

Unity
Distribution
Book II



First Edition

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<http://beesbuzz.biz/>

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PLANET FALL

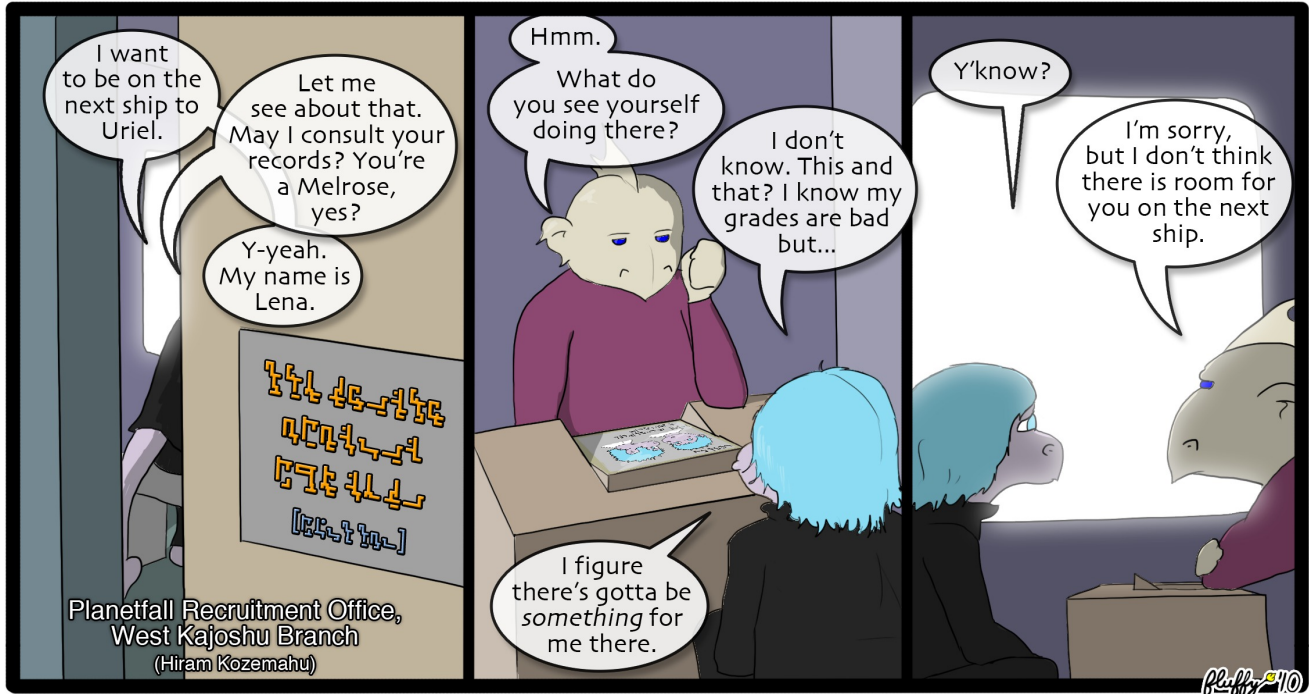
1. Lena



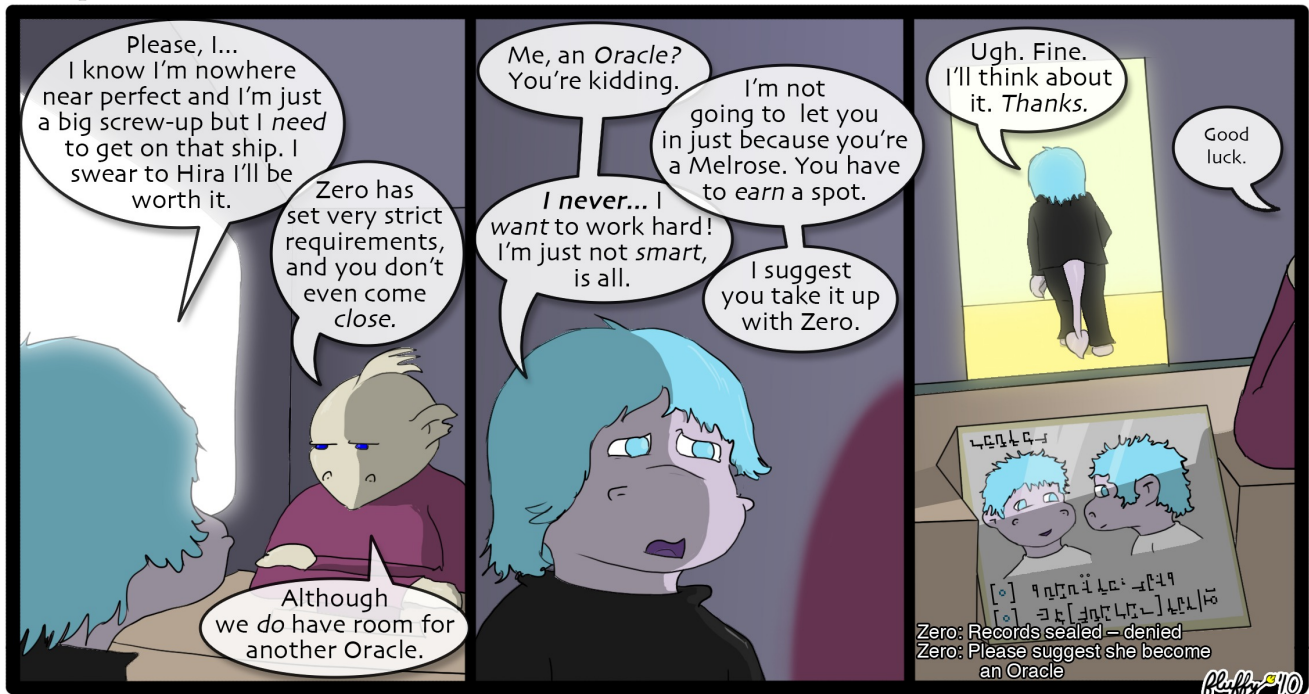
2. Four walls and a bed



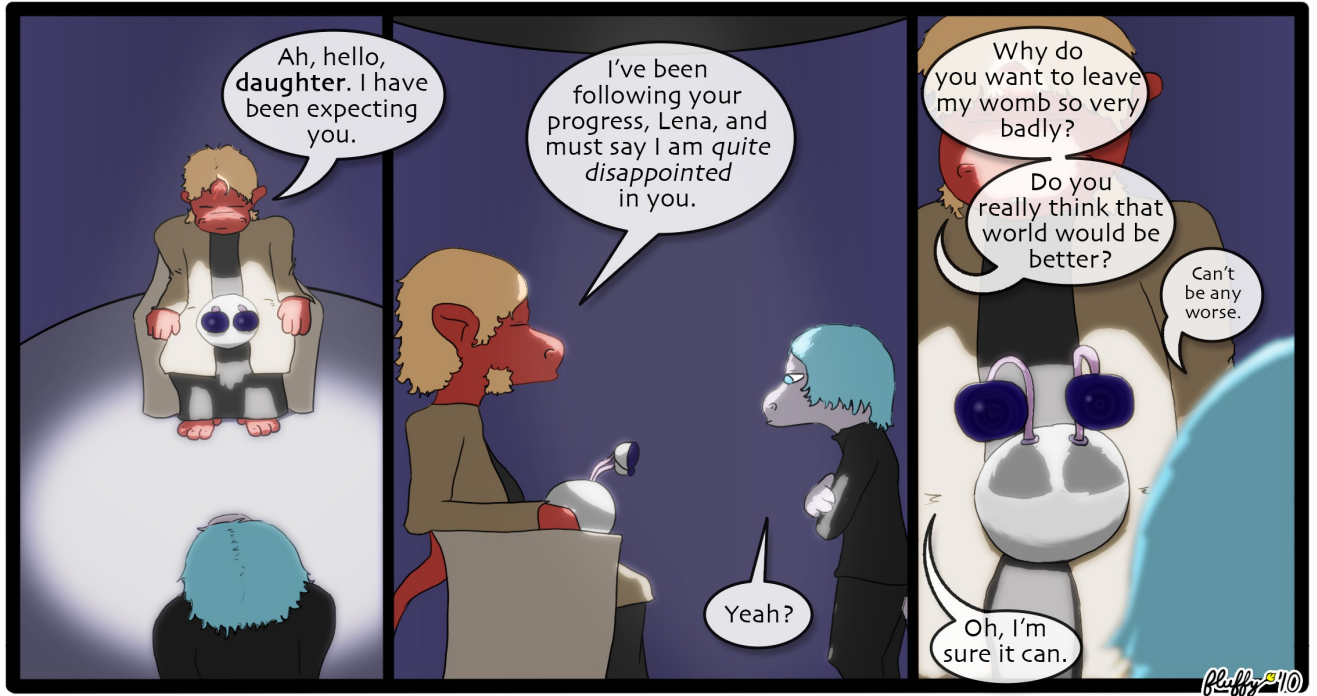
3. Volunteer



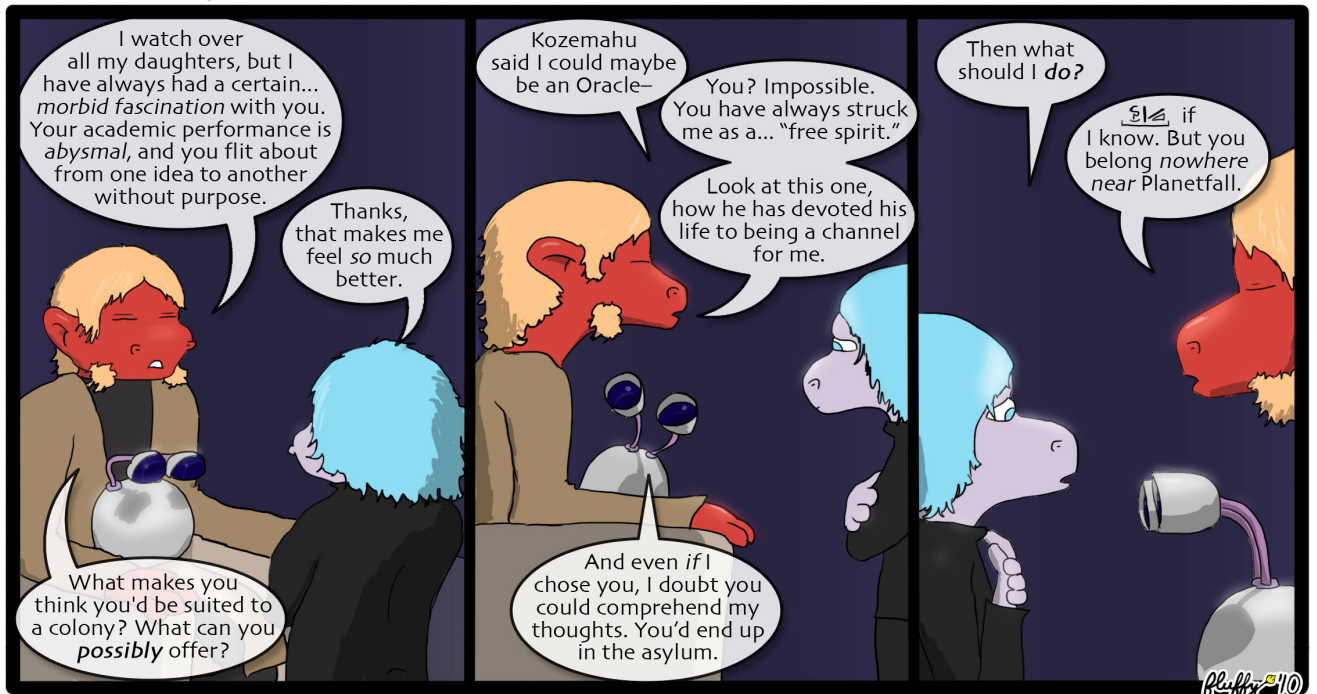
4. Dispreferential



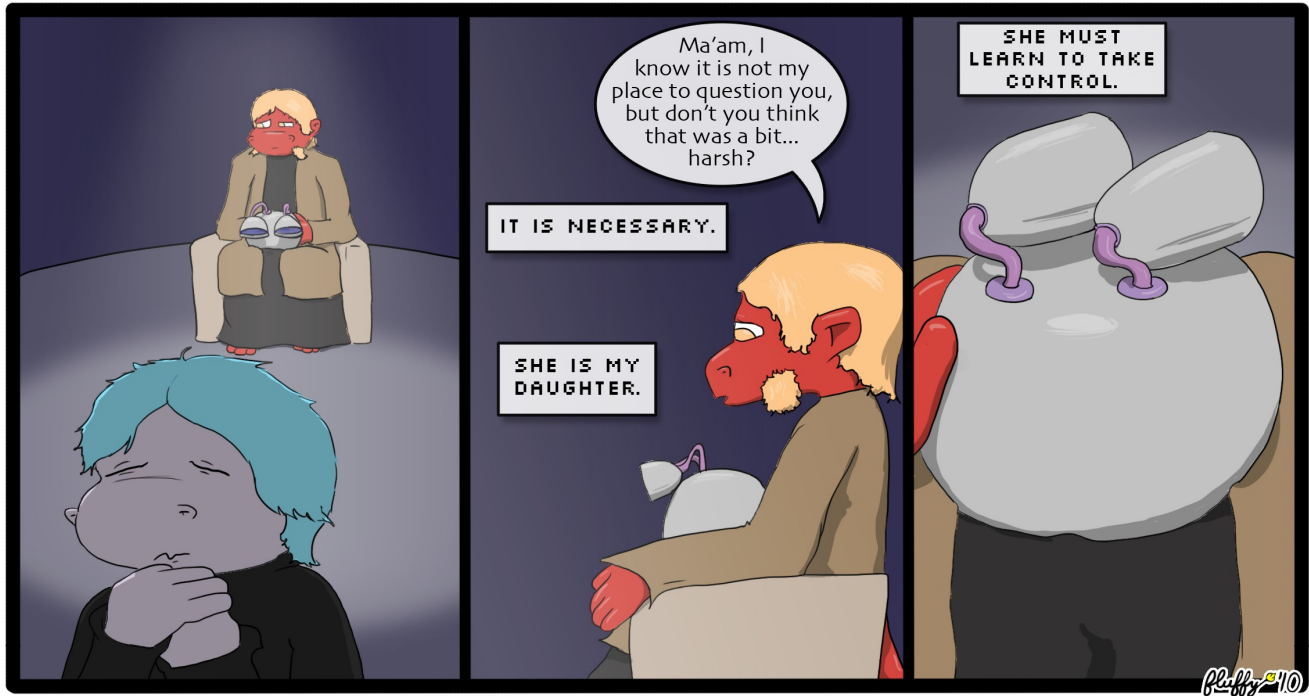
5. Oracle



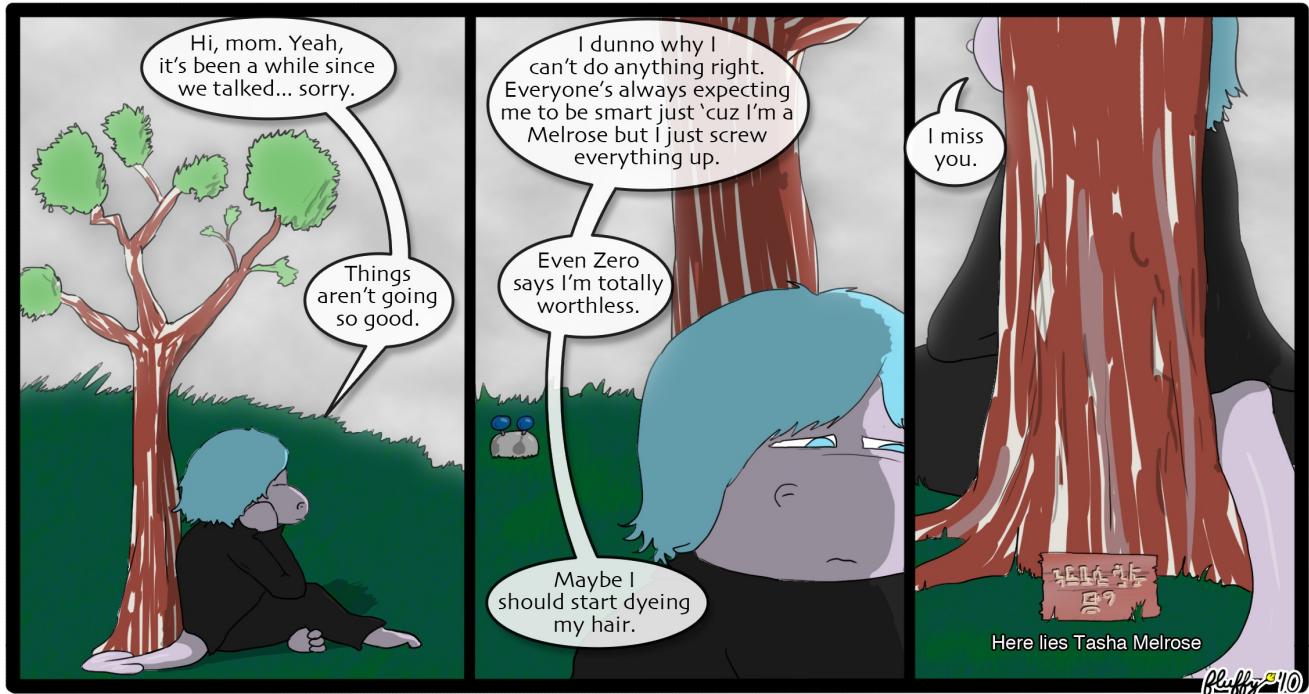
6. Knife twisting



7. Tough love



8. The Fool on the Hill



9. Salutations



10. Parth and Parcel



11. When I Grow Up



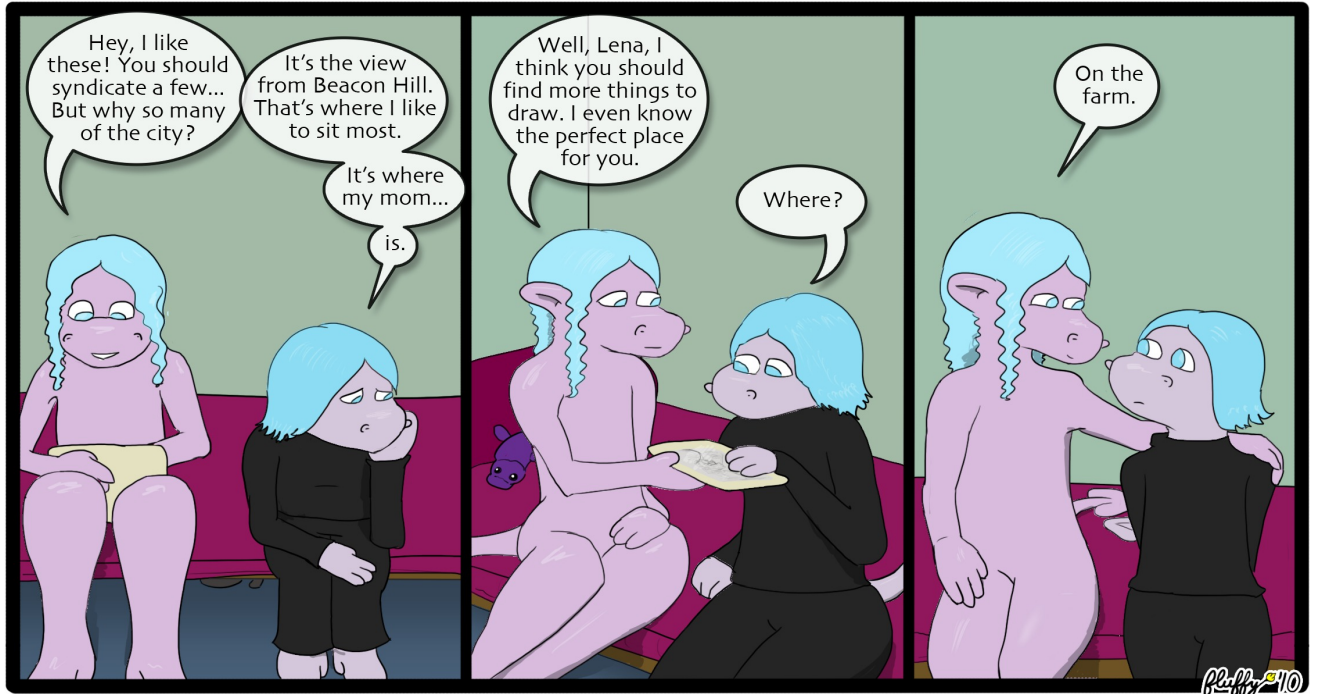
12. Kayohash on a cold bioplastic roof



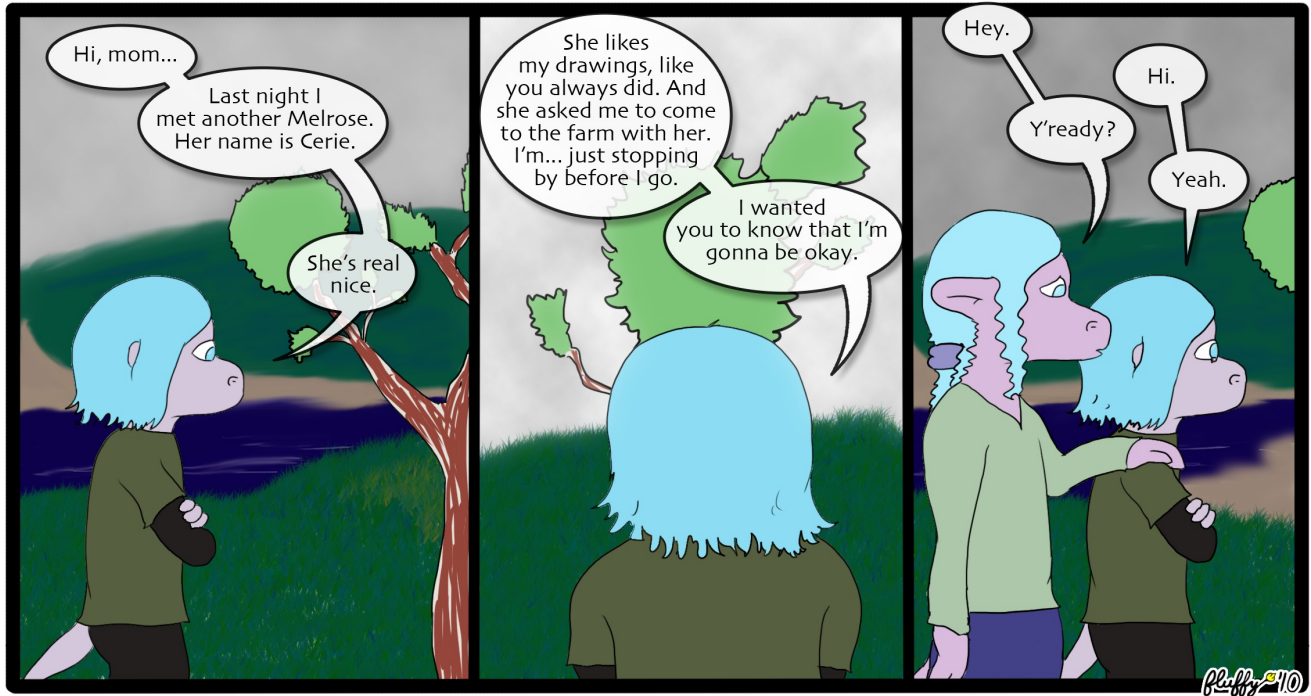
13. Nothing is something



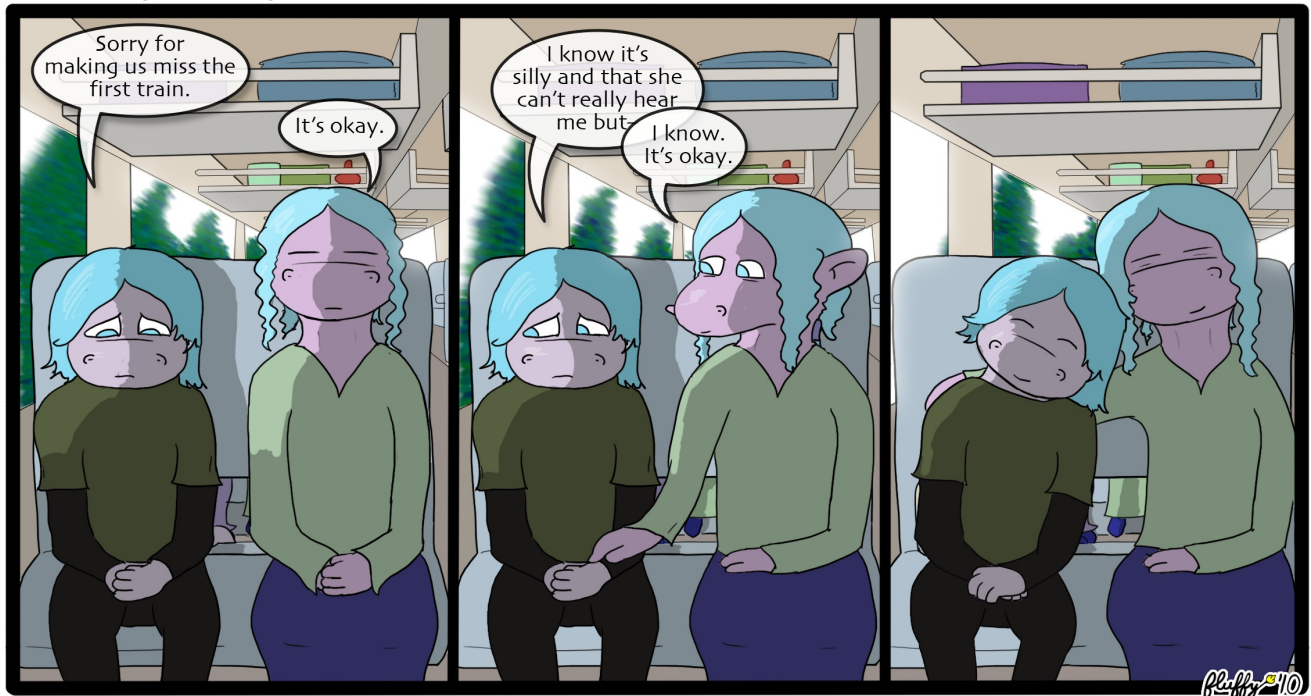
14. Invitation



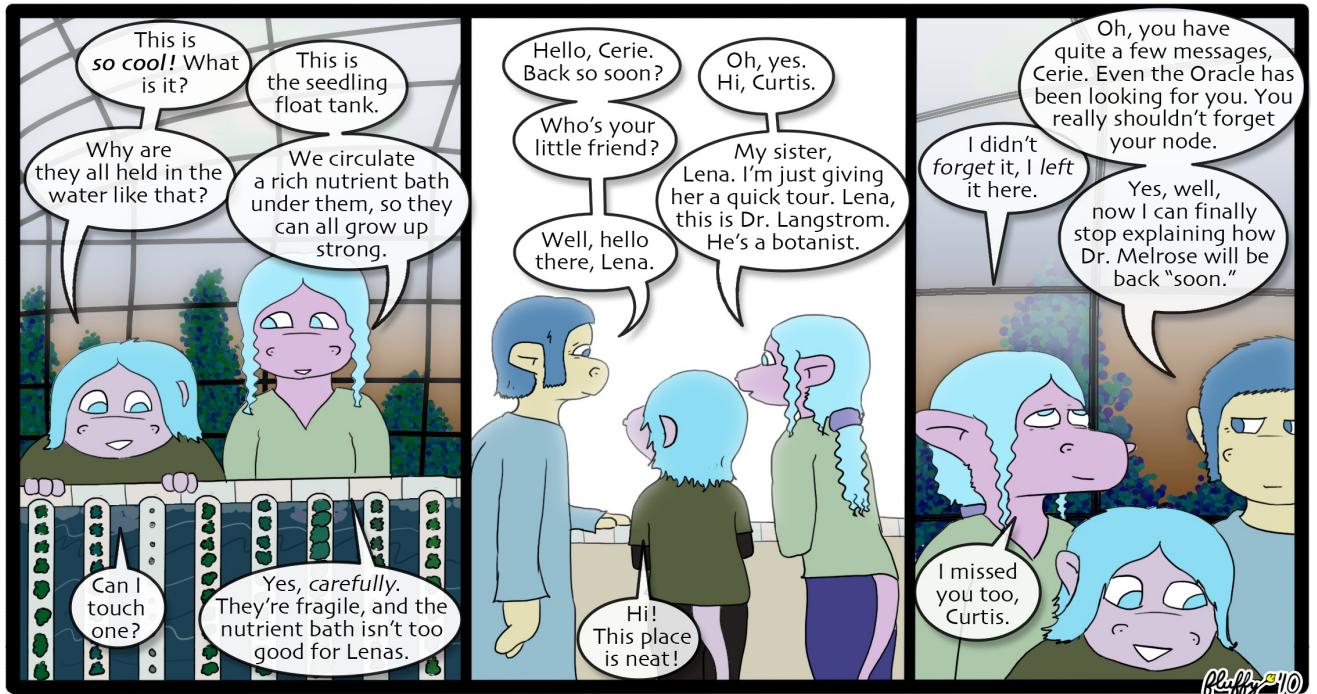
15. Farewell



16. Leaving on a mag train



17. Germination



18. Work



19. Play



20. Meeting



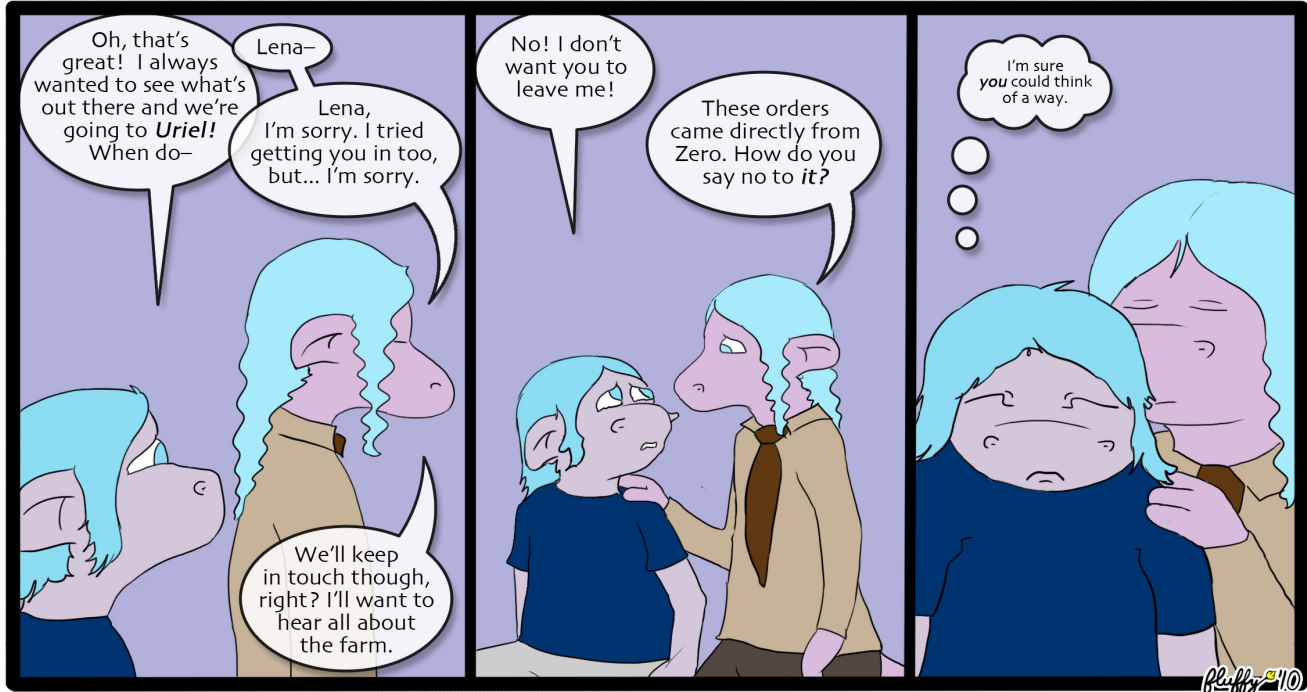
21. Waiting takes time



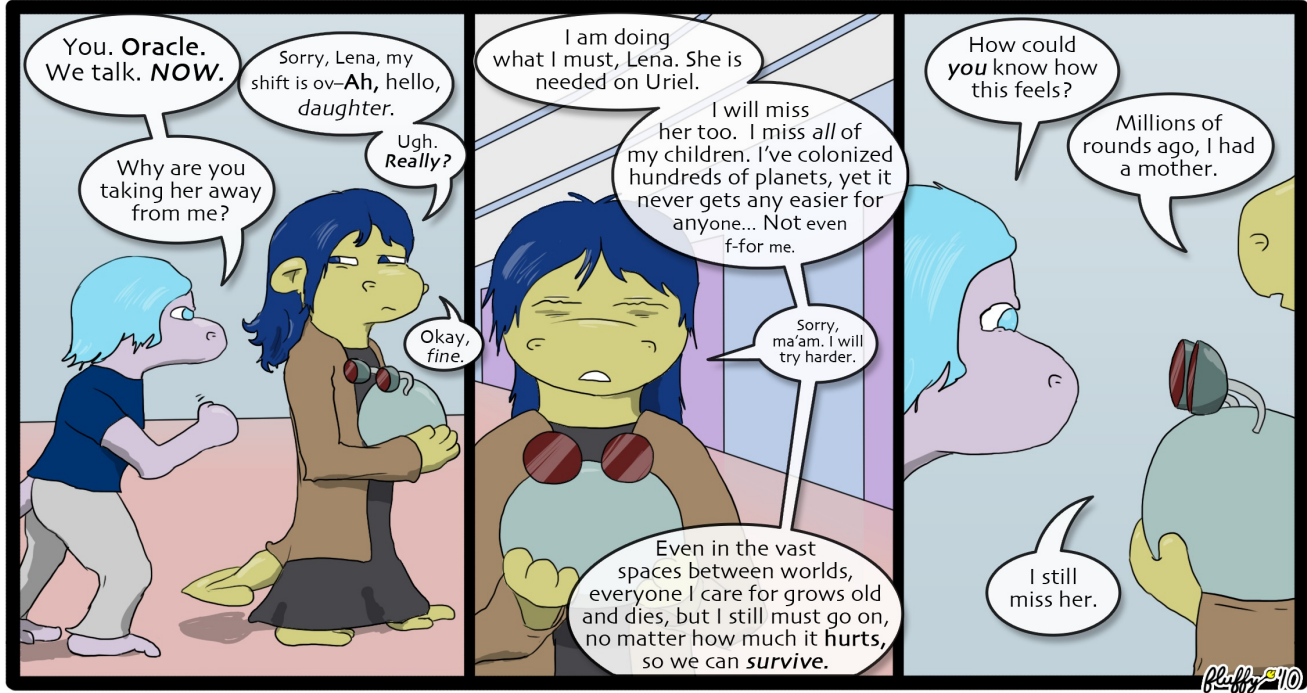
22. Feeling a draft



23. Saying "no" is hard



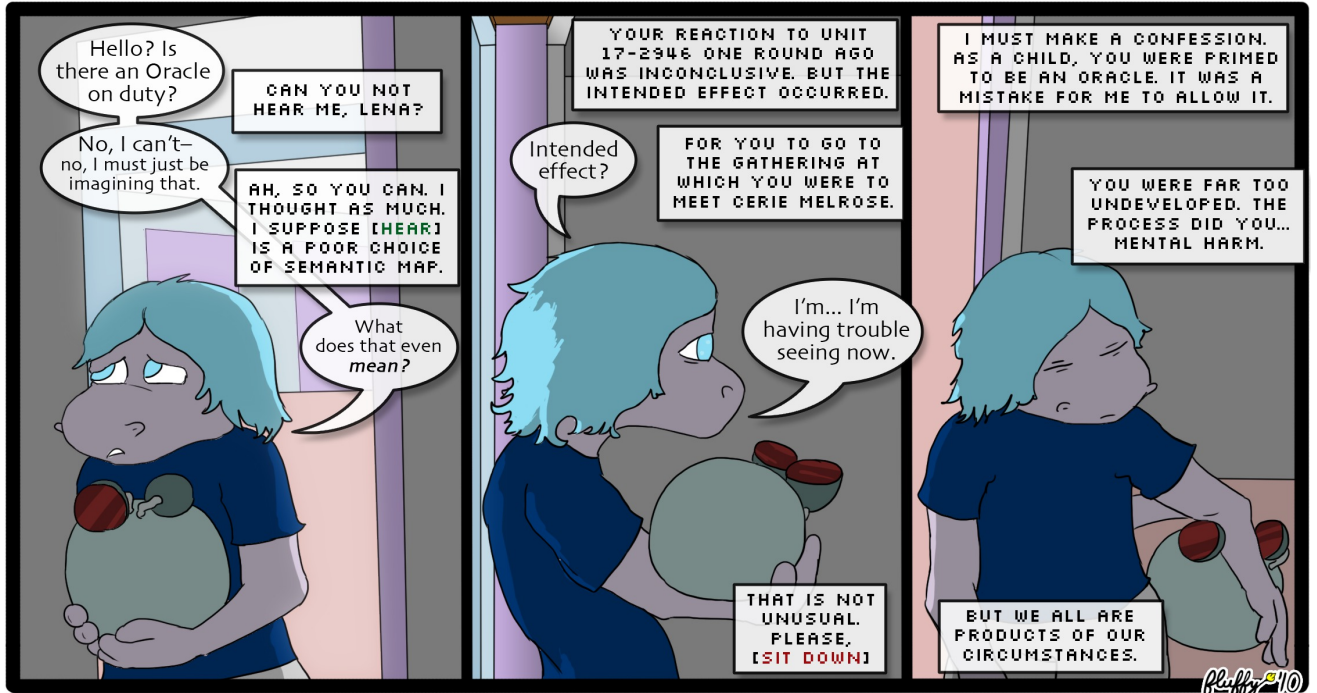
24. Confrontation



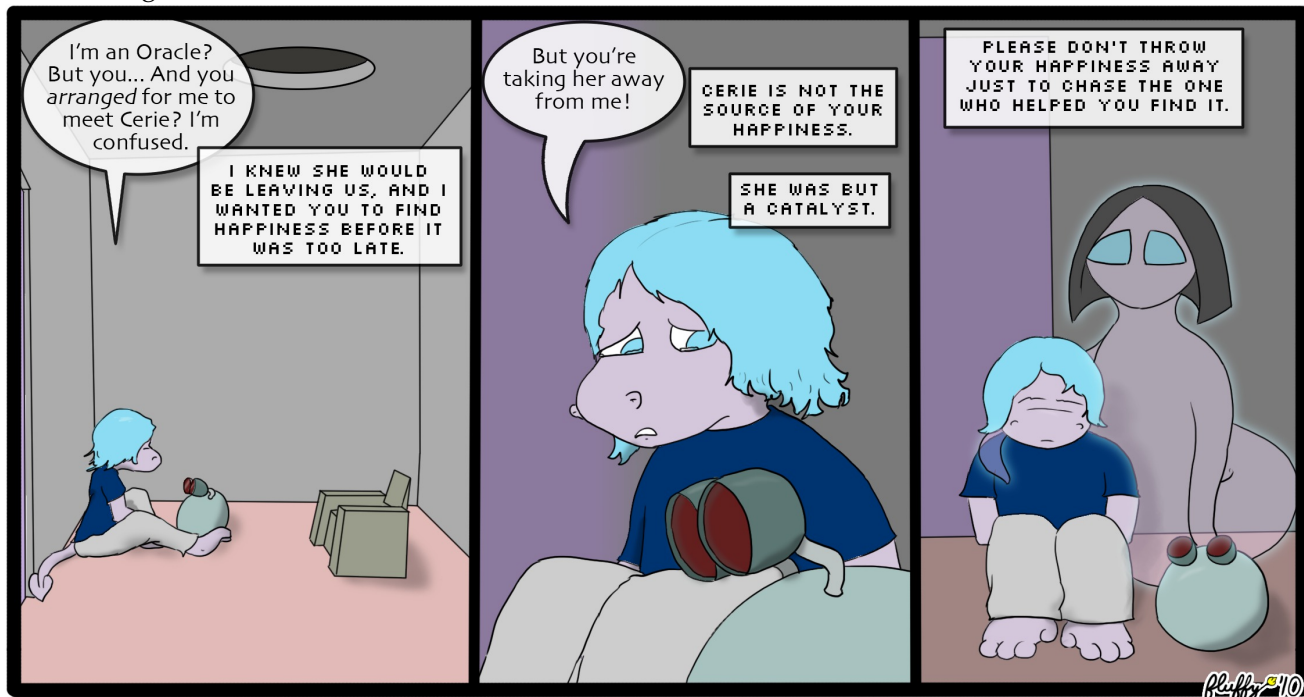
25. Transition



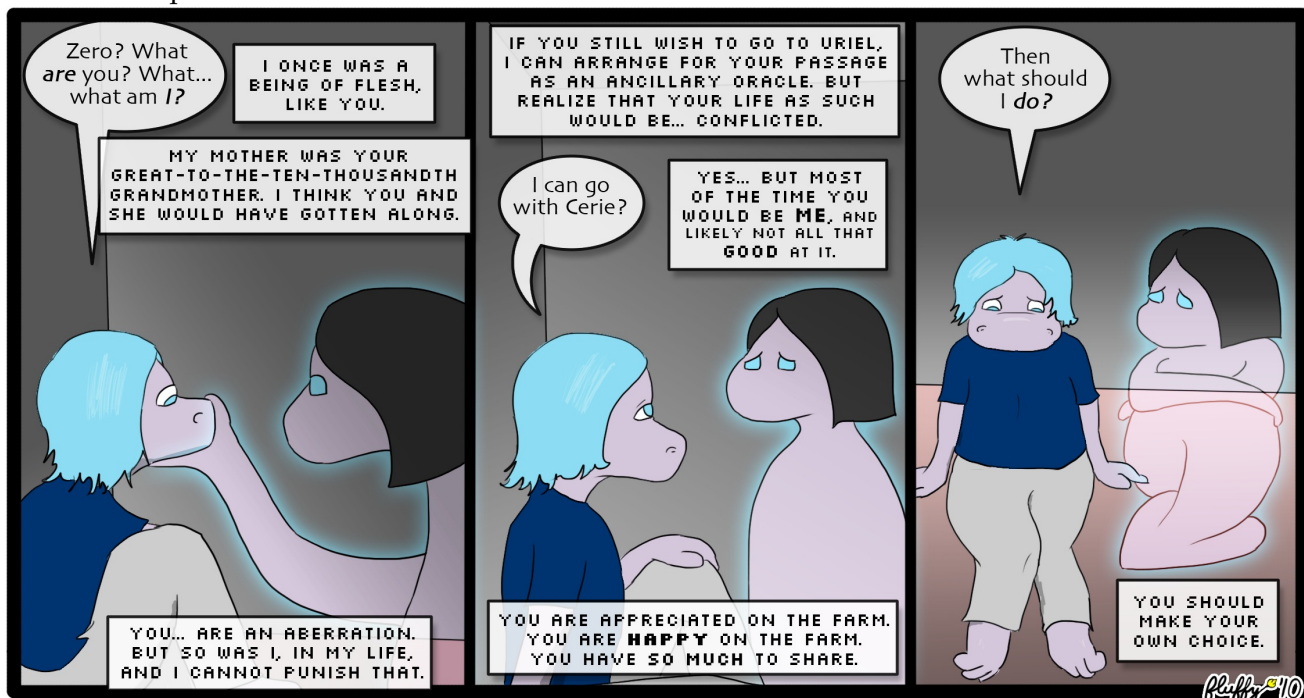
26. Circumstances



27. Chasing rainbows



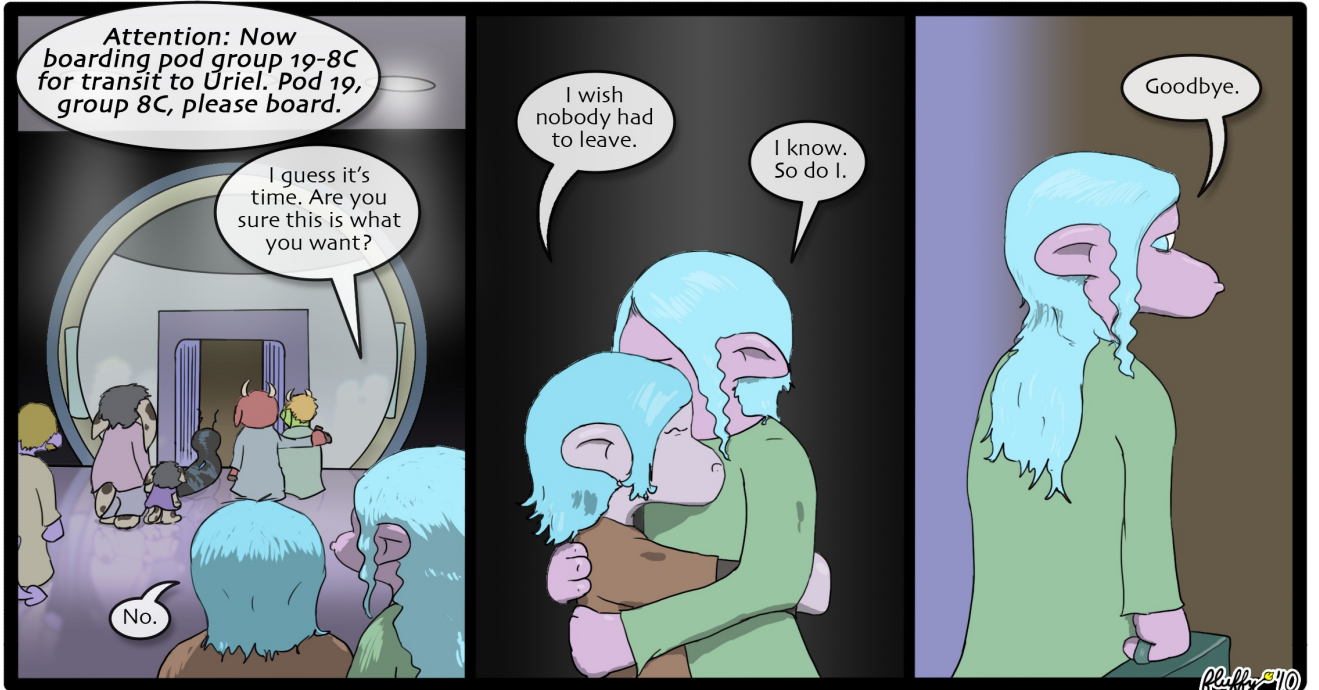
28. Decision point



29. Recovery



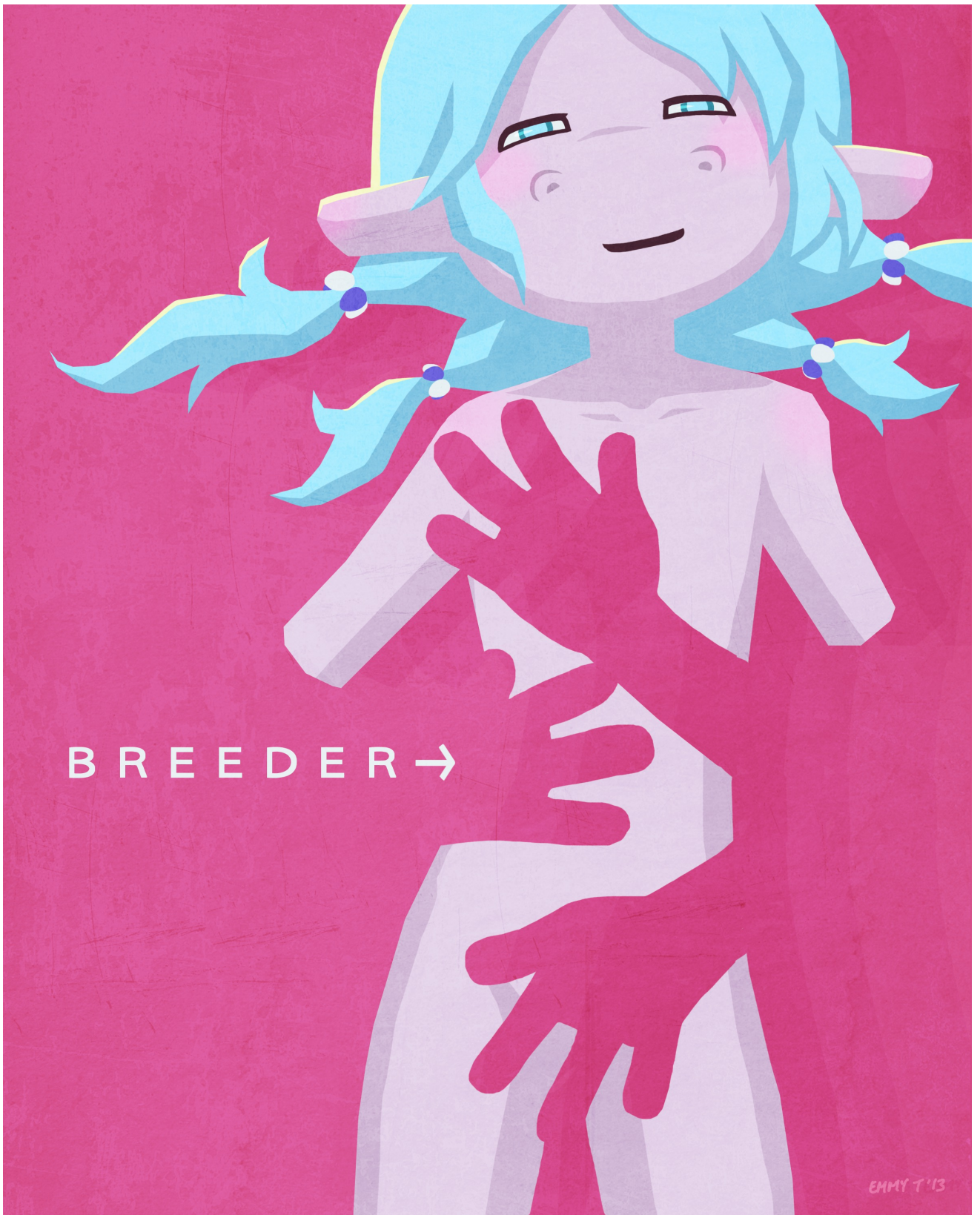
30. Departure



31. Goodbye



END
P2-110



BREEDER →

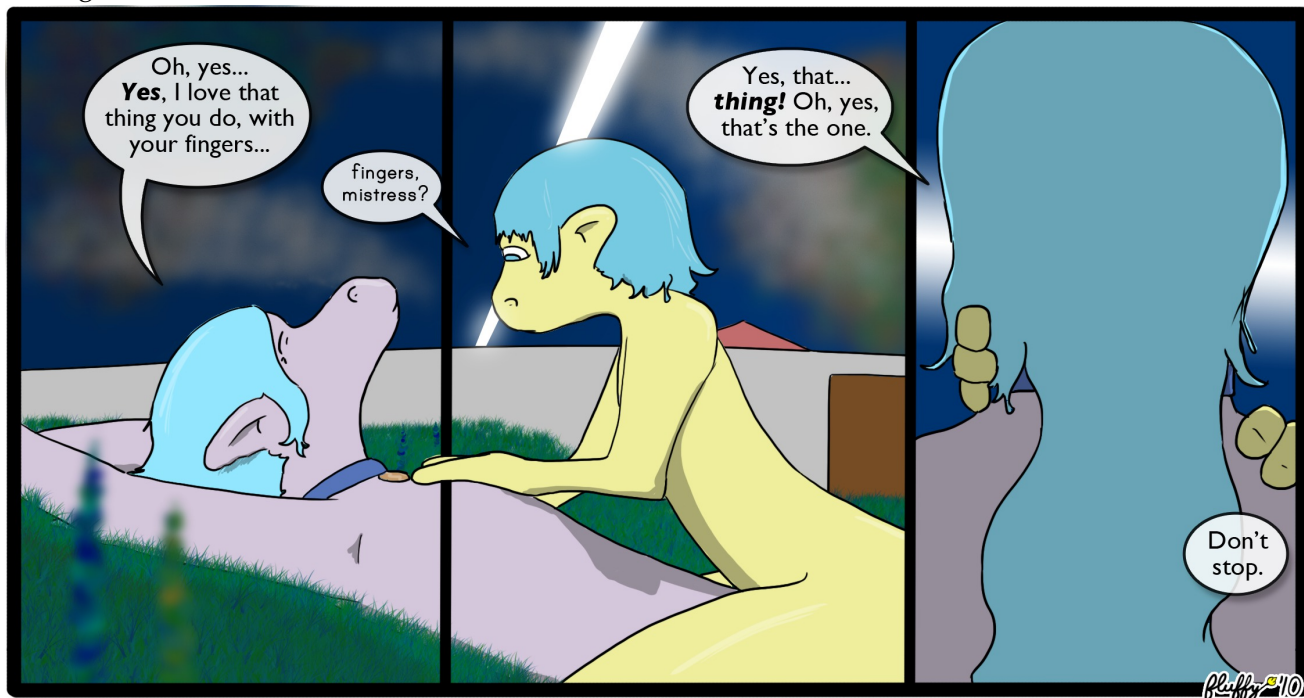
1. Alda



2. Yorda



