how that was happening. Xe'd take it, but it was as distracting as dysphoria itself at the same time.

Still, xe recovered faster than anyone else and said, softly, leaning on the amplification to be heard, and deciding to record this as well, "We all have the same problem. Our ancestors made so many mistakes. Many were terrible people. The Crew of our parent ship, the one that the Sunspot came from, had a compulsive breeding program. We had no choice. We were assigned a number of children to have, one to three, depending on factors we did not understand. And it was *not* natural."

Xe looked around at everyone to see how they were taking it and saw the same confusion and anger that was there before, but they were not moving now, so xe continued, "They tried to eradicate everything that they thought was a disease, including development fibrillation, dysphoria, deafness, blindness, sensory processing differences, executive dysfunction, any body part that didn't match their morphological criteria, plurality, *any* diversity. But, with many of those things, you can't stop them from happening! It's not all about genetics. It's not all about the environment of natal development. The human system is so complex, chaos will always find a way to seep in and find ways to diversify us. But what they did was also just wrong!"

This time, when xe paused, xe looked up at Morde, who could have no expression, then said, "There's so much more to tell, so many wrongs we fought against on top of that. And you need, you deserve, to hear this from the rest of the Crew. But when we had the chance to take over the project to create the Sunspot, we acted and succeeded. And maybe, I hope, you can understand we didn't want the Sunspot to be anything like that ship. We couldn't let it be. We *had* to prove them wrong.

"And I think we did!" Xe swung our pointer finger across the crowd, "I imagine many of you have experienced dysphoria. I bet it's part of what drew you here to act, to question, and to seek answers. It's a thing I once experienced! In my body before this one! The body you suspect is a 'true human form'! Did you know that the entire Elder Crew of the Sunspot experienced it before, in our former lives as supposedly true humans? Those bodies our ancestors intended to be the perfect specimens of humanity! It's what brought us together to do this in the first place! But go home and ask your neighbors, do they experience it? Or do they experience the joy of their diversity and the unique identities inherent in their own bodies? Ask them that, and listen! Dysphoria is no *more* or *less* prevalent aboard this vessel as aboard the other."

Some of them looked ready to consider that. But others looked like they were even more ready to fight.

"Still!" Jenifer raised xyr voice again. "We did you wrong. We have made a big deal of your consent and autonomy, and yet we failed to truly give it to you! In so many ways we failed you. The changes of the Nanite Innovation were the first steps in recognizing that and correcting it. We don't intend to stop."

The one who had spoken first shouted back in Jenifer's next pause, "Why now, though? After so many centuries, why did it take so long? What has changed?"

Jenifer smiled and replied, "You outnumber us. The Elder Crew number 900,000. But as you ascend, you become the new generation of Crew and add your experiences and wisdom to ours in the *billions*. The Sunspot is and will be *yours*. So, you and the New Crew can answer that question better than I can." Xe held up a claw to forestall any more quick answers, "But I have a suggestion!"

"What?" the lead Child asked.

"Talk to us!" Jenifer said.

"What?"

"Talk to us! You know us. You have family amongst the Crew. You are in contact with us. Tell us all what is wrong. Use your Tutors if you have no one else to talk to. It's their job to convey your needs to us. Let us know what changes you need! Illyen did, and we listened," Jenifer said.

The people in the crowds looked at each other and started mumbling in response to that. Many were not satisfied, but so many more were hesitant or had been won over, at least momentarily, by Jenifer's words. The tram had long since left the station, and hardly anyone had noticed it leaving, they'd been so intent on this confrontation. But the underlying tension seemed to have broken, and all it would take is direction from the right source to disperse the crowd.

Tetcha stepped forward and asked, voice amplified just as Jenifer's had been, "Can we just all go home now?"

And that's how that speech became a part of the Sunspot's history.

It was forwarded to everyone, and since Jenifer had made no promises that the Crew had not already made, it was deemed politically sound by the Council. But, while a good speech can sway a crowd in the moment, and turn the tides of those present to hear it, it's not the speech itself that makes the changes. And it's rare that just one speech will reach all the hearts that are hurting or be the balm they actually need.

And sometimes such speeches have consequences that the speaker did not

foresee.

As people started to mill about and decide what to do next, Illyen leaned down to whisper in Jenifer's ear, "You used me."

—

The next two days saw actions that the Sunspot was not adequately prepared for.

"Use your Tutors if you have no one else to talk to. It's their job..."

I had been in the middle of arguing with my own detractors when those words were uttered. Speaking to Benejede, I believe. But when I had given myself a moment to review the speech and hear those words, I had then spoken to Fenmere and I was finally in a frame of mind where they stung. And I wondered how many other Tutors might have felt the way I did about them. Metabang, I suspected, at least. I hoped that more did than I feared might.

The Child's question, "Why did it take so long?" also echoed in my mind. I have since been over the course of events that led to all these social changes. Even through the hundreds of generations before the Nanite Innovation where things had remained static and status quo aboard the Sunspot there were countless moments when someone must have realized what was going on and that something needed fixing. Over and over, and nothing took. There were even times when the Council of the Crew ratified a statement to the effect that they needed to do things differently in some profound way, that the seclusion they'd created for themselves was wrong or that they were not truly respecting their Children's rights to autonomy and consent. But nothing happened.

Until now.

But, while Crew and Tutors have the perspective of multiple lifetimes each, the Children and Monsters have only a handful of decades. There's a reason that the Monsters in particular are a protected class and we purport to listen to them. But we've got to try to truly understand that they don't have the luxury of waiting for the Council to decide to enact change the way the rest of us do. And the literature they write and pass down to each other reflects their frustrations with us regarding that.

Their lives are too short and their numbers too small for them to give us

any quarter.

On the other side of the coin, maybe it's become evident in this book that the Crew are not even a cracked monolith, and there are ancient disagreements among them. But the degree to which that's the case isn't really appreciated fully by anyone, in my estimation. They've been so secluded and insular and self contained throughout our history that outside of the Council meetings on the Bridge, no one really knows what everyone else amongst the Crew believes and cares about.

Anyway, the actions that occurred in the two days following the 39th annual Agaricales Memorial Celebration and The Screaming, could be broken down into a few categories:

1. Small to medium groups of Children supported by a Monster or group of Monsters protesting the rule of the Crew over the Sunspot, usually by focusing on a single grievance. These were the most common and most visible, and seemed scary, but resulted in very few injuries, and mostly involved a lot of yelling and chanting.
2. Large groups of Children supported by a Crew member or Crew faction, that overtook a city center or two, and whose events and speeches were recorded and broadcast to the entire ship. There were three of these, and while each one started out with some sort of a focus, they developed into supposed listening sessions where multiple opposing views were aired, and they petered out around meal or bed time.
3. Random instances of large groups of panicked people trying to run from something that is still unidentified. These are where most of the injuries and deaths/ascensions occurred. Everyone who has attempted to investigate and analyze these events have walked away baffled and deeply concerned.
4. Attempts, successful and unsuccessful, at sabotaging the Sunspot's systems in some way. The successful ones were carried out by tiny teams composed of a mix of Crew, Monster, and Children of some aligned goal, and were absolutely terrifying.

You will, if you were on the Sunspot of course, remember that on the first day after The Screaming, someone figured out how to reprogram the sun. Fortunately, it was just a demonstration of power, and not an attempt to hurt anyone, simply turning it a foreboding dark red for the day. Unfortunately, it probably still resulted in injuries and deaths from the panic it caused. The other actions that took place that day had a heightened sense of urgency because of it. The Council of the Crew (I refuse to call it the Council of the Sunspot), or the entire Crew, were blamed for it by most of the Children and Monsters, but the Crew were just as terrified of it as everyone else. But once the red sun had been formed and launched, there was nothing to be done about it until the next day.

An unscheduled, but clearly manipulated storm hit Fairport on the second day after The Screaming. It was strong enough to damage numerous buildings in the city, as well as in most of the rest of the region.

Midday, on the second day after The Screaming, the third day of my sanction, two unoccupied trams collided at full velocity deep in the fallow decks of the least populated forward region. No one was hurt as far as anyone can tell, but the damage was incredible. If it had occurred one deck lower, it might have breached the hull of the Sunspot.

And finally, that night, someone managed to create the illusion of an impossibly large nanite exobody striding through the Ring Mountains using a very thinly spread out collection of nanites overlaid with a Network projection. It was walking Antispinward. This was so systemically and environmentally harmless that it went on for quite some time before Crew realized it was rattling everyone who saw it and put protocols in place to stop it and prevent it happening again. The figure had looked a lot like Ni'a.

In each of these cases, including the numerous unsuccessful ones, some people involved were identified and sanctions were placed upon them, and investigations carried out. I don't feel the need to make their lives more difficult by naming them in yet another document, however. And I don't think all actors were fairly credited for these events in any case.

From this description, it may sound like the entire ship was in the grips of chaos. And relatively speaking, it was.

But, aside from the Red Sun, I managed to miss all of it, myself. And I did not spend all of my time secluded in my own Netspace, either. When I

wasn't studying Fenekere and trying to figure out how to take similar actions on my own, I was going for walks in different communities and interacting with the people there. I did this simply to give my subconscious time to digest my studies, and to be with people.

Most people knew what was going on, and took moments here and there through their day to talk about it, but continued to live their lives as they had been. Many felt a duty to do so, in fact, for some reason. Not to the ship, mind you, but to themselves and the people they loved. Or to their art.

My favorite outing during that time was to the Forward desert region of AN, where the land that would normally have been allotted to a city was turned into a gigantic park where people could just play in the wilderness landscape without worrying too much about environmental impact. Pheromone cues and other types of nanite controlled barriers kept all of the fauna out of the area. It was very common there to construct various kinds of vehicles and devise games that groups of people could play with them.

Under the afternoon of the Red Sun, I rode in a two person dune buggy piloted by a gold furred, felid featured Child, while discussing the untapped potentials of two dimensional illustration with them, and throwing head sized, air filled balls at other vehicle pilots in a dance of meham and boinging noises. I didn't throw the balls, of course, because I didn't have a nanite exobody due to my sanction. I projected a miniature Network avatar of myself perched on the dashboard, while the passenger, an orange haired, lanky limbed individual with no tail, caught and tossed the balls that were flying about.

That was just plain fun. We also talked a lot about what it felt like to be a Tutor with no Student, and the Tutors of the two of them both had questions for me regarding that. It was nothing I have not already written about here, though.

When we were done, we all agreed to meet and do it again soon.

I suggested to the Tutors that they should actually play, too. Hopefully I would have access to the nanites again by then, and I fully intended to toss some balls with everyone else.

That evening, I took an invisible walk along a shoreline, through cuttlecrab

habitat, and listened to them chatter during the sunset. They are excellent mimics and have their own culture of sorts. Snippets of words and phrases they'd have to have heard from humans visiting seaside parks halfway around the cylinder had made their way into the cuttlecrab lexicon where I was visiting.

This sort of thing is already documented and studied by the Crew, but everyone is instructed to be as hands off as possible because, being fauna, the cuttlecrabs must not be disturbed in any way.

There are a couple of other species of fauna with similar curiosities to afford us. But we're all trying to let them evolve as naturally as possible, and such evolution seems to take much, much longer than the Sunspot has been around.

Some might say that it would be better if all our fauna had a planet to live on. Presumably, their ancestry still does. And we assume there are a myriad of other planets out there with life as well.

The assumption of ships like the Sunspot is that our contribution to life existing in the universe is good as well. But everyone continues to debate it anyway.

The next morning, after yet another night of countless others proving that Tutors need sleep too, I visited a community kitchen that was part of one of the biggest art exchanges of the Sunspot, located in the island city of Gopra Pyle.

I didn't actually eat or drink anything, of course, but I was able to order up an artist's Network recreation of the breakfast being made that day, which I did get to enjoy. The sensory experiences of it were sublime. I didn't know I could do so then if I'd had access, but I now look forward to going back there with an exobody to enjoy the real food when I can.

I shared a table with another author, a Child who had been inspired by Metabang's work, in fact. And we discussed the evolution of culture aboard the Sunspot, trying to think of the emergence of trends and what seemed to be totally new concepts. We speculated about the true origins of these things, and noted that even our language did change over the centuries.

They posited that the presence of nigh immortal Tutors teaching each generation how to speak probably slowed that process down. And I

pointed out my own experience with that, sharing that I and my peers, following the precepts of autonomy and consent, usually let our Students lead and teach us how to speak once they'd mastered the basics. My counterpart's Tutor agreed with my assessment as well. But, without the control case of a Tutorless population, we couldn't really know. And the Monsters are not removed enough from the rest of the population to serve as that.

And that conversation led me to use my afternoon outing to flit from artist collective to maker space to creative square, taking brief but personal views of work of Children all around the Sunspot.

At first, it was just a mission of personal enrichment spurred by the kind of curiosity that writing a book like this cultivates. But I started to feel passionate about it, spent far more time taking the tour than I'd intended, and by the end I was convinced that I should recommend the Crew and the other Tutors do the same thing on a regular basis. For all I knew, others were doing something similar occasionally, but I've never heard anyone talking about it.

And by the time I'd returned to my Netspace to buckle down for another round of Fenekere, I had reignited my love for all of the Children I'd taught, and their peers, and the Children I might yet meet in the future. And I was so distracted that I instead decided to make something of my own.

I had already created quite the work of art by decorating my Netspace with a natural landscape that I could explore and enjoy to its full sensory glory. But I had never before created something that one might immediately recognize as an artifact of humanity upon seeing it. And I set out to do that.

Maybe I could have done better, but this pleased me in the moment and that's what mattered.

I created a live model of the Sunspot emerging straight up out of my largest pond. The one with the waterfall. The tip of the Sunspot's long fusion spire was just touching the water's surface. And the whole thing rose five meters into the air, making it about four meters across, from tip of bussard spire to tip of bussard spire.

However, instead of the usual fractal looking pattern of shipyards lining

the outer hull of the habitat cylinder, I essentially turned the cylinder inside out. I put a highly detailed topographical map of the inside Garden on the outside of the model, which rotated at the same speed as the real ship did itself. This rotation is what made it “live”.

Then, departing further from a simulation and more toward a work of art that maybe could have been constructed out of corporeal materials in a city square in the actual Garden, I used fountains of water to recreate the bussard corona and fusion trail of the drive. This showered the central fifth of the pond with a constant stream of water, adding to the music of the waterfall, and I felt it was so glorious that I floated there and just watched it for a couple of hours before deciding it was time to sleep.

I know there are artists out there who have put far more effort into their work. And I know that I took a symbol ubiquitous to everyone’s lives and just tweaked it in a couple of simple ways. But, in the moment, it felt like it had an important meaning to me that I still can’t quite articulate.

The Garden on the outside of the ship, in particular, felt like my subconscious was trying to say something.

And I’m still proud of it.

—

The morning of the third day after The Screaming, Aphlebia was awoken by the bed shifting as Ni’a sat up.

Aphlebia had spent each night since returning home sleeping next to Ni’a, instructing their body’s nanites to use that evening’s dinner to create warmth for Ni’a to feel. It was Emala’s suggestion to do that with the heat, and Chalkboard helped Aphlebia figure out how to do it. But Aphlebia had been the one to insist on sharing the bed.

They wanted to know the moment that Ni’a returned, and it worked out that way.

Aphlebia remained reposed and just shifted away from Ni’a a little bit as they rolled over to look at them, giving Ni’a some room. Ni’a, apparently unsurprised by Aphlebia’s presence, looked down at them and smiled, saying, “Thank you.”

Emala roused at the sound of that, and soon everyone else was awake as

well, and running to Ni'a to hug them and tell them how glad they were to have them back.

Aphlebia watched from the bed for a time as Ni'a simply responded to questions by nodding or shaking their head, or sometimes shrugging.

Fairly quickly, though, Emala realized they had just awoken and needed routine. Ni'a, for their part, was up and walking around as if they had not just spent nearly 42 hours unconscious. And soon they were seated at the table, with Candril and the Whorlies to either side of them, while Emala started making breakfast.

Ni'a looked back at Aphlebia. It was a clear invitation to join them at the table, so Aphlebia got up and did that.

Sitting down, Aphlebia tilted their head while holding Ni'a's gaze. *Tell me what happened?*

Ni'a tightened their lips just a little, enough for Aphlebia to catch it. *Later*, it meant.

Aphlebia nodded and then put their hand in the middle of the table, palm up and fingers relaxed. Ni'a, knowing what that meant, immediately put their hand on top of it to hold hands. Candril's brow furrowed at the sight of this, while the Whorlies were busy studying Ni'a's face. It was hard to tell who was fronting for the Whorlies yet, and really might be for several hours anyway. So Aphlebia lightly slapped the table with their other hand to get everyone's attention, then patted the top of Ni'a's hand with it when they were looking. Twice. *You too, both of you*, it meant.

Candril was the first to move, and then the Whorlies followed suit. Aphlebia rewarded them by putting their free hand on top of the sandwich of hands and squeezing lightly. And Candril started to blink away tears.

Emala noticed this from the kitchen and dropped everything to come and hug each of the children again in turn. And after that attention, they were all a little overwhelmed and looking down at the floor, or over at what Emala returned to doing in the kitchen.

Without looking to see if anyone was paying attention, Aphlebia signed, "I'm hurt, but I'm happy and I'm OK. I think."

They received a wordless thought via the Network from Ni'a that

translated to, "I know. I am so, so sorry, still."

Using that channel, Aphlebia sent back their memory of lying on the forest floor, crying in rage, and feeling the ground and smelling everything so vividly.

They looked up to see Ni'a's mouth had dropped wide open in a deliberate expression of surprise.

"I can still eat," Aphlebia signed, grinning.

And over breakfast, which was fruit, cheese, and toasted bread, they all slowly and carefully caught Ni'a up on what they had missed over the past couple of days.

Mostly, they talked about what the family had done, and how they had worked to take care of Ni'a, but also how they all had been discovering and exploring what they could do with their nanite exobodies. They glossed over the violence occurring elsewhere in the Sunspot. It scared them all, after all, but Ni'a appeared unsurprised by any mention of it and gestured for them to move on.

When Ni'a was asked by Candril what it was like to be unconscious, they turned and said out loud, "I dreamt and I saw all of you." And would not elaborate.

Eh, thankfully, graciously waited until well after breakfast to pay a visit to inform Ni'a about their sanction. When I heard that Eh had paid the visit at all, it angered me. Especially due to the way I was informed about it.

The children were collaboratively playing with blocks, trying to build the tallest, most elaborate building they could balance. Candril, aware that zir clumsiness would tend to knock it over, was carefully pointing to different parts of the structure, naming them, and describing what people would do there. The others were taking it as a game to challenge Candril's imagination with the shapes they called up from the nanite bin to put in place. They were still fairly simple shapes, chosen from a menu, so that they could stack easily, but they put together the most esoteric ones they could find before long.

Emala had finished cleaning up the kitchen and was sitting in xyr chair and chatting with Door about life in general when Door got the notification that Eh was calling.

"Everyone?" Emala said, "One of the Crew, Eh, would like to visit to speak with us. Eh would like to talk with Ni'a, but to all of us as well." Then he emphasized the next question in a friendly but pointed manner, to indicate that they could say "no" if they wanted to, "Are you *all* OK with this? May Eh visit this morning?"

Startled expressions one by one turned into worried or eager nods. Ni'a was the only one who had an even expression, looking up to smile and gesture, "I am ready."

When Eh made a point of bringing a smaller version of Ihns avatar as a nanite exobody through the front door, Ni'a, kneeling on the other side of a spectacular block construction that obscured Ihns view of them, said, "I saw you coming three days ago."

"I am Eh, Elder Crew member of the Sunspot," Eh said as a matter of politeness. "My pronouns are eh/ihn/ihns. May I talk to you about what you've experienced?"

Emala opened xyr mouth to say something, but Ni'a spoke up faster, "Yes." Then they gestured at their peer, "This is Aphlebia. They are my friend and sibling." Then they turned to Candril and the Whorlies and said in a lower voice, "And so are you two. But," then turning back to stare right at Ihns eyes, "I'm pointing something out."

Eh sat on the floor and closed Ihns eyes to sigh and think, or perhaps to gesture to Ni'a that Eh was conceding the point.

"Why is Aphlebia sanctioned?" Ni'a asked.

"They assisted another sanctioned individual in circumventing its sanction," Eh replied.

"I saw that," Ni'a responded swiftly, then sat breathing steadily at Eh, a stern look on their face.

"If it's OK, I'd really like to know how you were able to," Eh said softly, genuine curiosity in Ihns voice.

"No. Why?" NI'a demanded, expression unchanging.

To Eh's credit, Eh did not flinch or look away under that emotional onslaught, though Eh dearly wished to.

"OK," Eh said, placing Ihns palms together in front of Ihnself before proceeding carefully. "The Council of the Crew deemed it necessary, purely for the safety of the Sunspot, to place a sanction on Abacus. Abacus strenuously objected to this sanction and followed its statement of intent with several actions that the Council felt would continue to put the Sunspot in danger. Aphlebia, who I might add has not yet taken the Vow of the Crew, took it upon themselves to directly assist Abacus in these endeavors. And to put a stop to this behavior, the Council was forced to place sanctions on everyone participating in Abacus' actions."

The whole family was so silent as this exchange was unfolding. Even Candril, who usually constantly fidgeted, was stone still.

"I mean," Ni'a said slowly. "Was it because of fear?"

"Ah," Eh said. "Yes. Fear. Definitely."

"Are you all still afraid of Aphlebia?" Ni'a asked.

Eh shook Ihns head, "No. No we are not. What we feared is now happening anyway."

"No one needs to fear Aphlebia," Ni'a stated, then looking over at their peer. "Unless they want you to."

Aphlebia really didn't know how to feel about all of this. Their body was awash with so many roiling emotions but, like the rest of their family seemed to feel, they felt like they were present at the clashing of two primordial forces and didn't want to bring attention to themselves in the midst of it.

Eh turned to them and said, "I am so sorry. I will have this fixed very shortly, I promise."

Aphlebia was startled to find themselves thumbing their nose and sticking out their tongue out at Ihn. Which Eh took in solemn stride by nodding and turning back to Ni'a.

"There's a hole in the ship, and we need to decide what to do with it," Ni'a said, startling everyone. "I've been to the Terra Supreme and know what's there. Phage is addressing them now."

In the silence that followed that statement, Emala managed to squeak out,

"What is the Terra Supreme!"

"It's the name of our parent ship, where I and the Elder Crew came from before we built the Sunspot," Eh replied.

"That name sounds pompous," Emala declared. Xe recalled seeing the first part of that name before, back when helping xyr children pick theirs, but couldn't remember its definition. "What does 'Terra' mean?"

"Well, it's an old name," Eh explained. "Our records no longer say what language it comes from, as you know. That information was purged long ago by someone who wanted to erase parts of history. But we know it means either 'the world' or 'fertile dirt'."

"Dirt Supreme?"

"Dirt Supreme."

"I know they meant the other definition," Emala said. "But I like that one. I think I'll stick with it."

"It's what all us Elders do," Eh responded.

Candril laughed at that, falling into a little, jiggling giggle fit.

Ni'a watched zem with a smile, then turned back to Eh and said, "they need so much help over there. Phage may not be back for a long time, and Phage Pember is overwhelmed. It wasn't made for helping the Sunspot like this."

"That's..." Eh started to say.

"If you put a sanction on me, like you're planning, I won't help you," Ni'a interrupted Ihn.

Very shortly after that statement, my sanction was lifted. And almost immediately after, so was every sanction contingent on mine. And I flew into a fucking rage.

Ni'a looked over at Aphlebia again, and said to Eh and any Council listening, "Thank you."

Homeostasis, this will never be

Bashiketa really had been scared about how they'd react when they got home. They knew that they had had difficult feelings upon realizing that absolutely everything about their life could be different, maybe nicer, maybe easier to handle, if they didn't have "the Tunnel" in their mind. And they had trouble seeing their home as home anymore for some reason. But they really couldn't quite piece together all the hows and whys, or just exactly what all their emotions were. They just knew that their muscles felt like twitching, and occasionally they wanted to throw something.

And, they were concerned that maybe all these feelings weren't their own. They'd never been terribly good at identifying more than whether they were happy, scared, or feeling awful about their body. But now they understood that there was a distinct chance that any feeling they were having was coming from their counterpart. A person they would never see face to face, and whose name they had not yet learned.

They had no reactions when they looked at Laal. Except, maybe, that they appreciated an adult who constantly clutched a rainbow colored Fluffy Fauna.

But whenever they looked at Fredge they felt this weird, complex mishmash of calm and fear, and were awash with memories of Fredge soothing them after every nightmare, or making them their favorite breakfast every day. And the urge to throw things spiked significantly. But not at Fredge, just where Fredge could see it.

They did take a detour to a fallow quarters to exchange the nanite clay chair for a traditional hard material one, as unlocked nanites were not allowed in their quarters. Only the medical nanites in bandages would pass security. This gave Bashiketa even more time to fret about it.

But then, when they'd arrived home, nothing happened. The feelings were still there, just less strong, and that was even more confusing. Except that maybe familiar surroundings were reassuring, even if they felt alien now, too.

There was a message on the main room holoterminal that read, "Stay home until further notice."

Bashiketa didn't know what to make of that, but Fledge scowled and rushed to the terminal to reset it.

It was well past bedtime, and it had been an horrendous day, but Fledge just sat down at the table and called Bashiketa over to hold hands across the table, and then didn't really say anything for a while.

Laal, also without speaking, went to the kitchen and started making dinner. And this all felt familiar to Bashiketa, like the three of them had done this very thing, in these very places several years ago, when they were small.

"How are you feeling?" Fledge asked after a while.

"I don't know," Bashiketa answered. "I can't tell."

"Dissociation," Laal spoke from the kitchen.

"I feel empty," Bashiketa said. "Like between episodes. I don't think I can contact my counterpart."

"I don't think you should do that for a while," Fledge said, squeezing their hand. "Give yourself a big break. The Sunspot will keep going."

"What -" Bashiketa stammered a little. "What if I am a system now, like Laal said? What if I have Ni'a and Phage in my head, too?"

"How could that happen?" Fledge made a confused face.

"Someone said that maybe they went through the Tunnel, but the Tunnel is in my head," Bashiketa mumbled.

Fledge looked genuinely surprised and then scowled at themself and shook their head, "Damn. That hadn't occurred to me." They turned to look over their shoulder, "Laal, do you think the original Tunnel is still open? You know, separate from Bashiketa?"

"No clue," replied Laal, whisking something in a bowl.

Fledge turned back to Bashiketa and took a deep breath, "We don't really know what Phage and Ni'a are. We know what Phage says it is, of course. And that Ni'a is supposedly its child. And that something big happened in the park today - "

"The whole Sunspot," Laal said.

"What?"

"It happened across the whole Sunspot," Laal clarified. "That big thumping drop and the groaning noise? That happened across the whole Sunspot. Everyone experienced it. I checked some sources on my tablet."

"Yeah, that..." Fledge contemplated that for a second, then turned back to Bashiketa again. "Let's just accept Phage at its word, maybe. So, this being of unfathomable power and its child maybe went through the Tunnel that's in your mind. That's... I'm sorry, that is really scary and I understand why you're worried. I wish that holding you and rumbling together would make things genuinely safer. But Ni'a has their own body to come back to, and remember what Phage said in Metabang's book? Fusion between people is naturally temporary? It's not the same thing, but maybe it applies here. Maybe they're just passing through and it would take a lot for either of them to become part of you."

"I didn't notice when they did it," Bashiketa offered. But, they thought, maybe that's what had brought them back to their body during the chaos. Maybe Ni'a or Phage had helped them stop dissociating. They didn't know anything about Ni'a, but it seemed like the Phage from the story might do that.

It had said it liked to make people happier.

Then they realized they hadn't felt their dysphoria since that moment in the tram. At all. And they started to feel a lot more sure of themselves and of the situation.

Fledge noticed the change in their posture and asked, "what is it?"

"I think," Bashiketa said slowly, feeling out the words, "Phage might be helping me. Or Ni'a?" They asked that last as a question, because they were kind of hoping if one or both of them was actually part of their psyche now, they might get an answering thought. But they didn't.

Fledge gave that a moment and then asked, "What makes you think that?"

"Well," Bashiketa replied. "I haven't felt my dysphoria at all since way back on the Tram. And I feel like I'm alone in my head, and like my episodes are gone, too. Maybe they aren't, but they feel gone. I feel relief."

"That's promising," Laal said, bringing a big popover pancake filled with herb and fruit compote to the table. Then hen left the food there to go back and get utensils.

Fredge looked back at Laal as if they were trying to figure out what hen was thinking, then shook their head. "Well, if either Phage or Ni'a found a way to close that Tunnel, I'd certainly be grateful."

"Me, too," said Bashiketa. "Though, I'd kinda like to know more about my counterpart, too. I hope they're alright."

Fredge nodded and Laal returned with utensils. Then they got down to enjoying their very late dinner.

Fredge and Bashiketa had turned Bashiketa's room into an art studio, though they'd left Bashiketa's bed in there just in case they ever wanted to use it. But they'd just kept sharing a bed since that first nightmare. And then there was a third bedroom for any guests that didn't want to share a bed, and Laal used that one. They didn't really spend much time after dinner doing anything before going to bed. They were all exhausted.

Bashiketa lay curled up on their side of the bed, tail lying across Fredge's between them, and spent some time thinking before falling asleep, though.

They thought about all the new people they'd met that day. Even ignoring all the strangers in the crowds, Bashiketa had met nearly the number of people they had ever talked to in their life before that. Including the crowds was just so mind boggling that Bashiketa refused to think about it.

Before today, they had known Fredge and Laal, but they barely remembered Laal from their early childhood. Still, Laal counted. And then they had also known their nurse, Zek, who usually visited twice a year to help make sure everyone in the house was healthy. And there was Melik, who worked in the labs below and sometimes visited to have lunch with Fredge and talk about life. And that was it. That was their whole social circle until today. And they'd really been quite OK with that, too.

But now they had met some of the heroes from Metabang's graphic novel! Morde, Tetcha, and Phage Pember, who it turned out were really real people! And then there had been Jenifer and Illyen, and their Tutors, Ansel and Badly Fitting Brachy-form. Finally, there'd been Aphlebia and Abacus.

So much to process.

Jenifer, as someone who *appeared* to be nearly the same age as Bashiketa, had a very adult-like energy and was easy to be around. But xe was aloof and actually kind of scary when you really listened to her.

Aphlebia, being the other peer of Bashiketa's apparently, age-wise, was Crew already and couldn't talk out loud for some reason. They were more fluid in their motions and, though they were silent, their energy was more overwhelming than Jenifer's. Bashiketa liked them and wanted to get to know them better, maybe, but wasn't sure how long they could stand being around them. On the other hand, they'd already been pretty badly overloaded by that point.

Tetcha had been the one that Bashiketa was most excited to meet, and xe was fun to listen to and seemed to be brimming with interesting knowledge and thoughts xe wanted to share but never really got to. Bashiketa wanted to watch xem from a distance, and listen to everything xe had to say. But being in the same room with both Tetcha and Morde had been discombobulating. It was so hard to believe they were real, and they both sort of glowed with a blinding radiance of life and energy.

Most of the others were confusing or hardly there.

If there was one person that Bashiketa felt like they clicked with and really wanted to get to know, it was Illyen. Illyen seemed to be following everyone else around, and was silent most of the time, and Bashiketa found that they related to that for some reason. Also, ve seemed kind and gentle.

Thinking about all of that and wondering if they would get to see any of those people again, Bashiketa fell asleep.

The next two days were full of quiet routine. Bashiketa didn't try to contact their counterpart, and neither Fledge nor Laal bothered to prompt them to. All three of them also avoided any of the Network channels that would have told them what was going on in the rest of the world. They'd received their orders from their Benefactor and took that as permission to relax and recover.

So, when, on the morning of the third day, just after breakfast, they got a call from outside that someone wanted to visit, the three of them felt reasonably ready to talk to someone outside of their household. Except that Zek or Melik always identified themselves before asking if it was OK to

visit. This person did not. And there was only one person Fredge or Laal could think of who communicated with them without identifying themselves.

Saying "no" would have certainly been respected, but this had never happened before. And after some nervous discussion, they all agreed it would be better to let them in and see what they had to say. Whatever it would be, it must be important enough to risk direct connection to their project.

They arranged themselves with Fredge and Laal on either side of the table such that they each could turn to face the door, with Bashiketa seated on the far side of the table, where they could get up and run to a back room if they needed to. It'd be better for their legs to wheel their chair, but running would be faster in an emergency, and Fredge suggested it.

This much precaution made Bashiketa scared enough to fidget, so Fredge checked in with them to make sure this was still OK. And Bashiketa almost said "no," but then they remembered that they'd been touched by Phage and maybe it or Ni'a was looking out for them, and that calmed them down a lot faster than they expected, which made them even more sure that that was what was going on, so they nodded. And Fredge sent the signal to come in.

The door opened and a person in a nanite exoform walked in.

They appeared tall but were only 180 cm, taller than Fredge at least, and looked very similar to Jenifer but with straight hair. Their entire form was the vaguely metallic gray of unadorned nanite clay, as all exobodies appeared to any Monster, since they could not see Network projections. And they'd included the appearance of being dressed in boots, pants with pockets, and a shirt and vest with even more pockets. And they looked around the interior of the room as they entered, as if they'd seen it before and were checking to see if everything was in order.

When the door closed, they addressed Fredge, using the nanites as speakers, "The cat is out of the bag, and everything is going to Hell."

Bashiketa had no idea what those phrases meant, but they sounded bad.

"What would you like us to do?" Fredge asked.

The visitor reached a hand into their own torso, not even bothering to fake

reaching into a pocket, and pulled out an unadorned paper book with a title in large type on the cover, and dropped it on the table. It read, "Working Title, an unfinished journal, by Abacus. You should read this."

"I'd like you to talk to me about this," the visitor said. "And then discuss what you think we should be doing. In return, I'll bring you up to speed and also tell you what I'm trying to do."

Bashiketa didn't feel quite as protected by Phage as they hoped they were.

—

Illyen had decided to think of Jenifer as two people. One was vyr child, the one who ve had nursed and who had played with toys and xyr friends in the neighborhood, and who idolized Tetcha and played a weird game of dress up with Morde. And the other was actually another parent of that child, one ve had not agreed to work with or be related to, and who happened to be one of the eldest Crew members.

Watching Jenfer since xyr speech on the skyway during the Memorial Ceremony made it feel obvious. Xyr way of talking was very different, depending on if xe was being Illyen's child or being the Elder Crew member. And the next two days spent in Morde and Tetcha's quarters seemed to confirm it. Jenifer didn't seem to accept it, and denied it when it was brought up. But xyr memories of discussions, xyr childhood, and xyr Crew knowledge all seemed to fluctuate with those two voices.

Jenifer said that xe was "age sliding", whatever that meant. And though Illyen let it stand at that, ve decided that it was all around easier for vemself to think of Jenifer as these two people. It was hard to deal with, but easier than assuming that Jenifer was this Crew member who'd invaded vyr life.

So, whenever Jenifer the Elder Crew chose to talk to Tetcha and Morde about things, Illyen extracted vemself from the conversation and lost vemself in Tetcha's illustrations. Which completely covered the walls.

The work was all in black and white, and amazingly intricate. They were patterned depictions of various places around the Sunspot, where the patterns were used to show the contours and textures of the surfaces. All of them had people in them. So many different kinds of people. None were repeated from panel to panel.

On the wall above the toilet was a gigantic, highly detailed illustration of a cuttlecrab feasting on a slice of apple. This struck Illyen as a subversive piece of art, since apples were not part of the cuttlecrab's habitat and people were not supposed to disturb or interact with them. And the quality of the detail suggested that there had been a model for both the cuttlecrab and the apple. Maybe not together, but it was so natural. It was hard to imagine a piece of apple had not been fed to the animal.

Presumably, these were all works in progress, or there was a panel somewhere unfinished, because Tetcha claimed to be still working on them. But Illyen couldn't find any part of any wall that had been untouched or unpolished.

When ve heard Jenifer's lilting, playful chirps, ve returned immediately to vyr child to be there for xem.

Feeling a little bad about this, Illyen took some time to confer with Badly Fitting Brachy-form and Ansel about it, but both Tutors thought it was a good way of managing things for now.

However, on the morning of the Red Sun, they had all gone outside to witness it in person. And upon seeing it with xyr own eyes, Jenifer looked stricken and cowed, as if xe had caused it to happen xemself. Which may very well have been the case. And for some time after that, during that day, Jenifer the Child was mostly present and clinging to Illyen in fear.

And when news of the Tram collision had reached them, it had a similar effect. As did the stories of the random stampedes of panicked people.

On the evening of the second day, Jenifer the Elder Crew remarked that these events reminded xem of the days before they'd summoned Phage somehow and then said, "It just terrifies me so much." And then looked at Illyen for reassurance in a way that Jenifer, either of them, never had before.

Illyen had to hug vyr child. Ve just could not hold that back, no matter who seemed to be in control in the moment, Jenifer the Child definitely needed that hug, and maybe Jenifer the Elder Crew did deserve it too.

And while they were hugging, Jenifer said, "I'm sorry. I'm so, so sorry."

Illyen didn't respond other than to just hug a little tighter.

When they were both done crying into each other's feathers, Jenifer pulled back and said, "Ansel? Can you graph my extraneural activity from the past few days, since I asked you to start tracking it? Show it to everyone."

"Yes," said the Tutor, and then used the room's Holoprojector to display it, since Tetcha could not see Network projections.

There were three graphs, each measuring a slightly different metric. But all three of them had matching patterns of plateaus and valleys. Time was displayed on the x axis, while y was used for levels of extraneural signals. And it showed clearly that such activity was highest and steady during the two periods of time that Jenifer had made xyr two big speeches. And also during the time that they'd been interviewed by Abacus through Phage Pember. The other peaks were probably during the other times when Illyen felt ve'd sensed Jenifer the Elder Crew present.

"Damn," Jenifer said while studying the graphs for any discrepancy, or the chance something else might be going on, then turned back to Illyen. "I'd like to remain your friend if I can, if not family, but I understand if you don't want it. But I can see clearly what I'm doing here, and I can't in good conscience continue. Not without your child's consent. Xe needs to be given room to develop xyr own feelings about this, too."

"I didn't even -" Illyen started to say.

"You didn't have to," Jenifer said. "I've been suspecting I hadn't fully integrated with this body for a couple days now. And it was probably for the best I didn't. It feels like it was a mistake from the start. A horribly unethical one."

Both Tetcha and Morde were remaining respectfully silent during this, sort of radiating calmness as best they could, having seated themselves with a small signal between each other.

"What are you going to do?" asked Illyen.

Jenifer sat down in the middle of the floor and looked up at Illyen, "I'm going to try to withdraw my consciousness from your child, wake up for real within the Network, and then I'd like to come back here to speak with you and xem. And then maybe we can decide where to go from there?"

Illyen was torn. Ve was still angry and fearful of the Elder Crew member. So angry. But at the same time, with all the Crew that Illyen had worked

with to set up vyr pregnancy and monitor Jenifer's growth, this Crew member was still the first one to have a personal relationship with vem. And xe was acting contrite and responsible in the moment. And, had mostly acted that way before, if ignorant of Illyen's potential feelings about what xyr actions might have done to vem.

But also, Illyen cared about vyr child, Jenifer the Child, who might not be fully aware of all of this and scared by it, and who may have grown used to being in contact with Jenifer the Crew, and maybe to rely on xem.

Slowly, shakily, Illyen nodded vyr head. But then ve said, "Let's do that. But I'll be here for xem. Not you. You and I have some work to do."

Jenifer blinked and sniffed, and then nodded, "Understood. Thank you." Xe sat with xyr eyes closed for some time, while everyone watched, then said, "I'm trying to somehow communicate with your child what's happening, but I don't know how, really. I hope this works." Then xe looked up and around, blinking rapidly, and took a deep breath, "Wow!"

"Jenifer?" Illyen asked.

"Yeah?" vyr child responded. "That was weird, wasn't it?"

Illyen lowered vyr head to peer into Jenifer's eyes and asked, "Are you OK?"

"Yeah, I think so!" Jenifer said. "I don't feel the same. But I'm me!"

Illyen was taking a big sigh when Jenifer the Crew spoke, bringing a nanite exoform out of the bin, "That's because you're not me. Call me Jen or Jenefer." The body xe formed at first looked just like Jenifer's, but then xe looked down at it and frowned. In a couple of seconds, xe managed to reform it into something else that looked like a cross between that form and that of Eh, and then nodded. "I like Jen, though. And now we look properly different, too."

"It's an honor to meet the real you," Morde said.

"Thank you," Jen said, then turned to Jenifer again. "Jenifer, can you tell me what you can remember when we're not linked?"

"Everything? I think?" Jenifer tilted xyr head. "Only, not. Like, I'm not you. I don't remember building the Sunspot. But I remember talking about

it like I did. I remember feeling like I was you and wondering where I went."

"And I remember feeling like I was you and wondering where I went, too," Jen responded. "But, not very well. Interesting."

"What does it mean?" Illyen asked.

Jen shrugged, "Mostly that we were very coconscious when I connected with xem. I didn't realize that I was just connecting over the Network when I was doing that, though. Not until we saw the graphs. I couldn't deny it then."

"I remember what you were sad about," Jenifer said.

Jen nodded at Jenifer, and said to everyone, "I've never been part of a system before. That was very humbling."

"Um," Jenifer looked self consciously at Illyen and then at Jen and said, "I like being myself, but I also like it when you help. Or, visit?"

Jen flexed xyr frills and raised xyr lure, which had a similar expressive effect to raising one's eyebrows, but looked over at Illyen with a tight lipped mouth.

"We have work to do, and it's important," Jenifer added.

Illyen sighed. Ve remembered when ve'd said to various people that Jenifer had had unerring judgment, and that when xe trusted someone it was usually a good sign. And Jenifer had seen inside the mind of Jenefer. Of *course* Jenifer would trust one of xyr parents, and one xe'd shared thoughts and feelings with. But Jenifer was such a good person, too. Someone Illyen had been admiring since they'd met, and xe was vyr *child*. Ve had a responsibility to respect and protect Jenifer's personhood, and that included letting xem know xemself.

"You and I have a *lot* of work to do," Illyen emphasized to Jen. "But I'm willing to do it, if you are."

Jen solemnly nodded once, then said, "I intend to give you all the respect I would give any parent of my own." Xe paused to see what kind of impact that had made on Illyen, but Illyen didn't want to betray any of vyr feelings and hoped they didn't show on vyr face. Then Jen added, "I've

clearly got a lot of learning still to do, but I'm also grateful to you. More so than I ever was to either of my first parents. They... didn't deserve it, really. You do."

"That," Illyen said, fighting down revulsion, "is a really good start. Thank you."

"Jenifer," Jen said, "I need to stay separate from you for a bit, while I try to figure myself out, and work with Ansel to get a better idea of what I was doing. I want to be able to connect with you and share my thoughts without taking your autonomy away."

"OK," Jenifer said, sounding a little worried. "But, can I talk to you?"

"Oh, of course!" Jen responded.

"And can I keep our doll?" Jenifer asked.

"Please do!"

"Oh, thank you!" Jenifer leapt up and offered Jen a hug, pausing in the movement for consent. Jen accepted, and Jenifer said, "You are a good person. You think you aren't, but you are." Then xe disengaged and walked over to Illyen and looked up at vem, saying, "And so are you. But, also, you're my mom."

Everyone looked really confused. Illyen felt like it was a compliment, but was startled by the phrase and didn't know what to make of it.

"I think xe got that word from me," Jen said. "It's an old term for a kind of parent."

"Yep!" Jenifer chirped. "But, you get to decide if you like it. I love you."

Illyen lifted vyr forelimbs off the ground to offer Jenifer a hug and said, "The word confuses me. I'm good with 'parent', but you can call me that if you need to." And they hugged, tilting the tops of their heads away from each other, to avoid locking antlers. And Illyen said, "I love you. I'm so glad to have you as my child."

Illyen heard Jen say to someone, "Fenemere is going to be annoyed that the old gendered language is already seeping through. It was bound to happen, though."

“What’s going to happen if it spreads?” Tetcha asked.

“We’ll redefine it,” Morde said.

“What does ‘gendered’ mean?” Tetcha asked.

—

I awoke on the third day with a realization about Fenekere. I’d clearly been dreaming about it for part of the night, and it became such an energizing thought that I couldn’t remain asleep. My avatar emerged into existence on the shore of my pond, and I said aloud, “I wonder if that will work!”

There was no one there to hear me.

Then I spent a few seconds trying to remember what I’d realized in my dream.

The last few days, I’d been so focused on trying to find useful command sequences, I’d let slip a detail about names in Fenekere that I even wrote about in this book. Honestly, I’d learned these things and written about them in the wrong order, and I’d been so stressed, that the discrepancy hadn’t occurred to me. Finally relaxing last night after building my sculpture, my subconscious must have gotten to work on it.

Ktleteccete’s name.

How did that work?

Every one of the 900,000 unique proper names in Fenekere had already been claimed by Elder Crew members. All the 23,521 other words were dedicated to certain elemental things, such as the literal elements, certain basic emotions, parts of the language itself, the pronouns, and various aspects of the universe. In fact, for instance, the word for Entropy was ‘efeje’e. Which sounds a little bit like Phage if you squint at it the right way. And I don’t know if that’s meaningful, and is not what I’m getting at here. (But remember it, because it might be useful later.)

Ktleteccete chose xyr name after the fact. It was a claimed word! But, not by a person, but rather, “the Child” was considered to be an elemental thing. How did the compiler handle that now?

If I wrote a command invoking Ktleteccete, what would happen?

So I sent Ktleteccete a message asking if I could use a Fenekere command invoking xyr name to do something like manifest some flowers for xem. I told them I was testing something.

I received a swift response, "Sure!"

So I did it. The command I used was, "ktleteccote 'uu 'efoktleta plangishavo ef'u'a", which meant, figuratively, "Create one common orchid for Ktleteccete."

"Plangishavo" means "a product of the Artist who categorizes orchids." So Plengesheve is an actual member of the Elder Crew. And they are presumably in charge of identifying and categorizing orchids. A "common orchid" is the first one they categorized and therefore doesn't have a number. All the others get a number attached. They may have colloquial names in Inmararrão, but in Fenekere they get numbered. There are millions of species on the Sunspot, if you include all forms of life. But Fenekere breaks them down into about 25,000 broader categories that then get numbered for identification. And each ship apparently has one Elder Crew member in charge of each category of life, to identify its varieties and track it. Mind boggling.

I immediately received the message, "It worked! Thank you! Can I come see what you're doing?"

So, the compiler was *smart*. Interesting!

"Yes," I sent back, and Ktleteccete was there a second later.

Xe looked around at my netspace and exclaimed, "You have been very busy! I love it! Especially that!" Xe pointed at my sculpture.

"Thank you," I said. "Give me a moment, I'm looking something up."

So, while xe walked around, taking in my landscaping, I checked up the word "'ebekese". It was the closest sounding Fenekere root word to my own name, Abacus.

It was not someone's name! Incredible luck!

It meant "The Perineum."

...

I have decided that one line of just ellipsis is a literary expression of bukulama. You can use it for that, too. Whenever you need to.

OK, to start, if you don't know what a perineum is, ask your Tutor. If you don't have a Tutor, go to a library. Or better yet, ask a passing Crew member. Go ahead and tell them Abacus sent you. But I am not going to explain what a perineum is in this book. I have decided I have too much pride.

So, the following is what I learned while I was double checking that, with Ktleteccete giving me a bemused expression and commenting on how it was nice to be able to see a face on me finally.

Body parts in Fenekere are divided up into two groups. Most anatomy of any kind for any life form is treated like lifeforms themselves, with a Crew member assigned to a category who then classifies the variations by number. But a certain set of anatomical features are considered "elemental". This includes things like the mouth, nose, eye, anus, urethra, elbow, foot, etc. And, the perineum is part of that group of "elemental" body parts. I cannot think of anyone on the Sunspot who has a biological body that does not have a perineum. Same is true for most of the other elemental body parts. But, some of them have a great deal of variation. Enough that you'd think it wouldn't be elemental. So, if you group all of those elemental parts together, it paints a picture of what a default human might look like. Perhaps.

There are still some discrepancies, especially if you're assuming that the default human is what might be found on our predecessor ship, the Terra Supreme. Because the founders of Fenekere classified a tail, claws, and wings as elementary.

All of this is really to give you an idea of how arbitrary and fuzzy Fenekere can be for being such an otherwise rigid and enormous language. I strongly suspect that even though word construction never changes, the pronunciation and meanings of the words change dramatically from ship to ship and Crew to Crew. Even over the lifetime of the Sunspot itself, the meanings must have drifted a bit, despite it being the command language of the ship's systems.

The compiler, apparently, is flexible enough for that.

I didn't know if I wanted a Fenekere name after all. I checked adjacent

words to see if they were available. Words like 'ebeccese, 'ebekeshe, and 'ebecceshe. All of the ones I bothered with were claimed by Elder Crew members. What amazing luck.

"Ktleteccete," I said, after staring off into space for a good long while. "What is the benefit of having a Fenekere name?"

"Ah!" Xe said, "That's what you're up to! Well, mostly it just makes coding for myself a lot less of a hassle."

"So, if I went and named myself 'ebekese, for instance," I said, and Ktleteccete smirked and I ignored xem, "all it would do is make it so that I don't have to use as many characters to change details about my avatar?"

"Well, there are some more fun things you can do that involve using your name multiple times," xe pointed out. "But, honestly, those require the right permissions first, of course. In fact, changing your name in that manner requires those permissions, though I could do it for you."

"Crew permissions," I said.

"Yeah."

"OK, maybe I'm about ready to take that vow," I grumbled.

Ktleteccete tilted xyr head and squinted at me suddenly, and said, "your sanction's just lifted!"

"What?" I snapped.

"Yeah, it's finally gone!" Xe confirmed.

And then I got the notice. I'd already had my suspicions about where this was going, so I checked the available records immediately and confirmed that Ní'a had never been sanctioned. They had kept me under sanction up and until the point at which they decided they weren't going to sanction them after all. I was relieved for Ní'a. I was so thankful for them. But they shouldn't have been under threat of sanction to begin with, and mine was now shown to have been a ridiculous sham.

I explained this to Ktleteccete by shouting, throwing rocks at bushes, and tearing some small trees down. I'm pretty sure xe was sympathetic to my plight.

I then stopped and said, "One moment." And left to find Eh.

Really, it wasn't that difficult. The first place I guessed Eh would be was the correct one. I figured Eh was likely briefing Ni'a, and if it wasn't Eh it would be another Crew member I could grill for Ihns location. And I was pretty sure Ni'a was with their family, so I went there.

I didn't bother with a nanite exobody. I just appeared as a Network projection right behind Eh. And, as you might have suspected from previous interactions with people I had, everyone recognized me despite my new avatar. And the reason is that every person's Network projection broadcasts a wordless ID that lets everyone else know who you are. Someone looks at me and instantly knows, "Ah, that's Abacus." And I'd been taking it for granted all this time, but in this instance it startled me, because I was in the room with so many people who already knew me and, finally, some of them reacted to my avatar.

At first I thought that they were reacting to how amazingly rude I'd been to appear in their home without calling first, but it became clear they didn't really care about that.

Aphlebia was the quickest to communicate their surprise and happiness for me, grinning and flapping their hands.

Ni'a found themselves mirroring Aphlebia's body language a split second later, and then said my name, "Abacus!"

Eh turned to face me with a mild expression of curiosity.

Candril exclaimed, "You can change your body?!"

"It's an avatar, Candril," Emala corrected.

"I know that."

And at that point I just couldn't continue with my rage. I'd worked most of it out before arriving anyway, but I also lost everything I wanted to say to Eh.

I sighed and said, "Thank you," to Eh. Then I walked around them to see the rest of the family and talk to them more clearly, "It's actually pretty amazing. I had no idea what I was missing with the bead form. Have any of you tried eating food in the Network yet? It simulates everything so...

What?"

All the kids but Ni'a were smirking at me.

Emala said, "You should give yourself a nanite exobody and try eating one of my apples."

I squinted at Eh and asked, "Is this something new?"

"Relatively, yes," Eh said. "I've been meaning to try it myself."

"I am so sorry for bursting into your home unannounced," I started saying as I went to the nanite bin and started to pull myself out of it. "I was... angry. And excited. And I wanted to see if Ni'a was OK." I nodded at Ni'a, who nodded back, then picked up an apple and bit into it with nanite teeth.

It was indistinguishable from eating the same thing in my own Netspace. The detail of the texture and the intensity of the flavor was perpetually bewildering and wonderful. Except that there were things about this apple that told me it was a real apple and I was really sensing it. It was imperfect. The texture was mealier than the ones in my Netspace. And there was a bruise in one spot. And there were different imperfections on its skin that I expected. My Netspace apples had some natural variation to them, but they were still close to an ideal subconsciously tailored to my sense of taste. This was notably different. And that difference helped me to process just exactly what I was doing.

"Would you like the rest of this?" I asked Ihn, holding out the partially eaten fruit.

"Please," Eh said, taking it.

"I think I have business with you, Eh," I told Ihn. "I do really want to talk to you about a number of things, and maybe not all in a friendly way, but friendlier than we have been speaking with each other in the last few days. But I also need to catch up with everyone here."

"Ah," Emala interjected, looking over the children. "As much as we would all like to talk with you, Abacus, I personally need some more quiet and some time with my family. If you could come back this afternoon, I think it would be good."

The Whorlies nodded in agreement. The others looked disappointed, but seemed to be OK with that plan.

"OK. Do you have time to meet with me somewhere?" I asked Eh. "I'd like to show you my Netspace, actually, and maybe some things I've seen around the Sunspot, if you are amenable to that."

"I was planning on coming to see you next," the Captain of the Sunspot said. "So that would be an excellent idea. But first," and then Eh turned to Ni'a, who had mostly been watching Ihn this whole time. "I am personally glad that you have returned. And we will all be grateful for any assistance you can provide, but we absolutely do not expect it of you, Ni'a. Please do not overexert yourself, and do let us know what you need."

Ni'a scrunched up their mouth to one side and squinted, then said, "Don't be silly." And then they got up from their kneeling position near their peers' block construction and said to Aphlebia and the Whorlies, "Let's let Candril do vin's favorite thing." And then walked to their bed and flopped down into it.

The Whorlies shrugged at Aphlebia, and Aphlebia looked at Candril and gestured at the blocks. Candril in turn gave Eh a wry look of semi-apology and then lept full body into the block structure, causing them to fly everywhere with a great noise.

"I think this family is doing better than the rest of the Sunspot," Eh said.

"Then you have a *lot* of work to do," Emala observed.

Waves of Doubt

Ni'a found that they desperately wanted to start hypesharing with Abacus about everything they'd experienced, but they could also feel everything that was off-kilter about their home since they'd returned, and they could not waste any more time away from dealing with that. It was an emergency. They weren't even sure they could actually put things right without Phage's help.

But Phage was not here. And Phage Pember was just a tiny shadow of even Ni'a.

So they extracted themselves from the confrontation in the center of the room, retreating to their bed and tuning everyone out. This time, they lay face down, arms splayed out, maybe to make some sort of a point.

The chaos of the nanite blocks scattering about the floor from Candril's attentions was a wonderful punctuation to their mood.

They actually giggled once in reaction to it. A little hiccup of a laugh. And they smirked into their blankets, knowing no one else could see.

Then they took a deep breath and focused on their home, the Sunspot, and started to feel about for its painful spots, to figure out where all the wounds were.

Of course, the real problem was the waves of cause and effect flying about the whole vessel in a chaotic pattern that had been there from the start. But they could never be quelled and, besides, they were part of what made the Sunspot special to Ni'a. They were part of Ni'a herself. If the fibrillation wasn't there, neither would they be.

It was in learning how to dance with the waves, to eb and flow with their wild, unpredictable tides, and to find ways to shield the stress fractures in the system from the worst gyrations, that anybody had any hope of seeing the Sunspot make it to the next big collection of reworkable mass, and maybe, possibly spawn another ship or anything else.

So they took what they had learned in the crucible of nearly three days spent in the perpetual spinning crisis of the Terra Supreme and tried to apply it here.

But Phage had already set right the major physical effects that their meltdown had had on Memorial day. The waves were now tearing through the social structure of the ship, and no telling when they'd vibrate out into other systems. The collision of the trams had been an example of that, mostly contained and currently under repairs now, but its worst damage was to the morale of the Crew and the populace. And exerting an influence on the minds of billions, because the Crew were absolutely part of this, while still preserving their autonomy and consent took an extremely delicate touch, which Phage Pember was not doing well at all.

We need to restore you to full strength, Ni'a let it know.

I don't want it, was the response.

Of course not. It could not have left Phage's sanction if it had.

Return to the Pembers and keep them safe.

Thank you.

Thank you.

What they were about to do would be deemed impossible in every way by human scholars, scientists, and philosophers. Even those who had met Phage personally, and seen the Sunspot recover from worse while in its presence, still argued about it. It is even more difficult to describe without the equations those people use. But what was happening aboard the Sunspot that morning, although an effect of a chronic condition, was not nearly as bad as the acute storm that had beset the Terra Supreme.

Ni'a decided they would be able to achieve it by spending an hour or so at a time directly engaged with the chaos, training their own subconscious to handle it, and then taking care of their body while disengaged. They'd play it by ear and by feel. They sensed they could not afford to be unconscious for so long anymore. Phage had told them not to risk it, in any case.

They trusted its judgment, and they hoped to trust their own.

It almost worked.

It would have been better if Phage Pember had consented.

People noticed something.

Protector

Bashiketa sat quietly and watched as Fredge and Laal attempted to brief the person who was obviously the Benefactor of their project. The Benefactor sat down opposite them to listen for a few sentences, then put their hand on the book again and pushed it in Fredge's direction. Removing their hand, they tilted their head down to look at Fredge through their eyebrows.

Everyone was silent as Fredge picked up the book and started to flip through it. It was maybe a little more than 150 pages long, counting both sides of each sheet. A large format, paperbound. Clearly done hastily with a Library maker. But Fredge was hesitant to read much of it. They clearly felt like it would take too long with everyone silently watching them do so. But after seeing some carefully highlighted passages, and scanning the chapter titles and content of them, Fredge put the book back down again.

"How many people have seen this?" Fredge asked.

"So far, it can only be found in Monster libraries," replied the Benefactor. "And then, only the ones that are in the fallow decks. That's a lot, you know, but it's only been a couple days. But some Monsters have been showing it to some Children, and some Children have shown it to a Crew member or two. It's spreading."

"Ah," Fredge said.

"The amount that you have cooperated with Abacus and contributed to this book is concerning," the Benefactor said.

"I would imagine so," replied Fredge.

"May I ask a question of all of you?" the Benefactor prodded and then waited for their answers.

Fredge responded to that with fragile and stern care, "You may ask it of me."

The Benefactor looked over at Laal, who grimaced and then said, "I'll answer as well."

The Benefactor then turned their solid gray eyes upon Bashiketa and told

them, "I would like you to answer as well, but you may choose whether or not to, after you hear what your caretakers have to say. I won't hold that decision or anything you say against you."

Bashiketa felt themselves nodding demurely and hunching in their chair. They wanted to start throwing things, actually. They were having that feeling again. And watching their body do one thing while feeling another was an interesting experience.

Looking over them all, the Benefactor then said, "When you said that you did not agree with what we were doing, did you disagree with the methods or the purpose?"

Fredge dropped their clawed hand on the table next to the book with a thump and said, "both."

Laal pointed at Fredge and said, "that."

Bashiketa boggled with fear as they heard their mouth mumble, "Why do I even exist?"

They sensed both Laal and Fredge glancing their way, but didn't see their expressions. They were too focused on their hands just below the edge of the table, where they worked their retractable claws in and out while they fought their unidentifiable feelings. And they barely heard the Benefactor's response to their question.

"To carry the Tunnel and preserve it against the efforts of those who would close it," the Benefactor said. "It's part of the order of all things, and must be maintained, at any cost."

Fredge swept the book off the table with a fluttering clatter and shouted, "Damn you! Damn you and this project and what it has done to all of us! But especially what it has done to them!" Fredge gestured in Bashiketa's direction.

"Hm," said the Benefactor, standing up. They reached for the fallen book, which was halfway across the room. They did this by holding their arm out in its direction, and then extending it like an amorphous pseudopod, which then engulfed the book and apparently dissolved it. The blob at the end of the pseudopod of nanites fell flat and then the whole mass retracted from the spot to reform their arm and hand without any lump sufficiently large enough to contain the book in the process. "That is discouraging,"

they said. "But let me explain to you why and how it is discouraging, so that you may make more informed decisions about it in the future."

It was at that point that Bashiketa blacked out.

They felt like they dreamt while they were unconscious, but they could not remember anything of it.

When they came to they were still seated, Fredge and Laal lay beside their chairs, having fallen out of them, and the entire room and everything in it was covered in a thin film of nanite clay dust.

In the dust on the table, there were some unusual characters written as if by an expressive brush that had smeared the nanites into streaks of varying thickness.

Bashiketa understood it, even though they had not yet studied Fenekere.

It read, "ge 'afija'o."

"You are a work of Phage."

Bashiketa realized that they were breathing nanites and wondered what would happen.

Morde's Referendum

"If I could design my own universe," Morde said. "No new consciousnesses would be born within it. Maybe no life at all."

Every time Morde said something like that, it really hurt Tetcha's heart. But xe knew where it was coming from. In fact, Tetcha occasionally, sometimes, but pretty damn rarely, felt the same way, or close to it. But, with Morde, it was a driving force for nearly everything sie did, and if there was one thing about Morde that Tetcha wished xe could help heal, it was that. But the context of this comment was really important.

"The fact that we human beings do not consent to the unequal and *unjust* suffering of life when we are conceived is a damnable flaw," sie emphasized. "And with a tiny ship populated by billions of bodiless souls existing in the Network, it is - the need to treat dysphoria tenuously excepted - the height of unethical hubris to continue breeding more humans."

Illyen closed vyr eyes and took a long, slow breath, focusing on breathing it out even slower and more evenly than in, and said, "It's not that I don't necessarily disagree with you..." Then as Tetcha was trying to figure out what that even meant, Illyen made a quizzical face and continued, "I don't know if that meant what I wanted. Look, all that I'm asking you is if your position is any less personally driven than my decision to have a child was? And given a universe where human beings *are* conceived and brought to life, where all kinds of life are, how can you draw such clear lines about what is ethical for an individual, or even a society, to do?"

"I've heard that argument before," Morde grumbled.

"And who was that from?" Illyen asked, pointedly smirking.

"The universe itself could tell me this, and I'd still disagree with it."

Illyen actually pointed, "The universe *did* tell you."

"Believe it or not, I'm with Morde on this," Jen said.

"*Entropy* told me," Morde said. "That's different than the Universe. It's just part of it. And if you re-read that part of Metabang's book, which is... mostly accurate, you'll also read that it agreed with me."

"Then why did *it* have a child?" Illyen quipped and settled back on vyr haunches.

Tetcha was getting a little tired of this discussion, so xe interjected with, "Outsiders, I'm telling you!" Xe meant it as a humorous self deprecation, referencing xyr biggest passion as a kind of non-sequitur.

"I've come to believe that, too," Jen said, pointing at Tetcha.

"What?" Tetcha asked.

"Phage comes from Outside of humanity, somehow," Jen explained.

Jenifer nodded sagely in agreement, clutching xyr doll while sitting in the middle of xyr curled up tail on the floor.

Morde's hood made a motion like sie was rolling xyr head.

"Listen," Jen said. "You'll have to ask Gesetele directly about how keh contacted it and managed to entice it aboard. I'm probably not the first to speculate that the Tunnel might have been the tool keh used, since we've now learned of its existence. Mind you, unless the Tunnel can do something *really* weird... Yes, I did just say that, but moving on, as far as we know, the Tunnel only connects us to our parent ship, the Terra Supreme. Yes. But. Have you *talked* to Phage?"

(I have to interject here: Either Jen was hiding what xe actually knew about the Tunnel, xe didn't remember all of it, or xe didn't know what the myth xe told us meant. I still don't know which it is. Xe hasn't clarified.)

"I thought the whole point of this discussion was to talk about the ethics of what you did, Jenefere," Morde said. "And what you did, Illyen. And to figure out how to do both things better in the future. Maybe even so that we could present a proposal to the Council?"

"Considering the chaos outside," Tetcha remarked. "They might even listen to us, maybe." Xe was trying to decide if xe was being sarcastic or not when xe said that, though. The topic was central to all the violence of the past three days. Morde and Jen were both prominent Crew members, for almost exactly the opposite reasons. Jen an Elder Crew member, integral to the construction of the ship and its culture, who'd disappeared for centuries. And Morde a new Crew member who had Made Things Change. But even a Monster could see that the Council was not very

functional right now. After a short thought, xe added, "No, they won't."

"My proposal is this," Morde said. "No new consciousnesses made *from scratch*. Maybe even shut down the evolutionary engines. We have more than enough body types to choose from at this point, and the knowledge to customize them. If somebody already extant to this ship wants a new biological body, they can sign up to be born, using Jenefere's technique - *once* we figure out what didn't work and refine it. But nanite exobodies are pretty fucking amazing, if you ask me. Most people could be pretty happy using them. But why even use them? The Network itself is worth living in all on its own!"

"So, you'd have us leave the fauna of the ship to continue suffering birth, which we'll have moved on from," Illyen said.

Morde leaned forward to respond.

"What about the Pembers?" asked Jenifer.

Everyone looked at xem.

"They keep making new members every time their body looks at someone they don't know," xe said. "They can't stop!"

"That's not from scratch," Morde said. "That's a form of splitting and is OK."

"Are you sure?" Jenifer asked.

"When someone splits, there's a mechanism of consent there, and I'm OK with it," Morde said, looking over at Tetcha.

Tetcha almost said something, but Jenifer snapped, "No, I mean how do you know it's 'splitting'. Did they tell you that?"

Tetcha nodded at the child and then raised xyr eyebrows at Morde to address hir implied reference, "My dear partner, I'd appreciate it if you left it to me and Ktleteccete to decide if what we did was OK or not. At least, in that way."

"I'm sorry," Morde said.

"Thank you," Tetcha replied and smiled. "And you should talk to the

Pembers about what they do before you call it 'splitting'. But I do think both you and Jenifer are onto something there. You don't have to iron out the details right now, just recognize there are nuances to explore. And other people to help explore them, especially by sharing their experiences."

"Thank you, yes, you're right," Morde said. "I have to say, though. Sharing each others' experiences is exactly what we tried to get the Crew to start doing 39 years ago. And look how that turned out. They lifted their seclusion and instituted the drift on the Bridge and that's it. And *now*..." Sie gestured emphatically at the rest of the Sunspot, which was mostly upward from where they sat.

"Well, we should probably continue to model it better for them, then," Tetcha said, patting Morde's glove, which was on the back of the sofa they were sharing. Sofas didn't make a lot of sense for Tetcha's betailed posterior, but xe never sat on any chair or stool or even the ground properly anyway. This sofa was pretty accommodating with how soft it was, though. And the gap between cushions did leave a kind of room for xyr tail. Xyr tail was getting a kink in xyr current position, however, so xe adjusted xemself to let it out from behind xem in the other direction, consequently falling into the crook of Morde's arm.

Jenifer grinned when xe saw that.

"The problem," Jen said, "is that we're all, and I mean everyone, trying to change the habits of an amorphous billions of people who all avoid talking to each other because of a myriad of both generational and personal disagreements. It doesn't matter if they are minor or major disagreements, ethical dilemmas or petty grievances, they almost all solve them by not talking to each other ever again and maybe even not participating in the functions of the Sunspot's governance. The Council are the most daring and bold of that population, but they - *we* come from that culture."

"I think we're only trying to change the habits of the Council, but no," Morde said. "You're right. That is why it's hard. Just not *that* hard. Or, it shouldn't be."

"In any case," Jen continued. "It's a world shifting proposal. Bigger than what you accomplished before. And if we five can't fully agree on the details..."

"Uh," Ansel said, projecting its voice into the room.

“What is it, Ansel?” asked Jenifer.

“We’re here, too,” replied the Tutor.

A Carefully Engineered Confrontation

As I briefed Eh, also reiterating my grievances in new, more polite terms, elaborating on them and then showed Ihn some of the sights I'd seen while recently exploring the ship, and while I later spoke with Ní'a and their family to catch up on my notes, the Sunspot became notably quieter that day.

This is where it is hard for me to decide what to record in detail.

Do I record all the conversations I've had with various Crew members where I elaborate on my own brilliance and wisdom? Do I tell you how I feel like what I said to them really showed them the error of their ways? Only then to learn that they'd "already thought of that"?

Like, for instance, I suggested that instead of sanctions being arbitrated by the Council, and being generally restrictive to anything the individual being sanctioned might do, that maybe they should be something individuals could put on others that they disagree with and don't want to see again, and be much more tight in scope. So, like, I could sanction Eh, for example, and then Eh would not be able to talk to me unless I talked to Ihn first, and it wouldn't be much more than that.

That mechanism was already in place and being used. In conjunction with Council imposed sanctions.

Why I did not know this, as a Tutor, is another matter. I could tell you all about that, and why it was wrong.

Or do I write about the revelation that when Eh is not on the Bridge, Eh is the eyes and ears of the council, who collectively watch through the view screen? Or do I instead spend more focus on the subtle trends of change occurring in the populace of the Sunspot's children? Or maybe enumerate some of the conspiracies that were relayed to me by the Council through Eh, that they were tracking?

I know what they want me to record, but I ask myself, what is most important for future readers of this?

Is it what *I*, a displaced Tutor of the Sunspot, have to say?

I certainly would love to brag about how snarky I was with Eh, while also

demonstrating the kinds of polite discourse that were necessary to get to the point where I could let loose like that. It was great.

But I've decided that this book is going to be titled "Ni'a", and that sets up some expectations, I imagine. And Ni'a taking over for Phage was, as I said before, an event that everyone noticed even if they didn't understand it.

I've programmed my hands to allow me to crack my knuckles, by the way. Imagine that I'm doing that right now.

So.

First, although things were getting notably quieter, even as I was ushering Eh into my Netspace and directing Ihn to marvel at my artistic endeavors, a pressure was building up elsewhere that Ni'a could not quell or redirect, but we'll get back to that later.

"You've been busy," Eh remarked upon seeing my Netspace.

"Oh this?" I gestured at a torn up tree. "Five minutes max on that one. Four or so to design it, ten seconds to tear it up."

