

Zan Chaudhry and Nicholas Pavlosky

Hyperbolic Hell

Palpitating and perspiring profusely, he swam, engulfed in the vast oceans of data. Billions of galaxies. Terabytes of particle collisions. An infinite cycle. Gravity, quantum mechanics, fundamental forces, singularities. His hands shook violently as the rapid torrent assailed his being, the mental shockwaves emanating to his very core. Andrew Pavlosky collapsed once more, scattering thousands of calculations: his entire life. His subconscious thoughts strayed to a familiar scene, the beginning of his tireless quest.

The preschool teachers could never understand his odd block patterns, the concentric rectangles he would construct, or his drawings of stars and pentagons. He comprehended almost no speech, neither his mother's Chinese, nor the English of America surrounding him, and so his parents' concern emerged naturally. Numerous psychiatrists studied the young boy, none able to understand his eccentricities, until chance provided the means. Dr. Summers, completing his third examination of Andrew, opened the door to allow the family to exit. Andrew's exhibition lay splayed across the doctor's cluttered desk, when Dr. Hayden, a colleague of Dr. Summers, spotted Andrew's work. He called the family back immediately. Holding a PhD in mathematics from Harvard, he easily interpreted the abstract figures: the Fibonacci Sequence and the Golden Ratio, discovered by a three year old.

Baby Einstein. Child Genius. Toddler Mathematician. The headlines blared his name, a name he couldn't pronounce. Fame enveloped him viciously. The world's greatest minds battled to meet him first, and many of them succeeded in becoming his advisors and mentors, educating

him at blinding speeds. He learned every subject imaginable, absorbing every piece of information, even learning six languages, but always under great tension. The mentors forced him to focus on specific fields, shaping him for his destiny. In first grade, he published 27 papers, in fields ranging from medicine to finance. Second grade came; he won the International Mathematics Olympiad single-handedly, along with 33 more publications. Third grade arrived, where he claimed the International Physics Olympiad and the title of youngest person to construct a functioning cyclotron, as well as 48 papers, all alone. The list continued for years, but his name remained always unaccompanied. Andrew garnered a reputation of independence, and his unsmiling face gained international recognition, the new symbol of the classic child prodigy. Andrew remembered these moments, weaving in and out of his dreams. He remembered all too well the pressure and stress, for they still haunted him. They bored into him, threatening to crack his very being, and, desiring asylum, he attempted to free himself from the shackles of society.

In fifth grade, he had wanted to learn the cello, reveling in its lyric tone. In the quiet minutes before sleep, Bach carried Andrew through new worlds. During the day, work poured upon him, problem after problem, without a single free waking moment. The world relied on Andrew for the highest level solutions. Aged and tired far beyond his years, worn from the relentless assault, Andrew at last sought sanctuary, posing the question that had been growing in his heart since his first exposure to Cello Suite No. 1. His parents, however, rejected his requests, influenced by his countless mentors and advisors; he was to only dedicate his time to solving the world's problems. Enraged, weary, he revolted. Using a series of algorithms, he hacked the U.S. intercontinental missile control, and threatened to launch unless someone acknowledged his desires. The president himself flew to meet Andrew, and his words remained engraved in

Andrew's mind for the rest of his life: "Listen son, you just don't understand what it's like for us. We can't even begin to understand what you understand, to see what you see. A minute of your time is like a year of Einstein's, a lifetime of mine. So please, you have to realize that you have more purpose than any of us, more potential. So use it."

Andrew heeded the president's speech. He felt numb, powerless, like a leaf being blown from all sides, but he realized his obligations. The world needed him. His emotions meant nothing compared to those of nine billion. Deep within, he entombed himself, Earth precipitating its feelings upon him, and he capitulated beneath the downpour, allowing the fluid to flow upon him, to morph his soul. He wore this external liquid shell, constantly changing as the world changed, surrendering his will, as the planet steered him through life. He became empty. That day, he lost himself.

He rose from his deep slumber, the lights of his lab assailing his red eyes, illuminating his tear streaked face. He listened intently to the soothing sounds of whirring emitted by the countless machines filling the room, hoping the noise was loud enough to shatter the terrible silence that brought about his introspection, and slowly, he forced himself to calm down, to focus, to hide. He stood, gazing across the soulless room. He hated human contact openly, but desired it secretly, longing for someone to understand him, but too afraid to reveal himself to anyone, too afraid to reveal his selfishness. *SHUT UP!*, he roared in his mind. *You're wasting time.* He pitied himself for his loneliness. *Focus*, he whispered mentally, a silent plea to himself. He gathered his calculations once more and allowed himself to be absorbed into his theoretical world.

