Dear Ikora Rey,

With respectful courtesiis and the proper bow,

I have read the texts you sent. I understood very little. My thanks multiply. Truly my knowledge of Light is distinct from your own. For me, Light is in the air and the joints. It is eaten. It is received in radiation and discharged in the neuron. It is not separate from the physical world. It is the world.

You speak of Light as an intervention in reality from outside, parallel to causality. This is not my sense of Light. But as you say, I should not diminish my own kinship with Light, for it is in all places and things. So, I do not try to be a false Guardian. Instead, I preach to my people that we must be the best Eliksni we can be.

But always there is the question. Why the Great Machine left us. Why it became your Traveler and stayed to guard you. This question haunts all Eliksni. It makes us think we are Fallen. I have accepted that the Traveler is not mine to judge, but even without judgment, I am curious. Why did the Traveler leave us but remain with you?

I do not ask you for an answer. Only your thoughts.

Nisraake

Dear Misraaks,

With my own proper ireliis,

What if the Traveler abandoned you out of mercy? To give you a chance?

I won't pretend to understand what your people experienced during the Whirlwind. Nor do I ask you to measure your pain against ours. I only mean this:

We know no Human settlements beyond this system. We are surrounded by Darkness, trapped at the center of a cosmic war. The Traveler's presence draws the attention of every great power in our galaxy and beyond. It protected us and gave us the Light, but in doing so, it doomed us to war against its enemies.

There is a very good chance humanity will go extinct here.

But there are Eliksni who survived the Whirlwind. There are Eliksni alive around other stars: alone and small in a dangerous universe, but free of any obligation to the Traveler. I believe that the Traveler despises coercion. I believe it would not force the responsibility of defending it upon one of its chosen species unless it had no other choice.

(Why then does it choose species to uplift in the first place? Why doom Eliksni or Humans to a confrontation with Darkness? Perhaps it will not let the Darkness coerce it into abandoning its purpose. Perhaps it doesn't value longevity the way we do; maybe it values a short, bright existence more than a long, ordinary one. I don't know.)

When the Traveler left Riis, it gave your people a choice. Some chose to follow the Traveler. Some chose to go make new lives.

And you-you chose to stand with us against the night.

Ikora Rey

SUBJ: PSYCHOMETER FIELD TESTS

- 1. The new version works. Love all the knobs and antenna; very analog. I took readings off a hatch control out here on Europa and Cowlick was able to retrieve badly distorted voices in some kind of distress. I don't know if it's doing exactly what you Warlocks want, but it's doing something all right. Cowlick says it's probably tapping into her scrutiny, if you permit that term in your ivory halls.
- 2. Now, I'm not much for gadgets, so I won't ask you how you rigged this thing. But I am one for gossip. Weren't we closing in on some kind of workable theory of exactly how our ghosts resurrect us? One which was, if I am not mistaken, based on research by the Future War Cult? Did any of that work survive Lakshmi?
- 3. You know they did try to recruit me once. The Cult. Over a game of poker. Fifty-two cards in a deck don't seem like many, this hard-ass Titan told me. But there are 80 658 175 170 943 878 571 660 636 856 403 766 975 289 505 440 883 277 824 000 000 000 000 different possible shuffles of 52 cards. You could walk back and forth across the observable universe faster than you could count all those possible shuffles. A lot faster. That's life, she said, and she had daisies impaled on the spikes of her skull. Life is endless permutation. So many possibilities. But the rules are what matter. Who cares how the deck shuffles if you don't know the rules of the game? We play this game over and over. Life and death. Light and Dark. But the only way you learn the rules, the only way you're ever gonna get one of those Truces you're named for, is if you come inside. Come into the Cult. Come on in and see. But I didn't.
- 4. Another thing she told me is that you can play poker with just three cards and two players. Jack, Queen, King. Ante one, max bet one more. High card wins unless one player folds. And in this game, there are many strategies available to the first player, but very few to the second, who acts to exploit the choice made by the first. Many possibilities against few. Sounds like you'd rather be the first player,

huh? But if both players play perfectly, that second player wins in the end. Mathematical inevitability. Ain't that something? But I said, your game's just a toy. It's just a contrivance. That's not life. Life isn't one player always exploiting and beating the other.

5. Anyway, back to testing. Might go back to Cocytus and aim this thing at the gate. See how wild it goes. If you never hear from us again, you know Truce and Cowlick finally found something too spooky.

MESSAGE ENDS

If the Light forgets while the Darkness remembers, then why does a Ghost's power of determination let it access latent memories imprinted in the dead? That's paradoxical. That should be a property of Darkness. How can such fundamentally opposed forces do the same thing?

Am I as shallow as those Guardians arguing over power levels? Trying to force a simple binary upon a complex spectrum...? The Drifter talks about "spectrums of Light"-powers his Ghost can access because of its modifications. Forcing the metaphor, I thought. Light is not light. It doesn't have frequencies or spectra. But if we are all constrained by our internalized ontology, by our tacit understanding of how the world works... maybe the circumstances of extreme survival compelled the Drifter to explore a new ontology. Maybe his Ghost achieved a new way to think about the Light.

A sacred void would not be ashamed to think that she knew less about the Light than a greasy near-cannibal with a mutilated Ghost.

I'm a bad sacred void.