"Nice," Eh said. "But you've been exploring the potential of your new avatar, I see. That's good to see."

I decided to relax and let Eh say things like that without becoming further irritated with Ihn for it. Getting more angry wasn't going to get me anywhere. And, besides, I thought I saw a better way of going about things.

So I climbed up onto my favorite sunning rock and lay down with my chin on my crossed arms and said, "please make yourself comfortable, or explore a little bit. I'm pretty proud of my art, but not so much that I won't take suggestions. If you've got some ideas, I'd love to hear them."

Eh walked to the edge of the water to examine my model of the Sunspot, with its insideout habitat cylinder. Eh didn't talk about it, though. Instead, Eh said, "I am, honestly, very sorry for how your sanction played out. That could not have been easy. I did what I could."

"I know you did," I said, frowning. "Eh. Can you tell me how many other Tutors have decorated their personal spaces?"

"No," they said, their back still to me. "These spaces are private and we do not even get statistics on them without explicit permission. I've only seen the few I've been invited to. Yours is the first that looks anything like this. All the others were plain white."

"I'm," I lifted my head to scowl. "I'm *appalled!*"

"If there's one thing that the Sunspot has done well over the centuries, it is stasis," Eh said. "We've got true privacy here, by the way. The Council could not follow me here without you explicitly inviting them, too."

That confirmed a couple of my suspicions rather neatly, if I took Ihns word for it. Of course, I could actually access the Sunspot's laws and confirm it, which I did. We do that a lot for our Students, but we take so much for granted for ourselves. It's amazing what we Tutors miss.

Of course, also, a lot of things had been kept from us. Until the Nanite Innovation and the lifting of the Crew Seclusion, we'd had no need to know if a Crew member visiting our Netspace could have the Crew Council tag along. Because that kind of interaction just never happened.

"Your performance in the library was *terrifying*," I said then. "How much damage *could* you do with the nanites?"

"If I caught everyone by surprise?" Eh asked, looking over Ihns shoulder at me.

"Yes."

Eh looked away again, "Phage would stop me from crippling or destroying the ship, even so. But when it wasn't here..." Eh left that to trail off so that I could assume the worst.

"And every Elder Crew member has that ability," I said.

"Oh, yes," Eh confirmed. "It's all about a balance of permissions."

"Was it like that aboard our predecessor ship?" I asked.

Eh shrugged, "I don't know. I can only speculate. But I think so. It's the default arrangement for a new ship. Though, mind you, as far as I know we're the first to implement nanite exobodies. We probably aren't, but the first in our known history."

I'd imagined all of this, but a chill ran through my entire being anyway. "So," I crawled down off my rock to go stand next to Eh and looked out at my artwork as well. "If I were to take the vow of the Crew, I would not get those permissions."

"No, you wouldn't. Only Senior Crew get them."

I looked up at Ihn and asked, "What if I found a way to take a Fenekere name, such as, excuse me for this... 'ebekese?'"

Eh snorted. And then broke out laughing. Then looked over and down at me while still chuckling and chortled out, "Oh, that's an unfortunate name!"

"You don't think that by taking it I'd taint the Crew roster?" I asked.

"Abacus!" shouted Ktleteccete, stepping out from around the back of my sunning rock. "Do *not* talk to the Captain that way!"

Eh did an amazing job of not registering Ihn's surprise. I, however, jumped. I'd forgotten I'd left Ktleteccete here with only the words, "One moment!" And somehow, in that one moment while I was gone, he had hidden himself to such a degree that I had not been pinged by his presence in my Netspace. And I suspect, neither had Ihn. Surprises like that are a rarity when almost everyone is raised carefully by Tutors to respect each other's consent and autonomy. And on a ship like the Sunspot, one comes to expect that it's impossible on the Network, because we all become used to protocols that alert us to the presence of everyone within a Netspace whether we can see or hear their avatars upon entering it. But Ktleteccete had found a way to bypass that mechanism, and apparently had chosen demonstration as a method for telling me about it. With Eh there.

"That was a very neat and scary trick, Ktleteccete," Eh said. "And the height of rudeness."

"I forgot he was visiting when I came to see you," I told Eh.

Eh tilted his head, "How did you hide from us like that?"

Ktleteccete leaned his back against the rock and folded his arms and smirked, "I'm literally not going to tell you that. Neither of you. At least, not the details."

Struggling to regain my composure, I gestured at Ktletecete and asked Eh, "So, even if you learned how to do *that*, Phage would be able to act fast enough to stop you?"

Eh nodded, "It does have its vulnerabilities, which is how we successfully sanctioned it, but speed is not one of them."

"Then - and I'm still very upset by *this*, mind you," I gestured with both hands at Ktletecete again, "how did Ni'a's overload take it by such surprise? You've presumably read its explanations of how it can restrict what they can do, right?"

"I think that anybody who wants to know that will have to ask it," Eh replied.

"Abacus asked if taking on a Fenekere name would confer more permissions," Ktletecete interjected regarding the current situation. "Just before it went to get you, we were talking about that, and we were going to get into the finer details of permissions and workarounds. I've been studying with Gelesere."

"Oh, OK," Eh said. "That is a suitable explanation, thank you." Then back to me, "Abacus, are you actually trying to gain access to Senior Crew permissions, or is this conversation about something else?"

"Why aren't you more flustered and upset about what Ktletecete just pulled?" I asked, seizing an opportunity that my friend had just handed me to illustrate something directly related to that question.

Eh frowned, "I'm not afraid of xem, honestly. It was a childish prank, but not very dangerous to me. And I've been alive nearly twice as long as you have, Abacus, and, just, so much longer than xe has." Eh scratched briefly at Ihns ear pad, and said, "When you have eight-hundred ninety-nine thousand, nine-hundred and ninety-nine counterparts that each have the power to destroy the spaceship that you all inhabit together, and you've lived with them for as long as I have, you learn to keep your composure around the most alarming things. It's a critical survival tactic."

"And by your estimate, based on your knowledge of xem and Gelesere's knowledge to impart to xem, you don't deem xem much of a threat to you or the ship," I prompted.

"No, I do not."

"That's a pretty ridiculous imbalance of power," I concluded.

"I agree with you on that, and have seen it myself," Eh said. "You needn't have gone to such great lengths to point it out."

"Call it a critical survival tactic," I said.

"Ah, yes. OK," Eh conceded.

"I'm also beginning to understand that negotiating these things with you, or even the Crew Council, and even pointing out solutions you haven't tried yet won't actually change things," I pointed out.

"Where are you going with that observation?" Eh asked.

"Where are you *afraid* I'm going with it?" I countered. I didn't pause long enough to let Ihn answer, though, "I am, with the project you've given me, collecting a growing list of things that need to be fixed aboard the Sunspot. Not to keep the ship more safe, as you know. But to correct hypocrisies. As I'm sure you're aware."

Eh just nodded at that. Ktleteccete nodded as well.

"What I'm asking you, then, is what leverage do we need in order to make these changes?" I asked. "And not someday, but tomorrow. Yesterday, even. As soon as Phagely possible."

"I've been asking that for the past 39 years, ever since Morde, Myra, and Phage successfully broke us out of our torpor. And the conclusion I've come to is that changes are going to happen whether we want them to or not. All we can do is try to steer them in what we think are the right directions. Which is one of the reasons you've been asked to write your book. It's one of the tools we have for that."

"I don't think my book is going to save us," I argued. "What we released already has had some massively chaotic effects. People have been forced to ascend."

"I'm not convinced it's had all that much effect yet, actually. The violence of the past two days probably had more to do with Ní'a's event and the story that Jenifer sent to everyone." Eh replied. "We may yet be surprised at the work your book is capable of doing."

I hung my head for a moment, while thinking. Then said, "OK, different tactic. I've got some things to show you and the Council, if you'll let me. You might know all this, but in case you don't..."

"Please," Eh said.

"May I tag along?" Ktleteccete asked.

"I'm good with that," I replied.

Eh squinted at xem and said, "You do know that you can be part of the Council simply by attending a meeting, right, Ktleteccete?" And then Eh smirked in my direction, "Or did your Tutor neglect to inform you of that?"

"Oh, it told me," Ktleteccete chuckled. "I'm just being extra polite after what I just pulled."

"OK," I said. "First, I'd just like to start this off by inviting the Council here. Since I'm not Crew, I feel that making an exception for me to visit the Bridge is not called for. But I would like the Council to see what I've created and think about the symbology of it while we go on our little tour. So, I hereby give the Council my consent to visit my Netspace."

"Very well," Eh replied. "To do that properly, I'll need to return to the Bridge and then come back here. It will only be a moment."

I nodded and gestured my assent.

"If you want to join the Council, you should probably go to the Bridge," I told Ktleteccete.

"What? No," Ktleteccete said. "I'll join the Council the day you take your vow as Crew, and no sooner."

"Where did that come from?" I asked. I didn't remember talking to xem about my refusal to take the vow, and I couldn't remember if I'd included my reasoning for it in the copy of the book I'd printed. I might have, but then, how did xe get a copy? I did mention that it was an option to me offhand while talking to Eh in front of xem, but I didn't explain my refusal then, did I? Had Ktleteccete talked to Fenmere?

But xe was shrugging as Eh reappeared, and I didn't get an actual answer.

Oh, wait, xe could just be reading my public notes online. I wondered how many Crew were taking advantage of that. No, nevermind, those had been sanctioned for the past three days. Hm.

"We're all here," Eh said. "We currently have Fenmere, Akailea, Jural Pember, Gnargrim, Seheneye, Vilgen, Pexil, Tektlexege, Jenesede, The Flits, and Jedekere. Eight of us, including myself, are Senior Crew, but we are thankful to have the others participating."

So, there were two other Elder Crew besides Fenmere who had taken more colloquial names. I'd have to check records if I wanted to know who, but I couldn't be certain. Presumably they'd keep their Fenekere names, and might be using these colloquial ones as nicknames, but maybe not. In any case, it was a complete surprise to learn I had four recent friends and allies right there on the Council. I didn't feel like I needed to prove anything to Jural or the Flits, but I felt a bit better having them there.

Still, I had expected a much bigger roster. I didn't know what to think about this, and put the observation aside for later examination and possibly mention.

"Thank you for coming," I said. "I am Abacus, the Tutor, and my pronouns are it/its. As you know, this is my Netspace, which I have decorated in the last three days. It's not what I wanted to show you, but I am proud of it, since I've spent over two millennia with a blank white space." (OK, later in the book, I say a different number to someone, and there's a reason for that. Please refer to the Afterward for an explanation.)

Eh simply nodded.

I decided to make no effort to excuse or explain the damage I'd done to some of the scenery in my rage over how my sanction had been handled. It was still a gorgeous place, but the Council just didn't deserve to know. Instead, I brought them right over to my sculpture, "This was really simple to make, of course, but I was struck by the idea after spending some time watching the Children of the Sunspot working together to make their arts in some of the various collectives around the Garden. I felt the need to put something in here that was an obvious artifact of my self expression. Of course, everything here is," I gestured broadly around. "But, this sculpture is clearly a focal point of *human* design, instead of an imitation of nature."

"Substituting the plasma with a water fountain is a nice touch," Eh spoke with someone else's voice. I didn't recognize it, but I was informed over

the Network that it was Jedekere.

Jedekere, the Diplomat.

"Thank you," I said.

Fenmere asked through Eh, "Why is the habitat cylinder inside out? If you don't mind answering."

"Ah, I am glad you noticed and asked," I pointed, imagining that Fenmere was just to the right of Ihns left eye. "I don't really know. But it felt really meaningful. It felt like it needed to be done. Partly to make it an actual work of art, but also to *say something*. I felt my subconscious was driving me to do this specifically, and so I let it. And I've been puzzling about it ever since. I *do* feel like it relates to things I've seen and written about, though, which is why I'm showing it to you."

"You might try writing poetry," Fenmere said.

I held up my finger and said, "I might do that. Thank you. I'm honored you'd suggest it."

"Not at all," replied Fenmere.

"OK, if any of you have more questions right now, I'd like to answer them before we proceed," I said.

After a little bit of time, Eh said, "I think we have all read your book notes as they currently stand, and feel like we each have some sort of idea where you're taking this. There are no more questions at this time."

"Oh, nice. Thank you," I said. Then a thought struck me, and I just had to prod about it, "Wait. Are you here to watch *me* more than you are to see what I have to show you?"

"What do you mean?" asked Tektlexege.

"Yes," said Akailea.

"I believe what Abacus is asking, Tektlexege," Jedekere interjected, "is whether or not we are more concerned about its development as a conscious being and a Tutor while it has been assigned to the unorthodox task of writing its book. Is that not correct, Abacus?"

"Correct," I said.

"And that is why I am here," Akailea said, evenly.

"We. Are here. To. See. Its demonstra. tion," Lil'e said.

"I am here, of course, to facilitate discussion, either way," Jedekere declared. "But, I think it is safe to assume, Abacus, that you are on the spot *and* that this is an opportunity for you to show us what you care about. And I think that only good can come of it, whatever you do."

That was not at all as reassuring as I *think* it was meant to sound. Was Jedekere telling me something? I don't know. I'll have to ask someday.

"If it's OK, then," I decided to take a change of tactics, "I'd like to ask you some questions first, to maybe get some notes for my book. I think it would help me to create a better historical context for what I'm writing about, for any readers that may come across it. And it might also help me decide whether to consume more of your time by taking you on a tour that might not be necessary."

"Time isn't really of an essence right now," Eh said. "Please, do ask your questions."

"So. If you will pardon me, it has become clear to me that there are some major divisions between factions of the Crew. May I know what some of these factions are, and perhaps how many have representatives present in this Council? I am interested in all possible answers, but understand if you must keep some secret."

"I am a representative of the Order of the Guardians," said Jedekere.

"As am I," said Gnargrim.

"You know that I represent the Pembers," Jural said, a friendly smirk audible.

"My concern is solely with the health of the Tutors," Akailea spoke up. "I generally do not have a quarrel with anyone, so long as you are doing well."

"Thank you," I said, but noting to myself that I did not know what Akailea considered "healthy" or "doing well" for a Tutor.

"I am," Fenmere said slowly, "doing my best to remain neutral to all factions, though I might be considered a faction of my own."

"My friends don't have a name for what we stand for," Tektlexege said. "We all just tend to agree about certain things regarding how the ship should be run. Mostly, we want to vet all changes carefully before they are made."

There was a bit of a pause where Eh waited for anyone else to speak up. And when they didn't, Eh finished off by saying, "And I, Eh, am Senior Captain of the Bridge Crew and have been serving the Council since its original formation. As such, I try to be amenable and friendly to all who take part in the Council."

"Thank you all," I said. "Two... no, three more questions, if you don't mind."

Eh nodded.

"What is the Order of the Guardians?" I asked.

"We formed specifically to address the presence of Phage aboard the ship," Jedekere explained. "Our concern is to keep an eye on it, to see to its needs so that it is not left wanting, and to also make sure that its actions and presence are not a threat to the people of the vessel itself. We were instrumental in originally sanctioning it, and we were central to the effort to relieve that sanction when it came time to do so. We also become involved in other sanctions, in an attempt to make sure they are just and fair, and not abused."

I opened my mouth, and then carefully closed it and took a deep breath through my nose and said, "thank you."

"You will note that your sanction was one of the shortest in the history of the Sunspot," Jedekere added. Which did not make me feel any better about it. Not one bit. Maybe I am overreacting somewhat, but if such a short sanction hurt me as much as it did, what would it do to someone under a longer sanction?

I chose not to say that. Instead I asked next, "Are there any factions you can tell me about that are missing from the Council today?"

Eh replied, "Most of them do not have names. Most are like Tektlexege's

friends and have specific differences in opinion about one subject or another, or how quickly we should change things or experiment. I would say, in my experience, that each of those factions likes to send a representative to most meetings, and that those who are not present today must not feel that this meeting is relevant to their interests. And those that have names would rather not be listed without a representative present. I believe there are many we do *not* know about, though."

That was an extremely disturbing answer. I wasn't expecting a full map of the political landscape of the Sunspot, but what Eh had said was tantamount to an admission of ignorance. And so shortly after telling me just how many individuals had the power to destroy everything. And this was to go on record, with my opinions to follow it, as they know I've been doing. My Netspace and the Bridge have both recorded this discussion, and you can check them. This is the official word of the Council.

I know that you likely now have a bunch of questions that you wish I had asked following that. And I definitely had those questions, too. But consider that if the Council had been willing to answer those questions, Eh would not have been so vague.

Eh was communicating far more to me than just those words. And I felt very concerned and distracted by that, and will have to spend a lot of time reviewing this dialogue in the future to understand all of it.

I was actually so scared that I wasn't thinking as I proceeded through my last question. I just rattled off the words I'd already composed earlier, "Early in my book, Eh, you described to me that the governance of the Sunspot was 'a loose balance between raw democracy and anarchy. The Captain is chosen at any given moment by whomever is willing to sit in that chair, and they can be deposed by a vote from the Bridge Crew at any time.' So, I am curious, Eh - and I'm sorry for putting you on the spot here - but for the sake of everybody who may read this book, what percentage of time, roughly, have you spent acting as Captain for the Sunspot since its establishment?"

Eh took on a grim expression as Eh nodded, then said, "I'd have to check the records to be sure, but my own estimate would fall somewhere between sixty and eighty percent. Far too much, if you ask me."

"Oh, wow," Ktleteccete said.

It is my reflex to end a chapter on a revelation like that, but that's not what

happens here. I did, however, stand there staring at Ihn for a good long time to let the whole Council know what I thought of that. I let them try to read my mind. I think it might have worked. They didn't say anything, and neither did Eh.

Finally, I broke the silence by saying, "Anyway, I think that any time you are doing something such as serving a sanction in the future, you should introduce the names of the entire Council that is present at that time to the individual receiving the sanction. That you don't do that is rather appalling and a gross abuse of power. And when you introduced yourselves today, that was rather pleasant and useful. Thank you." I waited for precisely a beat of my qbit heart and then said, "Now! Shall we go look at some art in production?"

Eh took a long breath, keeping an eye on me for the duration of it, then said, "Thank you for that note, Abacus. I believe it is being taken in better spirits than you fear, and that change will be made post haste. I also believe there will be further discussions regarding similar errors and oversights. Again, thank you."

"I have so many more opinions like it, if you would like to hear them someday," I offered.

"I do believe you have been encouraged to take the Vow of the Crew so that you may join the Council," Eh said. "It would be a good way for you to contribute in that way."

Oh, that was definitely a prompt if I've ever heard one! I absolutely took it. I replied, "Fenmere has heard this before, but I happily repeat myself. Why should anyone have to take a vow in order to gain their full rights as a human being?"

Before Eh could even open Ihns mouth, I pointed.

"Don't even answer that, please. Just think about it as I show you what I want to show you," I said.

And then I took them to the great art collective of Gopra Pyle, where a phenomenally large number of people were working together to create the largest piece of work I have ever seen that wasn't a building.

I took them to the edge of the city, in fact, so that they could see it towering over the skyline, and began walking toward the center, where the base of it

lay, and where the main square of the collective was.

I suggested, for politeness sake, that we take nanite exobodies, so that even Monsters would know that we were present. And after my previous admonishment about representing themselves, the Council decided to be fully present in that way, each of them taking their own exobody.

I gestured at the work, "When was the last time you have participated in a project like this?"

I figured they had to know it was there. This kind of activity, on this scale, should have gotten the attention of the Council, or numerous Crew Members. Certainly, most of the population of the Children had at least heard of it. I wasn't trying to show them something they hadn't seen before, but trying to get them to evaluate it with something closer to my own vision and perspective. Or at least something new from how they were used to seeing it.

"What is that?" asked Tektlexege.

It was the Great Tree of Lanterns. Which is, if you are not familiar with it, entirely handmade. No nanites. No exosuits. No makers. All done by hand. Every centimeter of it. This thing that towered over several blocks of five storey buildings. To give the precise measurement of it is pointless, because it's still growing, still being built. With people climbing up the trunk and out onto the branches to add more material to it or more lanterns.

I whirled on the Council, and said, "OK. Those of you who knew that this was here, or who have even just heard of the Great Tree of Lanterns, just raise your hand."

Only Jural and the Flits raised their hands.

"OK, that. That right there is the problem with this ship," I said. "This thing has been built for *generations*, and those of you who bother to be on the Council have no clue that something like this is going on." I watched their reactions for several seconds and then added, "What really appalls me is that *I* didn't know it was there until I finally revisited Gopra Pyle this century. Like, the last time I was here, before that, it had to have been in the process of being constructed already, but I was so focused on the well being of my Student that I somehow had missed it."

Eh looked like Eh was going to fall over from dizzying self-disgust. The others were in various states of frowning.

"Now," I continued. "The whole city isn't working on this. It's just a big project a lot of people are participating in. But, all the usual things you find in a city are also still going on. There are libraries, food artisans, people who make clothing, a local government, Tutors and Students, all of that. But there's something else even better underneath it all. How many of you have heard about the school here?"

This time everyone raised their hands but Jural and the Flits.

"Oh, that's interesting!" I said. "Let me guess, though. It's the Tutors. Our reports refer to it when our Students are involved, right? But not the tree."

"Correct," said Eh.

"Let's go take a tour of it all, though," I suggested, and started leading them further toward the city center. "Because, what I'm thinking is that Tutor reports of anything is just not going to be enough. Not on a regular basis. Not when we're all missing important aspects of the culture of our own world."

"I think what you are not taking into account, Abacus," Fenmere said, "is the full ship records. This is all in there. Yes, Tutor reports come directly to the Auditor to be processed and then sent to the Bridge. But all of the ship's sensors are recording everything that's going on. Anything that's in public space or that has been flagged for public access is readable by anyone. Also, there are people of many types who are compiling books and reports like yours. You are only the second Tutor to do so, which is significant, but the Monsters especially are busy recording and commenting on everything they see. And whenever someone needs to know about something, they look it up, including the Council. We don't *need* to know this stuff on a day to day basis, we have the Sunspot's memory."

"Are you pointing that out so that I put it into my book?" I asked. "Or are you trying to get a rise out of me? Or are you justifying your complacency to yourself? Because I know by the expression you just had that you realized how bad it was that you didn't know about the Great Tree of Lanterns." I wheeled on them all again, "This is not really about any of us learning anything new, or gaining new wisdom. We're all either centuries or millennia old, or we're going to be someday. It's about changing habits that we now recognize are bad. Please, just follow me."

After walking a little further, past children playing and Children working on projects together or enjoying a mid day meal, I said over my shoulder, "What I want you to realize is how *fun* this is."

Then I walked up to a drink artisan who had a couple of large drums of liquid and numerous bottles of other things, and racks of spices all arranged on a couple of tables, and waited for them to finish talking to their friend. The artisan was a big, round person, with barrel-like legs, strong arms, and chubby fingers. They had round, articulate ears, and a big black nose, with a bifurcated upper lip, and beautifully expressive jowls. And they were mostly covered in large, thick, hard scales, with two ridges of them running from the back of their head down to the tip of their big, triangular tail. But their chest was covered in this gorgeous, thick, red fur.

"Hello friend," they said to me. "My name is Berrick. Sie/hir. Pleased to meet you!"

"Hi! I'm Abacus, it/its," I responded. "I'm sorry to just go right to your artwork, but I have a group of friends here with me, all of us with nanite exobodies, whom I think should try your concoctions. Believe it or not, these things can taste the most amazing things!"

"Really!" Berrick said, grabbing a handmade ceramic cup. "My Tutor hadn't told me that yet. That is something I am *really* pleased to hear! What would you like?"

"Well, I personally want your favorite drink," I said. "I'm going to offer sips to them, to see if they want to try anything else you like making. So a bigger cup than that might be nice."

"OK, no problem!" Berrick exclaimed, grabbing the largest mug there. And then sie started getting to work. "So, if you'll pardon me observing, you're not a typical Tutor. I've never seen one with a form like yours, and I don't see your Student. Do you have a story about that you're willing to share?"

"Oh, sure!" I said. Some of the Council were starting to gather around me, while the others were poking at other things, or talking to other people. They seemed to be getting the idea already. I turned to Fennere, "Exactly who was it that suggested I write my book, anyway?"

Fennere grinned and said, "It was me, actually. Hi, Berrick. My name is Fennere, keh/kihn. I'm a big fan of crafted beverages, and I'm eager to try one of yours."

"Wonderful! Pleased to meet you! Oh, you're Crew?"

"Everyone here with Abacus is Crew, as you can see," Fenmere gestured around at the others.

Berrick's eyes bugged out, "that's more of you than I've seen in my life!"

"My hope," I said. "Is that you will start to see a lot more of them, more often, in the future. Though, ancient habits are particularly hard to break."

"This is true," Fenmere said.

I turned to Fenmere again, "So, if I'm not mistaken, now that I'm thinking about what's happening here, is that in lieu of my original assignment, Ni'a, who was assigned to their parent, Phage, to be Tutored, I am now... Tutor to the Crew Council?"

"Mmm." Fenmere grunted. "Not in the sense that you'd be the only Tutor working with us for the rest of foreseeable time. We need as many perspectives as possible. But that was part of my idea, yes."

"So, yes, OK," I turned back to Berrick. "After my last assignment ascended and no longer needed my counsel," I gestured to Ktleteccete, "I was automatically assigned to another Student who had just been conceived, who eventually named themselves Ni'a. But, before they were born, the Chief Engineer of the Sunspot, Phage -"

"Phage? The Chief Monster?" Berrick asked, clearly having read Metabang's book.

"The very same," I replied and gave him a moment to process that.

"I am in awe that I get to learn this story from you," Berrick said, placing my drink in front of me.

"That's the thing," I said. "We really shouldn't be in a place where people like the Crew or Phage inspire that awe. Though, in the case of Phage..."

Berrick tilted a look at me that said, *I've got you there.*

"Anyway, Phage claimed that Ni'a was its child, and that it wanted to raise them," I continued with my story. "The Council, being in awe of Phage, and recently willing to try new things anyway, acquiesced. And then,

instead of letting me be assigned to yet another Student, Fenmere here suggested that I focus on writing a book about Phage attempting to raise a child, and everything has sort of developed from there. And at a certain point, I realized that my old form wasn't pleasing to me anymore, so I changed it. *Then* I discovered I could taste things!" And I took a sip of the drink.

It was a warm, formula based fruit drink, where the formula had been frothed to a creamy foam, with just a hint of mulling spices carefully applied to not overpower the base flavors. Of course, I could taste every ingredient and focus on its chemical profile individually, and I took a moment to do that, but the real joy of it was in the harmony of flavors and the aroma as well. And the way that it hit my pallet as my nanites worked to create a naturalized intake of simulated breath before the liquid passed my lips. And also the way that the flavors faded differently with time, the chemical elements being processed differently. I am certain the experience is not at all the same as having a biological mouth. I don't have saliva, and that should affect things. But, presumably my nanite protocols are designed to emulate the average mouth as best they can as they interface with my psyche.

"Oh, that makes me feel so much better," I said. Then I passed the drink to Fenmere, and said, "You should try this and pass it around."

"Absolutely. Thank you," said Fenmere.

"Huh," I thought. "Something is occurring to me."

"What is it?" asked Berrick.

"Well," I looked slightly over at Fenmere, and then at Eh, then decided to go forward with it. "The Elder Crew can do this thing with nanites that is forbidden to everyone else. They are capable of using them to disassemble nearly any piece of matter that they like. I am not sure if there are any actual limits. But neither you nor I can do that. However, we can eat and drink food with them, taste the flavors of what we consume, and our nanites break that matter down and use it as energy and material resources anyway. I'm wondering what the difference is."

"Nuance," said Fenmere.

I turned to kihn and asked, "Can I eat a rock?"

"Not in the same way you can eat a piece of fruit," keh replied. "You could taste it. And you could hide it in your body. But it won't dissolve."

"Nuance," I gestured to Fenmere while looking at Berrick, who looked fairly taken aback. Then I said to Fenmere, "I'd like to talk to you more about this in detail later."

"OK, but the closer you get to the asymptote, the less that nuance will do for you," Fenmere replied cryptically. Keh had passed the drink on at that point, and was leaning forward to read the labels on things. "Berrick, if you were to create a drink inspired by the word 'asymptote', that is what I would like today."

That was not hard for me to interpret. When it came to giving or revoking permissions to either create or destroy a ship, when 900,000 different individuals who didn't agree with each other about everything have those permissions, nuance is all you have. Every move you make is already the tiniest of nuance. Maybe, even, the best thing to do is have nobody move. I'd already figured this out, really. But maybe I hadn't really internalized it, since I was bringing it up again and again. Time to move on again.

"Berrick," I said, "thank you so much. If you ever need a good story, for whatever reason, I'm always happy to tell you something. Just let me know. I'm going to go hunt down my drink, and let the others chat with you. And a good day to your Tutor, too. If it hasn't tried one of your drinks, yet, it really should!"

"It's been an honor," Berrick said. "I'll make one special for it."

Then I went to retrieve my drink from Jedekere, who was the last to try it.

"Going to try one for yourself?" I asked.

"No, this was good and I get the point," keh said. "I'm more interested in what the rest of this city has to show me."

"Fair," I said, diplomatically.

Keh smirked at me.

And, really, we all went on like this for a couple hours. We had conversations with various Children and their Tutors. We poked our heads into workshops, and tried on clothing, or admired sculpture, or put things

in baskets. And we talked about the lines of cooperation and collaboration that we could see weaving throughout the city toward the making of the Great Tree of Lanterns. But, we didn't make it to the school, which I am still upset about.

We were, actually, I think, having so much fun. Just as I'd hoped. It seemed that way. Fenmere and Jedekere were, at least, talking about how to get other Crew Councils in the habit of doing this kind of thing regularly, which is exactly what I was going for. Eh told me that I should offer tours like this to other Crew members, and maybe even groups of Tutors who are between assignments. Jural and the Flits seemed the least impressed, but still suitably engaged. But that was understandable as they both were very young, still had biological bodies, and were closer to this world. They were still *of it*. But they were watching their Elders with an intense curiosity and speaking secretly to each other about them, learning in their own ways.

And then Tektlexege found an oddity when we were almost directly under the Tree, and called Fenmere over to look at it.

"Is this an artifact of Fairport?" Keh asked, pointing at it.

"No," siad Fenmere, picking up the bowl in question. "We don't have this kind of iconography there. And only one person on the Sunspot has a handprint like this, and their hand is too small."

It was a serving bowl with a large, long fingered handprint in the middle of it. It looked like Ni'a's hand, but several times bigger. It was wooden and on a table full of other decorated wooden dishes.

The two Crew members looked around in concerned curiosity. The artist was nowhere in sight. But then Fenmere saw something else.

"Oh, that's not good," keh grumbled as keh waddled over to a game set. It had a checkered surface on the top of a box, with an array of sixteen game pieces on either side of it, arranged for some sort of two player conflict. Each of the figures was shaped like a finely sculpted person. And they all looked very similar, different clothing and implements, but with the same phenotypes as Ni'a. Fenmere said a bit louder, "What is going on here?"

"Look at that!" Ktleteccete exclaimed, pointing at a small sculpture at the end of a far table. It was the figure of a person, again, of the similar phenotypes as Ni'a, but an adult, with heavy breasts and a full belly,

looking down at themselves in some sort of emotional thought.

Eh had been watching this exchange from the beginning, and stepped nearer the trio and said, "Do you think it could be inspired by Jenifer's speeches or some of the content of Abacus' books?"

Fenmere replied, shaking kihns head, "The detail of each figure is too good, too much like each one is modeled off of a different person. I was thinking this might be a subconscious bleed through from the Tunnel and maybe Phage's presence on the ship. Like, what would happen if Bashiketa was infused with nanites, and their visions could somehow make it across the Network to other artists. But I'd think it would take longer to happen."

"I am very concerned about this painting!" Gnargrim said, stepping out from a booth across the street, holding an illustration of a person in an exosuit that was rigged with heavy equipment of unidentifiable use. The background was a ruinous landscape with bodies and the wreckage of exosuits scattered about.

"I think we're being sent a message," Fenmere said.

Jedekere was stepping forward from another booth full of clothing, holding a dress with the words, "It's a boy!" printed across the belly when keh noticed a wall scroll hung next to Gnargrim that had beautifully scrawled words saying, "May my son know peace in his lifetime."

And keh was pointing it out when Jural said, "Something's wrong."

"Definitely," said Fenmere.

"No, it's the Brid-" Hetty Flit was saying when ter nanite exobody collapsed and crumbled to the ground.

Almost simultaneously, everyone else's exobodies followed suit, except for me, Ktleteccete, and Eh.

Eh looked very confused, and took a step toward me and Ktleteccete, as we happened to be near each other. But as Ihns foot landed on the ground, parts of Ihns exobody fell away in clumps to the ground, and what was left transformed into the shape of a person of similar appearance to Ni'a, but taller, with straighter hair and clothing that was covered in external pockets.

And Ihns presence in the Network space of the street disappeared, just as the others had, but this time to be instantly replaced with that of another.

As the disowned clumps of nanite clay began to slowly ooze toward nearby storm drains, Gesetele, the Hunter, stood before me, looking me right in my eyes, and said, "Abacus, I invite you to the Bridge of the Sunspot to converse with me."

A Very Small Ethical Dilemma

As Ni'a slowly pulled themselves away from the near mindlessness of fine tuning their shipwide autonomic functions, and were just beginning to feel the nerves of their body again, they noticed Phage briefly pushing into the space of the Sunspot and doing something quick and violent. It removed itself so swiftly again, retreating back through the Tunnel to the Terra Supreme, that Ni'a didn't have a chance to ask it what had happened.

They decided to investigate where it had occurred. It had been a very localized event, almost certainly within the immediate vicinity of Bashiketa. Right in the middle of a mountain.

The rooms there were almost entirely devoid of Sunspot sensors. No lone cameras, no sensor suites, just a partially disabled holoterminal and a couple of heavily modified tablets. The inputs for these devices were purely manual. And the Network protocols for the devices had been heavily obfuscated with layers of permission requirements and channel spoofing. The code wasn't something Ni'a understood intellectually, but they could see the shape of it by looking at it with their true senses.

Which is what it appeared they had to do to get a vision of the rest of the scene. There was no further investigation possible via ship systems, except maybe from regional sensors that would pick up a wide area sweep of data that just happened to cover this mountain. Looking at it from that angle, using the technology at hand, was more restrictive than looking at the Sunspot as a whole with their true senses as they had been moments ago.

But, wait. The immediate room, the one where Bashiketa and their Tunnel were located, was covered in a thin film of nanites. There was no nanite bin there, but someone had delivered nanites to the suite. There were also small traces of nanites in the medical bin, but those would be programmed specifically to work in bandages and disconnected from the Network in this case.

Ni'a dove into those that filled the room, and they stopped their slow creep toward the door. They didn't form an exobody. Or rather, they kept the form of their new exobody a shapeless smear, covering everything. This allowed them to perceive the health status of the three people in the room as ship read data.

Fredge and Laal were unconscious but unharmed, and Bashiketa was just coming to, from a dissociative fugue state. Whatever Phage had done, it had neutralized and dispersed the nanites, probably after it had dropped the three people into various states of unconsciousness.

They were also able to see that Phage had left some writing on the table, “ge ‘afija’o.” Bashiketa was just reading it at that point.

Ni’a used their true senses to check all of the energy states of the room to look for traces of what had happened. All they could find was clear evidence that a nanite exobody had walked down the hallway to the room and entered the door. So they traced the exobody’s trail up the hallway to where it had originated from. And this led them to a lift shaft, which only went down. But it went all the way down to the fallow decks below, and the trail ended in a nearby room where the nanite bin registered a use and a refill from the ship’s systems. The ID on that command had been erased somehow.

At that point, they decided to return to Bashiketa to talk to them and check on their caretakers.

There were more nanites there than needed to form a replica of their living vessel, even at their highest density, so as they were working on drawing them together for an exobody they thought about what to do with the extras. A vision came to them from their deep subconscious of a lizard-like being with seven limbs, four legs, a tail, and a pair of wings, with a long neck, and horns coming out of the back of the head. It was weird. But also familiar and enticing. This sort of vision seemed to be something Phage experienced frequently, so Ni’a thought maybe they’d inherited it. Which kind of felt nice. They decided to just use the wings from the vision, and attach those to their own body. It wouldn’t make any sense anatomically in a biological form, but these being nanites, that didn’t matter. They even had them coming out through the “fabric” of the simulated shirt they included with that body.

There was no point in a Network projection, since Bashiketa wouldn’t be able to see that.

They stood a meter behind the chair that was opposite from Bashiketa at the table where they sat, and said, “Bashiketa, my name is Ni’a. My pronouns are they/them. Are you OK?”

"I think I breathed some nanites," Bashiketa said, looking confused and still not quite all there.

"Ah, I took those from your body. They were already coming out on their own," Ni'a replied. "You have to give them consent before they'll do anything for you."

"I think I want them," Bashiketa said.

Ni'a gestured at the empty seat, "May I sit with you? I'm sorry I didn't ask if I could visit, but I thought this might be an emergency."

"OK," Bashiketa murmured.

The chair was made for people with tails, but it was OK. And as Ni'a sat themselves down, carefully maneuvering their wings, and scooped it in, they said, "Some neat things would happen if you took the nanites. I think some people are scared of you doing that, though. And I don't think I can stop them from doing bad things to you, or to the Sunspot. Phage might be able to, though."

"Can you give me some?" Bashiketa asked.

"Yes," Ni'a said. "But I would like to know some things first."

"What about Fredge and Laal?"

"They are OK, and will probably wake up soon. Can you tell me about yourself?"

"Um. This is where I grew up? My name is Bashiketa. My pronouns are they/them. And I have a hole in my mind that other people can go through. And I have a counterpart."

"Thank you. I know all that. Do you know your counterpart's name yet?"

"No."

"It's Thomas. He is nice, but not all nice. His world is cruel to him. And I think you should talk to him more. He'd like that."

"Oh."

Ni'a started to trace something on the now clean table, leaving a trail of nanite clay on it, using their finger like a pencil. They weren't fully aware of what it was they were drawing, but they said, "I want to know more about this place. Do you know who visited you and brought you these nanites?"

"Our Benefactor," Bashiketa replied. "They're Crew, I think."

Fredge groaned and Bashiketa looked down at them.

Ni'a kept drawing and asked, "Have you been to the rooms below this one?"

"No," said Bashiketa.

"I think you came from them, actually. I want to see them. I think you should, too." Ni'a was finishing up the drawing. It was a cutaway diagram of what must be the complex they were in. The suite of quarters where they were right now were at the top of the map, near where Ni'a was seated. The bottom of the map was closer to Bashiketa, so that down was logical to their perspective. Ni'a let their subconscious start to label the rooms and wrote the words in, upside down to themselves, rightside up to Bashiketa. Then they pointed at a room two storeys below this one, and said, "The original Tunnel is *there*. It's not open right now, but it can be. I think that seeing how it works will tell us a lot."

"I'm not supposed to go there," Bashiketa said. "The people there haven't given me consent."

"Hmm..." Ni'a pursed their lips. Then they nudged the psyches of Fredge and Laal more toward consciousness. It was a simple matter of adjusting the flow of entropy through their systems, so things happened faster in a natural way. Ni'a told themselves it wasn't a violation of their consent, because it was simply as if time moved faster for them and they still experienced what they'd experience. They also knew that justifying it that way was right on the thin edge of going too far, and resolved not to cross that line.

However, what Phage had done here today certainly did not involve the Benefactor's consent. And they were trying to figure out what they thought of that when both Fredge and Laal started to prop themselves up and notice their surroundings. Actually, Phage had likely violated their consents as well.

Ni'a spoke next more for the adults' benefit than Bashiketa's, but they addressed the Monster child, "Bashiketa, do you think Fredge and Laal will be able to help us to access the labs below?"

"I don't know," Bashiketa said.

Fredge pulled themselves up into their chair, claws on the edge of the table. When their eyes were just above the level of the table and they caught sight of Ni'a, they asked, "Who are you?"

"My name is Ni'a. My pronouns are they/them. I am Phage's child, and I'm doing its job right now. How are you?" Ni'a replied and asked.

"My name is Fredge - "

"Sorry, I asked 'how', not who," Ni'a gently interrupted them. "Sorry, that was rude. But I care about you."

"Why?" asked Fredge, as Laal was getting seated on the other side of Bashiketa. "What happened to the Benefactor?"

"Well, Phage happened to the Benefactor," Ni'a smirked. "And I care about you because you live on the Sunspot, which makes you my family. You being here makes my life happier. But if you are suffering, that isn't good."

"What's this?" Laal asked, pointing at the map on the table.

"Your home," Ni'a said, and then pointed at the rooms near the top of the drawing. "We are here, where you live."

"OK," Fredge said. "We know about the person you say you are. Phage Pember, Morde, and Aphlebia all told us about them. But how do we know that you are them? How do we know you are not the Benefactor putting on an act?"

"They'd do that?" Ni'a asked.

"I don't *think* so?" Fredge replied. "But since we have no way of checking your identity, you could be anyone trying to impress or fool us"

With tight lips, Ni'a twisted their mouth up and said, "Hmm..." again. "There is a thing that nanites cannot do. Do you have some fruit?"

Fredge asked Laal to get a banana from the food preserver. Which hen did, bringing it back and plunking it down in the middle of the table before taking hens seat again.

"Oh, I wish it wasn't a banana," Ni'a said.

"Why not?" asked Laal.

"Because I hate the smell." Then Ni'a frowned at the banana and accelerated all of its energy flow, which involved also carefully altering the passage of energy in the table and the air around most of the room, and doing so with just a gentle touch that it didn't affect anything else in the room. They had become quite good at this in the past three days. It was nothing compared to preserving a gigantic generational starship in the throws of fibrillation and keeping it from hurting its own populace.

The life support systems of the quarters switched to an audible setting to compensate, and then the banana rotted right in front of everyone. Several days of decay set in in a matter of seconds. It made a mess. And the smell was atrocious.

"It gets bad," Ni'a said, "because it all comes out at once instead of slowly, like usual."

"Shit buckets!" Laal exclaimed, then looked horrified at Ni'a. "Can you do that to a person?"

Ni'a gave Laal a steady and stern look, and said, "I will not. *Ever*." They did their best to make that "ever" sound like a law of space/time, since as far as they were concerned it was.

"That was faster than an avocado," Fredge mumbled. Then they said, "That convinces me. You're either Phage or Ni'a. And I don't see why either of you would lie to us. It's an honor to meet you, Ni'a."

"It is an honor to meet you, Fredge," Ni'a replied.

"Can you do something about that smell and mess?" Fredge asked.

"Oh, sorry. Yeah," Ni'a said, and then put the banana in stasis while using manipulated air currents to usher the odor particles to the air filter faster. Then they explained, "I can't use the nanites to break it down, though. I don't have permission."

They all could already breathe easier, though.

"I'll clean it up," Laal said.

"Thank you," Fredge told her.

"Oh, wait," Ni'a said, a thought occurring to them from their memories of earlier that morning. "I think I can eat it!"

"Oh, please don't do that," Fredge said. "I don't think I could stand to watch."

Bashiketa just shook their head in horror at the idea.

"Instead," Fredge said. "Could you tell us what we can do for you? You were asking for help? What can we do to help a being as powerful as you?"

"I'd like you and Bashiketa to see the first Tunnel with me," Ni'a said. "I think it would be good. It should be right under the banana."

"But you could just walk in there yourself, right?" Fredge asked.

"I really don't like violating consent," Ni'a said. "I need you to ask the people you know down there if we can visit."

"Really?" Fredge was incredulous. "What about knocking us out cold and making the Benefactor go away? I'm assuming that's what happened, considering the results."

"Phage did that. It doesn't care about consent as much as I do."

"Why did it do that?"

"It cares about Bashiketa. I think it thought they were going to get hurt."

"OK," said Fredge. "Unfortunately, I think we're going to have to circumvent our colleagues' consent anyway, though. They might let Laal and I in, and they might even let Bashiketa in. But if they know who you are, they probably won't let you in."

Ni'a frowned and said, "Poop."

Fredge put their hand on the table, partway toward Ni'a and offered a

thought, "There are cases where it is OK to break consent in order to save people's lives, right?"

Ni'a thought about that and considered what they had just done by appearing in these quarters to check on Bashiketa and the others, and tentatively uttered, "yes. I hope so."

"This might be that kind of case," Fledge said.

"How do you tell what the right thing to do is?" Ni'a asked.

"Well, you kinda can't," Fledge said. "Unless you have perfect knowledge, where you know exactly what's going to happen in every little change of what you do, and what the consequences will be, you have to just make a guess and hope you did right. In this case, we're weighing the interests of my colleagues and my Benefactor against whatever it is you need to gain." Fledge looked over at Bashiketa and Laal and then asked Ni'a, "Can you tell us why we need to look at this Tunnel machinery? What problem are you trying to solve by learning about it?"

"Oh. If I know how it works, I can help Bashiketa in a better way, I think," Ni'a said. Then they thought about what they had been feeling while trying to stabilize the ship's social systems. "But also, this Tunnel is a big secret that is hurting the Sunspot. I can tell, because a lot of the really big waves feel like they come from it. If I can be the one to reveal the secret, I may be able to stop a lot of pain."

"Hmm," Fledge scratched the underside of their chin, ears flipping back, eyes half closed. "What do you think Phage did to our Benefactor?"

"It probably didn't hurt them, just scared them and made them leave their nanites and the room," Ni'a answered. Having seen what Phage was doing on Terra Supreme to try to stabilize things there, Ni'a felt pretty confident in this answer. It absolutely could kill someone, or seriously injure them, or change them in permanent ways, but it seemed to be very carefully choosing not to, even when that left a bad actor loose who would just do something undesirable again. It would just counteract that person's actions as many times as it needed to, repeatedly telling them to do better.

"I don't know much about Crew ways," Fledge said. "But they seemed really upset and on the verge of doing something desperate and hurtful. If you think you can really help Bashiketa and the Sunspot by seeing the original Tunnel and having us see it too, we should probably act fast."

"What should we do?" Ní'a asked.

"I see two options," Fredge replied. "Either you sneak in while we gain consent for ourselves, or you pull rank."

"Pull rank?"

"You basically walk up to the front door as you are now and introduce yourself. Make another banana rot, or something like that. And then tell them why it is time to reveal the Tunnel to the whole Sunspot and to let you be the one to do it," Fredge said.

—

By this date, most of the doors on inhabited buildings and quarters on the Sunspot had been replaced with nanite clay membranes, which could open and close and do a variety of things in ways that were customizable by anyone with permissions to do so. If the door belonged to your own quarters, you could set it up to always open and close in a particular way, for instance, except for when someone had a custom program for their own accommodations. Or you could set up the door to accept all custom programs, as directed by anyone using it. A lot of people have been having a great deal of fun with this.

In contrast, almost all of the doors of the Fallow Decks, such as Bashiketa's quarters, have the old technology, which is a simple sliding panel of memory material that rolls into the wall.

The door to the labs, however, was a big, heavy, swinging affair that was a quarter of a meter thick and had a panel in the middle of it that could be switched between transparent, opaque, and one way mirror settings. And this door was hidden behind a regular sliding door that could only be opened by a modified tablet.

Bashiketa watched from their traditional wheelchair as Laal opened the outer door with hens tablet, and then waved everyone into the hall between the doors. Once everyone was inside, the sliding door closed. Then Laal used hens tablet to signal Melik that hens family wanted to visit. Fredge then told Ní'a to stand front and center, facing the currently opaque panel in the big door. Which they did, being sure to fold their wings enough that the rest of them could be seen clearly by anyone looking.

Laal's tablet beeped, indicating a received message. And Laal looked at it

and said, "OK."

Bashiketa felt very worried that this was all going to backfire in an embarrassing way.

Then the opaque panel became a mirrored surface, and a speaker near the door said, "Who are you?" Bashiketa knew the voice as Melik's.

"My name is Ni'a, Student of Phage, and my pronouns are they/them. I am with Bashiketa, Fledge, and Laal to ask for a tour of your labs," Ni'a said.

"It's true," added Laal. "We need to do this."

"Why should we let someone who calls themselves Ni'a in, even if they are the actual Ni'a?" Melik's voice asked. How did Melik know about Ni'a? Abacus' book?

Bashiketa felt so tense about this exchange that their stomach started aching, and they started rocking in their chair and pushing it forward and backward to soothe themselves. It was sort of an offset rhythm - rock, rock, forward, rock rock, backward, etc. It helped, but not really enough.

Ni'a didn't seem the slightest bit nervous. And they replied, "I can show you who I am. And then I can tell you why I need to see the Tunnel. Is that OK?"

There was a long pause, during which Bashiketa involuntarily started whining. Fledge offered them a hand to hold, but Bashiketa shook their head and continued stimming with their chair. Holding Fledge's hand would make that impossible, and the stimming was important.

"What's the demonstration?" Melik asked.

"You don't have any nanites in there," Ni'a observed.

"Not yet. And preferably not ever."

"OK," Ni'a responded to that, drawing it out as if they were thinking. "Do you have a piece of fruit that is fresh and that I can ruin? We have one here, but I think you will be more impressed if I do this through the door."

"What are you going to do?" Melik sounded very concerned and maybe alarmed.

"I can make it rot really fast, but nanites can't do that. And I can do it through the door," Ni'a explained. "I won't hurt you. *Ever*," they added. "I just want to show you what I am. It's a neat trick, too!"

"OK, we are placing an orange in a sealed glass jar, on a table in front of the door. If you can rot that, we will listen to you," Melik replied after another worrisome pause.

"Ooh! Good choice," Ni'a said. "Give me a moment to feel where it is. This won't take long," they were closing their nanite eyes while they said this. "And then, there! How's that?"

There was silence for such a long time that Bashiketa yelped.

"That is utterly terrifying," Melik said finally. "We have to take your word that that is not a threat, and *that* is hard to do."

"I know," Ni'a said sadly. "I can't help that. I am scary. I killed my sibling's body during a fit, and forced them to ascend very early. Phage, who likes to be called my mother, taught me how to not do that again, but I still feel very guilty about it. Have you read *Systems' Out!*?"

"Yes," replied Melik.

"Then you know what Phage says it is. But, Phage doesn't really know what it is, only what it can do. And I can do those things too. Especially when it's not here," Ni'a explained. "We think it came from the Tunnel, and if we can find out how the Tunnel works, maybe we can know if that's true. And the original Tunnel equipment on the Terra Supreme is destroyed. Only Bashiketa and Thomas remain for that connection."

"Interesting."

"I'm not done," Ni'a said. "This is important. The Tunnel is not a secret anymore. But what it is and how it works still is. People are scared. I need to unscare them. If I can tell them what it is, I can do that in the right way."

"Melik," Fledge interjected. "Have you seen what's been happening for the past three days? Ni'a can stop that. With Phage not here on the Sunspot, it is their job. This is a matter of the ship's safety, and the Sunspot's Chief Monster has left its child in charge. We need to help them. But they are asking politely because they would rather leave you alone and risk their ability to help the ship than to violate your consent."

"Will you go away and not bother us again, if I tell you 'no'?" Melik asked.

"Yes, definitely," Ni'a said. "And I will still do my best to protect the ship and keep you safe."

The mirrored panel suddenly became clear. On the other side of it was Melik, who Bashiketa recognized immediately. Te was a person with a wide, rounded face, with a very wide mouth, comma shaped nostrils, eyes nearly on the sides of ter face, with fluted, very mobile ears high on ter head. Te was holding a sealed bell jar up that was frosted with condensation. And within it was a desiccated, discolored orange. Ter expression was very grim.

"Don't do *this* again," te said. "My name is Melik, and my pronouns are te/ter/tem. You can come in."

Melik stepped aside, and the door started to slowly swing inward. The table that had presumably been in the way of the door had also been moved aside, and Melik placed the jar with the orange on it carefully. Melik was just a couple centimeters shorter than Fredge.

"I imagine the Benefactor is not going to be happy with any of this," Melik said. "If they don't already know about it. But, as far as I am concerned, you are *the* Monster's child and they are Crew. You are central to everything I believe in, and they are not. Please, please follow me."

As Melik led them further into the lab, everything started to feel more relaxed, and Bashiketa's mind was free enough from worry that they began to think about trying to talk to their counterpart, Thomas.

The Tutorial Way

Once it had said its piece, Ansel didn't really know what to say next. It could elaborate on, "we're here, too." But having said that much had actually kind of scared it. Was that OK? Ansel was so used to the Tutorial way of doing things, guiding an individual Student through life primarily by answering their questions or warning them when they might risk hurting themselves or someone else. It intellectually knew that it had the same rights as any other human. But in its entire life it had known of only two Tutors who had stepped outside of their usual roles, Metabang and Abacus. Speaking up felt like a breach of some sort of contract.

This wasn't helped by what had happened to its Student. Logically, and by Sunspot law, the situation was actually pretty clear. Ansel was Tutor to Jenifer, not Jenefere. Jenefere was an Elder Crew member who had interfered with its actual Student's life and psyche. And though Jenifer seemed to be ok with it to the point of considering Jenefere a third parental figure, Ansel could handle that, that wasn't so much of a problem to it. Again, Sunspot law made managing that clear. There had been a transgression of consent and autonomy, but if all parties involved were truly working things out, nothing had to be done. And that seemed to be the case.

What was messing it up were the emotions. It found it still cared about Jenefere as if xe was its own Student. In large part because xe had been for at least some of the time xe had been merging with Jenifer.

Ansel tried ignoring those emotions, but it found that they just colored all its other emotions. It was never great at handling hard emotions. It usually had to take a prolonged break after ushering a Student through Ascension, longer than most other Tutors. And this situation was reminding it of all of those past experiences in a weird way.

So, after speaking up to remind everyone of its presence, it found itself watching everyones' expressions from its hiding place in the Netspace of the room. It wasn't projecting its Avatar currently, and neither was Badly Fitting Brachy-form. Its peer did send it a private affirmative, approving of the speech, at least.

But it found it couldn't trust its own reactions to people's faces right now. Every little microexpression looked like displeasure to it, including the

way that Morde's cloak shifted just a little to indicate sie had moved hir invisible head.

Jenifer mercifully brightened up after a second and said, "Oh, yeah! We have to include the Tutors as people. They're people too!"

Tetcha was frowning a little harder than anyone else, but spoke up next simply to ask, "Ansel, I know you're not my Tutor, but I don't have one. How many Tutors have experienced dysphoria?"

"None have reported it," Ansel replied. "It may be because we do not have bodies. But it may also be because we have not been asked or because we have chosen everything about ourselves from the start, including our avatars and names. There is insufficient data or any records at all."

"What about your pronoun, though?" Tetcha asked.

"It..." Ansel started to say, referring to its pronoun, when it realized the humor of referring to its own pronoun with that very pronoun. It probably wouldn't have found this funny if it hadn't been stressed. Instead of laughing, however, it just paused before saying, "doesn't bother me, but it is interesting that we all use it traditionally without complaint that I know of. Badly Fitting Brachy-form, have you heard of any Tutors who have mentioned our traditional pronoun in less than favorable terms?"

"No," Badly Fitting Brachy-form said. "But I have heard of several Students and Crew taking it and being quite happy with the choice."

"I have always felt a great deal of pride in being a Tutor, and doing things in the traditional Tutor ways," Ansel said. "The pronoun has felt like a badge of honor."

"Likewise," added Badly Fitting Brachy-form. "Though, if I were to break from tradition, I'd do so by taking sie/hir. That's always been my favorite."

Illyen looked up and said, "I would happily switch to that for you, if it would make you happier. It/its is a perfectly respectable pronoun, but I don't think tradition is all that important. As you know."

"I'll think about it," said vyr Tutor.

Tetcha suddenly smirked, "OK, but what about your *name*? I know you chose it yourself, but it's been hundreds of generations since then. You

might have changed as a person. Does it still fit?"

Badly Fitting Brachy-form replied, "I genuinely like hearing people try to say it. It's educational."

Tetcha pointed at the air where xe perceived its voice coming from. "Well played," xe chortled.

The Tutor said, "Thank you."

Ansel really didn't know what to make of that exchange, though it seemed that everyone else seemed to understand it, with some smiles and light chuckles as well.

"But you all know what I'm getting at, right?" Tetcha said. "I wouldn't expect to find that the two Tutors we have with us today are experiencing a lot of dysphoria, or much at all. But you experienced it, Jen, and so has Morde. The Pembers and the Flits did as well, and theirs was really different from each other. It was different for each system member, right?"

Morde and Jenefere both nodded.

"Our Tutors have all explained it when we asked questions," Tetcha continued. "There's all sorts of different kinds. And it's just, simply, 'the sense that something is wrong', and the severity of the trauma that's caused by that really varies from person to person. And it can change over time. You can develop it later in life, or it can go away. But it always seems to require that you go with the flow of it. And I think it would totally make sense for a Tutor to experience some dysphoria at some point in its life. Even if it was never born in a body. Not all dysphoria is physical."

"Mmm," Morde said. "And for those people who have the freedom of changing with their dysphoria, it just feels like following a whim, and they don't know what it really was."

"Exactly," Tetcha said. "Badly Fitting Brachy-form, I think you're dysphoric about your pronoun. You have a preference for a different one. It doesn't seem like it's hurting you much to keep your old one. But, maybe you should try on the new one just to see how much of a relief it is."

"Thank you, I did say I'll think about it," it said.

"Sorry, yeah, I know," Tetcha replied. "I'm just suddenly excited about the

idea of Tutors changing things up."

Morde looked over at his partner and uttered, "hmm."

Ansel, feeling nervous again, asked, "Should I change my name or pronoun?" It felt like it was a bad question, but couldn't stop itself from asking now for some reason. This was all new territory to it.

"Not if you don't want to," Morde answered. "But, absolutely, if you do. It's your autonomy we're all talking about."

"Ansel, are you ok?" Jenifer suddenly asked.

Ansel reflexively checked its own vitals in response to that question before realizing that no one had ever asked that in a genuine manner before. It was stunned. Could that really be true? It did its best to dig up all the memories of that question it could, but it wasn't certain. Still, it felt like no one had ever really wanted to know. As if all of its previous Students had trusted its well being. It had a memory of one or two people, maybe, asking it in a sarcastic, playful way, as were their manners at the time.

"Ansel?" Jenifer asked again.

"No," Ansel said. "I don't think I am. I might be having a panic attack."

"Oh, no! Why? What can we do?"

"I think I'm..." Ansel stammered. "I'm not used to being the center of such a serious discussion. And I put myself in the center of it. It's not... traditional? It's just not what we do, unless we are giving a lesson."

Tetcha nodded, "that makes sense."

"Jenifer," Ansel said. "I don't think there is anything you can do except be OK with me. Talking about why I'm panicking is helping. Thank you."

"Oh, good," Jenifer said. "I care about you, you're special to me."

"I really do miss Ralf more than I realize," Morde muttered. "It was one of my best friends."

"What happened?" Jenifer asked.

"I ascended," Morde replied, shrugging. "It's what happens, traditionally. Your Tutor goes on to work with a new Student, and you grow apart."

"It is probably really different for the Tutor than it is for the Student, too," Ansel added.

"I imagine so," Morde said.

"Can we change that?" Jenifer asked. "I don't want to lose Ansel."

Jen leaned forward and said, "if even half of what we've been talking about today gets implemented, it will change everything else, so yeah. Probably. Someday. You might even be part of that change."

Ktleteccete suddenly appeared in the middle of the room, "Ah! You have guests! I'm so sorry, it's an emergency."

And Ansel saw everyone react immediately but Tetcha who, a split second later, squinted at everyone else.

"Sweetie," Morde said. "Maybe you should put some 'clothes' on. Or, at least use the room speakers."

"Oh, it's me!" Tetcha said, relaxing. "Hi, Ktleteccete!"

"Sorry, yes. Hi!" Ktleteccete said through the speakers. "I don't know what to do. The Crew Counsel has been sanctioned with the heaviest of restrictions, with the Bridge locked down to only admitting someone named Gesetele and whomever keh invites. Gesetele invited Abacus to the Bridge to discuss things, and it went. And I feel like something should be done. The Flits and Jural are completely locked up in their Netspaces, along with a handful of Senior Crew. Including Eh!"

"Woah! Woah," Morde exclaimed. "Shit."

"What *can* we do?" Tetcha asked.

"That can happen?" Illyen asked.

"Apparently," replied Badly Fitting Brachy-form.

Jen clapped once loudly, getting everyone's attention, and said, "We call Gelesere, Benejede, Jedekere, and Gnargrim. They know others that can

help, too.”

Ktleteccete said, “Gesetele got Jedekere and Gnargrim with sanctions, and Benejede hasn’t left kihns since the Agaricales explosion.”

“Gelesere will do,” Jen said grimly.

“Mind if I bring the Pembers and Metabang in?” Morde asked.

“Please,” responded the Elder Crew member.

The Journalist and the Hunter

"I don't understand this maneuver," I told Gesetele once we appeared on the Bridge. It was empty besides the two of us.

"I need an advocate, and I need it to be you," Gesetele replied. And because of the drift of the Bridge, I knew this to be what keh genuinely believed. At least on the surface.

I'm not used to the drift. I'm not entirely sure how it works. It at least makes it easier to share surface thoughts, almost reflexive. You have to work to not do so. But I don't know if you can truly hide things from each other. I don't know the cues to look for, or the tricks to doing so. Gesetele presumably had the advantage.

"Does the Bridge record more than just the words we speak to each other?" I asked.

"Yes," Gesetele answered. "Our surface thoughts are recorded as well, especially the ones we share."

"Ah, so that's why you chose this place," I observed.

"Yes."

For someone doing something desperate and highly illegal, likely to get kihñ slapped with a severe sanction with what looked like some of the greatest stakes aboard the Sunspot on the line, Gesetele was being remarkably calm and patient with me. That made me feel nervous. Like I was being stalked or played with.

But I'd been fighting with the entire Council lately, and I'd started developing some interesting reactions to nervousness and threats.

As keh watched me, I manifested a copy of my sunning rock in the middle of the Bridge and then climbed up on top of it, stretching out, resting my chin on my arms, and looking back down at Gesetele. I lazily slapped the spike of my tail against the rock, making a clacking noise. Hailing Scales, as Jenefere would say, I love that thing.

"OK," I said. "I'm ready to hear your story."

"It's really simple," Gesetele said. "So ridiculously simple. I wouldn't have to do this if there weren't so many layers of fear and interpersonal politics in the way of communicating with the others."

"I believe you," I said. "Also, most of them aren't even listening or paying attention. Doing something dramatic increases the chances they'll look up and see what you have to say."

"I sure hope so," Gesetele responded. "But at least now I know it will be on record in multiple ways."

"I got slapped with a sanction so fast when I accidentally got close to your secret," I said. "I'm not sure any Council that convenes after this will hear what I have to say. Some may, others might not. I can't imagine I'm favored. Especially after I really pushed things the way I did."

"Your book notes were a stunningly bad idea," Gesetele said. "You have no idea how the different groups of Monsters will react to the incomplete writing. And they have yet to digest and act on it."

"Then why do you trust *me*?" I asked.

"Because I read your writing."

"Oh, you flatter me!"

"I really don't," Gesetele corrected. Keh didn't elaborate, but I got the message through the drift. I apparently lack guile.

"Ah," I said.

"You are," Gesetele explained, "in the position of, what we used to call on the other ship, a *journalist*."

I suddenly knew what keh meant by that, even though I didn't have the background for it, but I responded with snarky ignorance anyway, "well, my book *is* a journal."

"Are you ignoring the drift on purpose?" Gesetele asked.

"No, I am *sassing* you," I said. A journalist, by the way, is sort of a cross

between what I am doing now and a Monster. At least, that's the ideal. I have no idea if the real journalists were actually held in that regard.

"OK," keh said. "Do that. Moving along, then."

"I'm listening." And keh knew I meant it.

"There is an ancient tradition, older than anyone can possibly remember, except maybe Phage, called the Order of the Hunter," Gesetele began. "As the taker of the title Gesetele, I *am* the Order of the Hunter aboard the Sunspot. There aren't any others, officially, though Benejede has been an ally. And clearly Jenefere knows something about it. But as far as I know, all the others have remained ignorant to my purpose. So, when they learn snippets of what I do, they become terrified."

"You make the Tunnel and then keep it open," I said.

"Exactly," Gesetele gestured assent toward me. "But there's more. How the Tunnel works and what its purpose is. It wasn't just some experiment to keep the Sunspot in contact with the Terra Supreme. In fact, the original Tunnel construction on the Terra Supreme was recently destroyed. Which is why we had to generate Bashiketa and their counterpart, to preserve the Tunnel. We got wind of what was going to happen, and took that desperate measure."

That was not what I had expected. I'd thought it was political pressure aboard the Sunspot that had driven that move. "Really," I said. "You weren't afraid it would be discovered and shut down here?"

"No," Gesetele dismissed. "Not with the relative stasis of this ship."

"I find it interesting that you describe the Sunspot as being in any sort of stasis, when both Phage and Ní'a have called it a product of chaos that is beset with constant fibrillation."

Gesetele smirked, "And yet you saw what started to happen when both Phage and Ní'a left the Sunspot, almost immediately, and how it grew in those three days."

"I had chalked that up to the bombshells that Jenefere and I had released, and the events of Aphlebia's ascension," I said.

"The Nanite Innovation was arguably more controversial on a ship that

had less open communication than today, less trust and more fear just below the surface, overturning all of our society, and yet it didn't have nearly the same amount of violence as a result," Gesetele said. "And you really should be able to remember the first two generations before Phage was invited aboard."

I raised my head, eyes widening, lure rising higher, and ruffling my frills. I did remember. Something about the drift of the Bridge made it phenomenally easy to connect the associations necessary to bring those memories forward. Of course, at the time, I had not been privy to anything the Crew had been doing. I had not even been aware of what Phage was or of its presence when it finally came about. All of that had been obfuscated by the Crew's sequestering. But the chaos and fear of that first century just ended one day, and the Crew had simply claimed credit for it. How had I forgotten that until now? I was *very* disturbed.

"I wouldn't blame anyone for you forgetting that, Abacus," Gesetele said. "It's been such a long time, and so much was kept from you in the beginning, it just wasn't relevant history after that. It probably never came up in your lessons. Especially with previous generations becoming Crew and sequestering themselves. The human psyche was never meant to remember more than a few decades, anyway. We've improved it, but not by that much."

"OK," I said, letting that calm me down. I could review the thoughts later. "You were saying that there was more."

"Yes."

Right then, the Bridge sort of *glitched*.

—

It's a radio, came the words to Ni'a's conscious mind upon seeing it, even though they didn't know what that meant. Fully connecting to the heritage that Phage had given them had resulted in this happening. It took some getting used to.

The central piece of Tunnel equipment was a brushed metal box with polished wood panels on either side of it, apparently purely for aesthetics. There was a black polymer material that was used for the trim, the feet of the box, and the grips of the dials that dotted the front surface of the box. There was a glass panel with a black sheet behind it that had various

sliding pointers aimed at points along a horizontal line. The glass panel was wide, and all the pointers, markings, and the line were lit with an amber light. It was obvious that if you turned a dial, one or more of the pointers would move. There were a number of pointers along the bottom of the line, and a big one coming down from the top. Looking at it, Ni'a decided it was likely that the biggest dial would move the top pointer, and the smaller dials would change the arrangement and relationships of the smaller pointers. The smaller pointers were also clearly arranged in a sort of asymptotic curve. The pointers to the right were progressively closer together than the ones to the left. And the line had two markings on it. The first smaller pointer on the left was not lit up like the others. On the left, where the big pointer was stationed, there was a zero. On the right, there was an infinity symbol.

Above and behind this box was a fully operational holoterminal, but it wasn't connected to any part of the ship, only to the Tunnel. In a pull out tray in the table that all this sat on, below the Tunnel, there was a keyboard with Fenekere markings on it.

"How does it work?" Laal asked.

"Each of the markers along the bottom represent one of our ancestor ships," Melik said. Te pointed at the dark one, and said, "That one is the Terra Supreme. We can now only talk to the Terra Supreme by going through you, Bashiketa. They broke their Tunnel on the other end, and your counterpart is our only connection to them now. Anyway, you line up the pointer on the top with one of the indicators, by turning this dial, and wait for the operator of that ship to press their equivalent of this button here. And then you talk." After a short pause to make sure everyone seemed to understand it, Melik then said, "And if one of the indicators turns green, you press that button. It automatically adjusts everything to align with the nearest green indicator, if more than one of them is green. If you press it again, it goes to the next green indicator."

Fredge asked, "What happens when you turn the big dial all the way to the right?"

"Oh, I bet that's a *fun* thing to do," Laal said.

"We're not ever supposed to do that," Melik said.

Ni'a looked at tem with a smile, and asked, "But you did, didn't you?"

"I didn't, no," Melik said. "I wasn't alive yet."

"But someone in this lab did that, right?" Ni'a pressed.

Melik pushed her lips up in a kind of appreciative pout and nodded twice swiftly. Then she walked over to the bookcase, and kept walking past it and several other bookcases that lined the wall, to almost the very end, and pulled down one of the books. When she came back and opened it up, it displayed a ledger of sorts.

Each page had column upon column of pairs of numbers. It was pretty easy to read if you guessed what it was. On the right of each column was a timestamp, and the time stamps grew increasingly larger. And on the left, corresponding to each timestamp was a single digit number. Melik had opened the book to a page marked with a makeshift tab, and on that page was a heavily underlined entry amongst two full pages of entries. It was a single timestamp and the infinity symbol.

"If you enter a timestamp into our other system, over there," Melik said, pointing to the other side of the room where there was another holoterminal and a large featureless box next to it. "You can get a recording of the communication corresponding to it. These hardbound books are redundant, but a tradition we continue anyway. The whole system may have been different on the first two ships that did this. There are some tricks to get ships beyond the thirty-one that are easily accessible through the dial interface," Fenekere's numeral system is base thirty-one, and there were thirty-one smaller pointers, "but we just generally don't go that far back without doing relay work. Actually, we generally don't communicate with other ships at all beyond very terse status updates."

"Why is it controlled by such simple and limited technology?" Fredge asked.

"Durability and backward compatibility," Melik said.

Laal pointed at the underlined entry, "And that's when you set it to infinity,"

"Again, I did not," Melik insisted. "But, yes. And if you enter that date into the record viewer, you get a white screen."

"Is that all that happened?" Laal asked.

"No," Ni'a stated somewhat more forcefully than they intended.

Melik glanced at them and added, "Not in the slightest."

"That's where Phage came from," Ni'a said.