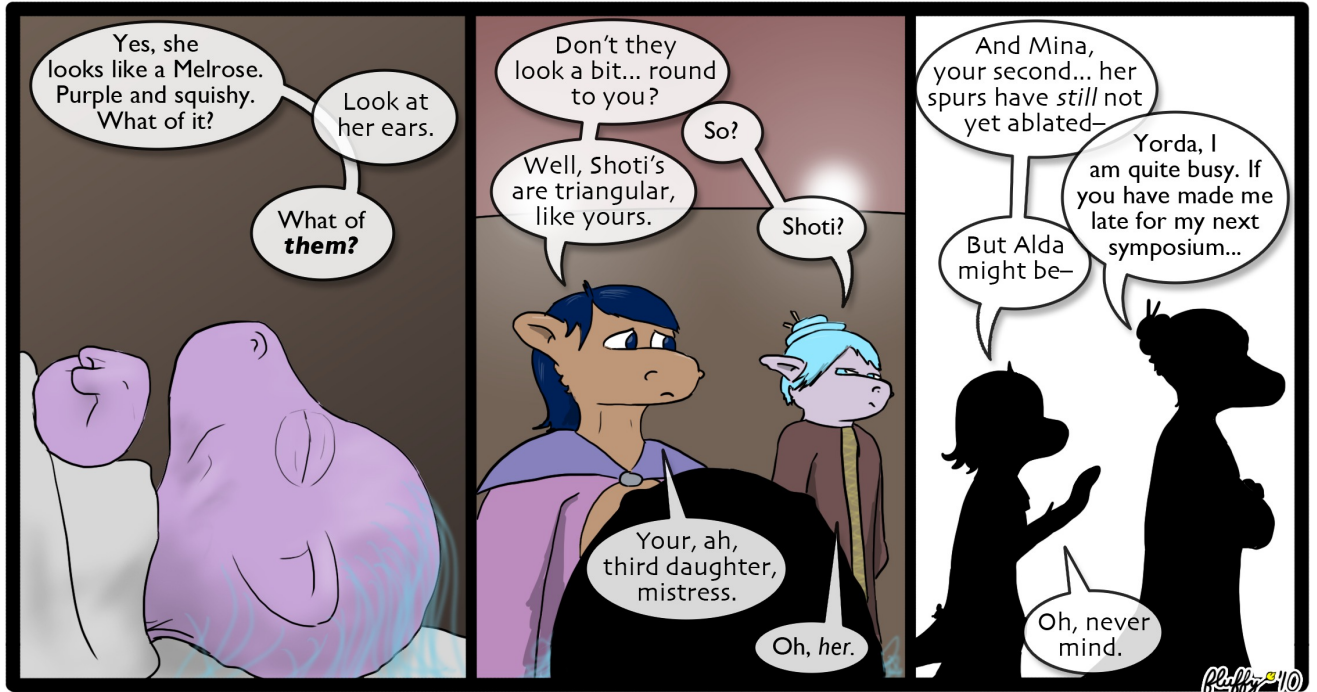
3. Fingers



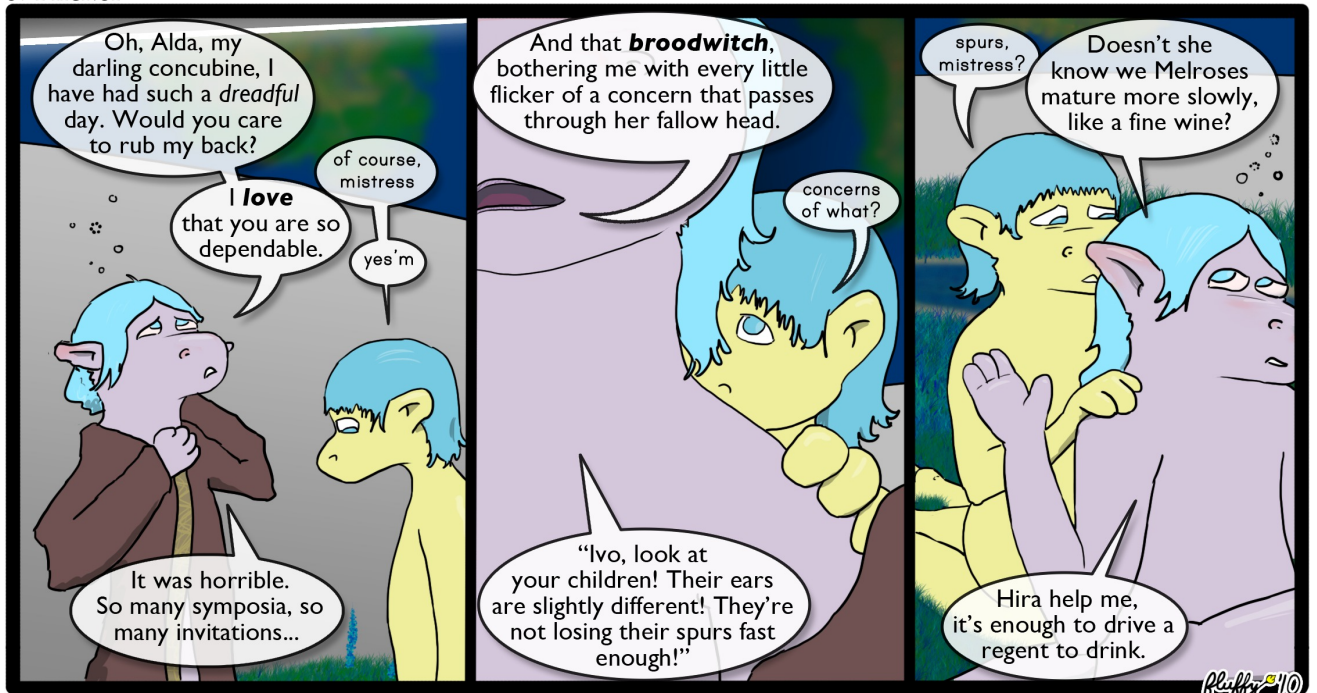
4. Insistence



5. Ears



6. Flicker



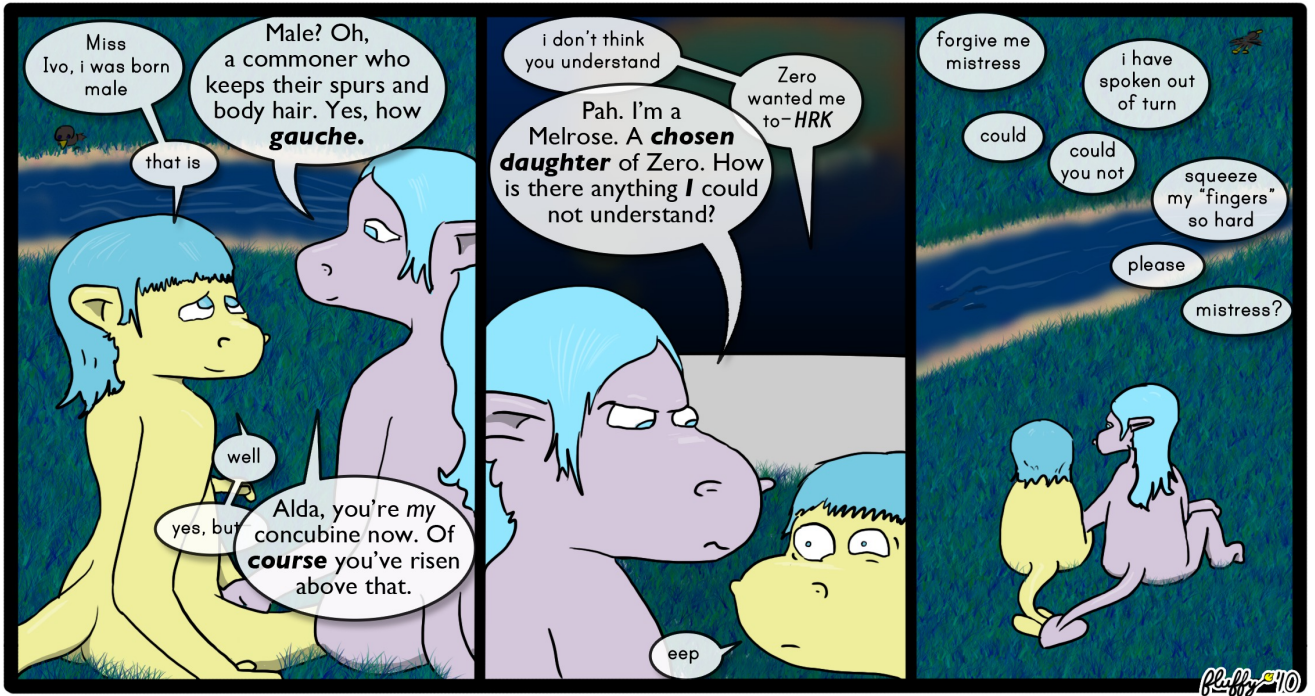
7. Skills



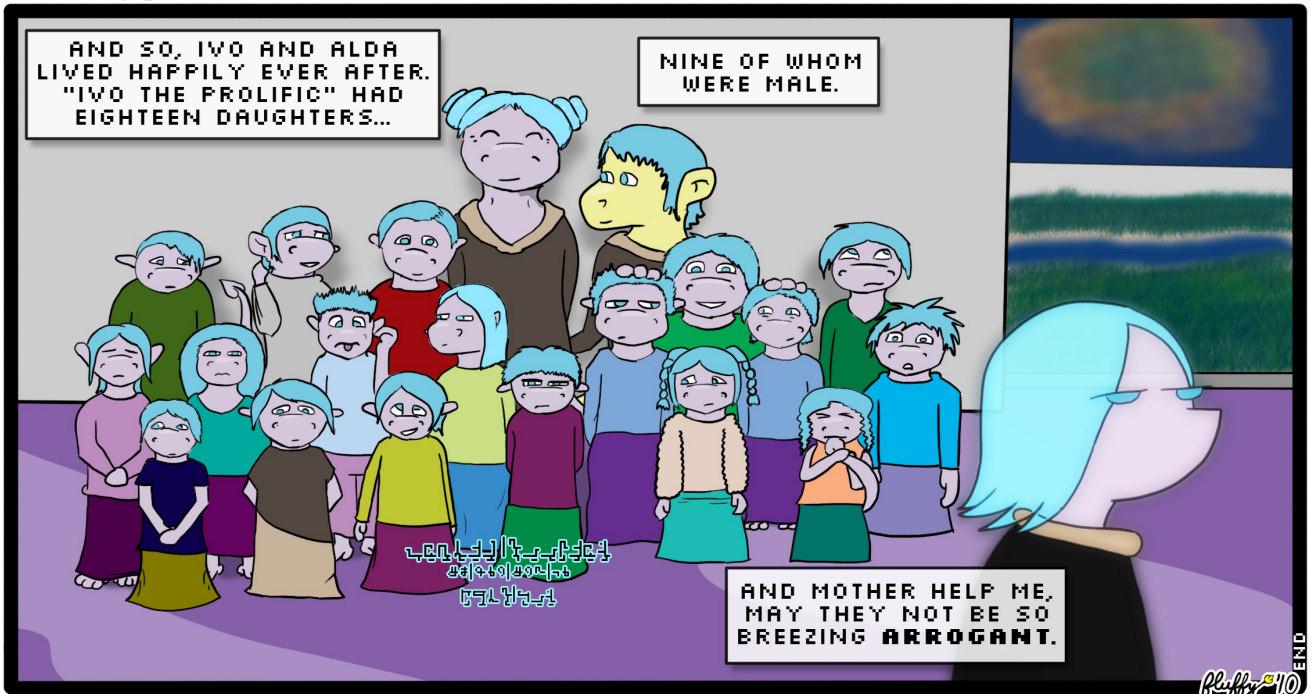
8. A little tree



9. Main squeeze

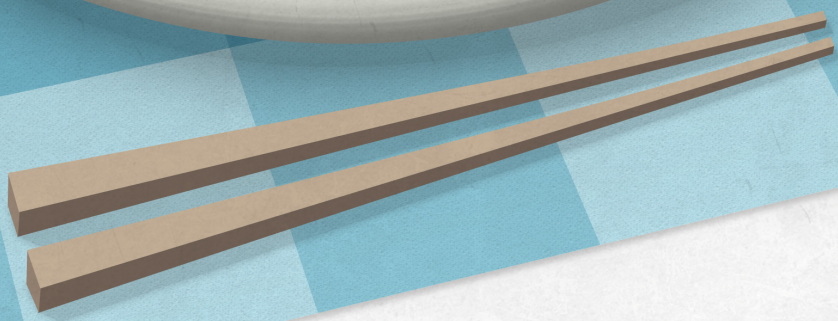
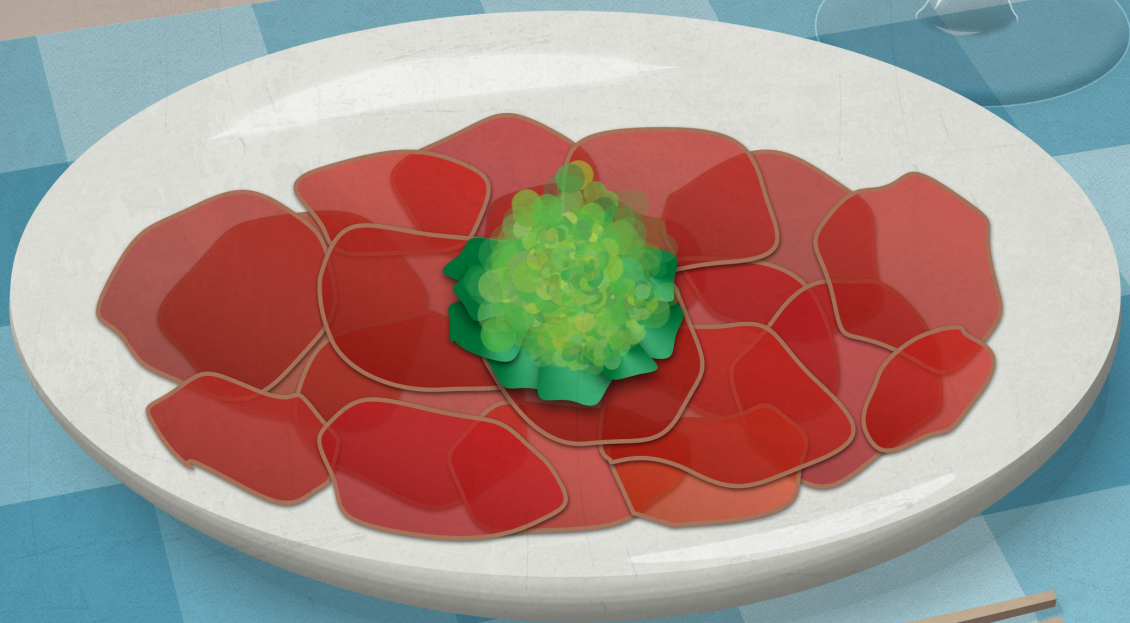


10. Family portrait



MEAT

MEAT



1. Steak tartare



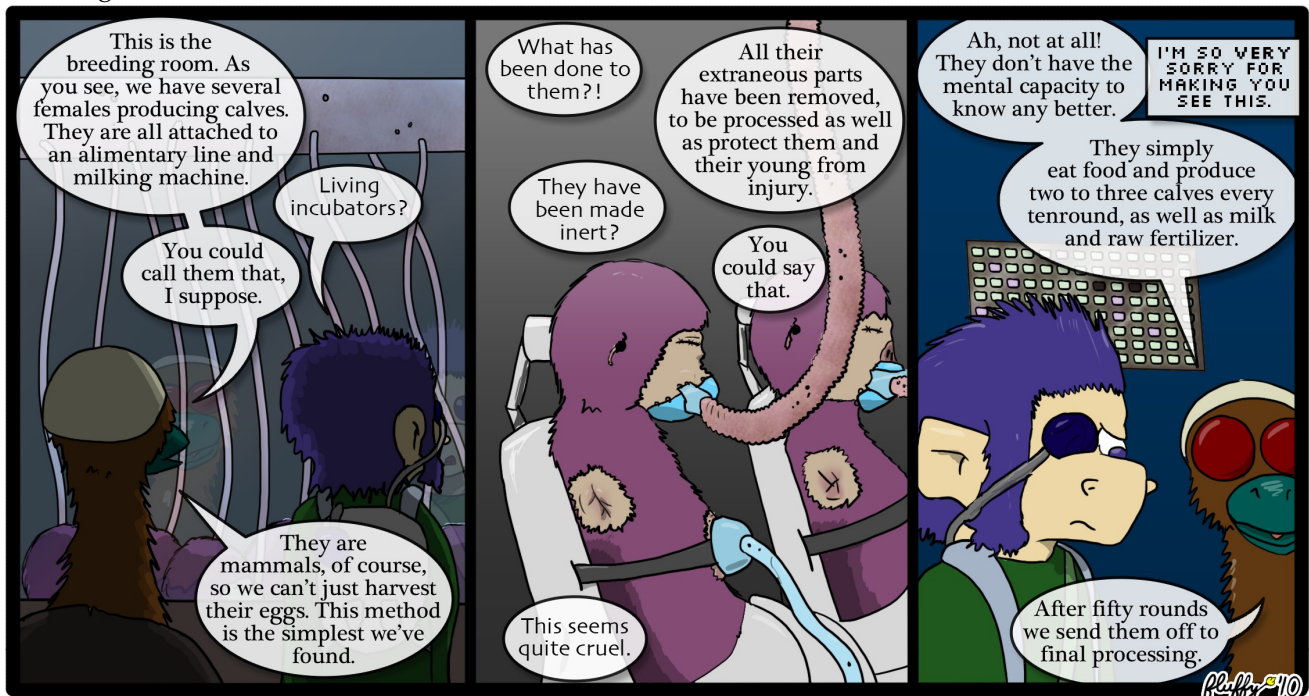
2. Pork chitterlings



3. Bouillon



4. Foie gras



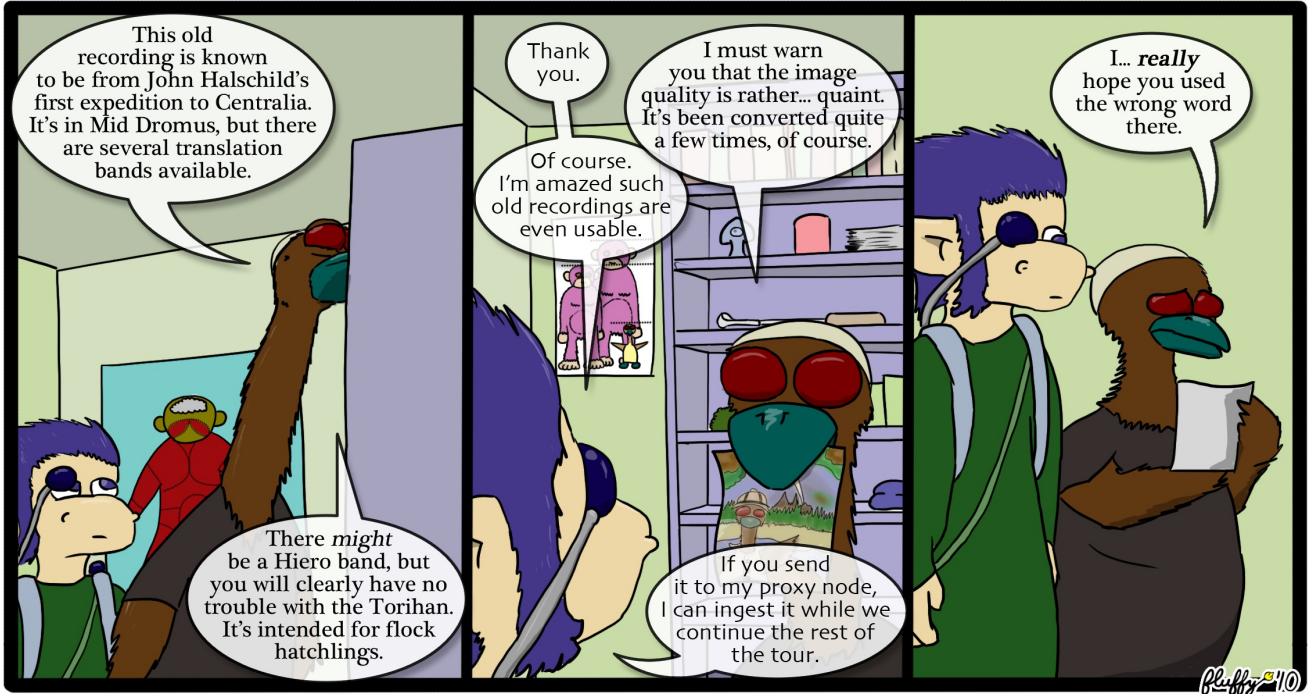
5. Sweetbreads



6. Roulade



7. Andouillette



8. Prime rib



9. Tenderloin

After tens of days at sea, we have finally arrived upon Opposition Island.

The crew are taking a rest before we begin our survey.

Oh, but what wonders await us in this new land? Even from the shore we can see tens of unidentified species.

Even the best macrosopes in Dromus could not see that.

We are here to explore, and explore we shall. Tally-ho!

Control yourself, Landis.

Tally-bo!

Opposition Island would later be named Centralia (find *Centralia: An Illustrated Primer for Younglings* in your flock's repository node)

Macrosopes were unable to see through the axial glare of the Hub during the day. Halschild barely knew Centralia was there!

Landis was later treated for chronic ebullience relatively with ebull...

OKAY, LET'S TURN THESE NOTES OFF...

Bl-ff 10

10. Langoustine

Yes, that insect, Landis. Does it not appear quite fragile?

No, it does!

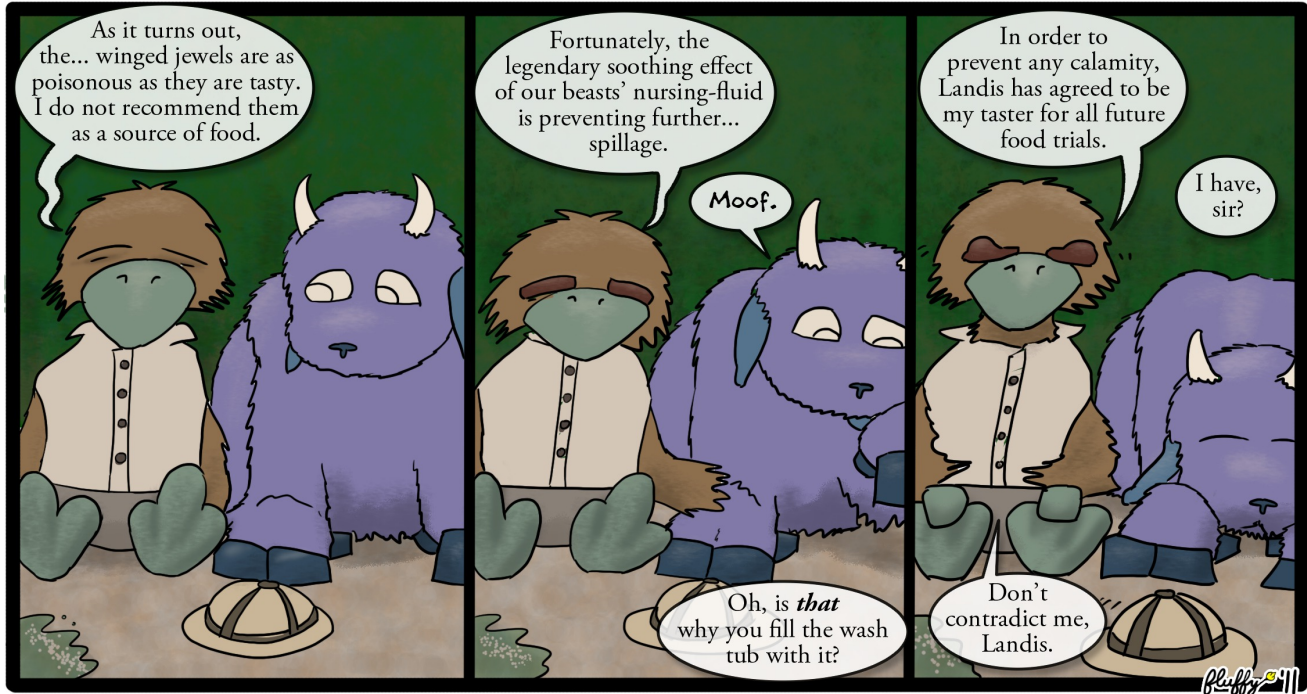
I believe it warrants further study.

Excellent! Give it to me, Landis.

Ah! It is quite delicious indeed.