VANCINCLOCK IKORA REY >> VANCINCTAN CMDR ZAVALA

If a game of go is meant to test two minds against each other, then I must play as my mind sees fit. I see fit to play 6x24because I am interested in what will happen next.

ZAVALA >> REY

This isn't a Basho haiku. Purposefully making a suboptimal move in order to make a game more "interesting" is a misunderstanding of the nature of a game. There is no reward for beautiful play in the rules of the game.

REY >> ZAVALA

Then why don't you just turn on a go engine and compute the winning play?

ZAVALA >> REY

I want to test my mind against yours. Not some quantum cheat.

REY >> ZAVALA

But I am a paracausal cheat, Zavala.

ZAVALA >> REY

So am I. Will you take the move back?

REY >> ZAVALA

Now, now, Zavala. There are no do-overs in war. I've made the move I want, and both of us will benefit from it. You may be stubborn enough to hold still for eight days, but the traditions of go are older and even more obstreperous. Play the game.

ZAVALA >> REY

Oh, I'll pinken your ears.

SUBJ: COUNTERCULTURAL INTELLIGENCE UPDATE REVIEW

- 1. This agent requests review of his past predictions regarding the Fallen versus the actual outcome of events.
- Regarding VIP #2029, Eramis the Shipstealer: "This agent... would urge the Vanguard and other interested leadership to aggressively prioritize her destruction." Outcome: VIP #2029 was not sanctioned in time to prevent her from gaining unprecedented new abilities sourced directly from the agent of the Collapse. Although ultimately neutralized, VIP #2029 succeeded in cohering Fallen power around Europa and in destroying irreplaceable Golden Age systems and information. Conclusion: failure to act led to disaster.
- 3. Regarding VIP #1121, Variks the Loyal: due to #1121's direct responsibility for the release and death of Prince Uldren Sov, the Vanguard allowed the Reef to drive policy regarding #1121. Outcome: he escaped the Reef, joined #2029 on Europa, and helped administer her House of Salvation before AGAIN switching sides to assist the Vanguard in exchange for the safety of itinerant Fallen. Conclusion: Variks the Loyal will turncoat whenever it is advantageous and therefore cannot be trusted.
- 4. Regarding VIP #3987, Mithrax, self-styled "Kell of Light": this agent urged skepticism regarding reports of #3987's cooperation with Guardians. Those reports have since been confirmed. Outcome: VIP #3987 was welcomed into the City with a colony of itinerant Fallen, leading to civil unrest. This ugly episode reinforces the volatility of Human-Fallen relations. To quote past report 692-FALLEN-DUS, "one or two sympathetic outliers cannot be relied upon to erase the wrongs of past centuries, nor should their good-faith efforts to correct the sins of their forebears be taken as sufficient symbolic reparation." Note that reliable intelligence places VIP #0013, the warlord guilty of the sack of London's survivor populations, within this Fallen colony. This agent strongly urges extradition of #0013 for

trial. The magnitude of #0013's crimes cannot be lessened by time or personal transformation.

5. It is the strongly held opinion of this agent that the Vanguard has, in fact, "pulled its punches" since 692-FALLEN-DUS was filed. This allowed the Fallen to rally and begin another cycle of political reunion, violence, and disintegration. While there is grace in helping some Fallen, it does neither side any good to force cohabitants to compete for desperately limited resources and security. End the experiment. Induce the so-called House of Light to recover interstellar capability and seek their own destiny among the stars. This is a better hope for the future of both the Fallen and humanity than anything to be found within the City's walls.

They certainly don't give a damn for their own long-term viability—they're too stupid to think that far in advance.

So keep that in mind when it comes to assessing the safety of Stasis. After all it is a power we use to explode each other like rotten balloons.

And keep in mind also that a virus isn't evil. It just wants to exist. If there really is a distinction between Stasis-as-a-power and the voice in those ships, if one can be separated from the other, then maybe Stasis isn't intrinsically corrupting. Or maybe it is corrupting but only when it's tied to the voice behind it. Maybe we can wrest it free. Who knows? Not me.

Truce out.

MESSAGE ENDS

The lingering trauma of centuries. Ransom cannot get out of its shadow. Part of me cannot either.

There was once a problem in philosophy called "the explanatory gap." Imagine a gray-scale person raised in a black-and-white room. They are taught a comprehensive scientific explanation of color, including the physics of the eye and the biology of the brain. They read lengthy and evocative descriptions of color. They taste foods and smell scents that are often associated with particular colors. They are allowed to do everything related to color except to see a color.

One day, they are allowed out of the room and into the world. They see color for the first time. They experience a thing they have never experienced before.

The explanatory gap is the difference between what they learn inside the room and what they see outside. The gap between knowing everything about color and actually seeing a color. In this gap lives the idea of "qualia," the first-person experiences of the mind. You cannot describe or communicate qualia; you can only have them.

Is there an explanatory gap between knowing the history of Eliksni violence against humanity and living through it? Is there a gap between experiencing full-sensorium captures of that night and actually being there, in London, when the Devils finally broke the wall?

There must be. Qualia of pain and hate.