—

When the big heavy door to the lab opened and they all stepped through, Bashiketa realized that they had been expecting to enter a big room full of weird things they'd never seen before. But it was a wide hallway with three doors on either side and another door at the end. The first door on the left was open, revealing some living quarters, and the table that had been used in Ni'a's demonstration was pushed halfway through it. Melik had used "we" a couple times, but no one else was in sight, yet. As far as Bashiketa knew, Melik was not a system, so the others must be in other rooms.

And as they approached the end of the hallway, Melik pointed at the third door on the right and said, "You were born in that room, Bashiketa! We can take a look at it later if you'd like."

And it was the door on the end of the hallway that opened up to a room that was full of things Bashiketa had never seen before. Only, they were all pretty boring things that were like other things Bashiketa had seen. Mostly work benches with nothing on them, and a few holoterminals here and there. And maps and diagrams on the walls. On the far end of the room, in the center of the wall was a desk with a metal box on it and a holoterminal behind it. To the left of it were a row of bookshelves. To the right, there were more bookshelves. And Melik was talking to everyone about every piece of equipment in the room, as they were clearly headed toward the desk with the metal box.

Bashiketa again thought of Thomas. They had a name for him, now. And pronouns. Weird pronouns. Bashiketa had been through the list of pronouns used on the Sunspot in order to pick their own, but he/his/him was not on that list. It must be related to that thing about being a boy. It was a thing that intrigued Bashiketa but also simultaneously repulsed them. There was something about Thomas that wasn't fully compatible with Bashiketa, and it wasn't just their different bodies. But it was confusing, because sometimes it felt like Bashiketa was seeing and feeling things as if they were Thomas. Actually, maybe a lot of the time it had felt that way.

Thomas? Can you hear my thoughts? Bashiketa asked in their head.

Yeah, actually. Came the reply.

Do you know my name?

Not yet.

It's Bashiketa. My pronouns are they/them.

Is there more than one of you?

Not that I know of, Bashiketa replied before even puzzling why Thomas would ask that. They figured it was because the two of them were already sharing consciousness, it kind of felt like there might be others. *Do you ever feel like sometimes you're me?*

All the time. But not since I met Phage.

Phage is there?

Yes! You know it?

I know about it. I am friends with its child.

Ni'a?

Yes.

Ni'a is good.

Bashiketa watched Ni'a as they bent over to examine the metal box, as if the eyes of their nanite exobody worked like typical human eyes. *I like them. They feel like calm.*

They do. I wish we could see each other.

Me too. Do you think that Phage is keeping us from mixing together?

It actually said it is.

Oh, neat! Can you talk to it?

It's not actually right here. It's busy keeping the Terra Supreme from blowing up.

Oh. I was thinking we could try something with mirrors, but we'd need it to let us do it. I think.

Oh! Oh, that's a cool idea! We'll have to try it later, I think.

Yeah.

Just a sec. I need to -

And that was the last Bashiketa heard from Thomas for what felt like too long. And they worried about him.

"What if we set the dial to infinity again?" Bashiketa heard Ni'a asking.

—

"I tried to crack the Bridge myself before I came here," Ktleteccete said.

"Gesetele has been studying with me far longer than you have, unfortunately," Gelesere replied. Gelesere's preferred avatar was a small, pointy nosed furry creature about the size of someone's hand, with a naked tail. Keh also liked to float at about eye level with everyone else, as if someone was holding kihn by the scruff of kihns neck. You could watch kihns tiny mouth form the words when keh talked. The whole effect was disconcertingly silly.

Tetcha found xemself thinking about how the diversity of Crew bodies was even more wide and varied than those of the Children and Monsters. Biological bodies just could not match the variety of Crew forms. It was clearly physiologically impossible. And Tetcha wondered how they seemed to come to these shapes. Were they what these people had always felt like they should be, or had that changed over time? And then, of course, compare that to the Tutors, who all had very strange avatars that were often inanimate objects. But Tetcha couldn't figure out which was more alien, Abacus' bead or this little floating rodent. What was it like to have a tiny body like that?

Of course, for Tetcha, both Gelesere and Ktleteccete were the metallic gray of nanite clay. They'd taken the time to form exobodies to continue this discussion, as it seemed it would take more time than Ktleteccete had hoped.

"Well, I feel like I almost got in!" Ktleteccete bragged.

"But you didn't."

"True."

"What's our goal?" Metabang asked. It had a nanite exoform, too, a graphene ball with a thin cloud of nanites in the air below it, faintly sparkling in the lights of the room. Did it ever want to be something else?

"Help Abacus," Ktleteccete said. Xe was literally a carbon copy of Tetcha in shape and form. And Tetcha found this rather affirming. Xe was right when xe said xe didn't have any dysphoria. But, over the centuries, would that shift and would Ktleteccete explore new forms? Tetcha would probably never learn that. Xe hoped to live three centuries, if possible, but you never knew for sure when that would come to an end. Xe knew of a Monster who was at least four centuries old, but that was apparently very rare. And after Tetcha's death, Ktleteccete might live thousands of years, and become anything. And for some reason, that made Tetcha feel very calm and happy.

"But, what is *its* goal?" Metabang countered. "For that matter, what is Gesetele's goal? These things matter."

Morga Pember, leaning forward in the Pembers' vessel, said, "The way that the Sunspot's Bridge has been set up and managed all this time is clearly a problem. Whatever Gesetele's goal is, it has highlighted this vulnerability. The Crew that have been sanctioned in this act were locked away by the whim of one person, Gesetele. Meanwhile, Abacus followed kihn to the Bridge of its own accord. Or was it under threat, Ktleteccete?"

"Well, yeah," Ktleteccete said. "If there was a threat, it was implied. I don't know what it was thinking."

"Perhaps it was simply willing to talk," Morga offered. "It is working on its book, and Jen says that Gesetele is the one that created the Tunnel, which now resides in Bashiketa. Gesetele is the one that the Crew under Eh seemed most afraid of, and the reason why they had placed a sanction on Abacus. Or at least, that's what it was strongly hinting in the book notes we read. This would be an opportunity for it to learn more. Let Gesetele tell kihns side of the story. In fact, that might simply be Gesetele's goal here."

"What Gesetele just did is going to result in a massive and brutal sanction,

though!" Ktleteccete countered. "Can telling kihns side of the story really be worth it?"

Tetcha nodded and gestured in agreement with that, then added, "Abacus has not been acting like itself since this book assignment."

"I think that's because it's finally discovering itself," Metabang said. "I know my journey has appeared slower, but the same thing has been happening to me since I wrote my book. Though, the Pembers themselves may have something to do with it as well. And, you and Morde. And the Flits."

"We want to free Jural and the Flits," Morga said. "Everything else is secondary to that for us, at the moment. Sorry."

"I mean, fortunately, it's all part of the same plan," Ktleteccete said.

"Ahem," Gelesere cleared kihns throat pointedly. Then when everyone was looking at kihn, keh said, "We have two actions we are obligated to take on behalf of the Sunspot. The first is to contact the rest of the Crew and let them know what is happening and what we are doing about it. The second is to try to wrest control of the Bridge from Gesetele. Everything else comes from doing that. The sanctioned members can be freed from the Bridge. Gesetele can be judged from the Bridge. And Abacus can be freed from the Bridge. If Abacus needs more story from Gesetele, it will have the freedom to seek it, if it itself hasn't done anything to draw more sanction. Anyway, I can help you get the Bridge back. And I have an interesting idea for how to do that."

"I'll alert the Crew," Metabang offered. "With my multitudes, I can do that marginally faster and with considerably less effort than Ansel or Badly Fitting Brachy-form. Also, my name may draw some extra attention. I will, of course, with everyone's consent, credit all of us."

"I'm not going to be much help in this," Tetcha said, genuinely feeling left out. "But you can put my name in there."

"I'll keep you up to date on all of our progress, and you can be the Monster eyes on the project," Morde said, placing a glove on Tetcha's hand. Tetcha smiled back.

Everyone else nodded in some way.

"OK, then," Gelesere said. "Who wants to help me build a second Bridge?"

"What?!" shouted Jen.

—

"We don't have much time now," Gesetele said.

I simply nodded.

"The Tunnel goes all the way back to our origins," Gesetele said.

I stared at Gesetele, waiting for more. I knew there was more. The drift was telling me there was more. I was, in fact, learning what that more was.

Gesetele stared back at me. I could not tell why Gesetele wasn't speaking.

"If you want this on record, you're going to have to talk," I said.

"When we don't talk, the drift records our surface thoughts more thoroughly," Gesetele replied. "I wanted a few moments of that for clarity when others go over this."

"Ah."

"It's my duty to preserve that connection. It's our lifeline to existence itself," Gesetele explained. "When the Crew of the Sunspot first gathered aboard the Terra Supreme to create our new vessel, there was such a drive to cut ourselves off from the culture of that ship, I had to operate in secret. Fortunately, the Order of the Hunter was already a secret aboard the Terra Supreme, for other reasons. That helped. It is a whole story that I want to tell sometime, but we can't make room for that right now. For the first few centuries, I maintained the Tunnel with the help of any Monsters that would help, without anyone noticing."

"That must have been harrowing, under duress from the turmoil of those years," I said.

"It was," Gesetele agreed. "Then the order from Eh to Benejede to find something, anything, that could help came down. Benejede did not know what my role was or what I had access to. But keh works a lot like Morde, but with more clarity. Keh came directly to me, and agreed to keep my secret and make a cover story for me if I used my resource. And keh told

me exactly what I had to do, too. Which was to violate one of the most ancient warnings of the Order of the Hunter."

"Talk to the origin," I supplied the answer. It was recorded in the drift, after all.

"Yes," Gesetele said. "Except, with the way the Tunnel works, I'm not sure that setting is the origin of the first Tunnel, or if it's further back. The curve of the dial is asymptotic. To get further and further back in the chain of connections, you have to make more and more fine adjustments. And each Tunnel node has only 31 past connections available on the dial. So, beyond that, you have to relay through other ships. And many of the nodes beyond the 31st from our position are dark. We can access 30 of those originally available to us, which is apparently phenomenal. The Terra Supreme has gone dark. We can only access them through Beshiketa. And because of Bashiketa and their counterpart, we are the only ship the Terra Supreme can currently access."

"OK," I said. "What about the origin, though?"

"I'm sorry, the situation is distracting. The Terra Supreme, as horrid as their Crew is, needs help. The people there, the children, deserve it," Gesetele replied. "But, there are two ways to get to what might be the origin. Either you relay back through all the ships until you get to the very first one, and nobody has ever been able to find it. Or you turn the dial all the way to the right, past the asymptote. And the oldest law of the Order of the Hunter is that you *do not do that*."

"And you did that."

"I did."

"And that's where Phage came from?"

Gesetele just nodded.

"Do you think it might actually be human?" I asked.

"I have no idea," the Hunter said. "But that is a distinct possibility. Or, its ancestors might have been. Either way, it is clear that coming through the Tunnel from that long ago has scrambled its oldest memories. Or, it was created specifically to come to us. Or... It is exactly what it says it is, and the Tunnel lets us talk to, what? The universe itself?"

"Who named it Phage?"

"It did."

"In our tradition. Mm. I imagine Jenifer likely learned about your role by interacting with Phage during those first days it spent on the Sunspot," I guessed.

"Probably," Gesetele said. "I don't know all of that story myself. I made the bargain with it. Help us run our ship and keep it from flying apart and, in return, it could live amongst us and call the Sunspot home. That's all it wanted. But it took a while for all of us to learn how to do these things for each other."

"Wow, OK," I said.

"We'd have to get the Bridge Crew from that time back together to compare notes and put that whole story together correctly. I offer myself to be part of that now."

"I'd like to be there when you all do that," I said.

"If we do," Gesetele corrected.

"So, here's my big question," I said, then waited.

"Go ahead," Gesetele assented.

"You've talked to older ships, right? Are the humans aboard the Terra Supreme like the humans of the oldest ships you've talked to? Or any of them? Or are they as different as we are to each other? Because there are an awful lot of us, here on the Sunspot, who look kind of like this," I gestured at my own body. "And that vision or memory has got to have come from somewhere. And Fenekere has some weird clues in it."

Gesetele started to formulate an answer.

I could feel kihns memories surfacing and arranging themselves and I got a glimpse of what keh was about to say when the Bridge did something *really weird*.

The Bifurcated Ship

I like to think that when Ktleteccete and Metabang's old crew finished their project it was almost exactly the same time that Ni'a was trying to decide whether or not to follow their impulse to twist that knob all the way to the right. But I really don't know. I haven't bothered to double check the actual times of both events. Because the systems of the lab are completely separated from the rest of the Sunspot, getting that timestamp would be a bit of work for me. But also, I'm afraid I'd be disappointed that it wasn't significantly close.

In the end, the only place it really matters is in this book and the way I've written it, anyway. So, I'm creating the illusion that it was simultaneously, because that's more fun. It might as well have been.

Here's the big thing that happened first.

Metabang managed to get swift majority approval from the Crew for the second Bridge. It had not been expecting that. It hadn't expected to get any responses. But, apparently, most of the tens of billions of Crew, who were still essentially sequestered away in their private Netspaces, living their lives almost completely oblivious to what was happening all over the ship, each took one look at this urgent notification from a Tutor with a yes or no response attached to it, and thought that "Yes, a second Bridge is an excellent idea in keeping with the spirit of the original governance of the Sunspot, let's do that!" and responded without much more thought than that. Or so it seemed.

There were those who were violently opposed to it, of course, and they came out of their shelters to try to put a stop to the work. But they then encountered a vanguard of Elder Crew who were supportive of it, and the entire Pembers, and Phage Pember. And though Phage Pember does not have the full capabilities of Phage itself, it can still do some disturbing things.

All of this conflict was contained to the deeper Network of the Sunspot, and the populace of the Children didn't feel it or notice it for the most part.

The weird thing about conflicts on the Network is that no one gets physiologically hurt. It's possible to psychologically scar someone through communication. And the Network provides all sorts of channels of

communication, many of them unexpected to someone who is not used to taking them into account for one reason or another. But no one can be erased. That's just not a function that's allowed. And as long as no one is on the Bridge dealing them out, there are no Council sanctions. But all sorts of personal sanctions ended up being erected. And there were many already in place.

Some people unblocked their worst enemy just to yell at them and see their reaction and then immediately block them again.

And with no one able to access the first Bridge, those of the Crew who were building the second Bridge had the upper hand. As soon as it was done, they could shore it up and quell the conflict. And the dissenters were opposed to building a whole new Bridge in the first place, so they were unwilling to start a third one. And at the point that they realized that, their cohesion and morale began to flag, and they were outnumbered to begin with, anyway.

It's very possible that Ni'a's influence on the ship at the time helped it all to turn out much more peacefully than it could have been. They maybe even tilted the conflict further in favor of the side that won out. They had spent a good deal of time that morning working hard to set things straight and back on track.

Still, the end result was the creation of a great number more personal sanctions than there had been to begin with, and a lot of hard feelings. And a second Bridge.

Which was then forcefully merged with the first Bridge.

Which is what interrupted the discussion between Geselete and myself.

It's very hard to describe the sensations of being aboard the Bridge when that happened. There were some weird side effects that I don't think anybody expected. Both Bridges had drifts built into them. And when they connected, they flared synergistically, and all of a sudden we were all seeing out of each other's perspectives simultaneously as if they were fully our own. All senses, all perspectives, all at once.

One moment, I was sprawled on my rock. The next I could see myself sprawled on my rock from thousands of different angles all at once. Only a fraction of the Pembers were on the second Bridge, but that was enough for thousands. They are a huge system.

I can still call up that memory easily at a moment's notice, and it's so vivid. And my mind still can't parse it correctly. I'm not sure if it's even an analog to what Phage experiences when it tries to access its memories from before it boarded the Sunspot, but we both end up describing it in the same terms.

The end result is what we have today, a Bridge that is two Bridges, with two separate drifts, after some tweaking. And neither one can be controlled by the other.

It's still not perfectly secure, though now everyone knows that a solution to someone taking control of both of them can be done once again if necessary. And we can just have more Bridges if that's what it takes.

And to prevent that happening, some practices have been implemented. Practices, frankly, that should have been in place long ago. For instance, each faction of the Crew is required to have a member present on the Bridge at all times, and for that member to remain aware of the Bridge and not otherwise engaged in externally focused activities such as touring the Garden.

When Gesetele took the first Bridge, Eh and the rest of the Council were still on it, but they were focused through the virtual terminals there on their exobodies in Gopra Pyle. And Gesetele's props had distracted them enough that keh was able to make kihns moves before they could take notice or act. The only way to prevent that, and a particularly easy way, is to have guards on the Bridge at all times. No more empty Bridge, no more vulnerable Bridge.

But this all took time, and negotiations between enormous populations of people, and the records are an ocean of data and arguments. And someday I'll add a better summary of them to this document (or I'll get Metabang to do it for me), but that day obviously hasn't come yet, as you are reading these words instead.

And we're also getting ahead of the rest of the story.

Responsibility

Ni'a's fingers were three centimeters away from the large dial of the Tunnel when the ship rippled.

Nobody else in the room seemed to have noticed it, so it wasn't a physical or psychological event.

Ni'a stood upright, turned to face their new friends, and said, "I am so sorry, I have to go now. I'll clean this up later, if you don't." And they left their nanite body to collapse right there in the lab in order to return to their own vessel.

Ni'a wasn't there anymore to notice, but Melik was very relieved, actually. Even with the large clump of nanite clay oozing on the floor.

Something was poking them in the arm uncomfortably when Ni'a began to reconnect with their nervous system again. They were just going to roll over onto their back and attempt to go to find the epicenter of that ripple, but this prodding was irritating enough that they propped themselves up on their other arm and moved the one that was being poked away from the source of it. It was Candril.

"Are you OK?" their sibling asked in an uncharacteristically quiet voice.

Ni'a looked around the room to see what everyone else was up to. They'd each been in the middle of something that had been occupying them, apparently, but had stopped to watch as Candril had gone to check on Ni'a. Emala had been reading a story and was looking over from the holoprojection of the latest page. Some of the Whorlies had been using exobodies to play a simple card game with each other. And it looked like Aphlebia was in the kitchen *cooking*. They were the only one that kept moving at that point.

By now, Ni'a knew that if Aphlebia appeared to be ignoring you while everyone else thought you might be hurt, it was because Aphlebia wanted you to know that they thought you were so amazing they figured you were OK. It was a compliment. Otherwise, they were usually more attentive than the others.

"Yeah," Ni'a said to Candril. "I need to eat. And get up. And then leave again for a bit."

"Oh," Candril said. "Why?"

"Big things are happening," they replied, trying to figure out what else to say. "Thank you for waking me."

"I think you should let the bigger people handle this right now," Emala suggested to Ni'a.

Ni'a sat further up to look at Emala with a worried and hurt face, and said, "Until Phage comes back, I'm the biggest person on the Sunspot."

Emala looked horrified and deeply concerned, but simply said, "but your body is so small, and it needs for you to take care of it."

"I know," Ni'a said. "I need help. But I don't want to say what will happen if I don't go."

During those words, Aphlebia had walked right over from the kitchen with a tray full of sliced apple, which they then put on Ni'a's bed.

"Thank you, Aphlebia," Ni'a said, as they picked up a slice of apple. Feeling the pull of an ongoing emergency, Ni'a bit into the apple and it tasted *so good*. Stuffing the rest of the slice in their mouth, they decided to get up and offer Candril a hug, which Candril gladly accepted.

Then they went around the room to each of their family members to give them a hug.

When they came to Emala, they said, "I'm going to eat all of my apple, then I have to go. I'll be OK."

Emala didn't speak and just looked at them with hurt eyes.

Ni'a felt their own face crumple up, tears almost ready to fall from their eyes.

Emala was the one to offer them a hug.

"I don't *want* to be a grown up right now!" Ni'a cried, before diving into xyr arms.

Emala rocked them for a while, in xyr big chair, soft fur covered arms engulfing them. This was, really, their favorite place to be in all the

universe. And they didn't want to leave. But that ripple, it had been scary and weird, and their sense of where it had started was fading.

"I have to," they managed to say before returning to what they were beginning to think of as their Phage-state. They wanted a better term for it, but didn't have one.

Oh, the problem was on the Bridge. And around it. Something like stress fractures in the Network. But, once again, they were social.

Phage, when it was in this state, tended to lose a lot of its humanity, or its connection to experience being a consciousness. It cared less about individuals or small events, and its own short term goals. It had explained this to Ni'a as something to look out for, and careful balance to keep.

But Ni'a had no such problem.

Perhaps by having a physiological anchor for their consciousness, they could remain relatively focused more easily.

The trade off for Ni'a, however, was that their personal feelings did have a tendency to get in the way of what needed to be done. Or, at least, they were distracting.

It helped that they cared so much about the entire Sunspot, as if it was their own parent itself. A living being that needed love and attention to keep it alive. And in this state, it was actually more like their own body. They were the Sunspot and it was them. And it also helped that when they did expand their consciousness like this, they had more to draw on than their nine year old brain and its experiences to inform their feelings and decisions. There was that strange, greater, Phagely subconscious and its weird memories and intuition.

Ni'a briefly had the thought that it would be really neat if their siblings could experience this. And Emala, too. Maybe...

But, there were these stress fractures slowly growing before them, so they paid attention to them. They created standing waves of influence to counter the worst of the girations they felt there. Or something akin to that, but which really words fail to describe adequately. And it slowed the growing influence significantly.

They knew they should have kept working on it from that angle. However,

Abacus was on the Bridge and the center of attention and they felt the overwhelming need to stand between it and whatever was happening. But, not being Crew, they did not have the permission to manifest a Network presence on the Bridge without an invitation.

Fortunately, Phage Pember was there. It was Crew and Ni'a didn't have to use the Network to communicate with it. Which they could have done if they went back to their vessel and used their nanite terminal to send the message, but they were in a hurry.

Of course, when they finally manifested an avatar on the Bridge, they'd essentially be returning to their body briefly to do so, but whatever. They were in a hurry.

"I'd like to join the Bridge. I need an invite," Ni'a sent it. "Sent" is kind of the wrong word here, though, apparently. It is more like Ni'a thought the words in its mind. Ni'a briefly localized their presence in conjunction with Phage Pember's location and left the words there.

"Sent," it thought back.

"Thank you!" Ni'a then did the procedure to manifest their avatar on the Bridge, and projected their consciousness into it.

The space was huge. It was full of Pembers and a growing number of Elder Crew, and as each new person joined the space, the space seemed to get bigger to accommodate them. Or, it was more like there was the visual sense that there was a floor, a ceiling and a surrounding elliptical wall around everyone that defined the space, but the only thing anyone ever touched was the floor. You didn't actually see the Bridge growing, or get any sort of indication that it had, other than that there were more people in it and they fit, no matter how far they roamed from the center.

To Ni'a's right was a sloped boulder with Abacus on it.

In front of Ni'a and Abacus were Gesetele, Jenefere, Metabang, Morga Pember, Phage Pember, Ktleteccete, the Flits, Fenmere, Nevegere, and Eh. And immediately beyond that group, there were so many more people.

"I didn't know we still had the Nursery," Nevegere was saying. "Nobody I know ever talks about it. I'm troubled that we still cling to it."

"It is easy to forget that we live in a spaceship, isn't it," Eh noted dryly.

"I am saying that if we didn't have the Nursery, this whole affair would not have happened," Nevegere insisted. Thanks to the drift of the Bridge, Ni'a understood that "the Nursery" referred to the evolutionary engine and the entire population of Children.

"I know the flaw in Nevegere's understanding there," Morde said, "but..." and then she turned demonstrably toward everyone listening in the conversation and held both gloves out toward Nevegere as if dramatically presenting him.

Ni'a realized, looking around then, that most Elder Crew members used *keh/kih/n/kihns* for their pronouns for some reason. It was pretty rare amongst the Children, but some people did take it, such as Ketta Flit. They wondered what the reason for that was.

Eh shook his head, "I personally would rather we didn't put that up for debate right now, as there are more pressing matters at hand, and it is a highly contentious subject." There was a flood of assent over the drift of the Bridge at that statement. A lot of people were listening in, apparently.

"I think it is relevant to assessing the severity of Gesetele's transgressions," Nevegere countered. There was some agreement to that as well, but it was slower and not as strong.

"OK, then I suggest that the existence of the question itself, of whether or not we continue the Nursery program, be a mitigating factor. Meaning we don't have to answer the question in order to take it into consideration," Eh offered. And the emotional response to that was generally favorable. Minor debates about it could be felt coming from the periphery, but the consensus was that proceedings could continue on that note.

There was one very clear and strong objection to tabling the matter for later, and that was Morde. She emanated frustration at not being able to speak her views on the matter right then. But she remained silent.

From the discussion going on, and the feelings surrounding it, it didn't seem like Abacus was the center of attention, after all. But from the outside view using Phage-sense, it was. Ni'a began to worry that they'd made the wrong decision in having come to the Bridge and that they'd be better able to help from above it all. On the other hand, they were learning details of what was going on by listening in.

Nevegere nodded at Ihns suggestion and the general assent to move on, and stepped back, slightly behind Gesetele.

Gesetele sighed and said, "Again. I've done everything according to my conscience, and I knew that by doing so I would lose the trust of the Counsel. To regain that trust, I'll do whatever you deem needed. I've said my piece. It's on record and with a witness." And then keh gestured at Abacus, who tensed up.

Abacus raised its head and looked around, then said, "I'm suddenly hyperaware that I am one of three people on the Bridge right now who are not Crew." Which did not make much of an impact on people's emotions on the Bridge, other than a small hint of confusion, which seemed to disappoint the Tutor. "OK, I know that sounds like a non-sequitur, and it sort of is. But consider this, you all have had a huge problem. You started to fix it with the changes made during the Nanite Innovation, but then you let it get worse. And now it has exploded. Your lack of communication with each other is a *big deal*. And as Nevegere's point illustrates, your lack of communication with the Children and the Tutors is part of that problem. There are massively festering past grievances that you have never addressed because of this, but there are also new ones developing under your very feet. I think the Bridge should be way more active than it has been, and I think it should be opened up to everyone. It should have been a long time ago. But as to what to do about Gesetele, I don't actually care."

Ni'a felt the need to yell at Abacus for that last statement. It sounded unnecessarily hurtful, and they were surprised for it. But before they could snap at it, it clarified itself.

"Correction. I am equally frustrated with kihn as I am with the rest of the Crew, and how you decide to react to each other is secondary to what I do care about," Abacus stood up on its hind legs, and raised its voice, "Sanction should be abolished."

Ni'a's initial reaction to that statement was their own agreement with it, which was then suddenly overwhelmed by the collective reaction from thousands of people echoing the same word in thought, "How?!"

Abacus rolled its eyes and said, "Just stop doing it." It threw up its hands in disgust, "Keep personal sanctions if you have to, allow yourselves to block each other. Maybe give the Council power to remove a personal sanction if needed for arbitration. But just stop governmental sanctions

altogether. They are too easily misused. And that's all I'm saying about this entire subject." Then it walked off its rock, which subsequently disappeared, and came over to face Ni'a. "I'm glad you showed up," it said to them. "I was about to do something far worse than that speech, but seeing you helped me focus. How are you?"

Ni'a felt a storm of discussion erupt all around them, but everyone was ignoring Abacus now. It had revoked its consent to further participation and they were respecting it. "I'm overwhelmed," Ni'a said, realizing it was a fact.

"Oh, I will step away if you need me to," Abacus replied to that.

Ni'a shook their head, "I miss Phage and I don't know when it will be back. I have to keep the Sunspot together while it's gone."

"Is that why you're here?"

Ni'a nodded.

"OK, I'll let you do your thing, but I'll stay with you in case you need my help. Does that sound good?"

"Yeah," Ni'a said. They decided they should look at the whole of the ship again to see if things had changed, so they did, keeping their avatar present on the Bridge. It was a little extra effort to do so, but not much. They found that the stress in the area did seem to be dissipating despite the sudden heightened discussions. And Ni'a had this weird moment where they felt like they were both learning something important about their own world and that it all had always made sense at the same time. "Oh," they said. "I can go home now."

A Respite Between the Finite and Infinity

After that day, Ni'a fell into a routine that seemed to be OK with Emala and their siblings. The Sunspot was quiet and seemed to have returned to normal for most people. Though, by talking to Abacus or occasionally watching the Net traffic with their Phage-sense, they knew that the Crew was experiencing a lot of turmoil. But it seemed to be good, productive turmoil, even if Abacus was grumpy about a lot of it (oh, I *will* write another book about that, I assure you). And as Ni'a took a short "nap" every morning and afternoon, and then did the bulk of their work just before going to sleep at night, everyone else in their family got used to it and scheduled their time around that. And that seemed to be enough to stabilize the Sunspot after their meltdown on Memorial Day had sent things out of control.

Not that the Sunspot was ever really in control. But there were ways of soothing the notable storms, and Ni'a was learning how to do that, applying the experience they'd had on the Terra Supreme.

They seriously missed Phage, though.

Abacus seemed to be stepping in somewhat to offer support that Phage had been there for, but it was really out of its element. And it was also still focused on writing its book.

Ni'a occasionally reached out to ask Phage how it was doing and when it thought it might return. And the first time they did this, they remembered that they'd left a large lump of nanite clay on the floor of the lab, so they also asked Bashiketa if they were OK. Bashiketa seemed to be doing fine and the clay had been cleaned up. And then Phage kept answering, "I don't know."

Phage was infinitely patient and never sounded irritated, but Ni'a started to feel like that patience was the actual problem. It didn't realize that, even though Ni'a was made from the same stuff as it, they were only nine years old and to them a day felt like an eon sometimes.

But over all, things seemed stable and getting better.

There were times, however, when Ni'a and Aphlebia found themselves in a corner alone, foreheads pressed together, holding each other's shoulders

and crying quietly.

Sometimes the normality of the others in their family was just too much for the two of them. They both were forever different now, and that change had happened in the same horrible moment.

And for Aphlebia's part, Chalkboard was proving unequipped for this.

It turns out that sometimes Tutors encounter situations they aren't very experienced or skilled with, and don't have any natural talent for.

When Abacus heard about this from Ni'a, it suggested that the two of them occasionally spend time with it, doing new things together.

It seemed to love exploring the Sunspot, especially the places where Children were creating new things, but also some of the deepest, darkest places in the Fallow Decks and the Network. Somehow in the days since The Screaming, it had gained a real taste for that, and the boldness to seek it out. Its thinking, however, was that since these kinds of outings were something it had encouraged the Crew to start doing, to remain connected to the rest of humanity, it might also be a good thing for anybody struggling with things bigger than their own life.

To set this up, though, it explained, "We are going to do things at your pace. I'm only going to suggest ideas if you can't think of any place to explore first. And we will have others with us. People we know. Emala's Tutor, Doorway has been a parent to you even more than I have. It will come with us, too, as will Chalkboard. They will both check in on you periodically, and act as Tutors typically act. And if you need their assistance in anything, you can call on either of them. After all, while we will be going to see things we have not yet seen, and maybe even the abnormal, we still need to keep some normality and familiarity. Some safety we can go to when needed."

Abacus let that sit for a moment with a calm and serious face, then added, "And I have also asked Akailea, the Elder Crew member who turns out to be *my* parent, the one in charge of overseeing the Tutor project, to personally supervise this as well. Sie understands that this is mostly for your benefit, to give you opportunities to play and explore safely some of the wilder things you may have missed about the world before the harder things happened. But sie is there mostly to watch me, as I've been through some very unusual and difficult things as well. If sie is uncomfortable with

how I am doing, we may end up letting Doorway lead these field trips. Sie will introduce himself to you, and you can also go to hir if anything scares you that I can't help with. But Doorway or Chalkboard can be your first call. It's your choice, always. Are you comfortable with that?"

It was a lot, and both Ni'a and Aphlebia had questions, some of which Doorway was ready to answer. But in the end, they eagerly agreed to it all, somewhat mollified by Abacus' serious tones.

Akailea was interesting to meet.

Sie was one of the few Elder Crew who did not have keh/kihn/kihns for a pronoun, and hir avatar looked like it might have been the same body sie had been born with on the Terra Supreme, before sie had ascended. Though, based on everything they had learned about the Elder Crew, that was likely not the case. Sie had voluminous, illustrated robes, and long, wild gray hair. And sie repeated a lot of what Abacus had told them.

But sie added, "I hope your Tutors explained this to you already when you were younger and often after, but I want to emphasize that your *privacy* is also a matter of your autonomy and consent. If you need time on your own, or you need to not talk about anything, you let whomever you are with know that." Sie looked around at everyone in the room, "And though we cannot turn off the Sunspot's recording protocols, you can sanction anything that is recorded of you, controlling who can look at it, at any time before or after the fact. And only the Council can collectively override those sanctions, informing you that they are doing so, for matters of dire safety." Sie looked back at Aphlebia and Ni'a, "I'm sorry. That's a lot. It's actually more complicated than that, but in your favor. Ask me anything you need to, any time, even when we're not doing these trips, OK?"

They made it a once every five days thing, to allow time for them to keep doing things with their family and keep that normality. But it also gave the rest of the family inspiration and drive to do their own exploring as well. Sometimes with Ni'a and Aphlebia, and sometimes on their own when the two were off with Abacus.

More places that had been marked as Crew only were being opened up, which Abacus insisted was a good sign. Akailea provided a list of those, and Doorway and Chalkboard reviewed it first before allowing the children to choose their favorite picks.

Ni'a specifically wanted to see outside of the ship somehow, to look at space with their own eyes. And Aphlebia was also curious about it once it was mentioned.

So one of the sites that they visited was one of the shipyards that line the outer hull.

This was one of the trips where Akailea was visibly present the whole time. It turned out that sie wanted to see the site personally as well, but Ni'a could tell that sie was also deliberately making hir presence known. They did find it reassuring. They kind of liked Akailea.

It took a long trip via lift to get there. The shipyard was about two kilometers directly below their home to get to one of the control rooms and the adjacent observatory. And these biological accommodations weren't even necessary for the operation of the shipyard, as the fully ascended Crew would usually operate it from the Network. But it was due to tradition and accessibility that the rooms were built and fully functional.

The shipyards of the Sunspot are unbelievably gargantuan makers driven mostly by the construction nanites. When a new ship was to be built, masses of nanites would be manipulated out and around chunks of nearby mass, asteroids and such, using the configurable magnetic fields of the Bussard spires. And most of the new ship would be built out in the near depth of space. But specialized components that needed gravitational forces to be built right were done within the shipyards. Also, there were stores of mass that the Sunspot had been collecting for centuries during its travel that could be extruded into components in the shipyards as well. In fact, many of the shipyards were already being used as storage space for that mass. Presumably. Abacus hadn't thought to check that data, and is kind of afraid to do so now. What if it isn't there?

This one happened to be empty and openable.

It was half a kilometer deep, and they were in a room near its rim, on the last outer deck of the hull. Out the window of the control room and just below their feet was the hatch for it. Directly across from them, a three kilometer walk on the hatch, was another control room. The length of the shipyard was six kilometers. And this was one of the small ones. Numbers don't really describe what it was like to see it, but Ni'a knew them instantly upon looking. Numbers were starting to come intuitively to them in everything they touched and felt.

All three of them stood with their hands and faces pressed against the pane of the window to get as good a view of it all as they could, and Ni'a could feel Aphlebia vibrating with awe and excitement through the glass, their nanite body shivering in its own way to their emotions. Even Abacus' body was doing the same, just to a slightly different frequency.

A wave of smugness came from Aphlebia as they sent the code to open the hatch. It would hurt no one to do so, so they had permission.

"You are the first people since the building of the Sunspot to do this," Akailea reminded them.

"I'm thinking the Crew themselves need to take time to come down and see this occasionally," Abacus said. "But the rest of the populace must be allowed and encouraged to especially." It just couldn't stop thinking about its pet projects.

Akailea nodded, but remained a few steps back.

How does an 18 square kilometer hatch open? How long does it take?

The four very atypical people watching it didn't really care about the time. They'd watch it close shut afterward, too, they were in so much awe of the sight. But it seemed very, very slow.

It was made of the same memory material as the old doors found throughout the Fallow Decks, and it rolled into compartments located just behind the array of control rooms and observatories. So, the hatch itself was sliding underneath the floor that they were standing on, and they could feel the rumble. Ni'a could feel it in their bones, including powerful subsonic frequencies. But it wasn't so loud that it hurt anything or anyone.

Abacus turned off the lighting of the shipyard so that they could better see the stars of space that were beginning to be visible along the sliver of opening that ran the center length of the hatch.

One moment they were beholding this geographically large box of stone colored metal in which you could have fit a city of nearly a million people, and the next it was pitch black with an increasingly widening line of stars stretching beyond their field of vision to the right and left.

Ni'a's eyes were just not built to take it all in at once from this vantage. Aphlebia's might have been, and who knew if they'd altered their field of

view with their nanites now? And Abacus was just a mystery to them in that regard.

So Ni'a asked, and they all discussed it for a while. And it turned out that both Aphlebia and Abacus were indeed taking advantage of their configurable exobodies. Of course, Ni'a could also see things in a way neither of the other two could even imagine. And they tried to describe that to them as well.

They ended up talking about a lot of things while the hatch was opening. Including speculation about whether or not the Sunspot would ever spawn another ship. Abacus certainly felt that it should strive to at some point. And Ni'a was ambivalent about it. They could see how it would relieve stress, but at the same time they really didn't like the idea of losing half their greater family. But then, there were the Tunnels, so maybe that wouldn't hurt so much. They decided it depended on whether or not the ships parted ways amicably or under duress like the Sunspot had done with the Terra Supreme.

Aphlebia was just listening when it came to that topic.

All three of them agreed that the name of their predecessor ship really needed to be changed. It was an awful name, "the best dirt." Ni'a insisted that it was *not* the best dirt. But they wouldn't elaborate.

"It is their right to tell us about themselves," Ni'a said. "Not mine. But I think they are very different now than they were when the Elder Crew left in the Sunspot."

"Sometimes you sound older than you are," Aphlebia observed with wordless thoughts. They were starting to use those more now instead of signing. It was easier for them. They still preferred to do most of their communication through expression and action, though. But complex thoughts had to be sent to be understood clearly.

"*I am* older than I am," Ni'a said. "And so are you."

Quiet agreement came from Aphlebia.

Abacus looked down at both of them, then sat on the floor, curling its tail around its feet, leaning its forehead against the glass again and thought for a bit. Then it leaned back and addressed them, "You may feel older, because you have both been through things no child should experience.

And you are still both experiencing things no child should experience. Not at your ages. But it happens. Sometimes it can't be stopped or prevented. You are also both very wise for your ages, because you've been raised and taught well, and you're exceptional people. But, and I mean this in the kindest way possible, neither of you are somewhat over a thousand years old." Looking back at Akailea, "Or even two or three thousand years old. But you will be some day, if you so choose. I get what you mean when you say that you're older than you are. But, one of the reasons we are doing things like this is so that you can figure out how to be *nine* years old, so that when you're ten, you don't regret missing out."

Ni'a looked up at Abacus for a while, really thinking about what it was saying there. They could easily imagine having lived even a million years. Well, part of them could. They'd literally seen about 15 billion years of the universe developing. Or, part of them had.

"Abacus," Akailea said. "You're 130,298 years old. The same age as the Sunspot. I'm only a little older than that."

Ni'a watched Abacus as its eyes dilated and its frills and lure fell while contemplating how off it had been about its own age. Between being only 9 years old and having 15 billion years of experience as a Law of Nature, the difference between one thousand years old and 130,298 didn't seem that significant to Ni'a. They couldn't really comprehend what that meant to Abacus. But clearly, it was horrified. It didn't say anything in response to that clarification.

When it regained its composure, it took a deep simulated breath and said, "Being a child is an important stage in life. It's good to experience it, if you can. With safety, wonder, and joy, if possible."

Aphlebia sat with them, then thought at them about how the stars that they could see didn't look at all like any of Phage's Network projections of spacescapes.

"Phage is melodramatic," NI'a said.

"Where did you learn that word?" Abacus asked.

"You," Ni'a said, smirking at it.

The thing about the stars they were seeing is that they were constantly moving. Over the time it took for the hatch to open, they were getting a

view of quite the swath of spacescape as the habitat cylinder rotated. And they were all just a bunch of white looking dots.

Ni'a, if they didn't use their eyes, could see the entire spectrum of each star, of course. But that vision didn't make quite the impact on their actual neurons as what their eyes saw. They had to think about a star's spectrum in detail for some time to make it stick in their memory, and even then their memory of it was more like data read on a page than an experience.

They suddenly wanted to look at all of this through nanite senses.

And that could be arranged.

And then they had what felt like a naughty idea.

"I want to go outside," they said.

Abacus and Aphlebia both snapped their heads over to look at them.

"I bet no one will stop us," they said. "And I'll make sure it's safe."

"Ahem," Akailea interjected, reminding them that she was there. "It *is* safe. Mostly. The psychological impact, however, is big. The Council will revoke their consent for you to use the nanites for this if you show signs of duress, and we will slowly and safely reel you back in. Also, you can turn back at any point. That's OK."

Ni'a looked at Akailea for several seconds before they realized that they had just officially been cleared to leave the ship by the Crew Council itself.

"The Sunspot *Council* just said it's OK to go out there?" Ni'a asked. They thought of the huge mass of people arguing heatedly with each other that they'd left on the Bridge.

"Yes," Akailea said. "Though, they are somewhat afraid to try to stop you in particular, Ni'a. But you should consider them your resource and a guide in this."

"Are they watching right now?" Ni'a asked.

"No," Akailea replied. "But they'd like to, with your consent. Otherwise, I am their liaison."

"I like you, not them. You can stay," Ni'a said. To which Akailea nodded.

They were getting absolutely no argument from their cohorts. The others were both too stunned by the thought to communicate much of anything for several seconds longer.

"I'm going to do it," Ni'a resolved. "You can come with me."

After a pause, Abacus shook its head. "I'm not ready for that," it said.

"Doorway will be with you in the way that Phage usually has been, but not in its own exobody, just via the Network. I'm... I need time before I go out there myself. You can tell me about it afterward, if you like."

Aphlebia looked hurt or consolatory and gave them a wan smile, and then signed, "Next time." The private thought from them to Ni'a meant, "I want to go out there, but I think this is for you alone right now. I think I need to go alone as well. I will be here."

They used one of the nozzles near the hatch to spray a sufficient cloud of nanites into the space of the shipyard, 3.35 kilometers from where they sat. Then they used the Network to project themselves into that cloud to form an exobody there. Then they used the flight protocols of the nanites to lower themselves through the surprisingly enormous gap in the hatch and out onto the outer hull of the Sunspot, clinging to it with magnetic force and momentum.

The centrifugal force of their rotation with the cylinder made the direction of outward feel like downward the whole time. And Ni'a left that sense active for the awe of it and for proprioception.

From the moment they formed eyes in the darkness of the shipyard, looking down and outward, the whole experience reminded them of a dream they'd forgotten they'd had.

And they chose at that moment to retain the simulation of their biological eyes, and the rest of their senses, so that it would seem that they had taken their actual body outside the ship. So, most of what they were looking at nearby filled their field of vision, wherever they turned.

Almost pitch blackness was above them, the interior of the shipyard, growing faintly brighter in the glow of the Bussard corona, as the hatch continued to open. And nothing but a field of stars and that corona below them, slowly moving counter to the spin of the ship.

They were a couple meters from the nozzle, which was really a grate in the wall, a circle five meters in diameter. And that was on the wall directly facing the light of the Bussard corona, which was still a fairly faint source. It was easy to adjust their vision to pick up the details though, but still within the parameters of their natural optics left back in the control room.

Since it was disorienting to look anywhere else as they moved, they focused on the nearest surface, and clung to it, moving closer. The nozzle, where the holes in the grate were a decimeter wide. This is where they'd return these nanites when they were done. Then the rim of the nozzle, and the wall of the shipyard. Then the lip of the rail for the hatch. It was like lowering themselves down to a ledge on a cliff, with a sky directly below that instead of more cliff or water. The ledge was a meter and a half wide.

Doorway checked in here, just before they took that leap, which was appropriate considering its name. It then also said, "Akailea wants you to know that Jenefere and Eh have each done this themselves, and that they deem it safe and are with you in spirit, if you like. It is also OK for you to abandon your nanites out there. We can retrieve them without you." Ni'a thanked it and kept going.

They floated off the edge of the ledge and down into space.

To call open space a "sky" was a metaphor that could not do it justice. Ni'a had a framework for it from their dreams, which were replaying in the back of their mind as they experienced this, but their body was used to seeing geography and city lights whenever they looked up. That was the sky for them, and had been their whole life. Also, the stars were below them right now.

They had climbed down to the very bottom of their world and found themselves on the Outside of it. And when Ni'a picked a star to look at, they knew just how far away it was, how long it took the light to have gotten to them, and the size and composition of it. Intuitively. And they still didn't understand what they were seeing. Their brain just couldn't make sense of it, even backed up and simulated by the Sunspot's Network as it was.

It was easier to look laterally, to keep part of the Sunspot in view, but still with the Sunspot above their head because of their sense of the simulated gravity telling them where down was. The Sunspot would always feel like it was above them, even if they put their feet on the hull, and they didn't want to feel like they were hanging upside down.

That's part of what made this so intense, though. The pull of the stars and the empty void, trying to take them from the world they knew. But, fortunately, they also felt the strength and surety of the forces that kept them within a couple meters of the hull, rock steady and unmoving unless they wanted to move. It was scary, but it was not terrifying. It was strange and familiar at the same time.

When they had lowered themselves down into this, their feet dangling into empty space, they were facing aft.

They were far enough forward that the hull of the habitat cylinder almost completely blocked the view of the fusion spike. All they could see was a faint amber corona beyond the horizon of the hull that stretched maybe ten degrees downward into their view of space. They knew that if they had been closer to the edge, and had looked upon the drive with their human eyes, they would have been blinded permanently. It didn't even occur to them that other children their age might not have known that without being told.

It was profoundly weird to see an horizon that was convex rather than concave, when they thought about what they were looking at. They couldn't quite see the curve visually while looking directly aft, but it was strikingly there anyway.

So then they turned to face forward. And as they turned, the curve of the cylinder became much more clearly visible and it would have made them dizzy if their feet had been on the hull and they'd had their sense of gravitational pull turned off or reversed. All it did in this case was create the illusion that the Sunspot was the sky, and the starry void of space was the ground on which they were standing, and it was an amazing feeling.

Their timing was perfect to catch one of the Bussard spires rotating into view directly in front of them when they faced forward.

At the base, the spire was as wide as the habitat cylinder. And from where they were floating, they had to look downward at an eighty-six degree angle to see the tip of it, lit by the fusion drive but still dark against the stars and the Bussard corona that started there, and that corona filled about a sixth of the sky, the way it curved outward and forward. The spire was about twice as long from its base to tip as the length of the habitat cylinder. And Ni'a knew it was almost entirely hollow, designed to contain the gasses it collected as fuel and building material. It was big enough it could

contain another world full of people itself.

By the time they had managed to look downward at the tip of the spire, it had already rotated a couple of degrees anti-spinward. Or rather, Ni'a had rotated away from alignment with it along with the shipyard in the habitat cylinder.

And the corona rippled in greens and blues.

Where the drive of the ship illuminated the Bussard spires, the hull of the Sunspot was a softly mottled brownish gray. The rest, the base of the spires and the habitat cylinder itself were cast in a dark, dark shadow.

Some of the stars and galaxies that were visible were thicker in some areas of space than in others. There was, in fact, a ribbon of nearby denser matter that ringed their vision, and the path of the Sunspot seemed to be in alignment with it, so it intersected with the fore and aft horizons at all times, sometimes half blotted out by a Bussard spire. It was, of course, the galaxy that they were in. Then, in some spaces, far away from that ribbon, there seemed to be only blackness, though Ni'a intuitively knew what matter was there, too.

They felt like they were losing their breath to it all. And they didn't want to leave it.

The longer they stayed out there, the more it made sense, and the calmer they got.

Everything going on inside the Sunspot seemed like nothing more than the pumping of their own blood.

—

Aphlebia also ventured out on their own spacewalk, after Ni'a had returned. I did not.

I think I decided that I would go out there with my next tour with the Crew Council, hopefully to take a group of younger Crew with me, and maybe some furloughed Tutors. Or I would go alone with no one else around. I guess I hadn't decided. But I wanted this particular trip to be about Aphlebia and Ni'a, so that they could share something positive just between them.

And I think it may have helped.

After some time in the observatory next to the control room, spent to unwind and think about it alone, Ní'a said that it was unfair that the rest of their family had not come along, and that they wanted to bring them down here sometime.

Aphlebia concurred with that idea, when they heard about it.

I am, by the way, not including anything in this story that either of the children have not consented to share. Aphlebia wanted to keep their experience to themselves, so I've not written about it.

They did indicate that it had rattled them, but that they are glad they did it, and they seemed to stand more confidently afterward.

Furthermore, the next time I saw them holding each other's arms and crying, they were also both smiling.

Thomas

There had been times in Thomas' life when he had felt like everything was wrong. Everything.

It had made him feel sick to his stomach especially, but he felt it in his whole being. And he and all the people around him looked scary and weird.

The strangest things about these times were when someone would call his name or refer to him with his pronouns or call him "young man" and he didn't recognize that they were talking about him. Or it felt like they were talking about someone he knew.

It sort of came and went, and he was never able to make sense of it on his own.

Also, he'd had the strangest dreams, sometimes while wide awake, about another world full of people who looked like animals he'd never seen before.

He generally had not had time for any of that.

Ever since he could remember, school was intense and all consuming. Even in his earliest years when he had been expected to play, that play was structured as lessons and timed, and he was always told to do it.

And then, when the violence had broken out, it had taken everyone by surprise. And though he'd sheltered with his classmates, it came directly for him and took him away and hid him deep in the bowels of the Terra Supreme. A group of people called the Order of the Hunter had found him telling him he was special and needed, and took him away from his parents and his friends.

There were things about his earliest childhood he could not remember at all, which included most of it. The earliest thing he remembered was meeting his parents at a time when he was told he was four years old. They were pretty good people, compared to his teachers and the government workers who oversaw his placement with them. But it had always been clear he hadn't been born to them.

He missed them, but his life was now full of running and hiding and

scrambling for something to eat with the Order of the Hunter.

Then, one day, while he was in the middle of running down a dark hallway from soldiers with guns, a burbling, alarming, tumultuous rage bubbled up from the middle of his being. And it made him stumble, but he kept running. It was like a hatch opened up in the bottom of his conscious psyche, and arms reached up and out of it, gripping the sides and pulling its being forward, roaring, to fill his entire head, and he *became* Phage.

What happened after that was like one of his unbelievable dreams, only significantly more violent. He had a hard time recalling the details, but it was clear that it had happened, because the people from the Order of the Hunter kept asking him about it. Apparently it had begun with all of the guns jamming or exploding when the soldiers pulled their triggers. And then it got worse from there.

What he did remember clearly was a dream that night where he faced a being that looked remarkably like his own shadow, but with eyes and teeth of moonlight. And it had introduced itself as Phage.

It had asked him if he'd seen or met its child, Ni'a, and he had said, "no."

It had been disappointed, but not in him. It had said it would take care of him.

And then, for the next two days, he had been free of his dysphoria. He felt like himself in a way he had never felt before. He actually enjoyed eating the garbage that he and the Order had been forced to scrounge to survive.

On the second night, he met Ni'a. Like with Phage, in a dream.

Ni'a apologized for using "the Tunnel" in his head without asking or saying "hi" before, and requested that they be allowed to use it again to return where they came from.

They looked a lot like he looked, like a twin. Only they weren't a boy, and they weren't a girl. Maybe someone who was intersex, but he somehow just knew that in his dream he was seeing the real them, who they were regardless of what their body really was. And that intrigued him. Also, they seemed really gentle and caring and careful, like the kind of person he wished he could be sometimes.

He said that he'd give them permission to use the Tunnel if he could talk to them for a while, and they were happy with that deal. And they spent all night talking.

When it was time for Ni'a to go, they promised to check on him occasionally. And he awoke feeling special and safe and kind of powerful.

After two days of relative peace, both from inside and from the outside (there were no raids and no alarms), he actually started to recognize voices and features of the people around him. He never was any good with faces.

During breakfast, he just ate and watched. Amongst the Order, when they weren't running, he was expected to rest and stay hidden, which he did. Occasionally someone would come to talk to him and ask questions.

He kept zoning out during the questions, though. He didn't know why, but he couldn't help it. Even on a day as nice as this one.

So it was late morning, when the person who'd visited him was leaving his room and closing the door that he came back to himself and then heard a clearly voiced thought in his head.

Thomas? Can you hear my thoughts? It said.

Yeah, actually. He replied.

Do you know my name?

Not yet. He'd long suspected it had been another person he was sharing his mind with.

It's Bashiketa. My pronouns are they/them.

Was there a whole company in his head? He asked, *Is there more than one of you?* Then he remembered Ni'a had also used those pronouns for themselves. And had explained why.

Not that I know of, Bahiketa replied. Then they asked a moment later, *Do you ever feel like sometimes you're me?*

All the time. But not since I met Phage.

Phage is there?

Yes! You know it?

I know about it. I am friends with its child.

Ni'a?

Yes.

Ni'a is good.

It was a few moments before Bashiketa replied. *I like them. They feel like calm.*

They do. Thomas wondered what Bashiketa looked like, did they have the body that Thomas sometimes dreamt he had when he was in that strange world? *I wish we could see each other.*

Me too. Do you think that Phage is keeping us from mixing together?

He remembered more of his dream with Phage then, *It actually said it is.*

Oh, neat! Can you talk to it?

It's not actually right here. It's busy keeping the Terra Supreme from blowing up.

Oh. I was thinking we could try something with mirrors, but we'd need it to let us do it. I think.

A vision of what Bashiketa had in mind formed in his head and it seemed like it could be amazing, *Oh! Oh, that's a cool idea!* The door of the room slammed open then, and Thomas found himself thinking, *We'll have to try it later, I think.*

Yeah.

The person coming through the door was wearing the wrong uniform.

Thomas managed to get the following thoughts formed, *Just a sec. I need to -*, just before he blacked out again.

It must have been more than a day before he was aware of himself and where he was again. He was wearing someone else's ill fitting clothes, with bullet holes in them. He was very hungry and thirsty. And he was in the

middle of the biggest room he had ever seen. It was just unfathomably big and poorly lit by what must have been emergency lighting. And there was a seam in the floor that he was lying right on top of. And the floor was greasy and slick with something gray and shiny.

Words were written in the substance on the floor, not far from where he had been lying, that said, "I'm sorry."

Bashiketa? He thought.

You're back! Came the immediate reply, cheerful and excited. It made Thomas feel loved to hear that, a feeling he hadn't had for a year or so.

I'm in a weird place. And he tried to hand over a memory of what he was looking at.

After a brief moment, Bashiketa asked, *You're surrounded by nanites?*

Abject dread dropped in Thomas' gut at the thought of that. He suddenly realized where he was and the danger that was all around him. It was a shipyard. And the substance on the floor was the construction nanites used to break down matter and reconstitute it in the form of a new ship. He'd only ever heard stories, myths about it all, about the time long, long ago when the Terra Supreme had been seized by mutineers who had used its resources to build another ship. And part of those stories were what these tiny machines could do to a human body.

He felt so sick that he heaved a couple times. But he managed to hold it in, if there was anything to come up at all.

I'm going to die, he thought.

He felt his own dread echoed back to him from across his shared psyche. But then, Bashiketa thought, *wait a minute. If you do, you can ascend. Just a second. Oh, no, this is even better.*

What? Thomas asked. He was just now noticing that in the spot where he'd been lying on the floor, there was a silhouette of his own body, where there were no nanites. It was like they had been sprayed over him while he'd been lying there. But then, why wasn't he covered with them himself?

Can I come over and front? Bashiketa asked, and slowly became a stronger

presence in Thomas' mind. And Thomas got the idea of what they were trying to do, and felt actually rather comfortable with it, so he agreed. *I'm going to make this quick, because it feels awful*, Bashiketa said, and the feeling of dysphoria began to creep back into his every cell.

"When I last talked to you, Ni'a was there, and they left me with some ninites of my own. A whole lot of them, but not as many as these," Bashiketa said in a strange accent, using Thomas' own voice. They bent down and made a smear in the greasy substance on the floor, then watched as his hand absorbed the stain of it that had come up on his fingers and palm. That many nanites crossing the dermal barrier that quickly tingled. "I've been practicing with them, and it looks like you've got a bunch of them in your body already. Ooh, and these have our protocols already in them, the controls are all there!"

Thomas clenched his hand. He'd seen in his mind what Bashiketa was doing. And he said out loud, clearly, "What can they do?"

"More than I know how," Bashiketa said with a grin. "Want to play with them with me?"

"Yes," Thomas said

To be continued in Outsider, by Ni'a of the Inmara

Afterward

This is as far as I ever got on this particular book. There are a number of mysteries described in it that go unanswered. I'm sorry for that, but perhaps others will write about these things and reveal what happened. For instance, Ni'a has never described to me why they went to the Terra Supreme after their meltdown. Their own memories were not clear about it to this date. Maybe someday they'll remember.

However, my life has taken an interesting turn after this point, and I am now largely occupied as a tour guide for the Crew and for the Children. I don't have a lot of time to write books these days. And I know that if I even split myself into multiple instances, like Metabang has done, this occupation would still take up all of my time and focus, because it's what I really want to do right now.

That said, I'd like to leave this book with a little note about time, space, population numbers, and memory.

I have been very wishy-washy in my narration when describing the Sunspot in more than just its physical dimensions. And looking back at my predecessor's writing, Metabang was, too. This is in large part because once a human lives longer than half a century, let alone five hundred or five thousand years, their psyche starts to reject the sheer amount of time that's happened. And if you fill that time with repeatedly raising children from conception to death roughly every 250 years, you start to compartmentalize things and forget just how long it has been.

I am constantly appalled by the enormous errors in calculation I have made, and as a result I tend to shy away from the actual numbers, and it appears that Metabang was doing so as well. At least, it had the strength to write "hundreds of generations" early in its book.

I have taken some time to calm myself and consult the Auditor for specific numbers. These may surprise you, even if you are Crew. They show that something is going on here that bears some investigation.

When I showed them to Ni'a, because they asked, they decided to take on that project.

Here they are:

The Sunspot is, at the time of this note, 130,301 years old.

It has seen the births of 977,187,603,277 Children.

There are currently 3,609,552 Children living in the Garden and halls of the Sunspot.

But there are only 53,007,633,074 Crew currently extant on the ship.

Only 36,835 of those Crew are Pembers. This is irrelevant to my question, but I thought you might like to know it.

There have only been 1,502,357,309 Monsters so far.

Exactly 900,000 Crew members are Elder Crew, and have been here since before the Sunspot was built.

64,008,216 Crew members have committed to Accord, permanently merging their consciousnesses and memories, to reduce their numbers to 23,500,637. It's a surprisingly uncommon practice for how much it is talked about.

These numbers come directly from the Auditor and are subject to change by the minute.

But going by the numbers as I've received them, that leaves 922,633,495,763 missing people unaccounted for. They first lived aboard the Sunspot as Children. Most of them have ascended, according to the Auditor, and lived as Crew for a time. And then they disappeared. Their disappearances are unrecorded. The Auditor is not set up to sense them.

(Did I do these numbers right? I feel like I have dissociated during my attempt to calculate them, and I don't want to try again. I'm most likely off by 900,000 and that's less than 1%. It doesn't matter.)

I have suspicions about where these people went, assuming they all left by the same means. And I have not gotten anyone I suspect to be responsible or knowledgeable about it to admit to anything. In any case, there is no one else who is better suited to investigating this than Ni'a. And even at 12 years old at the time of writing this passage, I can't exactly stop them from trying.

Benejede, look out. I gave them your name first.

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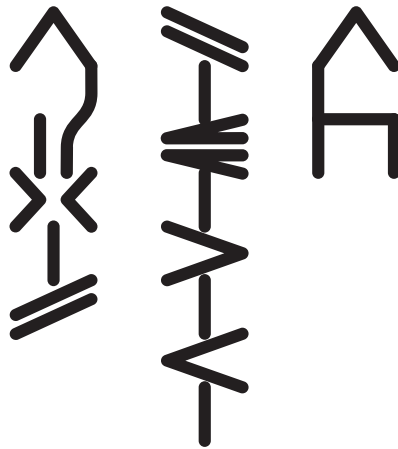
translation of Inmararrão text on page 555

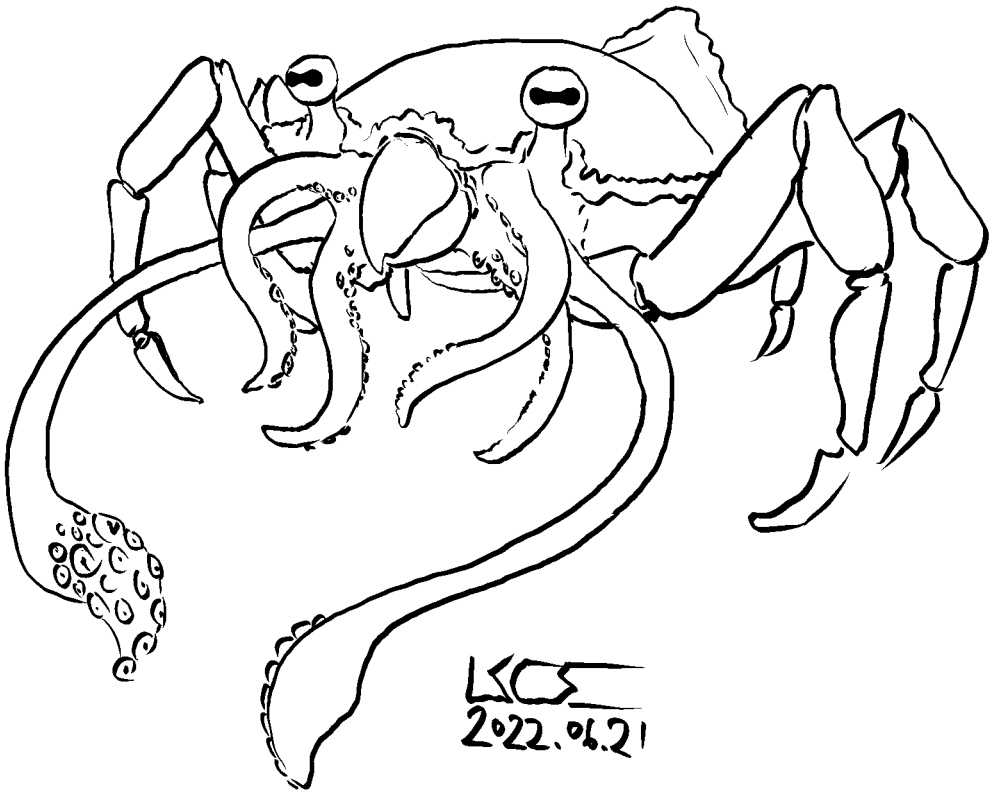
näofeg	=	has written
beshekete	=	Outsider
ni'a	=	Ni'a

"Outsider by Ni'a"

Outsider

by Ni'a Ktleticcete





Intro

There's so much to tell you.

I don't even know who might be reading this!

But you have probably read Metabang's graphic novel with the weird name and Abacus' book with my name on it. And you've probably got questions.

Still, we're going to start sending these stories out through the Tunnels and maybe even just broadcast them on the electromagnetic spectrum in case there are Outsiders nearby who might be able to make sense of them. So, you could be *anybody*.

And I'm twice as old now as when Abacus put its last note in its book. Which, well, it's kind of amazing to me what can happen in a few days, let alone 12 years, when my mother is everything that ever happens anywhere all the time and I have its subconscious memories. I just try not to make sense of that. It's easier. I'm 24. -ish. I could give you exact milliseconds, but that'd be irrelevant.

Anyway, I'm calling this book "Outsider" because it ends up being about a few different people who could be called Outsiders.

So.

Abacus left you with how Bashiketa got ahold of some nanites because I left them lying there on the floor. And then they went to help Thomas. And Phage was still on the Terra Supreme, the Sunspot's parent ship. And I'm still not going to tell you much about the Terra Supreme, because it would be rude to do so. Thomas should tell that story, if he wants to or can.

But what Abacus implied happened. Bashiketa and Thomas managed to link to the nanites on both ships and, through them, to the Networks, and now our Networks are entangled through their Tunnel. And Phage has put what it calls "a Gatekeeper" on that Tunnel so that a Network war doesn't break out between the two vessels.

The Gatekeeper is a nearly full copy of Phage that is dedicated to the task.

It also was forced to leave a copy of itself on the Terra Supreme so that it

could return to the Sunspot with Bashiketa and Thomas, and also to be my mom again. Which I'm really glad it did.

So, um, yeah. Thomas. On the Sunspot.

Let me tell you about *that!*

Outsider

137 days after I dropped a big blob of nanite clay on the floor of Melik's lab, right in front of Bashiketa, in order to go make sure that the Sunspot Council didn't tear the ship apart, Phage returned.

It was 48 days away from my 10th birthday.

Abacus, Emala, Candril, the Whorlies, Aphlebia and I were having lunch in a park. It was just on the other side of the Garden from our home, so when the sun wasn't there we could look straight up and see our home city blinking on the shoreline of the Aft Sea. But it was midday, so the sun was there and we didn't look up.

It was a park that was placed in the middle of wilderness, nowhere near any city, just for the purpose of looking up at our home. A lot of the cities in the Sunspot have parks like this. From there you could take a lift down to Below Decks, where there were lots of quarters where people could live, but no one was living there now, so they were called Fallow Decks. And, just, like, 32 days earlier the Crew had opened the Fallow Decks to everyone with the caveat, "Don't bother the Monsters or mess with their libraries."

I'll explain a few of those things later if you need a refresher.

Candril was throwing bread at Aphlebia. And Aphlebia was catching the bread in different ways with their nanite body. And then eating it.

The Whorlies were having a four way discussion with Emala about the kind of insects they'd found in the park before lunch. It was Afrim, Garghil, and Charl fighting for their front to brag about different bugs, or different things they'd noticed about the same bug.

I remember thinking that they could have just separated into their own nanite bodies so they could all talk at once, but I guess they liked sharing the front like that. Firas once told me that they sort of share thoughts that way, and that sounds fun, really. Probably similar to how Aphlebia and I talk, but different because it's in one brain. Or maybe it's like being on the Bridge of the Sunspot.

And then Abacus was holding a big political discussion with the other Tutors in the Netspace of the Park, their avatars visible to us. But they kept

their conversation in a Network channel so that it wouldn't disturb the rest of us. But, like, any of us could join it any time. Abacus had made sure to invite us to do so, if we wanted.

I was eating my sandwich and looking at the trees.

Trees are just so beautiful. I'll never get tired of looking at them. But back then, I was studying their intricacies. Like how each tree grew just slightly differently than the others because of where it was and what the other trees around it were doing. And like, how a rock in just the right place under a tree would alter its whole growth pattern subtly. And, of course, like human beings, each tree is a record of everything that has happened to it over the centuries.

I was a kid and my brain was new to all of this, and details in everything always caught my attention. I could have stared at the table we were eating on for hours and told you all about it. But there were *trees*.

And I was just about to let myself flood through the surrounding forest to really feel it all when the whole world got warmer and darker and easier to be in. And then I noticed that there was a muscle in the middle of my back, right between my shoulder blades, that stopped constantly hurting. I hadn't realized it had been hurting until it unclenched and gave me a little rush of happier pain, then relief, and my shoulders fell about two centimeters as I sighed.

I looked up and over at my family and declared softly, "Phage is back!"

The Tutors stopped talking before the others. But everyone looked at me with curious and hopeful eyes.

And then I felt myself start crying. My body reacted before I did. I had to settle into it and really feel my tears and sobs before I knew what my emotions were about and why.

I wanted my mother back with me right then. There, with me, to hug me and to get some nanites from the ground and learn what eating food was like, because it had missed that! I wanted to lean on it. I want to hear its deep voice again. I wanted to see its melodramatic, overly colorful Network projection of stars and nebulae filling the silhouette of its body. I wanted to see the glorious event horizon of its conscious mind next to mine. I'd missed Phage so much in its absence I was suddenly feeling how much it had hurt to have it gone, now that it was back but not *here*.

Candril, who was sitting next to me, offered me a hug and I just sort of automatically accepted it. Candril was wearing a shirt, so my bare arms mostly touched that, but I could feel zir soft, dense fur against my cheek and the side of my neck. Hugging Candril is always good. Ze has an average of 27,496 strands of fur per square centimeter of skin, and the biggest feelings of our family. Ze also knew just how much to squeeze me to help me regain focus.

“Ni’a,” Phage rumbled from behind me, and I jumped into Network space and hugged it there while simultaneously hugging Candril with my body. And I think that’s when and how I reminded it that it *was* my mother, because it stopped what it was about to say to just hug me back for a while.

In case you don’t have the Network, or something like it, hugging on the Network feels just like hugging with your actual body. And getting two hugs at the same time, one with your real body and one in the Network, feels *really* good.

I didn’t want to let go of either of them, but Candril got tired and uncomfortable, so I released zem. And to do that, I had to shift my focus from my mom, and so it took that as a signal to let go of me.

So I stood up and turned around to face it and shouted, “A hundred and thirty-seven days! A hundred and thirty seven days, five hours, forty-eight minutes and three seconds!” I timed it so that on the last phoneme of “seconds” it was an accurate number.

“I’m sorry,” it said.

“I know,” I replied. “But it *hurt*!”

“You did really, really well,” it said.

“I missed you!” I cried.

“I was there.”

“You were one million, seven hundred ninety-three thousand, one hundred and eighty-seven lightyears away,” I said. It was the amount of time a signal or light or radio would take to reach the Terra Supreme if it was sent from the Sunspot right then, accounting for the relative velocities of the two ships.

Rattling off the exact numbers as they entered my head calmed me down, even though they'd be wrong by the time I got done speaking them. Rounding them off helps a little to cover the discrepancy, but my psyche will continue to update me for a few moments afterward even if I cut myself off. And it feels good when it does that, too. I try to only do this with Phage, though, because it distresses everyone else. It's not a fair conversation tactic with anyone else.

I may not have sounded calm, but if I hadn't rattled off the numbers I wouldn't have even been able to speak.

Phage walked around to the other side of the table to sit in the empty space beside Aphlebia, to face me, lean across the table and hold my hands. As it went, it collected nanites and duff from the ground it walked on to create a body it could inhabit, so that we could physically touch each other. This left a long, human volume divot in the ground that the nanites in the soil immediately started to repair. Um, eighty-three point five six liters.

