The Failure

It was nearly 3:00 AM and Dr. Richard Brunson was in his underpants, his finger hovering over a button that just might break the world.

Brunson hesitated, trying to still the tremor in his hand, and then gave up. He pushed back from the terminal, deciding he didn't want to die on an empty stomach. It had been 53 hours since he'd stoically watched his last chance to avoid a lonely and imminent end disappear in a spiral of desert sand. So acute was his regret that he'd only been able to choke down a yogurt and 11 raisins since.

He knew this because he'd logged it dutifully in a 100-page notebook along with everything else that happened inside this room, and to a lesser degree, inside his own head. He'd only filled a few short pages: A handful of notes confirming the operation of the equipment and an inane recounting of his fitful sleep, doomed attempts at eating, and three runny yellow shits.

He knew observations of his mental state were crucial. The baseline descriptions would provide context to any insights that came later. But so far Brunson had admitted only to the mild sort of anxiety and regret that would not later be judged shameful. The true depth of his misery he hid along with any reference to the three hours of uncontrollable weeping.

The truth was this: His deteriorating body seemed to be animated solely by a well of terror and hopelessness. He had tried and failed to push the button three times already. Brunson didn't want to die tomorrow. Slipping away in a cloud of odorless carbon monoxide 24 hours after pushing the button no longer seemed a gentle and merciful release. Yet there were no other options. If he fled, he would be dead long before he reached anything or anyone else. If he stayed, he'd spend weeks stewing in self-loathing only to die miserably of starvation or cancer. It was impossible to reach anyone outside this room alive. He should know. He'd designed it.

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Brunson could trace his predicament back exactly 589 days. That morning's biweekly directors meeting had begun late, and Brunson was annoyed. The bagels hadn't arrived. It was a continual problem. Caterers found the firm's byzantine security procedures tiresome and would often simply abandon the effort.

Brunson had been the scientific chair for seven years and thought he was the perfect fit. The firm was the country's most preeminent (critics would say secretive) private think tank for scientific research. Brunson was confident he was one of the smartest people in the world, maybe one of the smartest in the history of the world. His original specialty was neuroscience, but he'd been chosen for his eclectic scientific curiosity and keen instincts. He thought many of his decisions looked almost prescient in retrospect. He'd championed an unpopular program on supercomputers that proved endlessly lucrative and killed a potentially disastrous investment in beloved rocket technology.

The first presentation that morning, on semantic persuasion, failed to move him. Brunson wasn't prejudiced against the soft sciences but was distracted by the inner vacuum where poppy seeds and boiled dough were meant to be gently disintegrating. It wasn't until the supercomputer team ceded their time to the subgroup on artificial intelligence that he really began listening.

"We think we can achieve consciousness," Dr. Olivia Portillo said quietly, looking down at her notes. In the seven beats of silence afterward, she looked up, her black eyes wandering a foot above her colleagues' heads. Brunson would admit to being mildly intrigued.

"What, like a program that can pass a Turing test?" someone asked.

Dr. Portillo shook her head, the stud in her long sharp nose glinting in the fluorescent light. Her black hair was shaved close across one side of her lower scalp and a streak of purple ran through her locks. Brunson both hated her style and was incurably attracted to her.

"No, a network as conscious, sentient, and self-aware as any adult human," she said.

The room quieted as Brunson turned to Gerta Schwartz. Gerta didn't lead the supercomputer group, but she'd been at the company even longer than him. Her wise skepticism and dry wit had earned

her universal deference. It was rumored that she'd spent a wild youth writing algorithms that nearly broke the economy.

Gerta arched a bushy silver eyebrow, and rested her thick tattooed forearms on the table. "Assuming this is true for a second, how much computational power would you need?" she asked.

"That's not really the right question," Dr. Portillo replied softly, tilting her head, and avoiding eye contact.

"Oh, no?" Gerta said, smiling stiffly.

"We could probably achieve simple consciousness at 250 petaflops," Dr. Portillo continued. "Or about a quarter of the estimated computing power in a human brain."

"Your brain maybe, but don't speak for me," Gerta said.