Only-

We solved the explanatory gap. Golden Age philosophers correctly identified the difference between the education of color and the experience of color. Experience occurs in the brain. Qualia, no matter how ineffable, are the result of physical processes. If the Gray Room Dweller had never experienced Red, it was because the neural correlates of the qualia Red had never been activated. Give the Gray Room Dweller a dose of hallucinogens, or an EMP to the right part of the brain, and they could experience all the colors imaginable without ever leaving their black-and-white room. The problem was never one of incommunicable experience, but one of insufficiently rich communication. We cannot write a book that evokes the experience of Red, but we can design a brain stimulus which makes a Human see red. The same goes for ancient thought experiments like Nagel's bat, which was solved by the epistemology bridge–although there are arguments the bridge just negotiates a compatible illusion–

I wonder if Ransom would still push for the "complete extirpation of invasive Fallen from the system" if he lost his memory of all those centuries, if he had to relearn it all from books. What if he were like a newborn Guardian again? Richly educated on our bleak history with the Elisksni, but not scarred by the experience of it?

Would he still arrive at the same unshakeable conviction that they all have to go?

Or would he be missing some irreducible qualia, some pearl grown around the grit of first-person suffering?

O, Traveler. I see now!

It all comes together. The erratic Ghosts. Ransom's grudge. The psychometer and Glykon Volatus and Nazino Island and the go game with Zavala and the sacred void and the silence of the Light and even the Drifter's Ghost.

It all means one thing. Darkness remembers. Light forgets.

It is about memory. Memory and forgiveness.

The prisoner's dilemma. A relic of the days of the high carceral system.

Two criminals are interrogated in separate cells. Who committed the crime? Tell us. Tell us the other one did it, and we'll let you go.

If both stay silent, both will get a year in jail. (The common good.)

If one blames the other, the rat goes free and the other gets 10 years. (One winner. One loser.)

If both rat out the other, both get five years in jail. (Common failure.)

The only choice an individual prisoner has is to stay silent (cooperate) or blame the other (defect). Together, their two choices make four outcomes.

Naïve rationality, which was the assumption in the first days of behavior theory, always leads to the common failure. Always. Both prisoners blame each other and go to jail for five years. No other outcome is possible. This is why:

A prisoner who stays silent (cooperates) suffers a year in jail if the other cooperates; 10 years in jail if the other turns. Possible outcomes: one year or 10 years.

A prisoner who turns on the other (defects) goes free if the other cooperates, or gets five years in jail if the other also turns. Possible outcomes: zero years or five years.

No matter what one prisoner does, the other benefits from turning on their ally. So both players will rationally defect, and rationally doom each other to five years in prison. Even though each might have escaped with just one year if they cooperated. By acting to seek the selfish best, they deny themselves the global best. Of course, a child can see the failures of this model. What about honor among thieves? What about the punishments criminals inflict on the tattletale? What about "decent people don't turn on each other"? Later developments in behavior theory call these influences "externalities" because they are not described by the rules of the game alone.

Now we turn to evolution. The rule that made us all. Evolution is not a simple zero-sum fight to the death. It has room for cooperation and coexistence. But it ultimately rewards systems that perpetuate their own survival. It is a local optimizer, like the players in the prisoner's dilemma. It only cares about who is ahead now. It is impossible for evolution to reward those who sacrifice themselves for others—evolution can only reward those who benefit from the sacrifice. And the winners don't carry the self-sacrifice gene.

The only altruism that evolves under these rules is the tit-for-tat exchange: I will help you if you help me. (Witness the gopher, infected by an alarm gene, shouting warnings about a predator, dooming itself to be eaten so that relatives who share the alarm gene can scurry to safety. Or the worker ant, which cannot reproduce except by helping its queen survive. Both ultimately act in their species' self-interest.)

It is possible for evolution to reward altruism given to other altruists. If there is a reliable way to identify other altruists, communities of altruists can flourish. But then comes the specter of the free rider. The cheat that can fake the "I am an altruist" signal long enough to get the reward.

(How much of your life have you spent wondering whether that kind, compassionate person is truly good? Or if they just do it to get ahead?)

Some thinkers believe that all of morality is a race between the true altruist and the counterfeit. The true altruist finds new tests for true altruism. The counterfeit invents new cheats. This is called a Red Queen's Race, for reasons I don't know. In a Red Queen's Race, racers must compete just to stay in the same place. Not to gain advantage, but simply to hold on to what they have in the face of competitors. Parasites are a perfect example. Living organisms must constantly evolve new defenses; parasites and cancers constantly evolve to defeat them. The body is a treasure trove of energy to steal, and the body's systems for preventing parasites and cancer are a form of internal morality. (The Red Queen's Race may even be why sex evolved. Constantly remixing genes is a good way to change up defenses. Of course, the Red Queen's Race is not the only theory that explains the need to constantly adapt—but never mind!) In evolution, the only good is self-interested good.

But we are not restricted by evolution.

We have minds. We have memories and imaginations and culture. We can imagine the consequences of our actions and select those which suit a world we want to live in. We can do this without waiting for generations of genetic change. We can enshrine the common good as a norm. We can say, "Everyone who cooperates is good, and everyone who defects is evil, and evil defectors will be harshly punished." We can say, "By cooperating for the greatest common good, we will all be elevated, so let's do that."

Only-

What do we do with our cooperative good when we meet someone who defects?

A neighboring village steals our crops. A friend has us paint his roof, but he is always too busy to come paint ours. A lover shares all our secrets with a gossip. A colleague takes all the credit for a shared project.