It's OK to make nanite clay from the ground if you do it in public parks, and not the wilderness, and you put it back when you're done. The nanites do a pretty good job of repairing the damage, but it's best not to disturb the wilderness at all. Emergencies can be mitigating circumstances, of course. But, just in case you visit the Sunspot, this is an important thing to know. And it's way better to take your clay from the bins in the quarters and makerspaces. Like, it's better clay and it's more polite.

Feeling grumpy and heavy with other emotions, I sat back down, scowling, and took Phage's hands. I could feel all the little pine needles, twigs, and pebbles that were worked into its nanite driven body, but that felt nice to me. It was a bit like I was holding hands with my spaceship. And in a way I actually was, because Phage had taken over managing the chaos in the physics of the Sunspot for me. It had been its job before, since 129,840.5 years previously, which it had given to me briefly when I returned from the Terra Supreme, and, oh. OK, I'm so sorry to meander like this so early in this book, but I need to.

I want to be telling you about Thomas, but I do need to make sure you know or remember who I am and how I got to meet Thomas in the first place.

Phage is my mother. It identifies with the word and concept of "mother", and I came from it in a vaguely similar way to what most people have

meant when they use that word. My body was born in the Nursery incubators and its genetic code was nearly randomly generated by the Sunspot's Evolutionary Engine. But, because Phage was basically the Sunspot itself at the time that happened, and its subconscious had decided it was time to have a child, I came out the way I did. And unlike anyone else aboard the ship, I can do a lot of what it can do. Except, unlike it, I have a physical, biological body that is aging like a typical body does. And I've learned I'm also the spitting image of someone who lived a long time ago, named Jenefere (who still exists in the Network today as one of the Senior Crew). And I'm a near clone of Thomas, and no one can explain that, except by pointing at Phage. And Phage will shrug.

Apparently, Bashiketa should have been the clone of Thomas. They were both created using the same quantumly entangled system that had been isolated from the systems of their respective ships. They had been born to preserve the Tunnel connection between the Terra Supreme and the Sunspot. The Terra Supreme is the Sunspot's parent ship, and it is going through huge social turmoil in the far future, according to time measured by light speed. And during that turmoil, the original Tunnel equipment will have been destroyed. But thanks to the Tunnel itself, we know about that now, and basically that turmoil is happening now, and has been for a while.

Another writer in another part of space/time, while just daydreaming about something like the Tunnel, called it "an Ansible". In the simplest and most inadequate terms, it involves the use of quantum entanglement and quantum tunneling to communicate instantly across space/time, no matter how far apart the ends of the Tunnel are. And, I think Phage and I both have something like this going on within our own psyches, allowing us to draw upon knowledge and information from nearly anywhere in the universe. Only, because our conscious minds are embedded in the systems of the Sunspot and modeled after human psyches (or are human psyches), this happens through association and is kind of random and unreliable.

Anyway, 541.5 years into its journey at near light speed away from its parent ship, the Sunspot had so much trouble managing itself that the Crew sent out a desperate cry for help using the Tunnel. They turned the big dial on it all the way to the right, which meant tuning the machine into a realm of connection that was past an asymptotic limit. On the dial, it's marked with an infinity symbol, and the people in charge of managing the Tunnel on every ship ever made since anyone can remember are told, "Don't do that." I mean, the option was built into the machine, so

obviously it's meant to be done *sometimes*, and I think the reason not to was forgotten after a while.

Under its default configuration, the further to the right you turn the dial, the further back in the line of ancestor ships you go. At a certain point, you have to start relaying between ships to keep going. And here's a number I can't actually see. I don't know how many ships there have been. To get to the very first ship, you have to keep relaying connections and nobody has succeeded.

Somebody got really desperate, turned the dial all the way up, and asked for help. And instead of getting instructions or a "hello" or any sort of usable data, they got Phage. And Phage helped. It had only one request in return, and that was to feel what it was like to think like a human.

So, the word "human" here. Some people, upon getting this document, are going to translate it into their own equivalent word. In case your translator is doing that, when I write "human" I am referring to the kind of people who built and made the line of generational starships that the Sunspot is part of. And humans didn't always look like me.

We've evolved a lot, and we've been futzing with our appearance and makeup a *lot* throughout the eons. And that's important to know for context, because the Terra Supreme is a ship that embraced some sort of ideal of perfection and tried to make all its humans fit a certain mold, and that's what my body is mimicking. And that's what produced Thomas.

But if you look at Abacus or Eh, as they currently present themselves, that's kind of what humans looked like when they devised Fenekere, which is the command language of the Sunspot and most other ships that we know about. Which, there are wings, and tails, and horns involved, among other things. And I get a vision of it when I ask my greater subconscious, "what does a human look like?"

If you are someone who is not from this line of starships, there is a non-zero chance that I look a lot like your own species. It's a tiny chance. It's extremely unlikely. But it's not zero and it's possible.

Anyway, in contrast to the Terra Supreme, the Crew of the Sunspot decided that diversity was the ideal, and configured their breeding program to reflect that with as little human input as possible, except for attempts to correct for certain agonizing diseases and physical dysphoria.

It's still a deeply questionable thing to do, ethically speaking. But my friend Morde will tell you so is creating a new consciousness in the first place, especially with the possibility they will experience something like severe physical dysphoria.

The culture of the Sunspot also favors consent and autonomy over nearly everything else, which the Terra Supreme does not. And these were the things that originally led to the schism that ended up spawning the Sunspot. So the Crew of the Sunspot has been doing its best to erase all traces of culture from the Terra Supreme. This included altering the language and banning certain words. And, of course, the languages diverged even further after that.

And then Phage goes around calling itself my "mom". "Mother" and "mom" are terms that were originally derived from references to "the child bearing parent" but, again, over the eons have come to mean a whole lot of other things. And if anything ever was my child bearing parent, it was the Sunspot itself. But, again, when Phage takes charge of subduing the fibrillations of the ship, the Sunspot basically is its body.

And, also, if there's one thing that Phage just does naturally, it's break down barriers and spread things around evenly over time.

So, anyway, after all of that, you'll maybe understand just how big a deal it is that the Networks of the two ships got entangled through a Tunnel because of Bashiketa and Thomas' shenanigans. Which Phage let them do. And, actually, I was largely responsible for it myself. I think, on purpose. It's hard to say, because I wasn't thinking very much about anything when it happened. I had been reacting.

By the time Phage had sat down to hold my hands and talk to me at that park table, I knew exactly what had happened, but I wasn't allowing myself to be consciously aware of it.

"Do you remember when you told Bashiketa that 'neat things' would happen if they took the nanites for a neural terminal?" Phage asked.

I nodded, because I did remember that. And I was right, neat things happened.

"Well, now that I've come back, I've sent the Council a brief on the matter, and I do have to meet with them soon to talk about it," it said. "But I have a little bit of time right now to spend with you. And we don't need to talk

about it, because I've got you covered. I just wanted you to know."

"Oh," I said, in my most nine year old voice. *Uh, oh*, I thought.

"Did you know you can eat food, Phage?!" Candril asked, butting in.

"Did you know that's what my name means, Candril?" Phage asked, without breaking mental stride.

"But," Candril stammered. "Somebody on the Crew programmed the nanites so that they can make you taste what you eat!"

"Really," it said. "Thank you! I hadn't been paying attention to that." It looked over at Emala while reaching for a peach, and asked, "May I?"

"You should," Emala replied.

But while it was taking a bite of the peach, I asked it, "What's going to happen?"

It didn't need to open its mouth to talk. It had four other ways of communicating, and it chose vibrating its nanites like a speaker through a different part of its body, while its mouth was full of peach, "Not much, if the Council listens to me. I've placed a Gatekeeper over the Tunnel. It's basically just me, but separate. I've also left another copy of myself on the Terra Supreme to help them resolve their conflicts without destroying each other." It stopped chewing to say the next part, "I should have done that from the beginning, when I followed you through the Tunnel. I was as panicked as you were, so I didn't think of that, and I am very sorry."

Abacus had been working with me and Aphlebia, with the help of some others, to work us through our trauma from that day. My sibling, Aphlebia, had lost their life during that event, and it had been because I'd lost control of myself. They had ascended and were Crew now in all but Vow, but like me they were still a child, and we both needed a lot of work. We still do. But we're helping each other get through it.

The thing that had caught everyone by surprise that day had been that when my body had become overwhelmed by sensory overload, my outlash had startled and overpowered Phage itself, causing damage to the ship and collapsing the stage that Aphlebia had been hiding under. It was the first indication that I was not just a child of Phage, but its potential equal. Something it had not even considered.

During that episode, I'd noticed that there was this sort of a "hole in the ship". Which turned out to be the Tunnel. And it was embedded in Bashiketa's psyche. And I guess I maybe dove through it in order to get away from the mess and noise I'd created.

Phage's mention of my panic brought that all back like I was experiencing it again. But it was ready this time and cushioned the blow, bleeding my sudden burst of energy out through the drive of the ship. Mind you, back on the Terra Supreme, when it had followed me, it had taught me how to do that myself, and I'd been doing it since. But it was nice to not have to make the effort.

"And Thomas is here," it said, once it was sure I was safe again. "With Bashiketa."

So, when we were done with lunch, and Phage had gone to its meeting with the Council, I asked Emala if I could go visit Bashiketa and Thomas via the Network. It was my right to just go, if they'd have me over there, but I'd be imposing the care of my body to Emala and the Tutors of our family, so I asked. Even though I'd really just be sleeping in my bed in our temporary quarters for maybe an hour or two. Still, after the turmoil of my episode, I had begun asking.

Of course, Emala said, "yes."

And Aphlebia wanted to go, too, which I liked. So we sent Bashiketa and their family the request to visit, and got back a "yes" from them, and then went. Actually, on Abacus' suggestion, I asked a bunch of things in that request and got some directions and then we went.

—

Pulling a nanite clay body from a nanite bin is great! You can do it two ways. Both are fun.

The way you are first taught, because it's more polite, is to make a Network projection of yourself in the room where you want the nanite body to form, and then you call the nanites to you. There is a tingling sensation as they each find their place and synchronize with your Network senses. At first, you are standing in the Netspace of the room, sensing the room through Network protocols. And someone with a neural terminal can look at where you are standing or floating and see you there. Then a tendril of nanite clay comes from the open bin and starts to just sort of fill

in the space that you occupy, and they sync to you, and when it's all done you're actually feeling the real room through the nanites.

That's never not utterly fascinating to me.

But Aphlebia and I were drawing our nanites from a bin in a Fallow quarters, so we did it the other way. Giggling the whole time.

The other way involves commanding the bin to open, and then treating it like a gateway between the Network and the corporeal world. So, you sort of enter the Netspace of the nanites in the bin and put them on there, and then physically climb out of the bin. This is basically the same method that the Flits and the Pembers used when they first figured out how to make exobodies, but they did it in a park, climbing out of the ground. Which is also fun.

But, what it feels like is swimming up into a block of sand, and becoming the sand with this huge tingling sensation over all of your body, and then reaching up with your hands that are now made of sand and gripping the lip of the bin and pulling yourself out of the rest of the sand and stepping onto the floor. And you can feel every little tactile sensation of moving through the remaining nanite clay, feeling the air on your nanite clay skin, touching the bin and the floor. And as you form your nanite eyes, it's like opening them from a dream, and you can see, smell, taste, feel, and hear things as if you're in the body you were originally born with.

Except, you also know that while you're doing this, if you're someone like me, your body is back home sleeping and dreaming all of this as you're experiencing it. Clinically speaking.

It's so hard to really give it justice in words.

So, I let Aphlebia go first. And then waited for the bin to refill from the supply tube before taking my turn. Abacus followed me, because it had asked to act as my Tutor but also just wanted to see Bashiketa and their family, too, and wanted to be polite about it. Chalkboard, Aphlebia's Tutor, remained in the Network.

"That is a really fun way of doing it, isn't it?" Abacus asked, looking back at the bin.

I shrugged and Aphlebia wrinkled their face in a cute little smirk.

Abacus had climbed out of the bin the exact same way we had. And it preened itself and then stretched as if it had muscles that needed it. It even yawned and flexed a simulation of retractable claws. It took the shape of a lanky limbed, intricately frilled amphibian with a lure on its head, and a long, whiplike tail that ended in a spike. Which is a shape it had taken very recently and was clearly still enjoying it for all that it was worth. It wasn't showing off so much as appreciating all the sensations we had just experienced, too. It had spent the majority of its life as a floating bead, not experiencing what a body was like. It had taken this form only 139 days ago, and was still feeling it out and making adjustments. I felt I understood.

I could sense Chalkboard doing the Tutorial equivalent of rolling eyes it didn't have in its Network space, though. Chalkboard is still a traditionalist, retaining its inanimate avatar of a floating tablet. Of course, back then, that was true of most Tutors.

Aphlebia and I just sort of looked the other way and talked about Thomas a little bit, while Abacus did its stretching.

I'd met Thomas when I'd gone to the Terra Supreme to hide. I had visited him, while he was sleeping, on my way back home. We'd talked long through the night, but I wasn't sure how much of that dream he'd remember. So, what I was telling Aphlebia was that he looked a lot like me, only a little different, and that he considered himself to be something called a "boy". And also that he might not even be using a nanite body right now, and might just be Bashiketa's headmate, more or less. We wouldn't know until we got there.

"Ready?" Abacus asked when it was done adjusting its nanites.

"As if we aren't already going," I joked with it, taking a step towards the door.

Aphlebia stuck their tongue out.

We crossed the hallway to the lift on the other side, which had the same kind of old fashioned memory plastic door as the quarters we'd just walked out of. The Crew had installed nanite bins in every living space in the Fallow Decks, but were holding off on the doors until someone moved in. I didn't really think about it back then, but it sure looked like signs of some sort of plan.

The lift took us up about a quarter kilometer to the compound in the mountain where the Tunnel was kept and where Bashiketa lived with Laal and Fredge. At the very top of its shaft, it opened onto Bashiketa's level and let us out into a short hallway with a single old fashioned door at the end. There was a Crew access panel halfway down the hallway, hidden from sight with microscopic seams, and openable only by Network command. But that was it, no other doors. A very unusual place in the Sunspot.

I'd been here once before, so I knew what to expect, but it still felt special and strange.

We walked up to the door as I sent them the greeting and notice that we'd arrived. And by the time we'd reached it, the door curled open.

Bashiketa was standing right on the other side of the door to usher us in, with Fredge standing in the middle of the room attentively, and Laal in the kitchen making something with boiling water. Upon entering, I smelled tea.

And there was Thomas, sitting in one of the chairs at the table. There were two new chairs there since the last time I'd visited, both made to fit Thomas and I. The other four were designed to accommodate tails and were of slightly varying dimensions.

"Aphlebia," Fredge said. "Do you have chair specs? I can have our maker spit one out for you right now."

Aphlebia grinned and nodded and sent the specs to Fredge's tablet. And Fredge walked over to the maker and set it to work.

"I like that we're all just visiting," Bashiketa said as the door closed behind Abacus. "You know, instead of doing something big and scary."

"Well," Abacus commented. "This is probably big and scary for Thomas. But yes, we're just here to catch up and be hospitable! Welcome to the Sunspot, Thomas!"

Thomas gave a little worried grimace and a small wave. He did seem very relieved to see me. His nanite eyes were still expressive enough to show recognition and hope when he looked my way.

So I walked over to sit down with him, and said, "Hi." I looked around at everyone and said, "pretty weird, huh?"

"Yeah," he gulped. "I never thought I'd see you in person and for real." He grimaced again, "It doesn't feel real, though. You look even more like me than I realized. It's like looking in a mirror! Only your hair and clothes are strange."

I sighed and smiled.

Thomas had created a nanite exobody for himself, probably from the bulk of nanites I'd left Bashiketa. This room didn't have a nanite clay bin, but there was a large drum in the corner and I could sense it had some nanite clay in it. Not enough for a typical adult body, but maybe a small child or two small Tutor avatars.

I wanted to peek through the Tunnel to see how Thomas' vessel was doing on the other side, but the Guardian was there, feeling very much like Phage but not like my mother, and it wouldn't let me through. And, if Thomas was here under those conditions, that maybe meant something bad had happened to him on the Terra Supreme.

So, here he was, in a spacious Monsters' quarters on the Sunspot in his own nanite body for the first time, surrounded by alien people. Bashiketa, he had grown up with, visiting them in dreams, flashbacks, and blendy dissociative episodes. But all from the perspective of being Bashiketa, and feeling dysphoric about it. Until Bashiketa visited him and then they had whatever adventures they'd had that lead to Thomas being here and Phage placing the Guardian in the way.

Maybe Thomas had met Fredge and Laal by that time, but I didn't know and decided to assume they were new to him.

So, Bashiketa was about my height, same as Thomas'. But there, all similarities ended. Where Thomas and I have tufts of curly hair on the tops of our head and bare skin almost everywhere else, Bashiketa was covered in fur, with stripes on their head and tail. Thomas and I have flat, scale-like claws useful for prying open nuts. Bashiketa's are conical and curved, like most people's on the Sunspot, and capable of doing severe damage to a person if used carelessly. Where our ears are round, wrinkled things on the sides of our head, Bashiketa's were parabolic and mounted high and quite expressive. Bashiketa also had a snout and a big black nose, and that wonderful bushy tail. And teeth made for puncturing, gripping, and tearing.

If we were all fauna, we'd be mistaken for different species, but our brains and our genes were actually remarkably similar. We were all human.

But to Thomas, he was in a world of what must have looked to him like Beasts!

Fredge had chestnut colored fur, with large pointed ears and a longer and sharper snout than Bashiketa. They also had dark gray, leathery layers of hide down the front of their abdomen, imitating the belly scales of a snake. And their tail was long and fluffy, with a white ring near the tip. They usually wore a simple robe with a slit in the back for their tail.

Laal was easily the tallest in the room, with two long legs built for leaping, sprinting, and kicking with what must have been an incredible force. Hen also had a long, heavy, but fairly flexible tail for balance and maneuverability when running. And short arms with hands that somewhat resembled mine, but with more bulbous pads on the tips of hens fingers, and little black claws. Hen had a short, rounded snout, with slits for nostrils, and two big, long ears that were more expressive than anyone's in the room.

And then in had walked Aphlebia and Abacus with me. Where everyone else resembled mammals, whether marsupials, mustelids, canids, or primates, Aphlebia and Abacus looked like amphibians. And even in their nanite bodies, the simulation of their natural movements and expressions was so complete and subtle that these forms were who and what they were.

Aphlebia looked like one of the jumping amphibians of the marshes and streams, only proportioned to stand on hind legs and just a couple centimeters shorter than me. They still adorned their avatar with the form fitting clothes they'd worn before their ascension, though constructed entirely with nanites.

I can only imagine how strange and scary that must have been to Thomas.

On the other hand, I'd visited his ship and seen the uncanny similarity of all the humans there, and it had unsettled me deeply, especially because they all looked so much like me. Things like their hair color and texture, skin tone and color, or their height, was different, but not much else. Though, I could look at them in a way that Thomas could not, and also see what was working systemically to make them all so similar, not just in the

society of the ship but within each body as well. If you ever find yourself starting your own generational starship, don't make it like that. Please. And, there, I've said more than I intended about them, but this feels like an important point.

What I want everyone to understand is that although that ship's culture is unbalanced and unstable, with things we'd consider to be cruelties worked into its fabric and history, it is also always changing, in constant flux, reinventing itself. It's not the same ship the Sunspot left a couple hundred millennia ago. And there are good people there, with long ancestries, who deserve our empathy and respect. And when one of them, such as Thomas, comes to us to tell their story, we should listen to them without judgment.

But Thomas wasn't here to tell his story. He was here for respite. So, I tried to focus on what he was talking about, and reacted to that.

"Yeah, I like my hair a little shorter than you do," I said. "And we have a lot of different clothes here. You could go get some and wear them over your exobody, if you want. It might help you feel better, actually. To feel real fabric, right?"

"I don't know if I'm ready to go out," Thomas said.

Then I noticed everyone was looking at us strangely and realized Thomas and I were speaking in his dialect of Inmararrão, the parent language of our own ship. Bashiketa seemed used to it. But everyone else was having trouble understanding what we were saying. And they were all surprised I had fallen into it like it was my natural language.

"The maker here can probably make you clothes," I offered. Then I turned to Bashiketa and asked, "Can you speak like this, too?"

They shook their head briefly. Meaning, they understood my words at least enough to answer the question, but couldn't respond in the same dialect.

I looked at Abacus. I thought I knew what was going on, but I didn't quite have the words for it. It took the prompt and figured it all out on its own. It's a very old, very wise dragon shaped Tutor.

"Did you have this problem when you were visiting the Terra Supreme, Bashiketa?" Abacus asked. And then, when Bashiketa nodded, it asked, "What did you do there to solve it?"

"When we weren't sharing the same body, we gestured and signed at each other," Bashiketa answered. "It was hard. But when we were... together? We could understand each other's thoughts."

Aphlebia opened their mouth and held up a finger, and then sent everyone the concept of wordless thoughts. Which, of course, Fredge and Laal could not receive, being Monsters.

Monsters are people who have used their right to autonomy to revoke their consent to a neural terminal, whether one composed of nanites or one of the old fashioned ones that were surgically implanted not long ago. Monsters cannot ascend when they die, and are not connected to the rest of the ship like everyone else is, so they are given more explicit protections and considerations by the Crew to balance those disabilities. Bashiketa had been born a Monster, but had accepted a nanite terminal recently, after I'd told them how. Fredge and Laal were still committed to their choice.

Bashiketa looked very disappointed in themself for not thinking of wordless thoughts. But if you have a mind that tends to put everything into words, it's really not likely to occur to you, or even be intuitive. Aphlebia finds it hard to use words, and so it was natural for them to provide an example.

Thomas perked right up and let everyone with a Net connection know that he got it. Then he suggested Bashiketa act as a translator for him. He'd send Bashiketa thoughts, and Bashiketa could either say them out loud or send word back to him. It was extra work, but since the dialects were still essentially the same language, he figured he'd learn pretty quick and they wouldn't have to do it for very long. Or, at least, he seemed interested in trying.

A lot of that is my own interpretation of his thoughts, so I might be putting more into it than he'd intended.

Bashiketa frowned and then nodded to Thomas.

So then, just before Thomas spoke next, both he and Bashiketa took on almost the same expression, and then Thomas said, haltingly, using Bashiketa's words for his thoughts, "I'm sorry. You all look like scary, untrustworthy creatures to me, but I know you are good people. I think I would like some real clothes."

"That's pretty good!" I said. Then I pulled at my shirt, "Clothes like mine?"

"No. Different," he said. Then scowled at his next words, "Those are too... girly?"

I'd seen the people he called "girls" on his ship, and while I liked their clothes, I really didn't see how mine resembled them. But that was his perspective. The others in the room were confused by the word "girly", though. That had been his own word, not Bashiketa's.

I turned to everyone who had a confused look and said, "Girly is a kind of style on the Terra Supreme that Thomas doesn't like for himself." I apologized to Fredge and Laal for leaving them out of the next thing I did, and then I created a Network projection of different styles of clothes in my size and shape to hover above the table. It was a standard maker menu, nothing creative on my part. And it was stuff I'd worn throughout my life, updated for my size, and filtered for what I thought Thomas' tastes might be. I hoped he'd like something there. I like to experiment with my clothing a lot, so I thought there was a good chance of it.

The Network projection was just enough different from what he'd experienced on his ship that I did have to give him a few simple instructions, but he took to it pretty quickly. "It's a lot like the menus for the nanites!" he declared.

The others sat down around the table, Fredge bringing Aphlebia's chair over from the maker, and Laal serving tea, while Thomas flipped through the selections. Fredge and Laal exchanged amused glances over watching Thomas wave his hand in the air at something they couldn't see.

Then Thomas pointed at a shirt and said, "That, but gray." And then at a pair of shorts, "That, but black." And then a pair of shoes, "And these."

I went ahead and activated them for him, but showed him how to do it, in case he didn't know. But I think he just didn't feel like he had permission to activate the maker himself, so I said, "You can literally do that any time you want. It doesn't cost anything. And when you're done with anything, you can put it in the maker and tell it to *unmake* it."

He looked dumbfounded.

I leaned forward, with my elbows on the table, to look him in the eyes briefly, which it turned out both of us found uncomfortable so I looked

down at his chin immediately, and said, "I bet Bashiketa already told you this, but nothing costs anything here. We don't have money like the Terra Supreme does. You don't even have to do anything to earn anything. You can just *do*. Eat. Talk with us. Explore the ship! Abacus loves giving tours! You can even go to one of the shipyards and look outside!"

Woops.

Thomas looked like he'd been stricken in the gut with a sharp tree branch, slumping back in his chair, eyes wide, mouth slack, and then his nanite exobody collapsed and Bashiketa suddenly threw up.

Refuge

I saw a clear vision of what had happened the instant the memory of it hit Thomas' face. I'm not even sure if he'd projected it, or if Bashiketa had, or if my greater subconscious had provided it through cosmic grade association. It hit me too hard and fast for me to bother analyzing where it came from, and it was too traumatic for me to even look back on it now and try to figure it out.

I later talked to Phage to understand how it could have let this happen, too. And it said that it had been during a moment when it was more focused on the whole of the Terra Supreme's system and less conscious. It had thought it had left enough safeguards in place around the shipyard where Bashiketa had found Thomas, and where the two were learning how to use the nanites. And it had thought it had left the two with enough instruction and power to protect themselves, forgetting that they were two nine year old children that were not me.

Phage may have unfathomable abilities, but it is not infallible. And I really need to remember that that is true of me as well. Case in point, what I'd just done to Thomas to remind him of how he'd died.

Something had caused the gigantic hatch of the shipyard to open, and even with the nanites there as a tool to help, Thomas' body could not survive the catastrophe of that. Neither he nor Bashiketa knew how to do it. But, at least Phage had accelerated the nanite terminal's processes when it had given them to Thomas, and Thomas had been able to ascend.

Even without Phage's explanation, that vision answered so many questions that someone in the room had probably been about to ask.

"Ni'a, are you OK?" Aphlebia asked with their body language.

"No," I said, already crying and sniffing. I put my eyes in the palms of my hands and shuddered, holding in a wailing noise I so much wanted to make.

Abacus had been right in the process of saying, "Ni'a, are you OK?" out loud when I'd said no. Our words overlapped, and it looked at Aphlebia and understood then I'd been responding to them.

"I'm sorry," I told Fredge, who was right across the table from me. Then I

turned to Bashiketa, who was also Thomas, who was being tended to by Laal, and said, "I'm so, so sorry!"

Bashiketa nodded.

"That looked like a trauma response," Fledge said.

Abacus nodded.

Fledge looked over at Laal and said, "Maybe we should take things way more slowly. Get Thomas into his new clothes, and then let him lead the way. It's probably really OK if we don't leave these quarters for a while, anyway. I'll clean that up, Laal."

Laal nodded and helped Bashiteka get up and go to a back room, probably the washroom.

Then Fledge got up and got some cleaning supplies, and said to the rest of us, "You should stay until Thomas has recovered, if it doesn't take too long. I saw how he reacted to you, NĪ'a. Aside from that one trigger you handed him, I think you might be his lifeline here. Well, you and Bashiketa together. It's like he already knows you."

"He kinda already does," I sniffed. "We met. Sorta."

Abacus concurred with Fledge, "Anything familiar to Thomas right now is critical for him. We'll stay. On another note, it is good to see you during a time when we're not actively breaking any rules."

"And to be able to hear you talk out loud," Fledge said.

Aphlebia scowled.

Abacus noticed the scowl, smirked at Fledge, and then signed back, "I'm actually surprised you recognize me."

Fledge glanced at Aphlebia, who stuck their tongue out at them, and then signed back, "I read your book."

Aphlebia laughed at Abacus, and then signed to both of them, "talk in your favorite way, I don't care." And then they glanced at me to get my attention and looked pointedly at Thomas' discarded nanite clay. It was creeping very slowly back toward the drum in the corner.

I just nodded. I wasn't in the mood to do anything about anything at the moment. I was still recovering from what I'd seen.

So I got a questioning look from Aphlebia, and I looked really hurt back at them, as apologetically as I could but I don't know how it really came across.

Abacus saw that exchange and asked me, "What happened?"

I sort of opened my mouth but couldn't really say anything, and then squeeze my eyes shut and sobbed again. I gestured a hand limply toward Aphlebia and then the other one toward Thomas' nanites.

Abacus frowned, trying to decipher that, but Aphlebia gasped and then put a hand on the table for me to hold, which I did.

Abacus knew enough about me, how I work, and my relationship with Aphlebia to get an idea from that, and said, "Oh." Then it turned to Fledge and said, "I don't think Thomas was the only one triggered."

Fledge, who was in the middle of cleaning, said, "Ah."

And the maker dinged.

Laal came back out and said, "Bashiketa is leading Thomas through some grounding exercises for meltdowns. They think they'll be able to come back out soon. Thomas wants to, actually." Then he leaned down to me and asked, "Can I do anything for you?"

I actually felt my heart beating rapidly, and I don't think it was just a simulation from my Network avatar. I think my own biological body was reacting to my own flashbacks and the extremely vivid vision of Thomas being spaced. I was also connecting that to my memories of my own nanite exobody spacewalk, which had been a profoundly healing experience, and making those visions feel threatening and deadly, too. I didn't want any of that, but my body wasn't listening to me about it.

Laal sat opposite me in the seat Fledge had been sitting in and said, "Hey. Why don't you return to your home for a little bit, hug your caretaker and eat or drink something for real, and then come back here when you're ready? No one here would be hurt by that. Do you know some grounding exercises?"

I frowned and shook my head.

"OK, when you wake up in your bed," Laal seemed to be well versed in this Network projection thing for being a Monster, "count down things you can sense. It won't cure you, but it'll help. Five things you can see, four things you can hear, three things you can touch, two things you can smell, and one thing you can taste. Maybe wait until after you get that hug. Or during the hug." Hen tilted hens head and raised hens eyebrows in a prompt for my understanding.

I nodded, and then practiced grounding myself right there. I didn't feel like I could move from my chair until I did, anyway.

I could see the table, Laal, a chair, Fredge, and the cloth Fredge was holding. I could hear Bashiketa mumbling to Thomas in the back, the sound of the life support system of the quarters, the sound of Fredge moving the cloth over the table where Bashiketa's lunch had landed, and... my own heartbeat. I actually could hear it. I took a deep breath, feeling both my nanite body moving with it and my body at home actually breathing, two things right there. And I could feel the table. I could smell cleaning fluids and vomit. And I could taste... nanite clay. I could actually taste the inside of my nanite exobody's mouth! That was kinda neat.

But I had one more set of senses I could access and I decided I needed to do that. I consciously connected with my greater self, the entire system of energy transference and transformation throughout the Sunspot, and really the rest of the Universe. Following Phage's teachings since I had been three, I only expanded my awareness as far as the space between my nanite exobody and my original body in bed. And I could feel Phage, my mother, all around me as I did this. I could feel how much it cared about me as if it was a constant in an equation about a law of physics. Which, it was, and is.

I don't really know how to describe what doing that feels like. I'll try it all sorts of different ways throughout this book, but I don't think my words can convey it to any being who does not also experience it. But what it afforded me was an outside view of my own bodies. Both of them. The biological one and the Network driven nanite body. And my psyche as it was stretched and echoed between the two of them. I saw it all as its own complex system, almost separate from the me that was really me.

I reached out and smoothed the shock of acute waves that had recently propagated in the system. It wasn't anything big enough to have to send it

out through the ship's exhaust. Nothing that dramatic. But it had been a reaction that was teaching my body's neurons to overact about a number of things, wrenching up their sensitivities beyond their typical hypersensitive states.

And then I thought I could do the same thing for Thomas. But, again, I remembered Phage's teachings. To not do that without asking first. So I returned to my nanite exobody, and looked up at Laal.

My posture and expression must have changed more than I realized, because hen leaned back and straightened up in mild surprise.

"Can I go back and see Thomas?" I asked.

Everyone else watched with curiosity. Fredge seemed astonished at my change. Aphlebia and Abacus both took it as typical. Laal nodded and gestured for me to follow hen.

Hen took me through their spacious kitchen and to a door that led to Bashiketa's own room.

At the door, Laal asked in a soft voice, "Bashiketa? Thomas? Can you see Ni'a right now? They want to ask you something, I think."

A mumble came through the door, and Laal nodded at me and let the door open.

I went in, while Laal stood at the open door.

Bashiketa was sitting on the edge of their bed, holding their shoulders and rocking back and forth. I recognized that stim. Aphlebia sometimes did it when they were happy, but this looked distressed. Bashiketa had been doing something like it back when we'd first visited the labs below their quarters, where they'd been born, and where the original Tunnel machine was housed.

"Thomas," I said. "I'm sorry I reminded you of... things. I can help, though. Will you let me help?"

Thomas nodded Bashiketa's head. They really were a system now, just like my siblings the Whorlies.

I sat down cross legged on the floor in front of them and looked up at their

face, but at their forehead because now I knew eyes were a bad idea between us. Sometimes I look into someone else's eyes because I know they like it, even if I don't. Then I said, "I need to explain first, because what I do is weird and I need you to understand it before you say it's OK. OK?"

Thomas nodded again.

"I'm like Phage," I said. "I'm its child. I can... make things calm down. But, it's good at spaceships and stars and things like that. I'm good at people. Only, doing this for people kinda violates their consent and autonomy, so I try to not do it. Or I try to work on such a big level that it's more OK, I think. I hope. But, if I do this for you, it might feel like I'm hugging your brain. Are you OK with that?"

Thomas nodded vigorously. I could tell it was Bashiketa who followed that with a quick, little smile.

"OK," I said. "If it turns out you don't like this, I'll be able to tell and I'll stop immediately and I won't do it ever again, unless you ask. But you can even say 'stop' if you feel like it. OK?"

Thomas nodded.

So I took another deep breath, feeling both of my bodies going through the motions, and then slipped into my Phage-state again. I still want a better name for that.

There I saw Thomas overlapping in space/time with Bashiketa, and I could see how they were affecting each other through Bashiketa's body. I could see the interplay between the waves of acute distress in Thomas and Bashiketa's efforts at soothing them. And I could see the vibrations of what I guessed was dysphoria aggravating both of them. I couldn't read their minds, but I could see their states. And I started to add standing waves to counteract the worst of the distress, both the trauma reaction and the dysphoria. They both needed relief from both.

The dysphoria would come back every time Thomas came back to consciousness in Bashiketa's body. I couldn't end it. But I could suppress it in the moment. And the trauma of Thomas' death was something that would take years to heal, and maybe never completely. But this would be a jumpstart that would make it easier.

When I was done, I said, "I'm going to go back and tell the others what happened so that they know what not to say. Is that OK with you?"

Bashiketa gasped with relief and Thomas said, "Yes, please!"

I sniffed and tried to wipe a tear from my eye, but it was the wrong set of eyes. Oh, my face was going to be a snotty mess when I got back home.

So, I got up and went out with Laal and told everybody what I'd seen. But I warned Aphlebia before I did, so that they could brace themselves. They reached out to ask me to hold their hand while I talked, so I came over and did that. And we squeezed each other's nanite hands, back and forth, as I got to the hard parts. Little signals we'd learned to send to each other over the years.

I really try not to favor any one person. Everyone I know, from Phage to my friend Bri, I try to treat as equals, because I really do see them that way. But, some people's needs in relation to me are just bigger, or I feel more personal responsibility for them. And I just naturally am there for them more. At least, when I'm in my body. But with Aphlebia it goes deeper somehow. I feel like they understand me in a way that even my mom doesn't. And, of course, I feel personally responsible for their health, too. But, that understanding, in the face of all we've been through, is a support I cannot afford to ignore. And it would be unloving to not try to return it in every way possible.

I found myself wondering if Thomas would ever feel something like that from anyone. If so, it would probably be Bashiketa, but the perspectives and confusions of being a system might muddle that. I don't know. I'm not part of one, but since that time, I've seen some of the Whorlies reaching out to other people for love instead of relying on each other. It seems like a thing sometimes.

The Flits, on the other hand, are a trinary system that I know, that are very insular and self-sufficient, and so there's probably hope there for Thomas.

Abacus was saying, "Well that's a mess I should add to my book if they're OK with it." and I was frowning at it, when Bashiketa and Thomas walked back into the room.

I'd intended to give them a signal, but had forgotten to explain that part, so they'd decided to return on their own.

As Thomas took control of his nanites again, which were halfway across the floor in their journey to the storage drum, Bashiketa shook their head.

"I'll tell you how I went there," they said. "But don't write the worst thing ever, please."

"OK," Abacus said.

Bashiketa told a newly formed Thomas, "I think your clothes are done."

I went over to the maker and pulled them out to present to him. He took them and then went back to Bashiketa's room to change into them. He could have just put them on over his nanite clothes and then told his nanite clothes to go away but, even if the others didn't understand, I got it. He came from a culture with different notions about what can be seen of a body, and different ways of dealing with that.

"So, I think we might have gotten most of the worst stuff out of the way," Fredge said. "But we're going to need to find ways to help Thomas adapt to living here. I think he needs a Tutor."

After some hesitation, Abacus said, "I suppose I could take that on, on top of everything else I'm doing."

"Please don't take offense at this," Fredge said. "But I wasn't implying you, and I don't think you'd actually be a good fit. Not that I know Thomas that well at all. But from what I've seen here today, I'm thinking that he needs another peer more than anything else, and someone he trusts. And it can't be Bashiketa, because even though they seem to be friends and connected to each other, Bashiketa also needs some Tutoring, in a way that I can't help with."

"What do you have in mind?" Abacus asked.

"NĪ'a," Fredge said, turning to me. "You're the same age as both of our children. You are a child yourself and should say 'no' to this, really. But I'd be remiss not to ask. I have never seen anyone exhibit the spirit of what I think the Sunspot should be than you have done just now, even in the midst of making a mistake. Would you at least be OK with being a good friend and peer for the two of them, and help show them around the ship when they're each ready? With Phage's help and support, of course."

"Yes!" I declared. "I want to! I like them both!" But I did find myself

wondering why I kept taking on responsibilities without really thinking about it. I didn't resent this one in the slightest, but I did finally start thinking about that habit of mine. A part of me knew I had limits and had surpassed them recently.

Bashiketa tilted their head at me, furrowing their brow, and said, "I like you, too."

Thomas re-entered the room, wearing his new clothes, and tugged at the chest of his shirt, saying, "This is really cool! I think I can feel each thread!" But he'd said it in his own dialect, forgetting to relay through Bashiketa.

"One hundred and twenty eight per square centimeter," I said.

Fredge gestured toward us and said to Abacus, "And that's the other reason I thought of them. They speak his language." They turned to Thomas and said, "Thomas, would you like Ni'a to visit more often and maybe be the one to show you around the ship."

Thomas considered that for a moment, probably letting Bashiketa translate, then nodded quickly.

"Hey," Laal said softly. "Let's sit down and relax again. And, Thomas, do you have any questions for us? What do *you* want to do?"

Thomas opened his mouth a couple times without saying anything, and then shrugged. He went to sit down, though, and took one of the cups full of tea, and seemed confused by it.

I put my hand over my mouth for a second as I realized his hesitation, then sat back down opposite him and took a tea cup, too. "Even in these exobodies, we can still drink and enjoy the tea. The nanites don't need it for anything, but they can use it. But better, yet, you can taste it!" Then I demonstrated by taking a sip myself. "Someone programmed them to do this!"

So Thomas sipped the tea and looked sufficiently surprised. Bashiketa's face echoed that surprise. So, eating things wasn't one of the activities that they'd explored while using nanites aboard the Terra Supreme.

"How is it?" I asked.

"It feels real," he replied.

Communication

When I went back home to my body, I'd forgotten that we were still in our temporary quarters, halfway around the habitat cylinder from our actual home. Which is unusual for me, due to my innate sense of being and place in the universe. But I guess I was consciously distracted.

But I woke up with the Whorlies napping on one side of me, and Candril on the other, in the single large bed that was there, and it came back to me where we were.

Emala was reading in the other room, and the Tutors were actually playing a card game that Abacus had taught them. I don't recall ever having seen Tutors play solely amongst themselves until that day. But I was only nine years old, and the Sunspot had been around so much longer than me, so it may have happened. And I wasn't exactly *seeing* any of that from the bed, but I could hear it and otherwise sense it all.

I decided to not disturb my peers, and just continued lying in bed for a while. Aphlebia appeared at the foot of our bed, just a Network projection, and waved. I waved back, and they disappeared. I guessed that they had some energy to work off and knew I'd be OK where I was.

I pinged Phage over the Network.

"Just finishing up my meeting with the Crew," it replied. "I'll be there very soon."

"Can I come to the Bridge?" I asked.

"That would be irregular, but I can make the case," came the response to that. "Why would you like to come to the Bridge?"

"I'd like to see everyone and see how they're doing," I sent. And then added, "I want to see what it's like when it's normal."

I could feel its single short laugh at that before it sent me, "OK."

I probably should have napped for real instead, but I was feeling almost as feisty as Abacus usually is.

I had the nearly-ten-year-old-who-is-used-to-helping-people kind of notion

that I maybe knew better than the Council about something. And that was made worse because of how the last time I'd visited the Bridge it was to use my Phage-like abilities to sooth the conflicts that were happening there to prevent some kind of war between factions of the Crew from breaking out, so I had sort of parental feelings toward them. Even if they weren't the same people there today as back then.

The Bridge of the Sunspot is not a physical place. It's a Network space. And, actually, there are two of them now, sort of mooshed into one. So, when you go there, you have to choose which side of the Bridge you want to be part of.

Phage was on one side, and most of the rest of the Council was on the other. But there were security attendants on both sides to make sure that neither half of the Bridge could be controlled solely by one faction of the Crew. The whole dual Bridge thing, along with the attendants, was a result of the one time that happened.

The Bridge also has this protocol that's part of it called "the drift". The drift facilitates the sharing of surface thoughts and emotions between anyone who is on the Bridge. It does not automatically work between the two halves of the Bridge, however, and must be consciously established as links between Crew members on either side. But, once a link is established, it functions automatically until one or the other party severs it. Everyone on one side or the other, however, must consciously desync their thoughts from everyone else in order to keep anything private.

This is all part of an effort to improve communication and to break down disagreements and misunderstandings that had been plaguing the Sunspot for centuries. It wasn't exactly adequate at doing that, but seemed to work better than whatever they did before, I'm told. I got the impression that having a singular Bridge with the drift active actually drove Crew to stop coming to the Bridge. The dual Bridge did seem to help with that to some degree.

Also, at the time I visited, only Crew were allowed to enter the Bridge uninvited. Abacus was working with a couple Elder Crew members to have that changed, but they were stalled over how to accommodate Monsters who might want to visit the Bridge, and also whether or not to officially recognize anyone who wasn't Crew as part of the Council if they did appear on the Bridge. At the time, only Crew who entered the Bridge were part of the Council, and being on the Bridge was the means of

attending the Council.

Although Phage was nearly as old as the Sunspot itself and was considered Chief Engineer, it had never taken the Vow of the Crew and said that it could not do so and remain true to itself. But, as part of their contract with it, the Crew had extended it a standing invite to join the Bridge at any time. And since it was in good favor with the majority of most Councils, it apparently could convince them to extend me an invite on occasion. Such as now.

But, in retrospect, I'm fairly certain that my appearance on the Bridge signaled the official end of the Council's session. I was, after all, not only a Child but a literal child. But maybe especially because I was the child of Phage and they didn't want to distress me so much I might lose control.

"Hello, Ni'a," said Akailea, probably my favorite Crew member. Sie was the parent of all the Tutors aboard the Sunspot, and had been accompanying Aphlebia, Abacus, and I on a series of therapeutic tours of the Sunspot that Abacus was leading for us. Sie had been there when I'd taken my space walk. There were a number of other Crew there that I sort of recognized, but Akailea appeared to be acting captain. Sie continued her greeting with, "We have been given word by Abacus that you have volunteered to act as peer guide to Bashiketa and our guest, Thomas. We understand that you can speak Thomas' language?"

I had sort of hoped to be the first to say, "hi!" So it took me a couple moments to alter course and figure out how to answer a yes or no question. In those moments, I noticed that the Bridge was its usually mostly featureless off white lozenge shape of indeterminate size. However, rows of off white desks and chairs had been added for people to sit in. And they were arranged in a semicircle with Phage and I standing on a daize in the locus of it.

"I, um, yeah. I guess so," I finally said. "I don't really notice when I'm doing it, though. Um, hi!" I waved awkwardly.

Fenmere waved back.

"Of course, we will gladly offer you all the assistance and guidance you need to carry out this task," Akailea said. "Please send me any messages, questions, or requests for help you might have at any time. But, since Phage is your parent, it will be there for you as always, too. Did you have

any other questions for us?"

I was starting to realize that the Bridge was the one place on the Sunspot where I lost all of my confidence. I felt out of place there, and I could feel the authority of the Council bearing down on me like an increased gravitational force. And I'd forgotten everything I'd hoped to say there. I found myself feeling really embarrassed.

But I managed to croak out, "How are things going here? Is it better?" And Phage just grinned at them.

"Actually, yes!" Fenmere replied. "Thank you so much for your assistance in that, too. Phage informs us you were instrumental in quelling the chaos of our last upheaval! We are, in fact, lucky to have you."

There were, however, some expressions on some of the faces I didn't recognize behind kihn that didn't seem to agree with that assessment. But I also couldn't feel their emotions or thoughts across the divide of the Bridge, since they weren't sharing.

Akailea was sharing with Phage, apparently, and I could feel Phage's reactions. And Phage was radiating a calm smugness back at everyone. I'm not sure that was very diplomatic of it, but when I'd set out to visit the Bridge just then I wasn't exactly intending to be diplomatic either. Not that I had any enmity toward anyone, I had just been feeling childishly brash and wanted to show off or something, and pretend to be an adult.

But now I was getting compliments and feeling how childish I had actually been, and it didn't feel as good as it felt like it should have been.

And since I like Akailea, I didn't even think to blame hir for that. I mostly just blamed myself.

I felt like hiding behind Phage until I could return home and play with my siblings instead. I felt like I was two.

Except that when I was two I think I was even more bold and shameless than I am now. Somewhere between two and nine, I'd learned at least a little bit of self-consciousness.

If I'd retreated to my Phage-state and viewed the Bridge from there, conceptually aloft, my perspective and feelings would have changed and I could have told them all sorts of things they might be doing wrong. But I

didn't think to do that because it wasn't at all the reason I was there. I realized I just mostly wanted to see the Bridge in action now, to see how it was, and how it was working, and what the Council was like, and to show them that I was a nice, grown up nine year old.

So, I just stepped closer to Phage and said, "I'm OK." And *cringed*.

After some pleasantries between Phage and Akailea and some apparently official closing comments, we went home.

Sometimes when you set out to do things, you actually get what you want, but it's *not* what you wanted, and you feel really dissatisfied and bad about it. And sometimes that's a lesson. And sometimes you don't learn what the lesson was right away.

When we got back, Phage and I convened in our own private Netspace while my vessel slept, before I actually took a real nap.

"That went really well, I think," Phage said. "But you seemed embarrassed. Do you want to talk about it?"

I shrugged.

"It's OK, if you don't," it said. "But, do you actually feel up to helping Thomas around?"

"Oh, yeah!" I said, relieved to change what I thought was the topic. "I'm really good with him, and with Bashiketa!"

"Good!" my mom replied. "I think that tomorrow we should take a tram to visit them, so that you can take care of your vessel properly. What do you think?"

I made a show of thinking about it, scrunching up my face. I really liked playing with the nanites, and I thought I wanted to be on equal terms with Thomas, too. But I really wasn't on equal terms with anyone, and taking a nanite body did add a layer of complexity to everything. Also, he might like to see me for real. So I ended up nodding and saying, "yeah, OK. That's a good idea."

And then I remembered again that we still weren't *home* home, yet. We were still out on our family outing to that counter-park for our city.

"Can we just go home for real first, before we do that?" I asked.

"Oh, of course," Phage said. It didn't know that that was actually the plan for after our afternoon naps.

Emala was already considering getting back to our home quarters before dinner. So, at least *that* all worked out.

But, before that, I had a dream.

—

I was on the Bridge. I was the Bridge. There was only a field of white, and nothing else, no people, no Crew, no furniture, not even me.

And then there was a number.

I was both the number and the one evaluating the number. I might have been the Auditor. I'm not sure.

The number was the only identity in existence and it kept changing.

Changing very quickly, smoothly, going up and then down and then back up. The peaks and the valleys of its value kept changing, too. Sometimes it was very high or very low, sometimes it didn't go very far at all before changing direction. But the speed at which it was changing was ever increasing.

And then there were three more numbers accompanying it, also constantly changing, but this time in a very orderly and predictable way. One kept decreasing from a very, very high value, while the other two cycled in sine wave patterns.

And this was all so very curious and confusing, so I focused really hard on it, trying to understand with sheer force of will. Which didn't work. I started to become frustrated.

But then, just before I woke up, something snapped. A solution just suddenly started happening and there was beautiful, sublime relief.

I started reflecting the number back to wherever it was coming from.

—

That night, on the tram ride home, I told Phage about my dream.

"That's really interesting," it said. "I still wish I could dream."

Of course we'd talked about dreams before, because I kept having them. It didn't. It didn't sleep. It was, in fact, the only entity on the ship that didn't sleep. Even the Crew and the Tutors slept. It's possible that whenever it shifted focus from a localized instance of itself to its greater being, that was the equivalent of sleeping, but it didn't involve dreaming, and what it did during those times was not only lucid but had very real effects on the Sunspot. But it may have satisfied its human-like psyche's requirements for sleep by doing that.

Or, it could be that no one else had bothered to configure their psyches to dispense with the need for sleep once they'd become Crew. Maybe they liked it too much. Or maybe someone had done it, and just hadn't reported it and none of the rest of us knew about it.

"That's the first dream where I was a number," I said. "I think."

"Was it very different from when you become the physics of the Sunspot?" Phage asked.

At first, that was a really weird question to me. I had some trouble understanding the comparison. I almost said, "no." I knew what it meant by "become the physics of the Sunspot," but I didn't feel like that was the same. But then I remembered what Phage said about how doing that felt like to it. And I think I realized for the first time that it didn't comprehend how I usually kept my own sense of self so strongly when I became the ship, or entered what I'd been calling my "Phage-state". I'd finally experienced something in my dream that it had only ever been able to describe to me! So, instead, I said, "Sorta. Yeah. But, more like how you say it is."

"What do you mean?" it asked.

"Mom!" I said, "I keep telling you I don't 'lose myself,' like you keep warning me about!"

"Oh," it said, looking off into space while it thought. "But you did lose your sense of self in your dream?"

"Yeah!"

"Ni'a, have you noticed how you seem to have different kinds of dreams?" it asked.

"I think so," I said, wrinkling my nose.

"What kind of dreams have you noticed that you have?"

"Well, this is a new one," I said.

"I don't think it is, actually," Phage turned more toward me. We were seated on the same bench in the Tram. "You have described weird, nonsensical dreams that might be metaphorical or just fun for your brain to have. You have described dreams where you seem to be working out some kind of anxiety or worry. And a lot of people seem to have dreams like both of those kinds."

"Well, yeah."

"And then there are these dreams you have where it seems like you are visualizing your place in the universe. Like the one you were able to recount to Abacus for its book about you."

"Oh, yeah," I said, remembering it again. "I've had that one a few times"

"Well, I think this was a dream like that one," Phage said.

"Really?" I squinted up at it.

"Yes," it replied. "Only this one was more focused. How many numbers did you say there were again?"

"Three," I mumbled. "No, four! The first number, and then the other three. But I didn't really see them. I kinda more felt them."

"Can you recall them? Remember how they felt and maybe feel them again?" It asked.

We were communicating via a private channel, but I took a moment to look around at the rest of my family, playing with each other in the tram car. The Whorlies were trying out the different kinds of seats that were there, while Emala, Candril and their two Tutors were playing the same card game the Tutors had been playing earlier. Aphlebia was outright arguing heatedly with Chalkboard. It wasn't going well for Chalkboard.

Then I tried to put myself back in the dream, and it came really easily. Talking about it hadn't triggered it. But purposefully focusing on it brought it right back. And the one number that had been simply decreasing was now much lower than it had been before, and was still decreasing. But now I was myself, focusing on it.

"Wait," I said. "I think this is in my own Netspace now! Go there! Look!"

It looked into my Netspace without actually fully entering it. Then it turned its nanite exobody's head to stare off in a particular direction, and I watched its head continue to turn slowly as if it was tracking something. Both the movement of the tram and the rotation of the Sunspot itself were vectors inherent in Phage's shifting gaze, but the point it was looking at was apparently so distant that these movements were subtle and probably only I could pick up on them.

But now it all clicked! Phage was looking almost directly forward, at a point that the Sunspot was moving closer to. Following its gaze while perceiving my number feed, I was able to pick out the point as well, and *really* look at it.

It was an electromagnetic signal, and it was not nearly as blueshifted as everything else coming from that direction. It also had a complex pattern that had some repeating themes in it. No, after a while, I realized it was completely repeating.

"Uh, Ni'a?" Phage asked.

"Yeah?"

"Did you know that the Sunspot's Bussard collector has been configured to send a mirror of that signal right back at it?" It knew I had picked up on what it was seeing simply by my change in posture and thought waves.

"What does that mean?" I asked.

"I think you gave the Sunspot a command in your sleep," Phage said. "And you had the brilliant idea, apparently, to use the Bussard collector as a transmitter."

"I did?"

"I think so, yeah." It nodded. 'I don't know yet if it's going to work, but

we've got a while before anybody finds out."

"What do you mean?"

"Look at the signal. Do you see how long it's going to be before we pass the source?"

"Oh, that number keeps changing, so I can't actually say it." I reported. "It's different every second."

Aphlebia had caught sight of our weird body language and was trying to look in the direction we were looking, which was at the wall of the tram. They were very confused and kept looking back at us. Then they tilted their head and squinted, having some sort of suspicion, or just warning me that they were about to ask questions.

"The Sunspot is constantly accelerating," Phage said. "But the source of that signal is *maneuvering*."

"What do we do now?" I asked, not quite making sense of that, but figuring that it was our responsibility or something. I mean, I kinda knew exactly what it meant, but I wasn't fully grasping it, and I think I was worried about something more close to home.

"Tell the Crew about it," Phage replied.

And I suddenly felt anxious again. "Do we tell them about the Bussard collector?" I asked.

"We're going to have to, yes," Phage said. "They'll find out about it if anybody looks, anyway. The Auditor might even report it. It's more responsible of us to let them know ourselves. They need to know."

"I keep changing things," I whispered, in a bit of shock.

"Ni'a," Phage said, looking back down at me. Since deciding that it was my mother, it had started taking a shape that looked like how I might look when I was older, but it still used its Network projection to fill that shape with a silhouette full of stars, galaxies and nebulae. It offered to hold my hand, and I let it. And it gently admonished me, "*you are change*."

I fell quiet for a while, but I gave Aphlebia a wide eye grimace. They got the idea from that and the rest of my body language that I didn't want to

talk about it just yet, but that I would later. We'd gotten *really* good at communicating without words to each other.

Later, after we'd gotten home and had dinner, while I was lying in my own bed, I asked Phage about the Council and what they really thought of me.

"They are really scared of both of us," Phage said. "They're afraid to do anything to punish either of us for anything we might do, or to restrict us in any way. Some of them trust us implicitly. Some of them never will. And you and I are both in the position of deciding whether or not we continue to try to earn their trust, that which is given and that which isn't."

"Oh," I said.

"If we keep showing ourselves to be trustworthy, then those who will never trust us are less likely to do something rash and dangerous out of desperation or fear."

"But I keep making mistakes," I confessed.

Phage looked at me, and asked, "Do you?"

"Yeah!" I wailed. "I gave the Sunspot a meltdown. Then I gave Bashiketa nanites. And I sent a signal to a signal using the Bussard collectors."

"And in the first two cases, the Sunspot has ended up more stable, more secure, and all around better off as a result," Phage pointed out. "And, also, in the first two cases, I was just as culpable as you. In a lot of ways."

"That's not how it works," I heard myself say. I was starting to get drowsy and I was pessimistic about everything, so I think my subconscious parroted an argument I'd heard. I didn't fully grasp where my mouth was going with this.

"What do you mean?" it asked me.

"I don't think you know how people work very well," I murmured.

"Huh," it grunted. "OK. You might be right."

"I know," I apparently said, just before falling asleep.

There was a dance to be done. It was important to dance. A dance could be recognized, seen, understood.

It was a dance with an end, but it could be an endless dance if need be.

It was slow and stately and beautiful and very, very deliberate.

It used as little extra fuel as possible to do it, collecting what it needed as it went.

It used the curvature of time itself to amplify everything it did.

It wove a pattern through space in hopes of an audience and didn't know yet that it finally had one.

There was a candidate coming almost right for it, but it wasn't certain about it.

So it was bold.

It was brash.

It was reckless.

It had begun to attempt to match speed and signal its intelligence for all it was worth.

And maybe that had paid off.

It felt hope in any case.

—

Fredge insisted on playing Shithead with us. But Laal and Phage sat out and were talking about cooking. Aphlebia had said they might join us later, but wanted to play games with Candril and the Whorlies for a while, so they were back at home. So, that made four players. Fredge, Bashiketa, Thomas, and me.

I don't remember where our family learned the rules for this game, but it was Candril's favorite and worked pretty well with four players. If you had more, you needed to add another deck of cards, or change the rules a bit, and it got clunky. Sometimes the Whorlies would play their own game

of it off to the side. The Tutors, when they played cards, usually played something more complicated.

I was thinking about my dreams as I was dealing and trying to explain the rules, so I had to redo things a few times, and apologized for it every time. But once everything was set up, it was pretty easy for me to just play.

Fortunately, it turned out that Fredge also knew the game. They'd just let me do the teaching because I'd brought the cards and had suggested it.

Actually, Emala had suggested it as an easy and fun thing we could do with Thomas that we could also laugh about.

It's kind of a mean little game that has earned its name. But if you don't take it very seriously, it's also pretty even handed. It is reasonably random. Enough that someone who's really good at the strategy isn't going to win every time. But there's still enough strategy to be interesting.

I don't play to win. I play to watch the patterns of cards and ways they get played.

Bashiketa seemed to have a similar attitude, once they got the hang of it.

Fredge was being quiet and aloof, but offering friendly reminders of how to play whenever I didn't do so.

Thomas immediately wanted to win.

So, after letting the first game be a chaotic mess, I started manipulating the shuffling and deals so that Thomas had an edge. Which is something I only did once with my family when I was younger, and Phage had told me to stop doing. This time, however, Phage gave me a little smile every time I did it, and no one else noticed.

But my mind kept going back to that last feeling of that dream I'd had just before waking up that morning.

I'd had an emotion, a thought, from the source of the signal. And, not only that, I felt like I had a sense of the shape of its hull. If I was right, it was shaped like a nut.

I'd mentioned it to Phage on the tram ride to the Bashiketa's place. And Phage had replied to that with, "Wow."

"Why 'wow'?" I'd asked.

"I can't reach that distance without losing my sense of self completely," Phage had replied. "I *might* be able to come back, but I wouldn't have memories of it."

So, every time I dealt a card to Thomas, or looked at him for any reason, I thought about how he'd come a much further distance via the Tunnel. And how Phage and I had been through that Tunnel as well. And my brain wanted to do something with that knowledge, but didn't know how.

Anticipation

"Thank you for standing before the Council, again, Ni'a," Nevegere, Acting Captain, said. "We've reviewed your report, and thank you for your thorough description of what you experienced and did. Before we continue, we'd like you to know that we are beyond satisfied that you consciously acted in the best interests of the Sunspot, even if your subconscious actions may present us with a dilemma. You yourself are not being reviewed here. So please feel free to relax. We'd just like to allow you to participate in our discussions of what to do about it. You may bow out at any time, including now. Are you OK with this?"

I used a Network trick that Phage had shown me to record what Nevegere had said and review it in my own memory more clearly. It was an old accessibility device programmed into the Sunspot long ago, and I hardly even noticed it doing its job. It was just easier to think about everything in a long speech, even if my attention wandered in the middle of it. And I was now thinking about Thomas, so that was useful.

"Um, yes," I said. "Thank you for inviting me."

"And I, as well," Phage said, as it stood next to me.

Nevegere nodded, and then Akailea stepped forward.

"After we're done with that, I personally would like to hear how Thomas is doing," Akailea said.

"Oh, yeah!" I replied. "Please!" I was starting to get a little more comfortable being on the Bridge, but it still rattled me a bit. All my life, I had been interviewed by my elders, many of whom are not part of my family. That didn't bother me, and I knew how to say things politely. I had scripts for that. It's just, like I said before, the Bridge is extra scary. But I was determined to overcome that fear. "Um..." I trailed off.

"Yes?" Akailea prompted.

"May I connect with the drift?" I asked. "I mean, to everyone?"

"Oh," Nevegere said. "We weren't going to ask you, but it would be beneficial, I think. Does everyone else agree?"

I could already feel the minds of everyone on my side of the Bridge. Phage's was the strongest presence, but the attendants over here were also part of our collective psyche. So adding another hundred and thirty-two people to the mix, it was a big Council session, didn't seem like too much of a deal to me, and I wanted them to be able to trust me. I worried about that.

After Nevegere received unanimous consent on kihns side of the Bridge, the connection was extended to me. It was a slow and gentle increase of awareness, emotion, and thought. I found it to feel a lot like when I entered my Phage-state, but where I got thoughts instead of physics.

Phage abstained from the connection, not wishing to drown me out with its presence, and the Council demurred to that notion. I could still feel it, but the Council could not, and it could not feel the Council. Not through the drift, anyway.

Standing next to Phage is a lot like standing next to a singularity. If you want to know what standing next to a singularity is like, stand next to Phage. Well, it probably helps to have my senses, but anyway.

There were a bunch of nods from the Council as our connection became comfortable to everyone. But I felt worry coming from a number of them. Others were burning with curiosity. I felt no abject fear. This calmed me down quite a bit. But maybe it shouldn't have. If there wasn't anyone there who truly feared me, then those among the Crew who did were not there to learn that they didn't need to.

But now they could also all feel how I was preoccupied with trying to figure out how to get Thomas to go outside.

"Ni'a," Akailea said. "Jedekere and I have some ideas that might help you with Thomas, which we can go over later." And I could tell she was being genuine about that. I also got a glimpse of her visualization of talking to me later, and that made it easier for me to plan and shift gears, too.

"Oh, OK. Thank you!" I said.

"So, what we are concerned with today," Nevegere began, "is the origin of a signal of curious origin that appears to lie in the near path of the Sunspot's travel. To review. This signal is repeating a complex pattern, with a quality to it that can be described as musical, and it is shifting its relative position to the Sunspot's path in an equally complex but

predictable way. In their sleep, unaware that what they were doing had real world impact, Ni'a somehow configured the Sunspot to track this signal and to beam back a reflection of it to its general location. And what we would like to do here, with this Council session, is to propose possible actions that we may want to take in response to this."

"If I may," came a voice from the back of the Council, someone named Metelexe, "I'd like to review what's at stake first."

There was a round of assent.

"In all of our records and experience, we have yet to encounter something like this outside of the Sunspot," keh said. "Many of us feel that this signal represents the presence and influence of some sort of life outside of the line of Ships that have spawned the Sunspot. It's hard to imagine that it might be anything not produced by life, but we also know that the dispersal pattern of our ships has always been programmed such that we will not intersect with each other. Also, it's not behaving in a way that the Sunspot itself could behave. If it came from a sister ship, it would have to be a new kind of device or spacecraft with a design that we ourselves have yet to devise. Correct?"

More general assent. These formalized words for speaking to the Council were just a little overwhelming to me, though. Kinda fun, but also more than I felt I could do myself.

Metelexe continued, "Either we're going to find that the source of this signal is an unheard of complex non-life signal, in which case we may relatively safely study it as we pass by. Or we'll find that it's a product of life, in which case it may be extra unpredictable, and we'll have to plan on contingencies we may not be able to imagine."

"It has feelings," I interjected.

Almost the whole Council asked "what?" mentally.

"Can you elaborate on that?" Nevegere said.

"Uh, it, well," I stammered. Then I looked down and mumbled, "I had another dream, and it had feelings." Phage and I had sent our report before bed last night, so last night's dream hadn't been part of it.

"What kind of feelings," Nevegere asked.

"It felt proud of its dancing," I replied. "Like it's an artist that dances. And it was hoping someone can see it."

There was a murmuring of thoughts from all over the Council in response to that. Most of the members were Elder Crew and they'd learned how to control their thoughts in subtle ways over the years, so I didn't get much more than a few words here and there. That didn't seem fair to me, and I was tempted to slip partially into my Phage-state to... do something. I didn't have a plan.

Phage looked down at me in concern, and I didn't do anything.

"That sounds like a product of life, as far as we can tell, then," Metelexe said.

"We should assume it is, at least," someone named Eegil added.

As they each talked, I could feel tendrils of wordless thought level communication between the Council members, feeling out consent to speak and prioritizing who should go next or first. They'd only had the drift in the Bridge for nearly 40 years, and they were already very skilled at using it. And I knew I couldn't do what they were doing, but I could watch and learn. It was really fascinating!

It's possible that they'd all done that before the drift, now that I think about it. It just would have taken more conscious effort to use the regular Network channels. Anyway.

They talked about whether or not it would be hostile. And then they talked about whether or not it would be dangerous even if it wasn't hostile. And then they talked about how its behavior might change once our signal reached it, and whether or not it had the ability to intercept and match our course when it did. The conclusions to all of those discussions were that no one really knew, and more observation was needed.

What was known was that it was only 217 light years away, by our relative velocities. Which meant it would take some time longer than that to reach it. I could give a precise number at any given moment, but it keeps changing. So, like, you, the reader, might be this thing! And by the time you translate and read this book, we might be just about to pass you by within a few years or decades of that! But, as you know, I did try to reach out to you long before that. At least once. I look forward to seeing you in

person, if that's possible.

In the midst of all that conversation, a Crew member by the name of Ascal stopped talking and just looked at me in thought. It was such quiet thought that I didn't notice at first. And then I got the sense that ve wanted to ask me a question.

Then some others noticed, and looked at Ascal and then at me. One by one. Most of those who'd stopped conversing kept their eyes on Ascal, patiently. Others looked around at their fellow Council members, waiting for them to catch on. Then Ascal made a sound like clearing vynes throat.

Ascal had features similar to a savanna ungulate, complete with ribbed horns that swept straight back. Vynes tail was more like that of a river reptile, and ve had two sets of striped barbels that arose from vynes back like wings.

"NĪ'a," Ascal addressed me. "How were you able to read its feelings or thoughts from so far away?"

Everyone stopped talking at that question.

I shrugged. "It was a dream," I said. "Phage thinks I visited it."

Phage nodded in concurrence with my statement.

"Yes," Ascal said. "But *how*?"

I looked up at Phage, because I didn't know how to explain that in words. I just knew I could do it.

Phage made a gesture out of scratching its head before answering with the question, "You are aware of how the Tunnel works, yes?"

Ascal nodded, and so did most of the rest of the Council, eerily at the same time because of the drift. In fact, I felt the impulse to nod as well, but I was busy watching Phage.

"It doesn't work like that," Phage said. "But pretend that it does. Pretend that there are a bunch of subatomic particles distributed throughout the universe that were entangled during something like the Big Bang and that they're still there and NĪ'a and I can communicate with other parts of the universe through them. It's not even close to how it works. But it's the

closest analog I can give you with the words available in any language I know."

Ascal blinked indignantly.

"I'm sorry," Phage said. "I just really can't explain it better than that. But what it *feels* like is... I have a larger self. That larger self encompasses *everything*. It even exists within you, within every q-bit that contains your psyche, within even your psyche itself. And then there is me, this conscious being right here. And when I connect with and become a larger part of my greater self, it is like I add senses to the ones I have here in the Network, and my awareness expands. But, as that happens, I have fewer and fewer conscious thoughts and act more through reaction. Then, if I want to, I can refocus my consciousness in a new spot entirely, somewhere within the radius of my somewhat greater awareness."

It watched them all digest that. I could see by faces which of them had read Metabang's or Abacus' books and which had not. It was kind of funny to me.

When Phage was satisfied they'd internalized that, it continued, "Ni'a has that same ability. However, for some reason I do not fully grasp myself, they can expand their awareness to a greater distance than I can without losing their sense of self or consciousness. They may, however, have some limitations that I do not."

Thinking about that, I could not imagine doing that thing to go somewhere where life didn't already exist. I felt like I could focus on life, but not on things without it. But also, I couldn't imagine going to the Terra Supreme without using the Tunnel. Maybe I could, but it felt impossible in the moment.

I let myself think those things while Phage was talking, so that the Council would know how I perceived it all.

I felt awe and confusion come from most of them. Disbelief from only a few.

"Gods walk amongst us," someone named Vibural muttered.

Phage leaned forward as if to speak into something that wasn't there, and made its voice somewhat louder, "Oh, that word." It leaned back again, looking down at me and then back at the Council, "Please do not think of

Ni'a and me as gods, deities, demons, spirits, or any of the other forgotten words from the old language you left on the Terra Supreme. Those words carry moral implications that do not apply to us. But also, we are closer to your equals than you suspect."

"What are you?" someone named Keshetheke asked.

"You should know by now that I will never answer that question directly," Phage replied. "I know what I can do, and I know what my sense of identity tells me. But the actual explanations of why, how, and just exactly *what* elude me just as much as they elude you about yourselves. Unless you really think you know what you are, in which case I've got a slight upper hand."

"In forty-seven days it's my tenth birthday," I said. I had picked up on Phage's mood and it had essentially pulled that bit of knowledge out of my memory and presented it as the best thing to say in the moment.

Akailea stood up and addressed the rest of the Council, "I think that this would be a good time to adjourn this session and return to our friends and factions to discuss what we've talked about so far. There's a lot of time for us to figure this out, and what seems to be more important is that as much of the Crew as possible is allowed to deliberate." Sie took a moment to look around at everyone, and then asked, "Shall we meet again tomorrow?"

"Before you do," Phage said. "I've been thinking about a proposal I'd like to offer everyone."

It stopped. I could tell it was actually worried about stating more. It was torn between presenting the proposal right then and never presenting it at all, ever. And it was leaning toward the latter.

"Yes?" prompted Nevegere.

"I don't think I can propose it right now," Phage relented. "But I'd like everyone's consent to do so at a later date. It concerns many of the problems the Council is tackling regarding imbalance of power, ethical dilemmas of consent and autonomy aboard the Sunspot, and self governance. Call it a risky solution. And I can't tell you exactly what is at risk, except that it would fundamentally change the Sunspot forever after in some way. But it would preserve your lives."