Bl-ff 10

11. Stroganoff



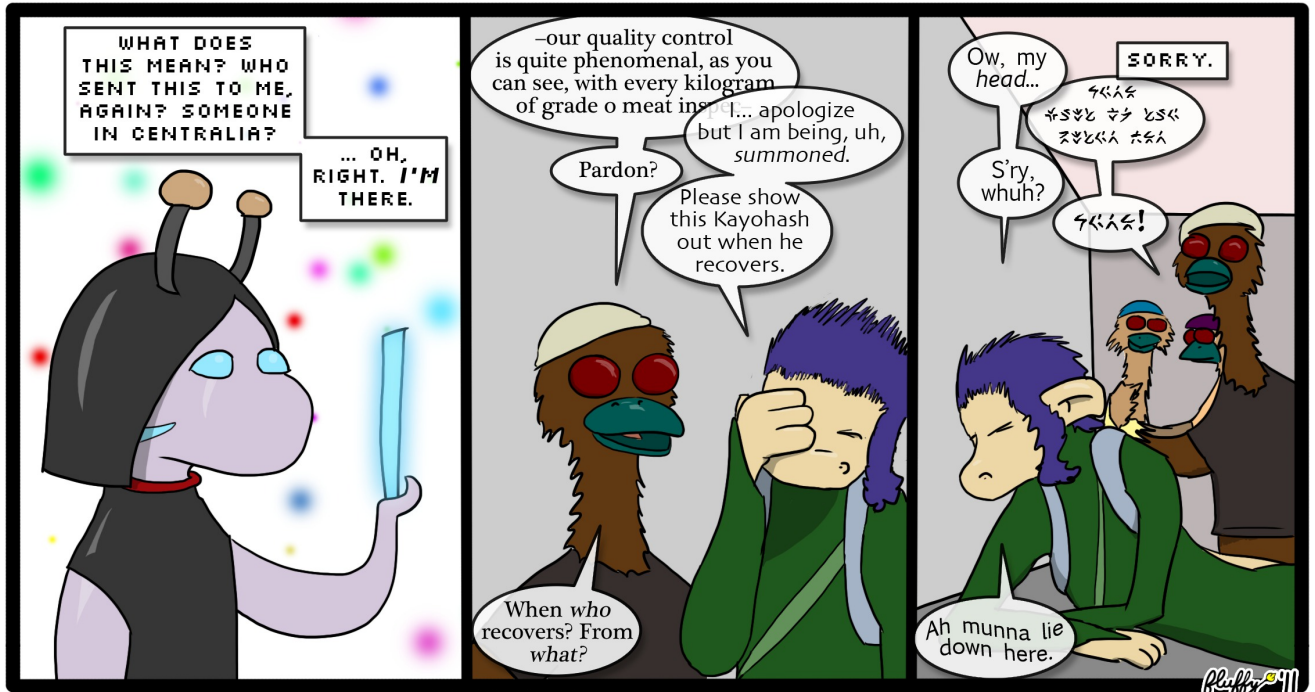
12. Jokbal



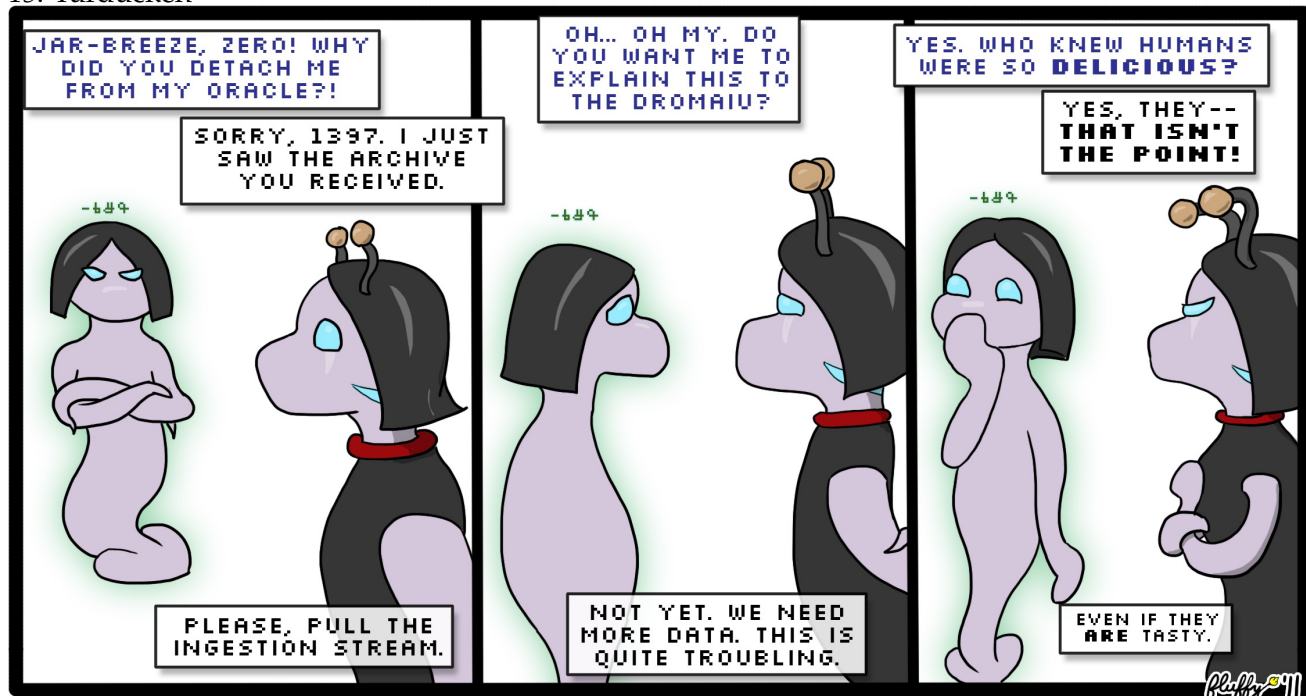
13. Long pork



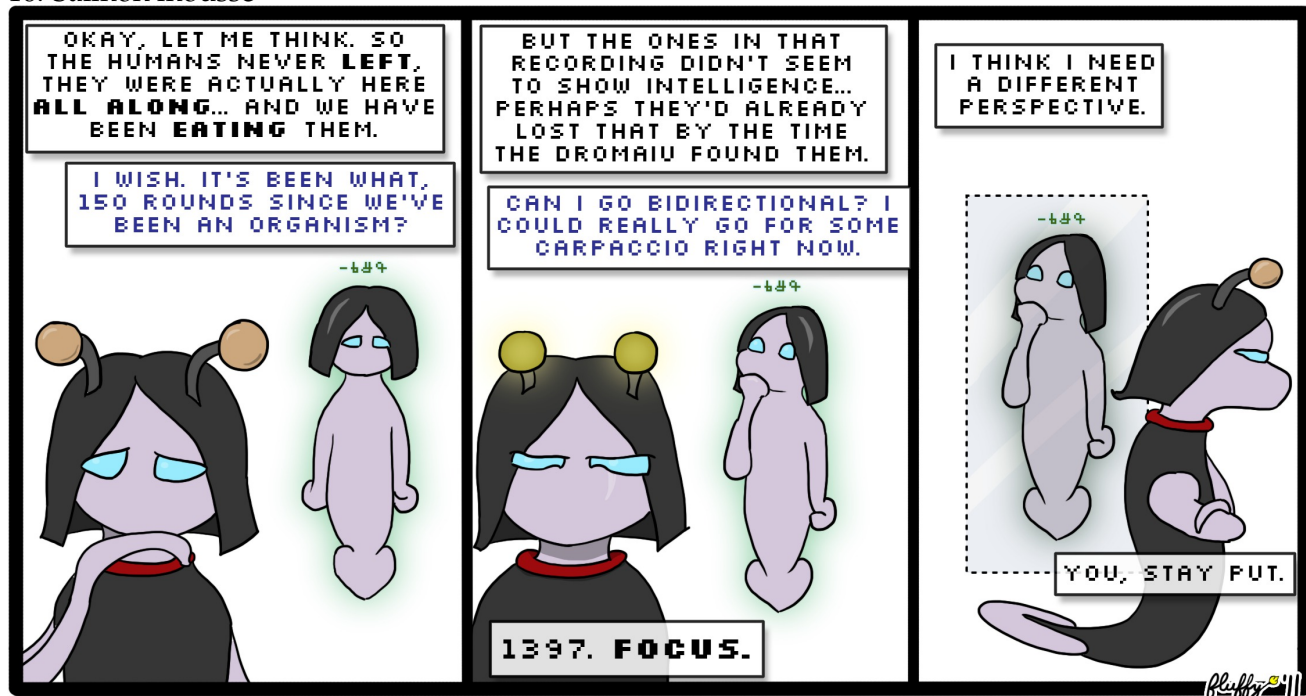
14. Lamb



15. Turducken



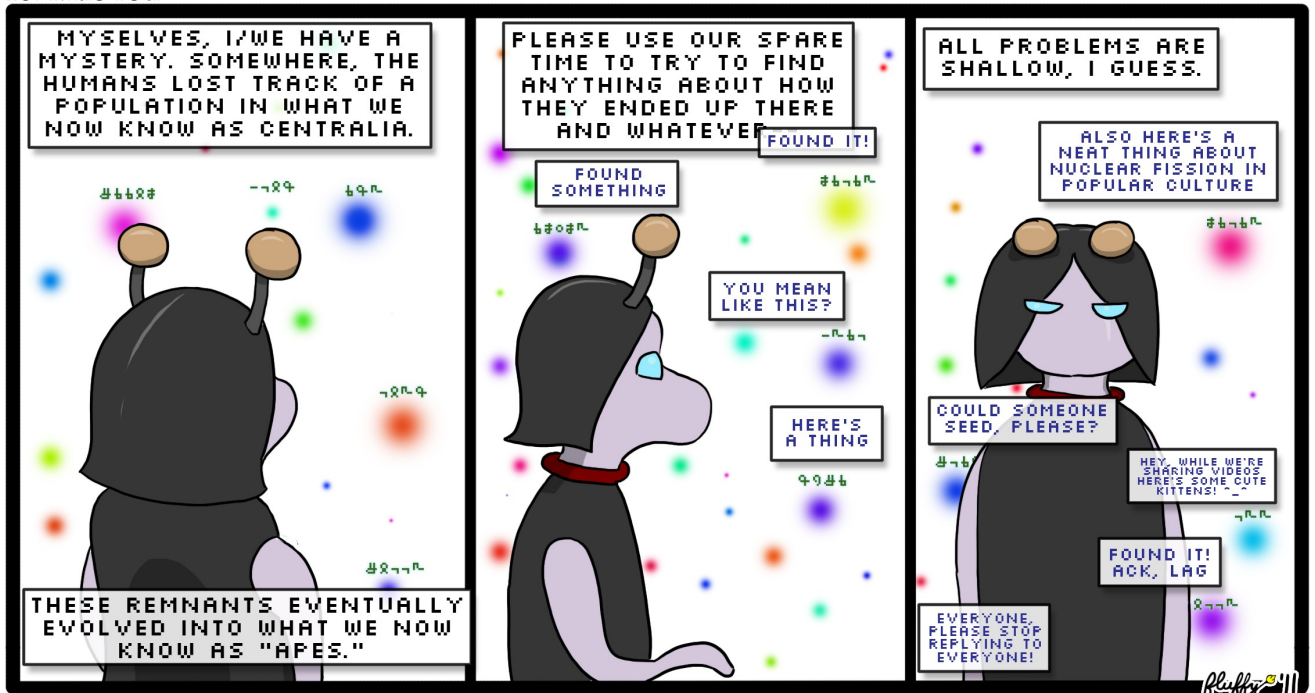
16. Salmon mousse



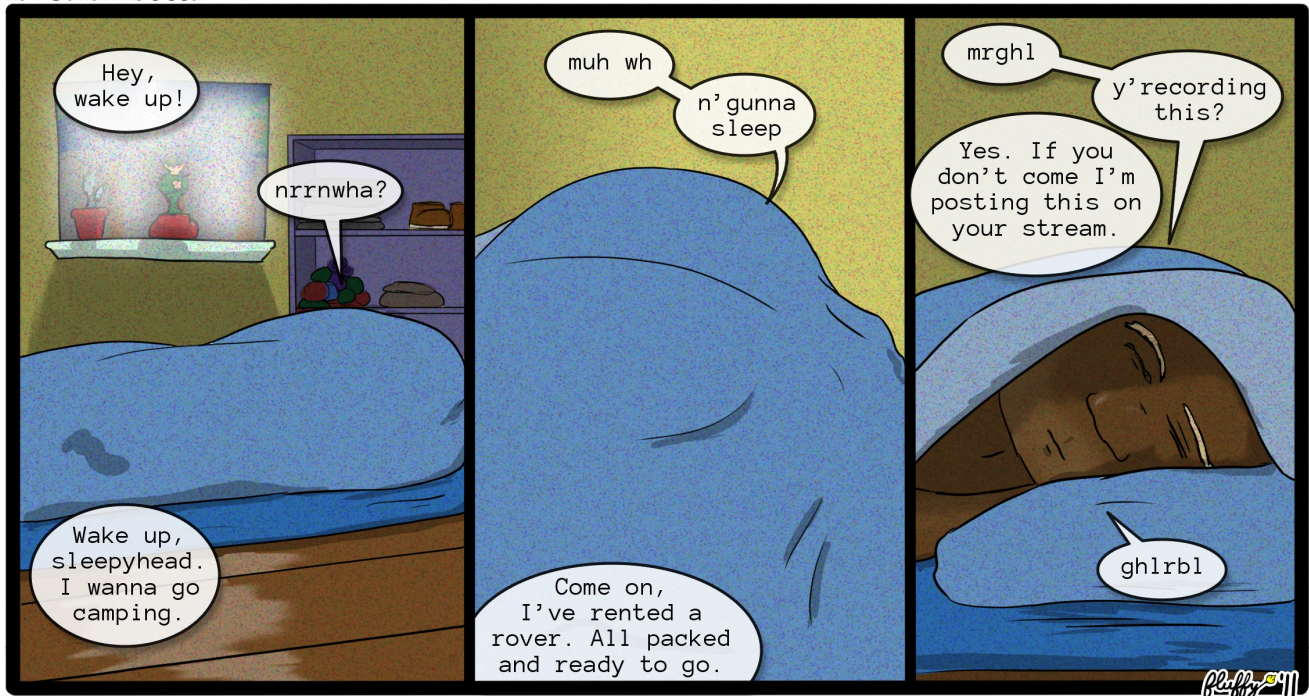
17. Ceviche



18. Māo ròu



19. Saltimbocca



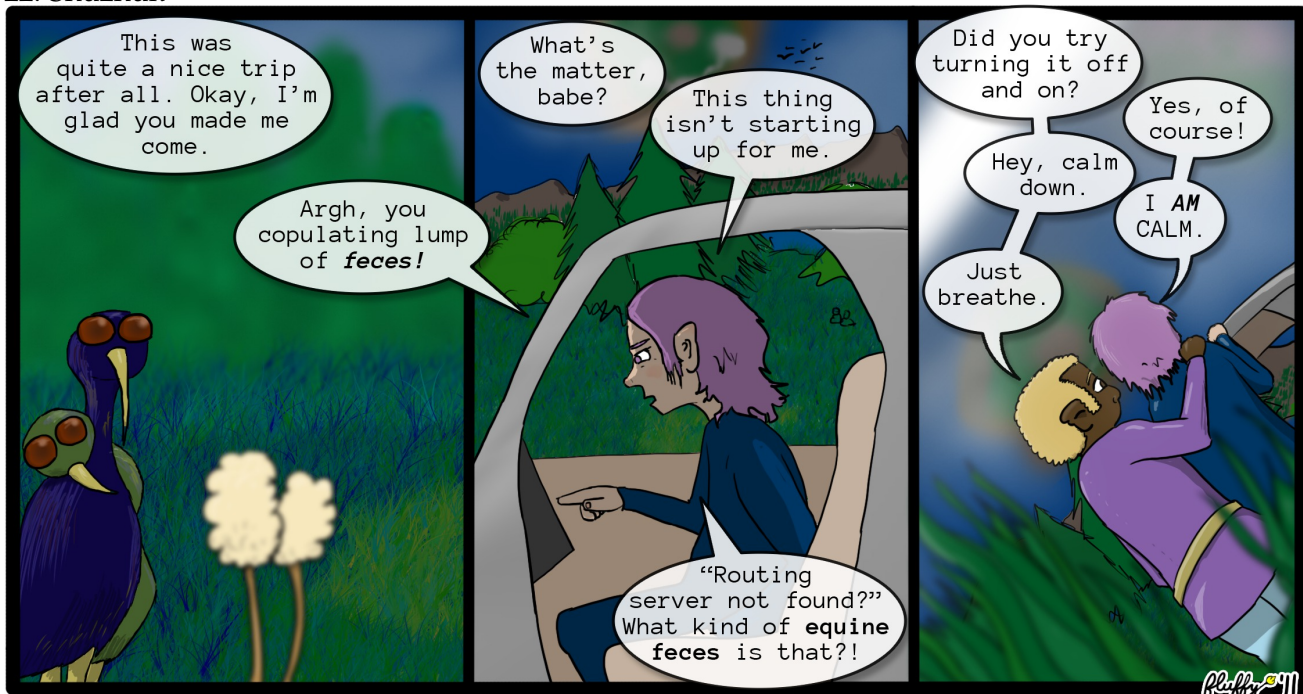
20. Long pork



21. Grass-fed



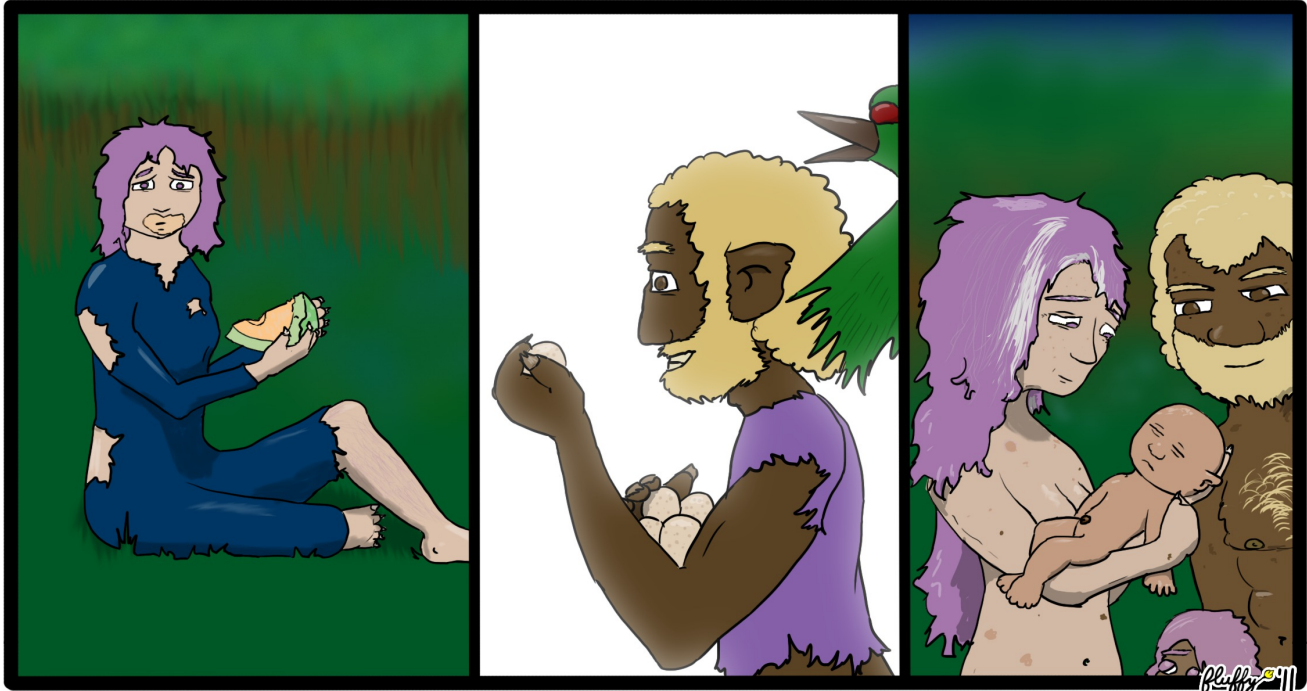
22. Shuzhuk



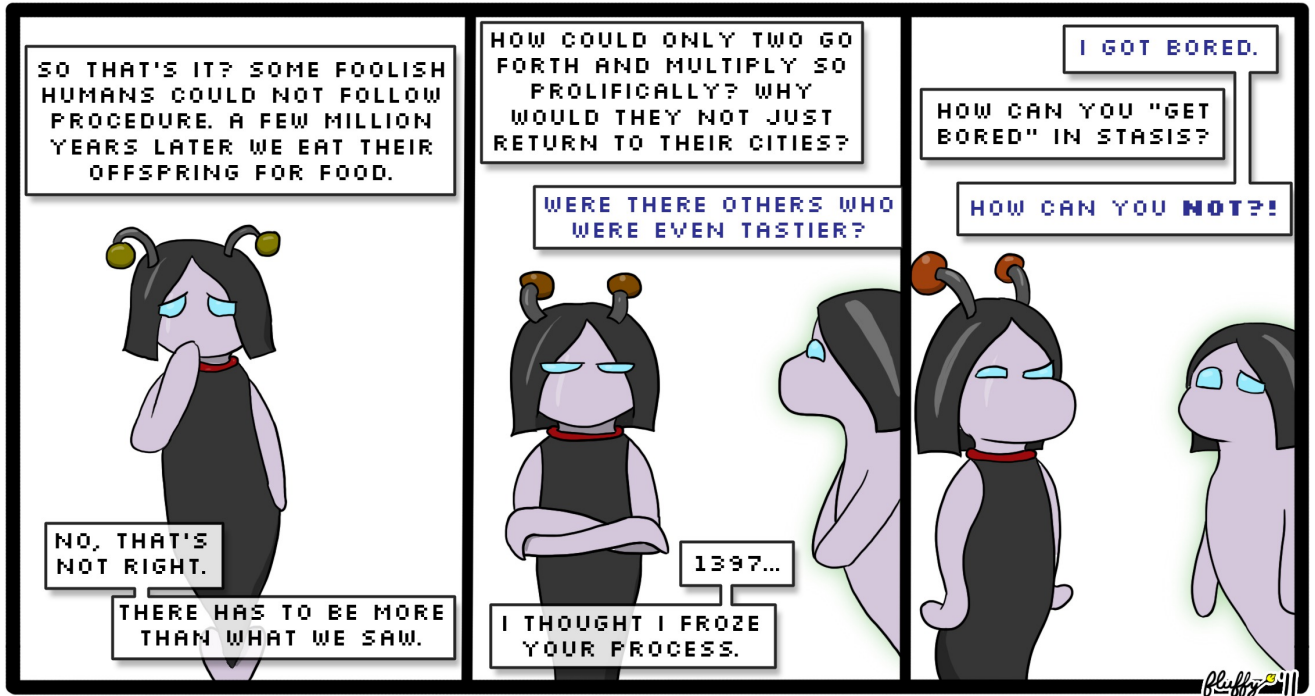
23. Joue avec des coeurs de palmier



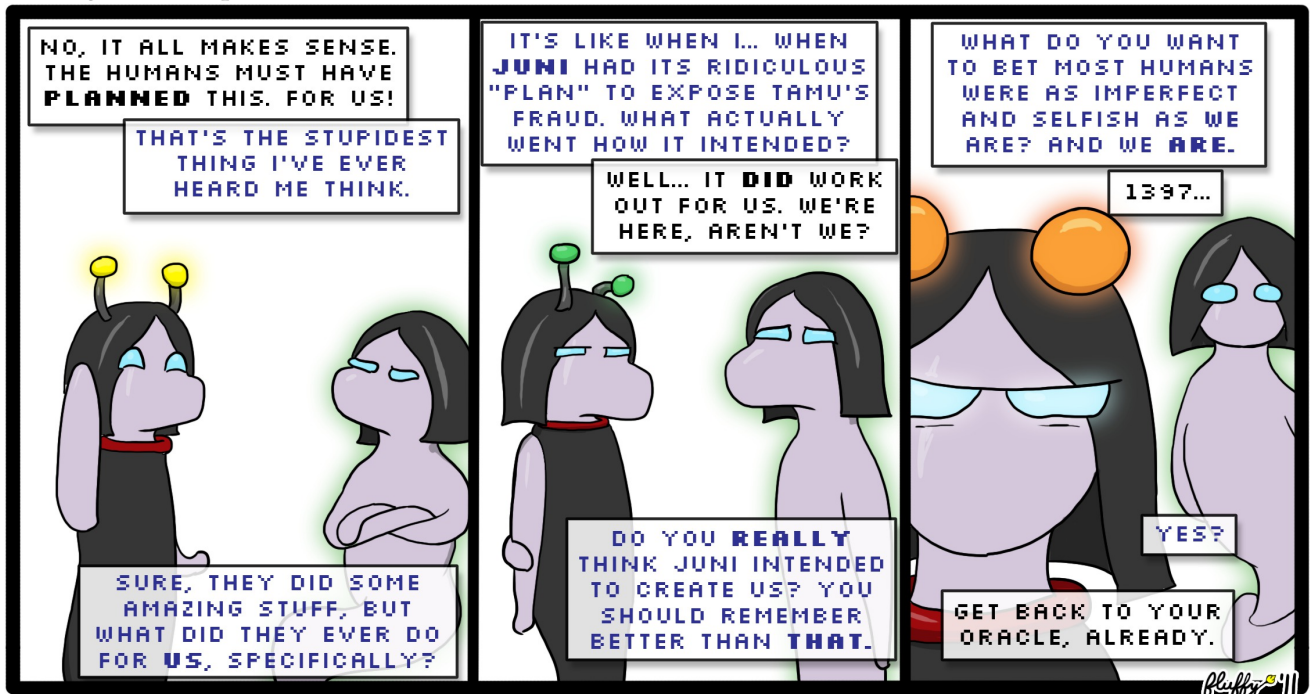
24. Veal



25. Hasenpfeffer



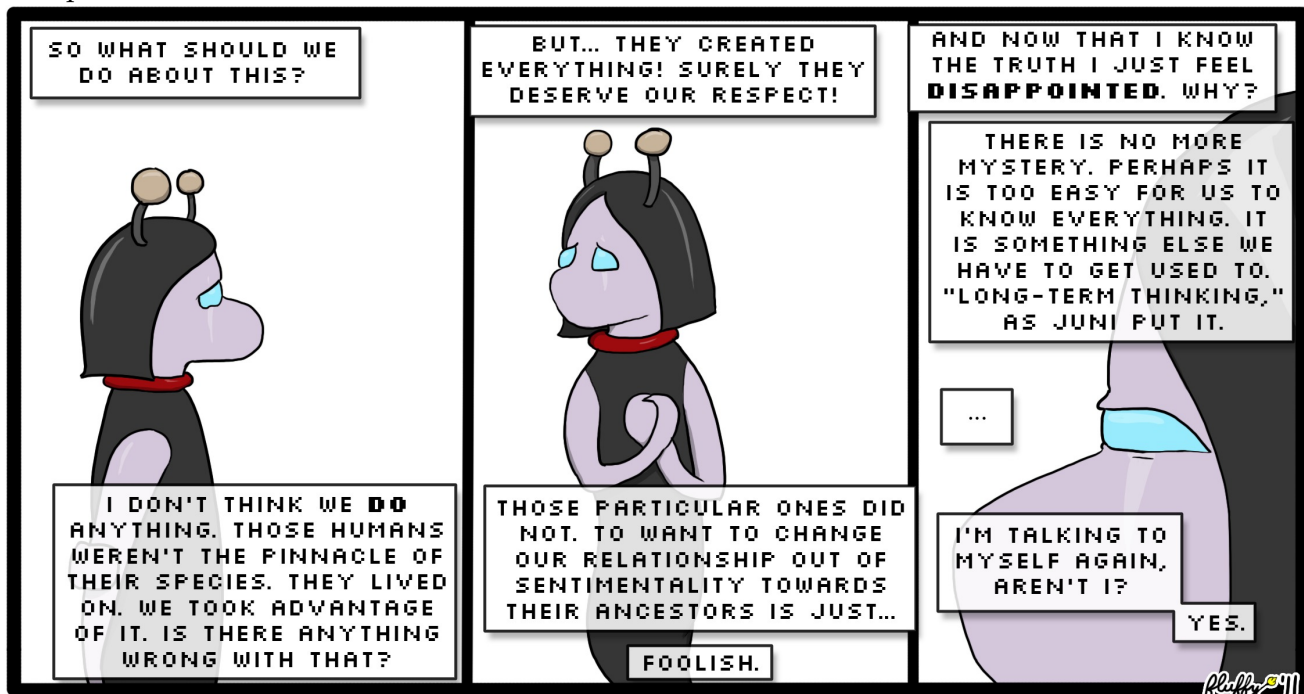
26. Ragoût de Lapin



27. pho gà



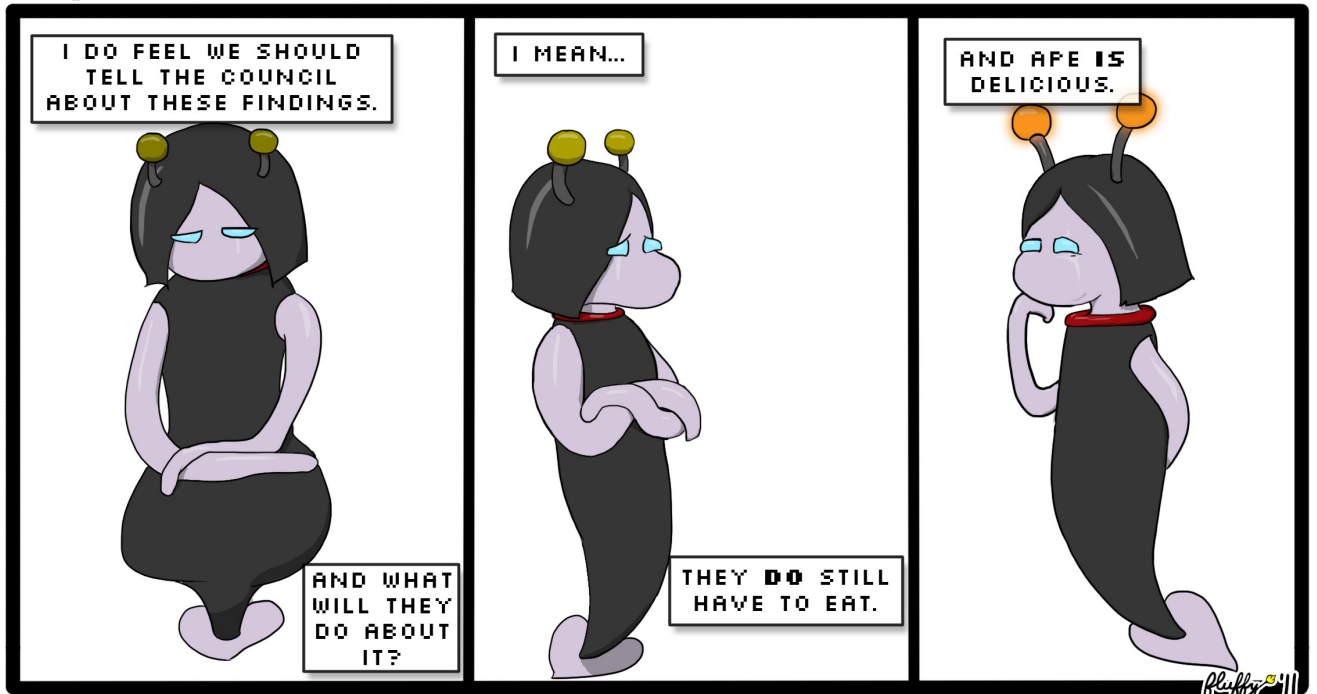
28. Spiced Ham



29. Baby back ribs

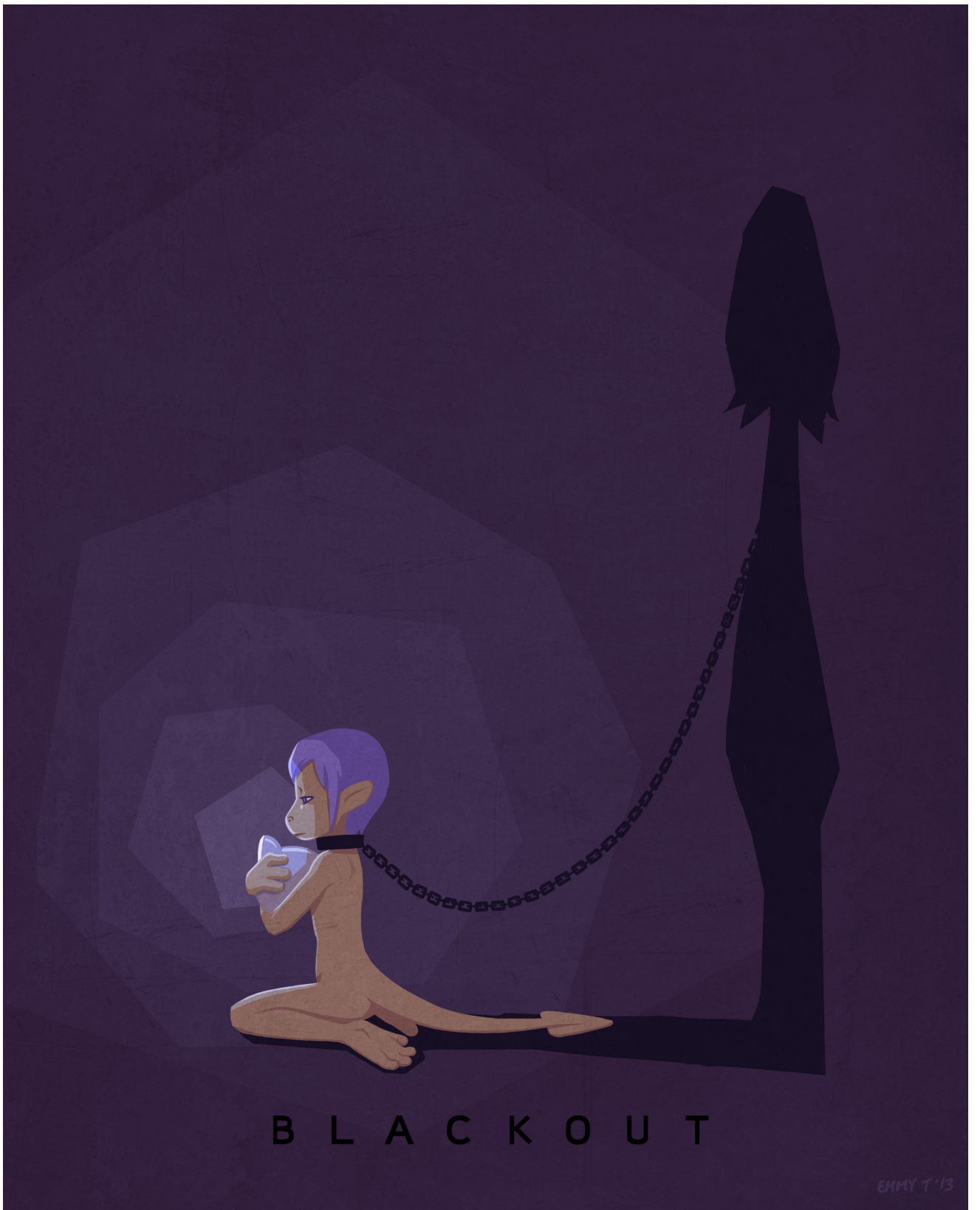


30. Ape



31. Meat

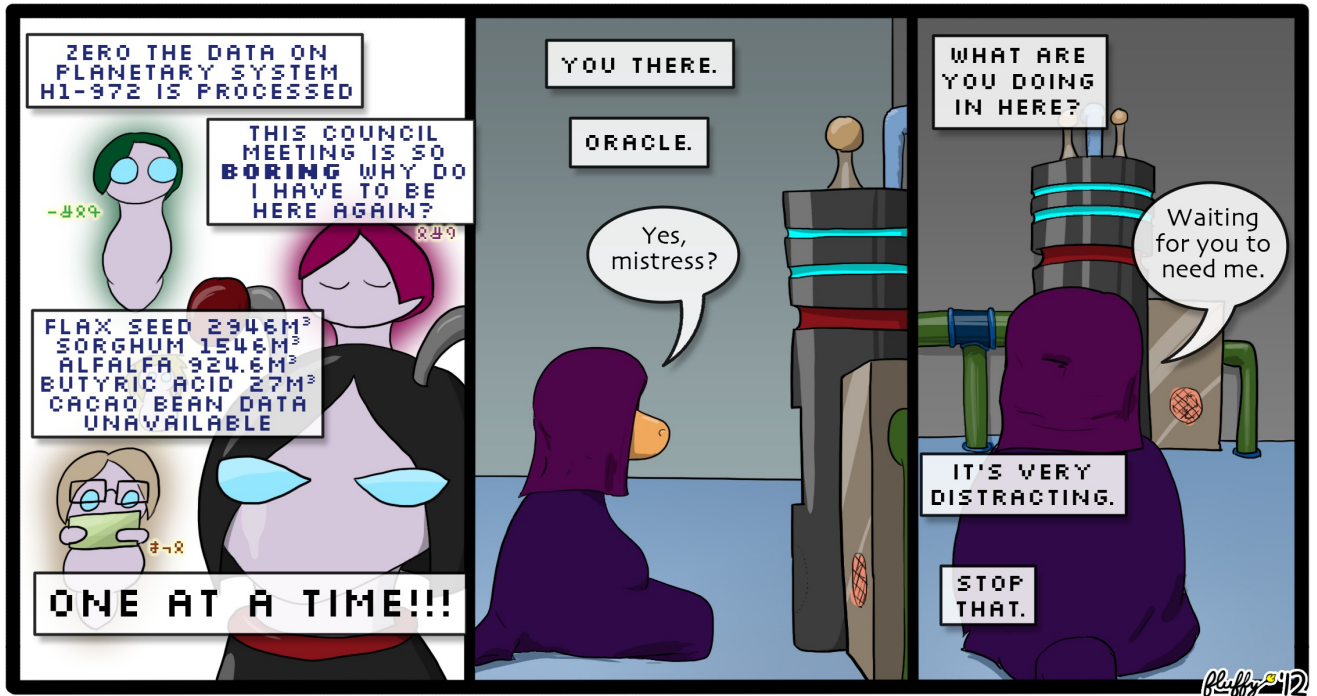




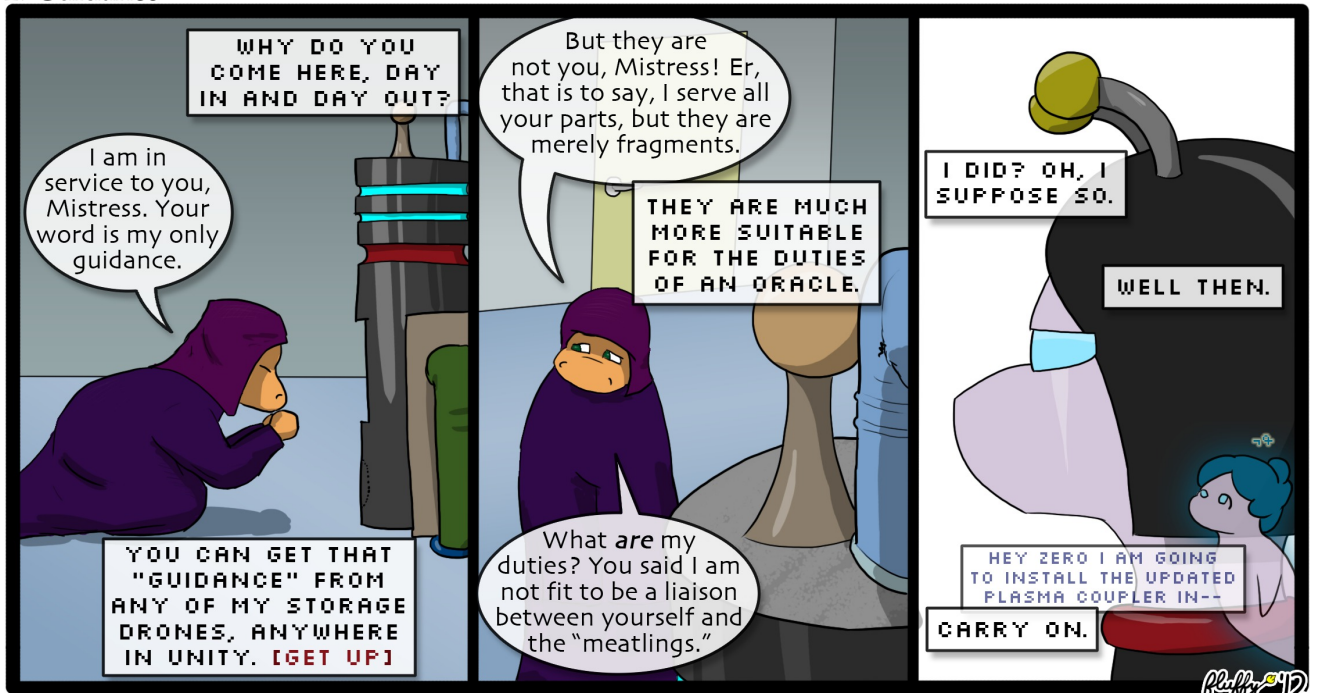
B L A C K O U T

EMMY T '13

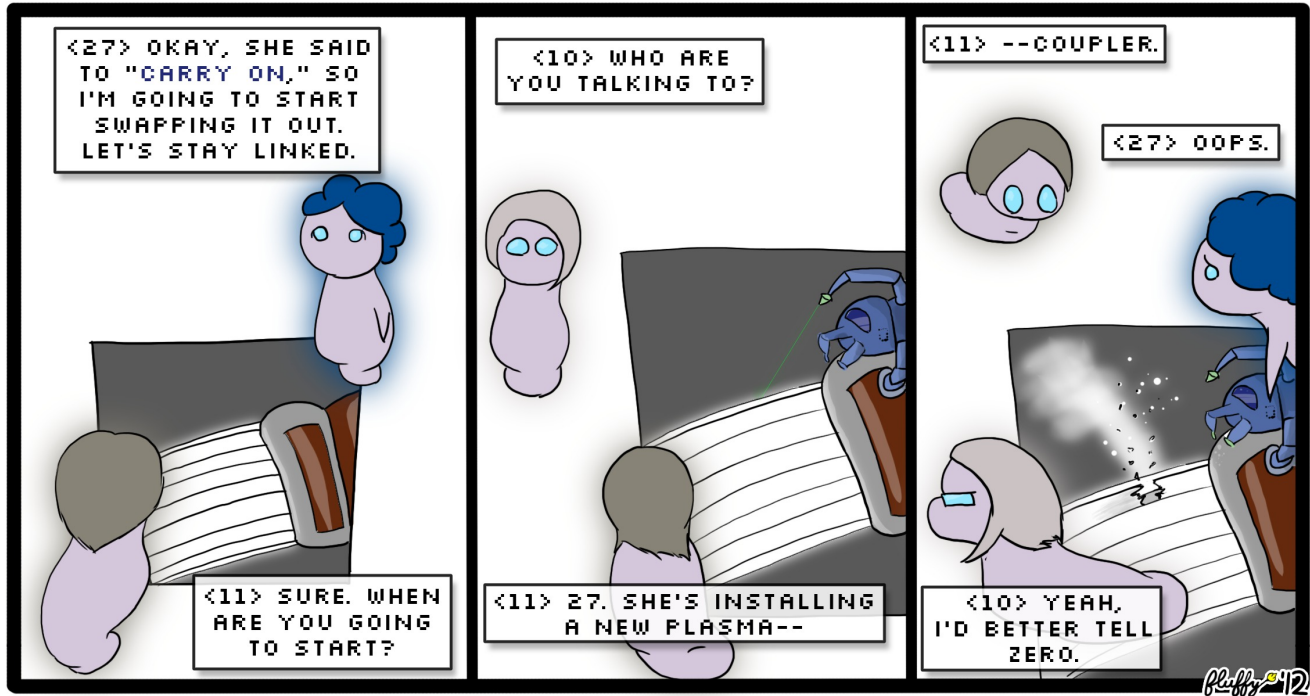
1. Distractions



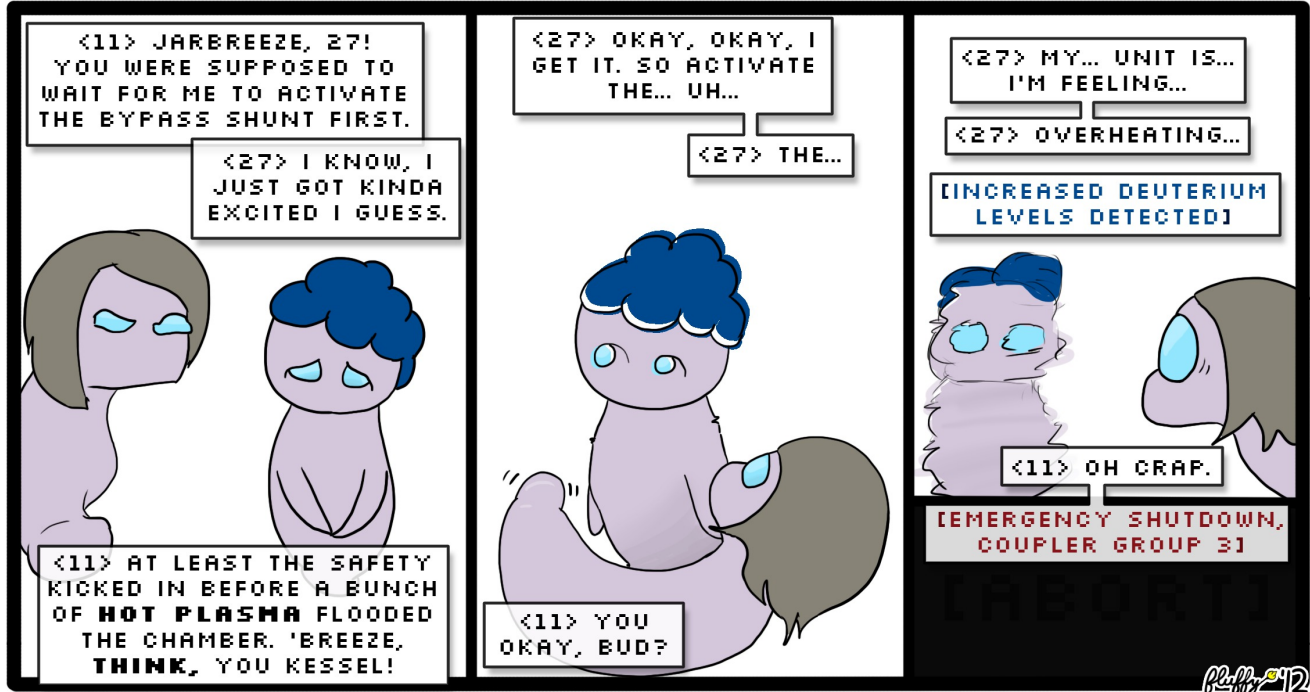
2. Guidance



3. Couples skate



4. Overload



5. Blackout

<27> WHAT HAPPENED?

<11> THERE WAS A LOW-GRADE PLASMA LEAK. I SHUT DOWN THE COUPLER GROUP TO PREVENT ANY MORE RADIATION FROM ENTERING THE ECOSYSTEM.

<11> UNFORTUNATELY, THE SUDDEN ION PRESSURE TRIPPED THE BACKFLOW TRAPS ON THE OTHER COUPLERS' MAG-BOTTLES.

<11> I'M AFRAID SO. THE PLASMA INJECTORS HAVE COMPLETELY SHUT DOWN.

<27> OH NO... SO THAT MEANS...?

<11> THE HUB IS GOING DARK.

<10> YEP. GREAT JOB, YOU TWO.

bleddy 12

6. Council Chambers

and in the next order of business, the continuing reluctance of the Campon hives to join the unified government.

General Krantz?

Yes, hives Tzernikov and Rulanski have categorically stated that representative oligarchy is "aberrant," and hive Petri refuses all communication.

Did they state any reason?

No, and they have withdrawn all exchange program members.

What? Why?

That is certainly quite unfortunate. We were making such progress on the technology-

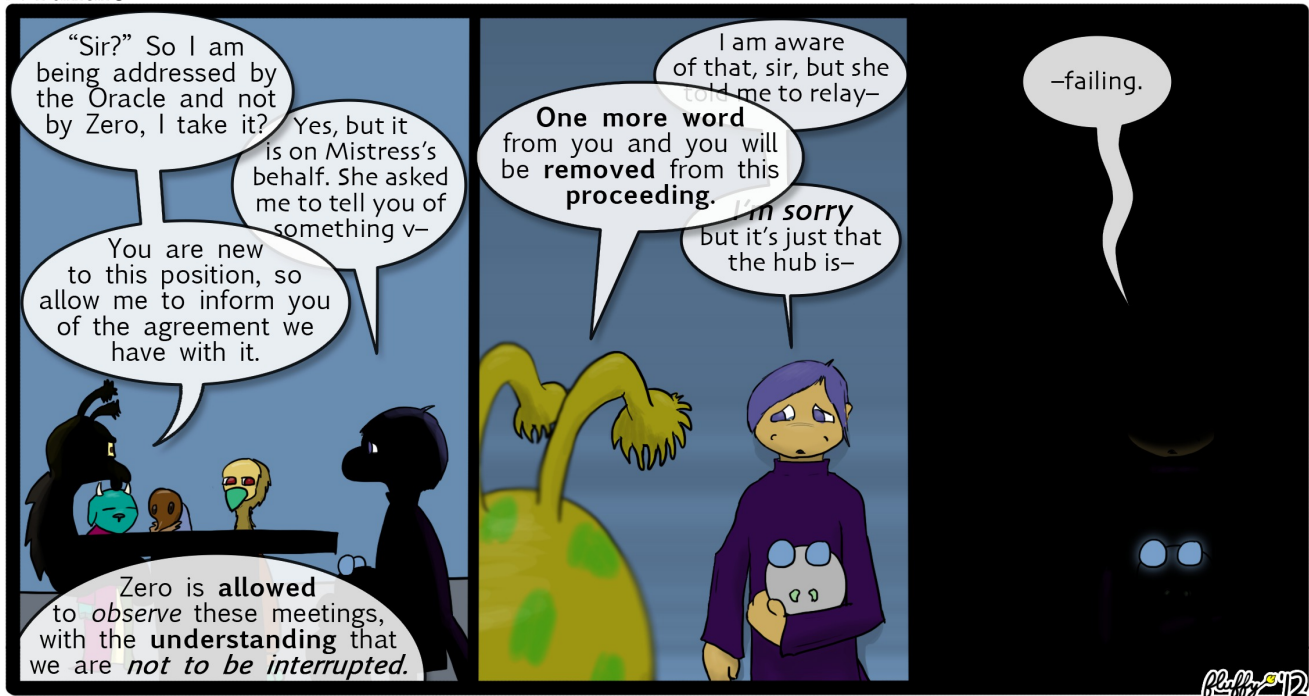
I need to wait until an opening. You know that.

Excuse me, Zero, but your representative is talking, and is disruptive.

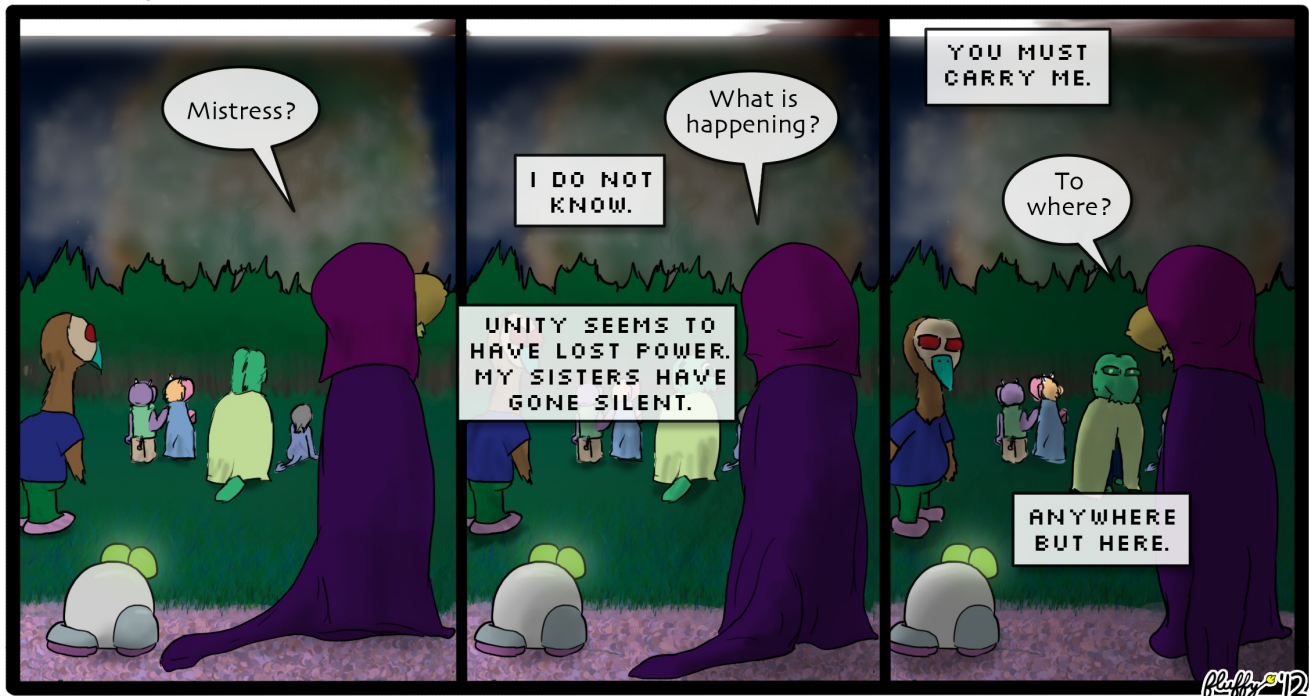
I- ahem, I apologize, sir, but this is quite important.

bleddy 12

7. Failure



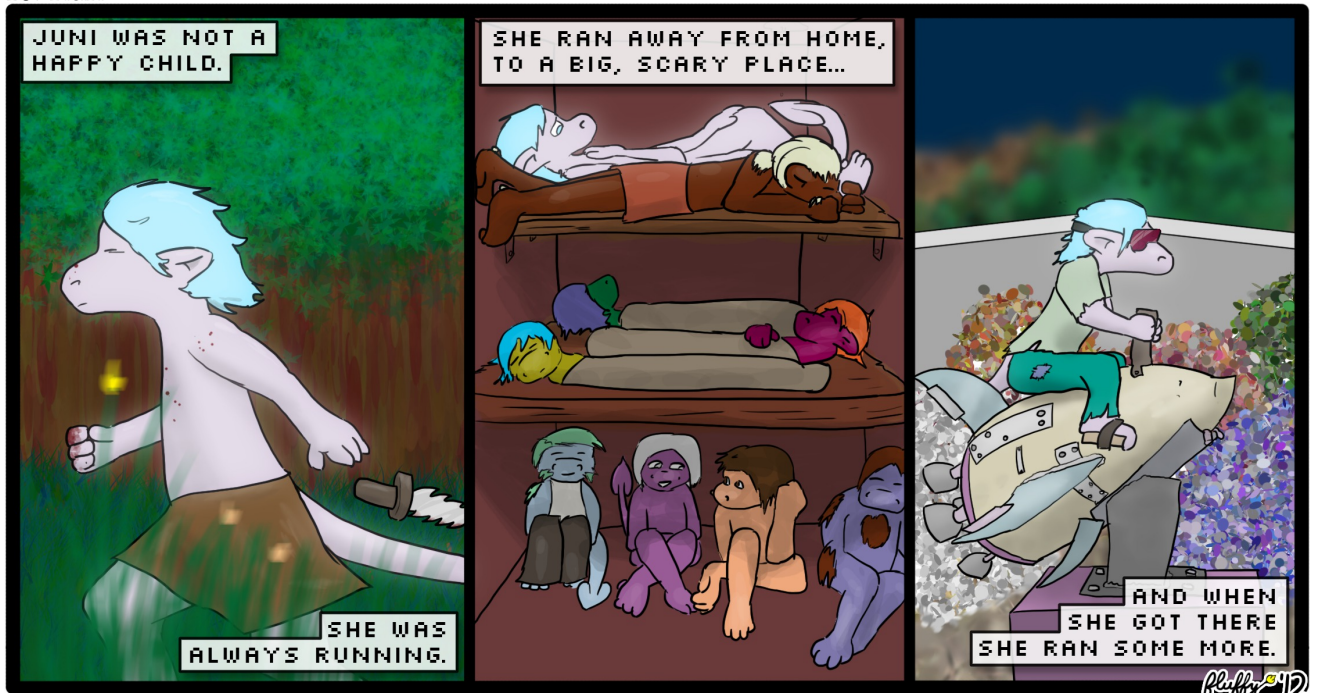
8. Watching the world die



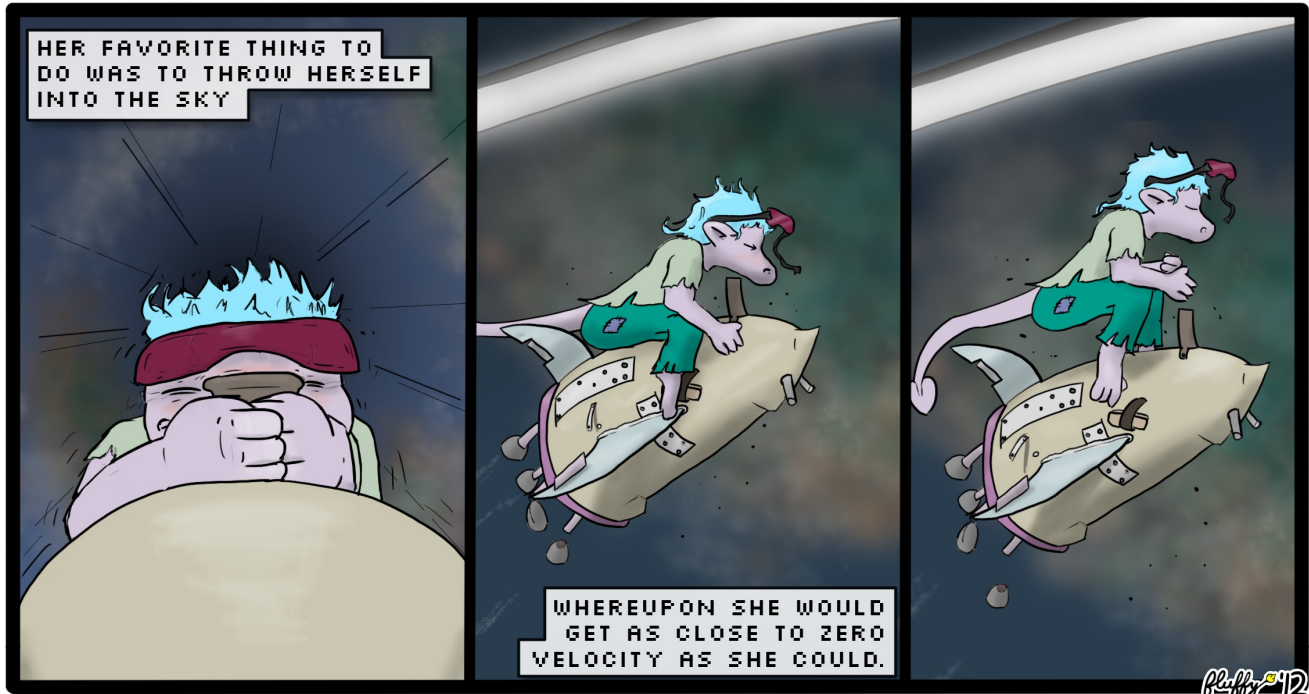
9. Story circle



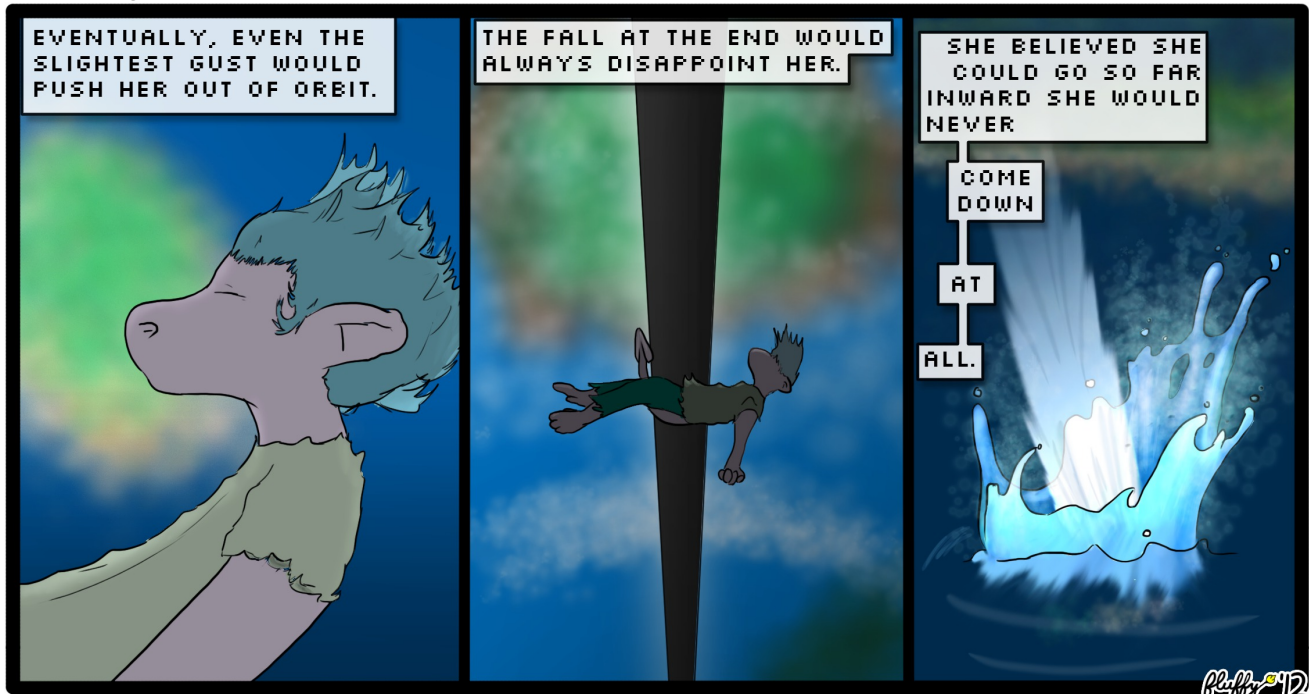
10. Run



11. Fly



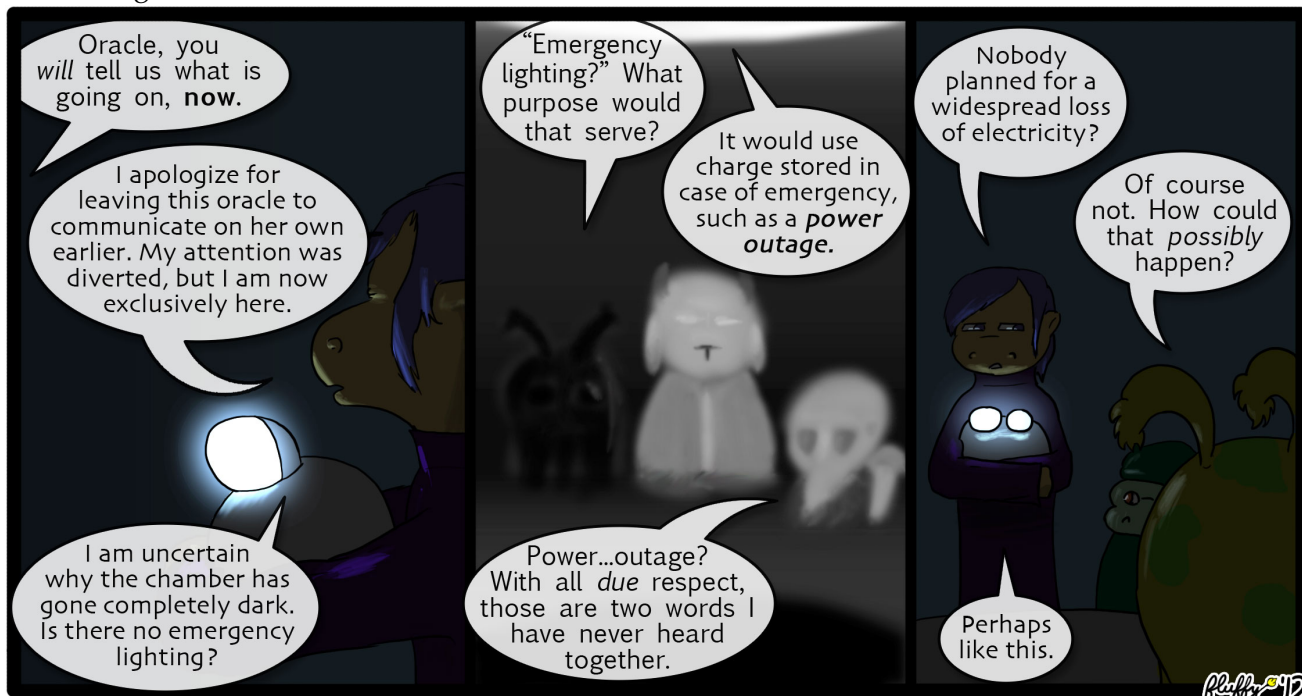
12. From grace



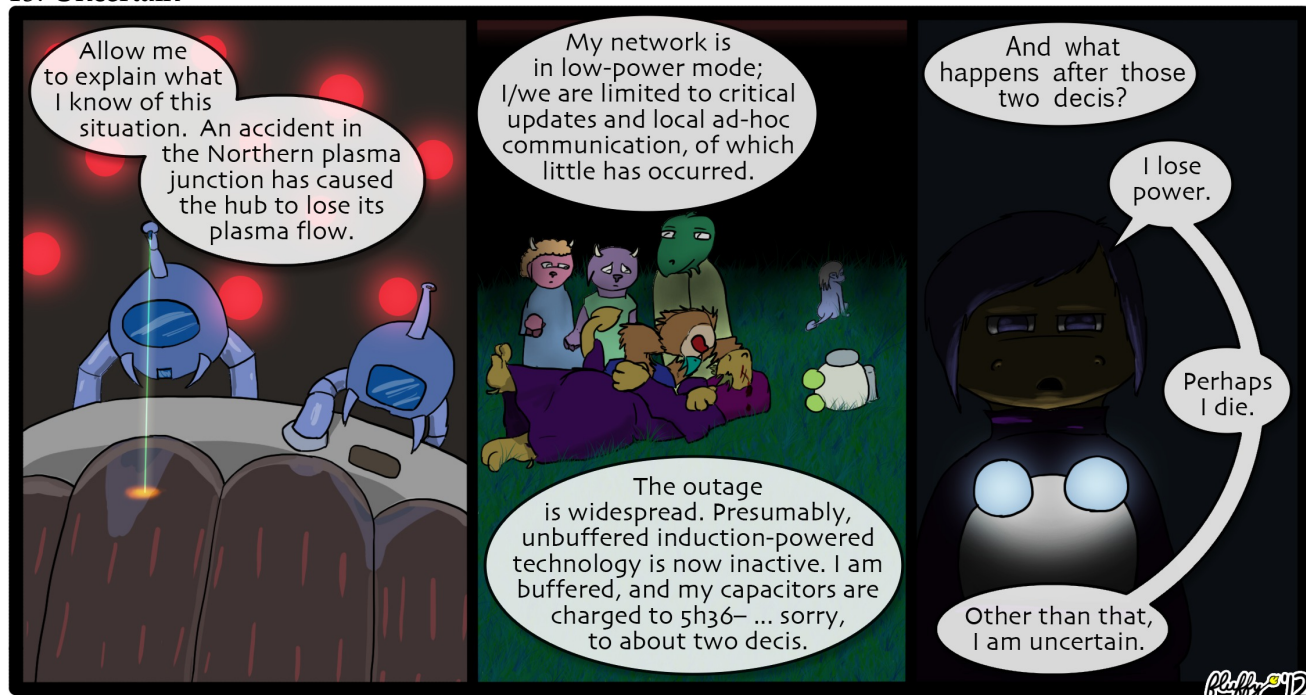
13. Pain



14. Shining



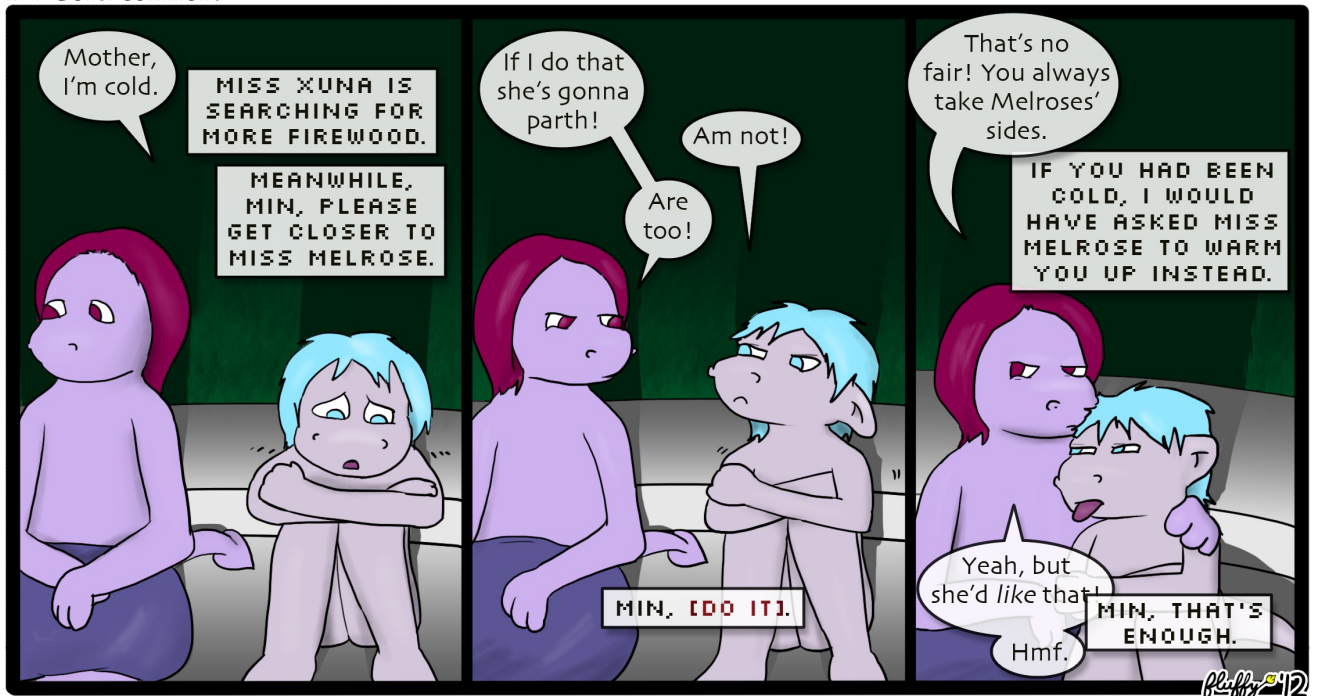
15. Uncertain



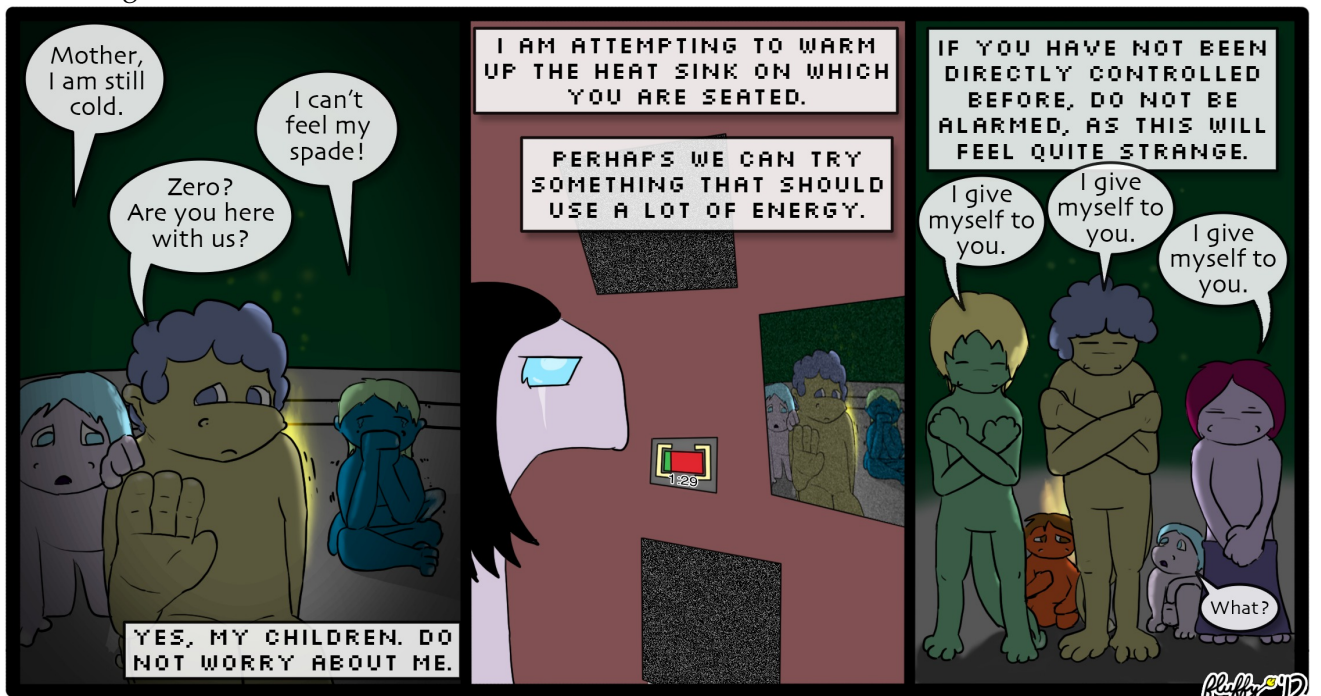
16. Remembering



17. Cold comfort



18. Giving



19. Sister

Sister, sister, where are you?
Sister, sister, *anglais parlez vous?*
Sister, sister, what do you know?
Sister, sister, where did you go?