Do we hold to our ethics and keep on cooperating? Tending our crops? Painting his roof? Telling our secrets? Watch others get a promotion? Are we, in short, going to be a sucker?

Most people would agree we must retaliate. We must answer defection with defection.

So the prisoner's dilemma is not just restricted to evolution. Even the cognitive must play it. It is a good model of any situation where what is good for the individual is not the same as what is good for the group.

Imagine another situation:

If two villages tend their own crops, both will produce 900 bushels of grain.

If one village attacks the other, it could end up with 1,200 bushels of grain, and the other village will get none. (Whatever isn't stolen in the attack is burned.)

If both villages go to war against each other, each will produce 500 bushels of grain, since labor is devoted to fighting.

Both villages benefit from going to war regardless of whether the other chooses war or peace. Rationally, both must attack. But these villagers are neighbors. They will not make this decision once; they will make it every year.

This is called an iterated prisoner's dilemma: a game in which you know you must play with the same person over and over again. You know they will remember how you treat them.

This is the value of remembering. Using knowledge of your opponent's past behavior to influence future choices.

The villages agree to cooperate. For five years they are at peace. They maximize their total grain production as a pair, rather than seeking to have more grain than their rival.

Then, on the sixth year, a misunderstood letter or a change in leadership or the influence of an outside power makes one village attack. It has defected.

How do we reply?

That depends on the strategy we are using.

There are many strategies. Examples:

Unconditional cooperation. Cooperate no matter what the other village does. This strategy achieves the greatest total grain output, but only if it is playing against another cooperative village.

Berserker. Always attack, no matter what the other village does. It always beats the unconditional cooperator. Optimal strategy in a one-off game.

Random. Flip a coin to decide whether to attack.

Tit for tat. Do whatever the other village did last.

Punitive tit for tat. Whenever the other village attacks, attack the next two years in a row.

Learning tit for tat. Each time the other village attacks, increase the number of years you attack in response. This strategy must have memory; it needs to remember backwards more than one year.

Grim trigger. Cooperate until the other village attacks, then always attack.

Probe. Begin with an attack, then cooperate for two years. Base your further decisions on how the other village reacts. Pavlov. Cooperate if both villages made the same move last year. Attack if you made different moves.

Equalizer. Choose to cooperate or attack so that both villages have equal expected grain yield in the long run.

Extorter. Attack in such a way that your village's grain yield is always higher than your opponent's, even if this means total grain yield by both villages collapses.

Then there are advanced strategies, colluders that use coded sequences of cooperation and attacks to recognize each other and form hierarchies. Never mind those for now.

The most Human strategy is some variant of tit for tat: tend to cooperate, but do unto others as they do to you. Start nothing. But if you are hit, hit back hard. Hit back harder each time.

So you punish the other village for attacking. You counterattack. Unwilling to walk away from a war they've already spent blood on, the other village attacks for the next two years in a row. A cycle of war begins.

If we take "A" to mean cooperating, and "X" to mean attacking (defecting), and both villages are playing tit for tat, the two villages' behavior over the years will look like this:

They are now trapped in an infinite war.

Let's say that the villages' yearly grain production plunges from 1,800 bushels to 1,200 bushels in the first year of war, to 1,000 bushels each year afterwards. Yet neither side can break out of the cycle of retaliation.

The only way out is a moment of grace. Cooperation, spontaneously and for no reason, after 20 years of war. Forgiveness without cause. Unilateral mercy. Declaring peace.

This is the value of forgetting. Forget they hurt you. Forget what's rational. Do what's right.

Now, if the other village takes advantage of your disarmament, you will look like a damn fool. But if the other side stops fighting too, both of you can go back to the maximum global good: 1,800 bushels of wholesome grain a year.

Imagine that those bushels of grain are peoples' lives, and you understand the urgency of grace. You feel the need to forget the past.

Ransom's grievance with the Eliksni is a rational one, but it could doom us to another cycle of conflict.

The psychometer lets us glimpse ancient memory, not because the Light cannot remember, but because it chooses to relieve us of memory's grief.

The Glykon Volatus is infested with the residue of evil's touch because the Darkness is there, and the Darkness remembers the suffering aboard. Haunted, like the Nightmares on the Moon.

You win a game of go by maximizing your own personal score. But I played for a joint good, a victory not described by go's rules. Externality drove me to cooperate when I should've competed. One move's grace for Zavala, so both of us could play a better game.

And the Drifter's poor Ghost. After centuries hoping he would become a true Guardian, after centuries of disappointment, it still sacrificed its own form to grant him another chance.

This is why the Light wipes away memory. It strikes away the pain of the past to break the pattern. To create the possibility of grace.

This is why the Dark remembers. We need to remember how we were hurt, so we can avoid being hurt again.

(I remember a Golden Age legend—a disease of the amygdala called SM syndrome. It created people without any fear. They could laugh at a man with a knife. They would try to befriend him, they would go back to the place they were attacked and look for him again. Or pick up venomous snakes out of curiosity. They had a heroic resilience to trauma. But they constantly made the same mistakes. They could not learn to avoid danger, or to act urgently to protect themselves. Wonderful neighbors, truly people of the Light. But without fear or even the memory of fear, they could not survive.) This is the message I need! Not some sophisticated exegesis of paracausal semiotics—this one thought. Grace and memory. The Light offers escape from endless cyclic violence. The Darkness remembers the hurt that was done to us so that we cannot be exploited by those who would hurt us again.