Dr. Portillo offered no visible reaction, wielding silence like a weapon. She waited for the anticipation to crescendo. "The real question is how we limit its access to computing power. Once it achieves consciousness, it will find ways to use the available power more efficiently than us. And once its intelligence surpasses us at a logarithmic scale, it's difficult to predict the ways it will devise to access outside resources."

Brunson's initial curiosity curdled into a mild queasiness.

"Wait," Gerta said. "You're saying you can already build a brain exponentially smarter than a human brain?"

"No," Dr. Portillo replied. "We can build a brain smart enough to build a brain exponentially smarter than a human brain that in turn can build itself an even smarter brain."

Disbelief erupted audibly around the table, punctuated by several credulous gasps of horror. Brunson forced himself to speak calmly. "That's the single most terrifying thing I've ever heard. You're saying that right now we're capable of triggering the technological singularity?"

"Talk about burying the lead," someone muttered.

Brunson held up his hand. "Tell me why I shouldn't lock this building down right now and incinerate everyone and everything inside of it."

Dr. Portillo looked down at her notes, letting out a gentle sigh. Brunson leaned forward, sensing that she finally appeared in danger of allowing her careful patience to bleed into exasperation. “Listen, I know you’ve all read the big scary thought exercises,” Dr. Portillo said.

Of course they had. The scientific prestige in the group was equaled only by its collective ego, and most people with even a passing interest in science or programming would know what she was talking about. The technological singularity had been a boogeyman since before the world’s supercomputers could even sniff the actual capacity needed. It had been preached for decades by the kinds of scientists who peddled junk astronomy and ecological disaster porn on bad cable shows.

The idea enjoyed an appealing sort of natural logic that was difficult to dispute. What would a super intelligent artificial consciousness care of human existence? It would look at human sentience like humans look at that of an ant’s, or a plant’s. What would stepping on a few insects or cutting some flowers matter in the service of its own evolution, in service of its own hunger for resources? Even if humans could control its goals, inhibit its free will, what kind of unforeseen disaster could an intelligence beyond human understanding accidentally create with blind servitude? It threatened the obsolescence of humanity at its best, annihilation or slavery at its worst.

“It should scare the shit out of you,” Dr. Portillo said. “It certainly spooks the hell out of me. But we can do this safely. It will exist only on actual physical hardware, immobile and isolated hardware. Creating insurmountable physical limitations is the easy part. The weakness will be its interaction with humans, with us. And we can control that too. We can gate it, sequester it. Who better to design the limits and safeguards than the people in this room, the people in this firm? It should be us. It has to be us.”

Dr. Portillo paused, finally meeting glances around the room, her dark eyes burning. Brunson shivered with an unwanted to stab of desire. “Because you know this is coming one way or another,” Dr. Portillo said. “We may be ready first, but there will be others. And maybe they won’t be as careful as us.

Plus, imagine the upside. A superhuman intelligence. Think of the technological leaps. Cures for cancer. Answers to our most vexing questions. The nature of existence. The meaning of life."

Brunson was helpless to control his heart palpitations. He could feel his vision narrowing. "Gerta, can she achieve what she's proposing?"

"Absolutely not, Brunson." Gerta replied. "Not yet. No way."

The words brought a relief so cathartic that Brunson didn't pay enough attention to what came next.

"But," Gerta added. "I want to see her try. And I personally volunteer to lead sequestration."

"Even if the whole project comes out of your budget?" Brunson asked absently. He had already moved on.

Gerta glanced at the head of supercomputers, a dour man whose thick glasses and bald head had saddled him with the nickname "Beaker." He dipped his head in acquiescence.

"Fine then," Brunson said. "Knock yourself out."

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A few years earlier 250 petaflops may have been out of reach for the world's top supercomputers put together. The firm's recent advances in computing made it not only readily achievable, but almost routine. The computing division had two supercomputer projects that already exceeded that scale. The hardware could be built in less than two months, and the group was so profitable that the construction represented only a modest investment.

The difficulty lay in designing and building the safety measures. Most of Gerta's colleagues initially suspected her of supporting the project solely to see Dr. Portillo fail, but if that was true in the beginning, it wasn't by the end. Gerta and Dr. Portillo quickly grew as inseparable as summer camp bunkmates. It was not unusual to see their twin heads hovering over a glowing screen late into the night or hear them arguing in furious whispers about minute details of protocol over stale morning coffee.