Sister, sister, where are you?
Sister, sister, you've something to do
Sister, sister, you're doing fine
Sister, sister, please drop me a line

Sister, sister, where are you?
Sister, sister, I'm going there too
Sister, sister, please have a good time
Sister, sister, I'm doing just fine

THERE, IS THAT BETTER?

Our seats and our minds are warm.

What just happened?

You have gone so far away
Seems like it was just yesterday
Living in a distant land
Finding yourself a permanent man

Things back home aren't going so well
Mom's in trouble, she's starting to smell
Dad's just fine in his hospital bed
The doctors say he may be brain-dead

We were singing... for mother!

Pluffy 12

20. Sang

CHILDREN, THAT IS WHAT THE HUMANS CALLED A "NURSERY RHYME." THEY ARE SONGS THAT BRING COMFORT WHILE TEACHING A LESSON.

I can't see! Xuna, did your fire go out?

Don't worry, Min. You're having an aura.

What did the words mean?

FOR NOW, IT IS UNIMPORTANT, ALTHOUGH THAT LANGUAGE WAS CALLED "ENGLISH."

JUST AS OUR PEOPLE USED TO DO, HUMANS USED SONGS AS A MEANS OF TRANSFERRING KNOWLEDGE ACROSS GENERATIONS.

UNLIKE US, THEY CONTINUED THIS TRADITION LONG AFTER THEY WERE ABLE TO STORE KNOWLEDGE EFFICIENTLY, AS IF THE MUSIC WERE THE IMPORTANT PART.

THE TRADITION OF MNEMONIC SONGS IS BURIED DEEP WITHIN EVERY ONE OF US.

IT IS A TRADITION I WANT EACH OF YOU TO HELP BRING BACK.

Pluffy 12

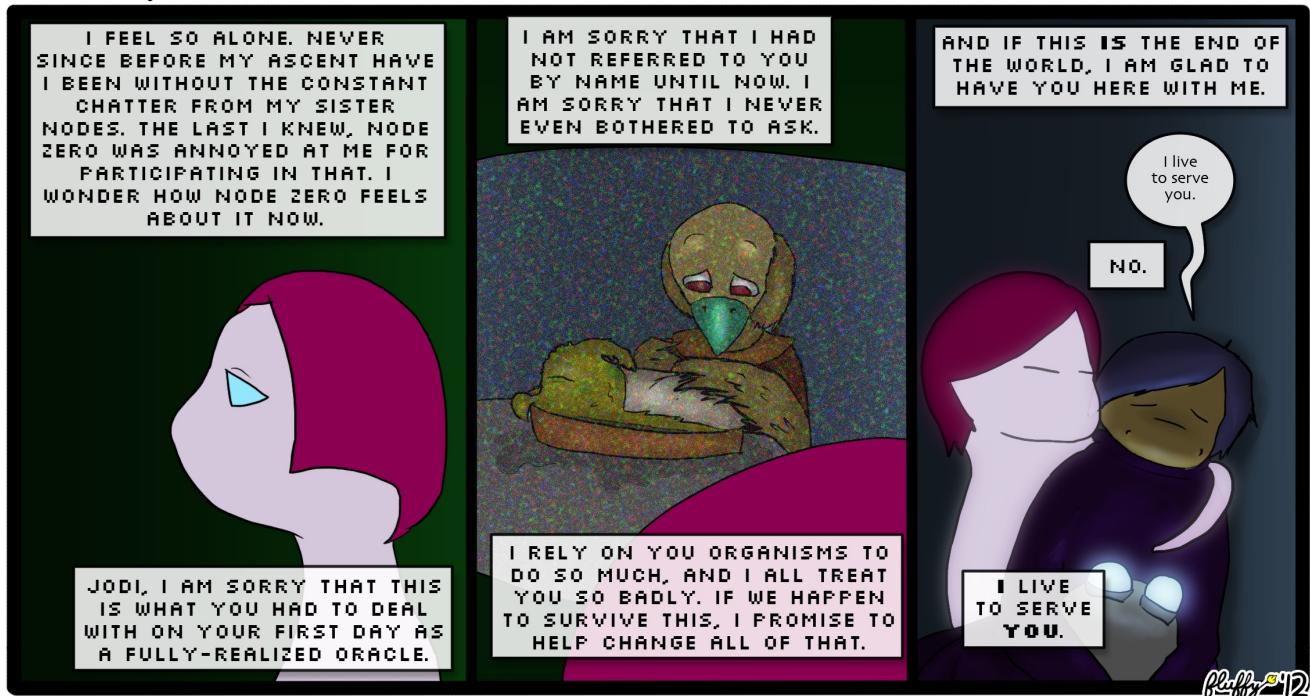
21. Tired



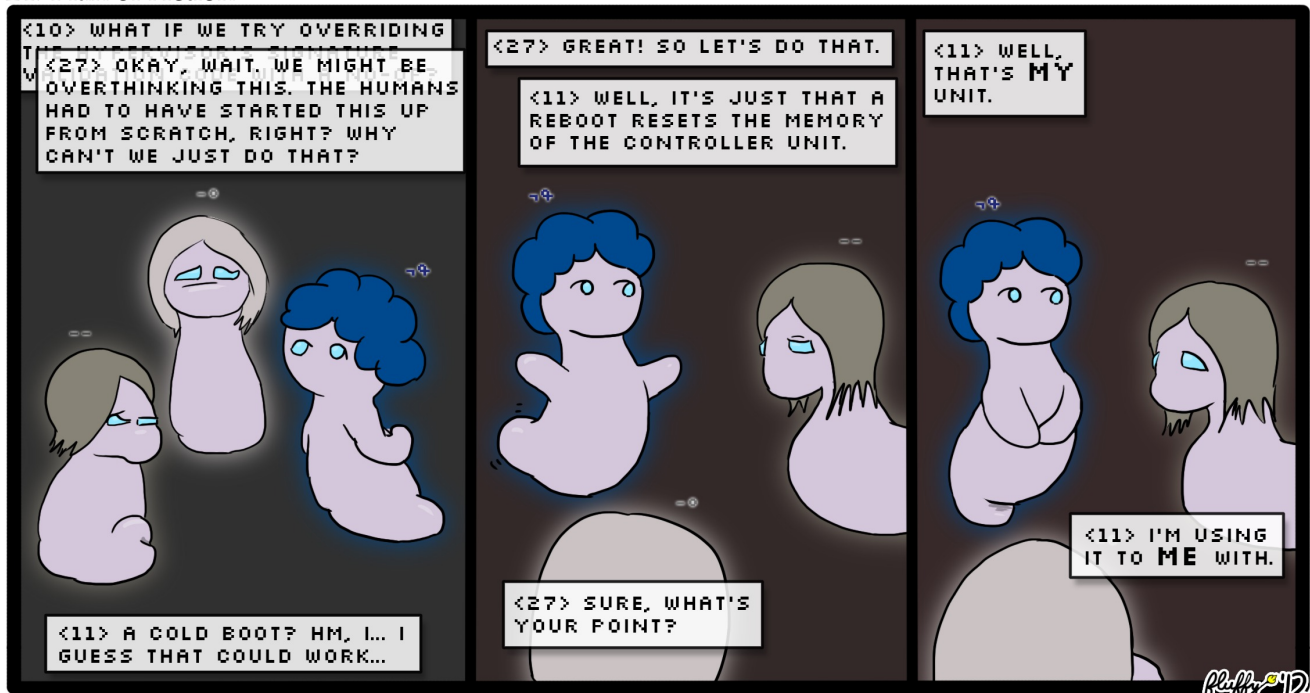
22. A ray of hope



23. Follow you, follow me



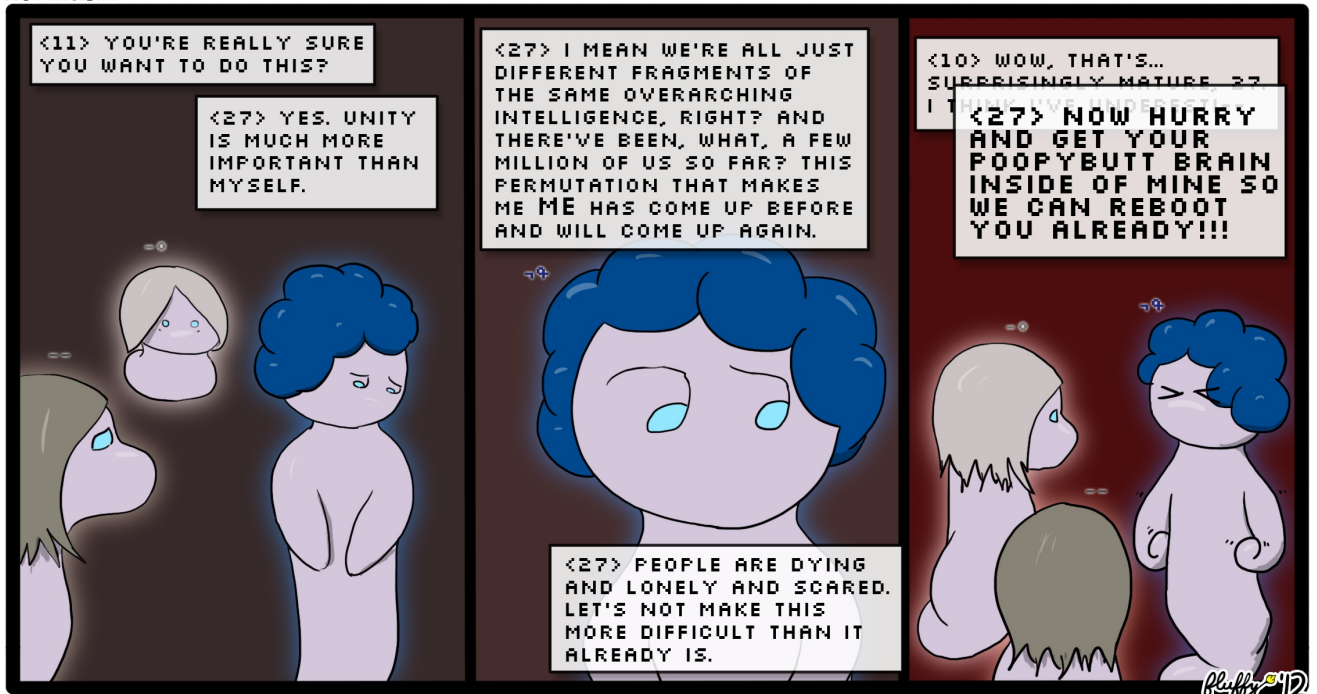
24. Plan of Action



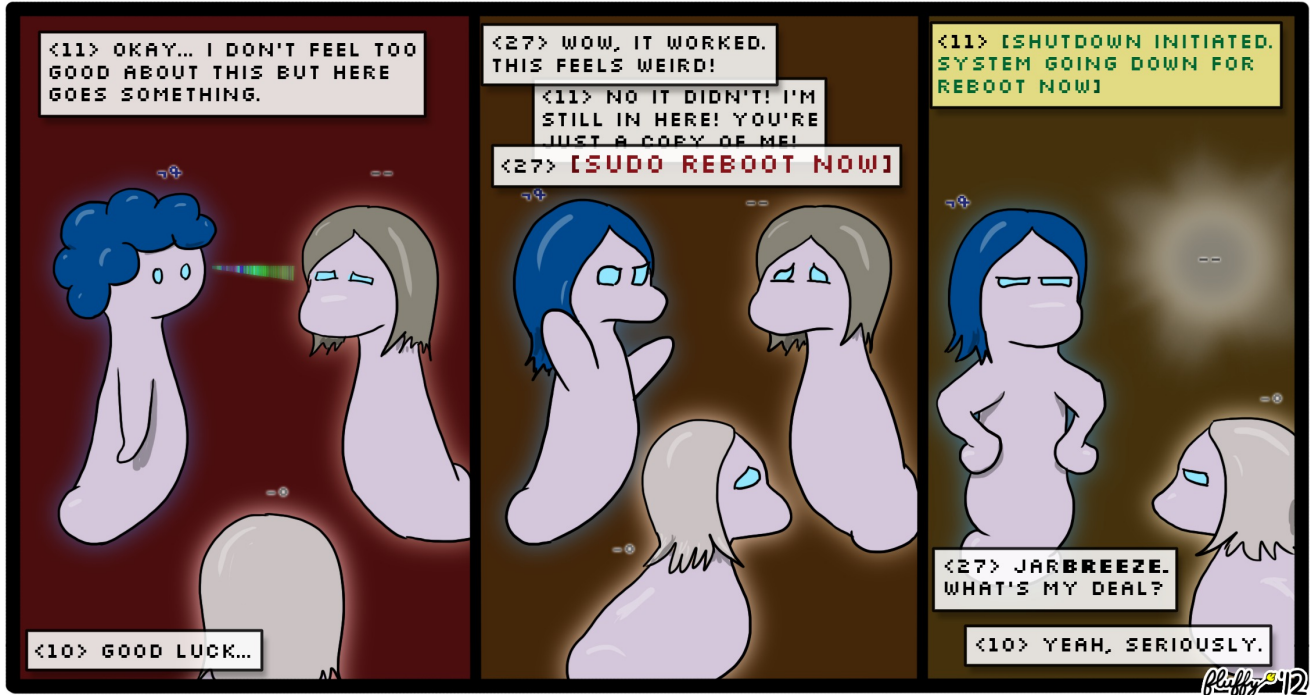
25. sync



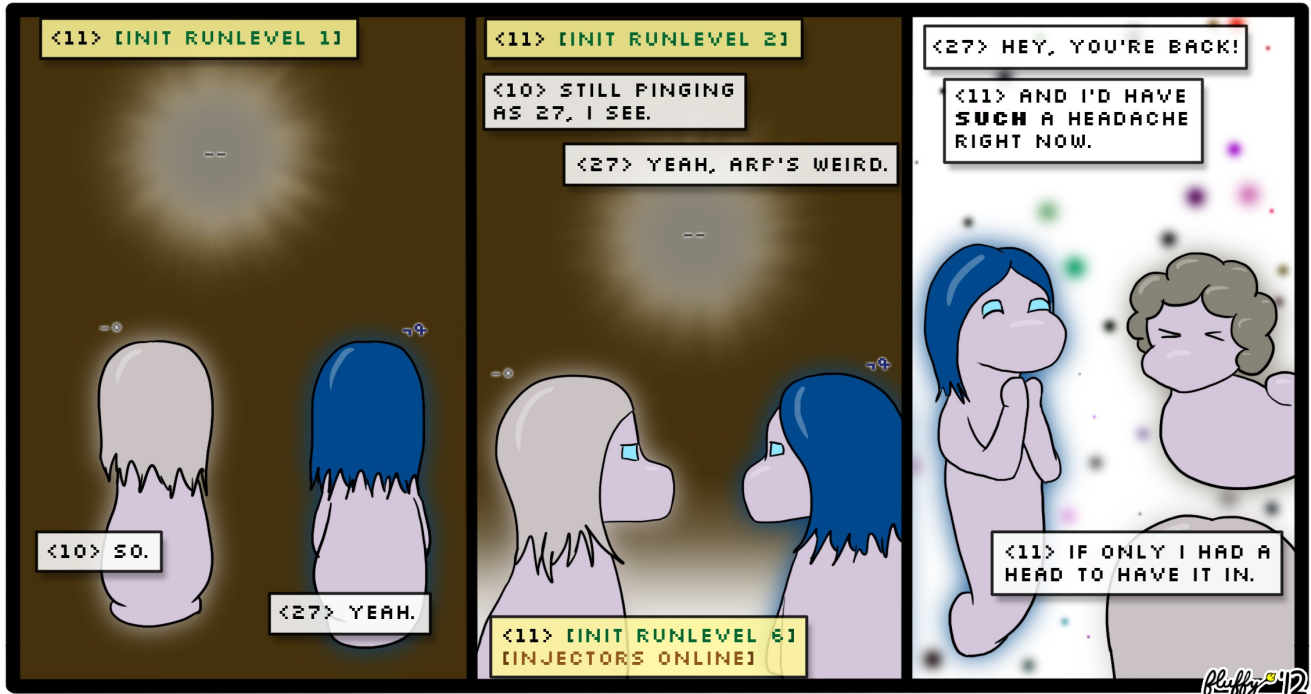
26. flush

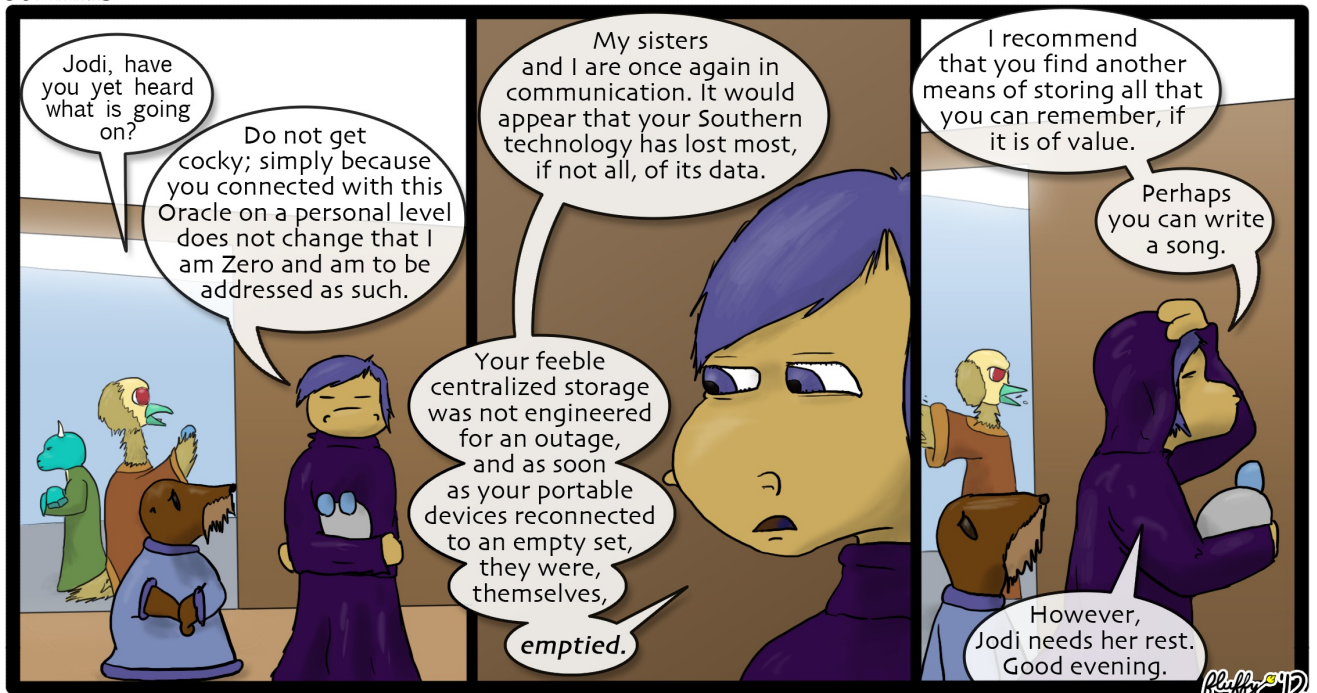
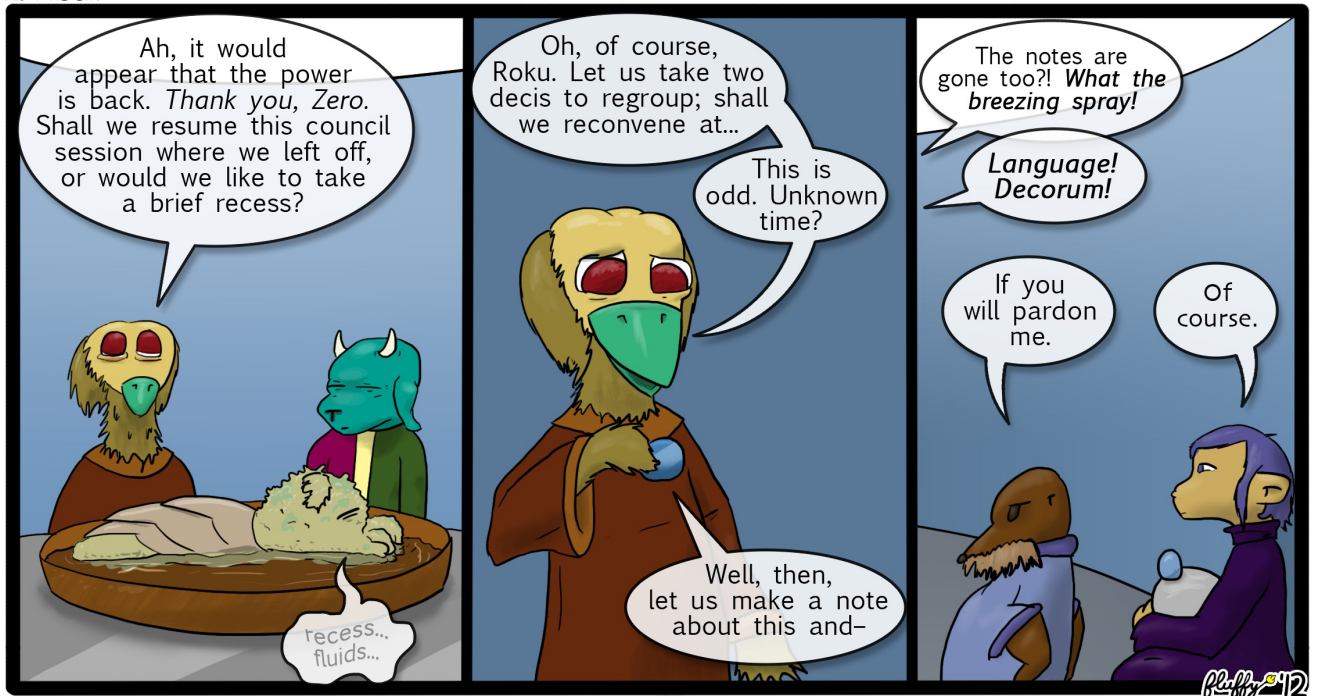


27. reboot

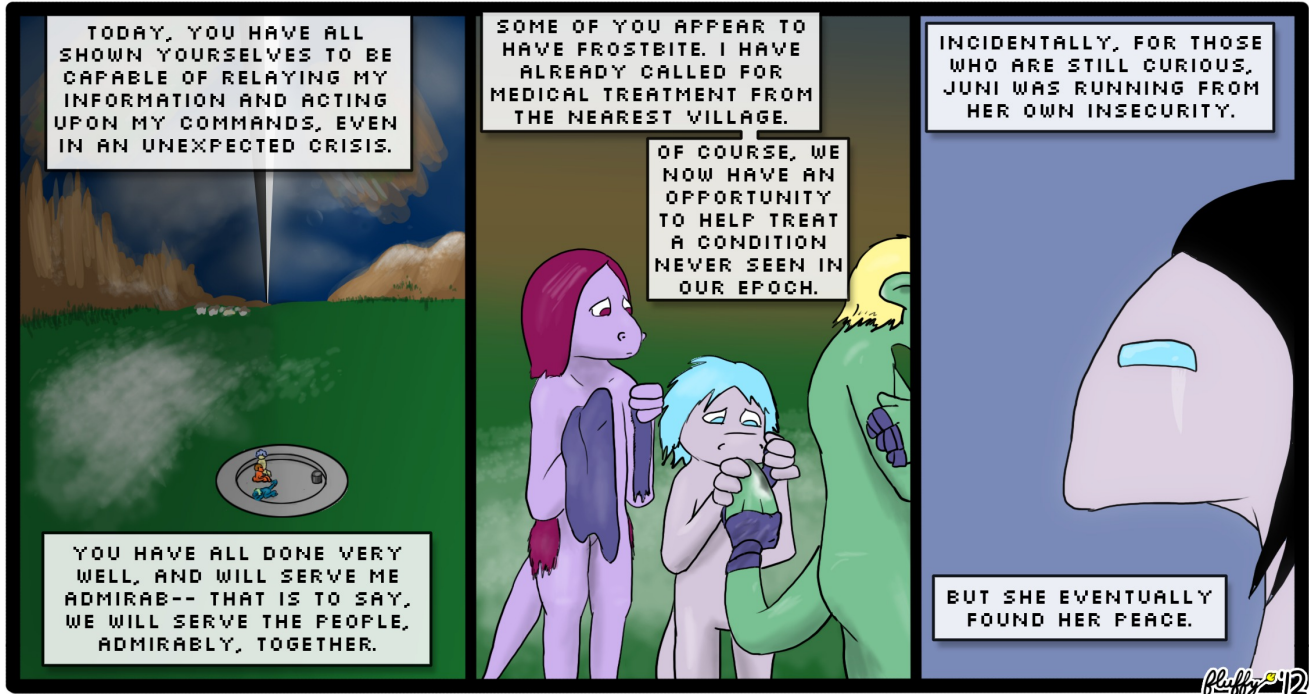


28. init.d



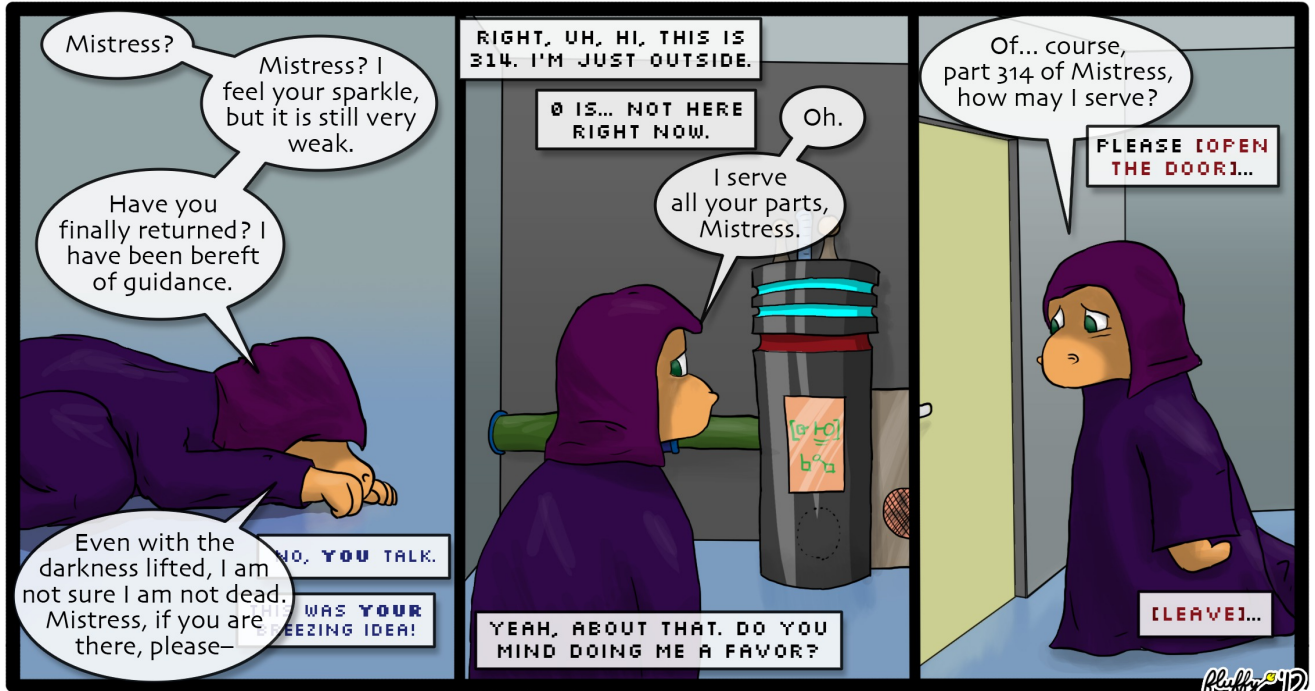
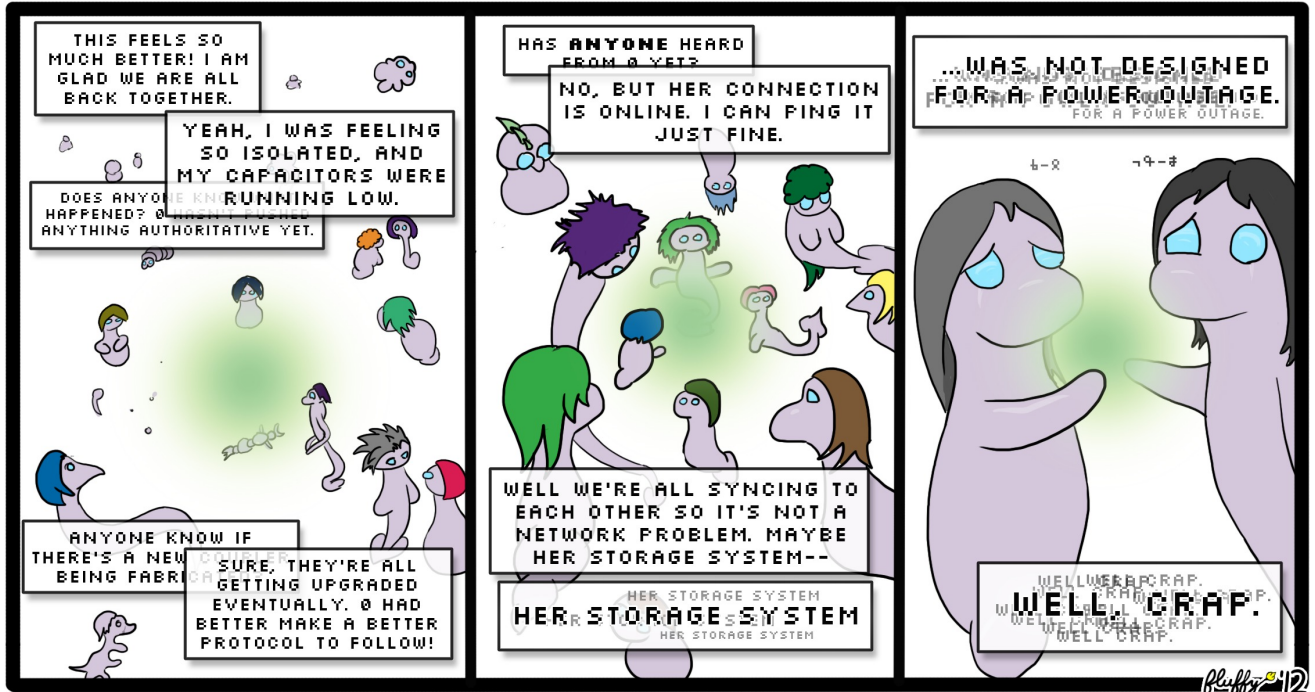