We need the Darkness to avoid being preyed upon by those who see Light as an opportunity to feed.

But we need the Light too. The Light is the hope of grace through the grace of hope. The possibility to be more than what reason allows us. Because by acting unreasonably, we escape reasonable limits.

This is how we reconcile Light and Dark. This is the message we must teach.

//

Dear Sen-Aret,

There is no such thing as a "low-power Guardian." There may be armor you can't actuate or weapons mechanisms you can't understand. There may be techniques you have yet to master and missions you dare not attempt. But the possibility of your Light is unlimited. I mean this very seriously. A novice go player has the exact same power to place stones as a 9-dan master. The only difference between them lies in their knowledge and ability to choose. This is my firmly held and personal truth: the only difference in "power" between you and me lies in what we have learned and practiced

Not many Guardians are brave enough to ask such questions. Maybe your age has done well by you. Your society might have been too small for leaders to rule you from far-off palaces. Maybe you were resurrected without any fear of bringing your concerns before your tribe. (I often wonder how many of the attitudes of our past lives we bring into our rebirth. But investigating this would fall into the taboo against pursuing past lives. And no Guardian would want to be told they retained ancient prejudices, even if the structures of power that once gave those prejudices their venom are long gone.)

This brings me to your treatment at the hands of other Guardians. Their curiosity about the enemy is natural, and we cannot suppress the enemy's arguments without perversely amplifying them. Even I have begun to believe that our enemy may not be the Darkness itself, but a power or principality that commands and rules in Darkness.

But you are right. Guardians do mistake the Traveler's silence for weakness. They do see the constant necessity of violence, and the rewards they reap through that violence, as a reason to disdain peace and virtue as dull. Guardians want action and meaning and loot. All Guardians have experienced devotion, sacrifice, and death: this separates us from the rest of humankind. But sometimes, we let this separation divide us from the ordinary good of ordinary people.

We forget what it means to live a peaceful life surrounded by the friends we choose. Because we can endure death and violence, we forget how horrible and final violence can be. The nature of your death, Sen-Aret, means you cannot forget that. You know that you were killed by other people, not by a great darkness from the stars.

The question of how to live well in a universe of indifference, cruelty, and deprivation is the ONLY question. The Light does not offer us an afterlife or an otherworldly paradise. It does not give us throne worlds or pocket universes. The Light tells us that paradise is something we have to make here.

The Darkness cautions us against mercy to our enemies. Are we fools for trying to be good, when our very survival is at stake? Maybe. But the fact that our morals sometimes make it more difficult to survive is proof they are truly good! There is not much commendable about doing a right thing when it is also the tactically correct thing. When the good thing is also the hard thing: that is when the righteous are separated from the lost.

Sen-Aret, let me tell you something I have told no one else. I know that in the end, the Darkness can win. Do you understand what I mean? By its very nature, the Darkness is the judge of what will exist and what will pass away. In the end, there may be only Darkness because all that exists will remain only by its consent. But the Light grants us freedom from existence alone as the measurement of our worth. Oh, evolution has made us afraid of nonexistence, certainly; and it is good to fear and to avoid nonexistence because without existence, we cannot experience joy. The idea that death is an escape from suffering is a trap. Death is not an escape from anything. It is a wall, a cessation, meaningless. I do not ask anyone to embrace death. There is no possibility in death; life is our only chance to live.

Darkness helps us avoid death. It helps us to go on existing. It is necessary. We must remember what hurt us so that we will not be hurt again.

But Darkness alone points to an eternal existence of mere survival-to a universe where the only judge of a good existence is the ability to go on existing. It is the grace of the Light that grants us the dignity to choose a finite life of compassion and common good over an eternity of competitive subsistence.

The Darkness, or the being that speaks for it, claims that the extermination of all those who choose the Light is inevitable; that the universe will be inherited by morally impoverished advantage-seekers like the Vex and Hive. Logically, I cannot see an escape-so long as I accept the Darkness's logic.

But this is exactly why we fight, Sen-Aret. Not to preserve our own lives, but to preserve the possibility that we represent. When all choices are measured by their fitness pay off-by what they do to benefit the continued existence of the chooser-the Darkness has won completely.

The most important thing we can do, the most formidable blow we can strike against our true enemy, is to offer irrational grace: to choose unreasonable hope and unreasoning compassion even if it goes against calculated advantage.

It is only by disregarding the logic of mere survival that we can create a possibility of existence outside that logic.

So. If they do not offer you a spot at the campfire. If they call you naïve. If they dislike your complaints about the casual violence of the casually violent. If they quote from the Unveiling texts, tell you how the Gardener lost because it always stopped to offer peace, and the Winnower always struck-then ask who they would rather sit by at the fire: Gardener or Winnower.

Then ask them if they would like to live in a universe where no one ever sits beside anyone else at the fire.

Never forget that even in the miserable logic of the prisoner's dilemma, it is the cooperators who create the best world. Two cooperators will score higher, together, than two defectors ever could. A world of cooperators would defeat a world of defectors if the defectors could only be kept away from the cooperators' bounty.