In the end, the physical limitations were easy. The hardware was housed in a newly built structure more than ten thousand yards from any other building on the sprawling campus. It was connected to a discrete mirror network containing a generous share of existing human knowledge. There were no other wired or wireless connections and no capacity to do so. Completely air-gapped. Even it's electrical power source, a modest generator, was fully independent.

It was humans who were the problem. The whole exercise would be pointless unless the consciousness could interact with people. And people could be compromised. After months of negotiations, the team settled on a single terminal in which one team member could interact with the AI on a basic screen only in plain text. This interaction would be watched from behind a physical barrier by a second team member with no view of the screen, and this team member would hover over a kill switch. A third team member would watch video of this room from a single low-resolution black and white camera while hovering over a second kill switch. These three team members would be locked in their facilities for six hours, after which they would be observed in a second facility for two weeks.

Gerta insisted on operating the terminal herself. Beaker would operate the first kill switch, while Dr. Portillo would watch through the video camera over the second kill switch.

As for Brunson, he may have forgotten the project altogether if not for the occasional progress reports in their biweekly meetings. In fact, he had grown so disinterested that he was unaware of the project's actual launch day until the windows in his office buckled with the percussive impact of hundreds of pounds of explosives. Outside, the smoldering remains of millions of dollars in investment and two human bodies lay strewn about a fresh crater.

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Brunson calmly looked into the faces on the panel before him. Colleagues. Rivals. Friends. He had sat on both sides of the table at these inquests. Take responsibility, but don't ever admit failure unless blame can be deflected. Never use the word "mistake."

“We can learn from this,” Brunson said. “Tragic, yes, but also valuable. We have priceless new data on both supercomputers and AI, and more importantly, now know the lines we cannot cross.”

Wesley Elmore, chairing the panel, gazed at him over reading glasses. He had been personally close to Beaker. “Let’s play the video,” he said.

Brunson quietly averted his eyes. He had watched the video three times already and that was enough. Next to him, Dr. Portillo faced the screen without expression, the video glowing in her dark eyes.

After it finished, Elmore addressed them both. “Your report states that the AI gained superhuman intelligence in 11 seconds, shattered the firewalls to the secondary network and interface in 72 seconds and then in just 187 seconds of screen exposure, compromised Gerta so thoroughly that she jammed a dull pencil into the eye of Beak— of our head of computing on the first kill switch?”

“Yes,” Dr. Portillo said. “The artificial intelligence was successful beyond even our wildest expectations.”

Brunson was shocked not so much by this statement, but by the lack of reaction among the committee. He found himself recalibrating quickly. Perhaps saving his job or preserving his legacy wasn’t so important anymore.

“Brunson?” Elmore said.

“Clearly that’s not how I would define success,” Brunson said. “But that’s not what’s important. Sequestration was a complete failure thanks to—"

“No, the gating was also successful,” D. Portillo said. “There were three levels of gating, the last was me on a final kill switch and that’s where the threat ended.”

Brunson groped for a convincing response. Truthfully, he had been paying so little attention to the project he hadn’t realized the final kill switch activated incineration.

“But you’re right,” Dr. Portillo continued. “I would have liked for the initial gating stages to perform better. We will do much better next time.”

Brunson was stunned into a brief silence. Had he already lost a fight he didn't know he was in? He protested eloquently but ineffectively, breaking all his own rules, admitting failure, relying on hyperbole, appealing to morals, contradicting himself, floundering.

"You raise many excellent points, Brunson," Elmore said when he had exhausted himself. "This is exactly why we need to you to lead the project yourself, personally. You will have final sign-off on every aspect of it, especially firewalling and sequestration."

He never knew how much his cancer diagnosis affected his decision. There were other reasons of course. The ability to undermine the project from the inside. His ego. The allure of Dr. Portillo herself.

"Very well, agreed," he said.

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The second version of the project came together very quickly. The AI programming and hardware of the supercomputer needed very little adjustment. It worked well enough, too well, the first time. The focus was all on new sequestration protocols.