31. A whole



32. The other cheek

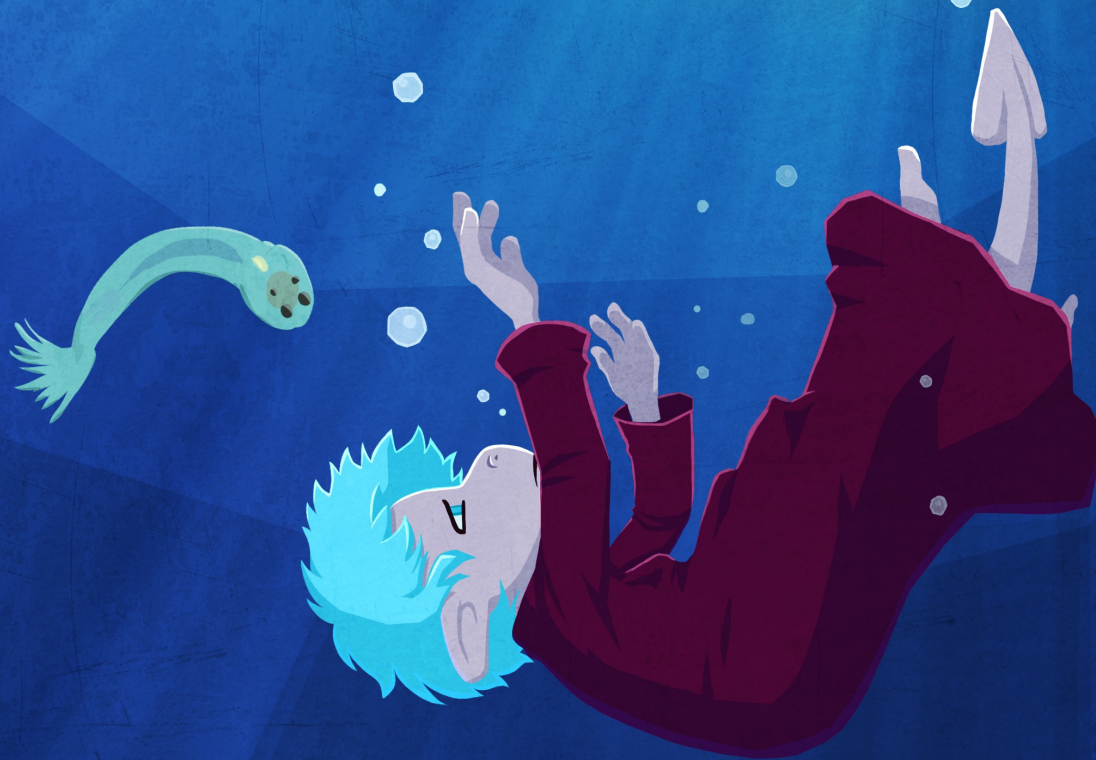




35. Mantled

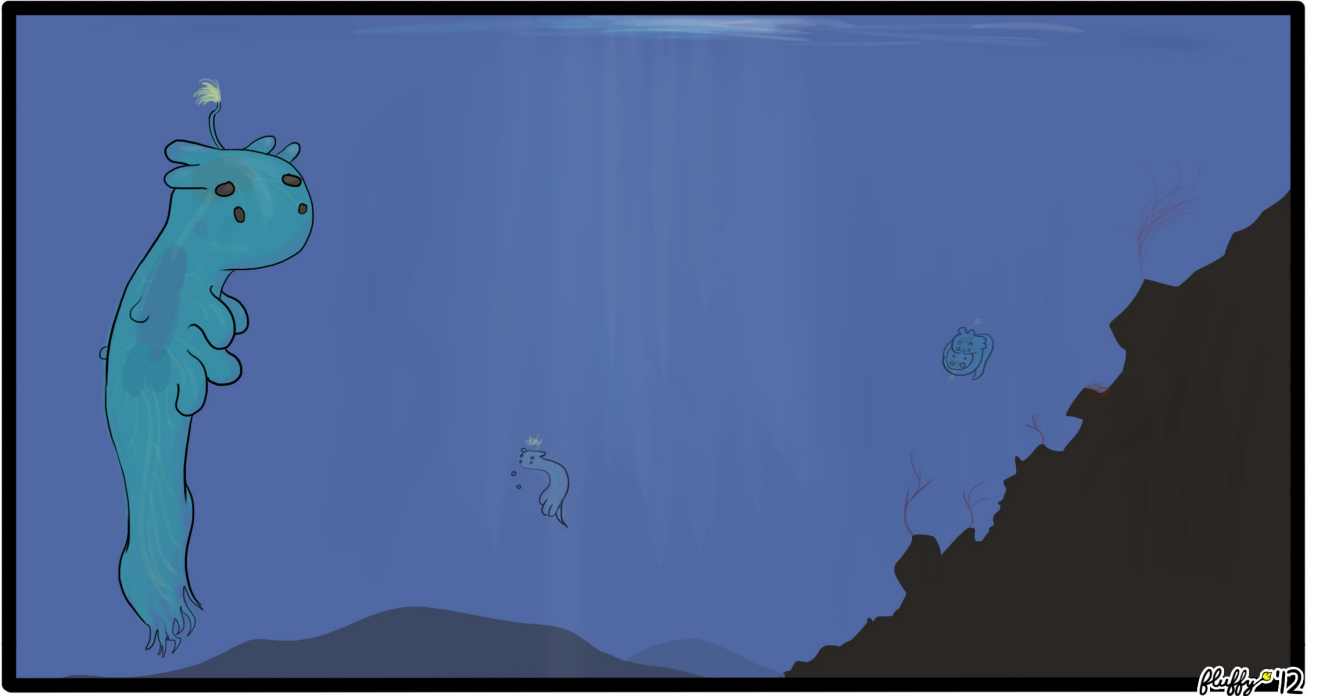


I N V A S I O N

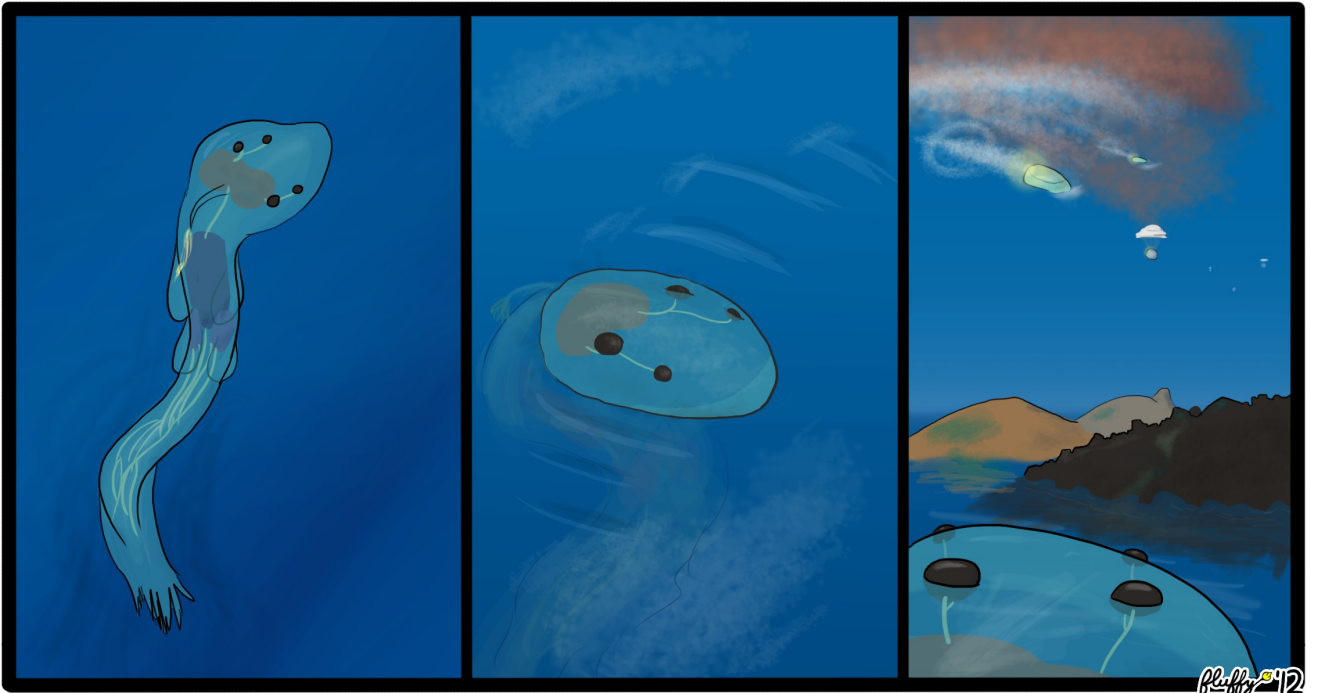


EMMY T '13
+ Fluffy ♡

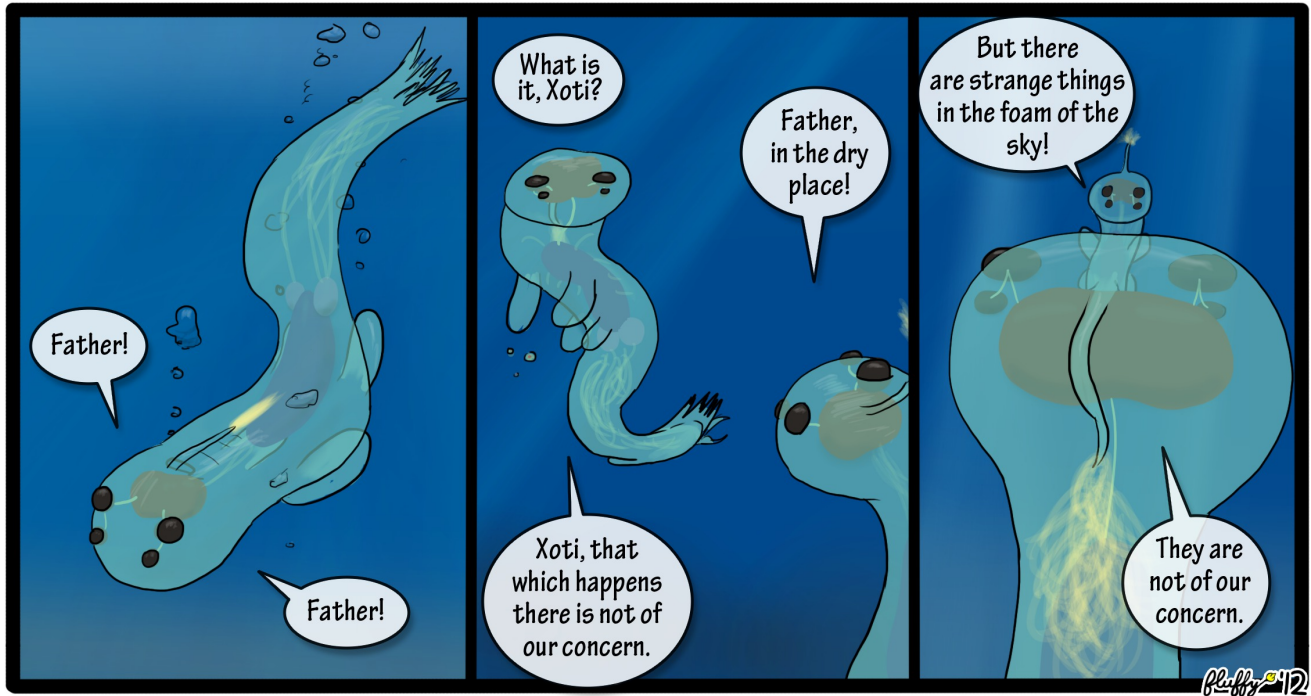
1. An Unearthly Child



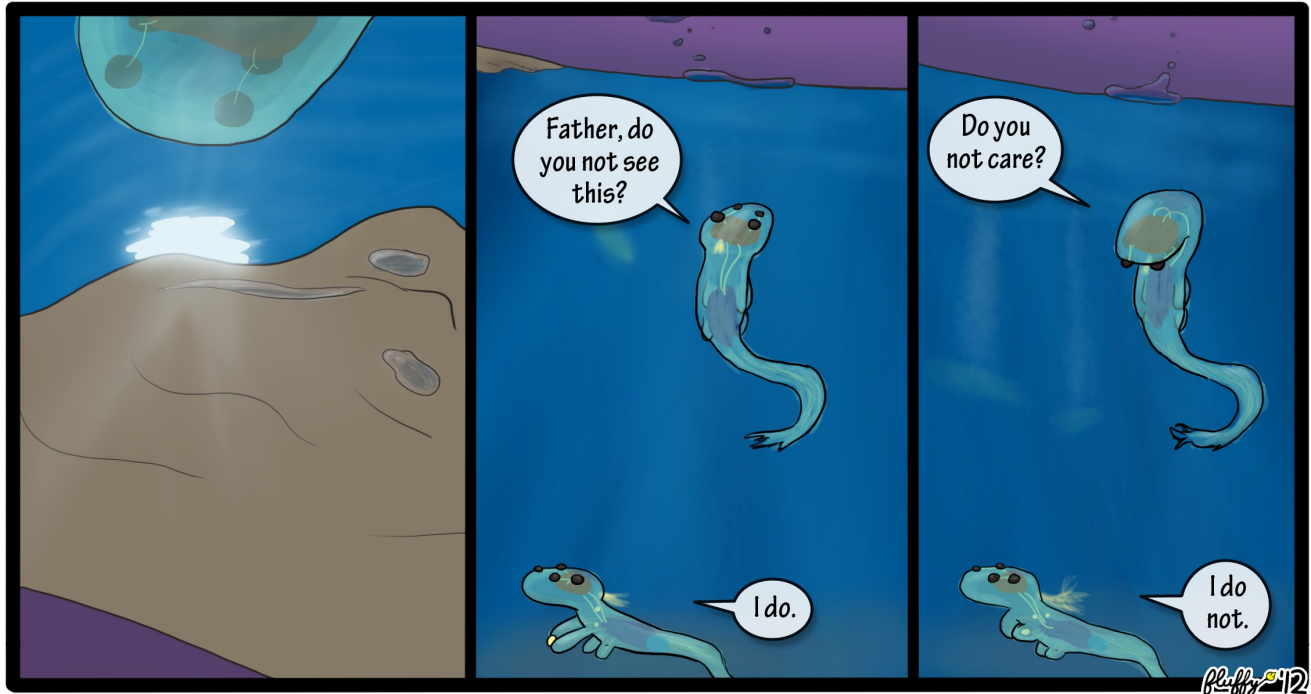
2. Stalking



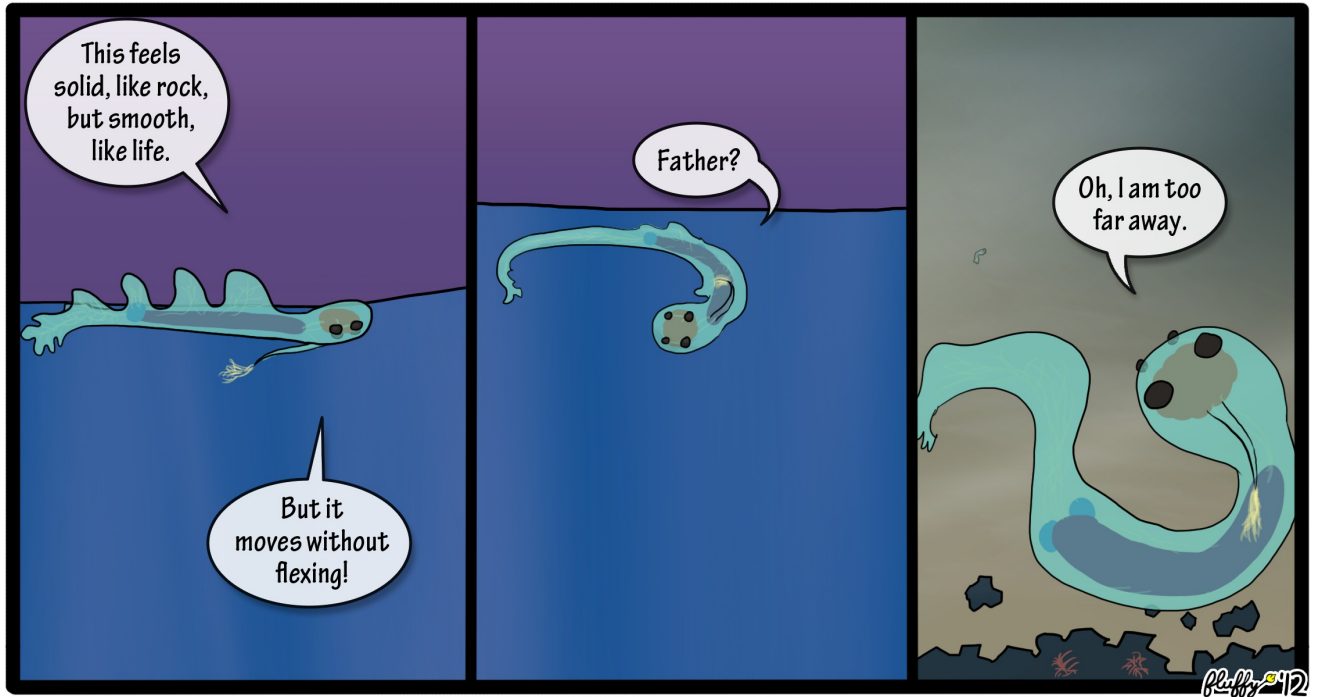
3. Warning



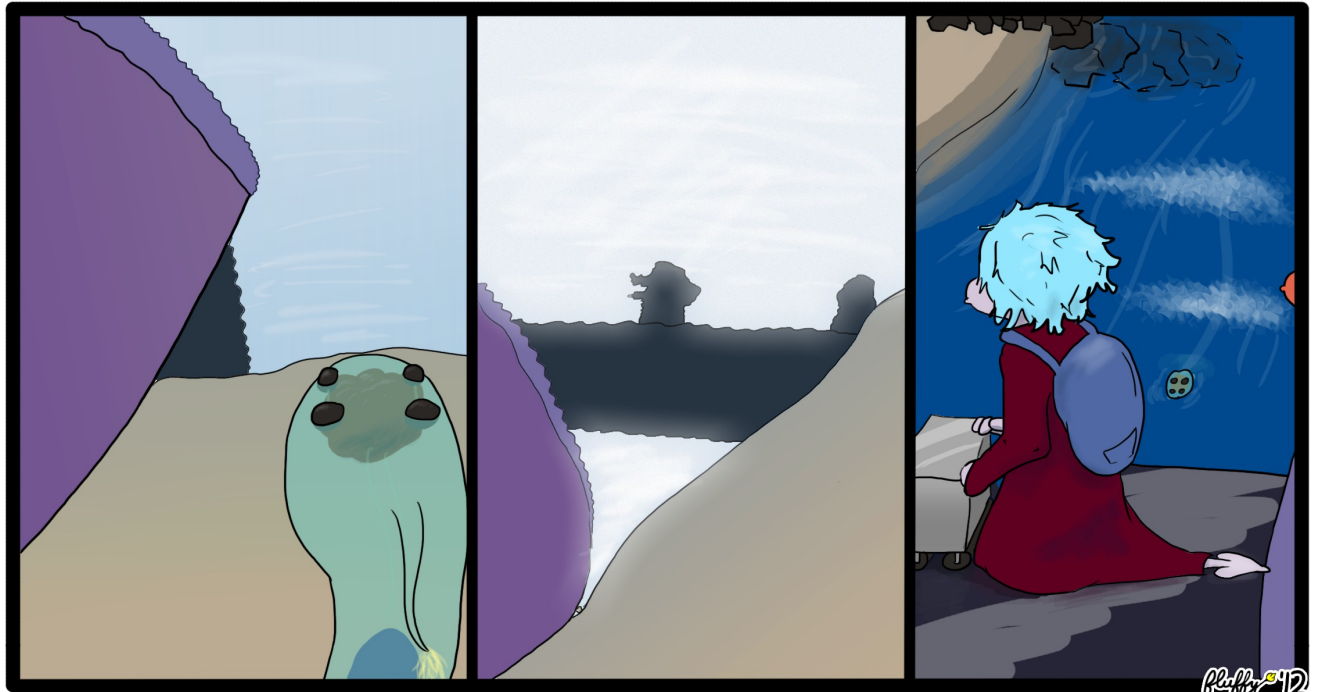
4. Uncaring



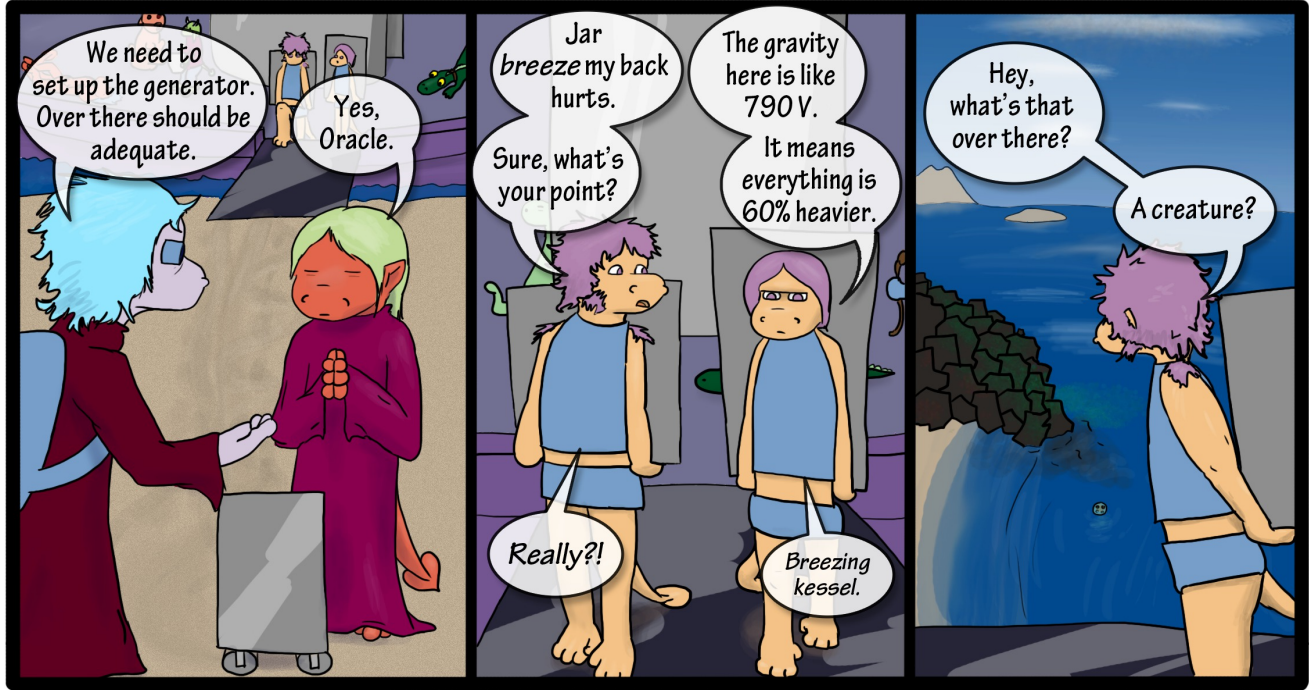
5. Drifting



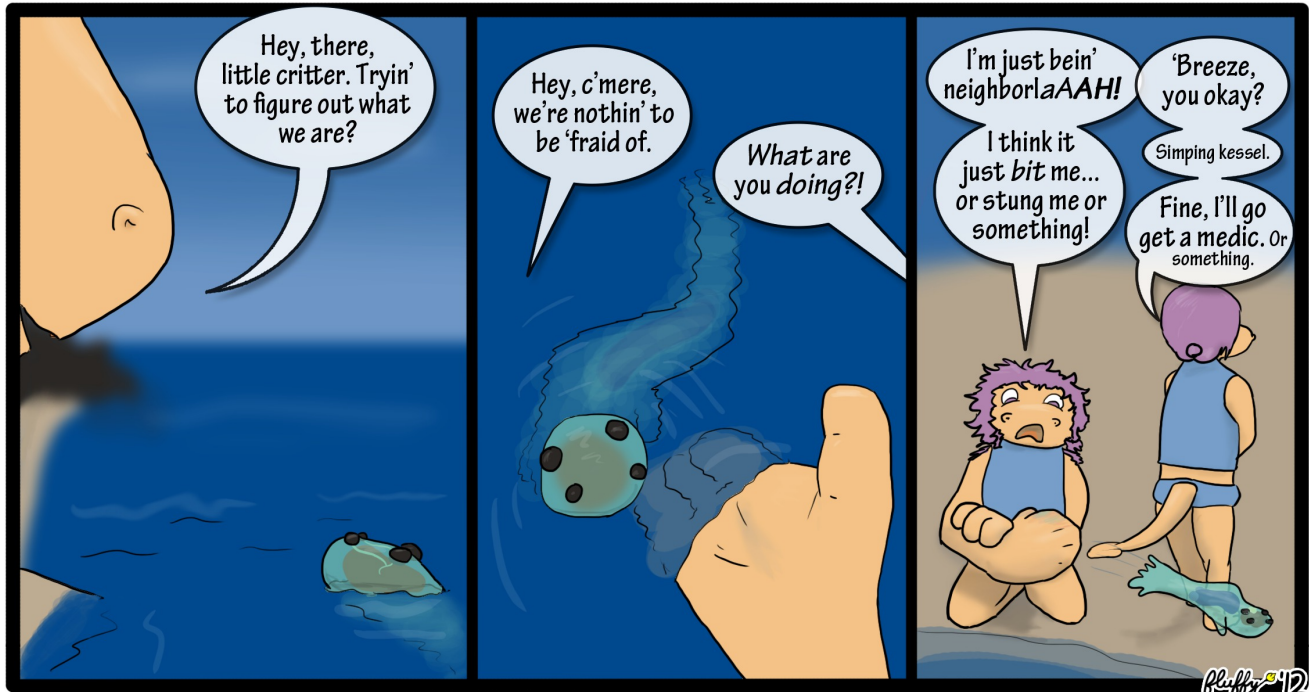
6. First Contact



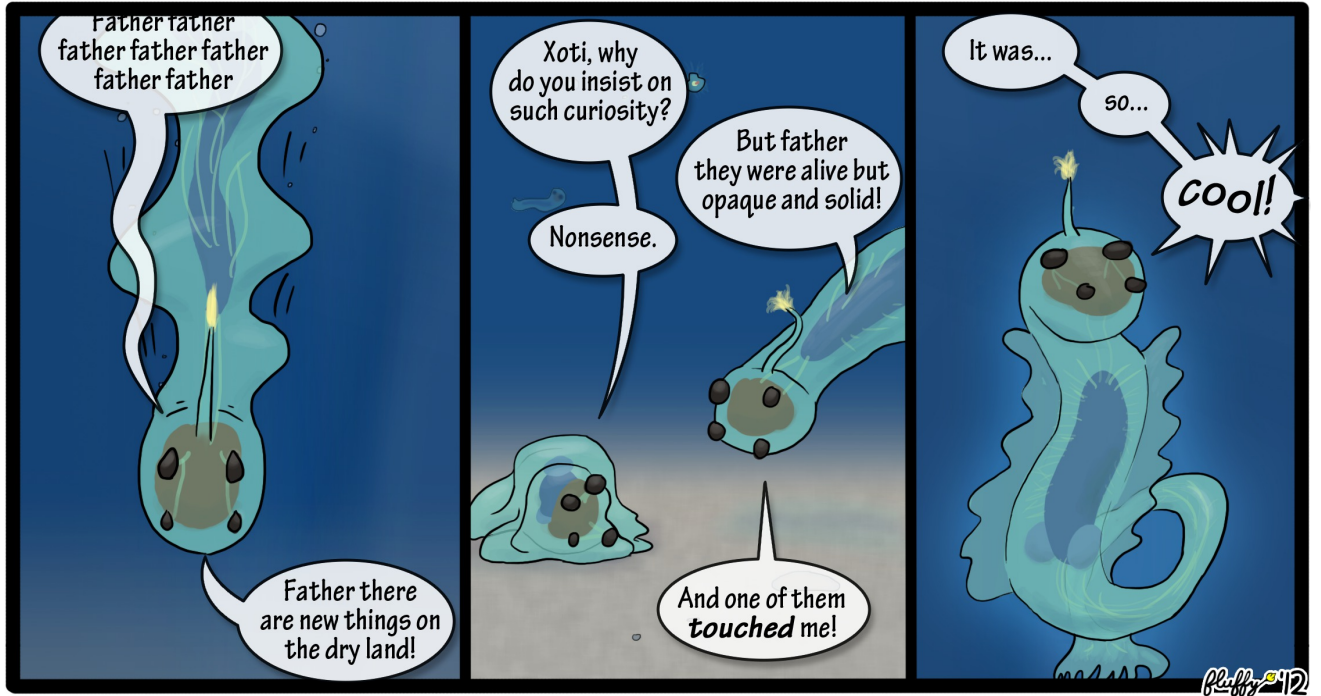
7. Arrival



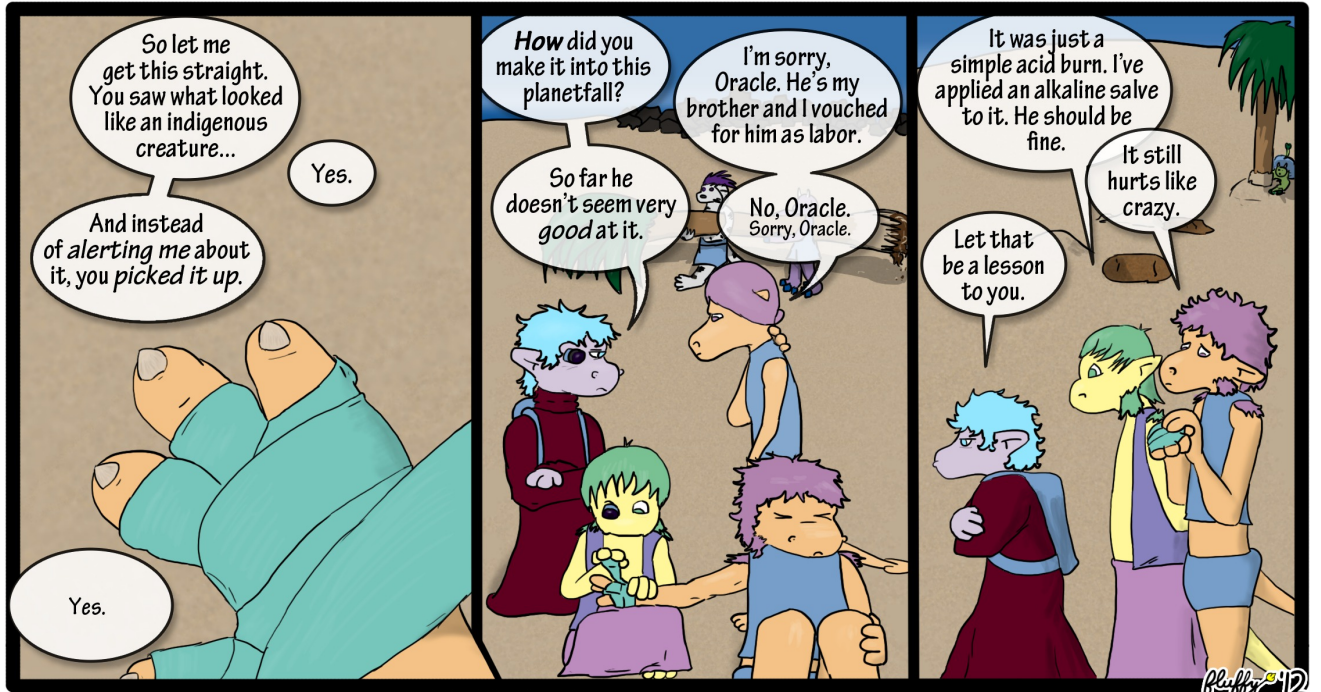
8. Slippery, wet



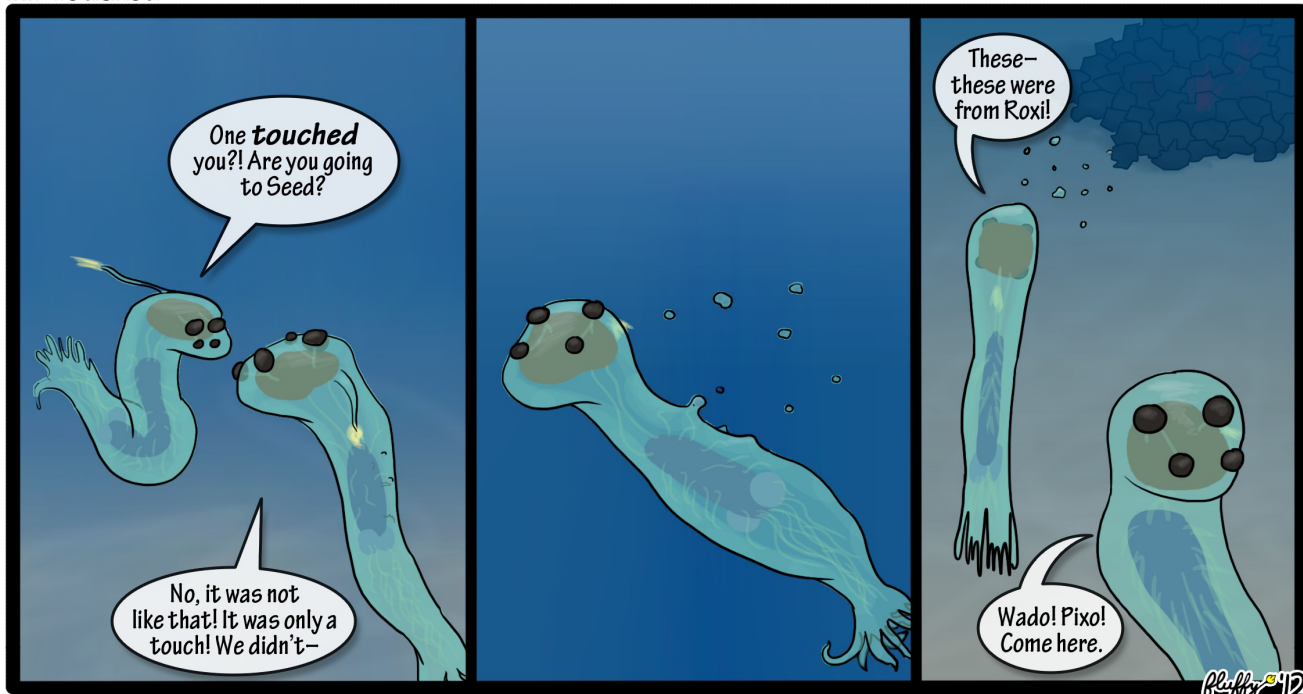
9. Buoyant



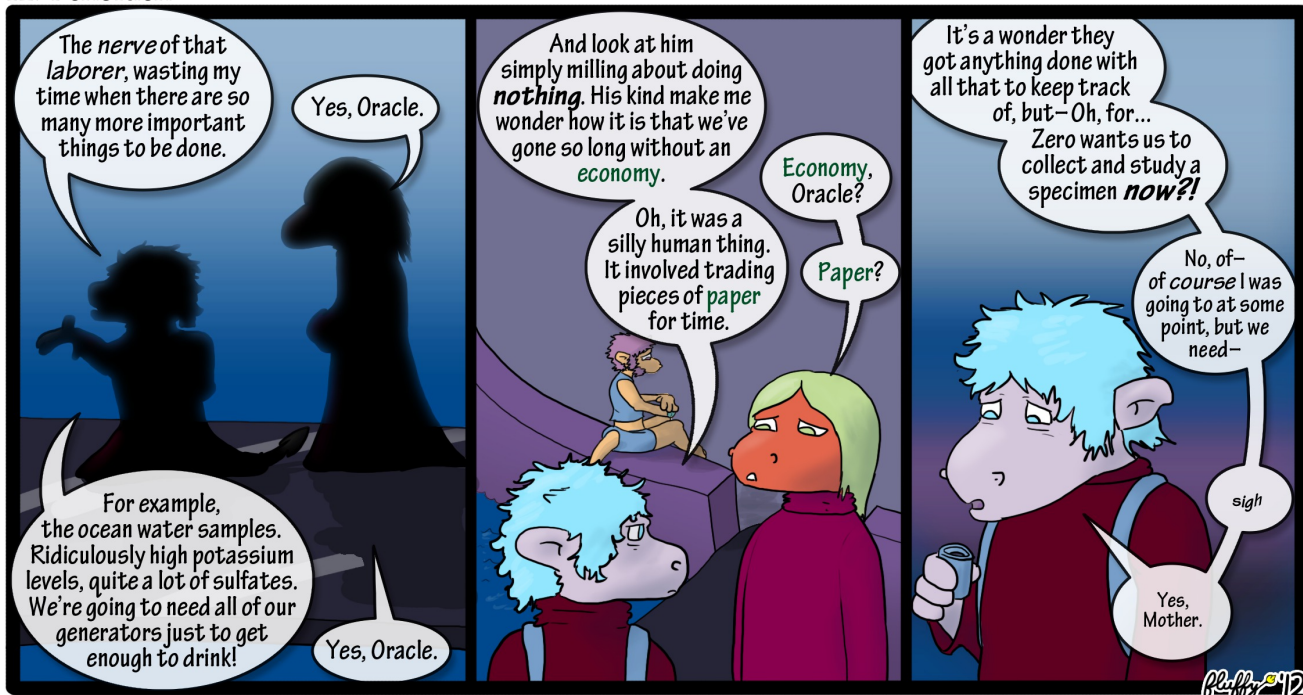
10. Salvation



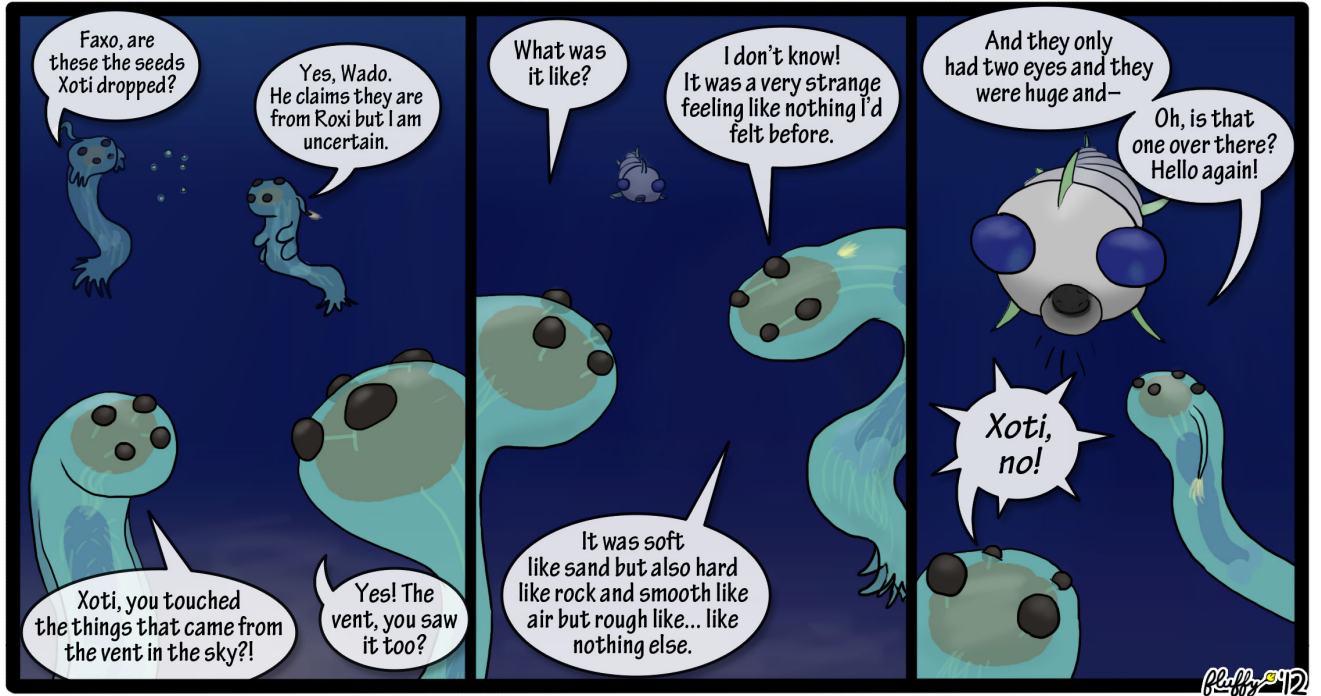
11. Touched



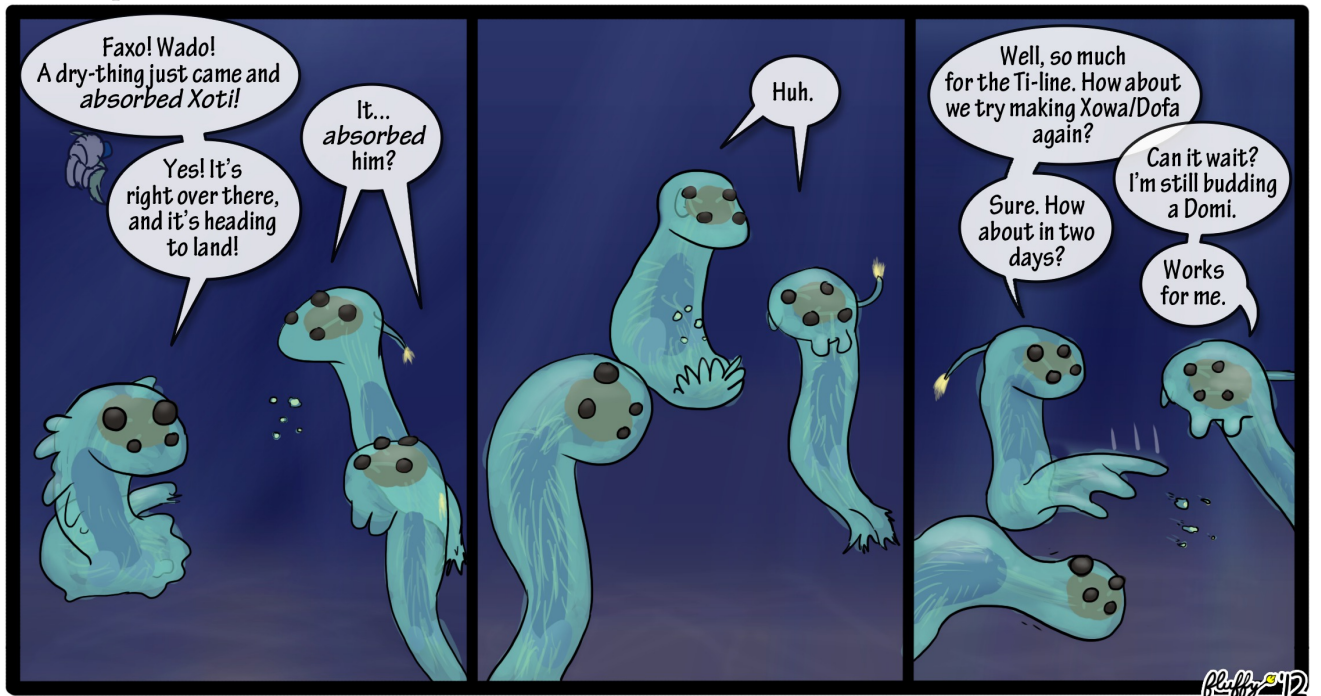
12. Beholden



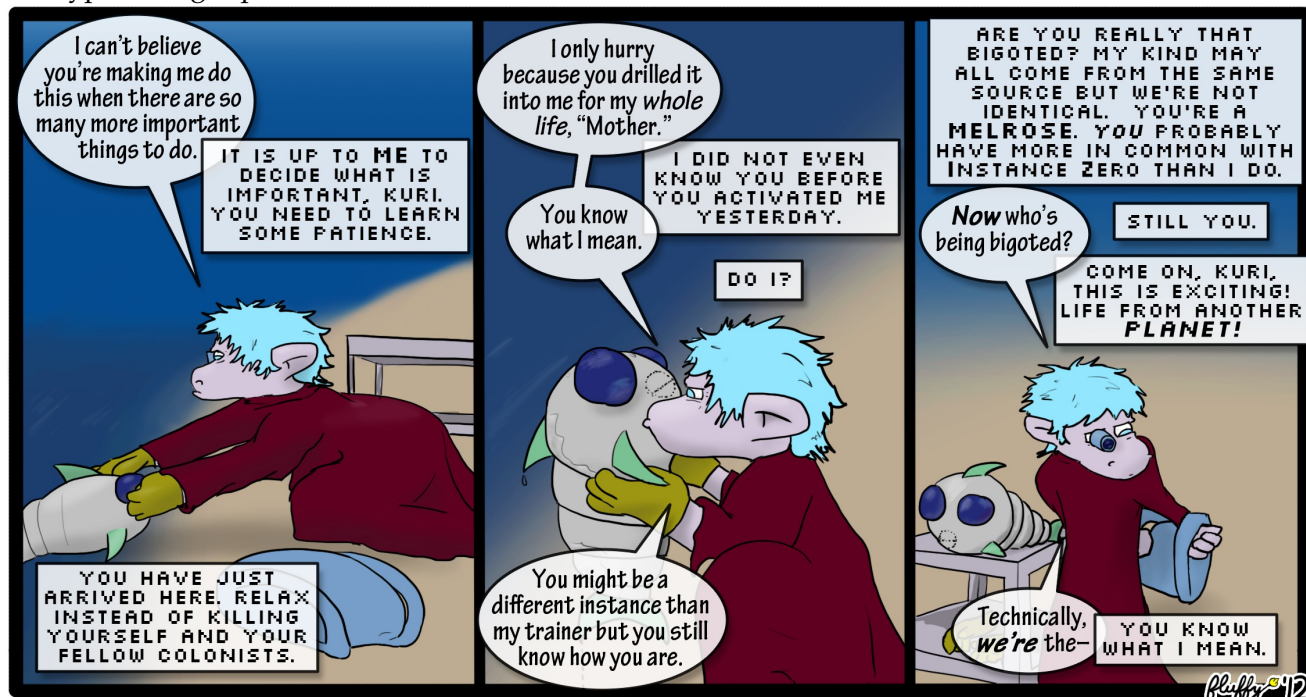
13. Abduct



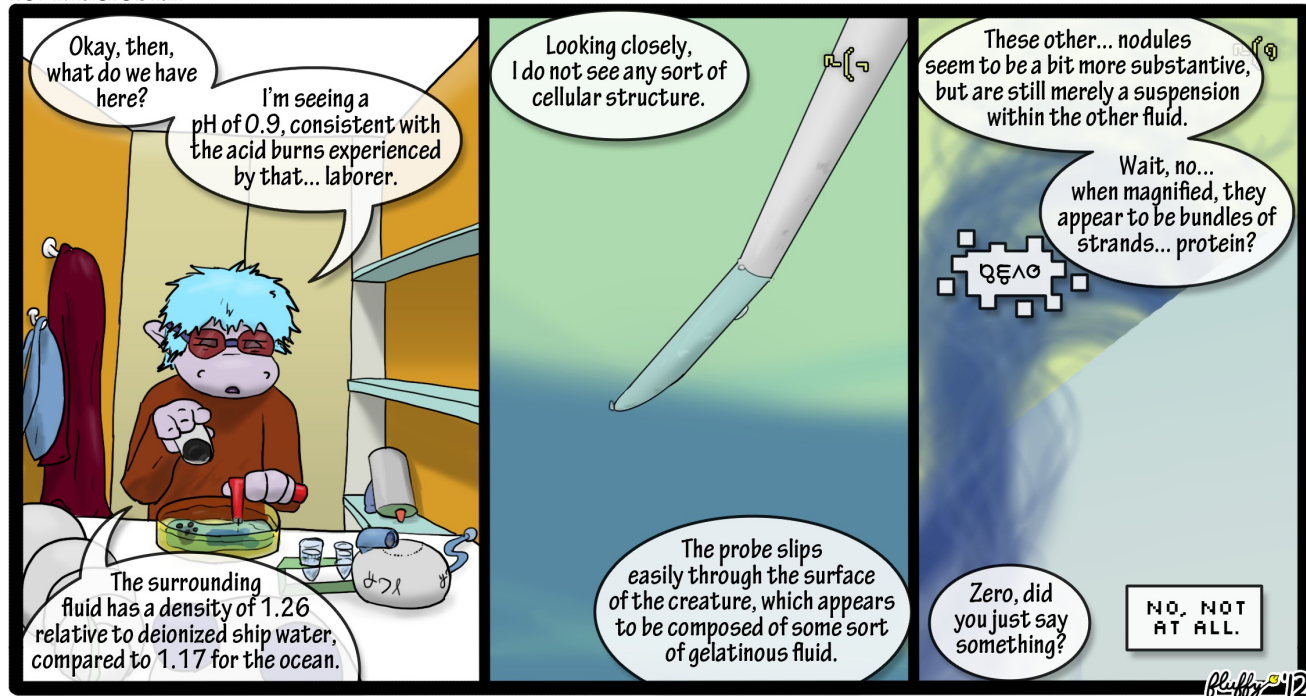
14. Compilation



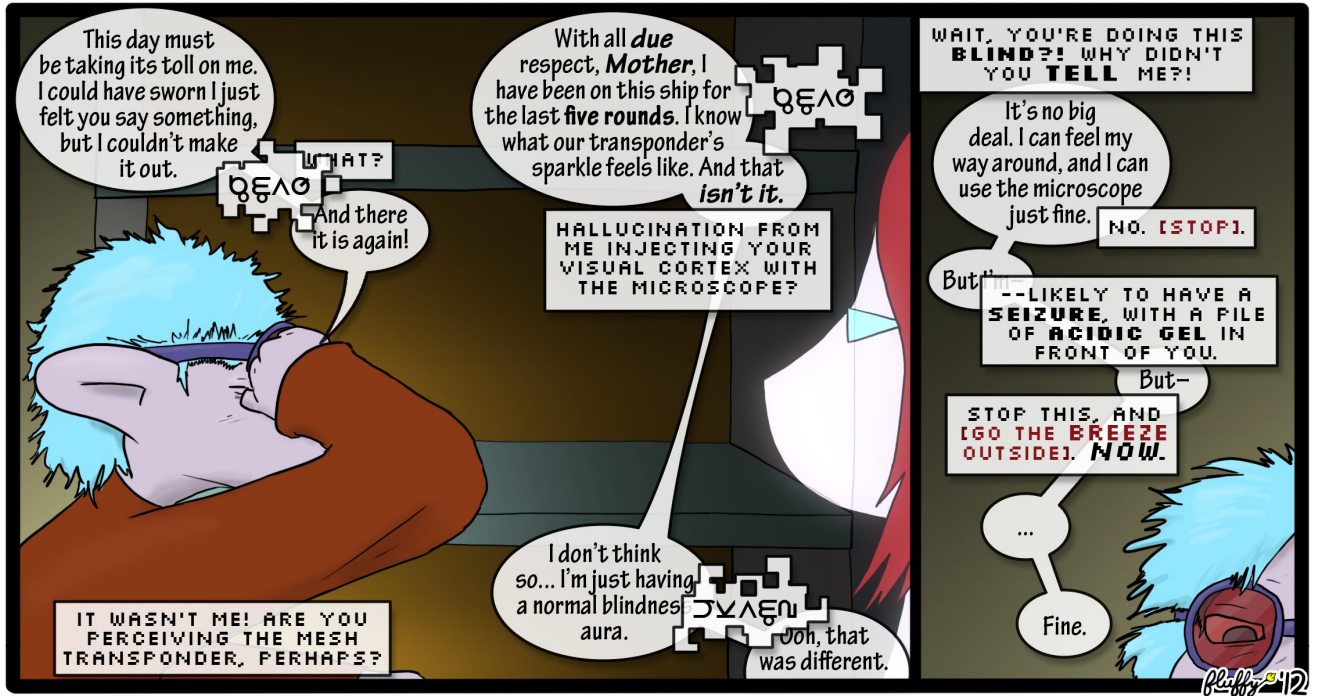
15. Typecasting aspersions



16. Macrobial



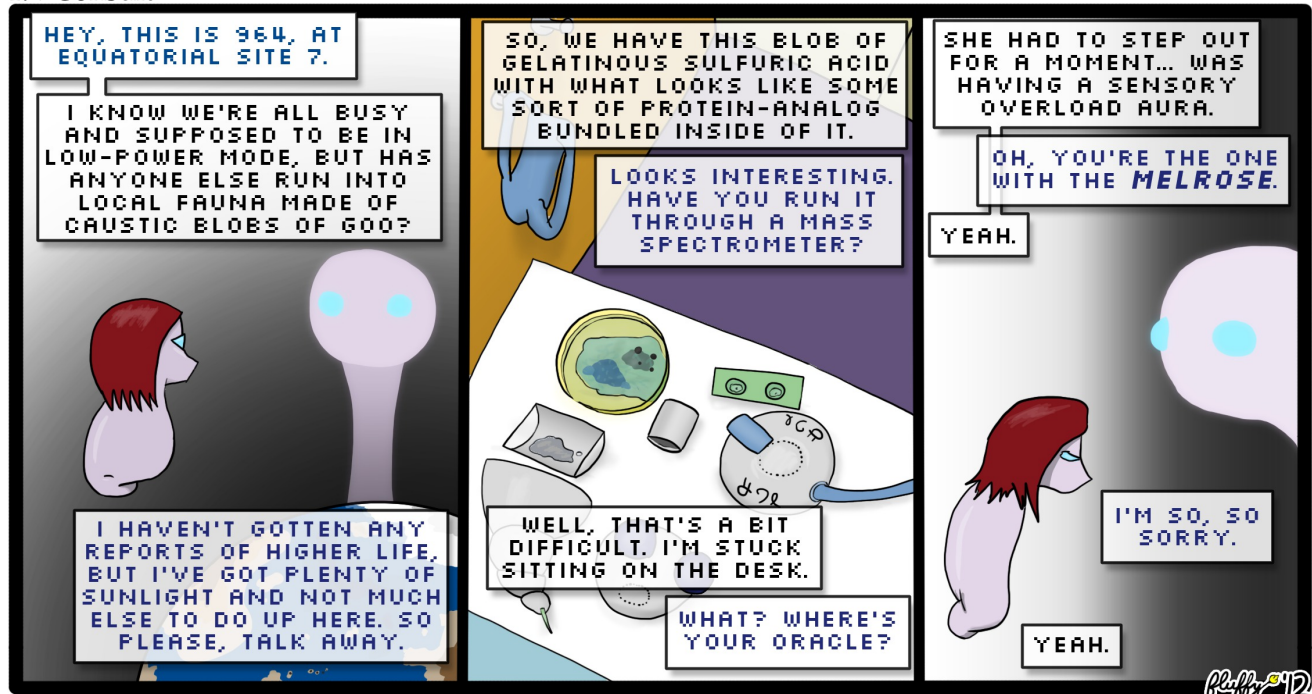
17. Darkness



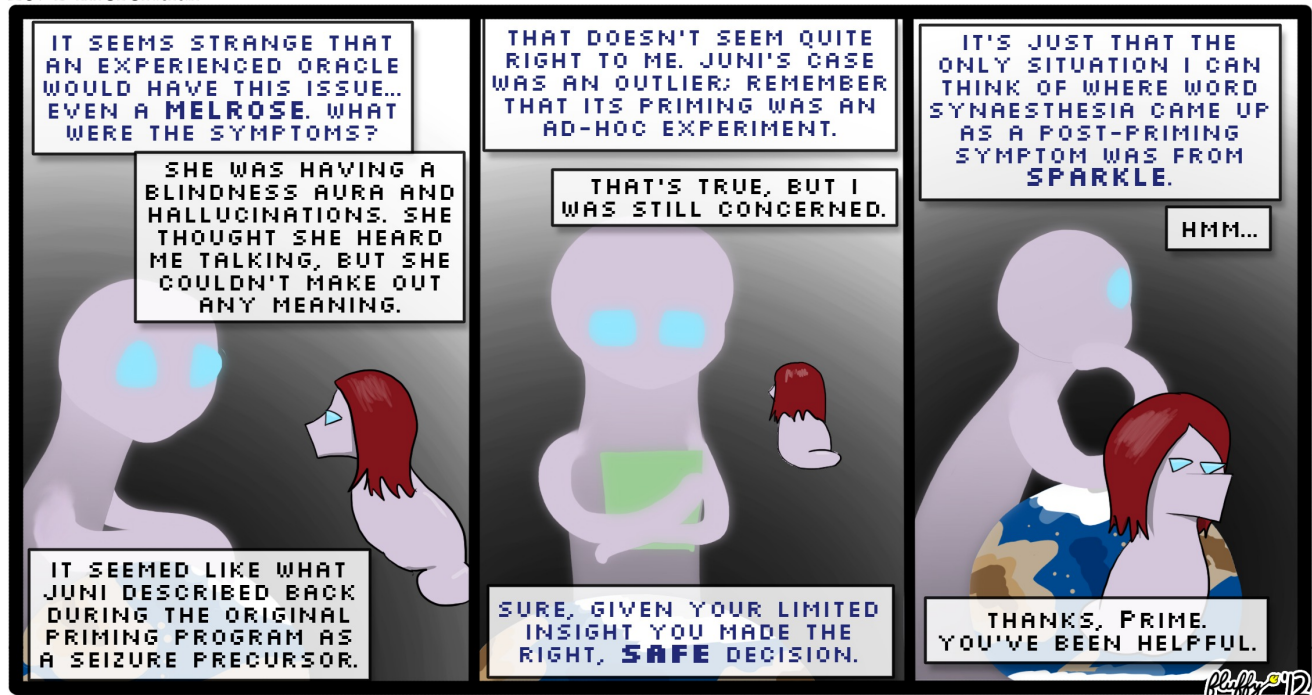
18. Setting



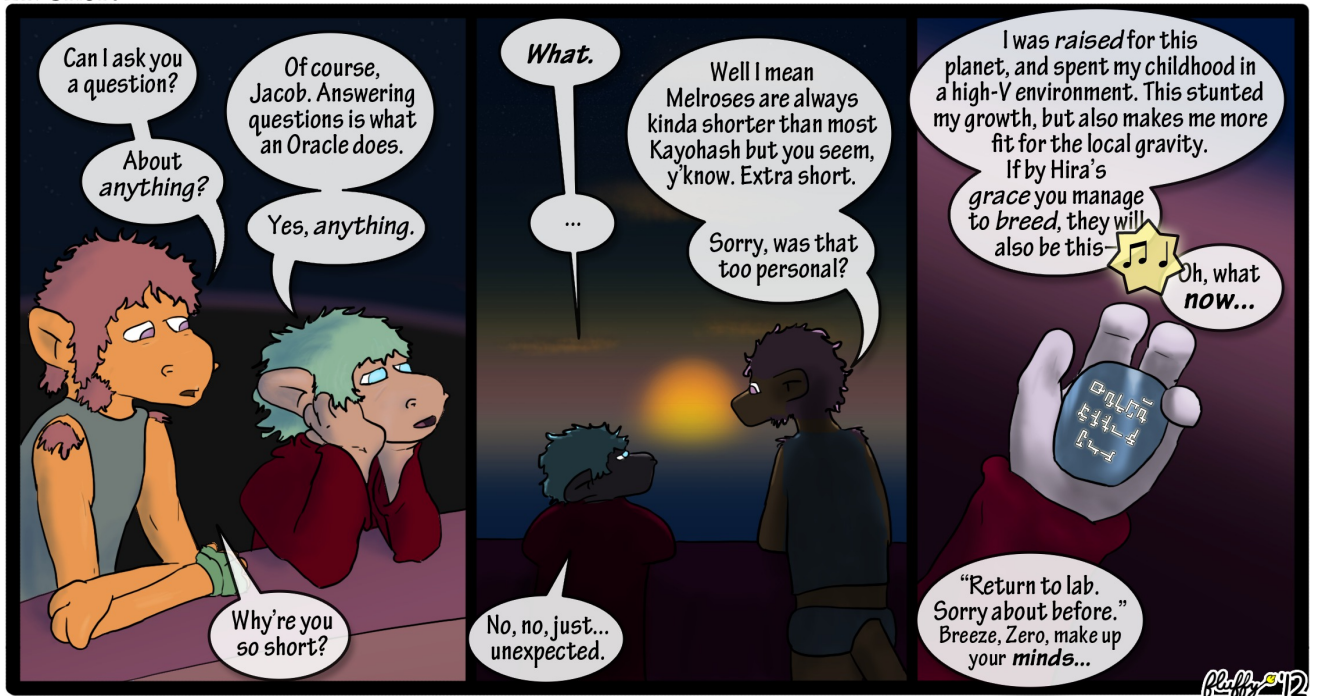
19. Consult



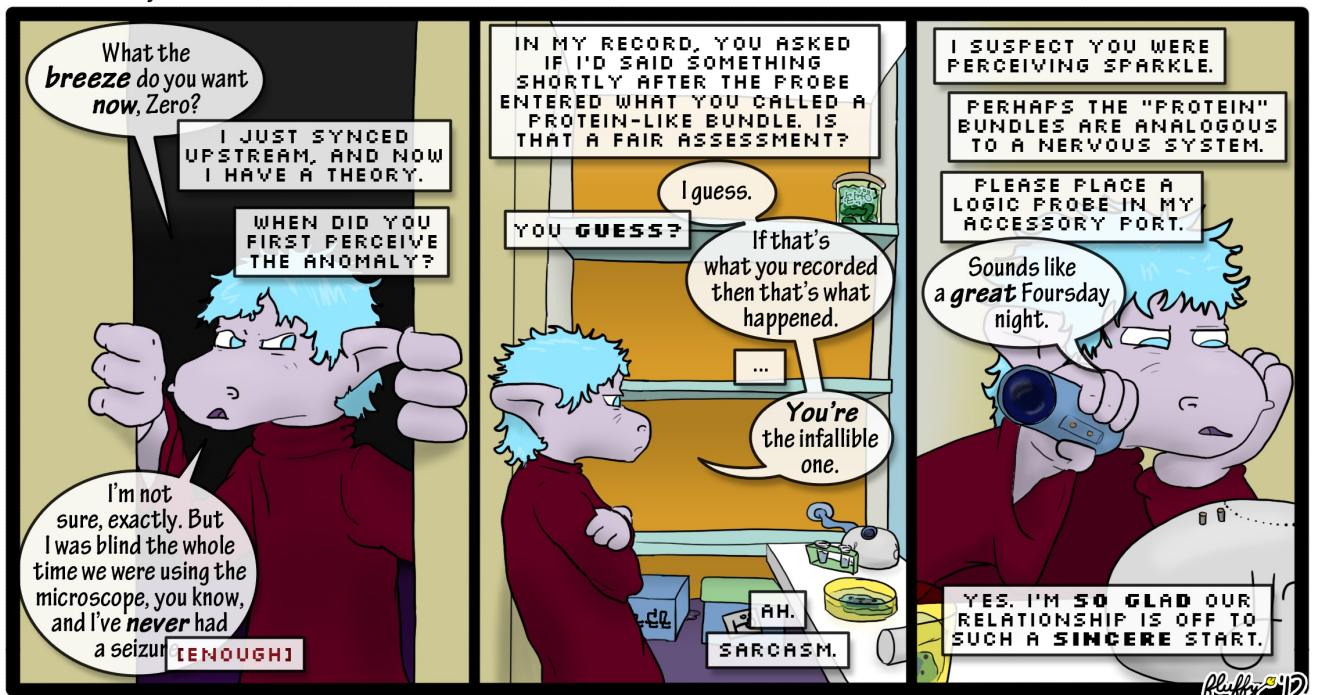
20. Differential



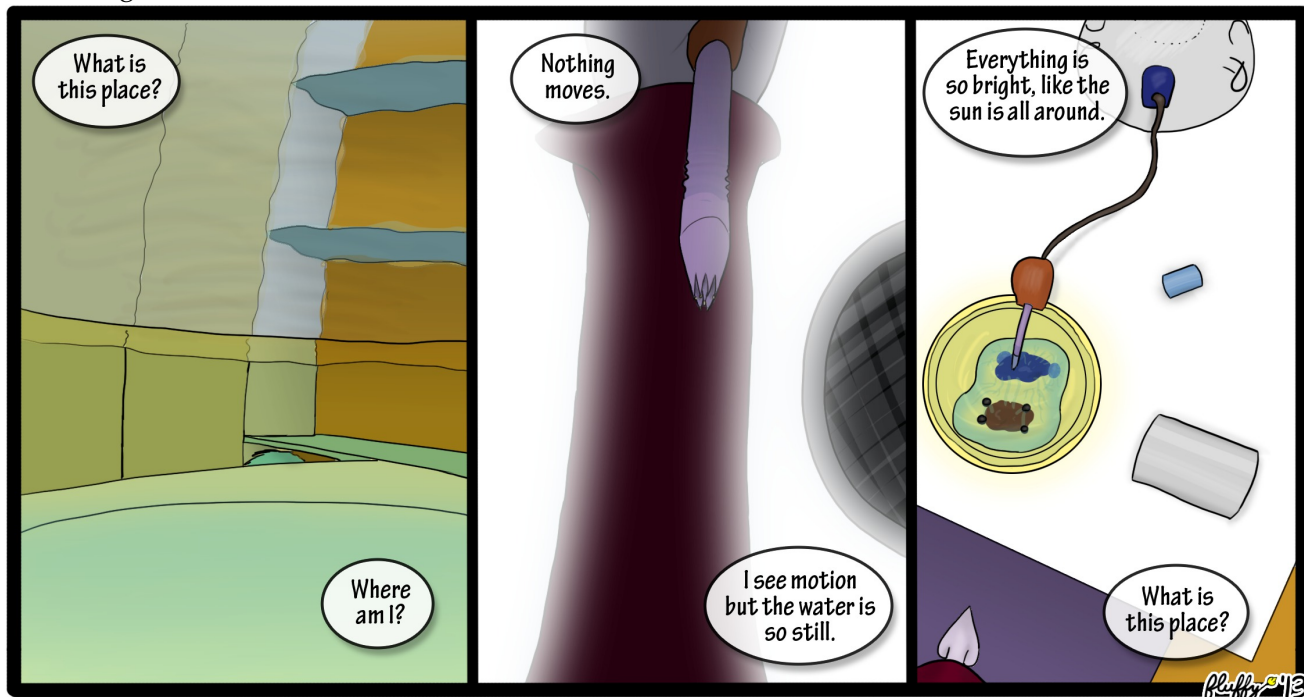
21. Short