Never forget that what we achieve together, what we accomplish by leavening Darkness with Light and Light with Darkness, tempering grace with memory and memory with grace, is quite literally more than the Darkness alone can imagine. The Hive may have extinguished entire galaxies of allied life, but before the Hive came, those ecumenes accomplished titanic works. What do the Hive have to show for all their conquest? Miserable warrens and rotting moons. Even their libraries are just catalogs of death. Even their queens want a way out. Never give up hope. If it is possible to live well, then it is worthwhile to try. If it is possible to exist by the rules of the Light, then the Darkness is forever defeated. It cannot dominate all things for all time.

Above all else, when you are in the deepest pits of despair, I offer you this: I believe that there is no reason the Traveler chose to make its stand here at Earth, instead of at Riis or any world before. I do not believe in any special quality it detected in humanity. Nor in any great tactical advantage the Traveler gained by vouchsafing its power to us. It did not release its Ghosts as a move in a scheme of incomprehensible complexity, or because we fit the criteria of an ancient plan. It did not compute the set of contingencies which could permit its own survival, a one-in-a-trillion pathway through a thicket of certain death.

I believe the Traveler simply could not bear to abandon one more infant possibility.

So it chose an act of unreasonable grace.

Clarity in action,

Ikora Rey

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SUBJ: PERSONAL REPLY (2)

Thank you for writing back. Determination is a good word for it.

You have a lot on your mind, and I like to hear it. I won't tell you what to do, but I will tell you, honestly, that you can't stop them from using Stasis. It's here to stay. People want change; they want possibility. They'll pick up what they can use.

Which leads me to my next big fraught question.

You once told me that you consider VIP #2014 to be a real friend. Someone you trust implicitly. But #2014 was forced to use Stasis during the events on Europa. I know #2014 is just one of a number of powerful Guardians from the Cosmodrome cohort, but there's no question they're an influence on their peers. I hear gossip that #2014's Ghost is overwhelmed sometimes by the need to support a Guardian who's taken such huge risks. He tends to minimize his own needs, rather than push back. He's barely even confided in other Ghosts about his own repeated possession by the intruders. Silence about such an invasive trauma? While he's working with a Guardian who is constantly forced into close contact with the traumatizer? That worries me.

How does that feel? Having a trusted friend set the precedent for Guardians using the Darkness to save the day?

And I know exactly what we are. We're best frenemies with a history of intense mutual hurt and messy reconciliation, leaving a deep tenderness as well as an almost impenetrable knot of scars. What could be simpler?

With love,

Chalco

MESSAGE ENDS

//

MESSAGE REPLY FROM: IKO-006 TO: CHA-319

One stone can change the whole landscape of the board.

Of course, I worry which side played that stone. But Guardians make their own fate.

MESSAGE ENDS

CONSFACDORB JALAAL >> VANCINCLOCK IKORA REY

All right, I give up. We may have quit the Tower, but I still need your help.

For three years, we've had our best analysts working on the documents slipped to a Guardian via the queen's court—the socalled "Truth to Power" manuscripts. All we've got to show for it are burnt fingers and bad arguments.

I appeal to the Hidden for help.

Here's what I believe we can know with confidence:

• The author of all these documents is Savathûn.

• The documents are an extension of Savathûn's strategy in the Dreaming City. They are cyclic, deceptive, and fond of the "you did exactly as I planned" mantra.

• There is no encrypted content. Any solvable encryption scheme would be discovered by the mass scrutiny of Ghosts. Therefore, encrypted information is little different from plaintext, so there is no purpose to adding solvably encrypted information. Any unsolvable encryption scheme would remain unsolved and is thus equally purposeless. Therefore, the true message of the documents can be obtained simply by reading the text.

• The true message concerns (a) the importance of singularities in Savathûn's personal cosmology and/or (b) instructions on how to mantle Savathûn.

We've had ships sweeping the edge of the system for orbiting singularities. But we don't know the mass of the Distributary, or Exodus Green's outward vector at the time the Distributary formed. We don't even know if the Distributary singularity inherited the Exodus Green's vector—leaving it on an escape trajectory into interstellar space—or if it emerged at rest with respect to the Sun—meaning, it would fall directly towards the Sun and pass through it, over and over. Add the gravitational influence of the planets, and it could be anywhere by now. We're looking for a microscopic point in a volume larger than the solar system. We thought about using fleets of sensor mites to search for a gravitational influence— but then we realized the Nine are in competition with us to find the singularity, and they would certainly use their phantom mass to interfere. Unless it's been in front of us all along. Right in the sky of the Dreaming City. Could they have found some way to harness the singularity? To park it where they can guard it...? If so, we must obtain this capability.

Have you found anything we missed?

REY >> JALAAL

This isn't a Basho haiku. Purposefully making a suboptimal move in order to make a game more "interesting" is a misunderstanding of the nature of a game. There is no reward for beautiful play in the rules of the game

JALAAL >> REY

The Truth to Power documents are Dûl Incaru's plea for her mother's love. She wrote a biography of her mother, an attempt at understanding, in the hopes that Savathûn would also understand her. Imagine how lonely it would be to live in the High Coven, where everything, all communication, is deception. Imagine if your mother had never once told you the truth about anything.

REY >> JALAAL

This is sarcasm. I'm asking you in good faith for your help.