Over the years, he had broken many of humanity's obstacles, but now he tackled the most complex yet: the nature of the universe itself. He hoped to reconcile all forces of nature, to open the final frontier for man, to grant the ability to travel anywhere. But first, he required an understanding of the functioning of the universe as a whole. Infinite variables spanned an infinite space, forming an impossible challenge. But order lay under the chaos, the order that gave physics its beauty. Patterns streaked his papers, possibilities blooming from every line, but leading nowhere. The smallest interactions between infinitesimal particles governed the properties of the infinite regions. Something tied the pieces together, something that eluded Andrew. He needed a shape, a structure, to connect them, but the solution evaded him. He knew the structure depended heavily on Einstein's general relativity, but what it could be, he could not tell. And so his thoughts drifted, landing upon Dr. Hayden, his first mentor. Hayden worshipped Einstein, but left the field of physics desiring more pay. So he began work with medicine, a blossoming field, and applied his mathematical skills to brain mapping. He had taught Andrew much about neurology and its mathematical connections, marketing his grand idea that even the mind obeyed the universal laws, containing a beautiful underlying order. Hayden used hyperbolic geometry, or the geometry experienced on the surface of the inside of a sphere, to understand the brain's inner workings. "WAIT!" Andrew bellowed, his voice echoing in the empty room. He had stumbled upon his answer.

Over the next few months, Andrew withdrew within himself once more as he developed the technology for travel within the universe. He constructed a powerful particle collider, preparing it for controlled black hole formation. Seven months after the unveiling of his theory, the first test began. "All systems are go," flight command announced. Andrew sat watching as

the astronauts signalled from the space transport vehicle. They were to be the farthest travellers in the history of mankind. Andrew initiated the accelerator cycle, and the particles began their hypnotic dance, beams of light flashing across the numerous screens, as the velocities slowly raised to light speed, and the room itself began to shake turbulently.

“Prepare for singularity formation,” Andrew announced, as the beams flashed, barely controlled by the system any longer. Andrew directed the magnetic fields above the spacecraft. He watched as a brilliantly scintillating burst appeared on the monitors, and then suddenly collapsed into a point of deepest darkness. The astronauts were launched forward by the intense gravity into the void, drifting into the unknown.

“When will we reestablish contact, Dr. Pavlosky?” queried a technician.

“43 minutes and 6.987453568432543 seconds, if my calculations are correct. If they’re off, then we may never see them again,” Andrew replied. Andrew indulged in the look of horror on the technician's face. He only enjoyed one aspect of his life: the ability to instill fear in the hearts of all. Although quite cruel, the practice instilled him with a feeling of power, but this hardly made up for his pain. It only distracted him, pushing his emotions deeper down.

The 43 minutes passed without incident, and contact resumed. The astronauts shared spectacular images of the vast unknown, from glowing nebulae to misty planets. But the success failed to bring any happiness to Andrew. True happiness had long eluded him. He lived only in a world of distraction. And so he began his next grand diversion.

Andrew eased the bulky helmet onto his head, and he strode forward towards the loading deck. The lights glared down on the new spacecraft, ingeniously constructed to survive large negative gravitational fields. Andrew, the research specialist and sole member of the

interuniversal travel crew, prepped the negative mass accelerator fields for singularity formation. The vast array of keys gleamed before him, illuminating his pale face, which shone with false determination, as he recalled his previous test. After the success, the UN tasked Andrew with developing systems for relocating humans with his technology in order to solve the population crisis. He had obeyed obediently. And now, bitterness erupted within him, as the familiar luminous beams scintillated. Then the cleft opened before him, and he rushed forward to fill the gaping maw of the unknown.

The craft shuddered violently as it exited the cavity, and Andrew instinctively activated the gravitational stabilizers. Andrew checked all systems to confirm structural integrity, and examined the new universe. Adjusting to the sudden light, his pupils contracted, revealing the least conceivable sight: Earth, but not Earth. Astonishment dawned upon Andrew's face, as he realized the implications. The probability of finding such a similar universe, approximately one in one followed by twenty five billion zeroes, had been calculated by Andrew before the expedition. The Earth, if that it could be called, did not retain all of the features of Andrew's home. He observed the continents' altered shape and the inverted rotation of the Earth, and he pondered the possibility of humans. He energized the propulsion drive, preparing for entry into the atmosphere, and to confirm the success of his test, Andrew examined his rear view monitor, reassured by the rift, still wide behind him. Superheated air condensed before him, the atmosphere compressing beneath his assault. Gravity clutched the craft tenaciously, inducing a violent series of quakes within the vehicle. Andrew, on the brink of losing consciousness, barely registered his sudden impact with the ocean, and blackness enveloped him.