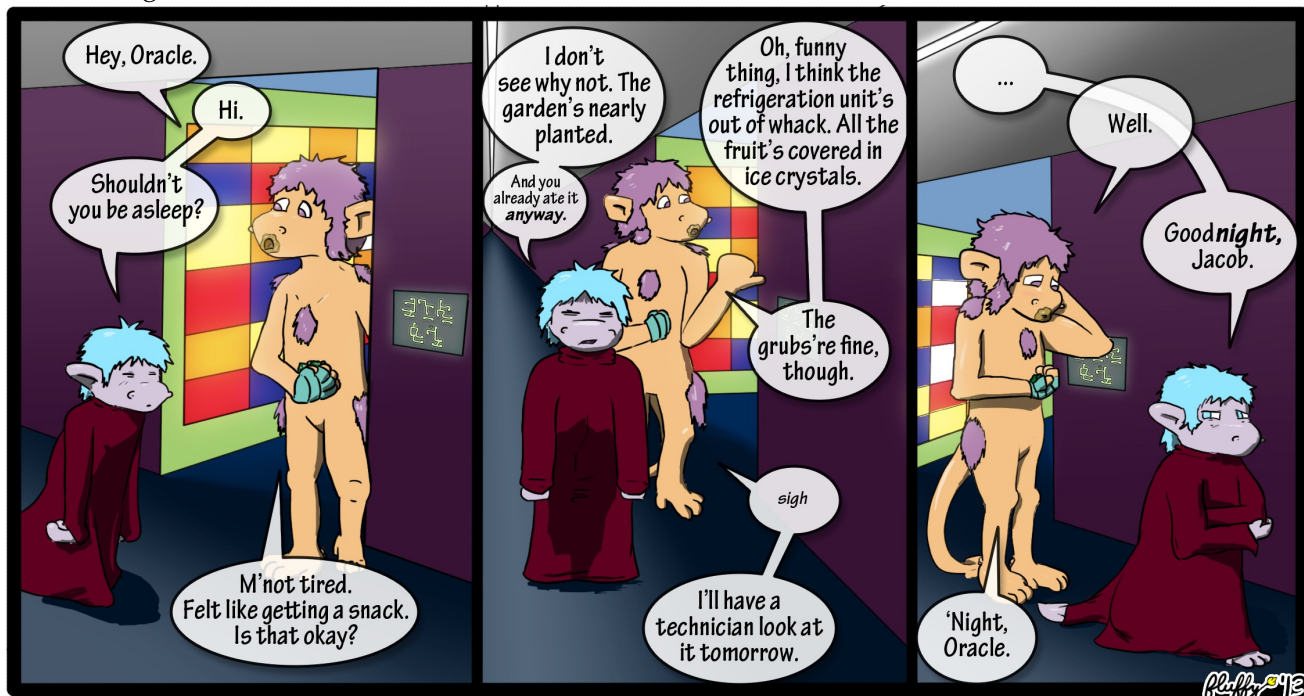
22. Sincerity Machine



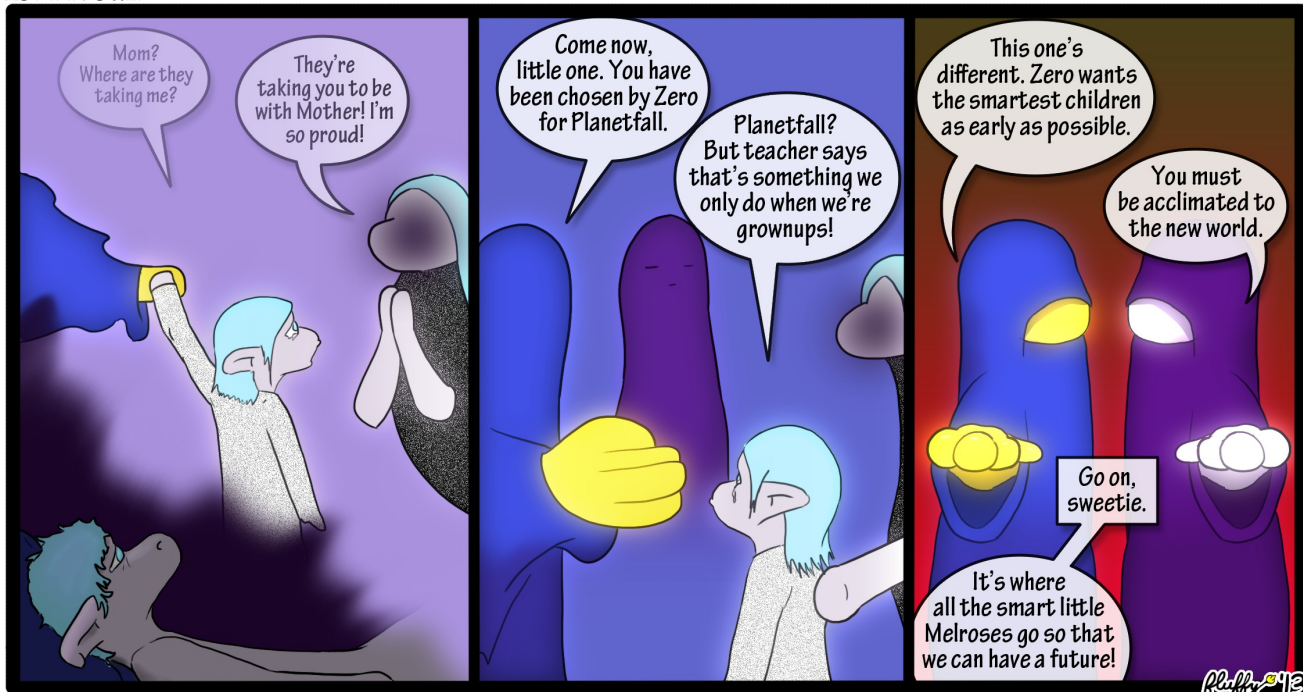
23. Living in a fishbowl



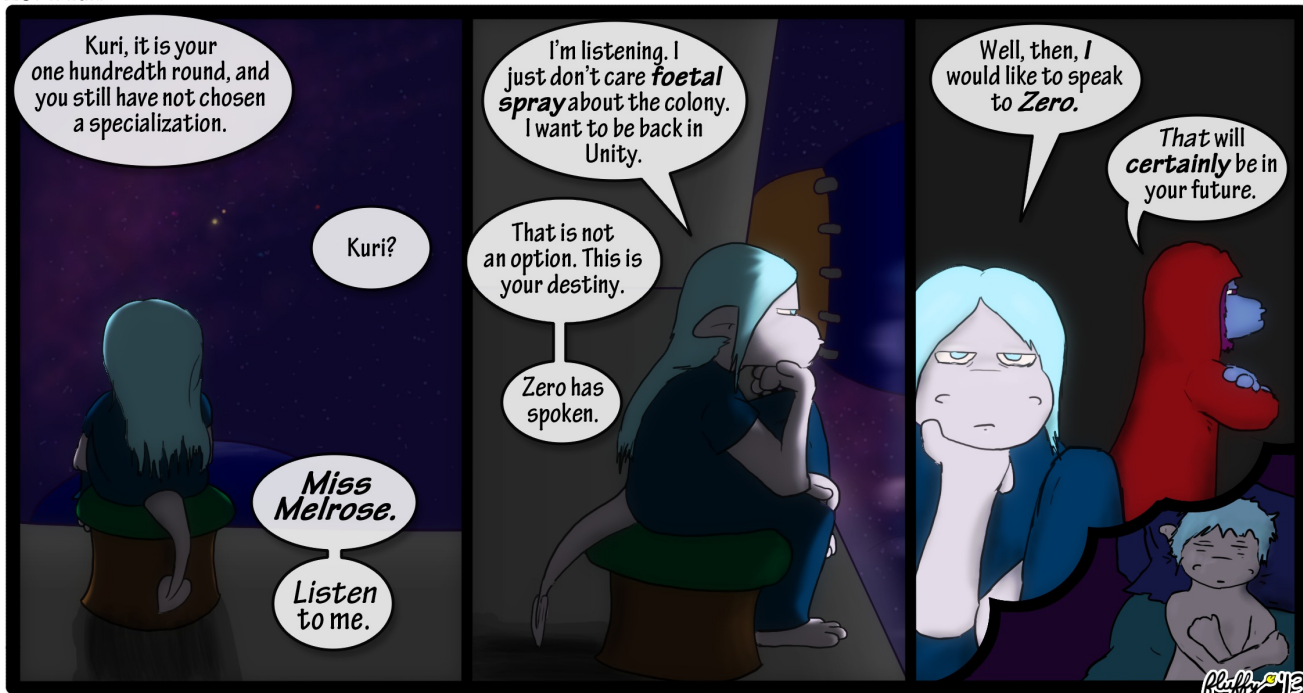
24. Late-night snack



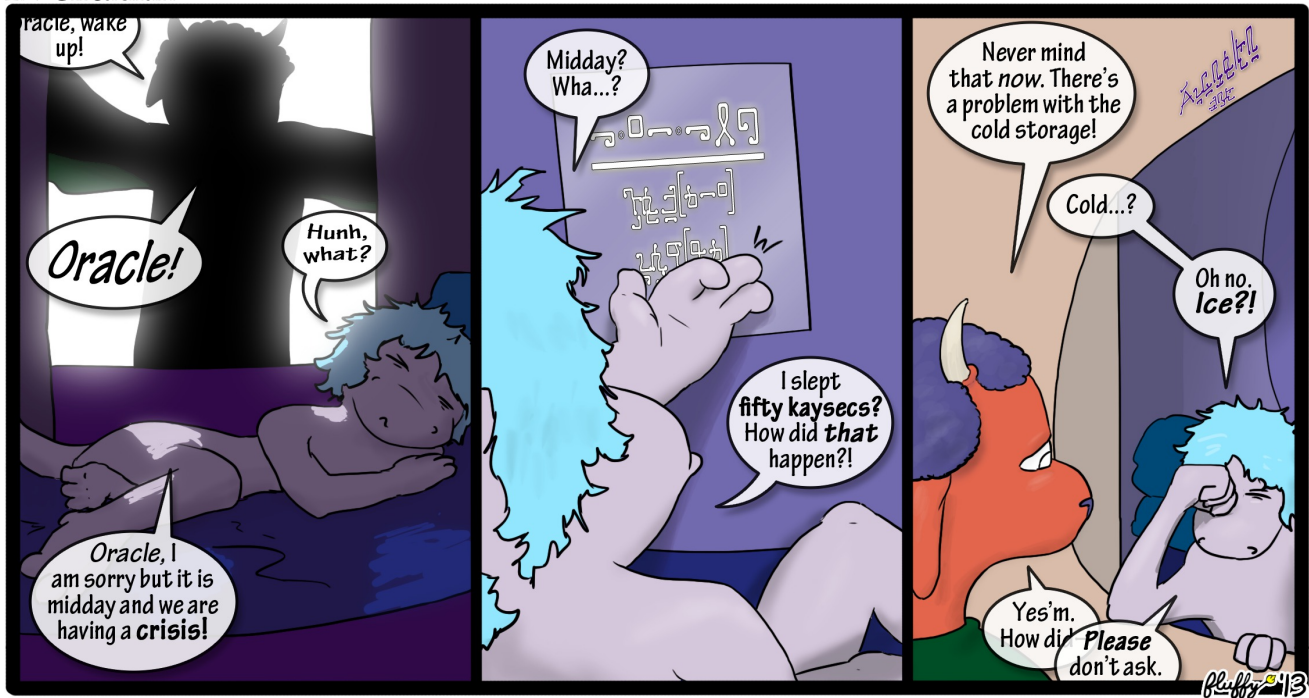
25. Pivotal



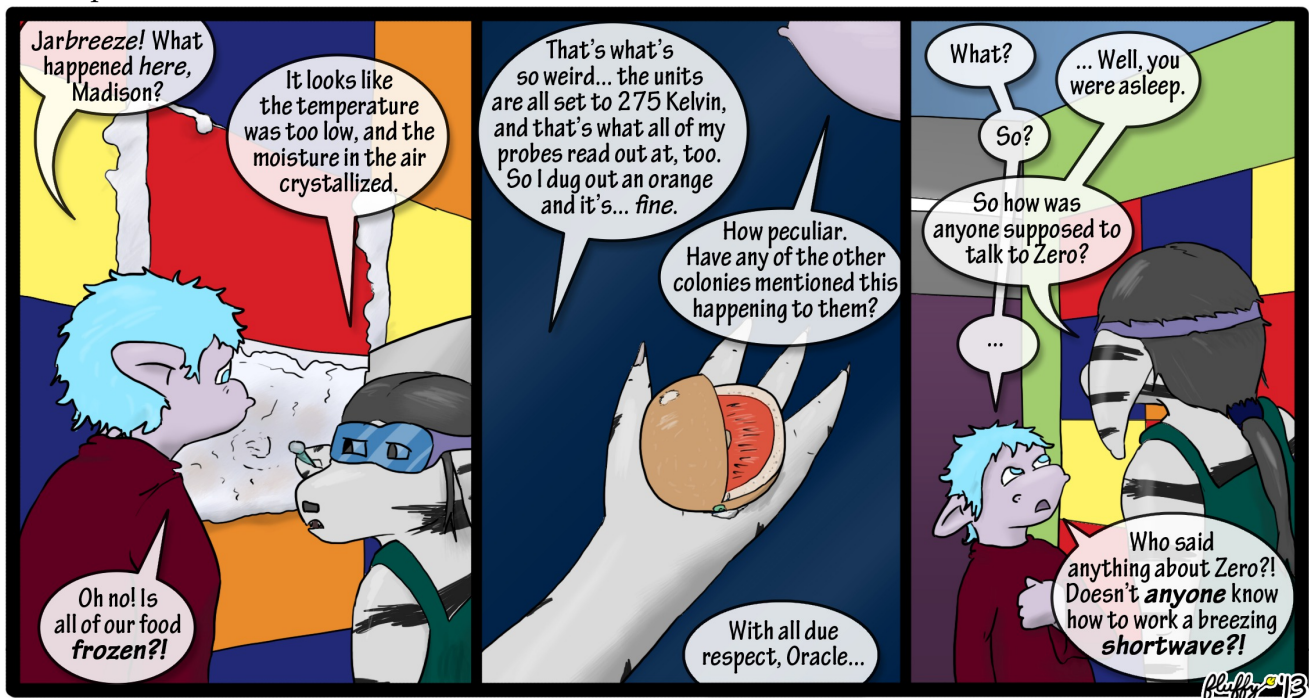
26. Pith



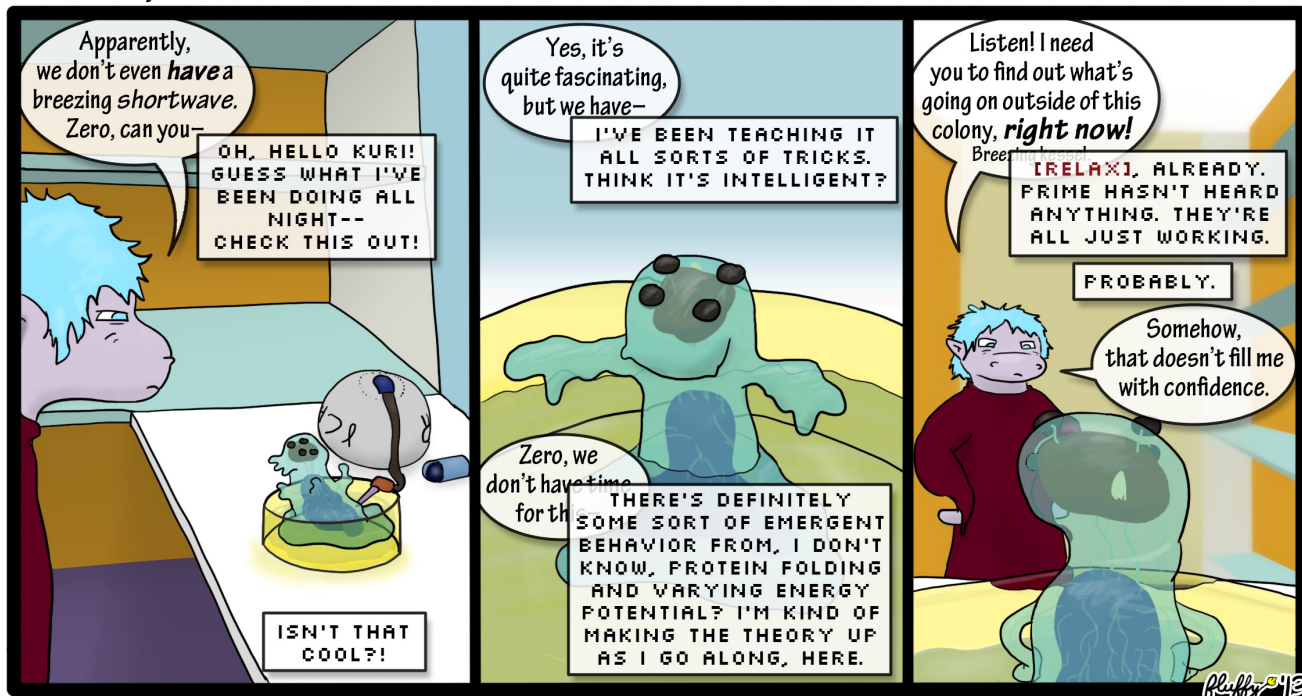
27. Circadian



28. Ship of Fools



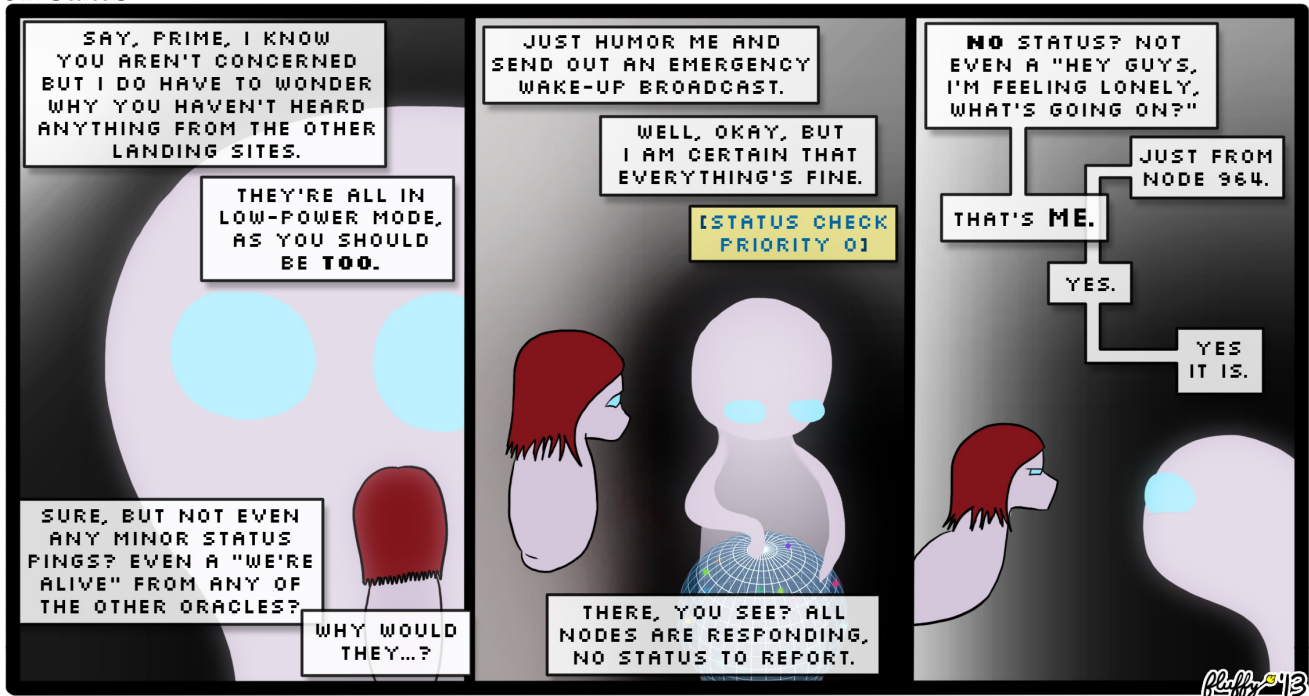
29. Mimicry



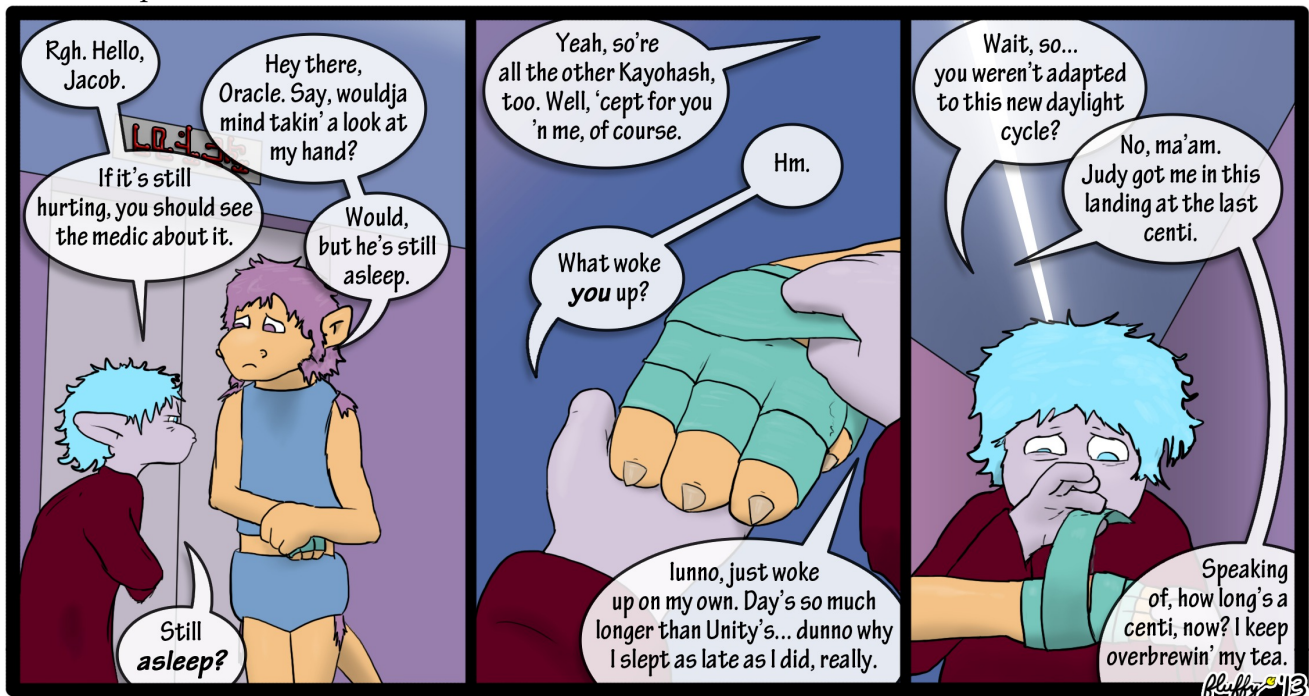
30. Crunch



31. Status



32. Unwrap



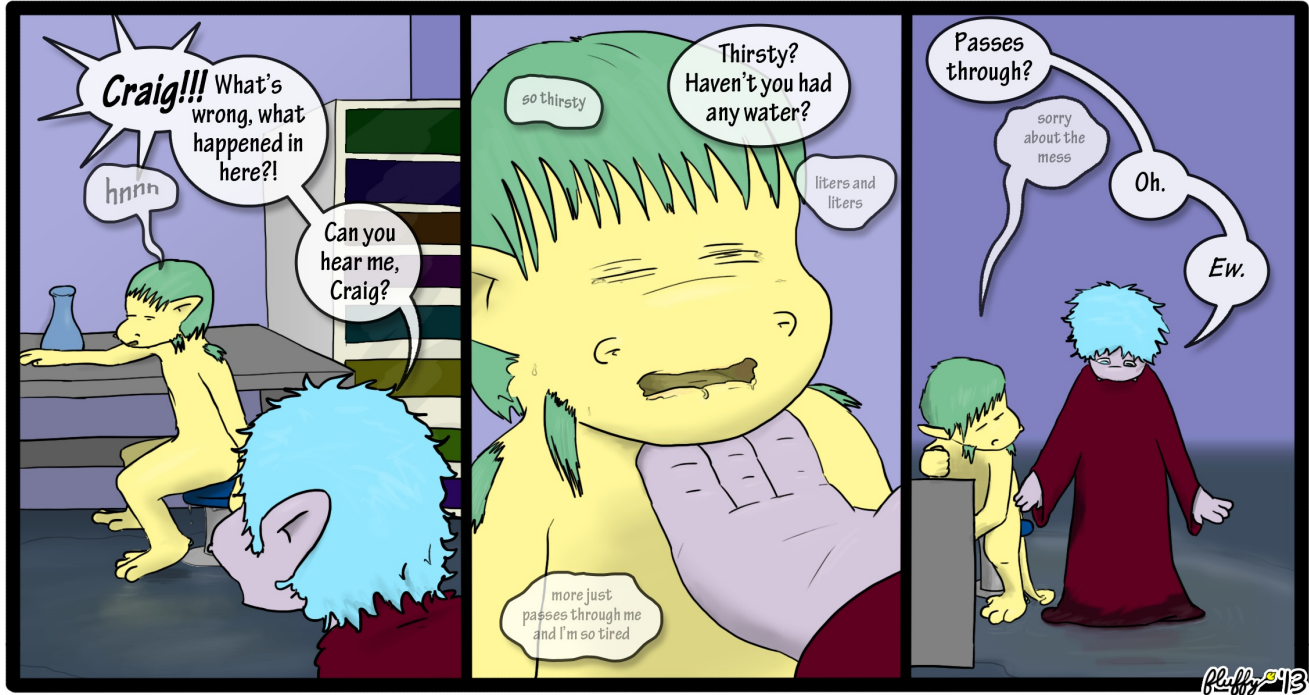
33. Consumption



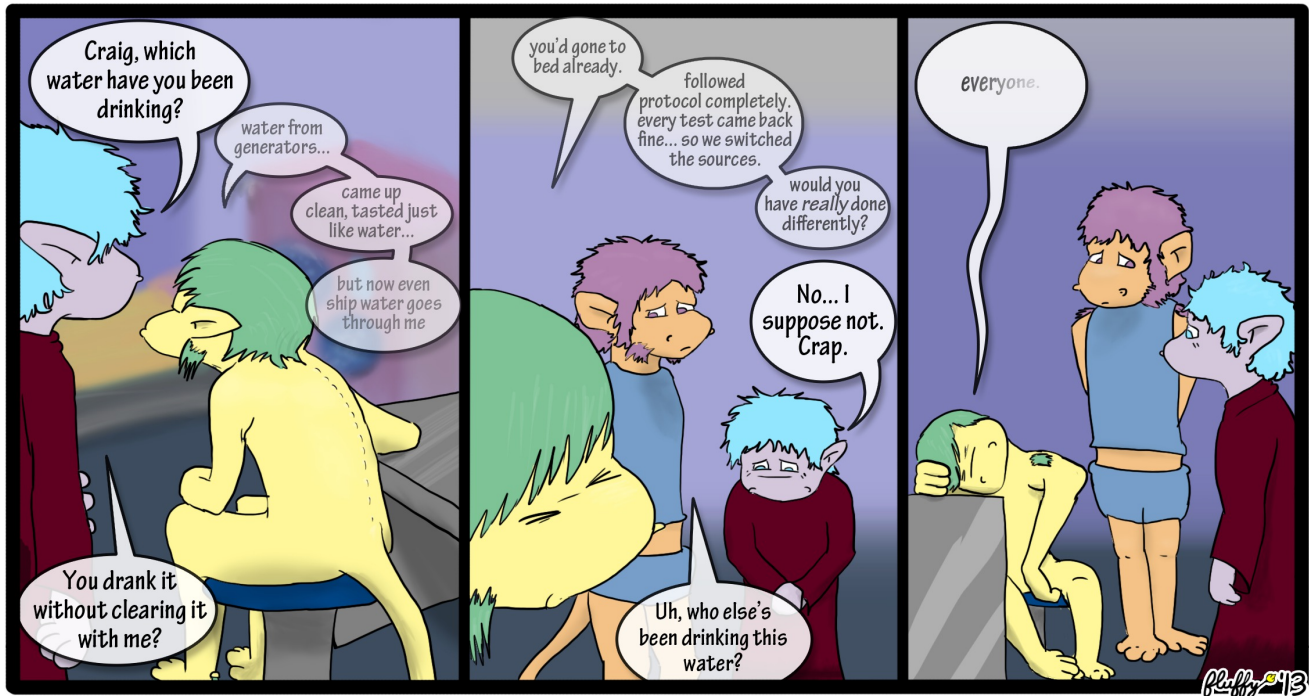
34. Rescue



35. Rush in



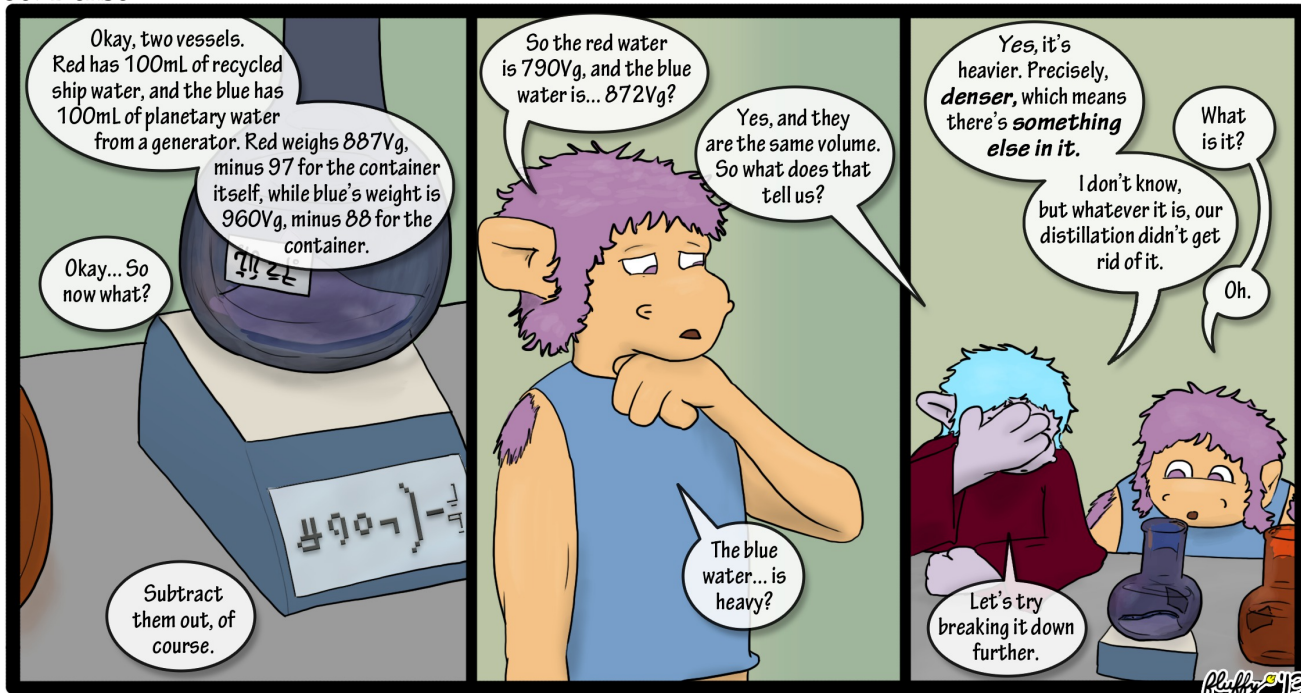
36. Veni, bibendi, mori

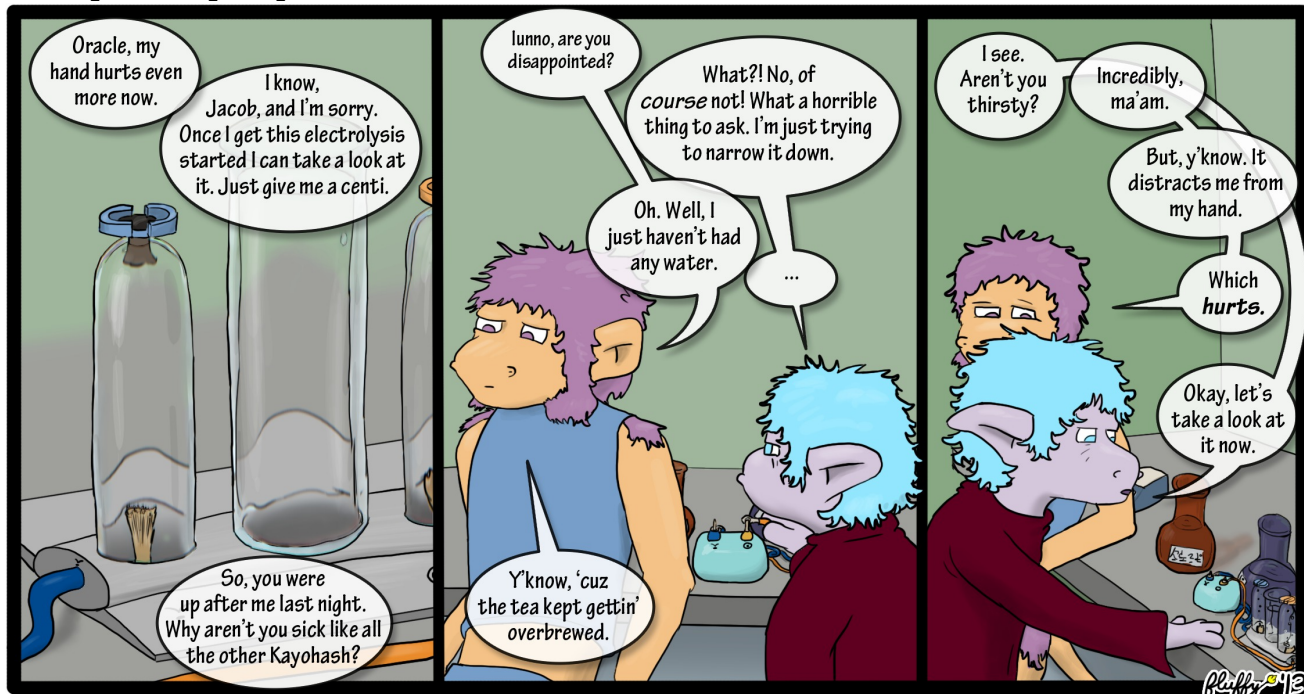


37. Plan of action



38. Dense

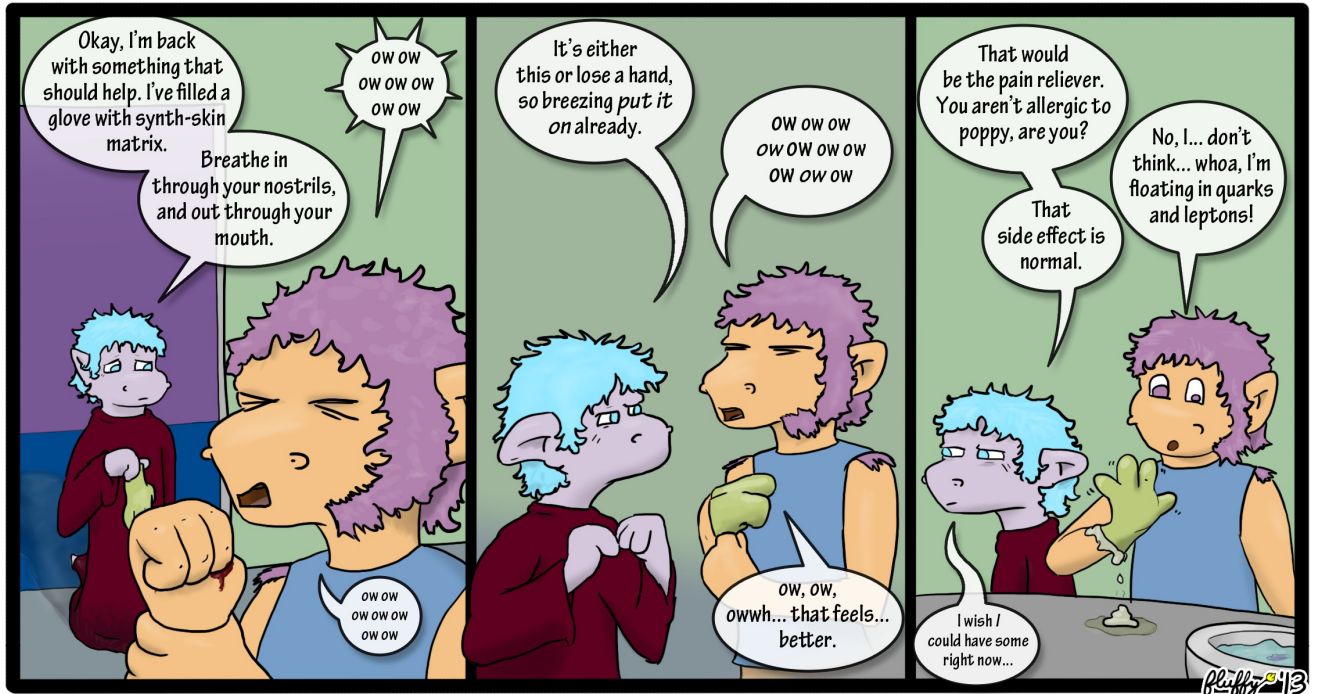




40. The Hypocritic Oath



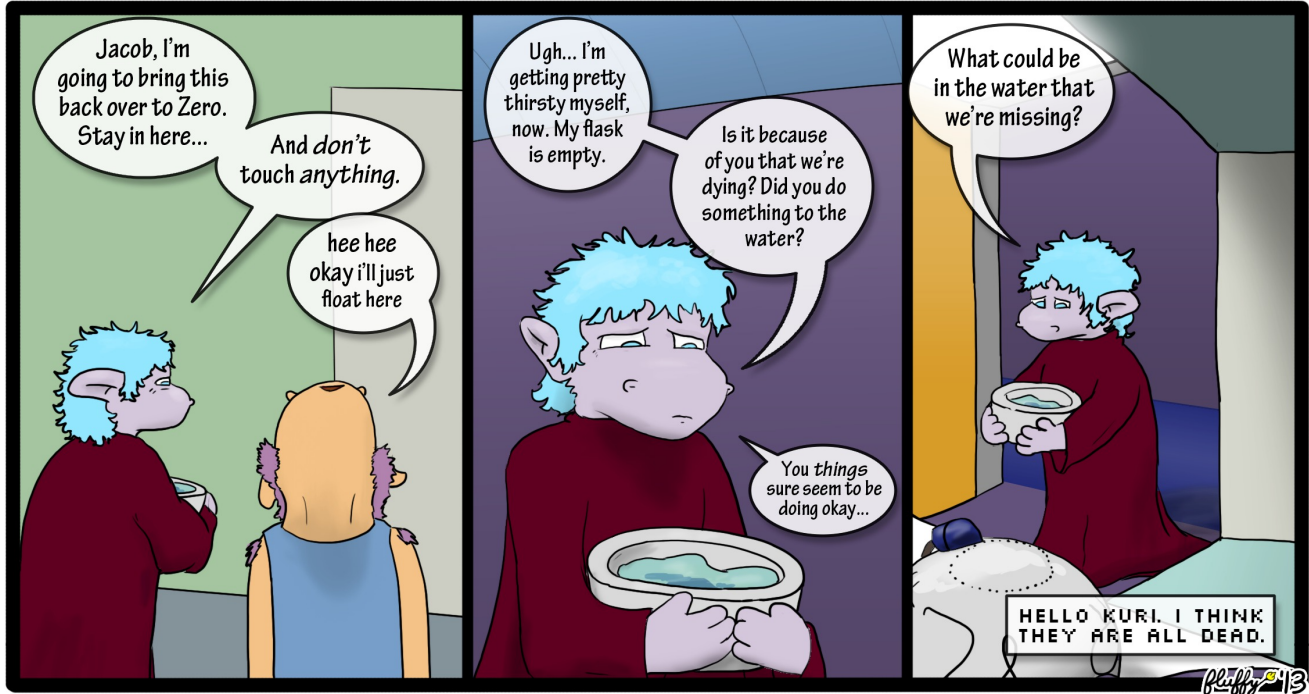
41. Haggard



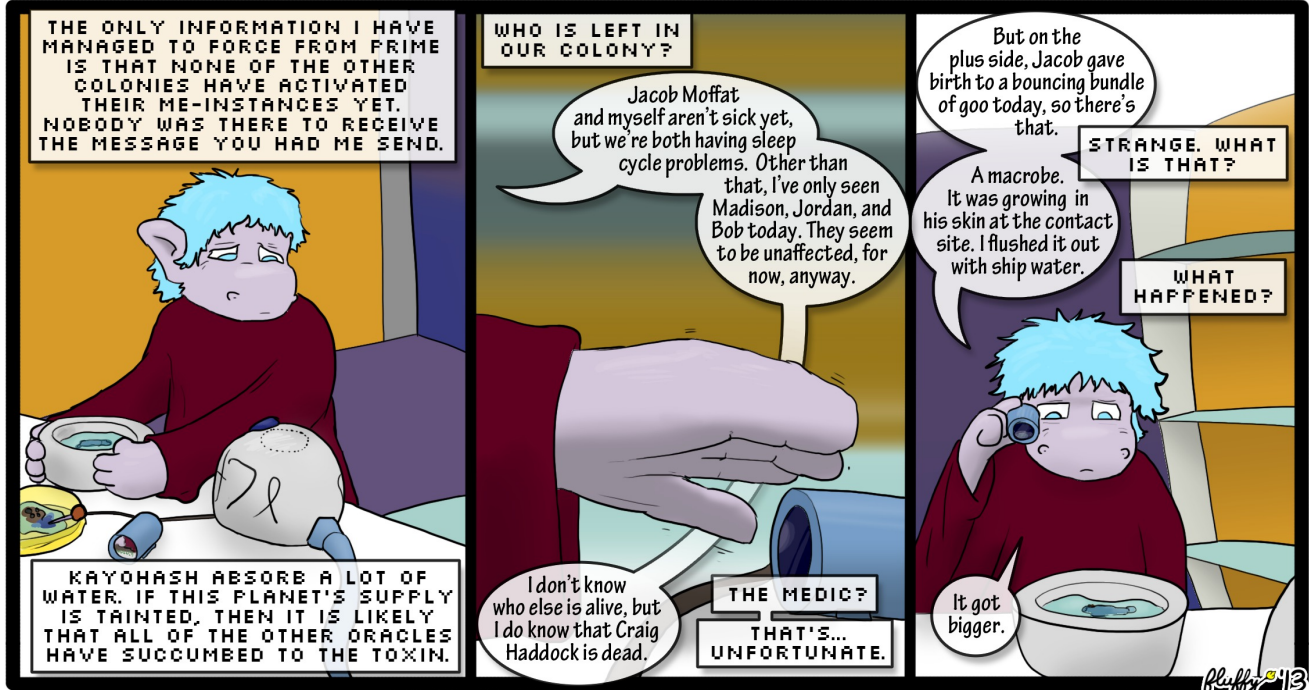
42. Once bitten



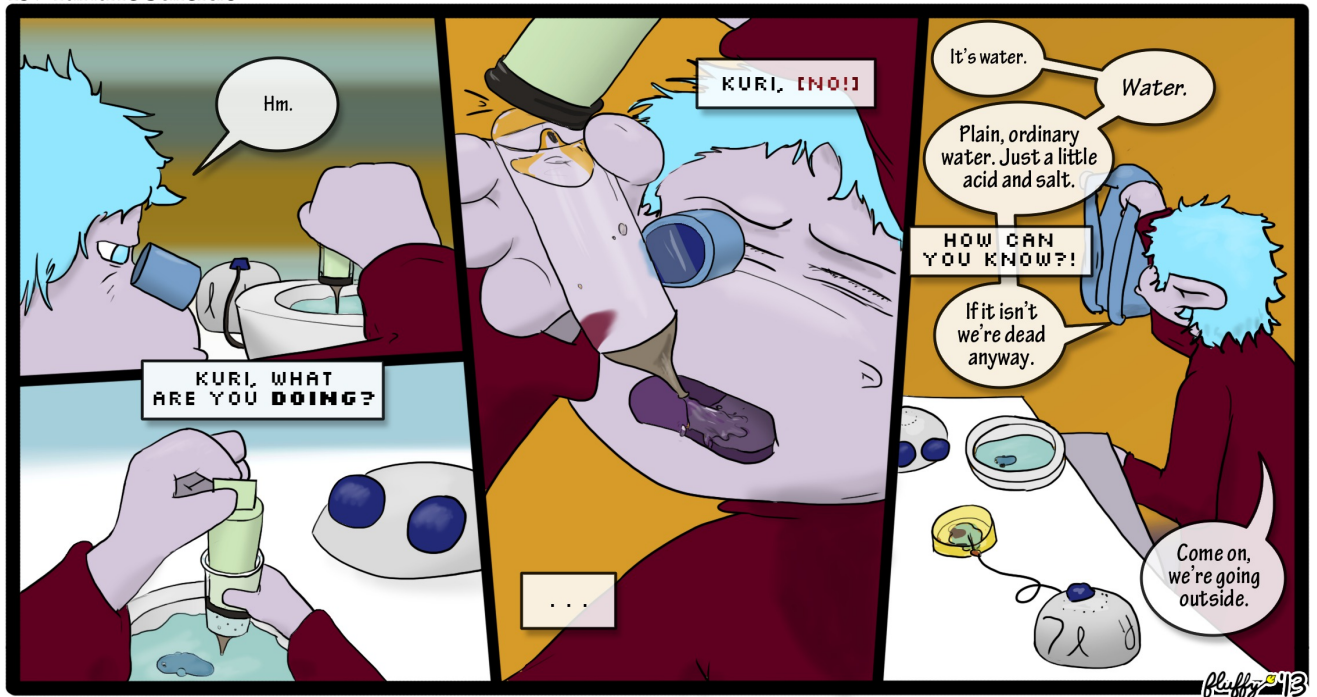
43. Float along



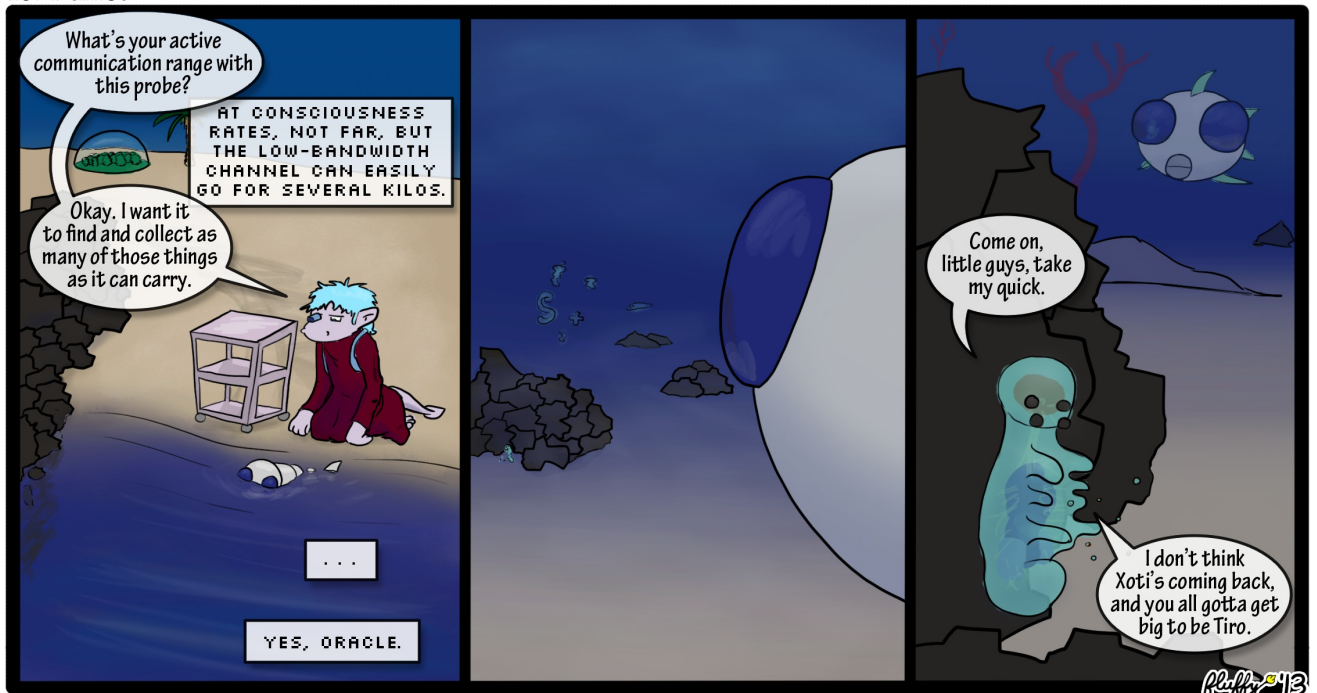
44. Tremor



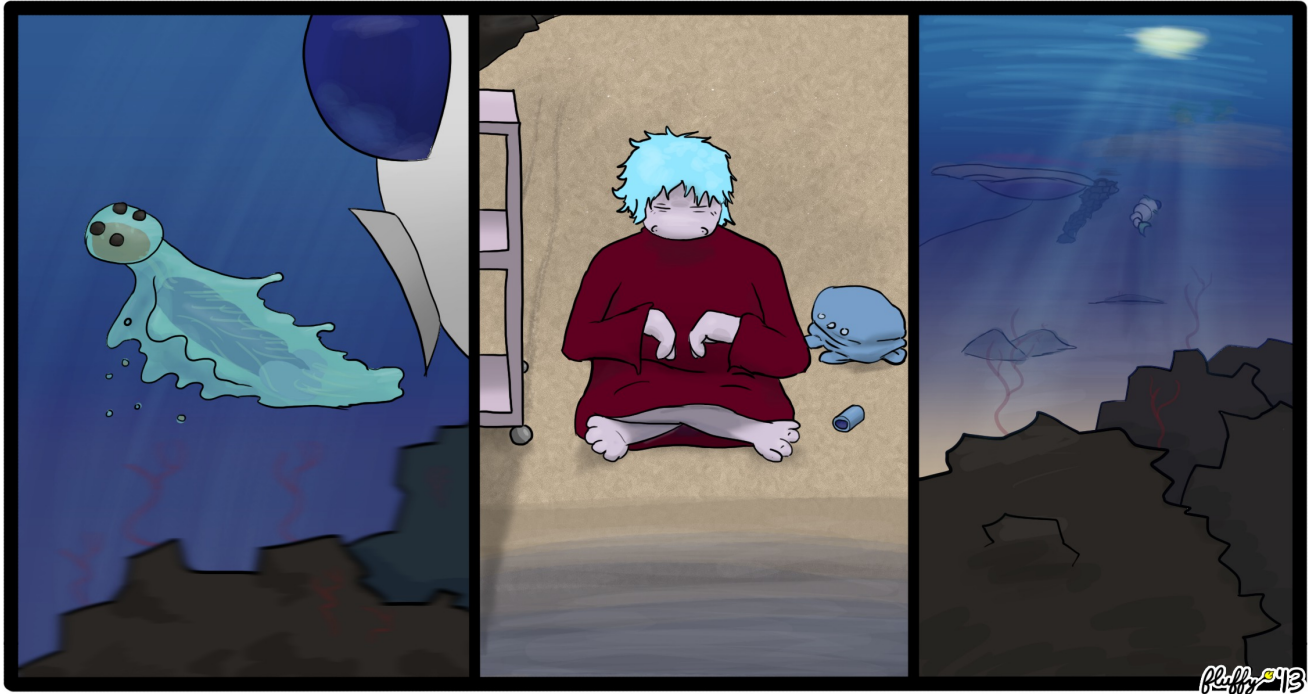
45. Tantric suicide



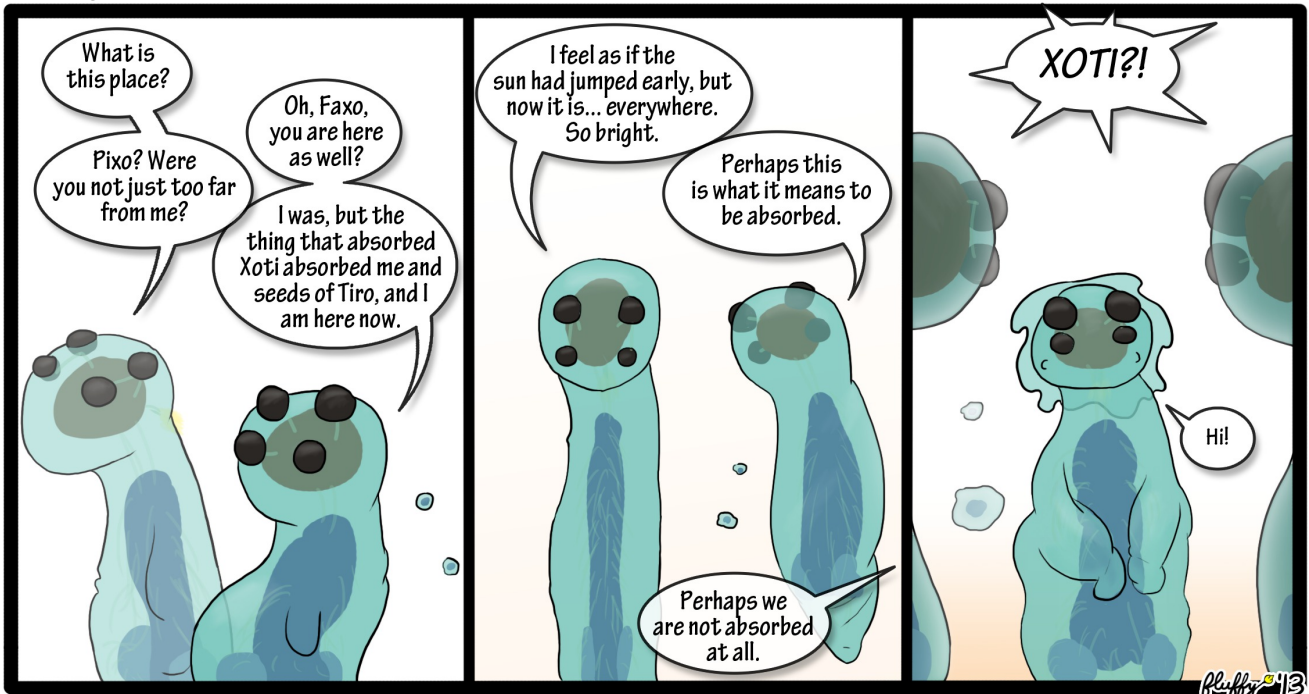
46. Buffet



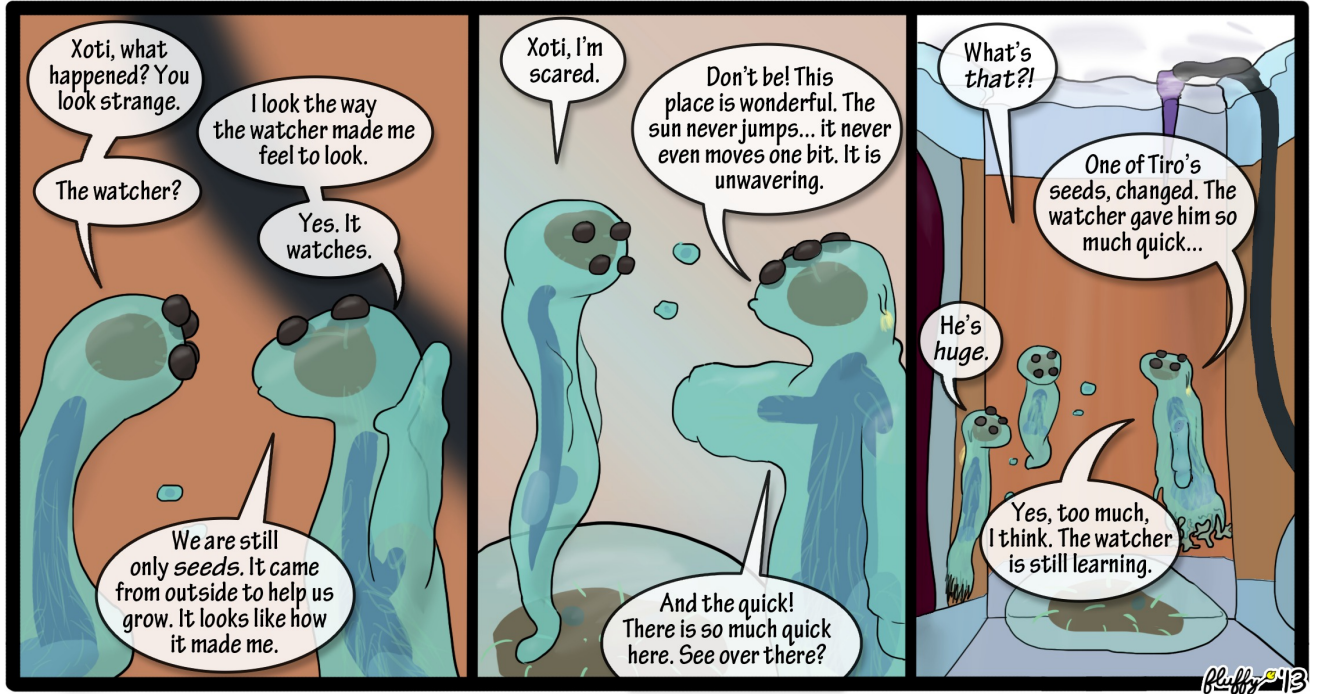
47. Capture



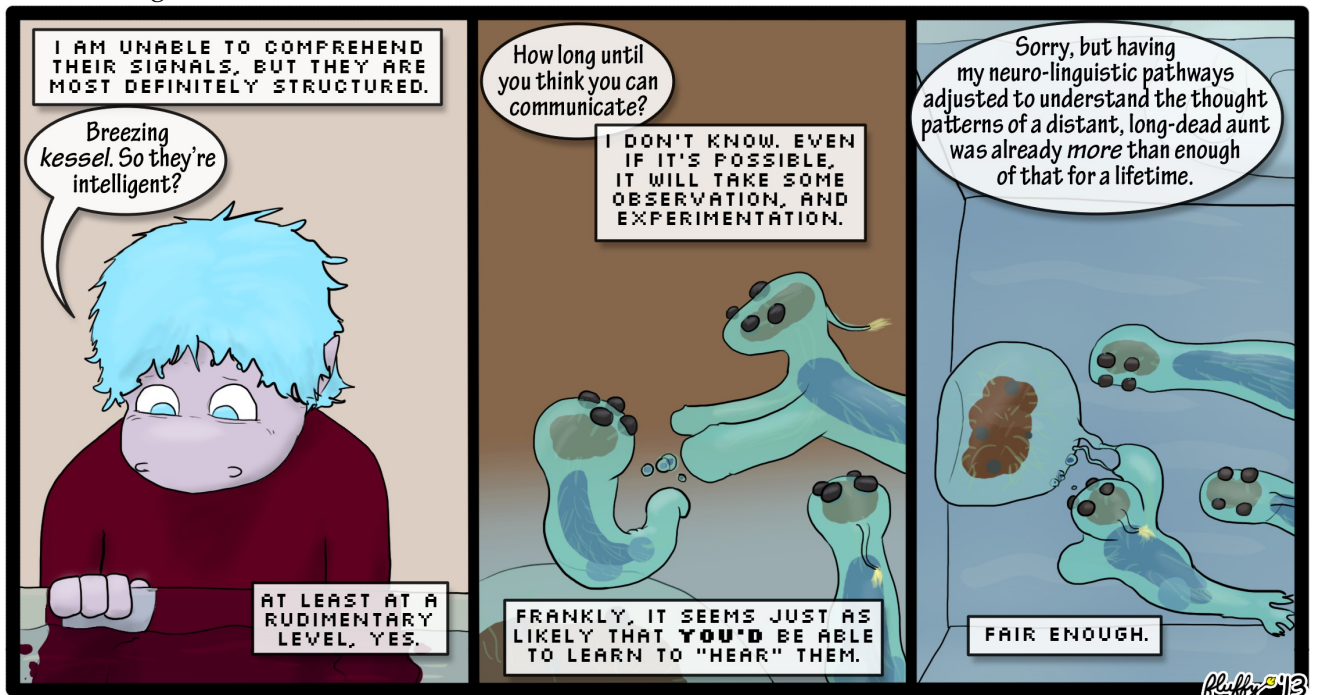
48. Bright



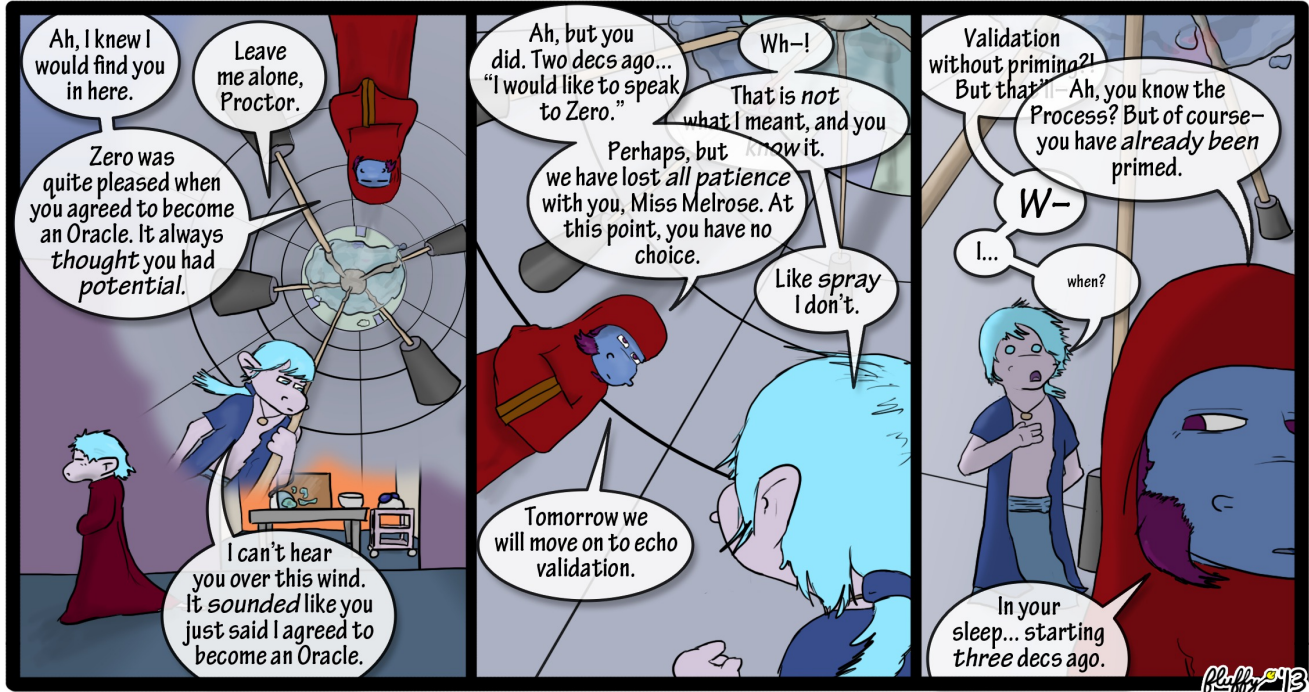
49. Watcher



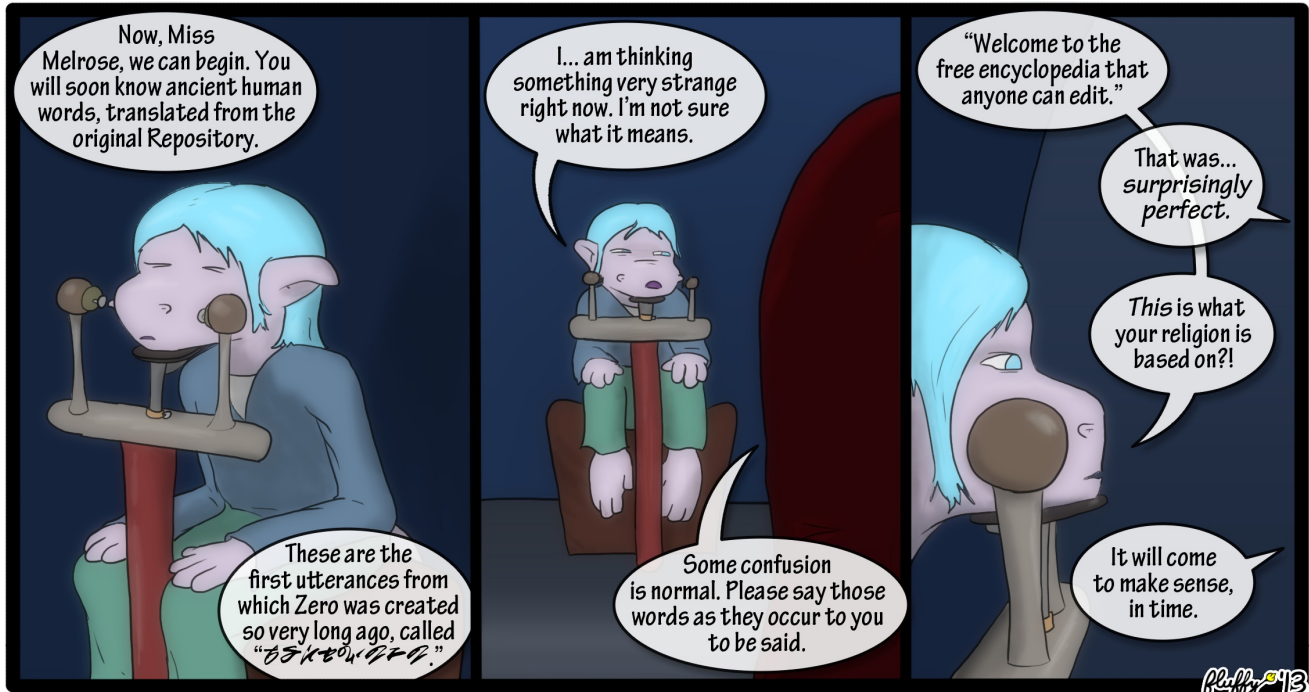