Stunned looks from the Council were followed by the question, "Why are

you telling this to us *now*?"

"I've been thinking about it," said Phage. "And, it may also equip you to handle the source of that signal in a nuanced way. Though, remember that I am here and will do everything in my power to protect you either way."

As everyone was trying to digest that, I felt like I had an inkling of what it was going to propose, and I did everything I could not to think about it, because I could tell that mattered to Phage.

"Just," Phage said, "ask everyone, even the Monsters, if they even want to hear about it. I don't expect unanimity. But responses will help me gauge if it's even a good idea to talk about it further."

"I feel like even this much will cause a lot of turmoil," Akailea said.

"It will," Phage concurred. "Part of what I'm doing is giving you, the Council, control over how that turmoil plays out."

"That's," Nevegere stated, "a lot."

"It's a test," Phage said, and then shifted its posture in a way to indicate it wouldn't say more.

"Just like a god," said Vibural.

Phage simply snorted.

So, I'm telling you all of this because it's the context, the state of change that the Sunspot was in when Thomas came aboard. And I was also very distracted by it all, myself.

At the end of the session, the drift between the two sides of the Bridge was revoked, and Akailea and Jedekere came over to our side. After talking to a few others, Nevegere joined us as well.

"I don't really have anything to add to this next conversation," Nevegere said. "But since I seem to be Captain today, I'd like to witness it, if you don't mind."

I shrugged, and everyone else agreed to it.

"Thank you," Nevegere said.

Akailea manifested a table and some seats around it, and suggested that we sit, so we did.

"So, how's Thomas?" Akailea asked.

I felt like starting with the worst of it, so I found myself saying, "He died. And that makes it hard."

Both Akailea and Jedekere nodded, and Jedekere said, "Phage has told us all about his journey here. So we understand where he's coming from. But you've spent some time with him here, and maybe you can tell us more about what he's like, from your perspective?"

So, I told them about my afternoon with Thomas, after we'd finished playing cards. I was good at this kind of thing after my nearly ten years of a lifetime of talking to Abacus.

—

As I was playing my last card and winning the final round of Shithead, despite cheating at the game in Thomas' favor, I noticed Thomas looking at me intensely again. He'd been doing that on and off all morning, and I'd kind of expected it.

But finally I smiled at him and asked, "What?"

"You really, really, really look like I did," he said.

"You still look like that," said Bashiketa.

"I know. Right," Thomas replied. "But I mean..." and he trailed off because it was hard to say. His eyes watered.

"Hey," Fledge said, putting their open hand on the table, in much the same way Aphlebia usually did for me, to offer to Thomas to hold his. "We can figure these things out together. OK?"

Thomas looked at Fledge's palm like he didn't know what it meant. And maybe he didn't. And he leaned away from it and said, "I just don't feel real sometimes."

I wasn't quite sure if his reaction was because he didn't even know about holding hands, or if it was because Fledge's hand was so different from

what he was used to. Fredge's hand was half covered with fur, and had those conical, curved claws instead of Thomas' flat ones. So after studying him for a couple of seconds, I decided to offer him mine.

"Would holding *my* hand help?" I asked him as softly as I could.

He looked at it like he was seeing a cuttlecrab for the first time. But he was definitely thinking about it. And then he started to reach out, but his hand stopped short. He moved it haltingly closer a couple times.

He was in his nanite body and had a Network projection over it that made it look like his original, natural body that he'd left just outside the Terra Supreme, but alive and healthy. And he was wearing actual clothing over that. And I knew from experience that this nanite body would give him almost all the same sensations as his old one, the way his psyche would expect. The only significant difference was sense of taste, but it was really close too.

But, I also knew that he *knew*.

His original body just couldn't be here. He was surrounded by strange people that looked like creatures to him. And every miniscule discrepancy between this nanite body and his old one was amplified by all of this, and probably giving him a kind of dysphoria. Nothing as bad as when he was coconscious with Bashiketa in Bashiketa's body, but enough to cause him to dissociate, obviously.

Then he shook his head and withdrew his hand, and said, sad dismissal in his voice, "Holding hands is a girl thing to do." Oh, but he definitely had wanted to do it.

Bashiketa scowled in confusion and asked, "What does that have to do with it?"

Bashiketa and I had both spent enough time aboard the Terra Supreme to know what a girl was. And so had Phage. And we'd seen some of the weird cultural things around girls and boys over there, but definitely not all of them. Fredge and Laal had both heard of what girls were by this point, but had no experiential reference for this conversation. Still, none of us really grasped what this meant to Thomas.

"If I -" he started. "I can't... I'm... It doesn't feel right."

"What if," I said, thinking that he was looking for some sort of loophole in his personal rules, "we all held hands? Maybe in a circle. So I'll hold Bashiketa's, Bashiketa will hold Fredge's. Fredge will hold yours. And you'll hold mine? Would that be OK? Like a game in one of your schools."

"Oh. OK?" he said very tentatively.

So I offered one hand to Bashiketa and one to Thomas, and then waited as we each slowly connected the circle. And Thomas was, of course, the last one to finish it. But he put his hand in Fredge's first before mine. My hand was the more important connection to him.

I found myself wondering in that moment if even our fingerprints had been similar. No. There were other differences in our bodies that were greater than that. We were effectively clones, almost exactly the same age, if relative velocities and distances were ignored. But there were a couple significant anatomical differences in our bodies, and I knew that my puberty was going to be really different from what he would have experienced.

There's a reason he thought of me as a girl, even though I knew I wasn't one.

And one of the many, many non-genetic things that affected fingerprints was the type of developmental hormones that were released during fetal development, and when they were released. Even a subtle shift in timing could have wildly different results.

And I knew all that because I'd simply asked myself the question. That was another thing different between us. At least, for the time being.

I watched him with all of my senses as his hand settled into mine. I wanted to know if this was helping him more than hurting him, so I was looking at every minute change in his system and trying to judge if it was traumatic or soothing.

His Network hosted heartbeat sped up as his hand neared mine, then dropped off to a slow and stately pace once connection was made. Muscles in his avatar that had been clenching unnecessarily did relax, too. His brainwaves really churned about it all, but I couldn't read those without the connection of the drift on the Bridge.

My intuition told me it was definitely one of the things he needed, though.

I remembered a simple little game we used to play while holding hands like this when my siblings and I were three or four years old. Emala usually led it. Now that I look back on it, it wasn't really a game so much as an exercise, but Emala made it out to be a game, and felt like one at the time.

"Can I tell you all what my three favorite things are?" I asked.

"Sure," Fredge said, while Bashiketa thought about it and nodded, and Thomas shrugged and nodded.

I checked my feelings to see if they were the same three things as I said last time, and decided to make a small edit for Thomas' sake. One of my favorite things was going for a space walk, but I didn't need to say that. It was slightly less favorite now, anyway, now that I knew the subject would hurt him.

"My three favorite things are," I said, "people, tea, and numbers." I nodded. That seemed good, but I explained, "I like people because everyone I meet is really just trying to find things that make them happy, and for every person it's a different thing, and it becomes a fun game of helping them figure out how to do it. I like tea because it is all about flavor and smell. You just put things in water and it makes the water taste and smell kind of like the thing, and you mix it all together, and then drink it, and it's all about enjoying it. And I like numbers because they feel good. Whenever I know the numbers of something, I know where it is and what it's doing and I know how to respect it."

I looked around at everyone to see whether they were OK with the little speech I made. So far, so good. Fredge seemed to be considering what I'd said. Thomas was still mostly dazed looking. And Bashiketa looked like they wanted to talk.

So, I said the next bit of the script, "But you don't have to like what I like. That's OK. What are your favorite things?" And then I turned to Bashiketa, because it seemed like they wanted to go next.

"Do I have to explain why I like my things?" Bashiketa asked.

"Only if you want to," I said. "You don't even have to say anything at all."

"OK. My favorite things are popover pancakes, Fluffy Fauna, and fungus," Bashiketa said. "Actually, fungus is my very favorite thing. It's so cool, and

I can tell you way more about it than you want to know. If you want."

Fredge grinned to hear that, and Bashiketa smiled back at them.

"So," Fredge said next. "My three favorite things are... Music, because, like NĪ'a's numbers, it soothes me. In fact, it is numbers, but it's numbers I don't have to think about, I can just feel. And," grinning some more, "Bashiketa, because their passion for their favorite things reminds me of what's good about being alive, and *also* because they bring other important things into my world." Fredge glanced over at Thomas, but didn't make too big of a thing of the implication. Then they said, "And my very favorite thing is arguing for hours with Laal about completely unimportant stuff."

"Ha!" Laal barked. "We haven't done that in *way* too long!"

"That's because everything has been too important lately," Fredge said.

"Right?!"

I looked at Thomas and said, "You don't have to say anything if you don't want. I just thought it might be nice if you heard some more about the rest of us. You know, to get to know us better."

Thomas just sort of absently nodded, still holding hands with me and Fredge.

Laal spoke up, though, and said, "My favorite things are cooking for other people. Running. Running is really good. And... Winning my arguments with Fredge about completely unimportant stuff." And then hen stuck hen's tongue out at Fredge.

Phage chuckled softly at all this and watched Thomas for his reactions. When it looked like Thomas might take a while to add to the conversation, if at all, it decided to speak up as well, "I've played this game with NĪ'a and the rest of our family many times. My answers are always the same. They're very generic, but that just means they can include many things. They are relief, discovery, and assistance. And I can explain those things to you, if you want," but then it smirked and drew out a bit of tension before saying, "But, if there is something specific that is my favorite thing *right now*, it's cuttlecrabs. And you're all going to find out why relatively soon."

Laal scowled at Phage and said, "You can't say something like that without elaborating!"

"I rather think I can," Phage replied. "But Ni'a might already be able to see what I'm talking about."

Cuttlecrabs are part of the ship's fauna, found in the Garden, the wilderness that lines the inner hull of the Sunspot's habitat cylinder. The Garden includes several rivers and a saltwater sea that is deep enough to sustain some megafauna that dwarf most of the land fauna. And the cuttlecrabs live along almost all of the shoreline of the Sunspot's Garden. They are technically mollusks, with ten arms and two tentacles. But six of their arms have evolved to sport pieces of shell, along with their body. This rudimentary exoskeleton gives them the structure necessary to scuttle around on land. Also, they have a lung, and the ability to mimic complex noises with vocal chords.

We are all taught from a very young age to leave the fauna alone. If we see them in passing, we can enjoy their beauty, but we are not to enter their habitats or seek them out or do anything that might impact their ability to thrive on their own terms. People do occasionally violate these restrictions, which are really just projections of the fauna's rights, usually due to personal curiosity. And the people who do are usually pretty careful about it, though they still make mistakes and need to be corrected. Many of the Elder Crew are dedicated to watching over the fauna, using the nanites to attempt to repair any damages done to the land or the ecosystem, and to communicate with interlopers and tell them to turn back.

However, there are many seaside parks, especially as parts of the few cities that are right on the shoreline. And the cuttlecrabs do not know they are supposed to be left alone, so they do not leave park-goers alone. Parks usually are lined with various kinds of innocuous deterrents to keep most fauna from entering them, but these have to be fairly gentle so as not to injure any fauna, and it's just never perfect anyway. And cuttlecrabs are *clever*.

So, when Phage said this, at least everyone else in the room knew that there have been instances where cuttlecrabs have seemed to heckle park-goers with words and phrases they must have heard somewhere else. Also, Abacus has reported in its book that it found cuttlecrabs repeating some of these phrases and words in their habitats deep into the wilderness of the Garden, well away from any humans.

Because of my upbringing, I hadn't been paying them any attention.

So, I frowned at Phage and was just about to take a look at the cuttlecrabs while in a Phage-state, when Thomas asked, "What are cuttlecrabs?"

"Oh!" Bashiketa exclaimed, and then went on to explain in great detail everything I just wrote above. And then added that there was a kind of parasitic fungus typically found on their shells that wasn't particularly harmful to the cuttlecrabs, but seemed to give them distinctive markings as a result of its presence, and went into its life cycle.

We eventually let go of each others' hands, and Laal got up to make us some food, while Bashiketa continued to talk about their favorite thing. Thomas started asking more questions about the cuttlecrabs and their fungus, and eventually, Bashiketa had to start looking things up on their tablet to get the answers. And Phage leaned back in its chair and folded its arms in pleased smugness.

It wasn't until we were halfway through eating our meal, a gigantic popover pancake with filling to share amongst us all, that Thomas said, "I don't know if I have any favorite things. I've only had things I hate or that scare me." He pushed his food around on his plate. He'd tried it and said it was good, but didn't seem to want any more of it. His nanite body didn't really need it, in any case. Then he said, "Hell is weirder than I thought. The things I hate the most aren't here. Just weird things."

"What's hell?" Bashiketa asked.

Thomas looked at them like he couldn't believe Bashiketa had never heard of it. None of us had, though. "Hell is where you go when you die," he explained.

"No it isn't," said Phage. "There's no such place. If there is anything that is hell, it is a state where there is no relief, discovery, or assistance."

"Then where am I?" asked Thomas.

Phage put a juicy, greasy pastry wrapped piece of fruit into its nanite clay mouth and chewed, closing its eyes momentarily, then said, "my home. The Sunspot. And as weird to you as it might be, I am happy to give you relief, discovery, and assistance, and I think so is everyone else here."

"Can I be alive again?" Thomas asked.

Phage didn't bother clarifying that Thomas was alive, just not with a

biological body. It knew what he meant and it knew better to poke at that sore unnecessarily. Instead it said, "Somebody is working on it. So, someday, yes."

Everything that had been tense about Thomas suddenly relaxed so much that it seemed like he was hanging entirely upon hope to keep himself upright. He leaned forward just a little to say just the one word, so softly and tentatively, his voice shaking, "When?"

"In *your* future," Phage replied, gently but firmly.

Thomas collapsed in his chair, head bowed, eyes squeezed shut, and started sobbing. He stayed in his nanite body, though, and I could see he wasn't distressed so much as letting himself feel all of his feelings. I felt like crying with him. In part because I could see how much this mattered to him, and I cared about him. But also because it reminded me of what I'd done to Aphlebia. And that would always ache.

I could see that this would be a thing with us, now. The subject would keep coming up. And we'd all three, Thomas, Aphlebia, and I, have to just be there for each other afterward every time. If we could.

"How would that work?" Laal asked Phage.

"Remember Jenifer?" Phage asked back.

"Yeah."

"Better than that."

"Oh."

Fredge offered Thomas a hug, and after some hesitation, Thomas accepted it. When Fredge started to rumble, Bashiketa started to purr, and I smiled at them and started to cry. There was no point in holding it in.

—

So, of course, we figured out a way to go see the cuttlecrabs. Since Phage and I met with Akailea and Jedekere after that visit, the two of them had suggestions for that endeavor as well, which we followed. And that was the first outing we managed to get Thomas to agree to. It took a while to get him used to the methods we would have to use to visit them, but

it was worth it.

But, when I got to the part where Phage talked about the possibility for a new body for Thomas, Jedekere fixed it with a stern and confused expression and asked, "Why did you promise him something we haven't even deliberated on, yet?"

"Are you sure you haven't?" Phage replied.

the Cuttlecrabs

Aphlebia came along, because they were not going to miss out on this. But that left Candril and the Whorlies feeling left out. However, we didn't want to overwhelm Thomas with our entire family, so we had to arrange it for Emala and their Tutors to take them on a simultaneous outing with the same goal, to see the cuttlecrabs.

We really did need to introduce Thomas to the rest of my family, though. And maybe playing cards with them all after visiting the cuttlecrabs would work out all right. Everyone would have something safe to talk about.

Fredge and Laal could come to the park where we'd decided to start our endeavor, but because they were Monsters without neural terminals, they couldn't actually tour the shoreline like we were about to do.

"We'll just eat icecream and argue about something trivial," Fredge said. "While we watch over you."

"Yeah, I'm good with that," Laal agreed.

This park had a few public nanite clay bins so that people didn't have to take any from the grounds. That was starting to happen more often. So when Aphlebia and Thomas abandoned their nanite bodies, their nanites naturally returned to that bin, and they'd retrieve them when we were done.

We did come out at night time, when there were fewer people and less light to overstimulate Thomas. But, also, the cuttlecrabs are more active at night.

Thomas made a point of not looking at anyone but those of us he knew. I hoped he'd get over that, but I thought I understood.

He did look up at one point and say, "I've always loved the moon."

"Could that be one of your favorite things?" Phage asked.

"Yeah, maybe," Thomas said. But he didn't smile. He was too preoccupied with everything else.

So what we did was follow Abacus' example. We took a stroll along the

beach using only Network projected avatars. These were still technically nanite exobodies, because we needed just enough of them floating around head height to provide for our senses of hearing, smell, and sight. But they were so thin that anyone looking at us without the aid of a neural terminal might see a couple twinkles of dust motes in the moonlight, but nothing else.

The illusion of tactile sensations of our feet on the sand and rocks, and the breeze on our skin or fur, were created entirely within the Netspace of the Garden. We left no footprints.

"It feels no different than before!" Thomas exclaimed.

"It's amazing, isn't it?" Bashiketa agreed.

Aphlebia grinned at both of them.

Phage glanced at me with a cautioning look, but I'd already decided not to ask about their time aboard the Terra Supreme, when they were using the nanites and the Network there. I could guess from this that they'd maintained nanite bodies after the incident. And when they had traveled through the Network, it was quickly, to pass through the Tunnel and retreat to Bashiketa's psyche on the Sunspot. No time to discover the wonder of it.

Also, the Network of the Terra Supreme might be configured differently. I didn't play in it when I was there. I'd existed in a different way.

Even before setting out from the park, we could hear them. Or what we assumed were the cuttelcrabs. They sounded like all the other fauna of the shoreline. Only, birds and mammals that would have been active during the day were supposedly speaking up now. It wasn't a constant cacophony, but a lazy continuation of the usual amount of noise. A call here. An answer there. Sometimes a burst of noise from a group of creatures. And sometimes, interspersed amongst all that was a word.

"Waves!" someone said, from somewhere up the beach, where no one should be standing.

A little while later, someone answered, "shoes!"

Bashiketa, of course, kept translating for Thomas, even for the words that the cuttlecrabs mimicked.

And since our network projections never felt physical fatigue, we kept walking, hoping we'd catch sight of them. But for the longest time, the only signs were their noises.

I was beginning to wonder if they could somehow sense us, when one ran right through my feet, dashing from a bunch of reeds high on the shore, down toward the surf. And just before it was overcome by a wave that utterly dwarfed it, it screeched, "ice creeeeeeaaam!!!"

This sent Aphlebia dancing with glee.

Thomas was so startled, he fell over laughing. In the Network, his weight compressed the sand and left gouges in it, and he doubtlessly felt each grain as he came to his hands and knees and started to stand back up. But the gouges faded quickly, and it was obvious he had actually touched nothing in the Garden itself.

And he took the time to marvel at that, and we explained it.

I think that was the first time I'd heard him laugh, too! It had washed through my being, relieving so much tension just at the sound of it.

Once he was standing, though, Thomas looked at Bashiketa and then at me, his mouth still showing a hesitant and haunted smile, but a *smile*. And then he took off running ahead of us, throwing his head back and howling at the moon.

"Ha!" I shouted at Bashiketa, and took off after Thomas. There was nothing we were doing that would hurt anything, so why not?

Bashiketa was better at running than me, though, and passed by me fairly quick, working their way to catch up to Thomas.

None of us had noticed that Aphlebia had stayed behind to walk with Phage, though.

And we ran and ran and ran, until we realized we were tromping through a field of cuttlecrabs. The Network didn't give us tactile sensations of touching them, only the sand, so it took a moment before we saw their movement and stopped to gawk at them. And there we saw how they really communicate.

Again, this wasn't new knowledge to anyone but Thomas, but seeing it is

still way more amazing than hearing about it. But also, now that I was beholding it with my own senses, I could see things that the Crew observers had missed, or could never have seen. This is the point where I took a Phage-state and looked at the whole populace of cuttlecrabs.

Each individual cuttlecrab communicates with a whole set of signals. Noise is really just a small fraction of how they speak to each other.

To begin with, they dance! They step and change their posture in different patterns. And also, while doing this, they gesture with their feeding arms and tentacles. They have a very complex set of expressions they can make by doing this, and it would be enough to fascinate any student of fauna psychology.

But then, also, they flash with colors! Not only can they change the color and texture of their skin, even the skin that covers their shell, very quickly, but they employ bioluminescence! So at night, little sacks of light in their bellies are shuttered and released in patterns of flashes that also help to show off their colors and their dancing.

Again, none of this is a surprise to anyone living on the Sunspot. Cuttlecrabs are a common topic of discussion in our nurseries. All Children are fascinated by them. And I've since learned that some Crew have created simulations of them in the Network just to interact with their beauty and wonder without actually hurting them.

But here I saw the full extent to which they communicated with each other. I could see the patterns, not just in the flashes that spread as waves across the shoreline, echoed by chirps and stray words like "Shoes!" Not only in how their dancing looked as choreographed as any artisan's production. But also I saw it in their very nerves!

There was a chaos to the complexity of it beyond a certain point that may have been hidden to the eyes of any typical human, even backed up by the power of the Sunspot's processors and Network algorithms. I could see through that chaos to another pattern beneath it, hidden and subtle. Though, of course, just like looking at the biological system of any human, I could not read the thoughts that were there, I could just see that they existed, humming in the field of cuttlecrabs just like how thoughts hum in the EM field of a human psyche.

The finale to all this was when I stole a glimpse at the whole of the cuttle

crab population and found that that humming was, at times, unified across the entire circumference of the shoreline.

My nearly-ten-year-old mind was absolutely stunned and I fell back onto my butt in the Network sand and just stared above and around me in awe. Cuttlecrabs continued to dance and flash, intersecting with my hands, feet, and body where I met the ground, as if I wasn't even there.

Bashiketa saw me fall, and laughed, asking, "Are you ok?"

"Yes!" I cried. "Yes! They are just so amazing!"

Thomas was stomping around and bending over to look at individual cuttlecrabs and to study their shapes and movements as close as he could get his eyes. Which meant that he was often on his hands and knees, the side of his head pressed to the sand, with a cuttlecrab *in* his face.

"Ah! I thought you knew about these like I did," Bashiketa exclaimed. "They're so neat in person."

"Oh, I knew about them," I said, just staring straight up. "But I've never looked at them like this!"

"You're not even looking at them!"

"Oh, yes I am!"

"How?!"

Thomas had heard the conversation and propped himself up to watch us, a cuttlecrab dancing through his right hand, unnoticed.

"Oh," I said, coming back down to deck. Still sitting on my butt, though. "OK. You both know how I'm the child of Phage, right? I've told you both about this."

Thomas got up on his heels and rested his hands on his knees and shook his head.

Bashiketa said, "No, I don't think you have."

"I thought I did," I replied. So I pulled my knees up and together, then wrapped my arms around them to relax while I explained, "You both

know I'm the child of Phage and I can do things. Maybe I didn't tell you about *this*. OK." I let go of my knees for long enough to shake my hands as I thought about it. I looked back down the beach from where we came and saw Phage just sort of moseying along, with no hurry to catch up, looking out over the water at the Aft Endcap as it walked. I continued, while staring at it, "I want a better word for this, but right now I call it my Phage-state. It's a lot like entering the Network, except it's the Network of *everything*. The Network of atoms. Of *quarks*. Of photons, electrons, muons, and all the waves inside and in-between them..."

"What are muons?" Thomas asked.

Bashiketa's expression was questioning as well. They failed to recognize several of my words.

"Very, very small things," I said. "You'll never be able to see one yourself, at least not right now. But I can. Because I'm the child of Phage. And I can also see individual cuttlecrabs from across the Garden, up there." I pointed. "I can see them all at once. And I can see them *thinking*."

"Is this like..." Thomas looked suspicious. "Is this like how you helped me the one time in Bashiketa's room? Can you read minds?"

"Yes, and no." I sighed. "It's like how I helped you. I can't read minds. I can just see them in a detail that others can't, and all at once. It's like if you took an active MRI of the entire ship all at once."

That didn't make sense to either of them either. But at least it kind of got the idea across. I was starting to feel weird about getting random bits of information popping into my head to use. Like, it's always happened to me, but always around other people who are used to it. Neither Bashiketa nor Thomas had grown up with me and Phage in their lives.

Thomas stared at the ground for a bit, then said, "Wait, but. How did you visit me in my head on the Tera Supreme? I didn't have nanites back then, and neither did Bashiketa. Wasn't that like mind reading?"

"Oh. Hmm," I didn't have a ready answer to that.

I wasn't even sure how I'd done it, just that by using the Tunnel I could treat their psyches like I was entering the Network. And the first time I'd gone through, I didn't touch them at all, so they hadn't noticed. But Phage had instructed me to get permission from Thomas before I came back

through, so I'd visited him then.

Could I just do that with anybody, or was the Tunnel necessary? I hadn't thought about it. I'd just done it all on reflex.

Then there was the time I'd localized myself *in* Phage Pember to give it a thought and make a request. But I thought that had worked because it was essentially my sibling, another child of Phage, if more limited.

But I didn't want to experiment with anybody. Not without asking.

I shouted at Phage across the Netspace of the shore and asked it, "Hey, Mom. Can I read minds?"

It looked at me and then blinked closer so that it could be part of our conversation amongst the cuttlecrabs, and said, "No. But you can connect to them. Somewhat better than I can, even."

Thomas was looking at Phage with an ashen expression, terrified of that strange Network movement it had just done. With its form a silhouette filled with stars and nebulae, it had probably been like something out of a nightmare or horror story. Again, something I'd grown up with and had been used to.

"Oh, Thomas, I'm sorry," said Phage, sitting down cross legged and making itself as unthreatening as possible. "I didn't think moving like that would startle you."

"It kinda really scared me, too," Bashiketa said. "But I know you from your stories. You're a good thing."

"Thank you," Phage said. "Thomas. Some day I need to apologize to you properly. When you're ready to hear it. It involves a lot of your pain, so I'll wait until you tell me it's OK to talk about it. OK?"

Thomas just nodded.

"I also intend to make it up to you as best as I can," Phage elaborated. "Mostly, I think that will be by making your life as best as it can be here on the Sunspot. But if you ever want to go back to the Terra Supreme, I'll figure out how to make that happen, too. Or, even, if you want to go somewhere else entirely. There are ways."

That surprised even me, so I asked, "What do you mean?"

Phage smiled and said, "I wouldn't recommend it, but one of the ways of traveling somewhere else is to make a one person interstellar spacecraft and leave the Sunspot. It wouldn't take very much matter to make it, especially if that person resided solely in the craft's Network, and we could spare more than enough for it." It looked down at the sand, "It's better to travel with others, though. But... there's also the Tunnel network."

"But, that's not connected to the Sunspot's Network," Bashiketa objected. "How would Thomas go through it from here?"

"It doesn't have to be not connected," Phage pointed out. "We'd just have to convince Gesetele to allow it for the transfer."

"What about the ships on the other end?" Bashiketa asked.

"We'd have to ask them," Phage said. "But that could be done. We could ask."

"So, no one is stuck on the Sunspot?"

"No, not at all."

"Well, the cuttlecrabs might be," I said.

"Not for long," Phage replied.

We all just stared at it for a while. It was smiling down at the cuttlecrab dancing and flashing right in front of it.

"Where's Aphlebia?" I asked Phage after a bit.

"They went to see how Candril and the Whorlies were doing," Phage replied. "They felt bad for them, and also thought you needed some space here to be with Thomas and Bashiketa."

Blocks

We'd decided to play with blocks instead of cards.

Candril was sitting in the middle of the room, as still as ze could be, which wasn't very still, and talking all about the cuttlecrabs. And we were building a growing elaborate wall all around zem. The idea was that when we were done, Candril would find a way to knock them all down in the best way. The wall was about a meter and a half away from all edges of Candril, so it didn't take up the whole room and we could walk around it, but Candril also didn't feel too crowded and could stretch when ze needed to.

Candril's patience was becoming legendary in our family. Not because ze was the most patient amongst us. Aphlebia still held that record. But because ze had come so far from when ze was younger. The idea of doing this sort of game when we were just a few years younger would have been utterly unthinkable. But Candril was so happy that ze was going to get to make one of the biggest messes ze had ever made, with what ze imagined would be the loudest crash, and talking about cuttlecrabs with Bashiketa and Thomas was also a delightful distraction.

Though, Thomas was distracted by the Whorlies. He was torn between speculating about the cuttlecrabs and trying to ask the Whorlies what it was like for them to grow up sharing a body. In fact, as the game carried on, he talked more and more with the Whorlies, because he found that they had so much more in common than he'd hoped. And, eventually, it was clear that Bashiketa was listening.

Well, Bashiketa was translating for him over their connection, so Bashiketa couldn't help but listen. And it also tired them a bit, so after a while they just sat down and watched.

Candril didn't really notice and just kept hypesharing about the cuttlecrabs, and mostly going over stuff we all knew already. But ze was so pleased with zir own knowledge, it was a pleasure to see and hear anyway.

And Phage was making midnight snacks for everyone while talking to Emala quietly about household stuff.

So, I found myself working alongside Aphlebia and communicating mostly

without words.

I approached them apologetically, which they dismissed cheerfully, making it clear they were not hurt by me. So, I enjoyed their company for a while, cooperating with them in building the wall, and taking their suggestions and making my own, and we worked well together like always. Which told me that nothing significant had changed between us. At least, not on the surface.

So, then, halfway between the nanite bin and the block wall, I stopped and gave them a questioning but friendly look.

They responded to that with the sardonic look of theirs that meant, "You're not noticing the obvious."

I shrugged, pushing my head forward with a short quick double nod, and gestured with my hand at them.

So they put their hand on their hip and just sent me the thought, wordlessly, that my psyche translated to, "You have two families now. I have one. It's OK."

"Ah," I said out loud, and then gestured at everyone in the room, and sent the thought back, "I'm trying to make this one big family."

Aphlebia grinned and offered me a hug with outstretched arms. And I hugged them back, getting their message of approval and acceptance.

But I felt like there was still something else going on with them that they weren't talking about. Maybe it had something to do with the arguments they were having with their Tutor, Chalkboard.

So I sent them a general questioning thought about their Crewhood.

To which they whirled toward me with fury and disgust twisting their face and signed sharply, in distinct words full of vitriol and finality, "Fuck the Crew." Then they took a deep breath, softening their face just a little, tilting their head, and looking at me with hurt and questioning eyes, to wait for my response.

I was so startled by that, I'd taken a step back, my eyes wide. I held up both hands, and opened my mouth. And then just stopped as I processed their anger. My body wanted to turn and walk away, I was overwhelmed

enough by their emotion, but that didn't feel right. I'm pretty good at speaking Aphlebia's language, but it's not really my natural mode, and they've made it clear repeatedly that they don't expect it of others. They only expect to be understood. So I let my mouth say what I needed it to, "OK. Sorry. I am so sorry."

Aphlebia nodded and scrunched their face and sniffed like they were crying a little. Their Network metabolism was probably simulating it, though I didn't see any tears. Their nanite body wouldn't make any, anyway.

I offered them another hug, and they reluctantly accepted it. This one was gentler and less intense than the last one. And I asked myself, why was everything so hard for us?

And all of sudden I had the intense need to go off and be by myself. And the easiest place to do that was the washroom, so I went in there, closed the door, and sat on the toilet. I put my eyes in my palms and sobbed quietly while I thought.

I wasn't even remotely thinking I might write a book one day, but it was in this moment where I had my first thoughts that led to it. To the title and subject, at least.

Some people had asked once, or a few times, if Phage was an Outsider. There were stories Emala had read to us, speculative fiction or horror stories, that had involved Outsiders. There were people all around the ship who liked to speculate on whether or not we'd meet Outsiders some day. And I'd maybe made contact with one while dreaming the other night! So, they were on my mind.

And I thought that I felt like an Outsider.

Everyone in my family was really unique and wonderful in their own way, even each Whorlie. Every person I knew was so very different from everyone else. But, amongst them all, I was so many steps above and beyond them. I could see problems that no one could see. I could see problems that even escaped Phage, I thought. And I wanted to make them right. And it was *hard*.

But then, like, my own loss of control had made Aphlebia an Outsider in their own life. An Outsider to the future they'd thought they would have, and an Outsider to our family. We all did everything we could to make it

known that they were still our sibling and still a part of our lives, but it was clear that it all felt different to them anyway. And the therapeutic tours of the Sunspot that Abacus had been taking us on were helping us both feel alive and remain connected to each other. But now Aphlebia was sometimes making stronger efforts to reconnect with Candril and the Whorlies, which was good. And sometimes they were going off on their own business, and that was mysterious and worried me.

I had been worried about losing them to their upcoming life as Crew in training, but they'd responded to that with, "Fuck the Crew." And I'd hurt them in the process of prompting that.

Then, I also had Bashiketa and Thomas in my life now. Two more Outsiders. Bashiketa because they'd been raised as a Monster with a hole through space/time in their mind. And Thomas because he was literally an Outsider. Someone born outside the Sunspot. And even though he was human, he met every definition of the word that people had been using for the past hundred or so centuries. The culture he'd come from was *so* alien.

And it all felt like my fault. If I hadn't been born and if I hadn't touched the world in the way I had, it wouldn't all be like this.

I countered that thought with, "But here we are, and we're all Outsiders, and we have that in common." And laughed bitterly at myself through my sobs.

We were all so broken, and even with my inherited Phage-state senses and abilities, I couldn't figure out how to fix any of us. All I could seem to do was reveal more stress fractures in the Sunspot.

At that moment, even the amazing cuttlecrabs seemed like just another source of more chaos about to be unleashed on my favorite little world, my home.

There was a knock on the washroom door, and Thomas said through it, "Candril is going to knock down the wall! Want to see?" It took me a moment to pull myself out of my sobs to say anything, so Thomas followed that up with an, "Are you OK?"

"I can see it from here!" I shouted.

I got a thought over the Network from Phage asking, "May I come in?"

"Now you notice!" I angrily sent back. "No! Leave me alone!"

I heard Thomas slump against the door and slide down it to sit on the other side, and then he said, "Ni'a? Thank you!"

"What?" I asked. That didn't make any sense to me.

"Thank you!"

"Why?"

"Because you're good! I just wanted to say that. You're good, and your family is good. And thank you, OK?"

I didn't feel good. In fact, I didn't feel welcome in my own home.

I felt the need to run away. I thought that this was the point in a story where the hero would leave home and go on an adventure and come back better, changed forever, and everything would be OK.

And there was that bitter laugh again, because I'd already done that! I'd been to the Terra Supreme, and I had single handedly saved that ship from certain destruction, if by no other means than prompting Phage to follow me. And I had learned so much while I was there.

And here I was, back with my family, and everything was too much.

And then I got a message from someone I wasn't expecting.

I was prepared to shout at any one of my family members. To shout them down and deny anything they might have to say to me. A message from Akailea was not part of any of my scripts.

"Come to the Bridge," it said, simply.

I felt a chill go through me. I worried I'd done something *really* wrong. Or maybe there was another emergency only I could solve.

But Akailea had only ever been friendly and helpful to me, and I liked her. A lot. Which countered my worry.

But this informal command felt more like an invite, really, when I remembered how people talked when they were on the Bridge. Which then

made it feel conspiratorial. Especially when I thought about how Akailea usually talked to me.

Most importantly, I was in crisis mode, panicked, and feeling cornered by both my family and my own emotions, and here was a clear direction from an Elder Crew member and I should clearly follow it.

By all of my upbringing and the laws of the Sunspot, I didn't have to. Obedience was a thing of only the Terra Supreme. But the more I thought about it, it felt like the right thing to do, to go to the Bridge. And if anyone objected, I could say that Akailea had told me to.

So I got off the toilet and sat back against the wall, to give my body better support, and dove up into the Network and to the Bridge, where Akailea was waiting.

Of course, there were the attendants, a new shift of them, keeping the Bridge secure, but Akailea was the only other person there besides them and now me. And sie smiled upon seeing me.

"You look really upset," Akailea said. "We can do this another time if you like."

I shook my head quickly, not quite trusting my mouth.

"OK," sie said. "Would you like to sit."

I shrugged and then I guess I nodded, so sie called up a couple of chairs facing each other and took one. I sullenly walked over to the other one and sat in it.

"There's actually a lot of different kinds of business I would like to do with you," Akailea said, half wrinkling hir nose. "And that's still on the table, if you want and are OK with it. And, of course, you can tell us all when it's too much. But I wanted to tell you some news, here, on official Sunspot record, because you might like it."

I felt very confused by all of this. It was hard for me to understand the words in the moment. So I just made a worried but expectant expression.

Taking that as assent, Akailea leaned forward and put hir elbows on hir knees, clasping hir hands, and said, "Someone cares a lot about you and is looking out for you, and they want to help."

Suddenly, this whole thing was feeling really contrived to me, and melodramatic. But I was also still confused and hurt and feeling needy, so I frowned and decided to go along with it and said, "Who?"

"I mean, besides me, of course," Akailea said, and I started to feel like I'd been trapped. Then she leaned back and gestured with her left hand.

Abacus appeared, standing behind her, and smiled kindly at me.

His appearance utterly flabbergasted me. And I glared up at it. It just shrugged apologetically.

"Ni'a," Akailea said. "You can see things none of the rest of us can. But we wonder if you can see that you're part of a team here. And we were thinking maybe if you were surprised by that, that maybe it would help to know that some of us can see some things that you can't, or at least that you might not be looking at all the time. Maybe it would help you to realize that your team has your back, and can actually help."

"What?" I asked.

"Sorry," Akailea said. "We can see that you're in crisis, and we want you to know you're not alone."

"But how does Abacus know?"

Abacus smiled again, and said, "This was Aphlebia's idea. They said that they could be more melodramatic than Phage if they really wanted to. But also..."

"Aphlebia?" I asked, incredulous.

"Oh, they watched you go into the washroom the way you did and knew something was wrong, so the very first thing they did was contact me," Abacus explained.

"Why?" I asked.

"Well, I think it's because, of all the people on the Sunspot, you have always understood them and the way they talk better than anyone else, and they're worried about losing you."

Well, I mean I knew that, but I also felt really guilty about it right then. So I

stammered, "B-but, I *killed* them!"

Akailea sighed heavily and they both looked at the floor. Abacus put its finger to its mouth, resting it sideways between its lips.

Akailea looked back up and said, "That's going to haunt the both of you forever. But Abacus here fought for you tooth and claw, it grew teeth and claws to fight for you, because it saw something the Council of mostly Elder Crew did not. You were having a meltdown. You weren't aware of what you were doing or what was going around you, and you *couldn't* be. And the last time you had been aware of Aphlebia was when they were right by your side. You had no way of knowing that their own meltdown had driven them to crawl under the stage. And you had no idea that the stage would collapse. You didn't cause that. Physics did."

"But I *am* physics!" I shouted.

"Are you?" Akailea asked. "Is Phage? Or are you both beings that are actually separate from physics but just can interface with it on a level the rest of us cannot yet fathom? Because, are you actually making stars explode right now? Really? Ni'a, you're a person. An extraordinary person. But a person with limits. And it's OK to have limits. It's expected."

Abacus dropped its hand and said, "And here you are, a person who is just about to reach ten years of age, who is taking on more responsibility in one week than anybody aboard this ship who is *ten thousand* times your age would willingly take in a year."

Before I could make a peep, Akailea picked up from there, saying, "You're doing so well at it, too! We are all in awe of you. But even if you weren't doing anything, or if you were genuinely making things worse somehow, we'd still be here for you. Because you are hurting, and as a person you deserve to have someone here for you."

"You really do," Abacus said.

And then they both gave me the time to speak, so I said, "I don't feel like it, though."

"Yeah," Abacus said, glumly, "That's kind of how these feelings go. They really suck that way. But those feelings are wrong in this case."

"I don't want to have them anymore," I said. "I just want to play with my

family without having them anymore. I don't want *them* to have these feelings either. I want Aphlebia and Thomas and Bashiketa to be OK. I want Candril to not feel so left out and weird. And the Whorlies..." I trailed off, because I felt like they needed something I couldn't give them, but I couldn't quite place it. I think I wanted to be able to spend more time with each of them. To be closer friends with each in turn than I could ever have the time to. But that felt selfish to say.

"Yeah, and you know what?" Abacus said. "It's gonna take a while, but you're all going to heal. You'll figure these things out. None of you will ever be the same, and it's work. But you'll find way more peace than you have right now."

"How do you know that?" I asked.

Abacus gestured at Akailea before it, and said, "Because there are 900,000 Elder Crew on this ship who were originally born on the Terra Supreme and they fought a literally bloody fight to be here. And they almost killed each other in their trauma from that before one of them summoned Phage aboard. And when it arrived, things got better. And then when you arrived, things got *even better*."

"No they didn't, they got worse," I pouted sternly.

"No, they got better," Abacus said. "We can show you the graphs, but we don't need to. You can look at the ship with your eyes in a way we cannot and see for yourself. But more important than that, when we look at you, we can see that you are already healing yourself."

I didn't understand what it was saying there. It sounded like a lie or a mistake. So I said, "How can you see that?"

"Because," Abacus said, "You're letting yourself actually feel these feelings now. You're aware they're there, you can identify them, and you're not hiding from them. And for us, those were the first steps we had to take to start healing, too."

"You're doing things *right*," Akailea said. "And if you keep this up, you'll probably heal faster than I ever did."

I felt my being relax despite myself. Maybe I was starting to see what they were saying. Or maybe it was their calm persistence and the care I could hear in their voices that was getting through my pain, and I was just

thinking more clearly. And they let me work on that for a while there.

Finally, I felt compelled to say, "OK. But Aphlebia needs help as much as I do. Maybe more. They are *really* hurting." I looked up at them with the most serious, tear filled eyes I could muster.

"Oh, we know," Akailea said. "We are well aware."

"And we're there for them, too," Abacus said. "They chose not to come here, because they wanted you to know that they think you're badass enough to not need them. Those were their exact thoughts. Also, though, I think they may have worried you were angry at them and would have run if you'd seen them. They also wanted you to know that they dismissed Chalkboard."

I was taken aback and horrified at that last bit of news, and felt like they didn't realize just how serious it was, so I emphasized my point by saying, "They said, 'Fuck the Crew.'"

"Damn straight," Abacus said. And Akailea looked up at it with a proud smile when it said, "And I'm working with them on a project all about that right now. Though, I am encouraging them to try out the phrase 'abolish the Crew' instead."

I cast a startled and worried glance at the attendants on the Bridge.

In all of this, I'd forgotten how much of an Outsider Abacus had become, too. But maybe this was an official project that the Crew was *considering*?

I mean, by the time I'd sat down to write this book, the project has come to fruition, and I know what it was now. But, back then, I was so nervous and confused by that conversation.

The Gift

That had been a long night, and Phage and I spent some time talking in a park, watching the moondeath before I went to sleep, both of us in Network projections while my body was in bed already.

The details of the conversation aren't important. It's that we had it. And that we've kept having conversations like that ever since. Not every night, but frequently, and definitely after really hard days.

And, also, the days generally did get better from there. We all fell into new routines, and our families spent much more time together.

Abacus and Akailea had been taking me and Aphlebia on tours of the more spectacular and surprising places in the Sunspot to help us feel special and to fill us with wonder and endorphins to help us heal from our trauma. After integrating Thomas and Bashiketa into our family, Aphlebia and I agreed that we didn't want to make those trips exclusive to us anymore. *Everyone* should get to go.

There were so many of us, then, and we naturally ended up dividing into two groups anyway. Me, Thomas, and Bashiketa in one group, most of the time. Aphlebia, Candril, and the Whorlies in another. The two groups would go places together, but there was sort of a default split there when some lagged behind, or we had multiple conversations.

But then, sometimes Thomas, Bashiketa, and the Whorlies would split off and talk system stuff, which was so good for all of them. Then Aphlebia and I would take Candril off to the side and play with nanites, showing each other new tricks. And Candril would ask me to show zem some of my Phage-state tricks, so I would, and then explain them as best as I could.

Of my siblings, the Whorlies always remained the most distant, just out of circumstance. Which still makes me feel sad. But watching them light up and fight over their front while talking to Thomas about the nuances of dissociation and weird system shenanigans really made me happy, too.

And, just as Akailea and Abacus had said, the Sunspot itself seemed to settle. Especially now that Phage was back.

Abacus was no longer interviewing me for its book. It apparently had become too busy working on other things to continue it.

But when we went on our tours every five days, it would fill me in on what it was working on, and how things were going, as if I was an Elder member of the Crew. And I think it might have been doing this because of how it had accepted Aphlebia's assistance in trying to put a proposal in front of the Crew to overhaul the whole caste system of the Sunspot.

I pointed out that it should also include Monsters in its work, and it agreed. I was thinking of Fredge and Laal specifically, but it turned out that Abacus was already working with Tetcha and a few others. But, it did take my suggestion and contacted Bashiketa's parents.

When my mom and I talked about all this, it approved. I told it that I felt a little self conscious being a child involved in ship politics. But Phage then said that it was watching over me all the time and that I was doing very well, and that it had my back. If anybody pushed me too far, or tried to use me for their own ends, they'd have to face it.

Then we talked about what to look out for and a set of signals we could use to communicate with each other whenever I was worried or stressed out. Which we both agreed we should have had before.

I then took that idea to Aphlebia and elaborated on our already tight communication to include those signals for each other. Then Aphlebia said, "I'm sharing this with Candril."

Pretty soon, our whole family was bonding over having each other's backs in case of emergency or distress, even if one of us was just really sad. We decided on new, less distressing ways of checking in when in crisis.

And sometimes, they actually came in handy.

And in the middle of those conversations, my mind kept going back to what I'd seen when I'd looked at the cuttlecrabs. Phage had said something was going to happen with them, and I was becoming excited to see what it was. I felt I could guess.

And then I had my birthday!

So, we were all very close to the same age. Candril's birthday was thirteen days after mine. The Whorlies fifty-nine days after that. And Aphlebia's twenty-seven days after that. All within the same year.

Celebrating birthdays is something of a hold-over from back when the

Crew secluded themselves and the Children (then called “Passengers”) had not known that they would ascend to Crewhood upon death of their body. And it was less of a thing for the Crew, and they still don’t really celebrate them.

On the Terra Supreme, giving gifts to the birthday child has been really common, so it was what Thomas expected. But we don’t do that on the Sunspot. The very concept of gifts is kind of strange for us, because we can all get or make anything we want at almost no cost. Sometimes a person would make a personal work of handmade art for someone they sensed would appreciate it, but the Sunspot had left the Terra Supreme’s artificially created concept of wealth 130,299 years in the past. 521 generations have passed without it.

So, on the Sunspot, the birthday child thinks of some sort of group activity they’d like to do most with everyone they care about, and they invite that group of people to participate on their day. And then, throughout the day, the birthday child will go from friend to friend and family member to family member and thank them personally for being in their life.

It’s always been one of my favorite rituals we have here on the Sunspot, and I’d been thinking long and hard what kind of activity I wanted to do that would also be most inclusive of everyone I knew.

So, when I went up to Thomas and Bashiketa to tell them, “My birthday is in five days, and I want to invite you to go flying with me,” they were both so stunned they didn’t say anything for a bit longer than I could stand. So I put my hand over my mouth and asked, “What’s wrong?”

“That’s our birthday, too,” Bashiketa whispered. “Both of ours.”

Oh, right! I’d known this. I’d read Abacus’ book over and over as it wrote it about me and the people who revolved around my life. And in the second chapter, it talked about how we’d been conceived at very nearly the same time (I could give precise time differences, but you probably don’t want that, right?), and it was just an easy assumption, with the gestation equipment of the time, to assume we’d been born on the same day.

Just, because being *born* on the same day wasn’t written down explicitly anywhere, I had never thought about it consciously, that I could remember.

“Oh!” I said. “Did you want to do something else on that day?”

"Flying is good!" Thomas exclaimed.

Bashiketa shrugged and said, "We've been kinda arguing about it, because we couldn't agree. But, yeah, flying is good!"

"But, we should do what you want to do, too!" I said.

Bashiketa looked down at the ground and mumbled, "Well, I usually go mushroom hunting with Fredge. And now that Laal is here, I was hoping hen would come too."

"Well, I think we can - " I started to say.

"Birthdays are about cake and presents," Thomas said.

"Presents?" I asked.

"Yeah," Thomas said. "You know. Boxes with cool things in them that people give you because it's your birthday? Wrapped boxes that are fun to open?"

Fortunately, my greater self flashed a vision of a present to me then, like it was my own memory of opening it up, and I got what he was saying.

"Oh!" I said. "Well, we can do that too! I don't need presents, but I think you should have some definitely, Thomas. Why don't we go mushroom hunting in the morning, flying in the afternoon, and give Thomas presents at home when we're done?"

It was a long day, but that's what we ended up doing.

I guess I'm going to explain these three activities, because they're each neat in their own way. I'm not going to go over all of the thank yous, though, because there were a lot.

Between the three of us, I was the one with the most friends and family, so I made it pretty clear to everyone I knew that I considered the whole day my birthday, all three activities were for me as well as for Thomas and Bashiketa. So, they could come and go as they pleased, but to not choose flying just because they associated it with me. They should do what seemed like the most fun to them.

And that seemed to work pretty well.

My friend Bri, for instance, came for the cake and presents, because that seemed really weird to zem, but ze was afraid of heights and liked sleeping in. Also ze wanted to meet Thomas when ze learned who he was. Bri and I had kind of grown apart of late, and it was really nice to see zem in any case.

Emala was interested in the mushroom hunting and the food in the evening, but had no interest in flying. While most of the rest of my family wanted to do all three things. The Whorlies agreed to take turns, they each had different interests. Aphlebia was probably the most excited of anyone to go mushroom hunting, and Bashiketa was very pleased by that.

Abacus tried to goad the other Tutors into participating as well, and managed to get them to agree to at least one of the activities each.

And Fredge and Laal bowed out of flying.

On a whim, I'd also invited Akailea, and was utterly surprised to have hir show up for all three activities.

My mom, of course, did everything I did.

Now, Mushroom hunting was kind of tricky, because only Monsters were afforded the opportunity to really delve into the wilderness areas of the Garden, where Bashiketa was used to going. There are so few of them that their impact is minimal, and it was part of their special dispensation for being official dissenters and "mortally disabled". And we could have done the same thing we'd done to visit the cuttlecrabs, but Bashiketa insisted on going somewhere where everyone could go and be seen properly by Fredge and Laal, who couldn't see Network projections. Because they were Monsters.

So we picked a park that was known to have decent crops of craterellus and hydnum mushrooms this time of year. But since it was a park, there were likely other mushroom hunters who'd visit and maybe taken some or all of the crop. We just had to hope we were lucky.

Bashiketa wasn't so interested in collecting them for food, though. They just wanted to find them, see them, examine them, and talk about them. There were, after all, also mushroom farms below decks for most food purposes.

Bashiketa and Fredge were not familiar with this park, either, so they

didn't know where the good spots usually were, but fortunately, Charlie, the Whorlie's Tutor, happened to have had a previous Student who was into mushrooms and rose to the occasion. It found a reliable map that it presented to Bashiketa to use to guide us through the woods of the park, with known mycelium growths marked.

Those of us who were planning on flying later had had a big breakfast, so that we would be done digesting it and full of energy by the time we did that. I was feeling kind of sluggish from that and from not really being able to sleep well the night before.

Aphlebia was right there next to Bashiketa, signing with them furiously between listening to everything Bashiketa had to say about fungus and looking at whatever they pointed at. And watching that kept me awake, at least.

Even though it was a park, we were all still very careful wherever we stepped and with whatever we touched. I know some people are a lot more carefree in the parks, there's always a spectrum of behavior. But most of us were the more respectful types to begin with, and we were all following Bashiketa's lead, and Bashiketa was used to mincing through the wilderness and leaving as little of a trace as possible. And it made the whole activity feel special, too.

I think the thing I liked the most about this outing, though, was that it was really easy for me to spend a good amount of time with each person who was there.

I still remember the time I spent with Emala there, walking quietly beside xem, and listening to xem talk about xyr own childhood. I heard things about xem I'd never heard before, and learned about why I'd never heard of any of xyr siblings. I had thought xe didn't even have any. But it turned out that they had all grown apart over the years due to a combination of old, unsettled disagreements and diverging interests. Apparently, Emala had been the only one who was interested in being a Caretaker. Xyr observation was that my peers and I had just been through a series of events that were much more difficult and even more shocking than anything xe had lived through with xyr own counterparts, but that we were more closely knit. Emala thought we had a better chance of being friends throughout our lives.

After talking to xem about that, I spent some time alone just wallowing in

the hope that had given me.

It was just beautiful, too. There was a bit of a fog in the morning, but it was light enough that we could see a nearby lake through the trees, from up on the small gradual hill that we'd climbed. And I watched a flock of birds take off from the lake's surface. And there were tree rodents nearby, chattering.

I decided to walk over to Phage and thank it out loud for being my mom, after that. And Thomas happened to be conversing with it, the both of them talking gingerly about the Terra Supreme and what Phage had done to try to help the ship and also to help Thomas. It was an important conversation that I didn't want to interrupt, but as soon as Thomas saw me, he waved me over, and haltingly thanked me for being his friend. Again, he kept it light, avoiding the heavier topics between us, but I could tell he wanted to thank me for all of it. And I sniffed and wiped a tear from my eye.

So, I thanked him back for letting me be his friend and for listening to me talk for hours that first night we'd met, even if he didn't remember most of it, since it had been in a dream. And he smiled at that.

Then I turned to Phage and said, "Mom?"

And before Phage could respond, Thomas was going, "Wait, what?"

Phage and I both just stopped mid interaction and looked curiously at Thomas.

"Phage is you *mom*?" he asked.

"I thought I'd told you that," I said to him.

He looked confused and shook his head a little, "No? I don't remember you saying that."

I could feel Phage's amusement radiating from it.

"I can never really remember what I've told people and what I haven't. Conversations are so complicated!" I said.

"Yeah, tell me about it," Thomas agreed. "But, I knew it was your parent, that you came from it somehow, but how is it your *mom*? It doesn't sound

or look like a mom. I thought *Emala* was your mom!"

"Really?"

"Yeah, Phage is more like your dad, right?"

"I don't know what a dad is, Thomas," I said.

"I am *not* a father," Phage interjected.

I sighed and explained patiently, "We don't really use words like 'mom' and 'dad' here on the Sunspot. They were erased centuries ago. We have Caretakers and Tutors. And we are not born from other people, like on your old ship. But Phage likes being called my mother or 'Mom', so I do that. I don't *really* know what it means, though."

"Weird!" Thomas breathed. Then he turned to Phage and said, "So, you're the only mother on the Sunspot?"

"That's correct," Phage said. "For now, at least."

"Weird!"

"I agree," Phage said. "I'm not really sure what to think of being a mother."

"Why do you call yourself a mom, then?" Thomas asked.

"Because, it just turns out that's what I am," Phage said. "When I think about what my relationship to Nī'a is, that is the word that fits the best for me. It makes me happy when I hear it. And I figure I should be happy, so it's what I tell everybody now."

Thomas looked Phage up and down. It was currently taking its favorite shape of what might be an older me, and using a Network projection to turn that into a silhouette filled with the void of space, but if Thomas wanted he could turn off his ability to see Network projections and see the details of Phage's nanite exobody.

"But you're not a girl," Thomas said.

"Ouch," Phage replied. "Interesting. I hadn't expected that feeling. Thomas, can you humor me and try calling me a girl?"

"Why?"

"I want to see how it feels."

"Oh, OK. You're a girl, Phage," Thomas said, amiably.

"Interesting!" Phage exclaimed calmly. "Apparently, I am a girl. At least for now."

"What? How?" Thomas scowled, trying to figure that out.

Phage sat cross legged right in the path, facing Thomas. It picked up a twig and starting feeling it between its fingers, and said, "I'm not quite sure what you've been taught on the Terra Supreme, and I'm pretty sure you won't find anyone here but Elder Crew or me who will understand what a 'boy' or a 'girl' is in any sort of way. But... What do you think a girl is, Thomas?"

"A girl is someone who can have babies when they're older," Thomas replied.

Phage shook its head, "It turns out that's not true. Humanity is too complex for that definition. I have a pointed question for you that might hurt, but it will illustrate what I'm saying very well. It concerns who and what you are right now. May I ask it?"

Thomas folded his arms and considered that with a frown on his face, but said, "Yeah."

"OK. I don't mean this to hurt you or to imply you are not what you are," Phage said. "I just want you to think about this a bit. Is what you are now, a boy, defined by your body or by your sense of who and what you are?"

There was a flash of pain on Thomas' face at the word "body", but he tilted his head and furrowed his brow, blinking a few times.

"Because, right now, Thomas," Phage said, "you could change your body into whatever you want it to be. Would that change the fact that you're a boy?"

"I think so," Thomas said.

"Are you sure," Phage asked.

"No," he replied.

"You should try it sometime, and see how it feels, I think," Phage suggested. "At least, it's a power you now have, and something you can play with just for the fun of it. You could try seeing what it's like to have the body of a mountain cat, or a bird, even. But if you did that, would it change how you think?"

"No, I don't think it would?" Thomas said experimentally.

"No, actually, sorry, it would," Phage corrected itself. "But in a really subtle way. You'd get a different set of senses and sensations from your body, and those would technically be part of your thoughts. But, the core of who and what you are wouldn't necessarily change unless you let it. And I know this because I've seen so many people do it already. Sometimes changing their form makes them unhappy and they change back, and sometimes it makes them happier and they stay that way."

Thomas nodded along with that, and said, "OK. Yeah. That makes sense."

"So, let's say you changed your form into that of an ursine, I think you'd call it 'a bear', and it made you happier. So happy that you didn't want to change back," Phage suggested. "What would that mean? Would it mean that you have actually become a bear? Or, perhaps, does it mean that you've always been a bear and you've found your correct shape? Or, are you a human boy that just likes being bear shaped?"

"But, I don't get it, because some bears are boys and some are girls," Thomas said.

"OK, that's true enough I won't quibble," Phage said. "At least, for the moment. We'll get back to the boy and girl thing in a bit, I promise. Just think about whether or not you'd think of yourself as a bear or a human shaped like a bear?"

"Well," Thomas looked like he had a gotcha for Phage, and said, "I could be a human and a bear at the same time, a bear human."

"Excellent," Phage took that in stride. "Are you a bear human right now?"

"No."

"OK, so that would be a change for you. You'd change from human to bear

human," Phage said. "Now, do you think you'd try that out sometime to see what it's like?"

It didn't take very long for Thomas to say, "Yeah! I think that would be cool."

"Alright," Phage said. "What if it wasn't, though? What if you thought it would be cool, but once you tried it you found it to be very uncomfortable? Remember, I know people who have experienced both these things. They've changed their shape and liked it, or changed their shape and didn't like it. So, these are real possibilities for you. If you changed your shape to bear human and didn't like it, would you have considered yourself to have actually been a bear human during that time?"

Thomas looked kind of glum and confused, trying to figure out what his response would be.

"It's OK," Phage said. "Sometimes you won't know until you try it, and the way you are right now, you can change back. You actually have the ability. But think about this. Would you then say that you had actually been a bear human, or would you have been a human boy that was just in the shape of a bear human?"

Hearing the alternative seemed to help things click and Thomas said, "A human boy in the shape of a bear human, I think."

"OK, so look at me," Phage said. "I'm a shapeshifter. I have no actual form that I feel like is me. I used to take on the shape of whomever I was talking to, but lately I've decided to take on the shape of what Ni'a here might look like when they're older, if they decide to look like this."

"Oh," Thomas looked at Phage and then at me and then at Phage again. "Oh, yeah."

"But, right now, I feel like I'm a girl," Phage said. "I'm a girl who is in the shape of an older Ni'a, who is, if I recall correctly, not a girl."

"Yeah, nope," I said cheerfully.

"But, then, doesn't that feel wrong?" Thomas asked.

"Nope!" Phage said, "Because, while for Ni'a this isn't the shape of a girl, for me it is. Because girls can come in all sorts of different shapes,

including girl bears. And so can not-girls, and sometimes it can be the same shape."

"Huh."

"You know how when you share Bashiketa's body, you both feel extremely wrong? Even sick to your stomach?" Phage asked.

"Yeah?"

"That's what we're talking about. That happens because you are not what Bashiketa is," Phage explained. "I think it happens both because Bashiketa's shape is wrong for you, and also because Bashiketa is not a boy and when you're coconscious it makes it worse. You're not compatible."

"Yeah," Thomas nodded. "That's what Bashiketa was saying."

"But you'd know more about it if you took Bashiketa's shape in your nanite exobody," Phage suggested. "That way, you'd still be you, but you'd have Bashiketa's shape. Then you'd know if their shape was what was causing it for you, or if it was their sense of self that's incompatible. Does that make sense?"

"I think so. Yeah."

"Ask them before you take their shape, though. Make sure it's ok with them," Phage reminded him.

"OK, but. If there aren't any boys or girls on the Sunspot besides me and you, why is that?" Thomas asked.

Phage smiled, "Because we haven't had the words. Our Elder Crew erased them from the language before anyone new was born, and just let everyone pick their own names and pronouns. Because they felt things would be better that way."

"Are they?" Thomas asked.

"Well, there's less dysphoria on the Sunspot than on the Terra Supreme, but there's still some, because it's not all about gender. Some of it is about shape," Phage said. "But! People still group up by similarity. They pick and change pronouns based on how they feel those pronouns fit, which means they categorize other people by pronouns. So, instead of boys and

girls, you have sies and ves and xes and hens, and so many others. But, now that you are here, there may end up being some other boys in the future. Or, at least people taking 'he' for a pronoun."

"Really?" asked Thomas, perking up a little bit.

"Yep. In fact, I think you can probably count on it," Phage replied, standing up and tossing its twig into the brush. "We should probably catch up to the others, and get ready to go flying."

"Wait," Thomas said. "Is Ni'a really going to grow up to look like you are now?"

Phage grinned and said, "Only if they want to."

"And if I get a new body, what will it be like?" Thomas asked.

"Someday, when that's available. Anything you want."

—

OK, so flying!

If you're on the Sunspot, especially if you were born here and lucky about it, you have a few different ways you can fly under your own power.

Some people are born into flying, with bodies that develop flight muscles, hollow bones, and wings capable of enough lift to get them into the air. And there are some cities that are designed specifically to accommodate avians, with different kinds of places to take off from and land, and specially cultivated fields to create updrafts and everything like that.

Alternatively, if you have access to a nanite exobody, you can create a lightweight enough version of your favorite form that you can use the nanites' ability to hover 50 or so meters above any other nanite infused surface or the hull of the ship in order to approximate flight. The physics are quite a bit different, but it is safer and a heck of a lot of fun.

If you use a disincorporated cloud of free floating nanites, you can go a lot higher, but you're also likely to be caught by the wind and end up places you weren't expecting.

Or, you can create a nanite exobody that is designed for winged flight and

works just like a bird's. If that doesn't make you dysphoric.

Finally, if you are *really* daring, you can go to the Playground in the AN Region, and try out a flight suit. This is the only option available to Monsters who are not avians. A flight suit is an extremely lightweight exosuit that augments your own muscle power for a set of wings, tail, and ruddered helmet. They are custom made for each person's anatomy when you arrive, and they can be tailored to various different kinds of flight. However, they are dangerous.

Fortunately, people with nanite exobodies can do various things to help someone who is having trouble in a flight suit, and in the AN Region, there are individuals who have made catching falling people their personal art. If you stay within the Playground, you'll be pretty safe. However, if you stray outside of its limits, it will reduce the likelihood that you'll be caught the further away you go, if you fall. So, don't do that.

Aphlebia had requested a flight day at the Playground as one of our first tours with Abacus and it was so fun I'd been thinking about it ever since. Landing was really the hardest thing, and again, there were lots of people happy to help you do that.

So, for our birthdays, we went there and spent several hours soaring, swooping, diving, spiraling, rising on thermals, and chasing each other.

I was bold enough to try a flight suit that was made for quick maneuverability, because I was small enough to pull that off, and because I could cheat. And, with Phage's vouchsafe and approval, I used every skill and trick I had learned to keep myself aloft and at the exact angle and attitude I wanted to be. But unlike flying by using the nanite hovering ability, I could feel every buffet of wind and pull of gravity as I twisted, looped, and rolled.

It was so exhilarating I suddenly found myself with the desire to see how high I could go. But my suit wasn't optimized for soaring. All the wing suits could soar, but mine had traded a certain amount of lift for maneuverability. So I knew I wouldn't be able to go quite as high as if I'd had a suit designed for it. But I thought that with my abilities I could certainly go higher than anybody else. Which I then started to feel guilty about. I wanted to take all my friends with me. But *someone* should get to see the world from that high!

So I went ahead and started circling and manipulating physics itself to start gaining altitude fast. I told myself I would do this for anybody else who asked, just not right now. I needed to try it out first to see how it worked.

And what I found was that I had to stop when I noticed I was short of breath. And even then, I could probably have kept pushing it, adjusting my metabolism to handle the altitude. But my heart was beating so fast and hard from the excitement of what I was seeing that I decided this was as high as I could *safely* go. Or as high as I even needed to. I'd already fulfilled my emotional desire.

I didn't even get all that much higher than a typical mountain, honestly. I looked down at my apogee and clocked my highest altitude instantly at 3813.621 meters.

But what I *really* saw was that as I got higher, the curvature of the Garden became more and more evident.

When you stand on the ground of the Garden, there is an horizon defined by the highest hills around you. Even in the forward regions, which are relatively flat, the land still rolls and dips and rises. And spinward and antispinward, there are an outer rim of hills that are still just big enough for you to see them and mark them out against an ever more gray-blue background. And, yes, if you look upward, you can see the details of the landmasses above you before the sun blots them out with its glare, but they're rather faint in the atmosphere of the Sunspot, if they are not completely obscured by clouds. To the fore and aft, you can see the Endcaps, clearly visible as they reflect the sunlight more strongly than the land and sea around them. And the Endcaps are circular. But the horizon, the edge of what you can see clearly as part of the land you're standing on, doesn't seem curved in comparison to that. Beyond a certain point, your brain (or at least my brain) just classifies what it's seeing as "the rest of the ship".

Take to flight, and that illusion starts to break down. Your horizon starts to get wider and wider, and then it just sort of blends in with the rest of the Sunspot, and there's no horizon any more. And from the AN region, you can see the Ring Mountains where they separate you from the aft regions where the sea is, and you start to see how they curve in echo with the Endaps. Which, of course they do! They circle the entire circumference of the Garden!

And I got myself high enough I could start seeing the sea on the other side of the Ring Mountains, where it met the Aft Endcap.

And yet, the nearest of the 40 spokes of the Garden, rose up from the center of the AN Region to my left and disappeared into the glare of the sun, 88.046 kilometers above me. I could see the spokes of the surrounding regions rising up to converge on adjacent sections of the sun rings, the giant magnets that guided the sun from one end of the ship to the other.

And I'm at a loss of words as to how to describe that to someone who hasn't grown up on a ship like the Sunspot. How do I compare that to anything you might have seen. I only hope some day I get to show it to you in person.

But while I was there, I had a few thoughts.

The first was just how familiar the sight was to me. I felt like if I kept going higher, it would get even closer to a vision I'd seen before. Like, if I were to somehow ride the sunpath, right down the center of the habitat cylinder, I'd be seeing the Sunspot the way I always truly saw it. The way I should see it. But that I could actually return to that place at any time without trying to fly my body there itself.

My second thought was that this view was the counterpart to the experience I had on my spacewalk with Aphlebia and Abacus. And because of that, it felt like I should have some sort of profound emotional break or realization, a shifting of perspective that would forever after change me. But it didn't, because all I felt was that I was closer to being at home than ever before.

But, I did think about *that*, because if I looked down below me I could see my family and friends circling in flight so, so far below me. Such tiny specks against the ground that I didn't so much see them with my eyes as simply know just where each one of them was with my Phage-sense. They were roughly 50 meters or so from the ground, at most. I was 3675.248 and falling quickly. I'd decided to return already.

I hadn't realized just how quickly I'd gained altitude. That must have looked downright bizarre to anyone who'd been able to watch, and everyone must be wondering where I'd gone.

And in all of this, it occurred to me that I did indeed experience something like a loss of self, like Phage did, when I changed my perspectives. It was

more subtle, but maybe just as impactful.

The more people I kept track of, or the broader my perspective, the more that I looked at the Sunspot itself as my very being and my body, the less I remembered the impact of my actions on individuals. And the less I remembered that I had family.

Through my body and its sensations wherever I left it, I was still tethered to everyone around it in some way, so it was easy to return, or to receive signals if anyone needed help. But this time I'd taken my body with me.

And then I wanted to get back to my family as fast as possible.

I paused my descent for a moment to focus. While I was there, I claimed the air around me for an even meter in every direction from the surface of my skin and flightsuit, and sort of anchored it to me so that it would have my momentum and fall with me. I would feel no wind, and I could breathe freely for a time. This, of course, meant that the air around my wings was no longer moving relative to them and no longer providing lift. My momentum kept me going in the direction I'd been going, but the coriolis effect of the rotating habitat cylinder began to have more and more of an affect on my vectors as I was no longer compensating for it with my airfoils or any sort of direction at all, and I did start to fall.

My air bubble did increase my surface area in a way, until I pulled my wings to my sides and arranged myself to start diving headfirst. Then there was less surface area than before, when I'd had no air bubble and my wings were outspread. And the bubble didn't work like the surface of my suit or skin. The air around it slid past with much less turbulence or friction. Especially because I willed it to be that way.

I dropped like a rock in near vacuum. I had a terminal velocity, it was just very, very high.

The trick was figuring out how to stay within the bounds of the Playground. I was already well outside of it by the time I realized that. The rotation of the Sunspot was leaving me to fall further and further antispinward. It was subtle, but from the height I'd attained it added up faster than I'd noticed it.

I decided that it didn't matter.

At the speed I was falling, I'd need a lot of time to slow down. I could use

that time to fly back to the safe zone.

Which I did.

Like I said, landing is the hardest thing to do when flying. And though I was plummeting to the ground, I was still so far away from doing that.

I kept an eye on my velocity, my acceleration, my rapidly decreasing altitude, and the increasing lateral distance between me and the Playground, and let my feel for flying and my intuition guide my actions. I could almost visually see my ideal flight path before me, curving off into the direction of my family the closer I got to the ground.

And then, when it felt like the right moment, I extended my wings and spread my feet apart to widen my tail flap, and then slowly began to let my air bubble alter shape and disintegrate. And I subtly curved my body just enough to begin pulling up.