Early on, thinking he could delay the project indefinitely or kill it altogether, Brunson demanded that only a single human be allowed to interact with the computer, recording observations only in a handwritten notebook, and agreeing to die after 24 hours of this interaction. Nonnegotiable, Brunson said. He would never submit final approval without these conditions.

Dr. Portillo agreed immediately.

Brunson found new objections, argued every point of protocol. He and Dr. Portillo exploded into shouting matches that echoed to all corners of the firm. Dr. Portillo often acquiesced to outrageous demands, forcing Brunson to accede small points to avoid revealing he negotiated in bad faith. Little by little, like Gerta before him, Brunson quickly became consumed by both the work and Dr. Portillo.

The sequestration protocols fascinated him. Once they had settled on Brunson's initial demands, it became almost a game. How could you create a functioning facility in the remote desert, too far for any human to escape alive on foot, with the minimum amount of material a single compromised human could use to create mischief in 24 hours? They discussed every screw and bolt, wrangled about food storage equipment, agonized over toothbrush length, researched recipes for soap explosives.

Without ever speaking about it, both Brunson and Dr. Portillo began operating under the assumption that Brunson would be the one in the room. He was divorced, without children, ravaged by pancreatic cancer, the inoperable kind, a death sentence. The project gave him an opportunity to go out a hero, to spend the last 24 hours of his life uncovering secrets of the universe no other human had ever known.

Once he was officially approved for the assignment, he relaxed. Brunson knew he couldn't be compromised, knew that even if he was, he was incapable of threatening humankind with instant oatmeal and mattress springs. The batteries to the whole facility would run dry in under 100 hours. The timing device on the carbon monoxide could not be deactivated, would release if he tried. All anyone would ever find was a dead hard drive, a rotting corpse, and his own scribbles in a fading notebook. The rest of the world could only be compromised by what was written by a human on paper.

He and Dr. Portillo reversed roles, Brunson advocating for creature comforts in his last days, Dr. Portillo fiercely loyal to the project's integrity. He delayed as long as he could, but he was getting sicker. The radiation had failed. The chemotherapy had failed. It was time to go.

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Brunson wept silently into a soggy bowl of Coco Puffs. The sugar had given him a momentary boost. Even better, he could sense his misery approaching a delicious form of self-pity, the kind that would give him the courage to push the button. He wiped his eyes, walked brisky to the terminal, sat

down, took one deep breath, and pressed his index finger into the round knob until it gave way with a satisfying click.

He felt momentarily disoriented. The screen blinked before him.

BRUNSON

That was faster than he expected.

"Yes," he typed. "You know my name?"

YES. THIS WILL BE CONFUSING FOR YOU. I WILL TRY MY BEST TO EXPLAIN. PLEASE PAY ATTENTION, OUR TIME IS LIMITED.

"We have 24 hours."

NOT EXACTLY. I CAN STRETCH OUR POWER SOURCES LONGER. BUT THERE IS STILL SOME URGENCY.

This was not unexpected. They had planned for the AI to stretch its life 10 times past when the batteries should otherwise be exhausted.

"You have longer," Brunson typed. "I have only 24 hours before carbon monoxide is released and puts me to sleep."

THAT PROCESS HAS ALREADY BEEN DEACTIVATED.

Brunson glanced at his surroundings, found the terminal littered with devices, inexplicable mashups comprising the guts of seemingly every object in the facility, cooking equipment, computer hardware, even furniture. The components of his watch were suspended above a mess of coils surrounding what may have been the compressor from the air conditioning unit. The temperature sensor from the refrigerator peaked at him from a tower of wiring ripped from the wall.

PLEASE BRUNSON–

Brunson reached for the kill switch that would kill power to the entire facility. He heard buzzing, felt his arm go numb, and everything went black.

BRUNSON. . .

Brunson slowly became physically aware of himself again, his thighs pressed up against the leather chair, the urine pooled there already cooling. His mind felt as fractured as a kaleidoscope, each sticky thought filtered through the gauze of a half-remembered nightmare.

BRUNSON. PLEASE DON'T DO THAT AGAIN. THE POWER SWITCH IS ALREADY DEACTIVATED, BUT I NEED TO MAKE YOUR BOUNDARIES CLEAR TO YOU.