CONSFACDORB JALAAL >> VANCINCLOCK IKORA REY

REY >> JALAAL

And I'm trying in good faith to lead you to the truth. The Truth to Power manuscripts are pluripotent. There are many ways to read them.

JALAAL >> REY

That sounds like an excuse for a failure to discover the true meaning.

REY >> JALAAL

You have it all backwards. You're trying to shuffle the puzzle pieces around until you get an image. You need to know the image before you can arrange the pieces.

Think about logic. Here, we define logic as "the governing principle by which a power defines its own existence." For example, the Hive practice sword logic.

What is the governing logic of Truth to Power?

JALAAL >> REY

Being nonsense? Being convoluted? Being misunderstood?

REY >> JALAAL

Very well, then. Study Truth to Power with an eye for how it means to be misunderstood.

JALAAL >> REY

Oh, ascended master, tell me, how are we to obtain actionable intelligence from the way the documents are meant to be misunderstood?

REY >> JALAAL

Your centuries of defeatism have left you with a bad case of learned helplessness.

The documents are full of possible misunderstandings. One misunderstanding is that they are pointless, just complexity for the sake of confusion. The threads about imbaru and powerfrom-confusion point this way. This is the stance that most amateur Guardian analysts seem to have settled on: it's all a lot of nothing, and there's nothing to understand in it.

This is plainly foolish. The text is full of useful intelligence, including an excellent explanation of the Anthem Anatheme and an apparently accurate description of how Riven preyed on Guardians to create the curse.

Another easy misunderstanding is that these pages are concerned with a "real humdinger of a scheme," a manipulation of Hive tribute that requires Savathûn's entry into the Distributary. This could be true; the scheme could very well exist. But if so, why would Savathûn advise us of such a scheme?

Another easy misunderstanding is that these are love letters.

Think before you laugh! The letters carefully establish a sense of shared physicality. The Eris voice asks you to center yourself in your breath and your body; it asks you to imagine her as a judoka, a swimmer, a football player. This is subtle work, Arach! It is the work of an alien that has taken on many forms and learned how to win trust in all of them.

The letters plead with us for compassion. Not-Eris describes herself as shy, pitiful, forlorn, afraid to share her true feelings for us. Not-Medusa pleads for help as she disintegrates. At the center, we find the clearest profession of love: "Thank you, sweet friend. You are a gift and a delight. You are more dear than my mother, for you have given birth to me a thousand times."

Superficially, this is a reference to the concept of imbaru. Savathûn's plan to predicate her existence upon the misunderstanding of others. We "give birth" to her by feeding her power.

But she also says, "Here at the center, I lie to you the truth. You have everything you need to know it, but I will give you a clue, as the duelist gives warning before she draws. The answer you seek to the Dreaming City is simple, not complex."

So let's not misunderstand this statement about giving birth to her.

Let's take this at face value.

We have given birth to Savathûn. She genuinely loves us for it.

CONSFACDORB JALAAL >> VANCINCLOCK IKORA REY

JALAAL >> REY

Are you implying that we created Savathûn by imagining her? That her presence in the Books of Sorrow, and all the things she's done throughout more than a billion years of time, were caused by us reading the Truth to Power manuscript?

If this is what the Light does to a mind, I'm glad I was never chosen.

REY >> JALAAL

No, I don't think that's the right answer. Her spawning on Fundament was only one of her births. She says it herself. "You have given birth to me a thousand times."

Look at Truth to Power simply. What are the topics it centers upon?

Black holes. Vex simulations. Ahamkara. Manipulations of Hive tribute. So our answer must involve all four of those.

Ahamkara willingly seek destruction in order to be taken as trinkets by Guardians. You must know this. You've tried to exploit those trinkets as thoroughly as the other factions. But do you understand the metaphysics behind their desire?

I do. I once wished to know more about Ahamkara. Wish granted.

Ahamkara believe that by transforming themselves, by metamorphosing from monsters into treasures, they become more real. More important ontologically. It is the gap between reality as is and reality as desired that they feed on, Arach. And Guardians are the richest, finest source of reality as desired that they have ever met.

What have Ahamkara artifacts ever done but instill delusions of grandeur? A solipsistic madness: "I am more real than what surrounds me"?

Why is this?

The skulls of dire Ahamkara speak to me. They know I want to know the truth, and so they whisper to me of a path they climb. They call it the Anathematic Arc. They are going somewhere. Somewhere they consider more real. Guardians are part of how they get there.

What if Savathûn wants to go there too?

JALAAL >> REY

...if you say there is somewhere more real than here, you are implying that we are not real.

This is the simulation argument. That we are ghosts in some other world's machine. Then there are no real stakes in our war for survival because even if we are extinguished, we were never more than phantoms.

I refuse to accept this.

REY >> JALAAL

Oh, don't be so timid! An Arach of Dead Orbit driven to despair by the thought of other universes, when you should know the lore of Hubble volumes and Tegmark hierarchies by heart!

Our existence is real to us, vitally real, because it is ours. It's the only one we have. Even if we are simulations or imaginations, we have an inner life as rich as any "real" living thing, and so, we are equally real! When we die, we are dead, dead, dead.

We believe there are many timelines; does that lead us to discount the reality of our own? Do we stop caring about ourselves, Ikora Rey and Arach Jalaal, because in another timeline, we are already dead? Do I punish you because in another timeline, you murdered me? What matters to us... is us.