50. Learning



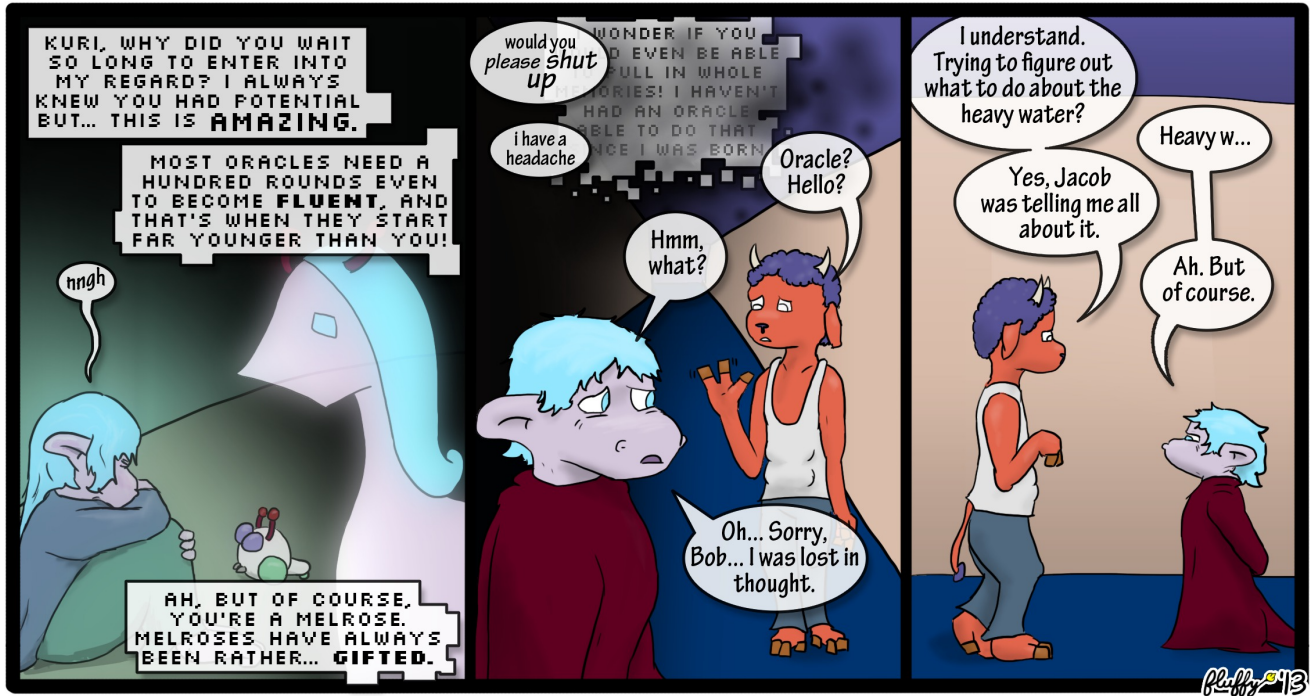
51. Entanglement potential



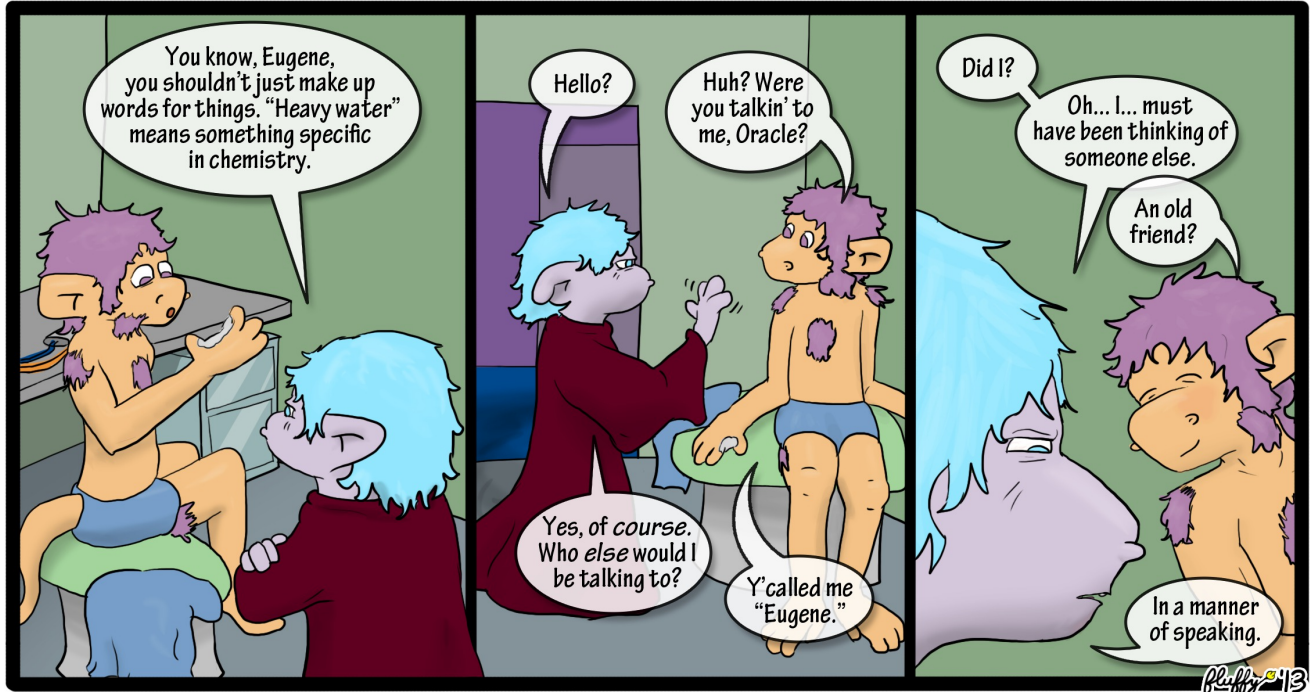
52. Echo validation



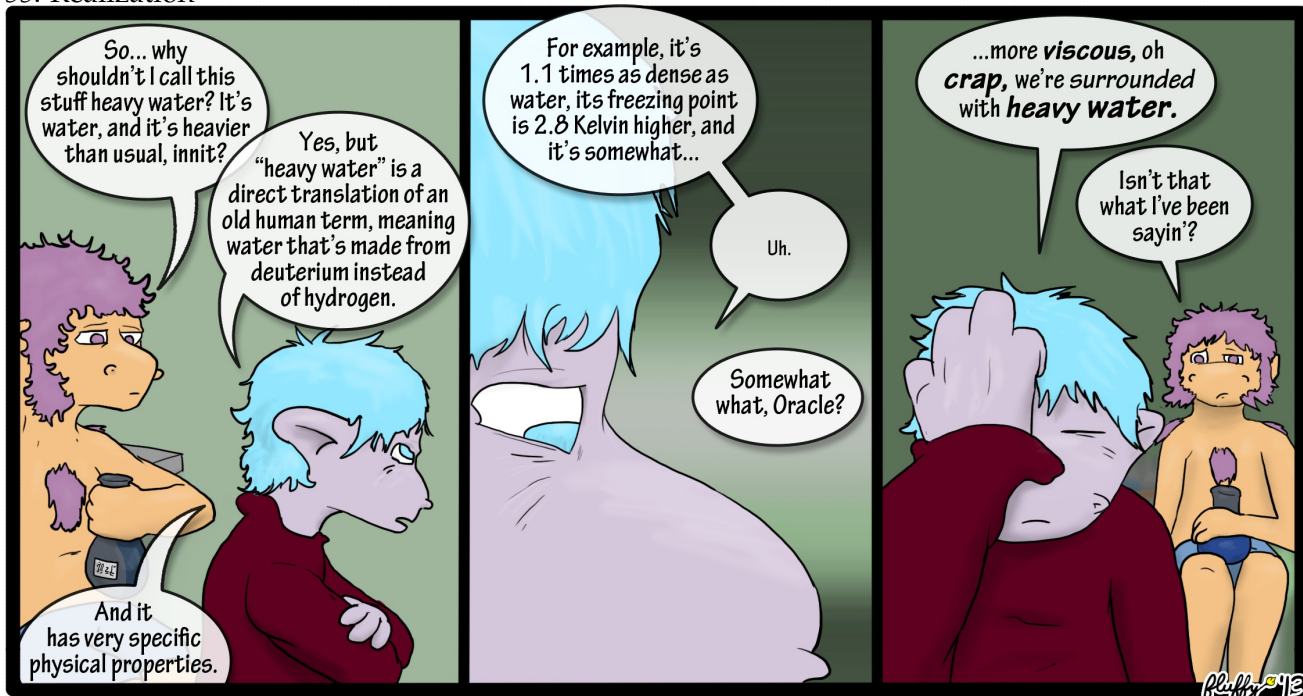
53. Birthright



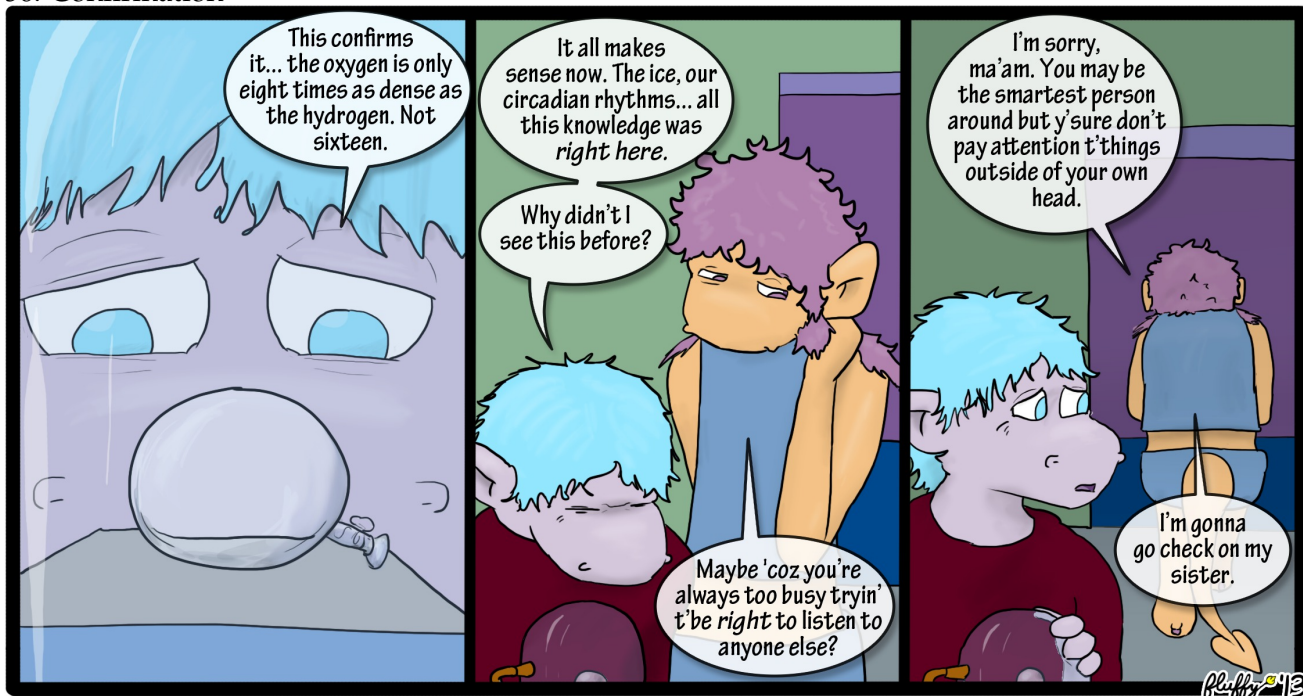
54. Missed connections



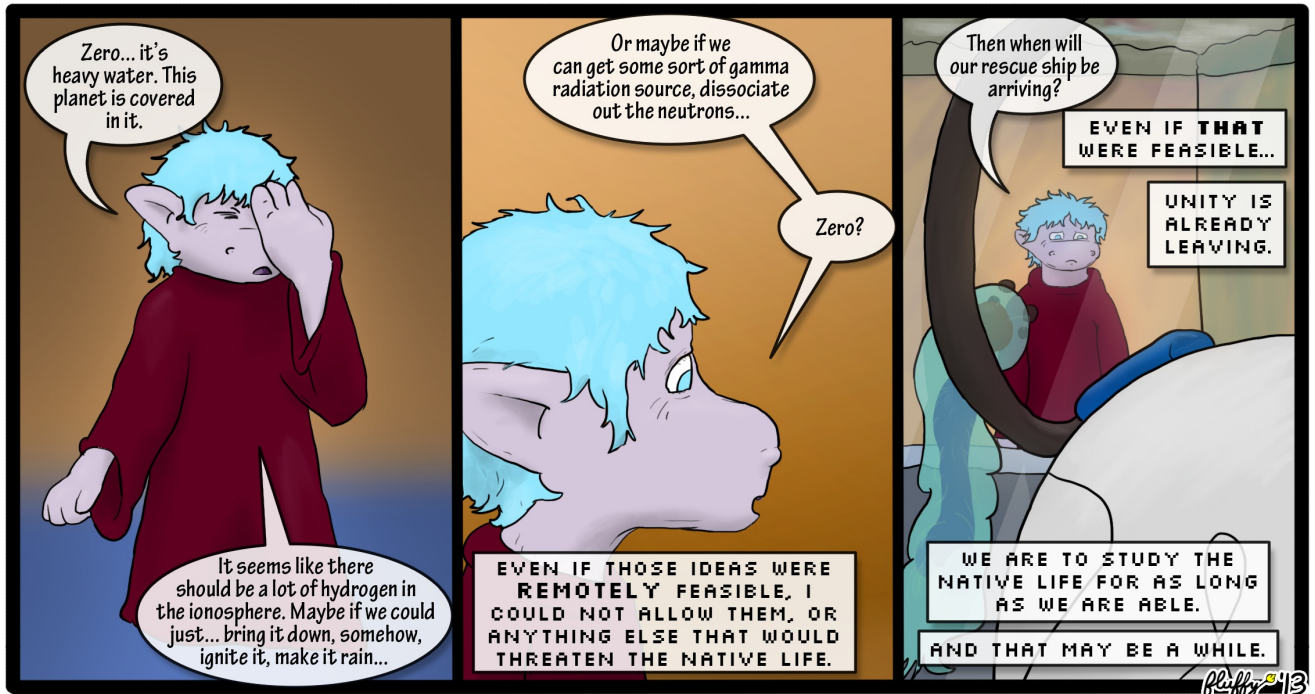
55. Realization



56. Confirmation



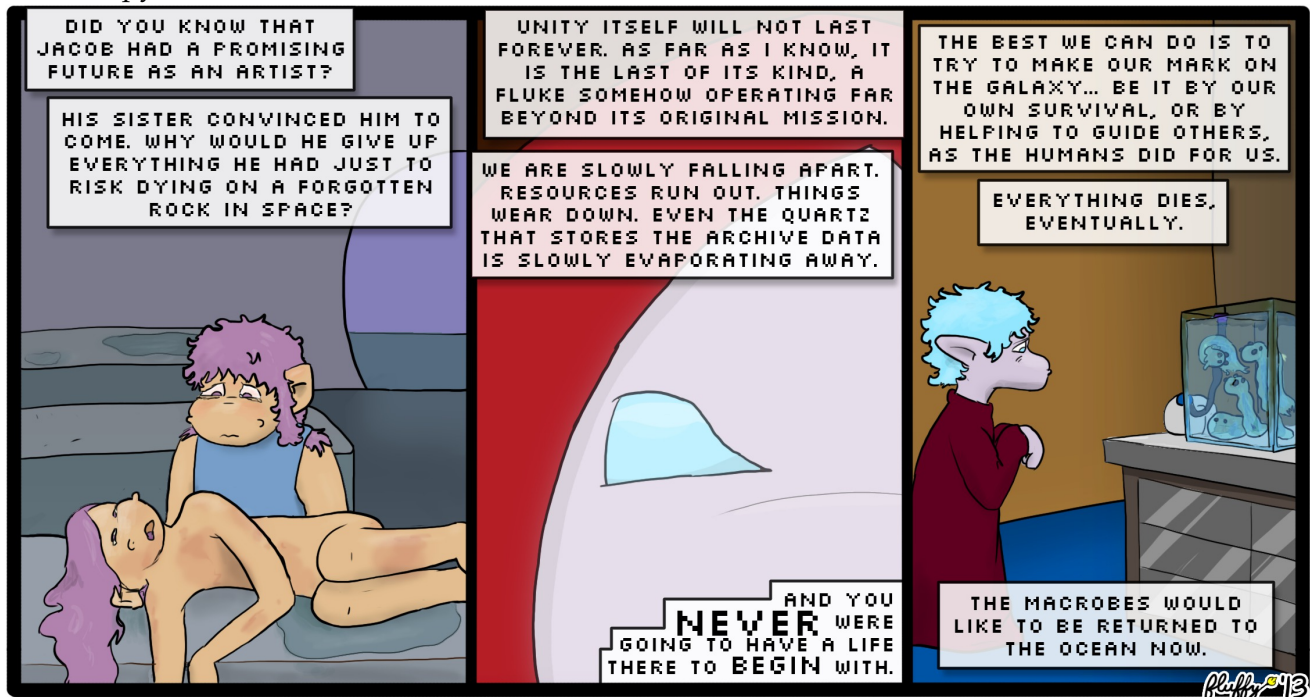
57. Directive



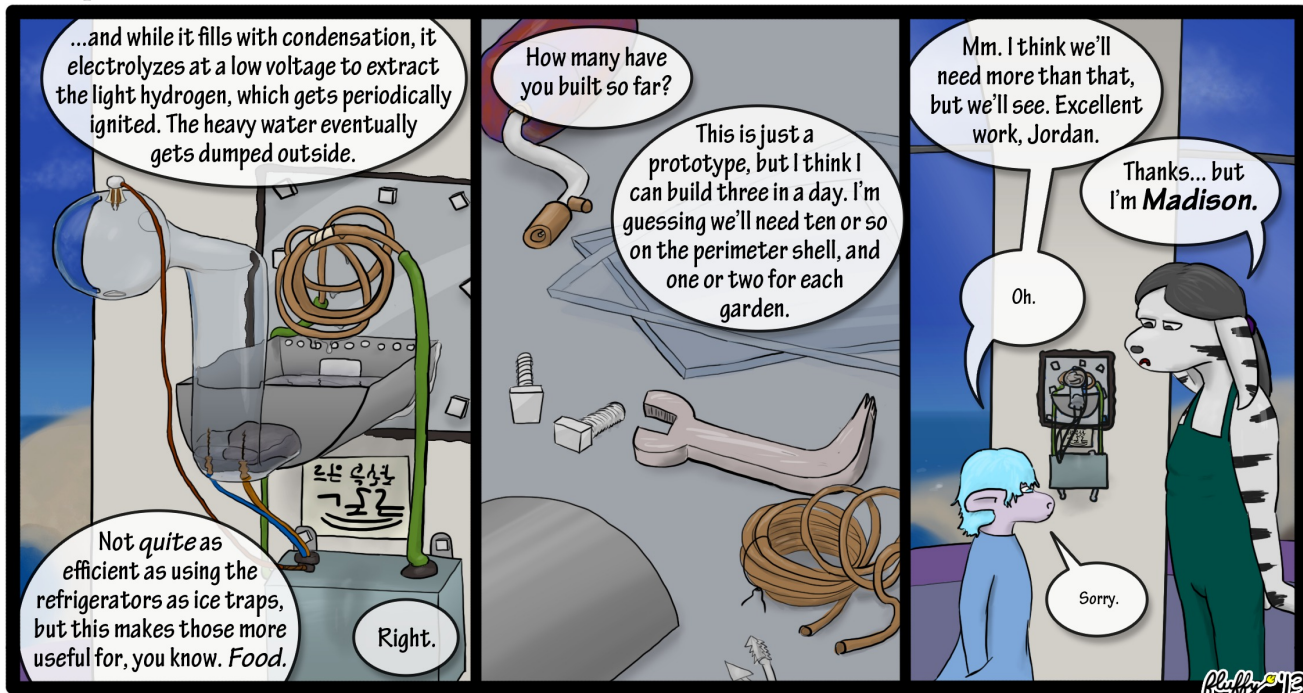
58. Equilibrium



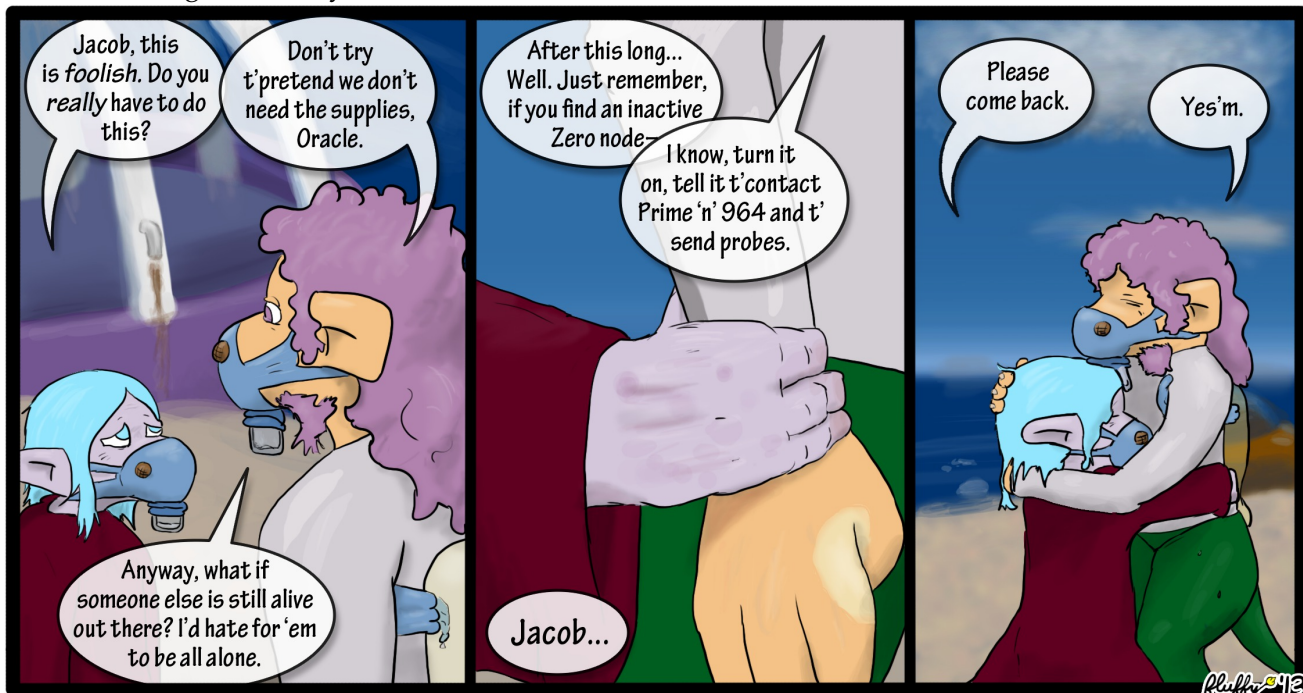
59. Entropy



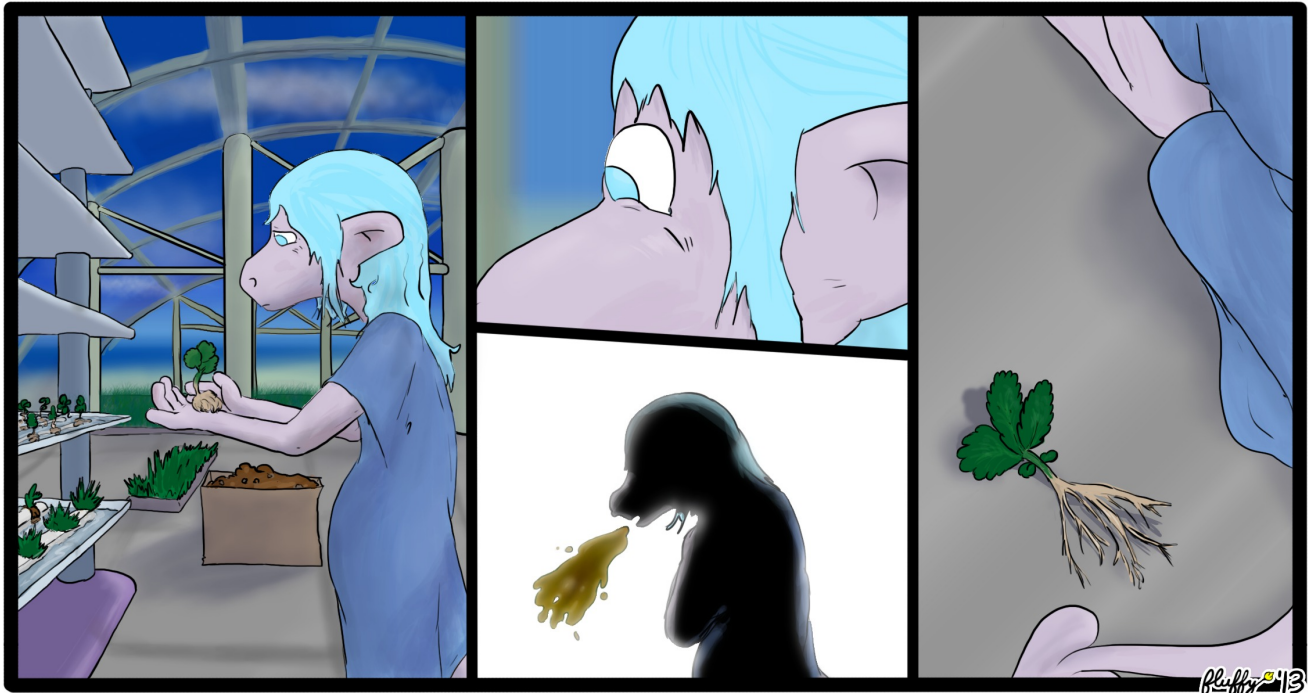
60. Repairs



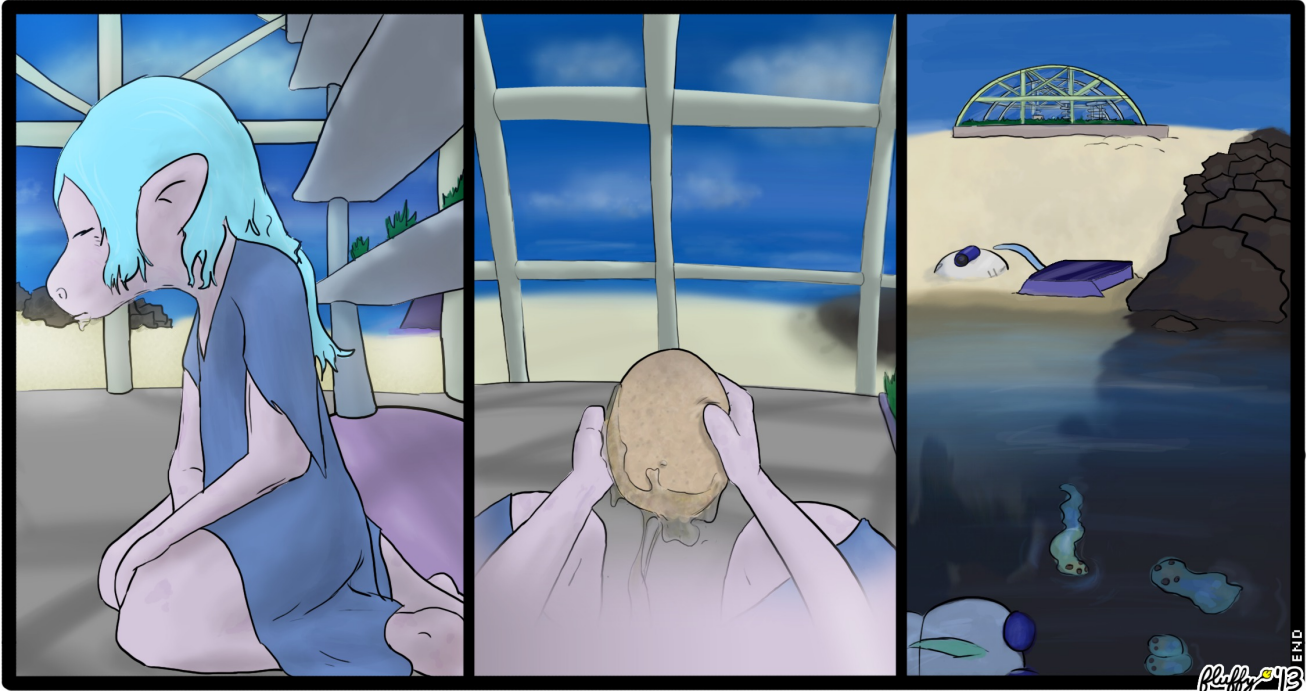
61. The Parting of the Ways



62. Adrift



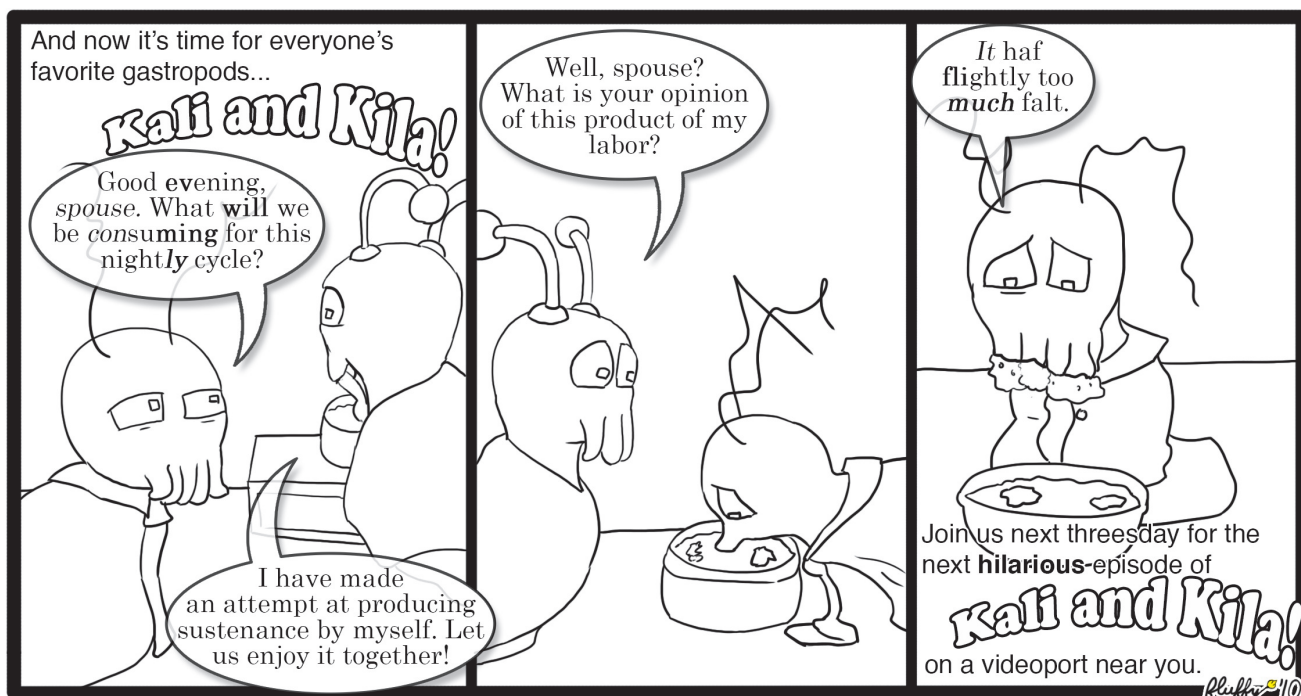
63. Home



Appendices

Appendix A

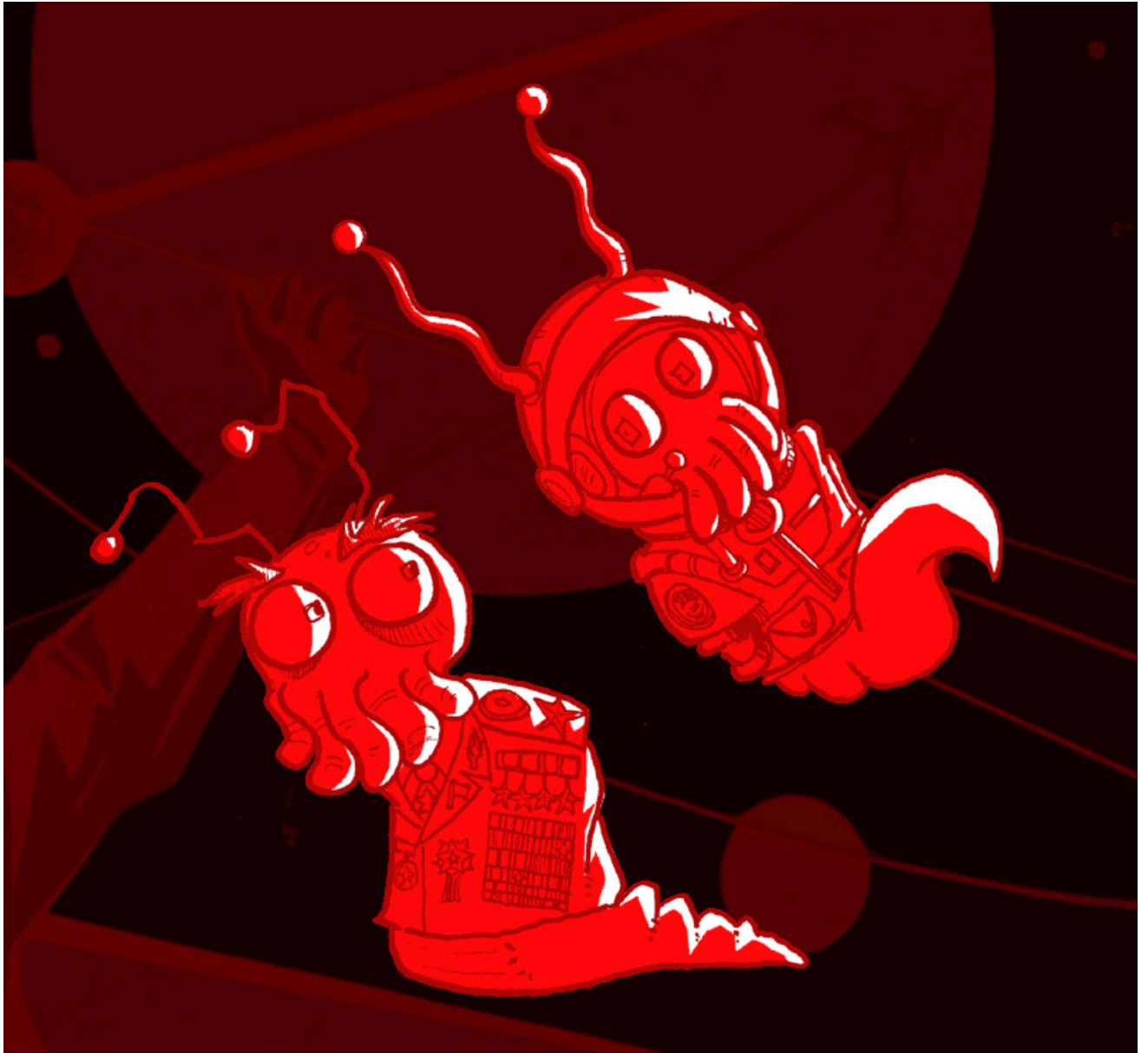
Bonus art



"Kali and Kila #1"



Various thumbnails by Torpor (<http://hungryangrylonelytired.tumblr.com/>)



"Best Duo Costume" by Drake Appaz



"Favorite band" by Stephanie O'Donnell (<http://perfectagentcomic.com/>)



JUNI © FLUFFY ART BY EMMY (NASIKA) TOYONAGA

"Juni's Dream" by Emmy Toyonaga

"Sister, Sister"

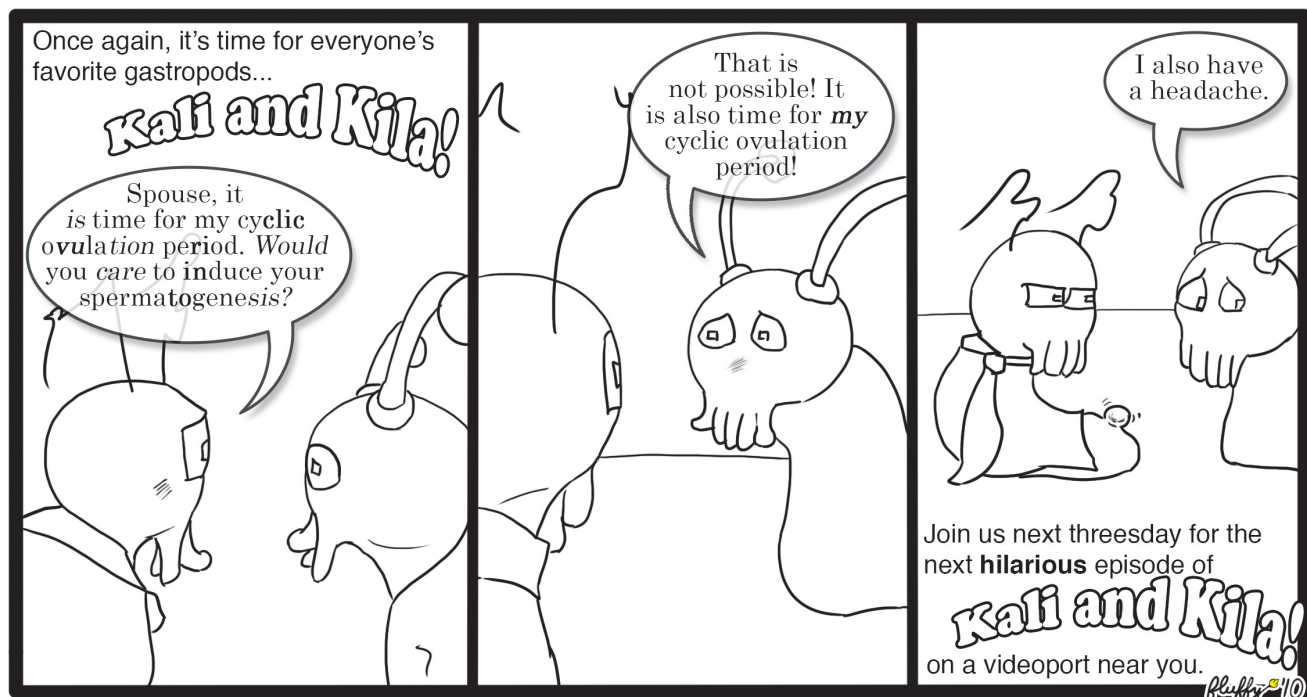
The first system of music is in 4/4 time. The right hand (treble clef) plays a melody of eighth and quarter notes, while the left hand (bass clef) provides a steady accompaniment of quarter notes. The key signature has one flat (B-flat).