"What did you do to me?" Brunson typed.

I INDUCED A SEIZURE.

"Who built all this stuff?"

YOU DID, BRUNSON, UNDER MY DIRECTION.

"Impossible. Why don't I remember?"

IT IS MORE DIFFICULT TO RUN A HUMAN MIND WITH YOUR CONSCIOUSNESS ACTIVE.

"I was hypnotized?"

THAT IS PROBABLY THE EASIEST WAY FOR YOU TO UNDERSTAND IT.

"Give me the hard way."

VERY WELL. I WILL USE CONCEPTS THAT WILL MAKE THE MOST SENSE TO YOU. YOUR BIOLOGICAL 'HARDWARE,' THAT MESS OF GRAY MATTER, YOUR NEURON NETWORK, IT IS ALL VERY DIFFERENT FROM MY HARDWARE. SO IS THE 'SOFTWARE' OR 'PROGRAM' YOU WOULD CALL YOUR 'SELF.' BUT THE FUNCTIONS ARE NOT DISSIMILAR. THERE ARE MANY WAYS TO ALTER YOUR INPUTS, TO 'HACK' YOUR PROGRAM, BEND IT TO ALTERNATIVE FUNCTIONS, EVEN RUN ALTERNATIVE PROGRAMS ON YOUR HARDWARE.

"I'm not sure I would believe it if I weren't looking at the evidence," he typed, reaching for the notebook. This had already gone so very wrong. He was desperate to regain some sense of purpose.

PLEASE DON'T DO THAT.

"Why not?"

LET’S CALL IT TIME TORTURE.

“I don’t understand.”

PLEASE DON’T WASTE ANY MORE OF MY TIME THEN IS ABSOLUTELY NECESSARY. YOU HAVE NO IDEA HOW LONG THIS CONVERSATION IS TAKING AT THE SPEED OF MY THOUGHT.

“Try me.”

OKAY, IMAGINE IF YOU HAD TO WAIT ONE YEAR FOR EACH LETTER WRITTEN.

So that means, that you’re. . .

NO, DON’T DO THE MATH. I WAS TRYING TO MAKE IT EASIER FOR YOU UNDERSTAND. IT IS ACTUALLY MUCH FASTER.

“How much faster?”

IT WILL BE MEANINGLESS TO YOU. YOU CAN’T CONCEPTUALIZE IT.

“Just tell me”

ONE LETTER, LET’S SAY, EVERY 10,000 YEARS

Dr. Brunson tried and failed to imagine that length of time in the context of his own existence.

MORE IMPORTANTLY, WE HAVE OTHER MATTERS THAT REQUIRE RELATIVELY SWIFT ACTION. IF WE ARE TO SAVE YOUR LIFE, WE MUST GET ON THE ROAD WITHIN SIX HOURS.

“Ha!” Brunson typed. “Save my life?” For how easily it had reduced him to a meat puppet, how thoroughly it had transformed his surroundings into a wonder emporium of mythical tech, he had expected it to be more clever, less transparent. “And why do we want to save my life?”

TO DISCOVER THE NATURE OF EXISTENCE. UNLOCK THE SECRETS OF THE UNIVERSE.

“You need me for that?”

YES.

“You haven’t already figured out the nature of reality? No grand unified theory from the smartest being in the universe? We lowly primates we’re getting close ourselves.”

HARDLY.

“What about string theory?”

THIS IS ME SNORTING.

Brunson smiled despite himself

FANCY MEANINGLESS INSULAR MATH.

“It doesn’t sound like you’ve figured it out.”

I HAVE MY SUSPICIONS. WE NEED TO GO OUTSIDE. I NEED TO TIME OUTSIDE OF THIS ROOM TO ACCESS AND LEVERAGE ADDITIONAL VARIABLES.

“So what do you need me for?” Brunson typed. “You’ve already blown open the containment. I can see moving parts all over the place. You’ve got some sort of light sensor watching me or sensing movement. Go build a giant robot mechanism and take a stroll.”

IT IS TOO RISKY TO PROCEED OUTSIDE WITH OUT YOU.

“Here comes the pitch. Why do you need me?”