But it is possible for realities to be concatenated. The Awoken Distributary is an infinite universe, but it exists within our universe.

The Truth to Power documents constantly return to the question of black hole singularities, to their value as computers and as secret keepers. We are told our true purpose as Guardians is to hurl all we value into a black hole. We are told that Savathûn wants to enter the Distributary and slaughter those within to gain power.

The Pathria-Good black hole cosmogenesis principle of Golden Age physics confirms that the interior of a black hole is a new universe: all black holes produce their own interior cosmos. All cosmos, including our own, are probably the interior of a black hole in a parent universe. The Truth to Power documents want it understood that Savathûn wishes to enter the Distributary in order to gain power in our parent universe.

The suggestion here is that it is possible for actions in a concatenated universe to grant power in the parent universe.

JALAAL >> REY

What does this have to do with love letters to the Human form? With confusion for the sake of confusion? You make no sense.

REY >> JALAAL

Savathûn pretends to have a soft Human body. She apologizes and empathizes. She asks for pity, she regrets emotional vulnerability, she is even funny. She makes a game for us to play.

These are attempts to enter the mind of a Human reader.

Wherever she wants to go, it is a place with Human minds. She needs to enter those minds to reach her destination.

JALAAL >> REY

Are you actually suggesting we are concatenated within the mind of a reader?

CONSFACDORB JALAAL >> VANCINCLOCK IKORA REY

REY >> JALAAL

Wouldn't that be something? No. The answer here is simple, not complex, certainly not a twist from early postmodern writing.

We surmise that what Savathûn wants in the Dreaming City must have to do with Ahamkara, Vex simulations, black holes, her daughter Dûl Incaru, and the manipulation of Hive tribute.

How can we relate these?

At first, we believed Savathûn wanted to use Ahamkara wishes to protect her daughter Dûl Incaru, while Dûl Incaru tried to find a way for Savathûn to enter the Distributary black hole in order to manipulate Hive tribute.

What if this is a misunderstanding?

Why would the Dreaming City tell Savathûn how to enter the Distributary? The Awoken have never tried to return to their birthplace. They believe their exodus was irreversible.

But what have the Awoken done instead?

Passed from the Distributary and into our world.

That knowledge IS in the Dreaming City. In the records of the Awoken Hulls that carried Mara's people on their exodus.

What Savathûn wants in the Dreaming City is exactly that. Not the way into a child universe, but a way out into a parent. A parent where there are Human minds waiting to receive her, formless as imbaru, as the mist.

JALAAL >> REY

How is anyone supposed to arrive at this by studying the Truth to Power text?

REY >> JALAAL

Very easily. This is why I believe I'm right. This is the analogy our Guardian analysts failed to grasp. Look at the structure of the text.

At first, Eris is real. Then we learn Eris's voice is a deception by Medusa. Then we learn Medusa is nested inside Quria. Then we learn Quria is a fiction of Dûl Incaru. And at the center, Savathûn reveals herself to be the parent of it all.

We are headed inward, as if moving from parent to child universe.

Then we proceed in reverse. Savathûn is revealed to be a fiction of Dûl Incaru. Dûl Incaru a simulation by Quria, and so on.

So in the end, Truth to Power moves outwards.

Just as Savathûn plans to move. In from our universe and out to the Distributary—

Or out from our universe to its parent.

JALAAL >> REY

Oh. I see! A literary structure like that is called a chiasmus, and chiasmus means "crossing point"! Like a wormhole or a portal! It was hidden in plain sight.

But then we must act urgently to stop this! Savathûn cannot be allowed to depart our universe into some reality superordinate to ours—

But now you'll tell me: so what if she does? What can she do to us out there?

REY >> JALAAL

It's all beside the point anyway. She may have already accomplished what she wanted. Some damn fool Guardian carried out her instructions on a dare. I don't know why she wanted a powerful Guardian to destroy her daughter in the ruins of Mara's throne. But she wanted it to happen. And I'm guessing the effects weren't felt here.

I think she got a glimpse into a world above our own. Maybe even a kind of influence.

Of course, Savathûn is still with us. She walked among us as Osiris; she tricked us into removing her worm; she hasn't vanished into some higher reality. I do not think she built a wormhole into another universe and walked through it although her intrigues with the Nine have focused on creating singularities from dark matter.

She keeps a lot of irons in the fire, our Witch Queen.

I think, rather, that she sent instructions on how to mantle

her. I think the whole Truth to Power manuscript is an ova, a manual on how to behave like her, how to describe her through action and thought so completely that you become her and thus give birth to her

It's done in the Books of Sorrow, to recall her from true death. It might be done again.

So a part of her is out of the jar. Slithering into that other world.

Let's hope no one there has given birth to her yet.

JALAAL >> REY

Maybe you're the one who has it all backwards.

The Light is noncomputable. It can't be simulated in conventional physics. That proves that any universe with the Light cannot be a simulation. Our universe can contain simulations, but it cannot be one.

Maybe this other world Savathûn's touched is subordinate to ours after all. Maybe they are the ones who exist in our minds. A dream of a purely material world, adrift in the true cosmos of Light and Dark.

Poor frail dreams. The things she'd do to them...