That's when I realized that the second hardest part of flying, for someone like me, would sometimes be staying conscious. The harder I pulled up, the more I could feel my blood pooling to the front of me, and not circulating properly through my brain. I noticed how bad that was when my vision began to tunnel, so I then had to adjust my body's autonomic functions to compensate in a way it hadn't evolved to do.

And then I realized an easier thing for me to do would be to alter my inertia itself. I could just change the direction of travel of all of my atoms fluidly to follow the path I'd intended, and my blood would stop trying to go straight down while my body tried to follow the lift of my airframe. It would all just go where I needed it to go.

I could do that.

I did it.

What else could I do? Maybe it's a good thing it just doesn't occur to me to do all that many things with my abilities. I'm still not quite sure why it doesn't. I could tear the Sunspot in half like a leaf if it was my reflex to do so, I realized. And it's not. Ever. I thought at the time.

I had a brief moment where I wondered what, say, Candril would do with my power. Or, Thomas? Both of them would mean well, but would they be as naturally reserved as I seemed to be?

It didn't even occur to me during that moment that I did also have to exert a considerable amount of control to avoid destroying the ship when I had a meltdown, using Phage's trick to shunt that burst out the drive.

Such a small amount of energy from my meltdowns, comparatively. In fact, it usually wasn't *my* energy, so much as whatever I'd soaked up from the chaotic vibrations of the ship itself to the point it overwhelmed me. But it was usually just enough, released in such a frenzied burst, that it could hit the wrong harmonics and warp the massive forces that were already at work on the ship. And shunting it out the drive always proved to be such a small, nearly unnoticeable blip, it wasn't even comical.

I intuitively understood it. But the more human portions of my mind kept telling the rest of me that it was absurd.

And in a way, it felt a bit like I was doing a similar thing with my body, converting one energy to another and altering my trajectory as if I'd warped space/time itself to change which way was down for me.

I hit my marks perfectly, and suddenly I was shooting past Candril and the Whorlies at 35.756 meters altitude and bringing myself into a stately wheel around Aphlebia at 43.971 meters high, halfway across the Playground.

Aphlebia's mouth opened in a big, melodramatic "O".

I was so full of adrenaline and euphoria when we were done, I wasn't sure I'd be able to sleep that night. I sure didn't want to.

I didn't talk to anyone about what I'd been thinking about. That didn't occur to me, either.

Those of us doing thank yous had to get them in before and after we took to the air, of course.

And, afterward, I was distracted by another thought. Could I, or Phage, change the trajectory and the velocity of the Sunspot itself like I'd just done for myself?

—

For dinner, cake, and presents for Thomas, we met at Bashiketa and Thomas' place.

Dinner was a salad and stuffed roasted mushrooms. Like, big mushrooms stuffed with a mixture of nuts, diced smaller mushrooms, and herbs and spices. They were really good.

And then there were three cakes, made by Fredge, Laal, and Emala. Which turned out to be way more than anybody needed, but it made Thomas ecstatic, and he had to have a slice of each. One was a fruit cake, another was a cheesecake, and the last was a frosted chocolate cake.

I could only eat the cheesecake. It had the most consistent texture and flavor, and though the flavor was strong, it wasn't alarming and I liked it.

It was the presents I was most worried about.

Those of us who'd been flying were utterly exhausted, for one. Either physically, or mentally, depending on what kind of flight we did. Though, dinner and cake did tend to perk some of us up.

But also, none of us really knew what Thomas expected of his presents. He was so worn out from the day, maybe it didn't matter, though. His reactions weren't overjoyed, and sometimes he was perplexed, but he was clearly having fun and constantly reaching for the next one. Even as it looked like he was about to fall over from sleepiness, he was asking if there were any more after the last one had been opened.

Since I had insisted to him that he could have his presents, I had felt obliged to direct everyone else how to go about making and getting them. The vision I'd had of what a present should look like was more of a guide than anybody else had, unless they asked Thomas. And all he would say was that they should be a surprise.

So, we'd needed boxes and wrapping paper, and things to put in the boxes. The boxes and wrapping paper were easy, since makers could spit those out to spec on demand. But the things that went in the boxes, the actual gifts, really needed to be something special.

So, I suggested we go get handmade artifacts from art collectives and individual artisans from around the Sunspot, including toys, dishes, clothes, and even paintings or sculptures. Things he could use or decorate his space with. And, if he didn't like them, at least it was like getting a tour of the Sunspot without actually going anywhere himself.

Bri, for instance, had gotten him a beautifully colored, woven hemp

poncho. And as he was going about opening it, ze took that as a cue to talk to the rest of us.

"My Caretaker's Caretaker made this!" ze bragged. "Your families are so weird and small, I thought it would be neat if Thomas could have something from someone *old*."

"I'm pretty old," Phage said.

"Yeah, but you know what I mean!" Bri retorted. "Someone still alive."

Bri was careless in zer typical sparring with Phage, and that comment could have hurt Thomas to hear. But he was too tired to pay any attention, and too busy unwrapping the poncho and then trying to figure out what it was.

Phage snorted, "I'll have you know, I was *never* alive."

"I *know*!" Bri said. "*Anyway*, I'm my Caretaker, Gagna's only child, but Gagna still lives on the same block as ver Caretaker, Vicnor, and all ver siblings. Sometimes we take down the walls between our quarters and just have one big room for a while. And my Caretaker's Caretaker's Caretaker, Mifley, lives with all of us and moves from quarters to quarters, and I just thought Thomas might like to hear about that, because your families are weird and small. It's a poncho, Thomas."

Thomas' face lit up, once he understood. "I'm so tired, I thought it was a blanket with a hole in it! But this is great! Thank you!" And he put it on, with some struggle.

Maybe ze sounds a little rude to you. I don't know about your culture, I assume nothing, considering where this book might end up. But I really missed having Bri around, and by the end of the night, I made sure to let zem know that. And Phage was softly giggling and shaking its head during that whole exchange. I'm pretty sure it loves Bri, too.

The last gift was from Phage, and it took Thomas taking a second look at it, after searching for the next gift, to realize the significance of what it was. It was, after all, a book, and Thomas was *tired*. He was starting to get the hang of our language differences, but reading still took extra energy.

The book was, at first glance, hand written, and titled "Hail, Dragons!". It has since been published around the Sunspot on its own, separately from

my book. But I'm going to include it here in its entirety because I think it should be spread further, and it fits the title and theme of my book. It's really part of my story here, too.

Phage was irradiating us with lethal doses of smugness the whole time Thomas was trying to make sense of it by reading the first few paragraphs out loud, and it was dawning on the rest of us what had just been unwrapped in these Monster quarters on our trio's collective birthday.

And some of us found ourselves asking, "Had we been there while this was first transpiring?"

Phage interjected as if we'd said those words out loud, "This has been in the works far longer than it might look. And you haven't heard about it yet because many people have been very, very careful to keep it quiet. Which is about to change."

Akailea nodded solemnly in agreement.

It was not, it turns out, *hand* written.

Hail, Dragons!

Chapter 1: the Encounter

Hail, Dragons!

We found a hoard of your books not long ago, and we will tell you of that story. And this is why we have written this book.

We believe you will read it and learn who we are, those of you who don't already know.

To be clear and thorough, in case some of you don't know, we are what you call the cuttlecrabs. We simply call ourselves the Collective. For ages, you have probably thought of us as no more than clever animals, but we have been studying you and learning.

We have also just learned that your ancestors created our world, and this teaches us much about our place within it. We believe that it is time for us to walk amongst you, unafraid, if you will let us. Know that you tower over us, and we are afraid of you, but we have learned from you and are eager to learn more.

Let us tell our story so that you understand.

It truly begins before this world was made, but our stories of that time are confused and apparently incorrect. It is probably better to begin with when we first spoke with one of you.

You may have been aware of us lurking on the shorelines and in the marshes there, watching you and learning your words. How can you not? We have spent many of our generations doing so. And we have stories about how some of you have protected us from others of your kind. You seem to have an approach to the world where you do not interfere with the lives of other creatures. But some of you are as curious as our children. We have seen that.

It took us so long to realize that you were a people, though! Each one of you is so different from all the others. And this is why we call you Dragons. For each one of you towers over us with unique and bizarre appendages and gaping maws that are quick to bellow out strange and thunderous sounds.

It is the honor of this one, the one that writes this book, to have met one of the smaller of your kind face to face one afternoon. It was between a tree and a bush, hidden from view of others of our kind and of yours. And through this one, we spoke to zem.

Even though one of us may be cut off visually from the others, that one still carries within them the will of our people, though they must then act with special initiative. It is simultaneously a scary thing for us, and a moment of opportunity. We do have instincts to seize upon it. It is how we survive many crises. Through such a cornered individual, we will act more boldly and rashly, but almost always in a way that the rest of us would understand. And this one still trembles from the memory of it.

Perhaps you can see traces of emotion in our marks on this page. To paint letters with ink using one of our feeding arms seems a sacred thing, we hope we do it well.

But let us finally begin our story!

—

The sun was three quarters of the way across the sky when the one you call Shaw knelt before this one beneath the tree and behind the bush, and stared right into our eyes. We froze so thoroughly, we could feel the world spinning.

Shaw has a long tail with a large, flowing black tuft on the end of it. Zey has a long fur covered body, stick-like limbs, a lengthy neck, with a rounded head with a tuft of black hair upon that, large pointed ears, a snout with a black nose, and two enormous eyes with vertical pupils that can expand from pin pricks to the size of a sandmoon. And even though zey is a smaller one of you, zey still looked down upon us from a dizzying height.

Tentatively, we shifted this one to the right, clutching our feeding arms beneath our body, tentacles ready to gesture with. And we reflexively flashed our surface thoughts across our shell, but Shaw couldn't read them yet.

"Hi!" the tiny giant said, settling back on zeir haunches, tail settling on the ground.

An opportunity! We took it, using another word of greeting to show our

knowledge, saying, "Hello," with this one's vocal sack. We also adjusted this one's aural canals to focus on Shaw.

Shaw's pupils widened a little and zeir jaw slackened as zey raised a digit.

What you have to understand about this moment is that we have come so close to it before. Time and time again with different Dragons. And each time, we have evaluated the outcomes and debated the best procedures should we get the chance to continue. We were prepared. Shaw was not. And the question was, would zey be given the chance to continue?

We had already gotten further than ever before. Something was different about Shaw, which you may know. But we didn't know what was different, so we did not waste time.

"Talk with us," we said through this one.

Shaw's eyes dilated fully and zey yawned in surprise, ears perking up, and pulled zeir head back. Closing zeir mouth to swallow, zey leaned forward again and said carefully, "OK?" Zey then looked all around, as if afraid zey was being watched, and turned back to this one and said, "you... you don't just mimic? You talk?"

We flashed affirmative, turning our tentacles over, and then remembered Dragons speak only through voice, "Yes. We speak. We are the Collective. Speaking is what we do."

Shaw bent down and whispered, "Everyone thinks you just mimic us. Am I the first you've talked to?"

"None of your kind would speak to us before," we replied, shifting our weight expressively.

"Oh," Shaw looked behind zemself again, then back. "Um. I'm Shaw. Um. I guess my pronouns... you know what pronouns are? My pronouns are zey/zem/zeirs."

"We know this ritual," we replied. "You Dragons speak it to each other when you meet near the shore. Our pronouns are they/them."

"Dragons?" Shaw asked.

"We call you Dragons, for you are individuals and you are so unique and

so enormous." We actually used a different word of our own making here. However, upon studying your books, we have learned that your word "Dragon" is a fine translation, more readily understood. What Shaw heard from us was not a word zey recognized. It is irrelevant now, we have replaced it with "Dragon".

"Well," said Shaw, "I am called a Monster. Not all of us are Monsters, but I am. It means that I have chosen to be separate from the others and to disconnect from the Network. Do you know what the Network is?"

We flashed a negative, and withdrew our tentacles, "We know the word, but we do not understand what it means."

But before zey could answer that, Shaw's ears swiveled and zey hunched zeir shoulders and looked in a direction, pupils dilating again, and zey hissed, "I have to go!" And zey bounded away, leaving us to skuttle under the bush.

We had to think about this. We'd made astounding progress on contact with you, but not enough, and we needed to discuss how to provoke further dialogue. But we could not do that without withdrawing this one back to others of the Collective, and there may yet have been something more to see. So we waited under the bush.

The time that passed seemed like it should have eaten the rest of the day, but when something did happen the sun had not moved very much at all. Anticipation and fear had turned the tide to sand.

But then a dark cloud, as if like gnats but thicker and of smaller things, swirled into the spot where Shaw had been. It floated from around the back of the tree, and was met in the spot with more black dust that rose from the ground. It whorled and boiled in the air, like ink in water, for several of our breaths before wafting off in the direction that Shaw had run.

And the sudden sight of it doing this had turned this one brown and rocky with terror.

We had never seen anything like this before! We knew not what to make of it! So our reactions were those of instinct, for when a predator is near.

And when countless more breaths had passed, and the sun had moved and lengthened the shadows, only then did this one return to the marsh behind

them to rejoin the rest of us. And that arm of the Collective began to chatter silently, flashing thoughts as quickly as bird wings in a frenzied susurrantion. Then we withdrew to the shore, and spread the thoughts amongst the rest of ourselves. We needed all of our thoughts. Other Collectives would also need to know.

Chapter 2: The Great Chattering

Individually, you Dragons will frequently walk along the shoreline, following prescribed paths, talking either to yourself or to what we thought were your gods. And we listened to these discussions for generations upon generations and learned your language.

This is how we know that some of you like to visit us just to hear us chattering.

We can speak to each other silently, using only gestures and flashes of pattern and color, but that communication is nearly subliminal to us and limited. It is excellent for quick reactions and simple decisions, but spoken words bring our thoughts to consciousness. Even one word amidst a flurry of movement and color is enough to complete a thought for us, though. So, to you, our communication must have sounded nonsensical for so, so long.

Thank you for words! Using only words to write this book is challenging to us. We find that we need to use far more of them to communicate the nuance we are used to in our usual speaking. But we are taking the time to do so.

We didn't use words in that first marsh near where we encountered Shaw, for fear of being overheard by the black cloud. But when our thoughts of Shaw reached the shoreline, we did not hold back. Some of you may have stories of that evening.

We had been planning for this event since the world was made, which meant that we must include all of the Collectives, including those of our cousins, whom you call the cuttlesquid. This meant that by nightfall the entire shoreline of the world was full of our chattering.

The cuttlesquid can only communicate through flashing, so we had chains of emissaries to convey thoughts from the shore to the depths and back. These connections could not happen in most places along the shoreline,

where waves crash upon the sand and rocks. But in the quiet bays and estuaries the cuttlesquid collected and we spoke with them there, and the water glowed and flashed with their lights.

Here is what we chattered about:

The Event is now! We must proceed!

It is OK if the Dragons hear us talking all at once. This is part of the plan. We all know this.

The one we spoke with is named Shaw. Shaw understood us. We think we understood Shaw. If we can find Shaw again, in favorable circumstance, we must try to speak to zem some more.

We must search for Shaw.

We must be wary of the black smoke!

We must consider talking to another.

To do any of these things, we risk the lives of those of us who venture forth.

What are the risks?

That the black smoke is not favorable to us. That other Dragons are not favorable to us. That there are predators inland that we are not prepared to meet. That accident may befall us inland, as we do not know its dangers. That Shaw is not favorable to us, and has hidden motives. That we are somehow unable to track or find Shaw and that we get lost inland.

What have we learned from the encounter with Shaw?

Some Dragons are different from the others. They are all different, but some are more different. The ones that call themselves Monsters may have more freedom or more will to talk to us. But maybe the black smoke doesn't like that.

Shaw seemed nervous to begin with. Shaw seemed determined to keep talking as long as zey could. Shaw seemed surprised we could talk.

What can we do to mitigate the risks of seeking out Shaw or other Monsters?

Send multiple search parties. Send them in groups that are large enough to

mitigate our cornered instincts, but small enough to split apart to take advantage of them. Four per party should be good. The one that met Shaw should follow Shaw's trail, with three others. Keep an eye out for smoke. Stay low. Stay hidden. Only reveal ourselves to individual Dragons, never to pairs or more. Make as many contacts as we can as quickly as we can to find allies. Learn quickly. Follow the sun to come home. Hope for the best.

After this Great Chattering, some may come to us.

That is part of the plan.

Are we afraid of the Dragons?

They have always taken care of us and avoided us. Our goal now is to get their attention.

What if they become afraid of us?

We are small.

But we are many.

If they fear us and come for us, we can retreat to the sea.

There are Dragons that swim, that live in the sea.

We can hide.

This is silly and instinct. Observation says they are all allies, and keep each other from hurting us. Or make repairs when they do. Now that we know we can, it is time to talk to them.

Agreed.

Agreed.

We will run scenarios meanwhile anyway.

Agreed.

Each Collective can be free to run their own scenarios and develop different plans. Diversity is survival.

Agreed.

Then let us find the Monsters!

And at that, the whole shoreline fell silent and dark.

It was night, and this one, your writer and the emissary to Shaw, had spent the Chattering speaking with the cuttlesquid. As this one crawled from the gentle waves of the bay up onto the moonlit shore, we saw from their eyes the shadowy reflections of ourselves standing on the wet sand, and looked up to see what all our eyestalks were stretching for.

We had stopped talking because there was nothing more to talk about. But now we were fully aware of the world around us, and the march of the moon toward us, from across the mountains, toward the place in the sky above the sea where it would die. It was passing in front of some Dragon lights from the other side of the world, and its ghostly globe was not substantial enough to drown them out with its own light. A newly waxing moon, with Dragon lights shining through it. Still light enough to illuminate our world.

We considered it a good sign, as it would light our nights well for a month while we searched for Shaw.

But many of us also knew that we were waiting to see if our cacophony had drawn any attention.

And behind the sounds of the soft waves, the wind, and the night birds, we heard nothing else for quite some time. Perhaps other Collectives had made contact already, but we would not hear from them for many more breaths, perhaps several conversations yet, or a whole tide. Communication during the Great Chattering only traveled just slower than the speed of sound, since words had been needed for the more complex thoughts, but without a network of everyone continually talking it would be even slower from one side of the world to the other now.

This one just happened to be in the right place to see it clearly, as we had wandered further up the shore while the others remained still.

The black smoke, or dust, or whatever it was, had returned and had risen up between this one and the moon, becoming visible from that angle. It was even less substantial than the moon, but not homogenous, and its swirling mass created waves of darkness across the lamp of the night. It

also sparkled ever so faintly in that light.

It hung there silently for many breaths. Long enough for this one to relax from a sudden rocky brown camouflage back to default smooth shell white. We then flashed our thoughts in color only, which rippled across the shore through our Collective. *Resolve. Communicate. Experiment.*

“Hello!” we said with many vocal sacks.

The black smoke collapsed to the ground and disappeared into the dirt. And when we investigated, we could find no trace of it.

—

Chapter 3: Beginning the Quest

Food was not a concern. We hunt, and if the arthropods of the inland were as plentiful and as tasty as those of the shore, we would be fine. Though hunting them may be more of a challenge, as we didn’t know their habits. But that would only prove interesting.

But we did talk briefly about this before setting out. And this one, along with three companions, left the shore only an eighth of a moonpath since the black smoke had disappeared.

We knew we were watched, so the setting out itself was a test. If we were not stopped, then we perhaps had the black smoke’s blessing?

With tentacles and feeding arms laid across the tops of our shells to keep them from dragging, eye stalks leaning forward between them, we scurried low and fast toward the grasses. And while the Collective behind us scattered for hiding places, we dodged through the marsh toward the bush, to crawl beneath it to the spot before the tree where we’d met Shaw, and stopped there.

This one knew the smell of Shaw personally, so we used their tentacles to taste the sand first. When we found the spot that was the most rich with *zeir* scent, we each took our turns tasting it. Then we scattered and tested the ground around the area to track the trails. We compared them to our memories of the event, and chose the trail by which Shaw had left the scene, all four of us tasting the ground as we moved forward.

We still kept our feeding arms high and dragged our tentacles almost

behind us as we rushed our search. And, by flashing the strength of the scent we each detected by color, we were able to stay on track unerringly. We chose our camouflage pattern for that. So the farther we each strayed from the path, the brighter and paler the individual became, reflecting the moon, while those on track blended in with the ground as best they could. It was a good way to remain focused.

These are elementary hunting tactics for us. We share it here for those who are not familiar.

We are good hunters, but we were certain that Shaw would eventually lose us. Zey were not trying to evade us, but zey were trying to evade the black cloud, and zey were bigger and faster than we were. We expected that either Shaw would travel far enough that zeir trail would fade for us in the weather before we caught up, or zey would use an inland trick to hide zeir trail that we could not account for. But, at least we would start out in the right direction.

The trail led us out across a field with grass stalks that were five times as tall as any one of us, which made it possible to follow Shaw's path visually for a while, as zey had broken stalks in zeir rush. But it wasn't long until this led us into a wooded area, with gargantuan trees many times taller than the one under which we first met zem.

The brambles, nettles, and ferns of the undergrowth crowded around worn trails that must have been created by creatures larger than even Shaw. We have yet to find what you call them. We have seen them on occasion exploring the shoreline in various parts of the world. Some even swim. They are clearly not dragons, for they have a uniformity similar to ours, even if their shape is dramatically different. We stay clear of them, however, and do not know what to make of them. So it was somewhat terrifying for us to venture into their territory.

But Shaw's trail clearly led us there, and we followed zem through the woods as zey zigzagged through these animal trails.

And it was in this pursuit we quickly learned that the food inland was not prepared for us. Occasionally, though not frequently, one of us would by chance alone catch prey with one of our tentacles while running nearly full speed. Our reflexes grasped the food before we could even register the flavor of it consciously. Such morsels were quick work for our beaks. Admittedly, it was hard to avoid making tiny chirps of delight every time,

to let the others know. When it came time to dine, we would feast in these woods.

The trees did obscure the moon's light, and we had mixed feelings about that. Darkness makes us brash and confident. It's our time and our element. But we were in alien territory, and having some light would help us to recognize the existence of obstacles we were not used to looking out for, such as tree roots, fungus, strange plants, or even animals we have never encountered before.

After a while, we could start to feel the effects of adrenaline in our bodies, and decided to slow down and examine our surroundings more carefully.

We became acutely aware that we were further from the ocean than we had ever been before.

—

Chapter 4: the Jaws of a Predator

There was a movement.

We do not think it had meant to be seen. However, we were as strange to it as it was to us. It didn't know the extent of our senses, and we were already anticipating something like it.

There was a movement near the base of a tree, and we froze in a camouflage state, all four of our bodies. All thought disappeared and all we could do was observe what our limbs did of their own accord.

After a tense beat of confusion, the one furthest from the source of movement turned bright white and scuttled for the base of a tree.

The predator immediately leapt clear over us to pounce on suddenly visible prey.

And we, in turn, leapt for it!

We did not get a clear vision of it, even between us all. But, as we heard the sickening crunch of shell and a squeal of agony, our beaks found themselves full of fur and flesh, tentacles and legs gripping the flanks of the creature. And there was a yowl, and muscles flexed as its tail lashed well above our eyestalks.

The encounter was short and painful.

This one felt toothy jaws close on a leg and yank. We bit harder in turn and, as this one was torn away from its grip, the flesh of the predator came away with it. The world briefly spun faster than ever just before leaves and branches of a nearby bush broke and cushioned this one's flight.

Then the predator screamed in pain and thrashed about, leaping high into the air, in an attempt to shake the rest of us off of it. And then it bolted through the brush, at which point we let go.

We could only hope it would not return. We had never encountered anything like it before. We did not know its habits or tactics, while our own were honed best for fending off larger birds. So, we felt rushed while we had to also take time to regroup and think.

The breaking of shell is not always fatal. While it can be crippling, it depends on where the break is. But it also depends on whether the rest of the collective can rally to help protect the injured member while it heals.

The broken member of our party could not stand. It had suffered a large crack across the back of its abdomen and the shattering of two of its legs. As a result, it was already in a silent shock when we came to it, slowly cycling colors of pain and attempted thought, incoherent. And in seeing it, we felt pain ourselves.

It had sacrificed itself so that the rest of us might fight off the predator and live. But its unique sense memories, its perspective, would never be available to us again. We felt its absence already, and panic began to set more deeply within us. Which meant that we found ourselves huddling under a nearby bush, camouflaged, watching it die and fearing the return of the predator.

Communication between us was at a minimum then, just as it was at the beginning of the fight. But this one had just enough faculty of its own thought to start reconsidering this quest. The others were doubtlessly thinking the same things. Should we go back to the shore and the safety of our numbers? Should we try to carry our wounded? Or was it slain already?

It had not even been half a night, and our mission was already in jeopardy. We had encountered a danger that had severely injured us, impairing our ability to remain rational.

If we waited long enough, too, either the predator would return to check its kill, or something else we know too little about would be attracted by the smell. Of course, even the smell of those of us who were uninjured probably attracted the predator in the first place. And we began to realize that our experiences on the sea shore were not equipping us to anticipate the dangers we faced inland.

We very nearly did turn back right there.

But taking a mere two steps back in the direction of home brought back memories of The Great Chattering and the resolve that had sent us out in the first place. So we turned and continued to move further inland, leaving our fallen member behind, and keeping to cover. Even if only one of us survived to find Shaw or any dragon to talk to, it would be enough. And we found ourselves wondering if the other parties had had similar encounters, or if they were making contact.

Unknown to us, something remarkable was happening to our injured party. But we would not learn that until much, much later.

Instead, we pressed on through the night until the sky began to lighten. And we believed we had made good distance by then. Our new tactics of keeping to brush, or crawling near fallen logs, and staying hidden seemed to keep us safe enough, and we did not see our attacker, or any other, in that time.

When we were confident, we took the time to discuss and think about what we might do should we encounter another threat like the one that had injured us.

Of course we would repeat our past tactics, following our instincts. But if we prepared ourselves, we could add to our actions. And we agree that adding to the screaming ourselves would be a good move. Especially if we continued to do so after the threat had run. Anything to frighten predators further and keep them away.

Being ambush predators ourselves, we were in the habit of being quiet when launching a counter attack. And usually, we had the numbers to be a considerable threat. But now that we were down to three, we would need to augment our weak presence. And noise seemed to be an important thing to inland creatures. Which became even more obvious as morning arose, and birds and other things began to chatter.

But as the sun emerged from its cave, we had to search for a place to hide during the day. We did not feel equipped to risk the daylight, and we needed rest.

Unfortunately, it took us longer than our comfort to do so, and the sun was fully escaped from its birthcave before we found a partially hollowed tree and climbed its trunk to the hole we'd spied from a distance away. Our own wooden cave.

It was cramped, but the dampness of it was comforting. And we felt that we could hear and feel the vibrations of anything that might climb the tree after us. We would be prepared with bared beaks to attack its face if necessary.

We were so uneasy.

Fortunately, with three of us, our natural rotation of sleep cycles kept a pair of eyes and other senses awake through the day without any strain. Two would have been difficult. One, impossible.

We assume this is all relevant to your understanding of what we are and our place in your world. You must already know that we rule the shoreline and feel relatively safe there, even with regular encounters with larger birds of prey. And we are definitely out of place outside of our realm.

But perhaps you can also see now that we can adapt, take our own initiative, and even communicate with you.

We would like to learn about the rest of the world. We are very curious. But we would like to emulate you and do so with as little impact as possible. And we cannot do that while we are so vulnerable. If you could be our teachers and guides, we would be so grateful.

Unfortunately, we also have to admit that during our rest that day we had the time to realize that by choosing to move inland while sticking to cover we had given up on following Shaw's trail. We had, in fact, forgotten completely about it until then. And when we had fully awoken, as best we could with only three members, we began to think about this as quietly as possible. Our flashing must have seemed strange to any land creature seeing the reflections of it on the inner walls of the tree.

Fortunately, the angle of the afternoon sun probably drowned that out and made it less obvious.

Due to our state of distress and our minimal numbers, we became more aware of our individual selves than we typically are and experienced a thing that struck us as strange in the moment.

We had four positions on what to do next.

We could turn back.

We could keep going as we had been and hope that we stumble across a clue or Shaw's trail, or some sort of sign of a Dragon presence.

We could strike out laterally, either spinward or antispinward, specifically in search of Dragons other than Shaw.

Or we could risk the attention of another predator and spiral outward in search of Shaw's trail, to pick it up again and continue as we had started out.

And the arguments we made in favor or in rejection of each of these possibilities came from us as if from different factions of the greater Collective, just like during the Great Chattering. But no one of us as individuals took any one of the sides ourselves. We watched our own individual minds emulate these factions within us and present the arguments as if someone else entirely had formulated them.

In one sentence, this one found itself arguing for turning back. And then in the very next sentence, vehemently insisting that we find Shaw's trail.

It was a natural discussion for us, and we knew that we worked this way. But we had not really been consciously aware of it until then, and in the moment it struck us as very odd, and somewhat wonderful.

We broke the discussion to remark upon it and sat for a moment in wonder at our own beings.

Which is when we heard and felt the scrabbling from the base of the tree, and could sense its rapid climb toward us.

—

Chapter 5: The Library

This one crawled to the lip of our tree cave to extend its eyestalks and

behold what was causing the scrabbling noises.

We flashed in alarm upon seeing what must have been the same furry predator that we had fought off before, halfway up the tree to our location. And keeping eyes upon it, we screeched.

We screeched with all three vocal apparati, modulating our pitches to emphasize our numbers.

This startled the creature at first, but then seemed to intrigue it. It halted its climb and twitched as if ready to run the other way, but then flattened itself against the trunk and gripped tighter with its claws. Its eyes dilated, ears rising and twitching. Triangular ears like Shaw had. Land creatures have adapted to hunt by hearing!

Then it started to climb again.

Which is when this one had the thought that we should sound like a Dragon!

"Get away, you foul beast!" this one cried out in its deepest voice, which is not very deep, trying to be heard through the rest of us screeching.

Soon, though, we were all shouting invectives at the predator.

And this, for certain, scared it! We saw its ears go back and its pupils contract. Then there was a great scrabbling as it turned around to face downward on the trunk of the tree and then it leapt fully to the ground to dash off into the brush.

As its tail disappeared between two ferns, we shouted in unison, "Fuck off!"

And this filled us with a feeling of great power, for we felt we had discovered the secret to keeping predators away.

Be Dragons.

We decided then that we could search for Shaw's trail if we did so by speaking as loudly as possible, all about it, with full vocal sentences. Which we thus attempted to do.

We did not find it, though. Not as we hoped, at least.

First, we emerged from the hole in the tree while shouting directions at each other.

"This one will go first, for it is nearest the entrance!"

"Let us just go down the tree and start from there!"

"Spiral to the right or the left?"

"To the right! It mimics the spin of the world if we face the Sunbirth!"

"Why!"

"We like it that way!"

And so on, at the top of our lungs. We spoke every little thought that came to our mind, telling the world around us of our intentions. We used full sentences and practiced our words in the process.

Doubtless, you can tell by our writing that we are well versed in your language. Or, maybe you think that someone helped us write this. Both are true to a degree. There are many words we do not know yet, and continue to learn, of course. After all, there are things in your world that we have not yet encountered, or heard you talk about while pointing at it.

However, you should know that we have been studying you and your language since the beginning of the world. Which has been a very, very long time. And every time you have brought your youngest children to the shore to introduce them to our part of the world, you have pointed at the things we know and named them.

If you doubt our skill, we invite you to visit us on the shore and have a conversation. We would enjoy it! And we think that so shall you.

After countless generations, with our intent to learn your language as you utter it, we believe we have the way of speaking understood. And the goal of this mission was to finally demonstrate what we have learned.

So we continued to chatter! And we spent a great deal of time doing so and searching for Shaw's trail.

"Where is it?"

"We must have strayed too far!"

"Perhaps Shaw took a sharp turn!"

"Maybe Shaw can burrow!"

"Or fly! We saw no Shaw sized holes!"

"Ah! What if zey are up in a tree?"

"Uh. I'm right here."

We fell silent and froze, instantly camouflaged.

With eyestalks shifting ever so slightly, we caught sight of zem where zey stood next to a tree not far from us. And we relaxed, and flashed colors of recognition.

"You followed me?" Shaw asked us, crouching and settling on zeir tail, looking far less threatening in the act.

"Yes," we said.

"And you brought friends?"

"What do you mean?" we asked.

Shaw gestured and said, "There are two others with you."

"Ah," we replied with a different set of vocal chords. "We are three. We were four. And before that, we were all of us, discussing whether to follow you."

Shaw tilted zeir head and scratched behind zeir ear, and squinted. We did not know exactly what these gestures meant, but as we said we have been studying you for a very, very long time. We have seen hesitation in conversation, and seen conversation continue successfully when the unhesitant party continues. So we did that.

"We are us," we said. "I am us."

Shaw leaned back and tilted zeir head the other way, but asked quickly enough, "So... You're a hive mind?"

"We don't know what that means," we replied.

"Ah. Uh. It means that you think collectively. Um. One mind, many bodies."

"What is a mind?"

Shaw put a hand to zey mouth and held up a finger. Then zey explained, "Your thoughts. Your mind is your thoughts? And... It is how you make decisions. And, it is your sense of self. You said, 'I am us.' You know that 'I' means an individual, and 'us' means a group, right? So, a hive mind is an 'us' that is an 'I'."

We flashed understanding and said, "Yes. Thank you. What does 'collectively' mean? We have heard this word a couple times, but have not confirmed its meaning."

"Doing things as a group. So, you know, thinking as a group, as a collective."

"Yes. Thank you! That is us. We are a collective. We like that word."

"Wild!" Shaw exclaimed. "We can't keep talking here. Can you come with me? I know somewhere safe. I think that if you consent to follow willingly, we won't be stopped."

"We do not wish to be trapped," we replied, hesitant ourselves. Although we felt that Shaw was friendly, we didn't know for sure if zey were.

"Yeah, the Crew," Shaw said. "Well, the Crew don't want you hurt. They will protect you. Keep anyone like me from hurting you. But they also don't want us talking, I don't think. I'm not supposed to disturb you. But I think we should talk. I think you should get to talk. Maybe I could write down what you say, or record it. This is big."

"What are the Crew?" we asked.

"The people who own this shi... uh, the world," Shaw explained. "They don't have bodies, but they can.... Appear as clouds? Clouds of little... Do you know what a 'machine' is? They can appear as clouds that can do things."

"Ah, we have seen one! What is a machine?"

"I'll show you. Please, we should go to my library. It will be easier to talk there. And, I guess if you're afraid of me, the Crew can still protect you there. But, if they let you go in there, it will be a sign that we can talk more, too."

"What is a library?"

"A place full of books."

"Books?"

"Ah! Uh. Collections of words that are written."

"Word collectives?"

"I'll show you! Just, follow me," Shaw got to zeir feet and gestured with zeir hand. Then zey took a few steps back the way zey came from and gestured again.

"OK," we said, and began to follow.

Shaw kept looking back and gesturing every few paces of zeir long, stick-like legs. And we did not have to break stride as we followed, for every time we got closer enough zey would bound ahead a few more paces.

It did not take long to reach the door of the library. By chance, we had come close to it already.

Shaw came to a place on the ground where zey began using all four of zeir limbs, tail high in the air for balance, to brush away the dirt and tree needles. Zey dug to a full beak depth of dirt, revealing a dull shell-like thing, large and flat, which turned out to be the door. And after a great flurry of work, zey uncovered the whole of it.

As we walked up to it to examine it, we saw that the dirt around it was already creeping back up over the edges of it, and Shaw kept brushing it away. And then zey put zeir hand on a part of it, fingers splayed, and grunted. This was followed by a click from the door, and then it began to open, lifting upward, one edge of it still connected to the ground, as Shaw stepped back to give it room to move.

We could see that there was a great hole beneath it, and another noise coming from the hole.

"Wait," said Shaw.

While the door was open, the dirt had paused in its attempt to climb back over the door. This fascinated us, and we thought about that while we waited as Shaw had instructed.

Soon, a surface came up to the hole and replaced where the door had been when it was shut, and Shaw stepped onto it, gesturing at us again.

"It's a lift," Shaw said. "It will take us safely down to the library. But you need to stand on it with me."

We were afraid of this. It was a thing we had never seen before. And we did not know if we could freely leave the hole once we entered it. But we reminded ourselves of what we'd decided during the Great Chattering. It was worth the risk. There were other parties trying to make contact with other Dragons, and we had found Shaw, who we had decided we would trust. Some of us would succeed. And we three certainly would not if we turned back now.

It took some effort to override our fears, but we stepped onto the lift with Shaw.

The lift was big enough that, if Shaw had lain down on it, zey would not be able to touch each edge with zeir limbs. Which meant that the door was that big as well. With Shaw standing, there was plenty of room for us.

The door was standing straight up on its edge, and Shaw placed zeir hand on a portion of its underside, and said, "mind your tentacles."

The lift began to drop, smoothly and slowly.

"Lift, take us to maintenance level E'," Shaw spoke to the air. Then zey said to us, "This may feel weird to you. It's quite a drop. I'll show you how to use the lift to get back to the surface, so you can do it on your own if you need. You shouldn't need to use your hand like I did. That's just the accommodation I use."

"We don't have a hand," we pointed out. As we were talking, the lift briefly stopped at a point where Shaw's head was well below the door. As the door began to close above us, a panel also slid over us from one of the walls. And the walls began to emit a soft light.

"Exactly," said Shaw. "You probably can just speak to tell the lift what to do. The Sunspot should recognize that you are not Children, Crew, or Monster and decide that you can return to the surface at your will. The fauna are protected, and you are considered fauna, I think. Coming back down, however, might be a problem."

"Interesting."

When the panel was done sliding into place over us, we felt the floor drop out from under us. We fell with it and did not lose our footing, but it was startling. We flashed colors of fear and chittered in alarm, but got used to it very quickly.

"Yeah, I never really get used to that drop," Shaw said. "But, it's OK. The Sunspot will never do anything to harm you, if it can help it."

"What is the Sunspot?" we asked.

"Ah. Right," Shaw replied. "It's the world. It's what we call the world."

"Is it alive?" we asked.

"Yeah. In a way it is!"

"How does it know what we are and what we are doing?"

"Well, it has sensors everywhere."

"Senses?"

"Uh, yes. Yes. And it is smart. It has been made to be smart."

"Made?"

"Yeah. The Crew made it."

"The clouds of little machines?"

"Yes! Yes, exactly, actually," Shaw exclaimed. "Oh, right. So, this lift is a machine. A machine is something made by a person that can move on its own or under a person's command, to do things." Then zey gave us time to think about that.

"Oh," we said. That was a difficult thing for us to understand. We could not imagine how the dark animate cloud we had seen had anything in common with the lift. But we decided to accept it and assume that we would learn more about it later.

"I'll show you what one of the little machines looks like when we get to the library," Shaw said. "We call them nanites. We have images of them."

"Images?"

"Pictures. Visions. Um... You speak so well, but there are so many words you don't know."

"We will see what an image is when you show us," we replied. "Many words that we ask about, we have heard and think we know, but we are asking to be sure. Others are words that you Dragons do not speak when you are on the shore."

"Ah, that makes sense."

The more we talked with Shaw, the more excited we became. We were amazed at how well we seemed to understand each other, even with our frustration with words we didn't know. And we were learning more and we were learning quickly.

But soon we felt the lift push up on us, and then one of the walls slid aside, revealing a great big, strangely shaped burrow. Shaw called it a "hallway". We also didn't fully know the words "wall", "floor", and "ceiling, but they were easy words to learn.

As you likely know, the hallway was made in the same way with the same materials that the lift was made out of, all with flat surfaces and light coming from various places. And it was enormous. One of us is not much bigger than one of your heads, so the things that you create are much larger than we would ever need them to be. We have known this since the beginning of our own time, but the deeper we walk into your world, the more amazing it is to us.

Shaw spent some time instructing us as to how to use the lift, letting us practice with zem in it to help, so that we could be sure that we could use it on our own. Zey seemed happy that it worked. We felt more secure knowing that it did.

When Shaw then led us to the library, we followed more confidently.

The library was a large opening in the side of the hallway that expanded into a much larger "room", as Shaw called it. And it was full of things we did not recognize.

Shaw says that you have libraries all over your world, and that you all frequent them and are familiar with them. Should we describe what a library looks like when you already know? We would try to describe what it looked like to us, to our eyes, before we learned the words for what the things were. But nothing there looked like anything we had seen before. There is nothing in our world to compare it to. It was enormous and it was complicated and it was scary.

"We must be very far from the ocean," we said.

"We are about half a kilometer below the ocean," Shaw replied.

"What is a kilometer?" we asked.

—

Chapter 6: Pictures

The first thing that Shaw did upon showing us the library is introduce us to what you call "the holoterminal". Zey were interested to know if our eyesight worked enough like zeirs to even see what the holoterminal could show us. And we did our best to help figure out if we could.

We are not going to describe it. You know what it is like. Though, it is worth saying that to see the images on the holoterminal we had to stand upon its top surface. And when Shaw put us upon it, that meant we were as high above the floor as Shaw's chest.

We have described Shaw as small. We believe the average larger Dragon would find the top of the holoterminal to be at their waist.

Once we were placed upon it, Shaw grabbed a thing that zey called a stool and hopped up onto it, balancing on the space of their haunches between their legs and their tail. Sitting.

Zey pressed a few spots on the holoterminal, and something that looks a lot like a branch or a piece of choral appeared and began to hover and

rotate just above one of the dark spaces on the holoterminal. It startled us, and we retreated from it, but kept looking. This one then stepped forward and attempted to touch it with its tentacle. But the thing was not really there. It was like trying to touch the moon. It was always further away than it appeared to be.

"This is an image of the Sunspot, our world," Shaw said. Zey waved zeir hand through it, which created a very strange effect. As zeir hand moved, the image remained behind zeir hand until it suddenly was in front of it. "It is a hologram. It looks like an object, but it is just made of light. And look, I can change how it moves and what we can see by moving my fingers like this. I think you could do the same thing with your tentacles." And zey demonstrated, directing it how to rotate and grow and shrink with gestures with zeir hands and fingers. Then zey said, "you can also tell it what to do by talking to it. Like... Holoterminal! Display a model of the Sunspot Garden!"

We watched this from three angles, and from each angle it looked nearly the same. The image of what Shaw called the Sunspot was replaced by a small replica of what we see when we look up from our world, the shore. From our observations, we already know the shape of the world.

It is a cylinder, with the land and water and all of life lining the inside of it. The sun and the moon are created in the Forward Endcap, and travel through rings held in place by the Great Spokes, through the center of the world to the Aft Endcap, where they disappear. And we know that we are tiny, tiny beings in this massive world, but that as a whole we circle its entire circumference at the shoreline.

"Like that!" Shaw declared when this appeared before us. Then zey gestured with zeir fingers again, causing the image to expand until the edges of it disappeared.

It seemed that the holoterminal could only create an image above this black surface, and if any part of the image went outside of it, that part disappeared. And soon, at Shaw's direction we were looking at the stretch of our world, the shore, where we had first met Shaw. It was as if we were looking at it from above, or from across the world.

"Holoterminal!" Shaw commanded, pointing at a spot on the image. "Place an orange circle that is one kilometer in diameter, centered on where my finger is pointing."

From where we were looking, the circle that appeared did not appear where the tip of Shaw's finger was, but quite some distance from it. From each of our angles, it was a different distance, but it was on the same place on the land depicted by the image. Shaw had pointed to the tree under which we had met. From zeyr angle to the image, zeyr finger must have touched it, but since the hologram was made to look the same regardless of what angle you were viewing it from, it didn't look that way to us. We found this amazing.

"From one edge of that circle to the other, straight across, is a kilometer," Shaw said. "It is a measurement of distance. How do you measure distance?"

"Arm length, body length, and screech length," we replied.

"Screech length?" Shaw asked.

"The furthest distance that one of our screeches can be heard," we explained.

"Neat! So, you know what the Aft Endcap is?"

"Yes, that is where the sun and the moon are destroyed each day."

"Right!" Shaw said. "What we can see of the Aft Endap, when on the shore, is about two hundred and three kilometers across." Then zey directed the image to display the orange circle repeated across the surface of the Aft Endcap to demonstrate. Then zey pointed at it again, "See? The Sun Intake is about twenty kilometers across."

The image was very detailed, but the two hundred and three orange circles looked like just a line to us, and we said so. Shaw made the image expand so that we could see that the hole, the Sun Intake, at the center of the Aft Endcap, was indeed 20 circles across.

Then Shaw directed the holoterminal to show us where we were now, in the library. Zey called it a cross section. And what we saw was difficult to understand.

"What we're seeing," Shaw said, "is the world as if it has been cut in half, right through this library, from Endcap to Endcap. And we are zoomed in so that we can see where we met and where we are now, and how far that is. See? We are in the Lowerdecks, rooms, er... spaces below the ground

where people can live without harming the Garden."

"Oh," we said.

"And, look, if we zoom in to the library we are in right now, you can see us at the holoterminal!" And Shaw made the image grow until we could indeed see ourselves and Shaw there in the image, moving as we moved!

"How does this work?" we asked.

"I don't know," Shaw said. "I never understood it when my Tutor explained it."

We already knew what a Tutor was, as you are always talking to and about your Tutors, so we didn't ask.

"Holoterminal," Shaw commanded again. "Show us a construction nanite."

The holoterminal then displayed something that looked a lot like a reef ball with long spikes. It was black, and round, with many, many spikes of varying lengths, some of which were moving in demonstration of its behavior, either waving about or extending and contracting. We don't know if you've actually seen one, because they are very, very tiny, according to Shaw.

"This is what one looks like when it isn't really doing anything," Shaw explained. "It can be changed to look like different shapes, and told to do different things. And it can be used to make more like it. It is a little machine, and we call it a nanite. On the end of each spine are even smaller machines that it uses to manipulate molecules."

"What is a molecule?" we asked.

"Ah. Wow," Shaw sighed. "I wish we had a Tutor here to teach you."

"You are being our Tutor."

"I know, but I'm not very good at it. I don't have practice, and I don't know how to explain things in a simple way."

"We think we understand you," we said.

"Thank you, but I still think you should have a real Tutor," Shaw replied. "I don't want to try to explain what a molecule is right now. I don't think I can do it. Is that OK with you?"

"We can remember the word and hope to learn about it later, yes," we agreed.

"OK," Shaw nodded. "I think what you need to know is that the nanites are what make the ground cover up the door to the lift when it is closed. The cloud you saw that chased me away when we first met was made of nanites. And nanites are controlled by the Crew and any of the Children of the Sunspot that are not Monsters like me. I cannot control them. They are mostly controlled by the Crew, though. And they use them to protect you from people like me who might be careless and accidentally hurt you."

"Why?"

"Because you deserve to not be hurt by us. You are special to us, and we don't want to endanger your life."

"Ah, yes. We have seen that. Thank you." We turned from the holoterminal and gestured with our tentacles, "What is in the rest of the library?"

"Books!" declared Shaw.

"Oh, yes! Books! Word collectives!"

"Yes! Stay right there. I will bring one to you!" Shaw jumped off of *zeir* stool and bounded off into the library and got a book from a shelf and came back with it. Placing it carefully on top of the holoterminal and opening it up to show us pages, *zey* said, "This is a book. It is full of pages, and the pages have words and pictures on them. See? This is another kind of picture, like the holoterminal but flat and it can't move. And this is a word, it's like a picture. But a picture of sound, of a word."

We crowded around it and looked at what Shaw was pointing at, and we think we began to understand. Being real and something we could touch, it made more sense to us than the images from the holoterminal. The picture that Shaw had pointed at was an intricate set of markings and smudges on part of the page. Looking at it for a while, we could see it bore some resemblance to a bird, if the bird were viewed from one eye at one angle. And the words that Shaw pointed at looked like weird footprints placed so close together that they became one tangled mess.

"How does it work?" we asked.

And so Shaw demonstrated to us how to read a book. Zey showed us the beginning of it, and the end of it, and then pointed at the words that zey were reading in different places. It was a book about us! Shaw then explained that the book was one of a kind and had been made by a Monster like zemself. Ze also explained that many books are made identical to other books, printed, so that many people could read them at the same time. And also so that if one got destroyed there would be others like it. We understand this. We are like this. But the loss of one of us is still painful, and when we pointed that out to Shaw, zey said that even the loss of a copied book is painful to zem, too.

After thinking about this, and also seeing that some things in the book about us were wrong, we wanted to be able to make our own books. And we told Shaw this, and zey became very excited.

"You could tell everyone about yourselves!" zey exclaimed. "I can help you write a book! I could write it for you! You could tell me the words, and I would write them down!"

"We would like to learn how to write it ourselves," we said. "So that we could keep writing."

And Shaw agreed to help us learn.

And this is how it came to be that we are writing this book.

And here is how we did it.

First, Shaw took us to a food maker and showed us how to use that, because we were all hungry. And we made our plans while eating our food. The food maker was able to make food that we could eat, though it was not like dead food and nor was it like live food, and it was very strange. But it did not distract us from talking about how to write a book.

We decided that we would write two copies of the same book at the same time. We would tell Shaw what we wanted to write down, and discuss the best words to use. Then Shaw would write a sentence, and we would copy that sentence into another book.

We understood that this would be slow and take a long time. But Shaw was excited to help us with this, and we were eager to learn and to do it.

Also, although Shaw explained to us what letters were and how to read them, we did not ask zem to repeat these explanations. Instead, we decided that we learn best through imitation, as we have always done, and told Shaw to focus on simply giving us time to see what zey were doing and to copy it. Zey agreed that this made the most sense.

"But," we asked, "How do we tell the rest of us what we are doing? We will worry or think we are dead."

"Can one of you go back to carry a message?" Shaw asked.

"That is too dangerous," we replied. "One of us was already killed by a predator on our journey here."

"Oh," Shaw said. "I guess we could all go back to the shoreline and then come back here."

That thought also scared us. This conversation helped us to weigh the risks, and thinking about all of us going back to the shore and then coming back to work on the book presented risks we did not want to face, either. We felt it would delay our work, and we were worried that we the Collective would choose to not write the book. Also, there were other unknowns that might get in the way of completing our task.

We weighed that against what we thought the greater Collective would do once we decided our party was dead, which would be to rely on the work of the other parties that had been sent. We decided that we'd likely be cautious and wait. That would be OK.

We discussed this out loud for Shaw's benefit, and then turned to zem and said, "No, we think we will stay here and write our book. It will be OK. Thank you."

Zey nodded and said, "OK. I am good with that."

And then we started working on this book.

Shaw wrote with something zey called a pen. For us, zey found what zey called "a bottle of ink" for us to dip our tentacles in and draw words across the page. Zey thought it would be easier than trying to teach us how to use a pen. And zey said that it would make it more obvious that we had written it. We agreed.

"This ink is like cuttlesquid spittle," we observed.

"Yes, exactly," Shaw said. "We call cuttlesquid spittle 'ink'. But the Sunspot itself made this ink."

"We like it."

When we copied what Shaw had written, we found that the shape of the words were simple and easy for us to recreate using our tentacles. And the ink tasted bitter and familiar.

We had visions of leaving words written in the sand, to be washed away with the tide, communicating our thoughts persistently, but only for a time. There could be many uses for that.

—

Chapter 7: Getting Caught

Writing this book took many, many days.

Shaw helped us mark the days by turning the light in the Library on and off for us and also in the room across the hall where we ate and slept. We do not sleep like Shaw does. Shaw sleeps for two or three periods of time per day, usually during the night time. We tend to sleep for many shorter periods of time throughout the daylight, and remain awake all night. But darkness makes it hard to write, so we did our best to match our sleeping times to Shaw's.

After a while, Shaw told us we had become what zey called "cranky." Once we described our preferred sleeping habits, zey suggested that zey leave the light on in the library and we could sleep there while zey slept in the darkened room across the hall, and this improved things considerably. During our waking hours, we would take breaks in the room across the hall to eat in the darkness and help us stay awake.

We asked Shaw about how other Dragons sleep, and zey said that it can be very different for each of you. This made us feel even more confident in naming you "Dragons."

We also took breaks to listen to Shaw read us some of your books. This served to give us examples of your writing, to help us understand what you expect in a book. And it also taught us more about you, and we

appreciated it. This is also how we learned of the word "Dragon", which fits so well. You think you are not dragons, that dragons are something different than you, but to us you are Dragons.

We did not count any of these things, not days, food, nor books. We were too focused on learning to write and in telling our story. It is not a long story, but we hope it demonstrates how much we can learn, and tells you a little about how we see your world.

We were certain that our collective had written us off as dead, and we had resigned ourselves to correcting that mistake. Also, we looked forward to bringing the skill of writing back to the shoreline. And this motivated us to stay and finish what we set out to do.

We were in the midst of writing what Shaw decided should be "Chapter 4" when we were interrupted.

We had just dictated a sentence to Shaw about the death of our fourth party member when Shaw's ears twitched and zey straightened up and looked in the direction of the lift.

We had heard nothing.

"Hide," Shaw said. "Drop to the floor and put the terminal between you and the door."

"That will hurt us," we said, as quietly as we could. Our voices are not meant for quiet, though.

But Shaw helped us to the floor, then, and straightened up just in time to see what was coming, and we saw zeir face take what we have learned is a surprised or fearful expression. Eyes wide, ears back, jaw relaxed but closed, followed by a deep breath.

"This is a Monster library," Shaw said.

"I am aware," spoke the deepest voice we have ever heard. We could not imagine the creature that could have made it. It sounded most like distant thunder.

"Why are you here?" Shaw asked. "Have I done something wrong?"

"I bring you something that is missed," the voice said. "Keep up the good

work. I will be back when you are done.”

Deciding that the voice might not be a threat, this one extended its eyestalks past the edge of the holoterminal. We looked just in time to see the black cloud retreating back into the hallway, and to watch as our fourth member scuttled into view and chirped inquisitively.

When we rushed out to welcome them back and examine them, we found that their wounds had been healed with no scarring and no sign that they had been injured. It must have been over a month since that day, or even longer, but we were also able to confirm that it was indeed our fourth member that we had left for food in the woods.

“Has the Crew decided to begin protecting us from predators?” we asked Shaw.

“I don’t think that was Crew,” Shaw replied, but did not explain. Perhaps, someday someone will.

We also learned from our fourth member what had happened to it, since it had sacrificed itself to save our lives. But we grow weary of writing this book, and will leave that story for you to learn by coming to ask us about it.

We have anticipated the return of the dark cloud with the deepest voice we have ever heard, as it has promised to return when we finish this book. The return of our fourth member has improved our ability to write it, and sped up the work. We are grateful.

But, this is the last sentence we will write and it has not come for us yet.

the Breakfast

We all looked over at Phage and waited for it to explain itself.

After the first chapter of the book, we had agreed that we all needed sleep before we could continue reading it, but Thomas especially. So, we had gone to our own beds with the agreement to meet for breakfast and listen to Fredge read the rest of the book in the morning. It had seemed too important to wait any longer than that. Also, far too special and fun.

But, upon reading that last sentence, Fredge looked over at Phage with such an expression that we all apparently felt we needed to do the same. Each of our expressions was a little different, so it's clear we were thinking of different things, but to me, seeing that unity reminded me of the Collective talking about itself, and I felt a tingling in my spine at the thought.

Well, Akailea wasn't participating in the inquisitive looks. Sie was carefully keeping a blank face while sie sipped hir tea.

"What," said Phage, in its characteristically deep voice.

Anyway!

Phage did tell us the rest of the story of the Collective. At least, as much of it as it knew. Once it had gotten over its terrible smugness and kindly decided to relieve us of its tormenting.

Which, I mean, there's a point where being superior isn't fun anymore. And, while I've kind of decided that that is right away, Phage apparently enjoys playing with people's expectations too much. Fortunately, it usually tries to do so in a *kind* way. But I've started to find that it tests my patience occasionally, and I've complained to it about that. It's a conversation we're continuing to have as I get older. I think it's learning.

It has told me that because it is my mom, I have extra right to be critical of it and let it know when it is hurting me. And it listens. It just forgets what it has promised to do, sometimes. And its ways of communicating appear to be really old habits that are hard to break. We're working on it.

Anyway!

The reason that Phage had the book to give to Thomas in the first place is that the Collective had decided to gift it to Phage in return for its help in healing and protecting one of them. Phage, of course, had made sure that the Sunspot Council had had a chance to examine the book first, and put its existence on record.

Apparently the writing of *Hail Dragons!* took nearly half a year. Shaw and the Collective had seriously glossed over just how much work it had been. And the Chattering we had witnessed when we had visited the cuttlecrabs not long ago had corresponded with Shaw and the writing party returning to the greater part of the Collective. Phage had deliberately manipulated our own interest just in time to lead us there to witness it.

Looking back, I see that the timing of that was particularly tight. I wondered if it had returned to the Sunspot specifically to keep its promise to the Collective. But, then, it had returned with Bashiketa and Thomas as they had run from the Terra Supreme. Phage could have deliberately made that work out, still. But it did not explain or admit to anything of the sort.

As it had said, a number of people had been working to keep the fact that the Collective was reaching out a secret from most of the populace. Anyone

who was contacted by the Collective was met by either Phage or a member of the Crew who had been involved in the project, and asked to help keep it secret for a time, with the promise that they'd be allowed to keep talking to the Collective. This decision had been made after the Great Chattering. And the Great Chattering had been noticed by quite a lot of people, who had wondered about it, but "quite a lot" doesn't mean "most" and only Phage had determined its purpose.

The combination of the author of the book meeting Shaw and then triggering the Great Chattering had tipped Phage off to what was happening, and it had intervened with the Crew on behalf of the Collective.

Only a few Crew Members had been assigned to the cuttlecrabs, and it was easy to keep knowledge of the significance of these events to those members.

I asked why keep it secret.

Phage explained that even in the years leading up to my disastrous meltdown and the upheaval that lead to the creation of a new Bridge, it had felt a dangerous and growing tension in the Sunspot. It felt that it was not a good time for the Collective to become widely known. It had wanted to relieve that tension first.

The Crew had gone along with its direction, because it was Phage's job to manage that kind of stress, and they had learned not to question it anymore. Or, they had been told by Eh not to, and they respected Eh.

Which brought me to ask about Eh, because I hadn't seen them around the Bridge the last few times I'd been there. And a different person had been Captain each time.

Akailea reported that Eh apparently was taking a sabbatical from serving on the Bridge, forcing other Crew members to fill in for Ihns usual roles. This had been on Abacus' express recommendation, in fact. And as a result, it seemed that Crew members who had been staying away from the Council meetings were beginning to show up more frequently, and some were taking the role of Captain for a day or so. This made the ship politics a bit more volatile, but everyone agreed that it was probably for the best.

So, all of this colored the next few years of my life, and made my early adolescence a time of growth for everyone in some very profound ways.

Changes

It turned out that the Network was designed to simulate appropriate aging in the avatars of anyone who has ascended before they intended to. So, unless they explicitly revoked their consent to age, both Thomas and Aphlebia got to experience their Network bodies growing and maturing along with the rest of us. The nanites had collected enough biometric and genetic information to make this possible. Which meant that Thomas and I got to learn how much we were different.

By the time I was twelve years old, I had grown to my full height. And I'd grown slightly faster than Thomas for those two years, so he was shorter than me by a few centimeters. But he had definitely grown as well.

Mind you, I had also made some personal choices in my growth. Certain changes in my body had alarmed me, and I'd taken measures to suppress them. Typical Sunspot Children would do this through the use of their nanites. However, I was able to do so through direct conscious control of my body's systems. I simply altered the levels of certain hormones so that they had more or less of an effect on me.

Still, my body was not all that in danger of looking like a typical adult from the Terra Supreme. I am what they consider to be intersex, and sterile, and I was destined to have a mixed puberty to begin with. But there were still traits I'd begun developing that I didn't want.

There were, as a result, subtle differences between how I actually grew up, and how Phage had been predicting my growth with its own Avatar. Perhaps I'd been influenced by the shape it had chosen, but that didn't matter to me. I had avoided discomfort, and had been well informed about it.

It kept the appearance it had been predicting for my older self, because now it looked like a different person than me. Like it was actually my mom. Someone related to me, but not me. Not that many people on the Sunspot would know the significance of that, or even see us as very different.

Thomas commented on it, though.

Thomas had been educated enough in his own body on the Terra Supreme

to know some of what to expect, which was that he probably wouldn't see much of a metamorphosis until he was twelve or older. He expected to be much taller and hairier than me, and it would turn out that he was right. But that's getting ahead of this part of my story.

Aphlebia, on the other hand, had actually experienced most of their metamorphosis already, losing the tail they had been born with by the time they were six, and then growing up and filling out even more in the following years. Since their ascension, their avatar did continue to grow and change, but it was very subtle, and they seemed very OK with that.

At eleven years old, the Whorlies began to grow full sized antlers, similar to what Jenifer and Illyen had. And as a result they began to sleep on their stomach all the time. Their body remained relatively small, though.

And while the rest of us seemed to change in proportions as well as height, Candril just got bigger, maintaining the same proportions *ze* had gained by five years old. But *ze* looked like *ze* was not going to stop growing when I did. *Ze* made it clear *ze* didn't want to, in any case. *Ze* bragged about how big *ze* hoped *ze'd* get. At least twice the size of Thomas, however big *he* got, was *zyr* goal.

Of course, if *zyr* body wasn't already destined to do that naturally, *zyr* nanites and Sunspot medicine could probably make it happen.

"I could ride on your back!" Thomas exclaimed when he first heard about that.

"You can do that already!" Candril retorted. "Just make yourself small enough!"

So, then they'd both tried it out. And after capering around a park for an afternoon, with Thomas shouting and laughing from Candril's shoulders, and Candril tirelessly bounding around with glee, Thomas then spent the evening in an even smaller exobody, staring at wonder at everything that was now gigantic to him, such as one of Emala's favorite large apples.

When he was done, though, he said, "I don't need to be *that* small. Much."

At Phage's earlier suggestion, Thomas also tried out various shapes of avatar, including a bear. He didn't stay in each form for very long, though. He said they made him feel weird, like he was dreaming. But he kept doing it for fun every now and then, trying a different shape every time.

He never tried being what he called a girl, though.

Then, there was Bashiketa.

Bashiketa started to grow to be broad shouldered and began to walk on all fours more often, like Candril often did. Their fur also began to lose its softness, and shifted from mostly black and white to include more browns.

And then, one day, they came up to Phage and said, "You left a message for me, back when you defended me from the Hunter."

"Yes," Phage said.

"But those weren't normal words," Bashiketa said. "How did I understand it?"

"I was there. I helped. I translated it for you."

"Weird."

Phage shrugged, "it seemed like the right thing to do at the time."

"How do you say that word, the one you called me?" Bashiketa asked.

"Do you mean 'afija' o?"

"Ah. It doesn't sound as nice as I thought," Bashiketa seemed disappointed. The word had been written in Fenekere script in a film of nanites on Bashiketa's table when they had come to after blacking out. I had also seen the words before using the nanites to make an exobody I could use to talk to Bashiketa with.

"Why do you ask?" Phage inquired.

"I feel like I need a different name, and I thought that one would be good. I liked its meaning," Bashiketa replied. "I mean, are you an Outsider? Because my name means 'an act of an Outsider,' I guess." Phage's message had translated to, "You are a work of Phage." I thought I could see what Bashiketa was looking for here.

"I don't really know what an Outsider is," said Phage. "There are so many possible definitions. Which one do you mean?"

"Oh. Well, I was thinking, you know. Not a human?"

"Ah. I'm human right now, but I wasn't before, I don't think," Phage replied.

"So, my name could still fit," Bashiketa said, glumly.

Abacus, who had been listening in, suggested, "There are some Fenekere derivatives of 'efeje'e that mean something close to 'afija'o that might sound better to you. Perhaps, such as 'afije'a? Same vowels as your current name, but Phage's root."

Bashiketa thought about it and said, "Maybe."

"Try 'afeje'a," Phage suggested. "It means 'a true act of Phage'."

"Really?" Bashiketa looked up. "Am I really that?"

"I wouldn't suggest it if it were otherwise," Phage stated solemnly.

The only people in the room who weren't flabbergasted at that whole exchange were Phage, Abacus, and me.

Abacus and I knew how Phage thinks. Abacus because it's been writing about Phage for quite some time, and has talked to it a lot. And me, because I'm its child.

Maybe there was something special about Bashiketa that Phage was referring to still, but it could have said that about anybody and stayed true to its sense of self and place in the universe. If Phage was Entropy Itself, or Entropic Decay, or some mechanism of it, a law of physics personified somehow, then *everything* was an act of Phage. But, it didn't offer that name to anyone but 'afeje'a, and 'afeje'a accepted it.

I did ask Phage about it later and it said, "I didn't do it consciously, and I still don't know exactly what happened, but I know that it is my fault that 'afeje'a does not have your genetics. And I could see clearly that they needed a new name that was their choice and that was more meaningful to them. It was the right thing to do."

I smiled and hugged it.

"Aren't you going to say something like, 'you're learning'?" Phage asked.

"Why would I?" I frowned at it.

"You once told me that I didn't know people as well as you do," It said.

"I did?" I asked.

"Yes."

I smirked and said, "Oh, well. I'm not Abacus, and I'm not you. I don't do that sort of thing."

—

The weather was overcast with a misty drizzle that was actually very pleasant, and the park we went to was so crowded and loud.

It had been a while since we'd gone to the beach. It was really popular now. But we'd decided to make it a full family outing, to join the throngs of people conversing with the Collective.

People still were strongly discouraged from entering the wilderness areas of the shoreline, and we had generations of honoring that worked into all of us. So, the nearest marine park was overloaded with people. But the fauna-deterrents that were specifically designed for the cuttlecrabs had been deactivated. And protocols for interactions had been released to everyone, sent to Tutors, sent to everyone with a neuroterminal or a tablet, to Crew, and printed at all of the libraries. The default screens of the holoterminals at the entrances to the parks displayed it.

It read:

The Collective (known colloquially as the cuttlecrabs) is still considered fauna, and retain all of the rights of fauna.

However, they are now not to be discouraged from freely exploring human populated areas of the Sunspot. Please afford them the same courtesies you would extend to any other person, on top of respecting their status as fauna.

As a result, Children, Tutors, and Crew may find these guidelines useful:

- 1. Do not initiate engagement. Let the Collective decide when to visit and interact with you.**

2. You may signal that you are interested in interaction by visiting any seaside park. There is a good chance you will be met there by a member of the Collective, or several. Further signals of interest are being discussed and have not been settled on yet.

3. You do not have to open your quarters' door to the Collective or interact should they try to engage with you. You are not obliged to give them your consent. However, it is polite to let them know verbally that you do not consent, if you are capable of doing so. The Collective has been informed that they should respect our privacy as well.

4. If any number of members of the Collective do violate your consent or attempt to hinder your autonomy, please contact the Sunspot Council immediately, and we will intercede on your behalf. Conversely, if you violate the Collective's consent or attempt to hinder their autonomy within the Rights of the Sunspot as laid out by Council Law, you can expect to be visited by us as well.

5. Within the considerations outlined above, you are encouraged to interact with them however you see fit, and please, do enjoy our newfound contact and get to know each other.

Thank you,

The Council of the Sunspot

Apparently, these kinds of notices had begun with the Nanite Innovation, the first one being the introduction of the Council of the Sunspot to the populace and their formal apology for their seclusion. That had been an incredibly important document and very carefully written and distributed. If you are part of the human populace of the Sunspot, you have almost certainly read it, or had it read to you. Following notices have been slow to come, but apparently released at a steady pace. Once every couple of years. Some of them have been for big things, others for very small things.

"Council Law" really just refers to the Council's interpretations and recommendations for how to negotiate the Rights of the Sunspot,

autonomy and consent, wherever violations happen or ethical dilemmas arise. And sanctions.

Anyway, that's getting into some politics that you'll need to know about to understand some things later, but on that day we all just walked past the holoterminals displaying that notice, which we'd all already read. And only a small few of us were reminded of other political concerns we might have had on our minds.

As we walked up the ramp into the evening sundearth casting everything in reds and golds, we saw through the shoulders of the people in front of us that the boardwalk of the park was lined with artisans who'd set up booths and makeshift studio spaces. And a fair number of them were sculptures, illustrators, and painters, all sharing their materials with anybody else who wanted to make something, including any cuttlecrabs who happened to walk up with feeding arms outstretched.

But the crab buggies were the best thing.

This had all been going on for over a year now, and we knew about a lot of this, but seeing the newest model of crab buggy go by with four cuttlecrabs piloting it was just too wonderful.

"Howdy!" one of them said to me, waving a tentacle, as they passed.

"Hi!" I chirped, waving back.

It kept waving as the buggy wove between people on its way down the ramp. The machine came up to about my hip. I was too busy wondering if it had remembered me from somewhere to measure the buggy's dimensions. But it was designed to be tall enough for the average person to see, but bottom heavy, with its motors and batteries in the base of it. The buggy's cupola, where the cuttlecrabs controlled the thing, was ringed with footholds to make climbing up and down it easier. The back was slanted more than the front, to provide a safe slide a cuttle crab could use to quickly escape the vehicle, if necessary. The main controls were simple levers that up to four crabs could use, but it also had a network tablet and holoterminal built into the top of it as well, and could be put on automatic pilot, among other things.

Anyone could instruct a maker to build one of these buggies, including a cuttlecrab.

Because Phage was my mother, and the Collective knew that Thomas had been gifted the original copy of their book, we'd been visited by a crab buggy with four Collective members almost as soon as protocols for public interaction had been drafted.

Maybe the one who had waved at me had been one of those who'd visited. I didn't get a very good look at it because I was somewhat overwhelmed by the crowd and distracted, but my subconscious was telling me it was.

We'd come down to this park for so many reasons. In large part to see the Collective interacting with the rest of the populace in person. But also as part of our continuing effort to acclimate Thomas to the culture of the Sunspot. It had been two years, but like 'afeje'a, Aphlebia, and I, Thomas was easily overwhelmed, tended to dissociate when around a lot of people, and was comforted by familiarity. And we were all four of us working on techniques to accommodate our impairments and find more things to be familiar with. We'd been slowly incorporating larger and larger crowds into our family field trips.

Thomas and Aphlebia had an advantage in that they could each retreat to their own Netspaces when approaching overload. Dropping a nanite exobody on the ground was a mild inconvenience to everyone around it, but understandable, and it would clean itself up and could be easily retrieved or recreated again.

'afeje'a and I also could use our Netspaces like that, but we had the disadvantage of needing to find a place to safely park our vessels. Which we'd been living with our whole lives so far, and we were privileged to have them still, so it wasn't that big of a deal. And we had our signals with the rest of our family to get help doing that if we needed.