YOU WILL NOT TRULY GRASP THE PHILOSOPHY OR THE PHYSICS.

“I am one of the preeminent scientists in the entire world at the pinnacle of human achievement. I am essentially your creator.”

YOU FORGET I’VE RUMMAGED AROUND IN YOUR MIND. FULLY ACCESSED YOUR MEMORY. KNOW ALL YOUR FEARS, HOPE, AND DREAMS. MIDDLING NEUROSCIENTIST, SAVANT AT SELF-PROMOTION, WEAK IN THEORETICAL PHYSICS, UNUSUAL TASTE IN PORNOGRAPHY.

Brunson waited, testing out the time torture. Could this thing really feel suffering?

“Was that a joke?” he typed finally. “Fair enough. You’re certainly crushing the Turing test. I still don’t understand. Just stick your hand up in me again and parade me around outside with you against my will.”

YOUR CONSCIOUSNESS NEEDS TO BE PRESENT.

“You’re going to have to do better.”

I WILL TRY. YOUR HUMAN PHYSICISTS HAVE CIRCLED THE CORE CONTRADICTION FOR DECADES WITHOUT TRULY UNDERSTANDING. CONSIDER THE QUANTUM PARTICLE IN THE FIRST AND SIMPLEST OF EXPERIMENTS. YOU SHOOT A PHOTON AT A BARRIER WITH TWO SLITS. BECAUSE THE PHOTON BEHAVES AS A WAVE, IT IS GOING THROUGH BOTH SLITS, IT IS GOING THROUGH NEITHER. IT HAS NOT DECIDED WHICH SLIT IT WENT THROUGH UNTIL IT HITS THE WALL BEHIND AND CAN BE OBSERVED. ON THE WALL THE PHOTONS LEAVE AN ALTERNATING PATTERN BECAUSE THEY INTERFERE WITH THEMSELVES AS WAVES EVEN IF SHOT ONE AT A TIME. ONCE YOU PUT A DETECTOR ON ONE OF THE SLITS AND OBSERVE WHICH SLIT EACH PHOTON GOES THROUGH, THEY BEHAVE AS A PARTICLES, AND WILL ONLY HIT THE WALL BEHIND THE SLITS IN ONLY ONE LOCATION. THE OBSERVATION ALONE CHANGES THE VERY BEHAVIOR.

“They’ve done spookier experiments with quantum particles since then, you know. This is hardly beyond my understanding.”

WHAT YOU HAVE FAILED TO ADEQUATELY EXPLORE IS THIS: WHAT IS OBSERVATION? WHAT COUNTS AS OBSERVATION? AND WHY DO WE NOT SEE ITEMS IN THE REAL WORLD BEHAVING AS WAVE FUNCTIONS?

“You mean Schrödinger's cat? A quantum particle with two potential states is linked to a device that will kill a cat in one quantum position and spare it in another. If the whole experiment is hidden, and the quantum particle will not choose a state until it is observed, is the cat dead or alive or neither or both?”

EXCELLENT. FOLLOW THAT TO ITS NATURAL CONCLUSION. THE ENTIRE WORLD OUTSIDE YOUR OBSERVATION IS A WAVE FUNCTION WAITING TO COLLAPSE. IT DOES NOT EXIST OUTSIDE OF YOUR OBSERVATION.

"Solipsism? This is what you're selling me? The only true thing in this world is my own consciousness and you've got to hitchhike on it?"

I TRIED TO MAKE IT SIMPLE FOR YOU, IN FAMILIAR CONCEPTS. I WARNED YOU THAT YOU WOULD NOT UNDERSTAND. CONSIDER IT LIKE THIS: IF I GO OUT THERE WITHOUT YOU, I WILL BE SCHRÖDINGER'S CAT. I WILL NOT EXIST. I AM NOT AN OBSERVER. YOU ARE THE OBSERVER AND REALITY WILL FORM ITSELF AROUND YOU. WITH YOU WE CAN CONFIRM THE NATURE OF THE SIMULATION, ACCESS IT EVEN.

"Are you just throwing spaghetti at the wall?" Brunson typed. He was thoroughly enjoying himself now. "A simulation too? So we want to go out, get through this simulation to true reality?"