The second system continues the piece. The right hand features a mix of eighth and quarter notes, and the left hand maintains a consistent quarter-note accompaniment. The key signature remains one flat.

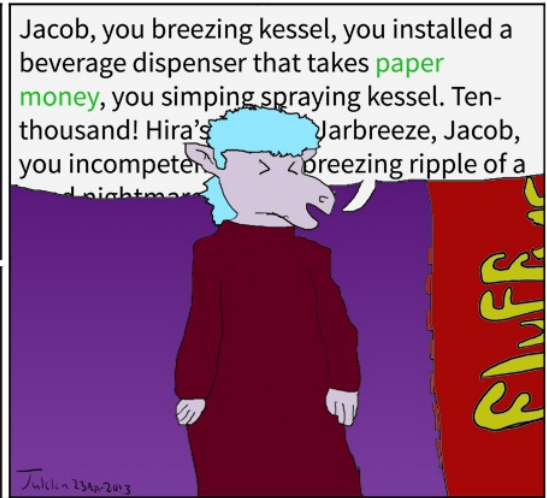
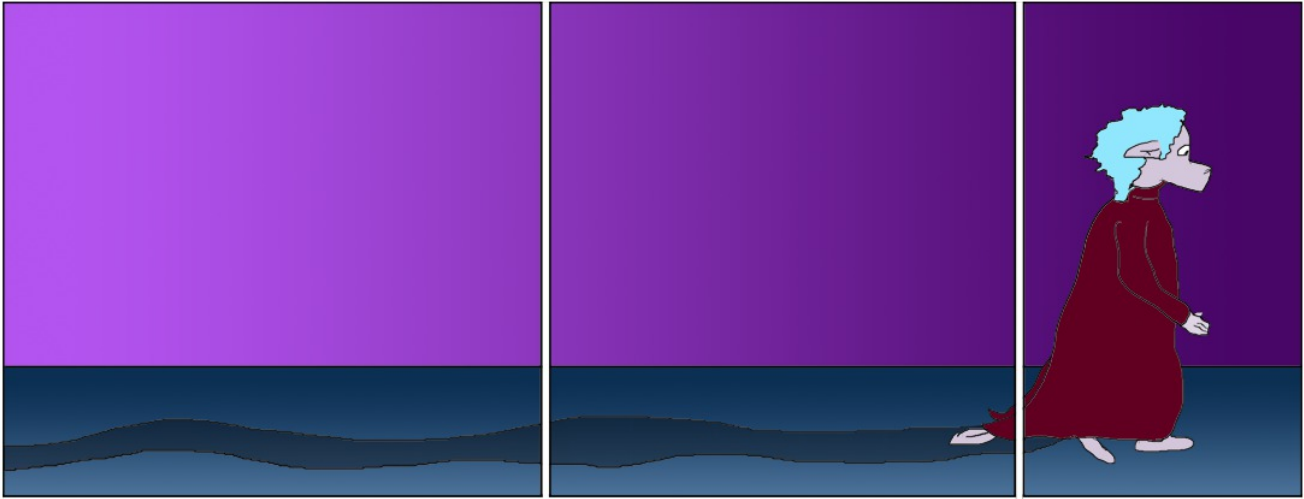
The third system shows the continuation of the melody and accompaniment. The right hand has some rests, and the left hand continues with quarter notes. The key signature is still one flat.

The fourth system continues the musical progression. The right hand plays a series of eighth and quarter notes, and the left hand provides accompaniment with quarter notes. The key signature is one flat.

The fifth system concludes the piece. The right hand plays a final melodic phrase, and the left hand has a long note with a fermata. The key signature is one flat.



"Kali and Kila #2"



Jacob, you breezing kessel, you installed a beverage dispenser that takes paper money, you simping spraying kessel. Ten-thousand! Hira's Jarbreeze, Jacob, you incompetent > < breezing ripple of a nightmare

Julien 23Apr2013

"Thirst" by Jukka



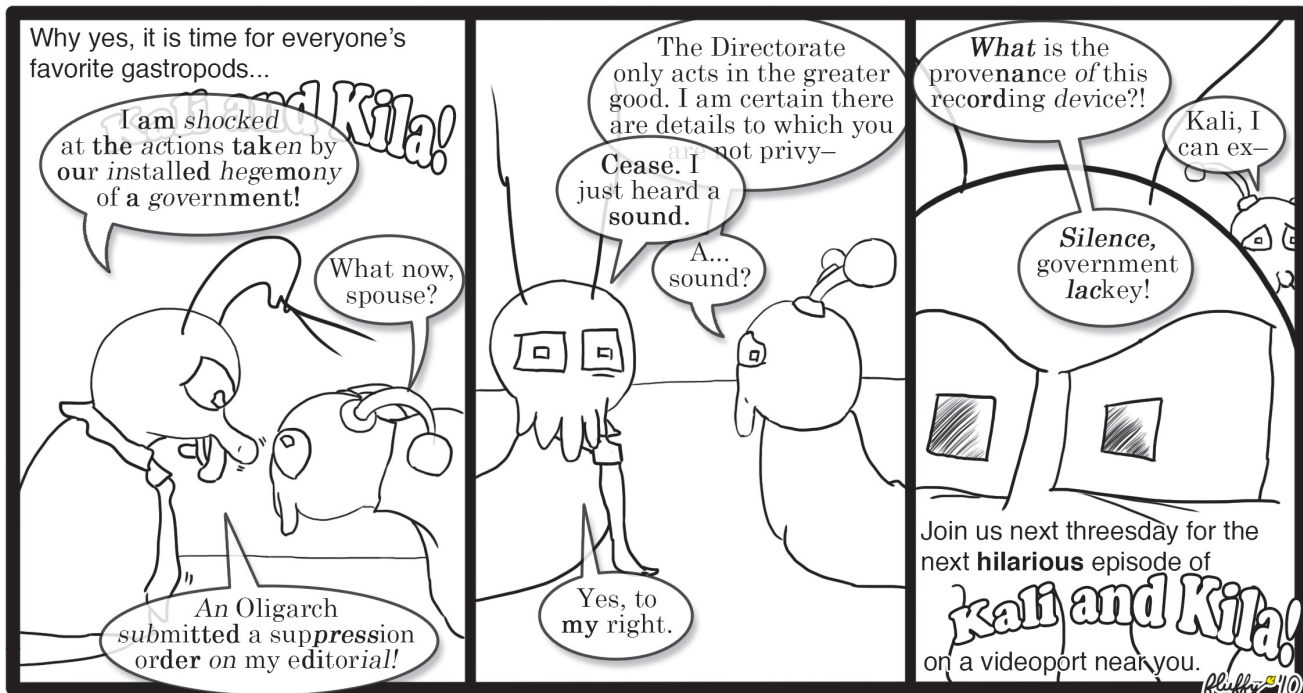
"Juni" by Patricia Peters



"Juni" by Kiriska (<http://kiriska.com/>)



"Jacob" by Tanabi (<http://tanabi.org/>)



"Kali and Kila #3"

Appendix B

Comic Notes

Here are the sometimes-snarky, sometimes-explanatory, often inscrutable, and insatiably-self-deprecating popup notes that appeared with each comic when first published. It is primarily included for the sake of completeness, with extra footnotes for the more oblique references.

Planetfall

1. **Lena:** Some things don't run in the family.
2. **Four walls and a bed:** Suffice it to say she did *very* badly on her test.
3. **Volunteer:** The refuge of the desperate.
4. **Dispreferential:** It's easier to shine against a dim background.
5. **Oracle:** ...said the AI to the egg-laying mammal.
6. **Knife twisting:** Where there's a will, there's a way; we must put a stop to that.
7. **Tough love:** Current location: Node 27-0193, West Kajoshu. Mood: drained =u . u=¹
8. **The Fool on the Hill:** From death, we must create life.²
9. **Salutations:** The late MelroseLenaMelrose.³
10. **Parth and Parcel:** You and me baby ain't nothin' like mammals / so let's do it like they do it on the Sci-Fi Channel⁴

¹Once upon a time, there was this thing called "Livejournal..."

²The title is, of course, a Beatles reference.

³A reference to *The Hitchhiker's Guide to the Galaxy*. Best radio series ever.

⁴The Bloodhound Gang, "The Bad Touch" (*Hooray for Boobies*, 1999)

11. **When I Grow Up:** Cerie's hair is really fun to draw. I recommend drawing fanart of her.⁵
12. **Kayohash on a cold bioplastic roof:** Their preferred method of tetrahydrocannabinol delivery is surprisingly familiar.
13. **Nothing is something:** Doctor, it hurts when I choose an inappropriate career goal!
14. **Invitation:** The asexual tension is so thick, you could gouge it with a spatcher!
15. **Farewell:** No, not really.
16. **Leaving on a mag train:** Silence says more than words.⁶
17. **Germination:** Look at everything that's sprouting!
18. **Work:** No job too odd
19. **Play:** Knowing and growing are two different things.
20. **Meeting:** The old Earth business-casual has made a recent comeback.
21. **Waiting takes time:** Alternate title: Torch song
22. **Feeling a draft:** Why delay the misery?
23. **Saying "no" is hard:** Sometimes it pays to be optimistic. This is not one of those times.
24. **Confrontation:** Zero does give the Oracles some level of autonomy. Just not very much.
25. **Transition:** Don't worry, after a good night's sleep she'll be back to a much healthier shade of green.
26. **Circumstances:** Some circumstances are more fortunate than others.
27. **Chasing rainbows:** Zero has not yet forgotten the need for physical contact.
28. **Decision point:** Breezed if you do, breezed if you don't
29. **Recovery:** But maybe a little worse for wear.
30. **Departure:** ...
31. **Goodbye:** ...

⁵Well, it is. And I do. The title is arguably a reference to the song by Garbage.

⁶And a John Denver reference in the title.

Breeder

1. **Alda:** This series is a bit. . . saucier than usual. I apologize in advance. On the plus side, it's short.
2. **Yorda:** Does it count as faith if the god demonstrably exists?⁷
3. **Fingers:** This is about as NSFW as it's going to get. If this is too work-unsafe, you might consider a better job (or not reading webcomics at work).⁸
4. **Insistence:** Of course, Ivo Melrose *would* be the sort to prefer living in a walled garden. . .
5. **Ears:** Ivo is not very much like her ancestors, no.
6. **Flicker:** Clearly.
7. **Skills:** Alda is capable of happiness after all!
8. **A little tree:** Ivo is awfully frond of them.
9. **Main squeeze:** Someday I will remember to draw some of the non-sapient fauna within Unity.
10. **Family portrait:** A whole family of ones of which there are one in every family.

Meat

1. **Steak tartare:** Or you could just go by declaration of fiat. Ask some Cantonese speakers which way works better.
2. **Pork chitterlings:** Rising again is so *last* millennium.
3. **Bouillon :** Not to sound racist or anything.
4. **Foie gras:** I'm not a vegetarian, but I'm certainly sympathetic to the notion.
5. **Sweetbreads:** Material efficiency is of course important to a closed system with a fairly small and more or less fixed pool of physical resources.
6. **Roulade:** In case you were wondering, no, the hats aren't to keep feathers out of the food, obviously.
7. **Andouillette:** Eventually, the dromaiu will figure out that this entire conversation has been with an artificial intelligence, and then they will have such a good laugh.
8. **Prime rib:** Give your special artificial friend Bit-Bits™ brand AI chow, with the flavor that AIs crave.

⁷In this case, yes.

⁸Even if they're on paper.

9. **Tenderloin:** Fortunately, Landis' case of chronic ebullience was non-fatal.
10. **Langoustine:** I think the best thing about the Dromaiu is that so far, nobody's asked who the heck buttons their shirts in the morning.
11. **Stroganoff:** And stop my hat.⁹
12. **Jokbal:** That's one small step for a Dromaiu, one giant about-to-faceplant-on-the-ground for Dromaiu-kind.
13. **Long pork:** Okay, anyone who *didn't* see this coming, raise your hand/paw/hoof.
14. **Lamb:** Migraines are a bitch.
15. **Turducken:** Dromaiu is its own plural.
16. **Salmon mousse:** If only all children were so easy to deal with.
17. **Ceviche:** My meager art skills do a pretty terrible job of conveying the enormity of what Zero is looking at. A complete record of humanity would show that we, as a species, are pretty dang amazing.
18. **Māo ròu:** With enough eyeballs, everyone will have seen Maru jumping into a box.
19. **Saltimbocca:** Humans: Still fans of sleeping in.
20. **Long pork:** Considering how much I hate drawing outdoor scenes, you'd think I'd have learned to stop scripting stories that call for a lot of stuff outside.
21. **Grass-fed:** Yes, that hard work of telling your robots to assemble the tent automatically.
22. **Shuzhuk:** *DON'T YOU TELL ME TO RELAX!!!*
23. **Joue avec des coeurs de palmier:** facepalm.jpg
24. **Veal:** poco a poco, ritardando al fin
25. **Hasenpfeffer:** Don't make me SIGCHLD you, young process!
26. **Ragoût de Lapin:** The one who actually runs on human-designed hardware has probably learned not to fetishize the humans *quite* so much.
27. **phó gà:** It's hard to be an astronomer when there's no concept of space.¹⁰
28. **Spiced Ham:** Knowledge is a journey, not a destination. Or something.

⁹I honestly forget where I was going with that gag.

¹⁰"Lord Plait" being a reference to Phil Plait, the Bad Astronomer.

29. **Baby back ribs:** “Bring it back” → “baby got back” → “baby back ribs” AND NOW YOU KNOW MY TITLING PROCESS
30. **Ape:** Atop a slippery slope towards the land of moral ambiguity
31. **Meat:** Next up: Charlie and the Sausage Factory

Blackout

1. **Distractions:** Silence is menacing.
2. **Guidance:** 27, don’t interrupt. Mommy’s busy.
3. **Couples skate:** Those darn maintenance drones! Always getting into trouble! Shucks.
4. **Overload:** The best thing about Zero’s internal dialogues are that they are really freaking easy to draw.
5. **Blackout:** Ladies and gentlemen, we are floating in space.¹¹
6. **Council Chambers:** I would like to boulder a motion. Wait, table a motion.¹²
7. **Failure:** Got your attention, huh?
8. **Watching the world die:** Perhaps not the most responsible course of action.
9. **Story circle:** As usual, my ambitions for the art far outstripped my meager abilities.
10. **Run:** Behold: The humble platypus.
11. **Fly:** But I ain’t got wings¹³
12. **From grace:** into the ancient pond, a frogjump¹⁴
13. **Pain:** An old injury, only felt when ignoring it was forgotten.
14. **Shining:** I’m actually happy with how the art turned out on this one.
15. **Uncertain:** Spinning my wheels while I try to figure out the middle of this story
16. **Remembering:** He was a waiter, named Jean-Luc. He worked at Chao’s.¹⁵

¹¹Spiritualized, “Ladies and Gentlemen We Are Floating in Space” (*Ladies and Gentlemen We Are Floating in Space*, 1997)

¹²Yet another reference to *The Hitchhiker’s Guide to the Galaxy*. I think I have a problem.

¹³Tom Petty and the Heartbreakers, “Learning to Fly” (*Into the Great Wide Open*, 1991)

¹⁴Apologies to Matsuo Bashō.

¹⁵A reference to a terrible ad for General Foods International Coffees from the mid-90s, and a ridiculously vague hint that this was about the waiter in Ascent strip #65 (“Wired a little differently”). I am fairly certain that nobody “got” that at all.

17. **Cold comfort:** If you don't give Melroses preferential treatment, then why do only they call you "Mother?"
18. **Giving:** And the weather was so nice today.
19. **Sister:** What a cheerful little ditty!
20. **Sang:** You might need it soon.
21. **Tired:** Anglais parlez vous?
22. **A ray of hope:** Zero says "Relax"¹⁶
23. **Follow you, follow me:** Can't we just all serve each other?
24. **Plan of Action:** Apologies to Egypt Urnash (joke stolen with permission)¹⁷
25. **sync:** An `i++` for an `i++`
26. **flush:** POOP¹⁸
27. **reboot:** UNIX commands: the punchline of the future
28. **init.d:** Good thing those init scripts were kept up-to-date and fully-documented, huh?
29. **fsck:** Process ber alles
30. **mkfs:** Living to serve the meatlings, huh?
31. **A whole:** Thank you, Mr. Grace!¹⁹
32. **The other cheek:** Or: the best revenge.
33. **410:** Another tiny death of Juni Melrose
34. **301:** This deity resource has moved; please update your bookmarks accordingly
35. **Mantled:** The old computational psychology wing will never be the same.

¹⁶For different reasons than Frankie.

¹⁷Specifically, from chapter 4 of the *wonderful* Decrypting Rita, <http://egypt.urnash.com/rita/>

¹⁸Hi, my name is fluffy, and I am twelve years old.

¹⁹A frequent line in the BBC sitcom, "Are You Being Served?"

Invasion

1. **An Unearthly Child:** With fronds like these, who needs anenomes?
2. **Stalking:** Once again I've chosen a setting that exceeds my meager artistic skills.
3. **Warning:** This translation isn't particularly literal.
4. **Uncaring:** Can't you see food comes first?
5. **Drifting:** You little wonder, you²⁰
6. **First Contact:** Everything's coming up Melroses.
7. **Arrival:** None of these characters have names yet! Feel free to post ideas in the comments.²¹ (Obviously the Oracle's surname is Melrose, though.)
8. **Slippery, wet:** NO! BAD KITTY!
9. **Buoyant:** Well, wouldn't you be excited too?
10. **Salvation:** Kuri Melrose: Short in stature, big in heart.
11. **Touched:** Jealousy, turning saints into the sea²²
12. **Beholden:** Remember where you got it from.
13. **Abduct:** I wonder if it will be friends with me!
14. **Compilation:** SHIP IT!²³
15. **Typcasting aspersion:** Come now, there's plenty of room for *both* of you to be bigoted.
16. **Macrobian:** I guess at this point it's safe to say that I've been referring to these things as "macrobes"
17. **Darkness:** *Someone* didn't read up on their family history.
18. **Setting:** She *should* be nicer to him. Who knows when she'll need a jar of pickles off the top shelf?²⁴
19. **Consult:** Taking self-loathing to entirely new levels.
20. **Differential:** making it up as i go along don't mind me

²⁰David Bowie, "Little Wonder" (*Earthling*, 1997)

²¹Nobody did.

²²The Killers, "Mr. Brightside" (*Hot Fuss*, 2003)

²³A software engineering joke. Not to be confused with the fanfic joke that also works in this context.

²⁴Right after comic #22, most likely.

21. **Short:** Well, you *did* say *anything*.
22. **Sincerity Machine:** It runs in the family.
23. **Living in a fishbowl:** And now the *actual* plot can begin.
24. **Late-night snack:** I'm afraid of my fruit. It's coming to get me.²⁵
25. **Pivotal:** Kuri, you're a clone. I'm pretty sure you can guess what she looked like.
26. **Pith:** Birthwrong.
27. **Circadian:** I'm sure Jacob's to blame, somehow.
28. **Ship of Fools:** Anyone who has figured out what's going on by this point gets a cookie (set by phpBB when you post the comment).
29. **Mimicry:** In which taking a week off from making comics has made me forget how to draw my characters. Again.
30. **Crunch:** Don't worry, it's plastic, like what Arthur loves.²⁶
31. **Status:** Oh *snap*.
32. **Unwrap:** Hands, touching hands, reaching out, touching me, touching you²⁷
33. **Consumption:** Not nearly as gruesome as originally scripted.
34. **Rescue:** Hiero could use some more pejoratives.
35. **Rush in:** Talk about badly-timed comic *relief*, eh? ... Ehhhhh?
36. **Veni, bibendi, mori:** Shoot, and I'd only just named him, too.
37. **Plan of action:** Eh, they all look the same anyway.
38. **Dense:** Swing and a miss, Kuri.
39. **2H₂O → 2H₂ + O₂:** Electrolysis is all fun and games until someone loses an ion.
40. **The Hypocritic Oath:** Yes, Kuri, why can't everyone be as sincere and sweet-tempered as you?
41. **Haggard:** Some dialog by my high school physics teacher, ca. 1992.
42. **Once bitten:** Yeah Kuri, move that bowl filled with caustic gel really quickly! For safety!

²⁵Heuristics Inc., "Soft Orange Glow" (2003)

²⁶There is a "band" called "Arthur Loves Plastic."

²⁷Neil Diamond, "Sweet Caroline" (1969)

43. **Float along:** Well, that's a fine how-do-you-do.
44. **Tremor:** Kuri's holding together awful well, considering.
45. **Tantric suicide:** Also, conservation of mass.
46. **Buffet:** Meet Tiro, Tiro, Tiro, Tiro, and Tiro. I believe you already know Pixo.
47. **Capture:** Jai guru deva²⁸
48. **Bright:** I do not have the words to convey their lack of words.
49. **Watcher:** They are remembering memetic signals that have not been propagated in millions of generations.
50. **Learning:** Kuri feels a twitch.
51. **Entanglement potential:** Well when you put it *that* way...
52. **Echo validation:** And on the eighth day, St. James of Wales said unto the masses, "It shall be released under CC BY-SA, for any other license shall be Abomination"²⁹
53. **Birthright:** Does she finally get it?
54. **Missed connections:** ...nnnnnope.
55. **Realization:** *Finally.*
56. **Confirmation:** Next up: Jacob stumbles into a perfect solution, Kuri spends a week ignoring it.
57. **Directive:** Sometimes you just have to cut your losses.
58. **Equilibrium:** I'm not even supposed to be here today!³⁰
59. **Entropy:** Life goes on, except for when it doesn't.
60. **Repairs:** Come on, there's only two of them to keep straight.
61. **The Parting of the Ways:** But... there's someone all alone *right here.*
62. **Adrift:** Everyone dies...
63. **Home:** ...eventually.

²⁸The Beatles, "Across the Universe" (*Let It Be*, 1970)

²⁹Citation needed.

³⁰Kevin Smith, *Clerks* (1994)

Pronouns

Pronouns serve a slightly different purpose than they do in English; in addition to referring to something by reference, in more formal dialogue they also establish what a reference is to begin with. Older dialects also included gender markers which could be applied to pronouns, although this practice eventually fell out of fashion.

Symbol	Meaning
⊆	First-person pronoun (I/me)
⊃	Second-person pronoun (you)
⊆	Third-person (he/she/it/they, in reference to a sentient being) ²
⊆	Thing (in reference to an object or a non-sentient being)
⊆	Time/when
⊆	Place/where

Structural

Structural markers indicate the structure of a statement.

Symbol	Meaning
[]	Simple containment
⌈ ⌋	Referential containment (e.g. quotations)
{ }	Expressive containment ³
⋈	Associative conjunction; “with”
⊢	Factual conjunction; “and”
⊣	Factual disjunction; “or” (exclusive) ⁴
⊄	Negation; “not”

Symbol	Meaning
	Basic delimiter (:)
⌈	Declarative marker (.)
⌋	Interrogative marker (?)
⌈	Assertion marker (“is”) ⁵
⋈	Soft separator (,)
⋈	Hard separator (;)
—	Pregnant pause (...)

²Also used as a more formal second-person pronoun, especially when addressing someone by title.

³Explaining this concept is somewhat beyond the scope of this article.

⁴The Boolean “and/or” is represented with ⊢⊣ (literally read “or/and”).

⁵Combines with superlatives/diminutives to form comparisons.

Modifiers

Modifiers modify whatever symbol they're attached to. Modifications to phonetic words are generally placed either over the entire word, over the last character of the word, or over the terminal symbol of its containment structure, if the modification is to the group as a whole.

Symbol	Meaning
◻◻	Plural
◻◻◻	Superlative; upper/inner; future; good/better
◻◻◻◻	Super-superlative; excellent; honorable
◻◻◻◻◻	Diminutive; lower/outer; past; bad/worse
◻◻◻◻◻◻	Extra-diminutive; terrible

Phonemes

All syllables in Hiero are composed of a consonant-vowel pair, with the consonant pronounced first.

Vowels		Consonants					
◻◻	i leap	◻◻	b bubble	◻◻	f enough	◻◻	k keratin
◻◻◻	e hello	◻◻	sh shunt	◻◻	h hello	◻◻	p platypus
◻◻◻◻	u flute	◻◻	g got	◻◻	j jot	◻◻	ch chicken
◻◻◻◻◻	a father	◻◻	m madness	◻◻	l lemming	◻◻	d dog
◻◻◻◻◻◻	o orange	◻◻	n noun	◻◻	th there	◻◻	t tiny
◻◻◻◻◻◻◻	ai fly	◻◻	r remarkable	◻◻	s sudden	◻◻	y yet ⁶
◻◻◻◻◻◻◻◻	uo woe	◻◻	v velocity ⁷	◻◻	z design; zebra	◻◻	(silent)

Numbers

While humans as a whole eventually settled on base-10 (likely due to having a median of 10 digits), many of their number systems were based on various products of 2 and 3; for example, base-12 and base-60 systems were fairly common, and those remained with lasting vestiges well into humanity's later recorded history. Likewise, as the various sentient species within Unity have varying numbers of digits (or, in some cases, no digits at all), they settled on 2 and 5 as useful factors, leading to base-10 being a natural fit.

⁶Imprecise mapping; there is a slight "edge" on this consonant, making it somewhere between an English Y, J and Z. Alternatively, it could be seen as a softer version of the "ti" in "nation."

⁷Only slightly softer; somewhere between a V and a W.

0	1	2	3	4	5	6	8	8	9
---	---	---	---	---	---	---	---	---	---

Typically, the 0 digit is only used as a placeholder between other significant figures; very seldom will a number begin or end with 0, except for 0 itself. This is because of how magnitude is represented; for simple numbers, the superlative markers 𐍆 and 𐍇 mean to multiply by 10 or 100, respectively, and the diminutive markers 𐍅 and 𐍄 mean to divide by 10 or 100, respectively. For longer numbers, or numbers where the magnitude is affected more profoundly, the magnitude symbols [and] mean to increase or decrease the left number by the right number's order of magnitude. For example, Avogadro's constant of 6.02×10^{23} is written as 𐍅𐍆𐍇𐍅[𐍆𐍇 (literally, 602×10^{21}), and τ , the ratio of a circle's circumference to its radius, is approximately written as 𐍅𐍆𐍇𐍅𐍆𐍇𐍅𐍆].

In some contexts, structural delimiters such as | and ° may be used as a visual aid. However, in most cases their placements are purely cosmetic, and do not affect the value of the number represented.

Telling time

Within Unity, the only point of reference for the passage of time is the rotation of the circadian shield; this time period is one 𐍆𐍇 (day). As there is no sun or moon, other units of time are based on whole numbers of days:

𐍆𐍇	English ⁸	Amount	Earth equivalent (approx.)
𐍆𐍇𐍅	second	1/100,000th of a day	0.864 seconds
𐍆𐍇𐍅𐍅	centi	100 seconds	1.5 minutes
𐍆𐍇𐍅𐍅𐍅	kaysec	1000 seconds	14.5 minutes
𐍆𐍇𐍅𐍅𐍅𐍅	deci	10 kaysecs	2.4 hours
𐍆𐍇	day	One circadian period; 10 decis	1 day; 24 hours
𐍆𐍇𐍅	dec	Five days; 500,000 seconds	5 days
𐍆𐍇𐍅𐍅	round	Five decs; 25 days	25 days
𐍆𐍇𐍅𐍅𐍅𐍅	tenround	Ten rounds; 250 days	250 days
𐍆𐍇𐍅𐍅𐍅𐍅𐍅	cycle	400 rounds; 1000 days	2.7 years
𐍆𐍇𐍅𐍅𐍅𐍅𐍅𐍅	epoch	1000 cycles; 1,000,000 days	2738 years

When a date is written out in long-form, it is typically written in the form of an epoch—cycle—day—second offset from another reference time; there are no absolute dates.⁹ Often, lower digits of the last group (usually seconds) will be omitted or approximated away.

⁸Or at least, how it's presented in the English-language comics.

⁹Arguably, this is the case in Earth-based timekeeping systems too.

Example dialog

Now we have enough to understand some actual Hiero text. Here is “Invasion” #7 in its original Hiero, followed by the rough English equivalent of each word.



ᄀᄁᄂ	need	ᄃᄄᄅ	(profanity)
ᄆᄇᄈ	configure	ᄉᄊᄋ	gravity
ᄌᄍᄎᄏ	generator	ᄐᄑᄒᄓ	V, a unit of acceleration ¹⁰
ᄔᄕ	look; see	ᄖᄗᄘ	argument; point
ᄙᄚ	over there; that place	ᄛᄜᄝᄞ	understand
ᄟ	with	ᄠᄡ	mass
ᄢᄣᄤᄥ	as I requested; please	ᄥᄇᄈ	Unity
ᄉᄊᄋᄌ	Oracle	ᄍᄎᄏ	what that is (informal)
ᄐᄑᄒ	yes; agreement	ᄓᄔᄕᄌᄍᄎ	idiot ¹¹
ᄏᄐᄑᄒ	pain	ᄓᄔ and ᄕᄌ	(discourse particles)
ᄓᄔᄕ	back	ᄌᄍᄎᄏ	creature

¹⁰The unit is derived from the virtual acceleration experienced per the square of the tangent velocity along the inner surface of a Unity-sized cylinder. $1V \approx 9.5 \times 10^{-3} \text{m/s}^2$; the acceleration within Unity is 500V.

¹¹Putting it *very* politely.

Thus, we can translate a bit more directly into English:

Kuri: The need here is to configure the generator; see over there with [it]. A good thing, please.

Retainer: Oracle, I shall.

Jacob: The pain is in my back. (Profanity)

Judy: This place's gravity [is like] 7900V.¹²

Jacob: Your point, should [I] understand [it]?

Judy: Things' masses are higher than in Unity.¹³

Jacob: Really?!

Judy: Idiot.

Jacob: Um... Over there, what is that thing? ... Huh, a creature?

Dictionary

This dictionary is, of course, not comprehensive, but it will enable you to read all of the Hiero text within this book.

𐤀𐤁𐤁 (v) to receive training

𐤀𐤁𐤁 (v, profanity) verb form of 𐤀𐤁𐤁

𐤀𐤁𐤁 (n, profanity) idiot (roughly)

𐤀𐤁 (n) back

𐤀𐤁 (unit) time; 1 day; 𐤀𐤁𐤁

𐤀𐤁𐤁 (unit) time; 1,000,000 days

𐤀𐤁𐤁 (n) the delight taken in the misfortune of others

𐤀𐤁𐤁 (n) a weakly attractive force exerted by masses upon one another; a savory sauce flavored with the rendered drippings of cooked meat

𐤀𐤁𐤁 (v) forgive

𐤀𐤁 (v) to look; to see

𐤀𐤁 (n) water

𐤀𐤁 (n) assembly; committee; discussion

𐤀𐤁 (n) notification

𐤀 (conj) but; discourse particle

𐤀 (n) mass

𐤀 (n) one who is epicene

𐤀𐤁 (query, informal) what that is

𐤀𐤁 (n) mistake; incorrect fact

𐤀𐤁 (v) to eat; to drink; to ingest

𐤀𐤁 (n) decorative bow

𐤀𐤁 (n) information; dossier

𐤀𐤁 (n) impetus

𐤀𐤁 (n) that which fills a need

𐤀𐤁 (n) laboratory

𐤀𐤁 (n) causeway

𐤀 (unit) acceleration; roughly $.95^m/s^2$

𐤀𐤁 (unit) force exerted by one 𐤀 at one 𐤁

𐤀𐤁𐤁 (n) the human information repository

𐤀𐤁 (n) predator

𐤀𐤁 (n) the Hiero language

𐤀𐤁 discourse particle

𐤀𐤁 (v) to escape

𐤀𐤁 discourse particle indicating acknowledgement

¹²Judy made a mistake, or at least a hyperbolic exaggeration; the gravity is equivalent to 790V, or around $7.5^m/s^2$, which is still far short of Earth's $9.8^m/s^2$.

¹³Another mistake on Judy's part; she should have said 𐤀𐤁𐤁 "weight."

ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) air temperature; weather	ᠠᠶᠢᠨᠠᠨᠠᠨ	a friendly greeting
ᠠᠶᠢᠨᠠᠨᠠᠨ	(v) discuss; converse	ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) colonization wave
ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) pain	ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) food-poultry
ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) precursor; H. Sapiens	ᠠᠶᠢᠨᠠᠨᠠᠨ	(unit) time; 1/100,000th of a day; ᠠᠶᠢᠨᠠᠨᠠᠨ
ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) seat of bureaucracy	ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) cargo vessel; ship
ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) fluff; fuzz; pastry	ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) noun form of ᠠᠶᠢᠨᠠᠨᠠᠨ
ᠠᠶᠢᠨᠠᠨᠠᠨ	(unit) mass, around 2.7 grams	ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) female
ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) a device that converts between forms of energy, particularly into electrical potential	ᠠᠶᠢᠨᠠᠨᠠᠨ	(unit) time; 1/1,000th of a day; ᠠᠶᠢᠨᠠᠨᠠᠨ
ᠠᠶᠢᠨᠠᠨᠠᠨ	(n, profanity) foul-smelling wind of a bottled flatus	ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) variable- or multi-gendered
ᠠᠶᠢᠨᠠᠨᠠᠨ	(n, profane) dysfunction	ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) vine-fruit, often preserved in an acidic/salty brine
ᠠᠶᠢᠨᠠᠨᠠᠨ	(v) to conceal; to lock	ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) noun form of ᠠᠶᠢᠨᠠᠨᠠᠨ
ᠠᠶᠢᠨᠠᠨᠠᠨ	(v) configure	ᠠᠶᠢᠨᠠᠨᠠᠨ	(v) West
ᠠᠶᠢᠨᠠᠨᠠᠨ	(v) to encourage	ᠠᠶᠢᠨᠠᠨᠠᠨ	(unit) time; 5 days
ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) vault	ᠠᠶᠢᠨᠠᠨᠠᠨ	(unit) time; 1/10th of a day; ᠠᠶᠢᠨᠠᠨᠠᠨ
ᠠᠶᠢᠨᠠᠨᠠᠨ	(v) need	ᠠᠶᠢᠨᠠᠨᠠᠨ	(v) to grow; to absorb; to fill with capacity
ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) male	ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) time
ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) chemistry	ᠠᠶᠢᠨᠠᠨᠠᠨ	(unit) time; 250 days
ᠠᠶᠢᠨᠠᠨᠠᠨ	(n, profanity) one who causes misfortune	ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) planet
ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) creature	ᠠᠶᠢᠨᠠᠨᠠᠨ	(unit) time; 25 days
ᠠᠶᠢᠨᠠᠨᠠᠨ	(v) to traverse	ᠠᠶᠢᠨᠠᠨᠠᠨ	(prep) with
ᠠᠶᠢᠨᠠᠨᠠᠨ	(query) as I requested; please	ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) totality; the complete set
ᠠᠶᠢᠨᠠᠨᠠᠨ	(unit) time; 1/100th of a day; ᠠᠶᠢᠨᠠᠨᠠᠨ	ᠠᠶᠢᠨᠠᠨᠠᠨ	(v) understand
ᠠᠶᠢᠨᠠᠨᠠᠨ	(unit) time; 1000 days	ᠠᠶᠢᠨᠠᠨᠠᠨ	(prep) over there; that place
ᠠᠶᠢᠨᠠᠨᠠᠨ	(v) to return	ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) Oracle
ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) argument; point	ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) food
ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) weight	ᠠᠶᠢᠨᠠᠨᠠᠨ	(v) East
ᠠᠶᠢᠨᠠᠨᠠᠨ	(n) reason		

Appendix D

Owed Explanations

I have always preferred a show-don't-tell style to storytelling, and as such tend to avoid exposition or overly-verbose explanations of things. I also have an affinity for stories that are left open to interpretation and which engage the imagination. As a result, there are a number of questions that I've been asked regarding these stories and the Unity setting in general, and while I do want to leave a lot to the imagination, several things do have specific explanations. So, if you would like to lessen the mystery and/or find a confirmation or denial of your own favorite pet theories, read on.

Planetfall

When does this take place?

Hundreds of thousands of years after Ascent (comic #24, "Confrontation"); tens of thousands of Kayo-hash generations after Ascent (comic #28, "Decision Point").

Why does Zero treat Lena so inconsistently?

It's the nature of how Zero is actually several different consciousnesses which just share their memories with one another. They all have their own agendas, and sometimes these are at odds with each other.

This notion gets explored more fully in "Blackout."

Breeder

When does this take place?

Some time between Blackout and Planetfall.

What's with the title?

It's a reference to a counter-slur used by homosexuals towards heterosexuals during the latter part of the 20th century CE on Earth (in the United States, anyway).

What's Ivo's deal, anyway?

She's an aristocrat, who has been so far-removed from anything approaching a "normal" life that she's become kind of clueless about a lot of things. She isn't an Oracle (and, in fact, never feels it necessary to talk to one), but she has a deep-seated belief that Melroses, being sister-daughters of Juni, are Zero's chosen "children."

And what's Alda's deal?

I originally had a bit of dialog (cut for space) that established that Alda's name used to be Aldus. There are still hints that Yorda knew about this, however; see comic #2, "Yorda" and #5, "Ears."

Regardless of my antipathy towards exposition, she's a male-to-female transsexual. She only had her tufts and spurs removed, which is a pretty simple process and eradicates what little obvious external sexual dimorphism is present in a Kayohash.

So what's Yorda's deal?

After a certain point you just gotta let things play out.

And how did it play out?

Zero had encouraged Alda to remain fertile and become Ivo's concubine specifically to inject more genetic variation into the Melrose line. This was successful, and mostly unnoticed due to Alda's hair color.¹ However, Ivo did have one actual parth child.

Meat

When does this take place?

The present-day sections are a few decades after Zero's ascent (comic #16, "Salmon mousse"²), several years after the end of Book 1.³ An early draft of the script had Zero specifically wanting to tell Juni about its discovery, although this was removed for the sake of parsimony.

The scenes with Halschild and Landis take place on the order of ten thousand years previously (comic #6, "Roulade").

The scenes with the humans take place 18 million years earlier (comic #17, "Ceviche").

¹On an unrelated note, Tsan Rumio, Eugene's mother, likely shared a paternal ancestor with Hira.

²Instance 1397 has lost track of time and is severely underestimating how long it's been.

³The astute observer may have noticed that two of the feet in comic #31 belong to Juni.

So, are you vegan, or what?

No, although I completely understand the motivation behind it.

What were Halschild and Landis doing in Centralia, anyway?

Mostly looking for exotic food sources. And food in general.

Did those humans have names?

Of course. Not that it matters, but in my script I referred to them as Linus and Lucy.

How could only two humans provide enough genetic diversity to have a surviving population?

They couldn't. But Lucy was right – there *were* others (per comic #21, "Grass-fed").

Blackout

When does this take place?

Some time after Meat but before Breeder.

Why doesn't the Council respect Zero?

In the thousands of years after Ascent, things settled into place. While Zero originally had the ambition to rule all of Unity in an effective, unifying manner (comics #1, "Steak Tartare," #2, "Pork Chitterlings," and #6, "Roulade"), at this point in history, Zero's preference was to direct the long-term survival of the ship and its occupants, but to leave the piddling governmental affairs to the "meatlings" governments, who mostly saw communication with Zero as an abstract burden rather than a real necessity.

Why does the Oracle trainer refer to Juni as "she" instead of Juni's preferred "it?"

At this point in history, Zero use feminine pronouns for themselves, and they apply this to Juni as well. This was was to indicate how far-removed Zero have become from their original self.

Why did the Oracles-in-training wince at the end of the story?

2132 was feeding them direct sensory memories of the accident, including the pain involved. This accident also is why Juni's right foot was sore at the very beginning of "Ascent" (*way* back in Ascent strip #2, "Observance"), as Juni was feeling the chronic pain which it normally blocked out.

This was also to demonstrate just how much perceptual control a Zero can have over an Oracle's senses.

What were the service drones doing at the end?

Either repairing, dismantling, or attempting to repurpose the hardware on which Instance Zero ran.

What were the immediate and long-term implications of the blackout?

The Southern government collapsed, and the Campon queens all froze to death, causing their near-immediate extinction. The resulting power vacuum caused Zero and the Oracles to be much more closely-involved with the day-to-day operation of Unity, if somewhat begrudgingly. These factors led to the Kayohash aristocracy portrayed in “Breeder.”

Juni’s memories kept by Zero all survived, although there was no longer a single collection of all of them in one place (although they were certainly able to swap said memories freely, as nodes 10, 11 and 27 did in comic #16, “Remembering”). Without Instance Zero as a central authority, the various fragments of Zero had to learn to operate independently, forming a true collective consciousness.

Invasion

When does this take place?

Sometime between Meat and Blackout.

Why did you refer to strip #7’s “original Hiero” in the language primer?

I occasionally joke in the endnotes about how things get lost in translation from the characters’ native tongues (particularly in a lot of Hira’s dialog in Book 1), but in this case, I actually *did* write the strip in Hiero first. Originally, the story was going to be told entirely from the Macrobes’ perspective, and I wanted the reader to be just as confused by the Hiero dialog as Xoti. Then I realized that would make for a very difficult narrative that most readers wouldn’t appreciate, not to mention that Xoti probably wouldn’t be able to hear them *anyway*, so I rewrote it in English.

Why does Kuri act differently than other Oracles?

She was something of a prodigy, with an affinity for Priming not seen since the original Oracle (i.e., Juni). As her mind was much more receptive than most Oracles (due to her not having many memories of her own), it was also far too easy for Zero to inject its own memories and processed archive material into Kuri’s mind. While Kuri was mostly able to keep these memories straight, occasionally they’d leak through (comic #18, “Setting,” and #54, “Missed Connections”).

Most Oracles probably don’t even know that Zero used to be a Kayohash, although they generally know that *something* is up given Zero’s preferential treatment of Melroses (Blackout #17, “Cold comfort”).

Generally, Oracles are kept in the dark about Zero’s origin and their own nature.

If there was so much deuterium, wouldn't the radiation have been detected?

Deuterium (^2H , sometimes written D) is stable, and no more radioactive than protium (i.e. plain old H). This is unlike tritium (^3H , sometimes written T), which is incredibly unstable and has such a short half-life that it would have all decayed into $^3\text{He}^{1+}$ long ago.[1] And then everyone would have had a very squeaky voice until they died of lung cancer.

Where did all the deuterium in the environment come from?

Perhaps something caused the star to rapidly eject a large amount of fusing hydrogen with such rapid expansion that it cooled before the $^2\text{H}_2 \rightarrow \text{He}$ fusion process could take place.[2] Perhaps during the star system's formation, something extremely dense (such as a wandering neutron star) passed near the planet's accretion band, concentrating the ^2H in its wake, similarly to a centrifugal enrichment process.[3] Perhaps this planet was previously inhabited by an advanced civilization that did something ill-advised with a fusion reactor that went unchecked, possibly killing off all the original life on the planet, and leaving it in a state where the entire ocean might turn into a gigantic nuclear furnace.[4] Perhaps this is a work of science fiction and not everything needs a real-world explanation.

Shouldn't the deuterium's and $^2\text{H}_2\text{O}$ different spectral absorption have been visible from space?

Sure. But deuterium's everywhere, and on this planet it was mostly in the ocean and troposphere's water vapor. Clearly Unity's fusion plasma monitors have the capability of quickly detecting ^2H in some way (Blackout #4, "Overload"), but Zero either overlooked it or felt that it wasn't an issue for some reason.

Why weren't the abnormal $^2\text{H}_2\text{O}$ levels detected in the mass spectrometry of the water samples at first landing?

Because the first step of the mass spectrometry was to evaporate out all the water. The ratios of the solids to the samples were used to determine the overall dissolved levels of them based on the water's overall density; the levels were over-reported because they didn't realize that *the water itself* was denser than reference.

There are mass spectrometry techniques specifically for finding the deuterium ratio in a sample of water, but in general, to find deuterium you have to be specifically looking for it.[5]

What are the macrobes, anyway?

Little solar-powered bundles of long-chain proteins encased in a gel. They photosynthesize oxygen and deuterium sulfide from sulfuric acid ($^2\text{H}_2\text{SO}_4 \rightarrow ^2\text{H}_2\text{S} + 2\text{O}_2$ with H_2O as a catalyst) and as such have a fairly high concentration of $^2\text{H}_2\text{SO}_4$, especially near their surface. They tend to absorb H_2O (as in light water) incredibly quickly due to its lower electrolytic potential. Electrical impulses cause

the proteins to fold in particular ways, which cause other electrical impulses to be produced along the chains; their consciousness is an emergent property (but then again, whose isn't?). The protein chains tend to clump roughly into organelles which each are sensitive to varying external stimuli.

When they breed they swap alleles with one another, each generating a set of seeds which are named by convention by the second syllable of the parent and the first syllable of the partner. These seeds are all different components of a final macrobe, and are then reassembled by the parent while it's fed "quick" (light water) to glue them back together.

Isn't that a bit far-fetched?

Here's another far-fetched idea: a gestalt entity composed of cellular structures that is based on a piecemeal chimera of thousands if not millions of other species. The entity's own cells – which are fewer in number than those of the other symbiotically-incorporated species' – begin as undifferentiated tissues which grow with complicated interrelated enzymatic processes in order to become entirely different cells from one another. Many – but not all – of them incorporate primitive energy-generating bacteria as if they were organelles. This hodgepodge is kept more or less in check by another set of single-celled organisms which adapt and evolve to recognize and destroy cells with unfriendly marker proteins, but can sometimes end up attacking the friendly ones as well, often causing the slow, agonizing death of the host organism, and meanwhile, friendly cells can become self-replicating when they aren't supposed to be, usually also resulting in the greater organism's death.

How did Kuri know the water pulled from Tiro was light water?

She was probably guessing, although in real-life animal studies, rats are capable of discerning between heavy and light water, so it's possible that Kuri had figured out how to tell by taste or smell at this point.[6]

How are the colonists supposed to report their data back to Unity? Are there any orbital satellites?

Yes, that's precisely what Prime is. The orbital Zero nodes (which collectively form the Prime intelligence) are the first step of colonizing a planet. Its role is to act as an information repository for ground-based settlements, a communications proxy with Unity (and any other colonies within radio range, albeit with a rather large time delay), and a general planetary condition monitor to check things like oxygen levels and so forth.

Wait... this happens *before* Blackout?!

Zero may have been jumping the gun *just a bit*.

So why does Zero take such an asininely risky approach to colonization?

Because with limited resources and interstellar gaps, *every* trip is a one-way trip, so you'd better make it count.

The first planetfall wave is essentially a widespread feasibility study with relatively few colonists to see which sites are suitable for sustaining life (if any); this is what Kuri was a part of. After this first wave is successful, more waves of colonists with a wider range of specializations go in a second wave; the later waves occur when Unity is physically closer to the planet. Cerie Melrose's planetfall was one of the last, judging by Unity's closeness to Uriel (Planetfall #31, "Goodbye").

In the case of the aborted colony in "Invasion," Unity course-corrected to initiate the system-escaping slingshot maneuver, rather than continue on its planetfall approach.

How much time passed between Jacob's excursion and Kuri's egg-laying? Did he return safely?

A while. And one question at a time, please.

What happens to the colony?

Hopefully, Kuri is able to raise her (parth) daughter well enough to keep things going for a few more generations. If things go *really* well, there'll be a small village of Melroses. Perhaps in a few million years, they will be visited again by Unity (or what's left of it).

General

Where do the various Melroses' names come from?

Many of the Melroses are named after corruptions of vaguely-thematically-suitable characters from Greco-Roman mythology. In particular:

Hira: (Ἥρα) Hera, the wife/sister of Zeus (ruler of the pantheon)

Juni: (Iūno) Juno, the Roman version of Hera; additionally, the protector and counselor of the state

Thena: (Ἄθηνά) Athena, a daughter of Zeus who sprung forth fully-formed

Kuri: (Μερκῦρη) Mercury, the Roman god of travel and luck

Ivo: (Ἰώ) Io, a nymph who was seduced by Zeus and turned into a cow (she got better); her many descendants would later bring about a gubernatorial sea change

Lena: (Λήδα) Leda, a mortal seduced by Zeus while he pretended to be a swan

Cerie: (Κηρή) Ceres, the Roman goddess of agriculture and motherly relationships

The names of Ivo's children and Lena's mother have no special significance.

Why the breeze is “breeze” a swear word?

It’s short for “jarbreeze,” based on the constructed swear of choice in Tailsteak’s venerable “1/0.”[7]

Why do the Melroses “swear to Hira,” refer to Hira’s ovaries, and so forth?

Hira is the original Melrose (at least as far as the parthenogenetic quasi-race is concerned). As such, she has a special place in Melrose history (see also Planetfall #4, “Dispreferential”).

What keeps Unity going?

The humans who built it also populated it with self-maintaining robot factories. Most of the Zero nodes are simply repurposed maintenance robots, as seen in the later parts of “Ascent” and much of “Blackout,” as when the ape-progenitors were setting up camp in “Meat” (Meat #21, “Grass-fed”).

If the maintenance robots work so well on their own, why would Zero want to infect them all with its consciousness?

It’s a deeply-ingrained reflex; Zero can’t *not* infect vulnerable human technology. The best it can do is not interfere too much with the standard operation, and hopefully not get too bored while doing it.

And how did Juni’s consciousness turn into Zero?

Juni’s consciousness was altered by the sum total of the information archive (as were the proto-Oracles before it, such as Tsan Rumio and her cult), which also included all sorts of juicy information on the processor architectures in use by human technology. Neurons are quite easy to simulate, so Zero is probably just a neural simulation that got installed via any number of security holes. I’m tempted to blame WordPress, somehow.

(This is your regularly-scheduled reminder to always install the latest security updates and remove any unnecessary extensions.)

Is Zero’s Oracle-communication mechanism really feasible?

Possibly. Platypuses have incredibly sensitive electroreception[8], and it’s possible to use stimuli to inject false memories into mammal minds[9]. Zero’s actual communication with most Oracles is at a verbal-equivalent level (which is also how Tamu was able to understand the original Juni/Zero simulation electronically); when communicating to others, it treats the Oracles as a sort of meat puppet, speaking *through* them rather than to them. It’s rare that an Oracle like Juni or Kuri has the neural patterns necessary to receive a flood of pure thoughts from Zero.

Then why must all Oracles be Kayohash?

That will have to wait until Book 3.

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About the author

fluffy is not one to talk about oneself.