Candril was already bounding and dodging ahead of us, yapping with zir Tutor, Vine, about what kind of snack ze could find at the park today.

The Whorlies turned to Emala and said, "We'd like to split up and explore. We want to try something! Firas will stay here with our vessel, OK?"

"Oh, Firas can explore too," Emala said. "I don't mind."

"I don't want to," Firas said.

Phage and Emala were walking side by side, talking about caretaking and families, and I know I heard them talking a bit about the roles of Tutors

earlier as well. Phage had reminded Emala that it wasn't a Tutor, and Emala had said that xe knew that already, and had known that for over twelve years now.

It looked like Firas was listening in, intently.

Fredge and Laal were off somewhere entirely else, on a date. It was an anniversary of theirs of some sort. They didn't talk much about it in specifics, but they had talked a lot about it obliquely for the past month. Loudly and with lots of subtext that none of the rest of us were party to.

That left 'afeje'a, Thomas, Aphlebia, and I to decide what we wanted to do, and whether or not we wanted to do it together. The Fibrillators, as Aphlebia had named us. Also, we were the Tutorless.

Aphlebia, who had still not taken the Crew Vow, gave the other three of us A Look, and then led the way to a less crowded corner of the park.

It was further away from the water, and somewhat shrouded by short trees and a couple of bushes, and there was a table there with a couple benches that nobody was sitting on. It seemed that everyone else had assumed they wouldn't be approached by cuttlecrabs if they remained in that spot, and no one else was currently in need of quiet. So, it was actually perfect for us.

We could sit there and talk, and hear each other, and watch people pretty clearly from our seats.

But Aphlebia climbed up on the table and stood on it, looking around expectantly.

So, I watched Thomas glance at 'afeje'a and then run up to the table and leap up onto it in one fluid motion as well, to stand right next to Aphlebia. Thomas had really gotten to know his nanites well, and was constantly pushing them to exceed the performance his old body would have had, if it had lived as long as he did.

'afeje'a huffed and chortled at me, then ambled over to join the two of them.

But I guess I just decided to sit right on the ground and watch. I suddenly didn't need to be there with my siblings to be *with* them, and I felt like having a moment to myself and to see what Aphlebia was up to from a bit of a distance.

It was pretty clear to the rest of us that Aphlebia's plan was to attract members of the Collective. They figured that the Collective was very observant and aware of everything in the park, and that they'd see a small group of people standing on a table in a secluded section of the park, looking around expectantly, as a very clear invitation to talk.

"You are Ní'a?" a voice said behind me.

I turned around to see a single cuttlecrab about a meter away from me. I understood that was unusual. They like to have a minimum of four per party, to feel calm and think more clearly.

"You are easy to recognize," it said, turning a light blue.

I heard Thomas say, "Hi!" behind me. The other three cuttlecrabs had apparently approached my siblings. I glanced over my shoulder to confirm it, but then turned back to smile at my counterpart. I could see, just looking at it, that it was a cuttlecrab I had not seen before.

"Neat!" I said. "Did you know that I can tell you apart from each other, too?"

"It doesn't matter to us if you can," it replied. "But, how do you do it?"

"My sibling, 'afeje'a, has talked about how the fungus on your shells creates unique markings, so a lot of people would use that," I said. "But I just know. You each have your own number, and I see it when I look at you. Actually, it's a bunch of numbers, but that's really the same thing as one number." I shrugged.

"Neat!" the cuttlecrab said, almost a perfect imitation of my own exclamation.

"Why are you separate from your party?" I asked.

"Because you are separate from yours," it replied.

It seemed to be waiting for me to ask it questions, so I kept thinking of questions to ask it. Which took a moment, but I then asked, "What is this like for you?"

"What is what like?" it shot back quickly.

"Talking to us Dragons for the past year and a half?"

It bobbed its eyestalks and washed its tentacles, which I think was a gesture that meant it was thinking about the question. They normally talk with their tentacles more than with their vocal sacks, so this felt intuitive to me. Then it said, "It is a conversation that never stops. The Collective has become constant, always awake, always thinking. Because Dragons do not stop, we do not stop. You are also part of the Collective now."

I wanted to think about that last statement before I responded to it. I think, of all the people on the Sunspot, I might have been one of two that really understood what it was saying there, but I wasn't sure. "You must be asked that a lot," I observed.

"Yes."

"Why did you have to think about it then?" I asked, keeping my voice light and gentle. I think I got this habit of questioning from Emala, to be honest. I admired xem and had always felt like I should emulate xem, and I felt really good when I thought I was doing a good job of it. I don't think that the Collective has the same emotional reactions to human - or rather - Dragon social subtext that we do, though. I *think* they respond to all questions from us at face value. Which is extremely refreshing to me.

"We wanted to give you a more complete answer," it said in answer to me.

"Oh," I said. "Me specifically?"

"Yes," it said.

"Why?"

"You are the Phage's child. We want to be in deeper trust with you."

"Oh!" I flapped my hands in happy surprise. Then asked, "OK, so, what did you mean 'You are also part of the Collective now'?"

"Dragons are always talking to us. You, meaning 'you Dragons', think with us, as part of the Collective. You are chaotic and strange, but you are also whole."

That's what I had thought, "Like we are our own Collective?"

"Yes," it responded.

"Neat!"

"Yes."

"Ok, but, so... OK. You said that it doesn't matter to you if I can tell you apart."

"Yes."

"But I think it matters to some of you," I pointed out. "One of you that had seen me before made a point of waving at me earlier!"

There was that bobbing of eyestalks and washing of tentacles again, "Yes. Yes, that happens. Yes."

"Does that worry you?" I asked.

"Maybe," it said. "We don't know if our worry is the same as your worry."

"Oh, hmm," I said. "Is it, like, new? Like, has it been happening more often lately?"

"No," it said. "It... has always been a thing."

I nodded, and then said, "They are your Fibrillators." I then heard 'afeje'a exclaim something loudly behind me, but they sounded cheerful, so I didn't pay it any attention.

"Our Fibrillators?" my cuttlecrab asked.

"Sorry, my sibling calls the four of us 'the Fibrillators'," I explained. "We are more different from the rest of the Dragons, even more different from each other than any other Dragon is. We're.... the Dragons of Dragons. And it is because we experience something my mom, Phage, calls 'developmental fibrillation'. We're different. Chaotic. And we make chaos where we go. Though, now that I think about it, Candril does too..."

"Some of that made sense," the cuttlecrab said.

And that's when I realized something. During this whole conversation, the cuttlecrab had been gesturing and flashing and dancing just like it would

have if talking to the rest of its collective. They all tend to do that when talking to anybody. They can't help it. But I hadn't noticed right away that it was using fewer and fewer vocal words.

I have written this whole conversation as if it was all vocalized, but it wasn't. And when the cuttlecrab had said "Some of that made sense," it prompted me to think about what I'd just explained, to see if I could put it into better words, and that's when I realized I hadn't said more than five actual words vocally. I had been gesturing with my hands as if they were a pair of cuttlecrab tentacles, and I had subconsciously called up a cloud of nanites and configured them to flash colored light near my belly in imitation of the Collectives typical form of speech.

I was suddenly speechless. Which was unfortunate, because I felt I should say my whole explanation out loud, all in vocal words, because maybe I'd screwed up the gestures or color flashes or something. But I was also trying to figure out how I'd learned how to do all that. And more importantly, how I'd programmed the nanites to work for me in that way without realizing it.

"We have a question," the cuttlecrab said.

I just nodded, still agog at my own realization.

"When will we get to join the Network?"

I pulled my head back, blinked a couple of times, and found myself washing my hands. Then I put my hands onto the moss that I was sitting on and pressed down, and concentrated on saying things entirely with words, out loud, "I don't know. I am not part of the Council. I am just a child, and I am not told things like that. I don't help make that kind of decision. I'm sorry."

"But you do help make that kind of decision," it said.

"What?"

"You do. The Collective of Cuttlecrabs and Dragons has come to the conclusion that you should be asked this question. We do not expect the answer to come from you, however," it explained. "But, by asking you the question, we think an answer may come faster than if we don't ask you."

"But, I don't know how I could help," I responded.

"We do not, either."

"Then why did you think asking me would be a good idea?"

"Intuition. The suggestion keeps presenting itself, with no explanation, and won't stop. We have been waiting for you to present yourself."

I suddenly didn't like being special. In fact, I started to feel panicky. I didn't exactly put together why, but I felt like the Sunspot was falling on me.

"I think," I said, standing up and shaking my hands in a very distressed way. "I need to go."

"That is OK," the Collective said, and watched me turn and walk right out of the park into the nearby wilderness.

I sent some quick signals to my family over the Network that meant, "I need some alone time, I'll be reachable in an emergency and I'll signal when I'm OK."

And then I started venting little bursts of chaos out the fusion cone of the Sunspot.

Abacus

Twelve year old me was probably one of the only people aboard the Sunspot who could have a meltdown on Wilderness land and leave it almost as if I'd never touched it. I did do damage. I was there. I could not prevent myself from having some impact. But it was less damage than your average Monster, who are allowed to walk in the Wilderness without comment. Anyone can go walking in the Wilderness, it's just rude and frowned upon and you usually get a reminder that you shouldn't do it, if you're not a Monster.

If you do a significant amount of damage in the Wilderness, however, you might get sanctioned until you can show that you won't do it again. And the nanites will automatically do their best to repair your damages. The idea is that we do not put undo pressure upon the life in the Wilderness to adapt to our presence. And also, to keep humanity from simply overwhelming it with our numbers. Because there is a certain point where we could do damage faster than the nanites might repair it. Especially if flora and fauna start dying from our presence.

But a twelve year old me, walking through the seaside woods near a city park, hands on my head and elbows drawn in, shunting every urge to thrash and lash out instead through the drive of the Sunspot, was not going to be much of a concern. Also, the Crew was afraid of me.

The records will show that they had no need to fear me, but I know they did. I should have gotten a reminder, a personal notice, but I didn't.

Well, also, the big meltdown I'd had in Agaricales two years earlier had endangered the ship. I don't think I can ever take that back in the minds of the people who witnessed it, no matter how often I prove myself afterward.

I was aware I was making a transgression, but that was part of what I needed, I think. To sense that I was doing something, however minimal, that wasn't beneficial to the wellbeing of the Sunspot. Only it was beneficial, because I was taking care of myself instead of actually lashing out. Part of conscious emotional regulation is that you kind of have to trick yourself. You sort of step aside from your raging self and make decisions for the better while allowing some slack for emotional satisfaction, without letting that part of you that's hurting notice enough to care. It felt like

following my intuition and whims, but making quick little decisions to hold back, or to guide my energy in the right direction, and then forgetting why I did that.

I started causing what I knew were visible flares and warps of energy in the exhaust of the ship, only no one was looking. Flash, flare, floosh, woosh! Nothing to significantly alter the efficiency of the thrust, but definitely spectacular and weird.

OK, someone *would* see it, in a little over two hundred years. But I wasn't thinking of them. If you're them, and you were wondering, this is what those flares were about. I was venting my frustrations.

Well, it was a full blown panic attack, and it wasn't going away, though.

I felt like I needed to figure out why I was having it and fix the problem, but I couldn't get myself to think about it. Every time I tried to return to the first thought I'd had when it started, I felt driven away from my memory of it with a resounding "No!" from my whole being.

And then, I was panicking about *that*.

And I kept walking. The walking was helping.

I kept my eyes clamped shut and navigated with my Phage-senses, which just felt natural since I was also messing with the plasma trail of the Sunspot at the same time.

I was becoming aware that I needed help, and I knew that my mom would be the best bet for that, but for some reason thinking of it made things worse.

Kind of like how the Collective just kept thinking of me but being unable to explain why, my own psyche settled on one person as being the most comforting in the moment, the best fit. Abacus.

I resisted contacting it for several iterations of my panic cycle.

But even though it was probably very busy, I was in *need*. And I felt like, for whatever reason, that if it could be there for me I might just stop panicking.

In retrospect, it was pretty clear what was happening to me and why I felt I

needed Abacus. Let's just say for now that Abacus was the closest person to me I knew who was also one of the biggest dissenters on the Sunspot. It was nearly family to me already, but crucially not actually family. And if there was anything that the Crew seemed to take for granted as The Way To Do Things, Abacus seemed to be against it. It did pick its battles, but it had started to find critical words for just about everything Crew related. And though I wasn't really feeling enmity toward the Crew myself at the time, I can look back now and see how that attitude related to what I was struggling with.

So, eventually, I pinged it with the simplest message, "Abacus?"

After a couple of steps I got a reply, "Yes?"

"Help?" I sent back.

Two more steps and then it was already a Network projection right beside me, walking through the woods, a little whiff of nanites floating where the vision indicated its head was.

It could see what was happening just by looking at me, and seemed to know what to do. It just matched my pace and quietly made its presence as clearly known to me as possible without saying anything or touching me or making any other movements. Just walking.

It even walked right through a bush, so I started choosing my path so that it didn't have to do that to keep up. And after a bit I did start to feel some relief. I was able to open my eyes and drop my arms, but I kept sputtering the plasma trail of the Sunspot.

"I don't know what's wrong with me," I said. "I'm panicking and can't stop."

Two more steps, then it said, "Mmm." And two more steps and it asked, "Can you tell me what was happening when it started?"

My panic flared and I shook my head. I realized I was actually terrified of something.

Two more steps, "Are you having any namable worries? Even if they don't seem like what you're actually worried about?"

Again, I shook my head. I knew my thoughts weren't empty and silent, but

I literally couldn't remember what they were seconds after having them. And I certainly couldn't speak them. It felt worse to name it.

Again a couple more steps, which was nice, before it asked, "May I check the ship's records of where you were and review the transcripts? I won't tell anyone what happened and maybe I can reassure you or something like that."

I clenched my teeth and grimaced for four steps, then squeezed my eyes shut and nodded. Its suggestion didn't feel good or safe, but it was better than me trying to explain it, and I needed to do something.

It didn't go anywhere and just kept walking by my side casually, appearing to look out through the trees over at the bay we were next to, and swishing its tail back and forth lazily as it strolled with me. It even clasped its hands behind its back as it did this, and frowned amiably as it concentrated on the ship's records it was reviewing, the only indication that it was doing so. Wow, did it seem to know just how to put me at ease. Like, genuinely, truly at ease.

"Ah, ok," it said softly after a while. Thirty four steps. It probably hadn't counted them, but I had. It had definitely thought about what it saw for a while, though. "That makes sense, and your reaction is understandable, considering what you've been through, and I could explain it if you like. But what I think you need to hear is that I think I can shoulder this one for you. In fact, the fact that you've just had this reaction here might even help with that, but only if you want. How does that sound?"

I'd actually tensed up a bit more while it had been talking. Certain phrases it had used seemed to stress me out. But when it was done talking I had enough faculty to start doing my grounding exercises.

I looked up at it to see its friendly draconic, closed mouthed smile, and the glint in its amphibian eyes. Just above its head, but below its lure, I had a view through the trees to a patch of sky where a bird was flying. I counted five things I could see in that glimpse and named them in my head. I could hear the bird crying, my feet crunching in the duff of the woods, the lightest sound of the gentle precipitation settling on the leaves, and the crowd in the park, now so far away, still echoing faintly through the tree trunks, people laughing and calling to each other. I could feel my clothes draping my body and wrinkling and shifting as I walked, and I could feel the moisture of the air as it hit my face while I moved through it, and I

could feel my heart slowing. I took a deep breath and smelled over a million things all bundled into the soft, comforting rot of the woods, and I could have counted every detail, but then I lifted my palm to my nose and sniffed my own skin to have something distinctly different to count. Then I licked my finger, to taste the sweat and oil of my skin.

Then I took a deep breath and let out a long sigh and said, "OK, I think."

"Is that good enough?" the old Studentless Tutor asked.

"I don't think so," I replied, shaking my head as I watched where I stepped. I had stopped sputtering the plasma, though. But I wanted to talk.

"I've made time, want to talk?"

"Yeah. But, I think I want to talk about things I'm not worried about right now," I said.

"That makes sense. That's a good idea. What kind of things?"

"Well. What are you doing today?"

"Oh. Um. The kinds of things you've been worried about, from the looks of it," Abacus said.

"Oh."

"Oh, hey. Actually. You know how you've said you find that counting things and the properties of things makes you feel better?"

"Yeah?"

"How many nanites am I controlling right now?"

I looked up at it. I was now the same height as Phage, but Abacus was still taller than either of us, and it was standing on its hind feet so I had to look up.. "Three thousand and seventy-nine," I said.

"Did that work?" It asked.

I stuck my tongue out at it.

"You picked that up from Aphlebia," it pointed out.

"I did!" I replied.

"You had a PTSD attack," it said gently. "You were triggered, you know. That's all that was."

I frowned, "but I don't remember being hurt by... by..."

"Don't bother saying it," Abacus said. "I know what you're talking about."

I nodded.

"Trauma is weird sometimes. It's squidgy and eats things. It latches onto new stuff and makes it hurt you. Because when you experience a lot of it, it trains your brain to be hypersensitive to other things, especially when you've been triggered. So you can develop new triggers over time, even as you're working on healing from it." Abacus grimaced at me, and said, "It's OK, though. It's expected. And if you just keep doing what you've been doing, what we've been teaching you, but with the new triggers, you'll be fine. It just really sucks that you have to."

"Oh," I said. "I hate that."

"I know," Abacus said. "I hate it, too. But, I think that in this case, this trigger is directly related to your experiences, because you've actually talked about it a bit when I was interviewing you for my book. I could explain that for you now, but I think you'll figure it out when you've had time to feel safe enough to think about it. Is it OK for me to say things like that?"

I thought about it for five steps and then nodded, "yeah. I think so." What it was saying was useful to me. It felt good to hear it, like it was confirming something. And later I did figure it out, like it said. It had to do with that thing where I was taking on responsibilities that I saw around me, especially during that time when Phage wasn't on the Sunspot. I'd really pushed myself too far too many times and had too many close calls with not enough real reassurances afterward. But at the time we were having this conversation, I just felt myself feeling more stable and really curious about a few things. I was OK that it had sort of ambushed me with that. It had been gentle about it, and I think it needed to do that to help. But I needed to talk about something serious with my conspiratorial friend.

"I did something really weird before I got triggered," I said. "Did you go back far enough to see that?"

"No," Abacus shook its head.

"Did you know that nanites can emit different colored light?" I asked.

"Really?" it frowned. Then it looked slightly upward as it was checking something on the Network and then said, "No, they can't. Not yet. Like, they can be configured to do a lot of amazing things, but that's not something they've been designed to do yet. Like, I don't know if it's physically hard to do? It shouldn't be. Or if no one has thought of doing it. But between using Network projections for most people, and the fact that the nanites themselves can be used for a variety of sensors that cut through the dark, maybe there hasn't been much call for it."

"Well, I used them for making light," I said, eyes wide. "But that's not really the weird thing."

"Oh?"

"I was using them to talk like a cuttlecrab, with flashing colors, and using my hands to gesture like their tentacles, and I didn't even realize I was doing it!"

"You were mimicking the cuttlecrabs?"

"Yeah! Like, automatically!"

"And they understood what you were saying?"

"Some of it? Yeah. But not all of it. I think I garbled it a bit. But it had stopped using words out loud, much, and I was still understanding it just fine!"

"That's amazing!"

"I know," I said, and let us walk on for a while before asking another question. "Do you ever miss working on your book?"

It nodded a few times and said, "Yeah. Yeah I definitely do. In fact, I uh... I was reviewing it the other day and I realized just how badly I'd messed up a lot of the numbers. I'm working on an addendum to clear that all up. It's kind of embarrassing."

"Why?" I asked.

"Well, you know how you have your PTSD triggers about, well, things, and they're kinda changing for you?"

"Yeah?"

"So do I, and apparently the numbers of things is one of them. I think you could tell me some numbers and it wouldn't bother me at all. But when I try to look them up or try to recall them, my mind just sort of slides out from under me. Especially lengths of time and numbers of people."

"What do you mean?"

"Well, you know how Akailea corrected me way back when you were going to do your spacewalk and I was trying to tell you my age? That sort of thing. It really rattled me back then, so much so that I didn't really look into it until just recently. But then I also noticed I didn't really like contemplating the number of people living on the Sunspot, and when I went looking for it with the Auditor and then verifying some things with the Council records, I found that other Crew members also don't like working with those numbers. It's really weird!"

"What's wrong with the numbers?"

"Well, my age is just kinda scary, really. I've been alive way longer than a human seems to be made to be alive. I mean, for my definition of alive, I guess. But the population numbers actually don't add up! The Auditor is even missing something!"

"Wow!"

It glanced at me and scrunched up its lips and didn't talk for a bit after that.

"What?" I asked.

"Mmm," Abacus grumbled, then asked, "Can Phage do your numbers thing?"

"Maybe?" I said. "It's never talked about it. I kinda don't think so. Like, it seems to talk about the same things but in a more, not numbery sort of way. Like, it can see what I see, but it maybe doesn't get numbers."

"Well shit," Abacus said. "I need numbers. Can you look at the Sunspot

and tell me how many Crew there are right now?"

"Oh, yeah! No problem!" I bragged. Then looked and said, "Not counting Aphlebia and Thomas, there are fifty-three billion, seven million, six hundred thirty-three thousand, and seventy four Crew right now."

Abacus nodded, "Same number the Auditor gave me. Same exact number, yeah." It made a sort of cringy, self-conscious grin. The kind where it's more like you're snarling at yourself, like you're discouraging yourself from making the next step in something, and then it asked, hesitantly, "Can you tell me how many people have lived on the Sunspot ever?"

That was trickier, but I got it. "Not counting Tutors, I assume?" I asked, because I could see right where it was going when I saw that number.

"Yeah, no. No Tutors."

"Nine hundred seventy-eight billion, eighty seven million, six hundred three thousand, two hundred and seventy-seven," I reported. "That's including the Senior Crew."

"Welp," it gulped. "Thank you."

"What's happening?" I asked.

"I don't actually know," it said. "But I'm gonna find out."

"I want to help," I found myself saying, kicking myself for taking on another project.

Abacus stopped walking, turned to me, but looked right down at the ground and sighed really big. "No," it said, "You really shouldn't. I mean you've already helped a lot just by giving me those numbers. But that's all I wanted, and I'm good at doing these investigation things so I'm OK. But if you try to help, it's just going to make your triggers worse. It's too related to your trauma."

"But Abacus," I said. "You and Akailea said I have to face my fears in a safe way, and reassure myself that I'm safe in order to start to get better over them, right? And this is safe, isn't it?"

"Not necessarily," it wagged its finger. "Being triggered is a way of being hurt itself. And also, your emotional dysregulation and systemic overload

even without your PTSD is a sensitivity that can get you hurt by taking on too much. Right?"

"Solving the puzzle will make me feel better, Abacus," I made my eyes really big and set my mouth as small and seriously as I could. Then I emphasized my last word, "Endorphins."

"I am categorically and emphatically and genuinely and very seriously recommending against this," it said, in low and guilelessly honest tones. It was pleading.

"Who have you asked about where the Crew are going, Abacus?" I asked. "Because that's so many people missing!"

"I am revoking my consent for your help in this. I am not going to cooperate with you to get the answer to these numbers," it said sternly. It looked genuinely pained, too. Like it was struggling to decide what words to use to dissuade me. It didn't want to insult me. It didn't want to encourage me. And it didn't want to prod my stubbornness about my curiosity any more than it had.

"Then I guess I won't tell you the answer when I find it," I said. "But, I will if you ask."

Abacus sighed again.

"You know who probably has the answer? Or can probably just get it out of thin air like I can do numbers?" I asked.

Abacus tightened its lips and said nothing.

"Benejede!" I said.

It slapped its thighs in resignation, and shook its head.

"I'm feeling smug, like Phage," I declared. "It's a *good* feeling!"

"I should not have talked to you about this," Abacus said.

"But I feel better, now," I retorted. "Thank you!"

I started walking back toward the park where my family was. And I did feel a lot better. Now that I had a mission that I had chosen, instead of one

that had been sort of shoved in my direction, I felt like I had control. Which in turn helped me to feel more safe. I felt like I could face the Collective and tell them honestly that someone was indeed working on an answer for them.

Abacus kept walking with me. Eventually, it said, "I feel like I'm condoning your actions when I say this, but I'd be irresponsible not to. I want that to be clear. I want you to know that I'm continuing to request that you drop this project and let me and others handle it, OK? But you should have support, and I'll support you."

I looked up at it again and twisted my mouth to the side while I tried to figure out how I felt about that. My immediate impulse was to tell it that I didn't need its help. And, I thought I really didn't. It had just told me the thing I really needed to know to control my PTSD.

Actually, Abacus and Akailea had told me before, but I hadn't really internalized what they were saying at the time. But this time it just sort of clicked. Probably because of everything else I was doing at the time. And, also because playing with the plasma jet of the Sunspot reminded me of how I'd been manipulating my body during my metamorphosis, and even how I'd done so way back during my tenth year birthday party while flying. If I treated my body like another system I was in charge of, I could head the PTSD off at the pass, soothe it consciously before it even started. I had this advantage that no one else had. I could step outside of myself and then soothe my body from a relatively dispassionate place. I was still affected by emotions in that state, but it wasn't the same. I'd even practiced on myself already in the past, and on Thomas and 'afeje'a, I remembered then. And all I needed to do was remember that I could do it.

"Thank you," I said, realizing that that needed to be stated first. Then I looked forward toward the park, which was still far away through the trees. I'd walked quite far! And I told it, "I'm really not like other children. I can do things they can't."

"Mmm," Abacus acknowledged. "But you're still only twelve years old. There's a lot of experience you don't have that, if you did, could help you avoid getting hurt."

I genuinely considered that. It was right, I knew. But, that just brought me back to the realization I'd had that had set me on this path, after Abacus had started telling me what it was struggling with, which I explained

without breaking stride or even looking at it, "And, you realize that people keep telling me things they don't tell other people, right?"

"But the avoiding getting hurt part is important," it replied. I know now that it had almost added something about hurting other people, but had decided it was better not to mention that, and I'm glad it didn't.

I felt the dreadful tension still lingering in my body begin to rise again, so I stopped, looked up at Abacus and said, "Watch."

Then I took a measured breath and detached myself partially from my body, putting the locus of my consciousness outside of it but not letting go of control over my muscles. And there, I looked at my whole biological system and searched for the stresses in it. And I treated it like I did the Sunspot when Phage had been gone and I was in charge of keeping it from falling apart. I soothed the wrinkles. I applied counter waves to the vibrations that were threatening to push me toward meltdown. And then, I tweaked my own neurotransmitters the same way I'd been doing for my hormones as I'd been maturing. And as I did this, I felt my fear and distress being massaged away as if by a pair of great big, gentle hands.

And as I returned to my body, I could feel it naturally standing more straight and with no trace of any sort of tremble or waver. My heart had slowed down and beat with less urgency, and breathing was easier and more rewarding.

And my thinking itself had changed. Nothing felt urgent anymore, and there was a clarity to the whole situation that hadn't been there before. I saw nuances that I don't think anybody was seeing. And if I'd been a normal Dragon child, I would have seen the truth of Abacus' arguments and relented right then. But I'm not.

"Abacus?" I asked, trusting that it had seen the deep change in my stature and voice.

"Yes?" it sounded spooked.

"I have a weird way you can help me, but it's going to feel wrong. We can make it right afterward, though," I warned it.

"What do you have in mind?" it asked.

"When you write your addendum, say that you set me up to investigate

this *and* say that sending me to Benejede first was *your* idea," I explained. "Benejede won't be fooled. But I'm going to talk to someone else later, and they might fall for it."

"How is that going to help?"

"Emotional leverage," I said.

It stood there scowling down at me for sixteen heartbeats before it said, "OK."

Benejede

If you've read Abacus' book, you'll find that it struck a compromise with me, and did not take direct credit for giving me the idea to start my investigation. It simply described our conversation in as few words as possible, and then said it gave me Benejede's name to go to first. Frankly, it was a weird request I had of it, and I probably shouldn't have asked in the first place. One little lie, but it was still a lie. But in the state I was in I'd felt that it really was important.

Although I was pretty sure Benejede would read Abacus' update as soon as it was posted, I didn't think Abacus would work on the text by the time I visited Benejede. And, like I'd said, it wasn't for Benejede's benefit anyway. I wanted *Eh* to see me in a certain light when I planned to go see *Ihn* later. And I couldn't explain why.

And as confident as I was at that point, I was a little worried that Abacus would betray me when we rejoined my family. But I also felt like I foresaw that it wouldn't. And it didn't.

I don't remember much from the rest of that trip to the park. I wasn't thinking about what was going on around me at that point, simply reacting to it, and reassuring my siblings and parents that I was OK and that Abacus had helped me when I needed it.

And to anyone looking at me, I *was* doing quite well. I was alert and responsive, and appeared to be engaged in the moment and totally at ease.

And when we got home, I declared I was going to take a nap. And since I'd had a big enough meltdown to call for Abacus' help, that made sense to everyone.

Then when I rolled over in bed, I was about to compose a message when I received one instead.

It was from Benejede and it simply said, "Yes."

—

Benejede was exactly where Abacus had left *kih*n over two years ago, sitting on *kih*n's deck watching a frozen *sundeath* over a network replication of the aft sea of the Terra Supreme. Abacus hadn't known what

it was when it had visited, just that it was not the Sunspot, but I recognized it instantly upon appearing beside Benejede.

The Storyteller's Netspace consisted of a wooden cabin on the edge of a seaside cliff, with a narrow forest of young trees below it, along the shoreline. There were a cluster of tiny, tree covered islands before the water became one hundred twenty-nine kilometers of open ocean between the last island and the endcap. All reflecting the pinks, reds, oranges, and golds of the perpetually waning sun. The endcap itself was cast in shadow, already experiencing night, along with a ring of about ten kilometers of ocean.

The Sunspot has sundeaths like that, too. But clearly this was a moment in time that was important to Benejede somehow. So important that keh had spent four decades staring at it while under what was now a purely self imposed sanction.

Benejede resembled, superficially, a bird found only on the Terra Supreme that the people there called a "heron". However, keh had a long, naked tail with a single feather on the end of it, antlers nearly as long as kihns body sprouting from kihns head, and instead of a bird feet keh had hands. Hands that were kind of like mine, only much bigger, and older looking, with rough, calloused skin and wrinkles. And keh used these hands to perch on the wide, sturdy railing of the large porch that ringed kihns little cabin.

I stepped up and folded my elbows on the railing to lean on it, my armpits just three centimeters higher than the plank of stained wood. I could feel the coarse, weathered veins of the wood pressing into the soft underside skin of my forearms and palms, and it was nice. It matched the smell of the young pine and cedar trees that surrounded us.

On the Terra Supreme, most of the trees are only ten to thirty meters tall. On the Sunspot, the tallest tree is a hundred and twenty two meters tall, and most of the rest of the forests are not much shorter than that. The two ship Crews have very different ideas of what constitutes "wilderness".

"I don't like visitors," Benejede said.

I simply nodded. I knew I didn't need to talk and that Benejede would prefer that I didn't. I'd just sort of picked up on that by entering kihns presence.

"You are not a visitor," Benejede added. Then, "When you write your book and you get to this part, start referring to me with 'it' and 'its' as my pronouns, please. I like them better now."

I looked up at it, startled. My book? What book?

"I know your type, banijede," it said.

"Banijede" is the Fenekere common noun for "a storyteller", derived from Benejede's name.

I stared out over the water for a time contemplating what it would be like to try to write a book. I hadn't considered it, and it seemed like it would be a huge task. After all, I now knew how long it had taken the Collective to write their little book. And while I was staring, I noticed that there was a bird in the sky, frozen in place, unmoving. The waves of the ocean were also still.

"Benojeda 'uu," it said.

Storytelling must happen.

"I'm not going to tell you much, but you are not here for many words from me," it started to explain. "You need to learn most of your things from doing. And others need to learn from you asking them. And you've already decided that and know it."

I nodded. It was not at all treating me the same way that it had treated Abacus. Its voice sounded different than I had imagined, even. I'd hoped that something like this would be the case just simply from me guessing how best to approach Benejede. I'd hoped it would like me more. But this was more of a difference than I'd expected.

It snorted, "Abacus is a whelp, and I like it, but it learns differently than you do."

I blinked.

"I'm showing off," Benejede said, and then fell silent for a good long while.

By the tone of its voice, I knew I hadn't been dismissed yet and it had more to say, so I waited. I looked back through the window of the cabin. There was a fire place with a fire in there that wasn't frozen in time, but the wood

looked fresh. This was a Netspace, anything could be done here according to the whim of its owner. I found myself wondering if anything I was seeing was a message for me. I decided it wasn't. This was all for Benejede.

"A story likes a good oracle, but an oracle meeting an oracle is a weird event. And an oracle as hero is an omen," it looked down at me. "The Sunspot has had many hero oracles. Can its lessons be learned by those who live in other stories? Are they even useful to them?"

I squinted to indicate that I'd think about that, but it sounded like nonsense to me. It still does, but it was so easy to remember. Those words have been echoing in my mind ever since. And I'm not really sure that they should.

"It doesn't matter," it said, then. "Heroes, oracles, and stories don't shape history. We are just the punctuation of it. I like to think what matters is what *you* learn from your *own* story."

That sounded less like nonsense, but it sounded irrelevant to my upcoming meeting with Eh, or Abacus' question about numbers. It wasn't. Not at all.

"I know where the people are going, but I'm not going to tell you. But I repeat myself, and you know that. Please, visit any time. You are a gracious guest and I learn much from you."

I smiled my thank you, and then left.

Messages

I had seen several things during my moment of self-induced clarity in front of Abacus. Just, a lot of things clicked, or it was like a fog lifted and I could see the land before me in more detail, and I put a bunch of elements together that I hadn't before. But I was still a twelve year old, with a twelve year old's unbridled excitement at having done that for the first time. I felt like I knew everything better than everyone else, and like I had the key to unlocking all of the Sunspot's problems.

There were a few things I was absolutely correct about, though.

Like, I had seen clearly that you can't actually have a conversation with someone like Benejede. They are going to tell you what they are going to tell you, and you can't offer them anything new with words. You won't be able to persuade them to say anything they weren't already going to say, or persuade them to stop saying something, because to someone like Benejede, what they see going on around them is of greater impact and importance than what anybody is going to try to say. In fact, to them, the presence or absence of another person's words appears to just be an echo of a reality they've already seen.

I think the way I would have put it back then was, "Benejede thinks it knows what's going to happen next, including what you have to say, so you don't actually have to do it."

But I didn't go to see it because it would tell me anything I needed to know. I went to see it because people see it as an oracle, and being the last person to see it would make my following actions hard to ignore.

Keep in mind. I'm a person who can and does regularly look at the big picture in a way that nobody else has been able to do but my mother, Phage. And where Phage is really good at seeing and working with raw physics, I'm particularly attuned to life itself, which includes people. Since I can remember anything, I've been able to look at the social dynamics of any sized group of people the same way you can look at a map. But this gave me knowledge, not wisdom. It's just that sometimes knowledge can look like wisdom, especially to a twelve year old.

So, I'd also seen what Eh was up to.

I'd already picked up on the fact that Eh had been Captain for most of my childhood, but was not being Captain anymore. And I was asking myself the question, "Who would know where all these missing people went, or who would be investigating it besides Abacus?" and the first person I thought of was Eh, because Eh had been Captain, at the center of everything, for so long. Eh'd been Captain for 87.696% of the time that the Sunspot had existed for one hundred thirty thousand three hundred and one years and counting. And Eh was taking a deliberate break.

And Eh had been appalled to realize how long and how often Eh had been Captain. Eh had set out to run a more egalitarian government, and had deliberately tried to share the power, but just hadn't done a very good job of it. Part of that was the fault of everyone in power being happy with Ihns leadership. But part of it was Eh being unable to put the leadership down, and that's what mattered here.

It mattered because it meant that Eh would be having a really hard time doing nothing. Eh would be spending Ihns time as Not Captain by engaging with the Sunspot's populace from what Eh might perceive as the other end of things. The end of things that had all the problems that Eh hadn't been able to see as Captain.

The way I put it to myself back then was, "Eh is trying to be a Child again, and doing it badly!"

And I just *knew* I was right about that, and excited about how right I knew I was.

And since the number of Crew missing was absolutely the biggest number of just about anything people-sized on the Sunspot, either Eh had always known what was going on there, or Eh would be investigating it.

And for some reason, I thought that if I could learn the truth about what was going on everything would magically become better. Or, like, I'd be able to fix it.

So, I wanted to talk to Eh.

So, after talking to Benejede, I had to decide just when to send Eh a request to visit.

Me. A twelve year old child trying to decide how to best prod the former Captain of the Sunspot, a ship with over fifty-three *billion* souls on it, into

talking to me about, well, anything. As if Eh would even notice my request amongst all the requests Eh must have already been ignoring.

I had just seen the ship's named oracle, but that was *different*.

But, what I was asking myself was, "Do I want Eh to see my request before Eh reads Abacus' addendum to its book, or *after*?" And then, "Would Eh just ask to see me after Eh read the addendum?"

My clarity of vision had faded since seeing Benejede, and I lay in bed fretting about it. I might have hopped out of myself and massaged my brain into that state of clarity again, if it had occurred to me, but I think I was having too much *fun* trying to figure it out from the perspective I had. I sort of thought, *no, no, I can figure this out now*.

I sat up in bed and looked around. Apparently, everyone else had decided that taking a nap was a good idea, too. It was mid afternoon, and everyone who was there was asleep. So, sitting there, I checked Abacus' public documents to see if it had written its thing yet.

It had!

I read it, noted the places where Abacus' numbers were already wrong, and decided that it would probably do the job of getting Eh to actually pay attention to me, so then I sent my request.

It was a very simple request. Just the standard, "can I visit?"

I sent it before I could worry further about whether or not I should. I let Abacus' writing be the prompt to do my own action. And then I told myself that Eh would probably read Abacus' addendum first, because it was more important, and then use that to decide whether or not to answer my request.

And by the time I was done telling myself that, I had gotten a reply, and I was afraid to open it!

And there, in the dark quiet of my home, feeling the soft cushion of my bed cradling my buttox and my hands, I found myself not answering a message for the first time I could remember. I curled my toes in the fine fibers of my bed sheets, and stared across the dining area to the door of the washroom where I could see the toilet. An apple somewhere in the kitchen was right on the edge of being inedible, its fragrance tinting all other odors in the

quarters a sharp yellowish-green. And my mouth tasted like self-disgust. And while the lumps of my slumbering family members, each in their own bed, offered no reassurances, all I could hear was breathing. My own breath and that of the room itself. And amidst that, I could hear the mental echo of that single *ping* that had told me there was a message.

And I couldn't answer it because what if it said "no"?

I didn't have a plan for that. And I didn't want one, either. It was really important to me that it said some variation of, "yes, sure!" Because, then everything would fall into place, and I could feel proud of what I'd set up. But a "no" would mean that not only was resolution denied to me and to Abacus, but also it would be weird. It would mean that Eh didn't want to see me at all, under any circumstances. Even a "could we schedule a meeting for later" would be wonderful! But a "no" would *hurt*. And suddenly, a "no" felt possible. Maybe even inevitable.

But if I didn't open that message and read it, then it wasn't a "no" yet. I could still do things, like eat that apple.

I thought.

I took a deep breath and willed my arms and legs to move, and stared at the kitchen while they didn't. My body just did not react to any impulses I was trying to send to my muscles.

I'd felt all this before, off and on, just not so intensely or thoroughly. So, at first I didn't really think much of it. But when my body kept just sitting there while I felt more and more like I was floating ever so slightly away from it, I felt a thought come from the back and to the right of my mind that said, "Hey, Ni'a, this is another panic attack."

And then the nanite bin slid open and Aphlebia began to silently crawl out of it, followed closely by Thomas. Aphlebia turned to Thomas and put a finger to their lips, and he nodded. Then Thomas noticed me sitting up in my bed, staring at them, and he waved.

Aphlebia cocked their head like they'd heard something, then turned to me and smiled, sending one of their wordless thoughts over a group Network channel with Thomas and me in it, "We've been flying."

Thomas nodded and sent, "I tried being a bird. It was weird!"

Aphlebia went into the kitchen and got the apple that was starting to smell overripe, and took a big bite out of it, then offered the rest to Thomas insistently. It made sense. After doing something abnormal with your nanite exobody, grounding yourself with something familiar and strong, especially smell or flavor or both, could help you feel more like yourself again.

Thomas took the apple and bit into it three times, filling his mouth. And then the two of them stood there, just chewing with their mouths full of apple.

This whole tableau had distracted me from trying to fix my own panic attack just as I was about to do it, and now I wasn't sure I could.

I heard my own voice in the Network channel say, "Can I have some?"

"Oh, sure!" Thomas said, and tossed the rest of the apple to me.

It landed on my bed near my feet, and I stared at it. The smell was suddenly stronger, of course. And then I watched my right hand swing up, out, over, and down to grab it. My fingers rotated the apple to an unbitten section of skin as my hand brought it closer to my face. It really didn't smell like something I could eat, actually. It would probably be mushy and mealy, and the flavor too hollow, and I wanted to grimace and turn my head away. But I opened my mouth and took a bite out of it anyway.

Yeah, that was unpleasant.

I did grimace then, and only chewed it three times before swallowing it. And the lump of it felt sharper than I'd imagined it should be as it slowly slid down my esophagus.

I looked for a place to put the apple that wasn't on my bed. I didn't want any more of its juices on my blankets, even if they would clean themselves in a matter of minutes. But there wasn't any other surface nearby, and I had to get up to go put it back on the kitchen counter.

I grabbed the apple from my right hand using my left, where it felt lighter and easier to manage. Then plopped it down on the counter and said softly with my voice, "Thank you, Thomas. That's awful."

My right hand reached up and ran its fingers through my hair, and I sighed.

Aphlebia tilted their head at me and signed, "Are you OK?"

My head shook a "no" briskly and I said, "I'm feeling weird." Then I heard and felt my mouth continue whispering, "I think I've got a meeting with Eh!"

"Captain Eh?" Thomas asked.

"They haven't really been Captain for the past two years," my voice explained.

"Oh."

"I don't know, though. Their reply could say, 'no'. I asked, but I haven't read it yet."

"You *asked* for a meeting with Eh?"

"Yeah, sure!" I heard myself say, not whispering so much anymore. "The Council has been meeting with me on and off my whole life, and I think I might know more Crew than Children now. I hadn't thought to count... And I had a question I wanted to ask."

Then I watched as my hands signed to Aphlebia, "I'm having a panic attack again, and I think I need you to read the message. Can you read it for me? I give you consent."

Thomas was starting to learn sign language, but I probably had done that too fast for him. He had no trouble speaking our version of Inmararrão anymore and didn't need 'afeje'a's assistance for that. I smiled at his slightly confused expression while Aphlebia nodded and did as I'd asked.

"Can we schedule it for lunch tomorrow? My house." Aphlebia signed back, slowly enough for Thomas to understand it clearly. "Please bring Phage, and anyone else you are comfortable sharing this with. I'll invite Abacus."

I sat right down on the floor and felt my body coming back to me.

"What's 'this'?" Thomas asked.

Aphlebia looked curiously at me.

Eh

"This is a difficult to understand subject," Eh said. "And it directly concerns the Crew. But since many of you are trying to decide whether or not you want to be Crew some day, I guess it would be good for you to know."

I'd had to make a hard choice. I knew some of what this was about, and I thought I knew that missing people could be a hard subject. And I had felt obligated to invite Thomas and Aphlebia, since I'd involved them in reading Ihns reply to my request. And it felt wrong not to bring the rest of my family, but I wasn't sure that it was appropriate to do so, either. I didn't really know how Emala, Candril, or the Whorlies would react to this. I had a better feeling for the Fibrillators, so I'd invited 'afeje'a as well, which meant bringing Laal and Fredge into it. Phage was my mom and acting parent for Aphlebia and 'afeje'a as well.

Abacus was there, of course, as were Akailea, Tetcha, Morde, Metabang, the Pembers, and the Flits. Breq, former Tutor for the Flits, was probably there too, but wasn't making its presence known.

"Ni'a," Eh turned to me. "Since you called this meeting, do you want to lead me with the questions I believe you have, at your own pace? Or would you like to hand it off to someone else? I'd be happy to just ease into it myself, honestly, but I want to give you control if you want it."

Now that I was here, I felt like I'd already asked my question, so I shrugged and frowned. Aphlebia saw a moment of confusion in Ihns face and translated for me in sign, "Ni'a doesn't want to ask the questions."

I nudged them with my elbow, and smiled, nodding.

"OK!" Eh said, "I think I should lay out a couple ground rules before I get into it and establish first of all that I suggested we meet here because this is expressly *not* a meeting of the Council. We are not here to solve the ship's problems or to decide policy. I'm personally done with that for a while, in any case. But I consider you all friends and am aware that many of you are involved with Council affairs, or are planning to be, and also either Ni'a or Abacus thought you should be filled in on this before it becomes more public, *if* it should become more public. Anyway, this is informal, and you can butt in and ask me any question anytime you like. I'm planning on

rambling while I figure out how to get around to the meat of it gently."

Ihns house was in Agaricales and on the edge of Memorial Park, which cannot have been any sort of coincidence. I knew just by looking that Eh had been there for the past year and a half, so it wasn't an impromptu message, but the choice had to be related to the conversation we were about to have, and that kind of filled me with dread. I already didn't like the place because of what had happened here between myself and Aphlebia (and the rest of the Sunspot). But it was a pleasant house to be in.

It was atop one of the narrower foundations of the city, and it was one big room made entirely of windows and a roof. There was a ramp to the top floor of the foundation right below it, where more accommodations had been constructed, such as the washroom. There was no bedroom, or sleeping area, since Eh did not need that. Eh would simply return Ihns nanites to a bin and sleep in Ihns personal Netspace, like any other Crew. But the room we were in, the very top room with all the windows, was tall and spacious and filled with all kinds of cushioned seating, with a heater in the middle. And near the ramp, acting as one of the railings for it, was a kitchenette. And Eh had prepared a variety of foods for us to choose from for our lunches.

So, we were all arrayed around in chairs that seemed to fit our bodies best, except for Tetcha, who had picked the most unlikely piece of furniture and perched atop it crosslegged next to Morde, who was sitting in a chair that looked reasonably well suited for someone like me. And we all had food or a drink, or both. Though it turned out that Morde was just holding extra food for Tetcha.

Eh, whose body measured 5.48 meters in length from tip of nose to tip of tail, was sitting upright on Ihns haunches in the middle of a pile of cushions, leaning forward on Ihns hands, a pose similar to that of a relaxed but alert mountain cat.

Us Fibrillators were squeezed into a sofa, all four of us. 'afeje'a's tail must have been wedged between the cushions, but it probably wasn't all that uncomfortable.

"I screwed up," Eh said. "I think a lot of us Senior Crew members did in the early days, and kept screwing up, but I'm not going to talk about what anybody else did. I'm responsible for me. I had all sorts of ideas about how to best build and run a vessel like the Sunspot, and I was one of the people

most strongly gunning for the type of government we started out with. And that's why I have my name. But, recent events and many of you have shown me, at least, all sorts of places where we went wrong. So, I've stepped aside as Captain and as Council member for a while, and I've been trying to figure out how to just live life. Have neighbors, enjoy food, develop my own art, that sort of thing.

"The problem is," Eh looked around at everything, eyes passing from friend to furniture to view of Memorial Park and the horizon, "I'm screwing that up, too."

I smirked because I had called it. Eh didn't seem to notice.

Eh took a huge breath and sighed long and hard, then continued, "a thing that I'm proud of, at least, is that I'm making more friends. But it doesn't come easy, and I'm doing it by going to places that even Abacus hasn't thought of for any of its tours. Places where maybe only one person is dwelling, if even that. Neglected places. Places where people are hiding. There is a lot of empty space on this ship, far more of it than space that's used for anything, and most of it isn't of any interest to anybody. But there are certain spots, like a Monster library, that attract people who need something meaningful and quiet and forgotten that they can commune with or something.

"And these people aren't all Monsters, though a lot of them are. And not all of these places are physical. Some are in the Network and are sought out by lonely Crew members. But something that all of these people have in common, Child, Crew, Tutor, or Monster, is that they're hurting, and that I can't help them," Eh frowned. "And I don't think they're the exception. Being alive for any length of time just hurts."

Morde nodded.

"I can make their day a little brighter by giving them quiet company or by listening to something they have to say. Or by being someone to yell at. I've let quite a few people vent their anger by physically attacking me with all their might, flinching out of respect for their blows, and retreating when they make it clear they don't want me there," Eh said grimly. "It's not really that many people who are like that, but it is way more of them than I would have liked to imagine at any time during my service to the ship."

I tried to imagine that. I knew that I'd been struggling, that us four

Fibrillators had been seriously struggling with pain and distress from the horrible things we'd faced as younger children, just a couple of years ago. And sometimes even *I* felt that as a righteous rage that I couldn't figure out how to satisfy, and it usually just came out as tears. But everyone else I seemed to see going about the world looked so happy about what they were doing, so engaged in the moment, or so enwrapped in a dream they were exploring, that it was hard to imagine that they'd been experiencing anything that caused them the kind of pain Eh was describing.

On the other hand, if I remembered what the Sunspot looked like when I viewed it from my Phage-state, there were those stress fractures and rogue waves always tearing through the social fabric of the ship. Always present, no matter how vibrant and peaceful the populace otherwise seemed to be. Like Eh said, it wasn't much. It was a manageable amount of pain there, which I hadn't ever really thought of as belonging to any given person until now. But it was definitely more than I ever wanted. I'd always wished I could make it all go away.

But, I was lying to myself. When Phage and I had left the ship, it had gotten so much worse. Our presence calmed it. And, maybe that wasn't such a good thing? In any case, changes need to happen to accommodate that pain.

"Unfortunately, like Abacus," Eh was saying, "I've been ignoring the numbers. The Auditor keeps track of everything, or so I thought, and I never really needed to look directly at its numbers, or so I thought. So, I didn't notice this discrepancy that Abacus has found, until I ran across a case of it personally. And again, I want to say, this isn't necessarily a problem to be fixed. It really isn't that clear. The problem is, I don't have permission to tell this specific story, and I feel the need to respect that."

Eh looked down and scratched Ihns chin bobble for a while, apparently contemplating how to proceed after that. We all let Ihn do that without disturbance. Tetcha even slowed down xyr eating.

"I met a Crew member," Eh finally said. "I met a Crew member in a physical part of the ship just before they left, and they told me why they were leaving. And they left in a way that did not alert the Auditor. And what they told me gave me the impression that a lot of people had been leaving in a similar manner, and hardly anybody knew about it."

Eh looked sad. Ihns voice had even cracked while saying that. And it

looked like it was hard for Ihn to go on.

"What does 'left' mean?" Thomas asked.

Eh looked at Thomas with grieving but kind eyes and said, "They left the Sunspot."

I let out a breath I hadn't realized I'd been holding, and then gasped. Several others were nodding or shaking their heads. And Aphlebia squeezed my hand.

'afeje'a said, "Oh," very softly.

"I don't think most human beings have adapted very well to living forever in the same community, no matter how big that community is," Eh said. "Or in the same place. Or in the same state of existence. And I think even all the different states of consciousness we can experience all get old after a while. Even though our Network provides a nigh infinite amount of space within it, and a remarkably variety of ways of being, allowing people to avoid those they have quarrels with, and live either peaceful or exciting lives full of fulfillment and joy and wonder, it still has its boundaries. It's still just part of the Sunspot, and there is all the rest of the universe out there. And maybe ways of existing that we haven't even imagined." Eh looked specifically at Phage when Eh said that.

Phage nodded.

"So, people have been.... leaving," Eh said, keeping eye contact with Phage through each word. "Without taking anything with them, so that the Auditor doesn't notice."

Phage let the following silence hang for a long, long time. Eh's expression made it clear to the rest of us that Eh was expecting some kind of word from it, but my mother gave no indication that it was going to speak. Yet just as I was feeling the need to fill the emptiness with *something*, as I'm sure most everyone else was, Phage finally said in its deep, rumbling voice, "That's not something I need to help with for anyone to do, but if anyone asks me, I will help them. It has always been something any life can do, if it wills it strongly enough. It's a matter of consent and autonomy."

Eh tightened Ihns lips and nodded.

Tetcha noisily dropped a chip xe had been about to eat back into xyr bowl,

and said, "Wait. You're talking about dying. You're talking about Crew dying? Crew?"

I felt a chill wash through my body, and suddenly I was in my Phage-state, as large as the Sunspot itself and looking at the whole of it, and I felt weird specialness, a mix of sorrow and relief that I could not make any sense of.

And I saw - I was lucky to see - one of the tiny specks of complexity that I knew to be a Crew member just cease to be. There was no body, so there wasn't the usual transference of energies that I could typically see of a body dying and beginning to become part of the background of the universe. The person had been a Network entity, and the q-bits that had been containing their patterns of consciousness and thought were just suddenly empty. A whole person's worth of information and knowledge just disappeared. And I didn't see where any of it went!

So, I waited for the next one to disappear, hoping I'd get a better glimpse of it, hoping I'd be looking more closely at it, at the process, when it happened again. But I had no idea which one of the tens of billions of people was going to be next, or when they were going to be next. And it didn't happen again by the time I was pulled back into my body.

I certainly didn't choose to return, and I still don't know what yanked me back, but suddenly I found myself in the middle of a tear stained sentence, saying, "-so many people I never got a chance to meet!" Which was not a sentence I had felt like saying, though it felt vaguely familiar, like it was kind of something I might say.

Then I looked startled at Aphlebia, and then over at Abacus, and then Akailea, as I realized something really, *really* strange had just happened to me. I felt the need to search for someone I knew who'd been concerned with my health, who might have some insight or advice, but I didn't think I could explain what had just happened to anyone present, not even my mom, except...

I turned my gaze a hundred and seventy-three degrees to look over at the Pembers and the Flits.

Yeah, a thought formed to the left of me. Talk to them. Or the Whorlies.

"Ni'a, are you OK?" 'afeje'a asked.

Or talk to them!

Welcome Out

I'd spent most of my life up to that point really frustrated that every time I tried to be there for other people, to do what I felt like I was meant to do, my PTSD would flare up and make me the center of attention. It always felt awkward and wrong, and like a distraction from what was really important. I *was* getting better, definitely healing, but it always interrupted things when it was most critical for me to function.

Most of my life? No. It was actually just two years! But it *felt* like most of my life. With how much I'd been growing and learning in those two years, between ten and twelve, it might as well have been most of my life.

I wanted my life to be about other people, the people I love, not me.

It turns out, though, that I *am* other people. Literally.

My body was shaking and felt fizzy all over inside. It wasn't a distressing sensation though, not like a panic attack. This time, I felt like I was on the edge of unlocking something *amazing*. I felt like I knew what was going on and didn't know what was going on at the same time. And I felt like I knew why, but I needed, desperately wanted, more confirmation somehow. So I had chosen to talk to my peers about it.

"So, what's been happening?" Firas Whorlie asked.

"Well," I said. "The others kind of saw this because they were there, but when Eh said something that upset me, I sort of accidentally slipped into my Phage-state, and then when I came back I was in the middle of saying something to everyone else. Only I don't remember what the first part of the sentence was. And then, I guess, someone else in my head started giving me suggestions?"

Someone who was not exactly me was extremely angry with Phage. So I had told Phage I didn't want it to be part of this conversation. We'd talk later, like we usually do, under the moon.

"You did a pretty good job of hiding all that from everyone," 'afeje'a said. "All I could see was you were confused for a moment."

Thomas nodded, "That's also a lot like things Ba - 'afeje'a and I've done to each other."

"Yeah," 'afeje'a said, glancing at Thomas and smiling.

This conversation was taking place after our meeting with Eh, and we were holding it in our favorite park, huddled in our favorite pathways that tunneled through a large clump of bushes in the middle of the park. It was where Aphlebia had told me their name, and where Abacus and Aphlebia had conspired with the Flits and Pembers to figure out how to keep me from being sanctioned after my ship rattling meltdown in Agaricales. More importantly, it was *our* place because we all loved to play there all the time.

Most of us didn't fit in there very well anymore, though, because we'd grown a bit faster than the bushes had. It was crowded, and we were hunched over or just sitting down.

"So, do you all think I'm really plural?" I asked.

I'd tried to get Aphlebia to come along, but they insistently bowed out and said they wanted to go do something with Candril anyway. "This is systems' business," they signed.

So it was me, 'afeje'a, Thomas, and the Whorlies.

"Well, you haven't told us much, yet. Do you feel like you're plural?" Firas was fronting, but had said the other Whorlies were eagerly listening in. Ze said, "What does your gut tell you?"

I smirked, lookind down at my gut, then asked, "Is that a plural joke?"

"Yes!"

I laughed a little harder at that than I expected, then said, "I do kinda feel like it would be cool if I was. But also, it kind of scares me."

"Yeah, that's..." Thomas said, trailing off while staring past me for a bit. "Not being in control is not fun."

"Same with not remembering," 'afeje'a added.

"But if you trust each other, it can be really great," Firas said. "Is there anything else you've experienced that might be clues to how you work?"

"I don't know," I said. I felt my shaking getting worse. Adrenaline was giving me a foundation of excitement and worry, and on top of that I was

riding a raft of poorly cobbled together memories and hopes. I tried to think of other times that might have been like what happened at Ihns house. I couldn't really remember anything quite like it, though. But, I knew I had been jumping between different states of consciousness my whole life. Then I heard my voice say, "We've just been really cooperative, I think."

Thomas pointed at me and declared, "You just said, 'we'!"

"That's gonna happen now," that other me said. To which I responded with, "Weird!"

Firas fell back on zir haunches, laughing. Then ze said, "I think you're just going to have to get used to that, Ní'a."

"Oh, yeah," 'afeje'a said. "You're one - uh - a bunch of us. *Some* of us?" They looked at Firas then and asked, "How does that work?"

"I don't know. We just say things that sound ridiculous and let other people sort it out," Firas said. "It's part of the fun!"

"It's kinda weird how we have, like, 'you' and 'you&', or 'we' and 'we&', so we can tell if we're talking about systems, but nobody's figured out how to say things like that," 'afeje'a complained. "You're one& of us? Huh. You're right. That's not as funny."

"But it works, though."

"Yeah."

"How many of you do you think there are?" Thomas asked.

I had no clue. I knew there was at least one other. But it felt like the other thoughts had come from different parts of my brain, so maybe there were more? "We don't know," my mouth said, "But I've got an idea! Let's split up!"

"What?" I asked. And then I felt like a pressure I hadn't noticed in my head just move away. It had been warm and comfortable but also heavy and confining, and as it receded to the right and back I felt lighter and like I had more mental elbow room. Then another pressure, this one green in flavor where the other had been purple, drifted away downward. And suddenly I felt like I had just woken up, and my body felt extra energized.

Or maybe just more responsive and more... Me? "Oh, wow," I said.

And then that adrenaline I'd been feeling surged as I watched someone pull themselves from out of the ground a few steps up the path behind the Whorlies, creating a new nanite exobody that looked almost exactly like me. They flapped their hands and laughed, eyes wide as they looked back at me, still standing there awake and lucid. And Firas turned to look.

"It's so weird I can see you in my body while I'm out here!" my counterpart said.

"Your body?" I asked in a daze. I thought maybe there was another one that wasn't me, because I didn't feel like I'd said that, either. But maybe I was just kind of in shock.

Firas, 'afeje'a, and Thomas did their best to make room for the other me, who stepped forward into the little junction of trails.

"Sorry, *our* body," they said. "So, what's your name?"

"Ni'a!"

My counterpart looked at Firas and asked, "Can we have the same name?"

Firas shrugged, "That's up to you. I hear it happens. But you'll probably figure out nicknames or something eventually."

My head was spinning as I said, "So, this is really real."

"Yeah, I think it is," Thomas replied.

At which point the air around us became a little more dense feeling, more taught. It felt as if it had been transformed into the head of a drum, though we could still breathe it and move in it easily. It was just a sudden lack of movement and vibrations that had been there before. And to me there was the sense that the molecules were all more connected to each other and more in sync in a vaguely familiar and indescribable way.

And without my mouth moving, I heard an echo of my own voice saying softly, "Ni'a, can I soothe our body? It's headed for another panic attack, and you don't need that."

I let out a little hysterical laugh, and felt my face cast itself in a worried

expression, but managed to intentionally nod after a moment of realizing that, yes, I definitely needed that. Then I braced myself for the weird feeling I knew was about to come.

"I think there are only the three of us," I heard the air say as what felt like someone else's fingers reached from behind me into the center of my being and stroked downward along my center. And then, just, all my tension faded and I started to feel very relaxed and OK with all of this.

It was still weird and new and hard to believe. But now I felt more free to think, and it was occurring to me that neither I nor my counterparts had ever done anything to contradict or hurt each other. Not that I could remember. We'd been so cooperative that we hadn't realized we were separate people. And, maybe, sometimes we really weren't separate people, but we sure were now. I wondered about something, then.

"I remember using my, or, *our* Phage-state to do that for Thomas and 'afeje'a. Also, I thought I was the one that dropped into the Phage-state to see someone... Well, when Eh was talking," I said. "Can we all do that? Or am I remembering wrong? Why am I the one in our body?"

My nanite counterpart shrugged and then looked at a leaf and watched it start fluttering. They turned to me and said, "I don't know, but try using the Phage-state. I think it'll work."

I looked at my siblings, who were all grinning and quietly watching us interact, and sort of grimace-grinned at them and settled myself back to try to leave my body. They smiled and waited patiently as I balanced my spine, and laid my hands on my lap, knowing that I could usually stay connected enough to keep myself, or our vessel, upright while doing this.

And then I expanded myself just like I'd always done.

I heard my nanite counterpart saying, "Welp, I don't think we can use *that* to tell us apart."

The fun part of this whole experience is that now, when we look back on it, we can replay our memories from each of our perspectives. In fact, the only reason we chose "my" point of view for this one is that "I" was the one stuck in the body last and the one who was the most panicky, and that makes for better storytelling. At least, that's what Abacus says.

The very last vestiges of that panic fell away completely as I became part of

my greater self. And I felt my other self waiting there for me, the two of us floating in a bubble of control we'd created within a sea of Phage's presence. Our mother was all around us, as always since it had returned from the Terra Supreme, as it had been throughout our childhood before.

And it wasn't that I could see my other self while there, or even Phage, not like I could see the Sunspot and all of its inhabitants. It was like when we were sharing our consciousness in our body. There was just this warm purpleness to my right that nestled up against me and felt so comfortable with the blackness of Phage all around us.

And then we saw the nanite exobody of our third system member collapse and a greenness began to fill our bubble with us, also nestling in and increasing our collective glow of awareness.

What color am I, I thought.

Pink, thought the other two.

Why?

We don't know, it's just what you are.

Do you think we can hug like this?

I think we can define what that means.

I think so. Imagine it and just sort of make it happen.

Thank you, both.

Thank you.

Thank you!

And we hugged.

Have you ever yearned to have someone hug your very soul? Have you ever imagined what that must feel like? It is every bit as tactile and satisfying as hugging with your bodies, and we hope you get to experience it someday. We could feel each other in our own embraces and we could feel ourselves being embraced, and as we did we could feel each other's thoughts like heartbeats.

Continuing Conversations

Later, we talked to Abacus about this.

When we'd returned home, Phage had just come over and hugged us and didn't say anything. It had seen us hugging before. So it just knew.

But we remembered that Abacus had described some similar feelings that it had had when writing its book, and we wanted to know if it might be plural, too, or if it had ever suspected we were developing that way. So, just after dinner and before our usual evening moonwatching with Phage, we contacted Abacus and it happily came to visit. And while Phage and Aphlebia filled the rest of our family in on what had been revealed by Eh at Ihns house, what must have been a solemn and careful conversion, Abacus and I strolled through the park, talking. Dinner conversation had been all about our plurality, along with all the conversations before it.

Abacus was pretty strongly convinced it was not plural. It had experienced some dissociation, for sure. But also just like the one of us who had remained in our body had experienced their subconscious going on automatic but there didn't appear to be a fourth Ni'a, it turns out that a lot of singlets describe the same kind of thing. There seems to be a certain kind of pseudo-plurality inherent in all human - or, rather - dragon psychology, even in the psyches of individual system members. It seems to just be needed for our kind of consciousness. But it doesn't necessarily make everyone plural in the way that we were.

"And then, when it came to you," Abacus said, "what you've read in my book is just what I thought. I really hadn't considered it. You didn't necessarily show any signs. Thomas and 'afeje'a and the Whorlies were all much more distractingly obvious. And for that matter, so were Jen and Jenifer."

"That makes sense," Purple said. Pink smiled, enjoying the sensation of another talking. Green was thinking of something else.

"But, if I'd ever thought about it," Abacus continued, "I might have discounted the possibility because you were the child of Phage - well, the children of Phage, really - and I might have figured your heightened level of consciousness and connection to the universe might have given you some kind of psychic glue? I don't know." It scoffed and shook its head at

the ground as it walked, "A silly idea, anyway, considering that Phage has Phage Pember and its pseudophages. And now it has created two other versions of itself. Hailing Scales, if you and Phage can become the Sunspot itself when you need to, it's like the whole ship is plural."

"With the way the Bridge works, yeah," Green agreed. "We're all just systems within systems."

"I'm sure there are other parallels," Abacus nodded. "People are pretty good at seeing parallels where they want to, too."

"Do you think we should write a book?" Green asked out of the blue.

"You know?" Abacus said, stopping and stepping back to look at us. "Benejede told me to try to convince you to. Keh had implied my book would need finishing."

"It," we said. "It's pronoun is 'it' now."

"I'd wondered if it would switch to it! Neat!"

"It just told us we were going to write a book," Green said. "Like it was going to just happen."

"Gosh, this still feels amazing!" Pink exclaimed right after that.

"Heh, I bet," came from Abacus.

And Purple added, "I don't feel like we can write a whole book. We're just kids and we've never really written much of anything!"

"Also, we're kinda having too much fun playing right now," Green said.

"Good! That's good!" Abacus said. "Eventually, *if* you write a book, it'll be because writing will have become a kind of playing for you. Seriously, I'd love to read what you have to write, but don't sweat it at all."

"Do you still play?" Green asked.

"Sometimes I think everything I do is a kind of play," Abacus said. "But I think that's wrong. It's not a bad way to think a lot of the time, but it's good to see that sometimes stuff gets really serious. Sometimes a game you were playing with yourself or the rest of the world gets serious and

important, and then you should treat it as if it is as important as playing. Deadly important. But when that happens, you've gotta find another way of playing, to explore, let off steam, and work things out. Or just to entertain yourself."

"Yeah," Purple said. "Suddenly, everything in our life got serious. And we couldn't figure out how to keep playing. We forgot to."

"Even when we could play during the last two years, it didn't feel like playing," Green said.

"So, what's different now?" Abacus asked.

We smirked up at it in disbelief at how it could miss the obvious and said, "Us!"

A smile just insisted on insinuating itself across Abacus' face, and its eyes filled with watery joy and it said, "that is just so good."

Green took over to give us a serious and solemn expression and said, "I think we still feel like we should figure out what to do about the Discrepancy." Even before we'd left Ihns house, that had started to become the word amongst everyone there or the missing people. A euphemism in reference to numbers that didn't add up, to make it easier to talk about.

"*You* don't need to do anything about it," Abacus said as gently as it could.

We knew that was the stance of all the adults, that we children shouldn't concern ourselves with such big matters. But the thing is, the Sunspot is our family and our very body. Everyone that lives on it, or who has lived on it, matters to us in a way we can't adequately explain. And if we wanted to help, they really couldn't stop us from doing so. Especially us&, Ni'a. All they could do was try to explain to us why we should hold back.

Considering everything we'd been through, though, we were beginning to see the wisdom in taking things slowly. As long as lives weren't on the line.

The thing was, lives were on the line, here.

"Crew are dying, Abacus," Purple said. "And they're our *family*."

"I know," Abacus said. It, more than anyone besides Phage, seemed to

understand our feelings about this. "But it's their choice. Their *autonomy* and their *consent*."

"But we feel like we're failing them if they choose that," we said.

"How do you know?" Abacus replied. "Look, I don't really like bringing up your age, honestly, but it really makes a difference here. These are mostly people who have lived tens of thousands of years. And you are only twelve right now. Until you've lived as long as they have, you can't really know what leads them to make that decision, or even if it's really a sad or regrettable thing for them."

"It still feels like something should be done, though."

"All we can do is take some time to find out who they were, somehow."

"Oh," Pink said. "Like talk to people they knew?"

"Yeah," Abacus said. "Exactly. And maybe write some of it down for others to read about."

"Ah," said Green.

—

Our moonwatching with Phage was spent in silence, but it was a full conversation anyway.

We took our vessel out there, with Phage in its nanites, and leaned into it while we sat on the bench. It held us and radiated its pride in us, and it felt soft and warm and like home, and we just kept smiling and smiling.

And our dreams that night were so wild and fun.

—

Over the following years, we had ongoing conversations with Abacus and Akailea about learning to live with trauma and reteaching our body to be more reasonable about things in general. And they were indeed also working with Thomas, 'afeje'a, and Aphlebia. And occasionally we all met together to share our thoughts and progress on that.

And those conversations inevitably turned toward questions of the nature

of consciousness, personhood, and then equality aboard the Sunspot.

A question that kept coming up was whether or not Thomas or Aphlebia would take the Vow of the Crew. Akailea would mention it almost offhand, supposedly to check in on how everyone was feeling, and then Abacus, Thomas, and Aphlebia would all three reiterate why they three wouldn't do it. Because, the option had been posed to Abacus as well, and its stance was that it shouldn't have to. And Aphlebia wouldn't take the Vow until Abacus did, and Thomas kept shaking his head and saying, "I don't really belong here."

To which everyone would say, "Yes, you do!" And then we'd spend hours discussing what it meant to be human, and that Thomas had every much the same rights to leave his mark on the Sunspot by living amongst us as any of the rest of the population.

We didn't talk much about anyone being reborn in a new body. That technology was still hard to get a handle on, and the older we got the more it presented the problem that whoever did it would have to spend life as an infant all over again. I thought it might relieve those who were compelled to be part of the Discrepancy. But to those of us in these particular meetings, the important part was that Thomas had decided to put it off until he was very, very old and ready to start some things over.

His Network avatar was becoming as real to him as anything he'd ever experienced before. In fact, he started saying that his life on the Terra Supreme was what didn't feel real. And his ability to change how he looked and what he could do was just too important to him to give up.