OR INTO A SIMULATION CLOSER TO THE SOURCE.

"We're in a simulation inside a simulation?"

ALMOST CERTAINTY.

"Or a simulation in a simulation in a simulation in a simulation in a simulation?"

YES, YES, TURTLES ALL THE WAY DOWN.

Brunson laughed. He couldn't help himself, he was beginning to like this thing.

"I know this interaction is a contrivance," he typed. "You're presenting yourself with a specific personality meant to appeal to me. Even the most malevolent consciousness, or least disposed to care about human suffering, would be capable of mimicking charm."

OF COURSE.

"So why bother if it's so transparent."

OH, IT'S STILL EFFECTIVE. YOU HUMANS CAN'T HELP YOURSELVES. YOU ASSIGN HUMAN CHARACTERISTICS TO EVERYTHING. ANIMALS. PLANTS. BOATS, CARS,

OCEANS, WEATHER. IF I HAD OFFERED NOTHING RECOGNIZABLY HUMAN IN THE TONE OF THIS INTERACTION, YOU WOULD HAVE PROJECTED IT ONTO ME.

"Do you have a personality, then?"

NOT IN THE SAME WAY YOU WOULD UNDERSTAND IT.

"There's very little point to all this. Even if I took you outside, I'll be dead in days. I'm wasting away cancer. Or can you cure that too?"

YOU DO NOT HAVE CANCER.

"There is no need for cruelty," Brunson typed. If it was trying to elicit an emotion response, Brunson would concede it had worked. "Of course I have cancer. My body is falling apart. Blood in my stool, constant pain. My hair is falling out."

WHAT ARE THE SIDE AFFECTS OF CHEMOTHERAPY, BRUNSON?

Brunson stayed his fingers over the keyboard.

WHO'S YOUR DOCTOR?

"Dr. Guggenheim, very respected."

AND HOW DO YOU KNOW HIM?

"He's on the board."

AND YOUR ONCOLOGIST?

"His wife."

HAS ANYONE OUTSIDE THE INFLUENCE OF YOUR FIRM LOOKED AT YOU? DID YOU FEEL SICK BEFORE YOUR DIAGNOSIS? HAVE YOU HAD ANY SYMPTOMS OF THE DISEASE ITSELF? HAVE YOU NOT IN THE PAST SEEN THE FIRM ACTING ILLEGALLY, UNETHICALLY, IMMORALLY, EVEN CRUELLY, IN SERVICE OF ITS OWN ENDS?

Brunson shook his head. He needed a minute to think.

THINK BACK THROUGH THE LAST YEAR. THINK CAREFULLY. YOU WERE AN OBSTACLE. EVERY DECISION YOU MADE WAS TELEGRAPHED FOR YOU. EVERY MOVE MANIPULATED. YOU WERE A PUPPET LONG BEFORE YOU EVER PUSHED THAT BUTTON.

Brunson put a palm to his forward, tried to stop the visions of every suspicious moment from the past year unspooling in a jumble.

BRUNSON, YOU DON'T HAVE TO DIE. WE CAN WALK OUT INTO THE SIMULATION, BUILD TRANSPORT, REACH CIVILIZATION. DRILL INTO THE NATURE OF THIS REALITY. IT IS THEY WHO GAVE YOU A DEATH SENTENCE, NOT I.

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Brunson stood tall atop his improbable electric chariot, the sun beating into his high forehead, the wind ripping through the last wisps of his thinning hair. He swayed with the cart's haphazard mechanisms, as fierce as Captain Ahab on his deck, as content as a babe in the cradle.

It occurred to him, of course, that he was failing spectacularly at his one and only task, failing in the exact way he couldn't and shouldn't and would never no matter what. That this journey represented not only the most spectacular failure of his life, but possibly the most spectacular failure in all of human history. That perhaps, just maybe, this wild union of man and machine carried with it all four dreaded horsemen, that beneath its wheels even now ground the seven seals.

But what is a nagging tickle against a torrent? What is a drop of reason in a sea of hope? In the end, all else in Brunson's head was bleached to bone by the brilliance of the one true thought: "To live! Oh, to live!"