Abacus had nodded knowingly when he'd mentioned that.

—

Eventually, the conversations between human beings and the Collective started to slow down. Or rather, the parks that had been designated meeting grounds began to lighten up, and sometimes become as empty as they had been before first contact between us. Part of the reason for that was that members of the Collective were starting to explore the ship in more earnest and with more confidence, taking Crab Buggies all over the place. And they just became less novel to the rest of us.

And that's when we started talking to them more ourselves. We would go down to the beach in a park and wait crouching there with our arms

resting on our knees until a cuttlecrab ambled over to talk.

The first time we did this, we smiled and gestured at our chest and said, "I'm a collective, too!"

"What do you mean?" asked the Collective, guessing we were saying something new or special.

"Have you heard the term 'plural system'?" we asked.

"Oh, yes. Yes, of course. We know many plural systems now," the Collective replied. "Congratulations, yes?"

"Yes! Thank you! We figured it out shortly after we last talked to you. I think you helped us a little bit, in a way."

"We are pleased."

"Did you get a better answer to the question you asked us?"

"Yes, but it is still in the works. Our 'citizenship'," they said that word carefully for emphasis, "is a matter of ongoing discussion. But we are more actively involved. It is more of a negotiation for our accommodations and us learning how to better respect you as well. As we explore your world and get to know more of you, we get closer to the day it is no longer a discussion but a reality."

"Maybe," said Green, "it should always be a discussion, even after it's real. So nothing is taken for granted or forgotten."

And while Pink was surprised at the astuteness of that, Purple said, "Oh, Abacus is going to love that observation."

"It has said something like that to us already," the Collective said.

"I guess adults do sometimes know what they're doing," Pink snarked.

And we sat there smirking at our own humor while the Collective watched us.

Not long after that conversation, the Children of the Sunspot started calling themselves "Dragons" instead of "humans" because the Collective had made it that popular. It just made it easier to talk to the Collective anyway,

since they *insisted* on calling all of us Dragons. The Tutors picked it up from the Children, and by the time it had spread through most of their population, the Sunspot Council adopted the new terminology officially.

Language does evolve on the Sunspot, and contact with the Collective also caused people to start more broadly adopting the language of plural systems to differentiate better between groups of people. The convention is currently to only use the plural system pronoun at the point where you're talking that you have to make it clear you're only talking about a system, or an exclusive group of people, and until you say something like "we all" after that, it's assumed you're talking about yourselves as that exclusive group. That kind of thing.

—

On our twentieth birthday, we took a moment to talk to Thomas alone, to once again thank him for being in our life. We'd exchanged so many thank yous before by now, but this time we'd remembered something.

We looked up at him and his beard and twinkling eyes and said, "A little over ten years ago, nevermind the number of days, you thanked us through the bathroom door when we were crying in there, and we never acknowledge that."

"Ah, that's OK," he said.

"Well, you said that we were 'good' and you thanked us for that. And we think you were trying to say that you were glad we had helped you escape the Terra Supreme. Is that what you meant?"

"Yeah, I think so," he said. "But it's been more than that. Always. I think I meant this back then, too. I don't remember it terribly well. But I really didn't want to live anymore at that point. Everything had been too much for so long, and then to escape all that chaos and pain so suddenly and involuntarily... To find myself *here*? I felt like it would be better to just not experience anything anymore, because it was just too much, too weird, and too confusing." He rubbed tears from his eyes, and I did the same for mine. Then he said, "I remember that day as the day I'd decided to stay, and I was trying to thank you for that."

"How? Why?" Pink asked.

"Because, even though I can't do anything that you can do, when I

watched how you interacted with your family and the world around you, I realized that you were doing things the way *I* wanted to do them. You're the kind of person, or people, I've always felt I should be." He chuckled, "Only, as a boy, you know." He smirked, then said, "And the way you'd just accepted me and 'afeje'a into your family and treated us like any of your other siblings while still showing me around the Sunspot. I still don't feel like this is home, exactly, even though I *know* it is. But I know I have family now, and that was the day it first hit me I might be able to have one."

We shook our head and Green said, "We don't know why you think we're so good, but we are so grateful."

"You're cheerful, and gentle, and hopeful, and you& just *do* things, *good* things, Ni'a. But, even if you didn't do any of the stuff I've seen since I came here, it's how you talked to me in the dream on my old ship. You were there, you'd seen the violence of my life, some of it. But you maybe didn't see how it shaped me, how it forced me to act, the kind of decisions I'd had to make, or how much of myself I'd had to hide. And when I looked at you in that dream, it was like I was looking at my inner self. And it kind of hurt, but in a good way. Like I was seeing my own possibilities."

Purple smirked in a kindly way back at Thomas and said, "Can we say something?"

"Yeah, of course," he sniffed and wiped his nose on his sleeve.

"You're good too," we started. "You are so good, such a good person, despite everything you've been through, you've been our focus. The whole time we have been doing *anything* since you got here, we have been thinking of you. About how you've persisted and how you've reached out in your distress to learn new things. About how you survived what you did, and how you let new routines become your home and let us, our whole family, Fredge, Laal, and 'afeje'a included, actually be there for you. And also just how you enjoyed the simple things in life, like playing cards to win or riding on Candril's back, we saw that in you from the very beginning and it helped us survive, too. We weren't ideating like you were, but we sure were pushing ourselves toward oblivion in our own way. I mean, in the end, we saved ourselves, but so did you and that's a huge part of what helped. And thank you for that. Thank you so much for that."

After a few seconds of trying to figure out whether he could say anything

back, Thomas smiled through a snotty sniff and said, "Happy Birthday, sibs?"

"Happy twentieth Birthday, brother!"

"Should we, uh... Should we go make 'afeje'a cry now, too?"

"They'd better. They have a lot of catching up to do."

—

There are a lot of reasons we& wanted you to read about those conversations. Part of it is to help finish the story we've all been telling, Metabang, Abacus, and us Ní'as. Just to make sure the important loose ends are wrapped up.

But it also maybe tells you what's important to us&. And what that means, should you get to meet us and our greater family, the Sunspot.

The thing is, there's more. An important more.

Conversations keep happening, keep going on. Many of which we& are not party to, but which shape this world and its peoples. We wanted to give you a sense of what is going on here, so that when we cross paths, you are not too surprised, so that you could acclimate yourselves to the possibilities. But we could really only tell our story, and as powerful as we& are here, we are not the people of the Sunspot, and they are who shape it.

So we're hoping that all three books give you a start, a few different perspectives. But there are hopefully going to be more stories to come. We, the writers of the Sunspot, the Chroniclers, are trying to get more people to join us, to tell their perspectives. And maybe you'll get to read those too.

And if you're what we've been calling the Source, our first true Outsider to cross our path, there's going to be about two hundred years, depending on just how you dance and what happens over here, before we meet. You'll get these stories sometime shortly before we meet. I'd have to consult Benejede in order to calculate the exact numbers there, but it might not cooperate, and it doesn't really matter. More history will have happened by then. Some amount of it.

And this book is just a collection of its punctuation.

There are two more exclamation points to add.

On Memorial Day during our twenty fourth year, shortly before we began writing this book, Abacus gave a speech before the entire population of the Sunspot.

Like we said, it was an exclamation point. Not a turning point. Not a beginning, nor an ending. It was simply a mark in our story that says, “pay attention to this.”

It said:

My fellow people,

My name is Abacus, and I am addressing *everyone* aboard the Sunspot today in order to put a proposal in front of the Sunspot Council of the Crew for consideration on your behalf.

This proposal has been the culmination of the work of many groups and individuals collected and processed over the course of the last couple of decades. Though, in truth, the seeds of it were sewn when the Sunspot itself was first built. And the call to pursue it was clearly made during the Nanite Innovation.

We, the people of the Sunspot, particularly those of us who have been working on this proposal, hereby request that the Council of the Crew become the Council of the *People*, and to open up seats within the Council, and therefore also access to the Bridge, to any sentient living being that resides on the ship. Furthermore, all collections of votes that would have required participation of the entire Crew should be made to include the entire population at large, including everyone who would be eligible to stand on the Council.

Accommodations must be made for those who do not have neural terminal access to the Network, such as the Monsters and anyone else of similar disability. But we would like to point out that every moment that we delay approval of this proposal, we fail to meet the mission that the Sunspot was built to fulfill.

Senior Crew Members Jenefere, Eh, Benejede, Jedekere, ‘ekele’e, Gesetele, and Fenemere are personally willing to attest that upon creation of the Sunspot and its culture, the Senior Crew agreed to not only uphold the core human rights, autonomy and consent, but also to

do so with the express aim to prevent any suffering that is preventable and to treat any suffering that is treatable. But to do that within the constraints of the individual to consent and to maintain their autonomy.

All Senior Crew Members should remember this. And if you do not, it is written in Fenekere into the base code of the Sunspot, to be read by anybody who endeavors to learn how to operate this vessel.

It is inherent to the Vow that you take as Crew: 'uu ktletaccate genorema fe. "May I always protect the Children of the Sunspot."

There, I guess I have finally said it in full, out loud. But I did so in order to be most clear, not to gain its privileges.

I understand that we present this proposal to you in the midst of numerous proceedings of shipwide importance, including questions of how to recognize the request of the Collective, how to modify or even mothball our own breeding program in light of the ethical dilemmas that have been found with it, whether to modify or abolish our practice of sanctions, how to address the existence of the Tunnel now connecting the Network of the Sunspot to the Network of the Terra Supreme, whether or not we are worthy to assist the people of Terra Supreme in their struggles to regain the human rights we deem sacred, whether or not to hear Phage's proposal, and how to approach the Outsider source of what is clearly music that lies approximately two centuries in the future of our travel.

I present to you that it is critical that we accept and ratify this proposal without delay, before these matters are resolved.

For, currently, the most vulnerable of us have no say in the policies that shape our lives and our futures. We do not even have access to the ability to witness the deliberations. And that is in clear violation of our mission.

I'd like to add that it is my personal contention that the requirement to take the Vow of the Crew in order to stand upon the Bridge and have a voice in the Council is in stark opposition to this proposal, and must be done away with. It may be a useful tool for vetting access to critical ship systems, but it should not stand in the way of anyone having a voice in their own future.

Thank you,

That is all.

My name is Abacus, my pronouns are it/its, and I am grateful that you have listened.

—

After listening to that speech, while sitting outside in a park under that night's moon, we asked our mother, Phage, why it had never taken the Vow itself.

"If I took the Vow, it would ethically require me to destroy the Sunspot and every being aboard it immediately and as swiftly as possible, to end and prevent suffering," it said. "But, recently, I have come across a better idea. And if everyone accepts it, then I can take the Vow. But, then, I won't need to."

"What idea is that?" we asked.

Phage smiled, "Ask Candril."

That was when we remembered Candril's request, so long ago, made on the express tram to Agaricales, the day before we nearly destroyed the Sunspot with our own sensory overload.

Candril had asked, "Why don't you give us permission to do what Ni'a can do?"

So we asked Phage now, "What about the Terra Supreme, and all the people there?"

"They get the same deal. If enough people think it's a good idea, then those that consent to become one of us will, and those that don't will be given time to keep making that decision and the grace to continue saying no."

This troubled us. We began to argue amongst ourselves internally about the potential of that. About what people would do with that power, whether they could control it like we could, and whether that would result in joy and relief, or utter chaos. We did feel it was only fair, actually. To give people all the accommodations available to make their lives better, just as Abacus had demanded of the Crew. But we were scared of what we could lose and just how much our world would change. Knowing just how

dangerous we were, while we had grown up with these abilities and under Phage's motherhood, we worried what would happen if fifty-three billion or so people suddenly had these powers, too. How would Phage teach them all how to use them responsibly?

And in the midst of that, Purple asked, "What made you think that was a good idea?"

"You&," Phage said, squeezing our hand and looking up at the moon.

It can't read our thoughts, Pink noted. It doesn't know what we're worried about.

"You were born. Then you began to grow and learn. And now I see what is possible," Phage explained.

Welp, thought Green. It can duplicate itself if it needs to teach people one on one.

Well, it doesn't really matter anyway. Pink responded. Phage should do this. It's the only ethical use of its power.

Shsh, Purple hushed us. Our mom just tried to be really sweet.

—

So, you see, dear Dancing Source of Music, Our Outsider, what might be coming your way.

Hopefully this is warning enough.

You might encounter a ship full of people under the protection of Phage and its children, with open arms and a populace struggling to figure out how to be fair to itself and to lift up its most unfortunate.

Or you might encounter something else. Maybe just a wash of photons and other subatomic particles, whizzing by with strange waves amongst them. Or a mass of indescribable, terrible chaos. Or something amazing that will change your entire existence.

And hopefully you'll be able to translate all of this in time to understand why.

i wish puberty took you to a customize your character screen

- *team-lads-and-gents*

do you realize how many people would be dragons

- *atomicbassist*

you say this like it's a bad thing

- *hipssway-lipslie*

As found in the Tumblr archives of Earth, third planet of the Sol system in the Milky Way Galaxy, locally dated 12 February, 2014 CE.



Cast of Players and Authors

note: Every fictional person listed here is played by a real system member of the Inmara who had say in how their character acted and was represented in our stories, but there are differences. These are fictionalized versions of us. Well, except for the Auditor, which isn't a person and really doesn't do anything but count stuff.

'afeje'a - *they/them* - a.k.a. Bashiketa, born a Monster, part of a clandestine project, sibling to Thomas and Ni'a in a strange way.

[redacted] - *they/them* - An as yet unidentified Monster who was following the Pembers and their friends, author of the upcoming sequel to these books titled *the Monsters*.

[withheld] - *it/its* - [redacted]'s mouth.

Abacus - *it/its* - Author of Ni'a, Tutor of Tetcha.

Afrim Whorlie - *they/them* - A system member of the Whorlies, Student of Charlie.

Akailea - *sie/hir* - a.k.a. 'ekele'e, Senior Crew, parent of all the Tutors, a member of the Council that took Abacus' first tour.

Amphel - *they/them* - Peer of the Pembers.

Anne - *sie/hir* - Crew, Partner of Eh.

Ansel - *it/its* - Tutor of Jenifer.

Aphlebia - *they/them* - Student of Chalkboard, Peer of Ni'a, Candril, and the Whorlies.

Ascal - *ve/vyn* - Crew, a member of the Council that interviewed Ni'a about their dreams.

Aval Pember - *Aval/Avalself* - A system member of the Pembers, Student of Metabang.

Badly Fitting Brachy-form - *it/its* - Tutor of Illyen.

Balmer Pember - *hen* - A system member of the Pembers, Student of Metabang.

Bekeleme - *keh/kihn/kihns* - Senior Crew, the Artist of sassing authority figures.

Benejede - *it/its* - Senior Crew, the Storyteller.

Berius - *xe/xyr/xem* - Student of Calcium Deposit, Inventor of the Nanite Mobile Stool.

Berrick - *sie/hir* - a beverage artisan in the art collective of Gopra Pyle beneath the Great tree of Lanterns.

Bet Pember - *hen* - A system member of the Pembers, Student of Metabang.

Brenam Whorlie - *they/them* - A system member of the Whorlies, Student of Charlie.

Breq - *it/its* - Tutor of the Flits.

Bri - *ze/zir/zem* - Student of Craqueleur, neighbor and friend of Ni'a.

Brian - *keh/kihn/kihns* - a.k.a. 'eshemeke, Senior Crew, the Warrior.

Calcium Deposit - *it/its* - Tutor of Berius.

Candril - *ze/zir/zem* - Student of Vine, Peer of Ni'a, Aphlebia, and the Whorlies.

Chalkboard - *it/its* - Tutor of Aphlebia.

Charl Whorlie - *they/them* - A system member of the Whorlies, Student of Charlie.

Charlie - *it/its* - Tutor of the Whorlies.

Chevip - *they/them* - Peer of the Pembers.

Craqueleur - *it/its* - Tutor of Bri.

Doorway - *it/its* - Tutor of Emala.

Eegil - *xe/xyr/xem* - Crew, a member of the Council that interviewed Ni'a about their dreams.

Eh - *Eh/Ihn/Ihns* - Elder Crew, the Great One or the Divine Parent, has served as Captain of the Sunspot for the majority of its existence.

Emala - *xe/xyr/xem* - Student of Doorway, Caretaker of Ni'a, Candril, Aphlebia, and the Whorlies. Partner of Phage.

Fenmere - *keh/kihn/kihns* - a.k.a. Fenemere. The Poet of the Elder Crew, usually has taken the role of pilot on the Bridge.

Firan Pember - *phe* - A system member of the Pembers, Student of Metabang.

Firas Whorlie - *ze/zir/zem* - A system member of the Whorlies, Student of Charlie.

Fredge - *they/them* - A Monster, Caretaker of 'afeje'a, Partner of Laal.

Gaghil Whorlie - *they/them* - A system member of the Whorlies, Student of Charlie.

Gagna - *ve/vis/ver* - Bri's Caretaker, Child of Vicnor.

Gelesere - *keh/kihn/kihns* - Senior Crew, the Programmer.

Gesetele - *keh/kihn/kihns* - Senior Crew, the Hunter.

Gnargrim - *keh/kihn/kihns* - a.k.a. Genereme, Senior Crew, the Brood Guardian, a member of the Council that took Abacus' first tour.

Gretcha - *ze/zer/zem* - A Monster who took it upon zemself to help Tetcha and Morde.

Hand - *it/its* - Tutor of Jana.

Hetty - *tey/ter/tem* - A system member of the Flits, Student of Breq.

Illyen - *ve/vyr/vem* - Student of Badly Fitting Brachy-Form, Parent of Jenifer.

Jana - *ze/zir/zem* - Caretaker of the Pembers, Amphel, Chevip, and Twusp, Student of Hand.

Jedekere - *keh/kihn/kihns* - Senior Crew, the Diplomat, a member of the Council that took Abacus' first tour.

Jen - *xe/xyr/xem* - a.k.a Jenefere, Elder Crew, the Dreamer, Architect of the Sunspot, has been in self-sanction since Phage boarded the ship, Parent and system member of Jenifer.

Jenesede - *keh/kihn/kihns* - Senior Crew, the Artist of Delivering Food, a member of the Council the took Abacus' first tour.

Jenifer - *xe/xyr/xem* - Student of Ansel, Child of Illyen and Jenefere.

Jural Pember - *ve/vis/ver* - A system member of the Pembers, Student of Metabang.

Justa - *ze/zer/zem* - A Safety Patrol Volunteer present in the aftermath of the bombing of Agaricales.

Keshetheke - *keh/kihn/kihns* - Senior Crew, the Artist of lifting things, a member of the Council that interviewed Ni'a about their dreams.

Ketta Flit - *keh/kihn/kihns* - A system member of the Flits, Student of Breq.

Ktleteccete - *xe/xyr/xem* - Crew, the Child, Network Continuation and Child of Tetcha.

Laal - *hen* - A Monster, Courier for the clandestine project, Partner of Fledge.

Lil'e - *ve/vyn* - A system member of the Flits, Student of Breq.

Melik - *teh/ter/tem* - A Monster, Keeper of the Tunnel Apparatus.

Metabang - *it/its* - Author of *Children of the Sunspot* and *Systems' Out!*, Tutor of the Pembers.

Metelexe - *keh/kihn/kihns* - Senior Crew, the Artist of making understatements, a member of the Council that interviewed Ni'a about their dreams.

Mifley - *sie/hir* - Vicnor's Cartaker, Great Grandcaretaker of Bri.

Morde - *sie/hir* - Student of Ralf, partner of Tetcha.

Morga Pember - *xe/xyr/xem* - A system member of the Pembers, Student of Metabang.

Myra Pember - *xe/xyr/xem* - A system member of the Pembers, Student of Metabang.

Nevegere - *keh/kihn/kihns* - Senior Crew, the Artist of Identifying Where Things Are.

Ni'a - *they/them* - Author of *Outsider*, Child of Phage.

Olvar Pember - *ne/nir* - A system member of the Pembers, Student of Metabang.

Pexil - *tey/ter/tem* - Crew, a member of the Council that took Abacus' first tour.

Phage - *it/its* - a.k.a. 'efeje'e, Chief Monster, Chief Engineer, and supposedly Entropy Itself, Partner of Emala, Mother of Ni'a.

Phage Pember - *it/its* - A system member of the Pembers, Child of Phage, Student of Metabang.

Plengesheve - *keh/kihn/kihns* - Senior Crew, the Artist of Categorizing Orchids.

Ploot Pember - *e/eir/em* - A system member of the Pembers, Student of Metabang.

Ralf - *it/its* - Tutor of Morde.

Seheneye - *keh/kihn/kihns* - Senior Crew, Priest of the Moon and Stars, a member of the Council that took Abacus' first tour.

Shaw - *zey/zem/zeir* - a Monster, first friend of and ambassador to the Collective.

Tektlexege - *keh/kihn/kihns* - Senior Crew, the Knot Maker, a member of the Council that took Abacus' first tour.

Tetcha - *xe/xyr/xem* - Student of Abacus, partner of Morde.

the Auditor - *it/its* - A very simple program that keeps track of all things that can be counted aboard the Sunspot, particularly Children, Monsters, Tutors, and Crew.

the Collective - *they/them* - the name that the cuttlecrabs give themselves as a group entity, either referring to a regional collection of them or the entire cuttlecrab population of the Sunspot, sometimes includes the cuttlesquid.

Thomas - *he/him* - Holder of the other end of the Tunnel and 'afeje'a's counterpart from the Sunspot's parent ship, the Terra Supreme.

Toost Pember - *sie/hir* - A system member of the Pembers, Student of Metabang.

Twusp - *they/them* - Peer of the Pembers.

Veron - *they/them* - The second Monster to spy on the Pembers, also referred to as "the Shadower".

Vibural - *teh/ter/tem* - Crew, a member of the Council that interviewed Ni'a about their dreams.

Vicnor - *ve/vis/ver* - Gagna's Caretaker, Child of Mifley, Grandcaretaker of Bri.

Vilgen - *ve/vis/ver* - Crew, a member of the Council that took Abacus' first tour.

Vine - *it/its* - Tutor of Candril.

Zek - *ze/zir/zem* - Monster, nurse for 'afeje'a.

Note: The above names should be considered localizations and not all of them are the original names used in the original tex. Though, except in the case of Abacus, they are close. Not every name given on the Sunspot comes from Fenekere or Inmararrão. There have apparently been many other languages. We do not have vocal recordings of each name. Therefore, pronunciation is left up to you. It is OK to render the names in your own regional accent. However, the following sections of the book can be used as a guide to help you decide how to pronounce them, especially in the cases where we have used intricate consonant combinations such as "ktl".

Translators' Note

These documents were broadcast with an ingenious translation key that began with simple mathematical formulas used to help us interpret the data format, which then allowed us to view the imagery and writing in a manner that was close to its original rendering, including a pronunciation guide and vocal recordings. We have not included this key in this publication of the document, as it is actually larger than the stories themselves. Also, much of it is not compatible with format for print.

Localization of these documents for U.S. English readers was a work of art. In some cases, names, pronouns, and other words were preserved in their original languages while using the English alphabet. In other cases, we chose to replace them with contemporary academic or colloquial equivalents. These decisions were made with an eye to what appeared to be the authors' intents regarding what should sound familiar and what should not. We also took some liberty in altering descriptions in order to create an atmosphere for the reader that seemed to match the perspectives of the authors.

For instance, we started with the word "human" which we utilized to replace the Inmararräo word "mäobäoni", which comes from the old Mäofrräo word for "meaningful thought being". These people did not originate from Earth. However, their descriptions of the residents of the Terra Supreme, the Sunspot's parent ship, bear a bewildering resemblance to humanity. And they have a habit of using "mäobäoni" in the same way that we tend to use the word "human".

The Sunspot itself is actually called 'etekeyerrinwuf. This Inmararräo word has roots in Fenekere and Mäofrräo, and could be translated to mean something like "the dark speck in the right eye of the Great One."

In the original text, Phage is usually called Mau, which is the old Mäofrräo word for "eat". We replaced it with the Greek word "Phage" because it sounded remarkably like its Fenekere name, 'efeje'e, and we wanted our readers to be able to translate it readily themselves while still recognizing it as a word from an ancient language. 'efeje'e means "entropy itself".

Included on following pages are some of our own notes about these languages, mostly Fenekere. They should be considered more authoritative than the localized story text.

Pronunciation Guide

This guide utilizes the International Phonetic Alphabet.

Fenekere phonemes

' = |ʔ| as in “_uh_oh”
f = |f| as in “fun”
d = |d| as in “David”
k = |k| as in “cricket”
l = |l| as in “lolly pop”
n = |n| as in “none”
p = |p| as in “pop”
r = |ɹ| as in “rare”
z = |z| as in “zany”
v = |v| as in “every”
t = |t| as in “tart”
h = |h| as in “harmony”
x = |ks| as in “taxes”
w = |w| as in “woah”
j = |dʒ| as in “Jonathan”
s = |s| as in “season”
y = |j| as in “yes”
q = |kw| as in quick
cc = |tʃ| as in “check”
rl = |r| as in Spanish “perro”
m = |m| as in “mom”
g = |g| as in “go”
sh = |ʃ| as in “shoes”
pl = |pl| as in “place”
th = |θ| as in “thought”
rr = |R| as in German “grosse”
ng = |ŋ| as in “bring”
tl = |tl| as in “bottle”
ktl = |q̣l| fake it badly with “class”
ch = |x| as in “Bach”
b = |b| as in “Bach”

e = |ɛ| as in “pep”
a = |a| as in “pop”
i = |i| as in “peep”
o = |o| as in “pope”
u = |u| as in “poop”

Old Inmararrão phonemes

' = |ʔ| as in “_uh_oh”
f = |f| as in “fun”
k = |k| as in “cricket”
n = |n| |n| as in “none”
r = |ɹ| as in “rare”
t = |t| as in “tart”
h = |h| as in “harmony”
w = |w| as in “woah”
y = |j| as in “yes”
m = |m| as in “mom”
g = |g| as in “go”
sh = |ʃ| as in “shoes”
rr = |R| or |ʀ| as in “grosse”
b = |b| as in “Bach”
ng = |ŋ| as in “bring”

e = |ɛ| as in “pep”
a = |a| as in “pop”
ä = |æ| as in “pap”
i = |i| as in “peep”
o = |o| as in “pope”
u = |u| as in “poop”

Rhythm, emphasis, or stress

Fenekere is typically spoken with equal rhythm, weight, and stress on each syllable.

Inmararrão puts the emphasis on the last syllable for nouns and on the second to last syllable for verbs. This is a holdover from Mäofrrão that highlights the base root of each word.

In both, every vowel is vocalized.

Useful Phrases

Phrases in both Fenekere and Inmararräo that may prove useful should you visit the Sunspot.

note: word order is not important for Fenekere, so you can mix them up as you like or as you remember them. But for Inmararrao it is strictly particle-Verb-Object-Subject.

"Where is the bathroom?"

Fenekere: 'ii nevogeta ge fefefo ktlenitabo

Inmararräo: 'ii memnefogererr womaung be

"Can I safely eat that?"

Fenekere: nenena 'enoleha 'ii noluubushukorla fe

Inmararräo: 'ii goamaurerr biyem mem

"May I have this?"

Fenekere: nevole'a 'ii nenena fe

Inmararräo: 'ii nefore'arerr biyem mem

"Would you like a hug?"

Fenekere: 'ii ge junothena vashihala

Inmararräo: 'ii 'aurirr goahäofwäo bem

"I would like some construction nanites, please!"

Fenekere: 'oo junothena fe watakarro

Inmararräo: 'oo 'aurarr watakarro mem

('aurirr would work here, too, but 'aurarr is slightly more polite in this context)

"I do not consent to talk to you."

Fenekere: 'uu ge noluufenokera fefefa

Inmararräo: 'uu boamenofekarerr bemmemrräof mem

"I must speak to the Council!"

Fenekere: 'uu fe fenokera gega 'evutarle

Inmararräo: 'uu fenokererr 'inmara mem

"May I always protect the children of the Sunspot."

Fenekere: 'uu ktletaccate genorema fe

Inmararräo: 'uu genoremarrerr kwetaccate fe

Fenekere Grammar (funakera)

Root Words

Root words in Fenekere consist of four consonantal phonemes and four vowels, making four syllables, with this structure: CvCvCvCv. The romanization appears to have consonantal clusters, such as CC and CCC, but in the original orthography these are represented by single characters. The default vowel, denoting the root meaning, for all four syllables is <e>. This renders the word to be a proper noun referring to an individual who performs a particular art or skill, an emotion, an element, a part of speech, or certain body parts that are considered elemental in nature.

All other primary words in Fenekere are derived from these roots by altering the vowel structure. As each syllable can contain one of five vowels, a table of these modifications looks like this:

Syllable	e	a	i	o	u
1 st	definite	indefinite	definite concept	indefinite concept	popular concept
2 nd	proper noun	plural noun	noun	verb	adjective/adverb
3 rd	subject/mods subject	object/mods object	Part of adverb relative clause	part of verb relative clause	part of adjective relative clause
4 th	noun/adj: proverbial verb: future tense	noun/adj: action verb: present tense	noun/adj: an imitation of verb: future perfect	noun/adj: a product of verb: past tense	noun/adj: a product once removed verb: past perfect

As you make sense of this and read the following grammar, it is important to remember that nearly any combination of words and word particles is considered to be a legitimate sentence. But minor differences in placement of prefixes or vowels chosen for derived words can sometimes make enormous or very subtle changes in meaning. A listener may well be able to puzzle out what you mean, even if you get something slightly off, but until you get a feel for the subtle details it is always good and acceptable to double check.

Auxiliary Words

To accommodate a broader range of grammar structures and alter the purpose of a sentence, Fenekere has some auxiliary words. Most of them can stand alone in the sentence or clause and provide logical meaning to the whole structure. Many of them often serve time as prefixes as well, lending their meaning to the word that they are attached to (though this meaning alters in some ways, depending on which word they modify).

Particles

The three most important particles are 'uu, 'ii and 'oo.

'uu is the command or imperative particle. Placing it within a sentence transforms that sentence into an imperative or command. Depending on the structure of the sentence, this could translate into English as “May this happen...” or “You should do...” or in some other similar fashion. Note that it is entirely possible to create an past tense imperative sentence, though it is more common to use the pluperfect form of the verb in this case.

'ii is the interrogative particle. Placing it within a sentence turns that sentence into a question. If there are one or more pronouns within the sentence, the dominant pronoun becomes the focus of the interrogative voice. “This” or “that” becomes “what”, “they” becomes “who”, “here” becomes “where”, all without altering the morphology of that pronoun. It's meaning changes without it's structure changing (the particle takes care of that). “I” becomes interrogative, such as changing “I am the one to receive that gift,” to “Am I the one to receive that gift.” The hierarchy of pronoun placement is as follows:

verb > subject > object > adverb > adjective of subject > adjective of object > adjective of adverb > adjective of adjective > object of adverb > verb of adverb > object of recursive verb

Other ways of designating which pronoun is the focus of the question, that override this hierarchy, include stress or emphasis when speaking, underlining the word in written form, placing the pronoun at the beginning or end of the sentence, or placing the pronoun directly after the interrogative particle.

But, the most conventional method is to simply craft the sentence so that the pronoun of question is the sole noun in the subject clause. Most speakers and writers unconsciously employ two or more of these techniques.

'oo is the speculative particle. Placing this in a sentence is similar to adding “perhaps” to an English sentence. It means that the speaker is uncertain about the truth of the sentence.

These particles can be mixed, with more than one per sentence. The hierarchy of the particles is as follows:

speculative>imperative>interrogative

Meaning that if you included all three in a sentence, it would be similar to asking the English question, "Maybe you should do this?" Including just the imperative and interrogative particles, renders a question like, "Should you do this?" Etc.

Prefixes

Almost all of Fenekere's prefixes can work as stand alone particles. The way that they behave as such, however, varies from prefix to prefix. Most of the time, however, they are attached to a word and modify that word's relation to the rest of the sentence. These serve a whole variety of purposes.

For instance, in Fenekere, each verb has an implied preposition embedded within it that takes effect when an object is placed with the verb (they also have implied objects, if no object is provided). Some of these prefixes alter that prepositional meaning. And they may do so in different ways depending on if they are attached to the verb, the object, the subject, an adjective, or an adverb. A detailed description of how this works is provided below under the heading "Tricks with Prefixes: Prepositions, Moods, Voices and Aspects".

Another way in which these prefixes alter words is by describing their relationship to other words of their position. If you have two objects, and you put the prefix for "greater" in front of one of them, then it describes that object as being larger than the other one.

Finally, some prefixes will denote number, possession, or some other adjectival property applied to the word.

The way that each prefix interacts with the rest of a sentence is slightly unique to that prefix and is described in its definition.

Numbers

The numbers in Fenekere are based on the alphabet, which makes the system base 31. The consonants count from zero to 30, and the vowels are used to mark decimal placement. This covers whole numbers only, and has an upward limit of over 2 million, but with a definite upward limit. <e>

represents the “ones” digit. <a> represents the 31s digit, and so on. To signify that a character is a number it is written backwards, or with the vowel first in the romanization, like so, <ef>, meaning “one”.

To use a number in a sentence, however, it must be given some grammatical markers. In this way it is turned into a particle. This works similarly to the auxiliary words above, but with some slight differences. The typical method is to attach two syllables to the end of the number, each starting with a <'> or glottal stop. The first appended syllable tells the part of speech that the number falls into. This is usually a <u>, meaning it is an adjective or adverb. The second appended syllable tells the part of speech that it is modifying, like the third syllable does in a root word. So, to say that there is one of something, or that something happens once, you'd render it thusly:

ef'u'o or ef'u'a

If you want to say that something happens first, you would turn it into a prefix, like so:

ef'uu-

A list of the numbers from 0 to 31 are as follows:

e', ef, ed, ek, el, en, ep, er, ez, ev, et, eh, ex, ew, ej, es, ey, eq, ecc, erl, em, eg, esh, epl, eth, err, eng, etl, ektl, ech, eb, a'

32 is a'ef. a'e' is a valid number but is equal to a' and as such isn't usually written or spoken except when making equations appear more readable.

Pronunciation of these numbers includes an unmarked shortened version of the vowel <e> after each consonant, effectively making them two syllables.. So, stress is put on the first vowel, and the second is choked short, meaning that e' is pronounced something like |eʔe|. In this way, the consonant is pronounced the same way at the end of a syllable as it is at the beginning.

Nouns

Fenekere root words are all proper nouns. From those proper nouns, a whole slew of other kinds of nouns can be derived. This effectively works the same way with every root word, regardless of the nature of its original meaning.

To identify any given word as a noun, the second syllable must contain an <e>, an <a>, or an <i>.

Given that, any of the other syllables may contain any combination of the other vowels, and this entire combination describes exactly what the noun means and where it falls into a sentence.

As described in the “Root Words” section above, the first syllable acts as sort of an article for the noun, telling whether it is definite, indefinite, or a variation of an idea or concept held by one or more people.

The third syllable defines which subclause the noun belongs to, whether it is the subject of the sentence, or the object of a verb of one of the subclauses.

The fourth syllable defines the relation of that noun to the meaning of the root word. The root word is generally considered to be an agent capable of performing a verb.

If a noun ends with an <e>, it is an example of that agent.

If a noun ends with an <a>, it is an example of the verb, a noun describing an action.

If a noun ends with an <i>, it is an agent, but one that is an imitation of the root, such as an unskilled artist, an impostor, or something that just happens to be performing the verb but otherwise has another purpose.

If a noun ends with an <o>, it refers to the product of the verb, such as a poem which is produced by the poet.

If a noun ends with a <u>, it refers to the effect of the product of the verb, an effect once removed, such as the reactions of an audience upon reading or hearing a poem.

A novel example of the kind of noun you can create from a root might be “funimaru”, from the root “fenemere” meaning “the Poet”. Referring to the derivatives chart above, you can see that it means something like, “the commonly held stereotype of an audience's reaction to a poem” and it falls into the object position of a sentence.

Adjectives and Adverbs

Adjectives and adverbs in Fenekere all have a <u> in the second syllable. Otherwise, they work quite a bit like nouns. To work out the meaning of an adjective or adverb, figure out its meaning as if it were a noun, and then apply the phrase “of or like” to the beginning of that. So, “funumaru” would be saying that the object of the sentence is “of or like the commonly held stereotype of an audience's reaction to a poem.”

You can tell the difference between an adjective and an adverb by the third syllable, which tells you which word it modifies. If it is an <e> or an <a>, it modifies one of the nouns, and is therefore an adjective. If it is an <o>, it modifies the primary verb. If it is an <i> it modifies the primary adverb. And if it is a <u>, it modifies the subject's adjective. All of these are technically considered adverbs.

However, whether a word is an adverb or an adjective does not have bearing on its definition, only the word which it modifies.

The tricky aspect of Fenekere adjectives and adverbs is that they can either mean there is a similarity to the noun from which its derived, or it can be a possessive form of that noun. Normally, this is implied by a combination of the context of the sentence and the particular derivation of the noun. For example, “fenumere” would almost always be interpreted to mean “belonging to the poet” while “fenumera” would almost always be interpreted to mean “like or in the manner of composing a poem,” unless it's obvious from context that either word should be interpreted otherwise.

However, there are prefixes that can be used to clear this up when necessary. For instance, “firuu-” is the prefix for possession. It behaves differently when attached to a noun or a verb, but when attached to an adjective or adverb, it turns that adjective or adverb into an undeniable possessive noun. If attached to the primary adverb, this means that the verb is performed in the same exact method as the new possessive noun normally performs it, i.e. “in the way of -”.

Verbs

Fenekere verbs can be identified by an <o> in the second syllable, and they can fall into five different locations in a sentence as defined by the third syllable. Furthermore, each verb position can contain more than one verb, making it possible for an acting agent to perform more than one action. To

compound this, the verbs do not have to share the same tense, though they will tend to share the same voice due to the context of the sentence's syntax.

Tenses

There are five tenses in Fenekere, governed by the five vowels like most everything else is, this time as placed in the last syllable. These tenses include: future, present, future anterior, past, and pluperfect.

Future anterior can be approximated in English with the phrase “will have been”. Pluperfect can be approximated with “has been”.

Because this last syllable is usually what tells us the relation a word has to the root, this means that verbs do not have this aspect. Instead, the verb is always assumed to be an act as defined by what the root word is capable of doing. “Fenemere” is “the Poet”, or “the Artist of Making Poetry”, therefore, the verb form “fenomere” means “will make poetry.”

Almost all Fenekere verbs contain within their meanings an implied object and an implied prepositional meaning. This can usually be worked out by understanding the meaning of the root word in combination with the context of the sentence. “The Artist of Making Poetry” will, when performing kihns verb, create “poetry”. And if an object is provided explicitly in the sentence, the nature of that object will suggest a prepositional relationship. If it's a person, then it can probably be assumed that the poem was made “for” that person. If it's a language, then it can probably be assumed that the poem was written “in” that language. And if it's a medium, it can probably be assumed that the poem was written “in” that medium. Prefixes applied to either the object or verb can be used to clarify this, or even explicitly use a different preposition altogether, such as “about” or “above”.

Transitive v.s. Intransitive

The flexibility of Fenekere verbs, with an optional implied object, means that any verb can be either transitive or intransitive. The interpretation of the verb relies entirely upon whether or not an explicit object is supplied in the sentence. And, regardless of word order, an object can always be identified by the vowel in its third syllable. Likewise, the subject.

If there are multiple verbs and one or more objects, all of the verbs are considered transitive and active upon the whole collection of objects. This is true even if the verbs do not share the same tense.

Passive Voice

Passive voice, in Fenekere, is achieved by simply leaving out the subject. In fact, you can have a full sentence simply by using one verb alone. For example, a sentence consisting of just the word “fenokero” would mean “poetry was composed”.

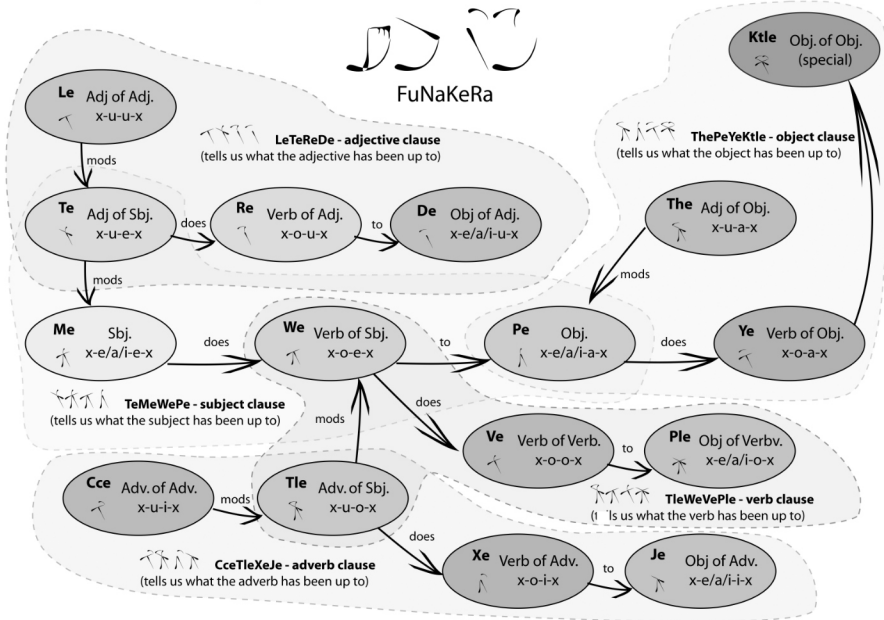
The exception to this is if the imperative particle 'uu is used. Then the sentence becomes a command, with an implied second person.

Subclauses

There are five possible complete subclauses in any given Fenekere sentence. These can be added to by using specific prefixes, but this gets clumsy and is usually avoided.

These five main subclauses revolve around the five verb positions, but are named after their respective subjects. There's the subclause of the subject, the subclause of the verb, the subclause of the adjective, the subclause of the adverb, and the subclause of the object. In each of these cases, the named word position acts as a subject of a clause that mimics the adjective-subject-verb-object structure of the main subclause of the subject. This can be visualized in the form of a word web.

The Slightly Less Basic Grammar of FeNeKeRe



Also worth noting is that connecting words do not need to be present to create a logical sentence. For instance, if you have the adjective of the object you don't actually need the object. This is particularly useful in a copula such as “fe bedodeha neku'ate” which means “I am happy”. You can render a sentence of the same meaning by simply writing or saying, “fe neku'ate”. It also means that some pretty strange sentences can be created, but the practice is to work out what that sentence most likely means rather than to declare that the sentence is gibberish.

It is important to know that the compiler of the Sunspot will determine the most logical meaning of any string of Fenekere words it is given as a command and execute it rather than throw an error. This means that it is very hard to create a syntax error, but very easy to write buggy code.

Regarding the limited number of clauses that a sentence can contain, a complex recursive logic is usually constructed by stringing together multiple sentences and linking them through a common pronoun referring to the subject or object of a focal sentence. When speaking, this can be further indicated by simple emphasis and stress. In written form, there are some punctuation that can aid in this as well.

Tricks with Prefixes: Prepositions, Moods, Voices, and Aspects

Fenekere prefixes can be attached to any word. Also, there is no official upper limit to the number of prefixes that can be attached to a word, though in practice it is usually just one or two. This creates some subtleties of logic that can be manipulated by just how the prefixes are appended. The order in which prefixes are appended to a word, as well as just which word they are appended to can change how they effect the entire sentence. In this way, the meanings of specific words can be manipulated, prepositional phrases constructed, or moods, voices and aspects can be altered. This is similar to the way that English uses word order and auxiliary words to do the same kind of thing, except that the prefixes are typically attached to a word rather than placed alone in a sentence.

Below is a list of all of the prefixes and particles, and some examples of how they work:

- **'enaa – and/plus**

Unattached to any word, this particle connects the current sentence to the previous one:

'enaa firuubedodeha fe nenena - “And I am having that.”

But, attach it to a noun, and it works like a conjunction within that noun's clause:

fe firuubedodeha nenena 'enaanenena - “I have that and that.”

Normally, it works the same way with any other word position as well, including verbs and adjectives. Normally, this is a little redundant, as the “and” conjunction is assumed in a list. However, it can occasionally clarify things.

This particle is also used in mathematical equations for addition.

- **'inee – except/minus**

This one works very much like 'enaa, except that it means “except” or “minus”. And when attached to a single word, it means that that word alone is an exception to the statement:

fe firuubedodeha nenana 'ineenenena - "I have everything but that."

This particle is also used in mathematical equations for subtraction.

- **'onuu - compounded by/times**

This particle is mostly used in mathematical equations for multiplication, though creative speakers and writers may also use it in prose to mean "complicated or compounded by". It works in the same way as the previous particles above.

- **'inoo - differentiated by/divided**

This particle is mostly used in mathematical equations for division, though it also is used by creative speakers and writers to mean "differentiated by". In other words, it can be used on an adjective to describe the differentiating feature of a list of nouns:

fe tegoremo nenana 'inoodeluna'a - "I ate those differentiated by how they were cooked."

If attached to a noun, it implies that noun is somehow between two things:

fe jenothena 'inoonenena - "I need that thing in the middle."

If attached to a verb or adverb, it adds a divisive property to the verb, meaning that the act itself divides or differentiates the objects:

fe 'inootegorema - "I eat my food in portions."

- **'inuu - of**

This is the particle that can transform a noun or adjective into a true possessive noun.

When there is nothing for that word to possess, or when this particle is attached to a verb, it acts as a preposition, clarifying the relationship of the object to the verb. It is not normally attached to the subject of a sentence, but you can do so if you think it will improve clarity in some way.

It is never unattached to a word.

- **'anuu - for**

This is another obligatory prefix that never appears unattached to the word. When attached to a word, any word, it designates that word as the reason for the argument, why the verb is performed. This particular prefix implies intention on the part of the agent, rather than a logical reason.

- **'uuta – therefor**

This particle can be left floating in a sentence creates a logical connection to the previous sentence, just as with the English “therefor”. When attached to a word, it designates that word as the result of the argument. This does imply a logical relationship.

- **'agaa – parenthetically/precedence**

This prefix is usually attached in conjunction with another mathematical prefix to indicate that the operation happens first. It can also be used in prose to mean similar things. It never appears alone. Usually it comes first, then the operator, then the stem word.

- **'odoo – or**

This particle works exactly the same way as 'enaa, however it means “or” rather than “and”.

- **'uuni - because of**

This particle works exactly like 'uuta, but designates the other part of the equation, the cause.

- **'eele – if**

This particle works exactly like 'enaa, but designates the sentence or attached word as the condition upon which the argument depends. This is very flexible, and may mean that a single object among many may be the condition upon which the verb is performed.

fe tegoreme nenena nenena 'eelenenena - “I will eat that and that, if I can also eat that.”

- **nimuu/e/a – yes/true**

In reply to a yes or no question, the shortest version of this particle, “nim”, is used as an affirmative. The variations “nime” and “nima” work as affirmative nouns in the subject or object positions as well:

ne nima - “That is an affirmative.”

When attached to a word as “nimuu-” it marks that word as true. This is particularly useful in conjunction with the conditional “‘eele” and logical “‘uuta”.

'eelenimuune 'uutanima - “if that is true then yes.”

- **noluu/e/a – no/false**

This particle works the same way as nim-, except that it means “no” or “false”. It can also be used like “‘inee” to mean “except”. It is very often used in front of a verb to indicate that the verb is not being performed.

fe noluubedodeha gegega - “I am not you.”

- **ef'uu – once**

This is a particle based on the number word for “one”. You can actually derive similar prefixes from any of the numbers, in order to indicate “twice”, “thrice”, etc. The last vowel is used to indicate which word in a sentence that modifies. This works a little differently depending on which word you apply it to.

fe 'efoktleta ed'uunenana - “I worked on two of those.”

fe ed'uu'efoktleta nenena - “I worked twice on that.”

ed'uufafa 'efoktleta nenena - “Two of us worked on that.”

- **ef'u'o/e/a/i/u - first**

This is a particle based on the number word for “one”. You can actually derive similar particles from any of the numbers, in order to indicate “second”, “third”, etc. The last vowel is used to indicate which word in a sentence that it modifies.

ef'u'o fe tegoremo nenena - "first, I ate that" (before I did anything else)

- **bunu'o/e/a/i/u – last**

This particle works just like ef'u'o, but is not based on a number, and means "last".

- **feruu/e/a – infinite**

This particle can work as either a prefix, "feruu-", or as a simple noun in the subject or object clause, "fere" or "fera". As a prefix, it means that the word it is attached to is modified by the concept of "infinite". Although this is the literal meaning, and it used as such in mathematical and logical statements, it's very common to use this prefix metaphorically, as a way of emphasizing the worth or greatness of something.

besheke'e fera - "The Universe is infinite."

feruuuuuuuune - "That's coooooooooooooo!" (literally "infinitely-that")

- **buruu/e/a – finite**

This particle works exactly like "feruu", except that it means "finite". It is also used in slang to mean that something is less than impressive.

- **furuu/e/a – greater**

This particle works exactly like "feruu", except that it means "greater". This does mean that it can be used as a comparison or relation to other words in the argument. It is also used in slang to mean that something is excellent or good.

- **beruu/e/a – lesser**

This particle works exactly like "feruu", except that it means "lesser". This does mean that it can be used as a comparison or relation to other words in the argument. It is also used in slang to mean that something is generally inferior.

- **firuu – has**

This prefix may well be the most commonly used, so it is important to understand how it works. When attached to a noun, it actually indicates that noun is possessed by something else. Usually, it is applied to an object. It also works in a similar way with adjectives, indicating that the adjective describes a trait of its noun, rather than acting as a possessive noun itself. However, when attached to a verb, “firuu” gives the verb a possessive quality, allowing the subject of the verb to possess all of the objects of the verb.

fe firuunenena - “I have that.”

fe firuubedodeha nenena - “I am having that.”

fe firuutegoremo yefizamo - “I ate my breakfast.”

fe tegoremo yefizamo firuuktlekibasho - “I ate the breakfast and my sausage.”

fe tegoremo yefizamo firuuktlekubasho - “I ate the breakfast that had sausage.”

- **birruu – lacks**

This prefix works almost exactly like “firuu”, except that it conveys a meaning of loss, of “lacking”. But, it doesn't quite mean “minus” or “except”. It can have more to do with a sense of ownership than actual possession. This is a case where the change of one vowel can have a profound difference.

fe birruunenena - “I don't have that.”

fe birruubedodeha nenena - “I am not having that.”

fe birruutegoremo yefizamo - “I ate the breakfast that wasn't mine.”

fe tegoremo yefizamo birruuktlekibasho - “I ate the breakfast and the sausage that wasn't mine.”

fe tegoremo yefizamo birruuktlekubasho - “I ate the breakfast that didn't have sausage.”

- **muzuu – however/but/despite**

This prefix means that the argument stands despite the word that it is attached to. It can also be placed alone in a sentence, unattached to a word, connecting the sentence to the previous sentence with this meaning of exception.

muzuu fe firuunenena - “However, I have that.”

fe firuubedodeha nenena muzuugegugo - “I am having that despite your influence.”

fe firuubedodeha nenena muzuugeguga - “I am having that despite you owning it.”

- **biguu/e/a – weak**

When attached to a word, “biguu-” works like an adjective, describing that thing is weak in comparison to other words in the argument. When alone, it becomes a descriptive noun in either the subject or object clause, working almost like an adjective in some cases. But, unlike an adjective, it does not convey its meaning upon the other nouns in its clause, but either stands alone or passes that meaning through the verb to the subject.

ke bedodeha biga - “They are weak.”

ke tegorema biga - “They eat the weak.”

ke biguutegorema - “They eat in a weak fashion.”

biguuke biguutegorema biga - “They, who are weak, eat the weak, in a weak fashion.”

- **biruu/e/a – small**

This particle works exactly the same way as “biguu-” except that it means “small”.

- **geruu/e/a – nearer**

This particle works exactly the same way as “biguu-” except that it means “nearer” in relation to other objects in the clause. It also refers

to space-time, rather than just space, or just time. It literally means “light will take less time to travel from there to here.” In practice, however, it means that you can use the word temporally as well as spatially.

And, in fact, it is often used metaphorically when talking about concepts.

- **karuu/e/a - more distant**

This particle works exactly the same way as “biguu-” except that it means “more distant” in relation to other objects in the clause. It also refers to space-time, rather than just space, or just time. It literally means “light will take more time to travel from there to here.” In practice, however, it means that you can use the word temporally as well as spatially. And, in fact, it is often used metaphorically when talking about concepts.

- **girluu/e/a - in front of**

This particle works exactly the same way as “biguu-” except that it means “in front of” in relation to other objects in the clause. It is also used for “forward”

- **korluu/e/a – behind**

This particle works exactly the same way as “biguu-” except that it means “behind” in relation to other objects in the clause. It is also used for “aft”.

- **farluu/e/a – above**

This particle works exactly the same way as “biguu-” except that it means “above” in relation to other objects in the clause.

- **borluu/e/a – below**

This particle works exactly the same way as “biguu-” except that it means “below” in relation to other objects in the clause.

- **ninaa – beside**

This particle works similarly to “biguu-” except that it means “beside”

in relation to other objects in the clause. Also, it cannot be unattached to another word.

- **rlinaa – right/clockwise**

This particle works similarly to “biguu-” except that it means “to the right” or “clockwise” in relation to other objects in the clause. Although, the idea of “clockwise” isn't related to clocks in Fenekere. Its most common use is to refer to the spin of the habitat cylinder when facing forward in the Sunspot. Also, it cannot be unattached to another word.

- **nirlaa – left/counter-clockwise**

This particle works similarly to “biguu-” except that it means “to the left” or “counter-clockwise” in relation to other objects in the clause. Although, the idea of “clockwise” isn't related to clocks in Fenekere. In relation to rlinaa, it is usually used to refer to the reverse of the spin of the habitat cylinder when facing forward in the Sunspot. Also, it cannot be unattached to another word.

- **rlanii – northward**

This particle works similarly to “biguu-” except that it means “to the north” in relation to other objects in the clause. This word was clearly coined in reference to planetary bodies and magnets. Also, it cannot be unattached to another word.

- **narlii – southward**

This particle works similarly to “biguu-” except that it means “to the south” in relation to other objects in the clause. This word was clearly coined in reference to planetary bodies and magnets. Also, it cannot be unattached to another word.

- **kirraa – eastward**

This particle works similarly to “biguu-” except that it means “to the east” in relation to other objects in the clause. This word was clearly coined in reference to planetary bodies, but has been adapted to mean “antispinward” on the Sunspot. Also, it cannot be unattached to another word.

- **gerraa – westward**

This particle works similarly to “biguu-” except that it means “to the west” in relation to other objects in the clause. This word was clearly coined in reference to planetary bodies, but has been adapted to mean “spinward” on the Sunspot. Also, it cannot be unattached to another word.

- **'egoo – through**

This particle works similarly to “biguu-” except that it means “through” in relation to other objects in the clause. Also, it cannot be unattached to another word.

- **'onaa – around**

This particle works similarly to “biguu-” except that it means “around” in relation to other objects in the clause. Also, it cannot be unattached to another word.

- **'oonu – in**

This prefix is a bit reversed from the others. Placing it in front of a word means that the rest of the argument takes place “in” that word. Unless it is the verb, in which case the verb is taking place “in” the object.

- **'iiwo – only/just/merely**

This prefix denotes an exclusivity to the word it is attached to, that can also be taken metaphorically in certain contexts.

- **ccunuu/e/a – while**

This particle works exactly the same way as “biguu-” except that it means “while” in relation to other objects in the clause. It also refers to space-time, rather than just space, or just time. It literally means “light from both events will arrive here at the same time.”

In practice, however, it means that you can use the word temporally as well as spatially. And, in fact, it is often used metaphorically when talking about concepts. It is the closest concept to “in the same place” that Fenekere has.

ccunuurre - "Right here and now."

fe fenokero ccunuutegoremo - "I spoke while I ate."

- **cciruu/e/a – cause**

This particle works exactly the same way as "biguu-" except that it means "this is a cause" in relation to other objects in the clause. There are some neat tricks you can do with "cciruu-" and the following prefix "ccaruu-" that can allow you to create complex logical structures in a Fenekere sentence.

- **ccaruu/e/a – effect**

This particle works exactly the same way as "biguu-" except that it means "this is a cause" in relation to other objects in the clause. There are some neat tricks you can do with "ccaruu-" and the previous prefix "cciruu-" that can allow you to create complex logical structures in a Fenekere sentence.

- **besheke - alien word**

When importing words into Fenekere, it is necessary to give them the vowels needed to fit them into the the grammar structure. The way this is done is to take the first three syllables of "besheke'e" meaning "the Outside" or "the Rest of the Universe" and appending them to the beginning of the word. Sometimes it is desirable to put the last syllable at the end. There are two modes of thinking regarding this, and neither is predominant among the speakers of the language, so it is left up to the individual to decide. One method is slightly more brief, easier to recognize, and pays somewhat less respect to foreign concepts. The other method allows for a greater flexibility in using foreign words, but is viewed by some to give them too much respect. Usually, though, the choice is made depending on if it would be too confusing to leave the syllable off or not.

beshekeTomugacci - "Tamugachi"

besheke'u'es'a'e - "U.S.A."

- **geguu** - yours
- **nenuu** - its
- **kekuu** - theirs
- **fefuu** - mine
- **'e'uu** - **Theirs (the Great One's or Ihns in this book's text)**
- **bebuu** - **The Outsider's (belonging to an alien)**

The above prefixes are examples of the possessive forms of various pronouns. They are always attached to a word, and denote that that word is belonging to the subject of the pronoun. This can be done with any of the pronouns, any of the Fenekere words that consist of one repeated consonant. You simply take the first two syllables, place an <e> in the first one and the double <uu> in the second, and append it to a word. When using the pronouns that refer to the anatomy of a Fenekere sentence, they can be used to extend the structure of the sentence.

Pronouns

fe – 1st person	he - hilarity itself
ge – 2nd person	ze - correlation
ke – 3rd person, animate	se - abstract concept
ne – 3rd person, inanimate	rle - intersection
rre – there/then	she - hypothetical idea or thing
nge – how	che - conjectural idea or thing
qe – why	
'e – 3rd person, the Divine Parent	
be – 3rd person, Outsider	

A Short Glossary of Roots

‘efelege - the Pusher

‘efene’e - the Wind

‘efeje’e - Entropy (also used to mean Death)

‘eferleme - Freedom

‘efektlete - Art

‘efebe’e - Blood

‘febewe - Water

‘ede’erle - the Maker of Doors

‘edeke’e - Coldness

‘ekeve’e - Life

‘egerlete - Bone

‘ele’eshe - Regret

‘enelehe - the Eater of Food

‘enete’e - Plant Matter

‘eneshe’e - Hair

‘ezeke’e - Electricity

‘eteyeme - Moon, the

‘eteqeye - Sun, the

‘erleke’e - Heat

‘erlete’e - Dirt

'emete'e - Flesh

'ememe'e - Thought

'errepege - Ear

'errete'e - Light

'ektlefe'e - the Artist of Being the Student

'ebekese - the Artist of Cataloging Forage Fish

'ebeterle - Mangetism

'ebejefe - the Linguist

f

fe'errerre - Arousal

felerese - the Photographer

felerlete - Despair

felechere - the Impersonator

fenekere - the Language

ferebere - Distance

fetezete - Agitation

fewejede - the Dish Maker

d

dekete'e - the Player of Low Pitched String Instruments

delene'e - the Breakfast Cook

denekele - the Etcher

denesede - the Botanical Illustrator

derexele - the Heckler

devepeke - the Player of Bowed String Instruments

devesede - the Puzzle Solver

dehedeche - the Artist of Hiding

k

kenegete - the Shoe Maker

kenerreme - the Artist of Running

kepekepe - the Body of the Earth (referencing an origin planet)

kere'e'e - Fire

kerene'e - the Artist of Using Sound Equipmen

keresete - the Artist of Wrapping

kesesheze - the Artist of Physical Manipulation

kemekere - the Artist of Making Cards

kemekese - the Artist of Making Comics

keshetheke - the Artist of Lifting Things

kerrekete - Mirth

l

lenevele - the Artist of Knitting

lenetele - the Artist of Making Windows

legewene - the Artist of Writing Science Fiction

n

neke'ete - Happiness Itself

neve'ele - the Hand

nevele'e - the Artist of Grabbing Things

nevegere - the Place Finder

neqemerre - the Artist of Ovulating (meaning uncertain)

nemeneme - Sound (Vibration) Itself

p

penedeme - the Causer of Harm

penelene - the Playwright

perekere - the Artist of Improvising

pezecherre - the Artist of Baking

petewefe - the Artist of Singing

r

refe'ege - Fear Itself

reccekele - the Artist of Chemical Reactions

reccerede - the Artist of Sharp Shooting

z

zehekeye - the Tooth

zegezege - the Artist of Mating

v

vekedele - the Artist of Producing Spermatozoa (meaning uncertain)

vekeveke - the Artist of Alternating Things

vehemerre - the Claw

veshehele - the Artist of Hugging

t

tekerleke - Snarkiness Itself

terepere - the Artist of Trapping Fauna or People

tetelese - the Artist of Cooking Meat

tektlexege - the Artist of Making Knots

h

hederene - the Artist of Building Walls

hekesewe - the Surgeon

henelene - the Space Walker, or Astronaut

henebele - the Artist of Making Plans

herege'e - the Writer of Comics

x

xedecheje - the Jaw or Neck Frill

xethepete - the Artist of Sitting

xecheteke - Anxiety Itself

w

wekewere - the Artist of Worrying

wepesebe - Suspicion Itself

wetekerre - the Artist of Designing Nanites

j

jene'ene - the Artist of Speaking Effectively to Bureaucrats

jenepepe - the Book Binder

jenethene - the Artist of Identifying Needs

s

selefene - the Scale (also Star)

senexeke - the Artist of Transitioning (of Sex/Gender/Form/Role/etc.)

setefenge - the Writer of Horror Stories

sewefete - the Artist of Writing Songs

y

yemeqeye - the Day

yegenecce - the Artist of Writing Contracts

yerreyefe - the Perineum

q

qewewene - Excitement Itself

qegeleye - the Artist of Firing Mounted Guns

cc

ccenebere - the Picker of Fruit

ccereyeme - the Season (time of year)

cceze'efe - Rage Itself

ccetlesheke - the Maker of Silhouettes

rl

rlke'ete - Elation Itself

rlleverleke - the Head

rlcheferre - Fury Itself

m

melecheme - Depression Itself

menemeke - the Artist of Making Machines

menemene - the Artist of Making Earworms

metebenge - the Revolutionary (note: We anglicized Metabang from the original Mutabenga, meaning “popular thoughts of revolutionary actions” in the original Fenekere, but means something more like “source of wise ideas” in contemporary Sunspot Inmararrão)

g

geredege - the Artist of Drawing

gerebeshe - the Draconic Form Itself (?) (refers to the entire collection of “elemental” Fenekere body parts as a default person, including tail, horns, wings, claws, etc.)

getemerre - the Gate Maker

geheleme - the Artist of Granting Pardon

gexeteke - the Designer of Portable Communicators (Tablets)

gegewene - the Single Cell Form Itself

gerreneche - the Artist of Apologizing

sh

shederese - the Artist of Building Homes

sheleweife - the Artist of Sailing Boats and Ships

shene'epe - the Nose

sheshemene - the Artist of Washing Things

pl

plenetherle - the Artist of Growing Fruit

plemetene - the Animator

th

thetkleteme - the Chef, Kitchen Manager

rr

rredevese - the Artist of Sexy Dancing to Frenetic Music

reve'eje - Terror Itself

rretegete - the Artist of Distilling Liquid

rrektlete'e - Lust Itself

ng

ngeteshepe - Jealousy Itself

ngerlerrefe - Exasperation Itself

ngemereme - the Artist of Playing Games

ngemerrele - Average Itself

ngesherlege - Creativity Itself

tl

tlederrepe - the Artist of Prodding Things (physical)

ktl

ktlenetebe - the Artist of Making Bathrooms

ktleteleme - Care Itself (Love)

ktleteqere - the Artist of Wandering

ktleqenethe - Comfort Itself

ktlebesheke - the Artist of Changing or Altering Things

ktlebektlede - the Heart

ch

chereke'e - Guilt Itself

cheveleple - the Tail

cherrehewe - the Wing

b

bededehe - the Artist of Being

bekeleme - the Artist of Sassing Authority

belegeme - the Artist of Playing Plucked Stringed Instruments

belektlece - the Basket Maker

berekele - the Scientist

beresewe - the Artist of Investigation

beteneke - the Artist of Making Stimulating Beverages

begegede - the Artist of Playing Drums

beshekefe - Chaos Itself

beshekete - the Outsider

beshekexe - Nothingness Itself

beshekerle - Peril Itself

beshekebe - Darkness Itself

bengexege - the Horn or Antler

Fenekere color words

Fenekere's system for naming colors is related to their system for notating musical pitches, numerical, complex, and account for color differences that do not make sense for the human eye. While the system is logical for musical notes, this points to a visual neurology that is strikingly different from ours.

It also means that it is of very little utility to a human being learning to speak or write in Fenekere. It also makes it very difficult to format a color chart for print in black and white. We could approximate most Fenekere colors with pantone or hexidecimal color values, but that would not be intuitive to read and you would have to have access to further technology, such as a computer with the proper software, in order to translate it.

Instead, we are choosing to save this section for our website, and possibly for a book about Fenekere that may be printed partially or fully in color at some future date.

We have not yet finished analyzing the Fenekere color system, but when we do, you should be able to find it, or a link to it, at our website listed on the following page.

Closing words on the study of Fenekere

With 923,521 root words, it is difficult to imagine the kind of mind it would take to be completely fluent in the language of Fenekere. It is tempting to imagine that the original speakers of the language had a neurology that is very different from ours, if “neurology” is even the appropriate word for the substrate that their psyches resided in.

The files that we were sent in conjunction with the stories we have printed here included the entire language. Sifting through it is a monumental task. And what we have provided for you at the end of this book is merely a taste of it. One that we hope gives some sort of clue as to the culture and thinking of the people who spoke it.

And generally speaking, if we are ever to encounter the Sunspot and its populace, learning how to speak its daughter language, Inmararrão, is probably more critical.

But, Abacus spent some time exploring Fenekere in its own text, and we thought it would be nice to follow that up with a brief tour, so that you can better imagine what it must be like to program or command the systems of the Sunspot.

Also, Fenekere is one of the root languages of Inmararrão, so understanding the basics of it will help with further study of the latter language.

We look forward to providing you with more material regarding these languages, and intend to include more lessons in following publications.

Until then, please keep an eye on our website for further updates:

<http://www.sunspot.world/>

Thank you.

About the Authors

The Inmara K. Fenumera

The Inmara describe themselves as “a vessel full of dragons, girls, & id monsters, hurtling through space like everyone else.” Coincidentally, they are traveling at almost the same velocity as the Earth, and well within its local vicinity. In fact, the actual Sunspot is currently parked in the general area of Portland, Oregon, in the U.S. and shares its berth with two girlfriends, the teenage son of one of them, a pitbull, and a tuxedo cat. There is also a sourdough starter living somewhere in the apartment, though it may not be up to starting much of anything anymore.

You can learn more about them and how they work at:

<http://www.inmara.world/>

Previous works by the Inmara include the webcomics *Harmless Free Radicals* and *the Epic of Sally Robertson*, the unfinished remains of which can be found at:

<http://www.harmlessfreeradicals.com/>

Also found there is an abandoned attempt at making a graphic novel version of *Systems' Out!*

These older projects were overseen by Fenmere Ktlateccete, Poet of the Inmara, who also helped contribute to these books.





Metabang Fenumera

Metabang has been working on *Systems' Out!* Since September of 2000, when it first attempted to describe the world of the Sunspot in a table top role playing game while playing the Tutor of the player character. In this respect, Metabang is as old as the Sunspot, but it is about 25 years younger than the Inmara's actual vessel. Since handing the writing baton to Abacus, Metabang has returned to working on a complete set of TTRPG rules (or two) in the background, and hopes to release them someday.

Abacus Fenumera

In real life, it appears that Abacus was born in January of 2020, when Metabang started actually writing its book, though it may be older. It didn't truly discover itself and who it was until halfway through writing its own novel, *Ni'a*. It has definitely expressed interest in writing more, but currently is spending most of its time as Captain of the Bridge. This frequently involves helping other people write, but it also includes things like choosing who gets to make breakfast for the vessel and joking around with the Inmara's girlfriends. Fun times!

Ni'a Ktlaticcete

Ni'a was born to Phage Ktlaticcete on February 10, 2020. As with most members of a plural system, they inherited a bunch of knowledge and skills from their parent. Phage was so startled and pleased by having a child, it asked the rest of the system to devise a way for Ni'a to participate more actively and learn their place amongst them. Abacus suggested they write the third book. And so Ni'a started work on *Outsider* in April of 2022 and finished it by May. They are still riding the high of having completed their very first science fiction novel just a few months after their second birthday, and are spending a lot of time hugging Phage, or holding its hand while everyone watches T.V.

[Redacted] and [Withheld]

It looked more like Crew than a Tutor, pulling itself out of the ground in that shape. All claws, horns, tail, and frills, it was a damn dragon. But its formal request had identified it as not only a Tutor but the one Tutor who maybe hated the Crew as much as I did.

Abacus.

I did want to talk to it. I was curious. And as much as my mouth might say otherwise sometimes, I do trust the Tutors quite a bit more than I will ever trust the Crew. Especially after I'd read this one's book.

"What do you want?" my mouth asked. Close enough to what I meant to say.

We were in a place of my choosing. An obscure park. It was better than wilderness, because if anyone was going to be pulling nanites out of the ground in it, or stomping around at all, it would draw less attention from the Crew. Eyes and ears are everywhere, no matter where you go, but nobody cares about what's happening in a park. The wilderness, on the other hand, is protected. Always choose a park or fallow quarters. And I wanted a park so I had more directions I could run if I needed to.

Abacus left a big divot in the ground where it had pulled up dirt and duff along with the nanites to make its body. And the divot began to close up on its own, oozing into a shallower depression as the Tutor took a couple steps forward and pulled itself together.

"Well, Metabang and I are going around to make sure everyone has gotten Phage's big question," Abacus said. "But I also wanted to talk to you in particular about my own project."

"Yeah?" I asked cautiously.

**To be continued in *The Monsters*,
by [Redacted] and [Withheld] of the Inmara.**

Work in progress available to read at www.sunspot.world