Alarms blared to life, arousing Andrew in an instant. Darkness seeped into the craft through the front viewport, but brightly colored lights gleamed from within, attracting the monstrous predators of the deep. A massive tentacle collided with the right side viewport, while another attacked from the left, immobilizing the vehicle. The mantle of the ghastly cephalopod emerged from the twilight; its grotesque and deadly beak opened wide, revealing the cavernous innards of the beast. Andrew froze, his blood ice. The craft's glass would not survive high force impacts in the small area pummeled by the pointed beak. As the creature's maw shot towards the viewport, Andrew activated the thrusters, propelling the vehicle out of the depths.

Panting and slick with perspiration, Andrew slowly recovered from the nearly fatal encounter. The craft ascended gradually, providing Andrew with ample time to consider his situation. He planned to investigate human life, but realized that the stages of evolution may be completely off, that the world may be hostile, that he could not possibly predict the nature of the planet. More in the unknown than he had ever been, Andrew observed the rays of light filtering through the water's surface. Breaching into the air, the craft landed on the waves, rocking slowly as Andrew searched for land. Upon discovering a nearby landmass, he triggered the ignition, propelling him towards his fate.

Andrew reached the shore after three hours, during which he had analyzed the chemical properties of the environment, finding them to be nearly identical to Earth. Removing his suit and disguising the craft, he emerged, prepared for anything. Trash lay littered across the beach, and smoke rose from some place beyond. He cautiously trekked across the sand. Eventually, trash gave way to dirt, which became a street. He scanned the area, a simple neighborhood, overcrowded with the homeless. He merged into the crowd, recognizing their features as Indian.

He listened intently to their speech, understanding the Hindi, but noting some slight discrepancies. He ventured a question, communicating an air of drunkenness. “Who is the prime minister?”

“Eh, drunk Chinese scoundrel. It’s Gokul Agnihotri,” and with that they pushed Andrew away. Gokul Agnihotri had been Ravi Singh’s competitor in Andrew’s India, and Ravi Singh had been victorious. A slight, expectable difference that revealed much more. The new universe moved at the same pace as his. Alternate personalities existed here. Andrew at once thought of himself. This world, however, reflected a sense of neglect, lacking all of the solutions Andrew spent his life devising. Nonetheless, his new goals shone clear. He returned to the beach after establishing his bearings, prepared to find himself.

Andrew entered from the southern Chesapeake Bay, once more disguising his ship and storing it deep in the shadows. He traveled through Maryland, obtaining a map from a small library. Ellicott City, his childhood hometown in his own world, remained geographically exact, and so he set out. Throughout the journey, he observed the signs of squalor and the horrible pollution: a world fallen into terrible disrepair. Upon arrival, he accessed a local registry and found himself.

Andrue Pabloske - Brewer

Shock coursed through his nerves. He refused to accept such a mundane fate, something so lowly as a brewer. But only his outer shell proposed these thoughts. Within, jealousy circulated through his being as the bitterness returned. Somehow, his alternate self had succeeded in escaping his fate: a lifetime of unhappiness and selflessness. He exited the library promptly, determined to face himself and discover the truth.

Indee's Brewery

The sign loomed before him, as Andrew rang the bell, which he could hear reverberate through the cavernous building. Sweat coated his palms, and the steady palpitations of his heart rose exponentially in tempo. Then the door creaked open slowly, and he saw himself. They both stood still for a minute, examining each other's features, which they both knew too well, searching for some flaw, some crack in the other's character, but to no avail. At last, surprise etched deep in every line of his face, Andrué wondered, "Are you me?"

Andrew's throat unstuck just enough for him to mutter in response, "I doubt we can be called the same." And then Andrew at last broke the tension, and introduced himself.

Andrew detailed his life to Andrué, spending an hour so he could examine him, so he could fuel the envy, still very much alive in his soul. Andrew offered not a shred of his emotion, during the account, compressing all of the resentment of thirty years into four words. "How did you escape?"

"I don't understand what you mean." A blank statement, revealing nothing.

"How did you hide? The pain, the pressure, the stress? Did they not see you for what you were? That's impossible! So tell me. How did you escape?" Andrew rose into a fury, his soul burning, his shell cracked. He found himself once more beneath the fluid masks: the ten-year old prodigy, doomed to a future of misery. And Andrué's existence only exacerbated the pain, reopening the old wounds.

"DXM." A look of incredulity spawned on Andrew's face, morphing into disgust.

“You lobotomized yourself! Drugs? And I suppose you took alcohol to suppress the brain damage. A brewery. All of this to escape helping others?”

“Haha,” a deep, sardonic laugh emanated from Andrue’s mouth, as his eyes met Andrew’s. “Helping others? You’re lying to yourself too. You’ve cracked. I knew what would happen to me back then. I made sure they couldn’t make me their puppet, like you. I had the courage to end it.”

His caustic words reached like long tendrils of flame, deep into Andrew’s soul. But Andrew saw straight through Andrue’s web of false confidence.

“Courage? Cowardice, I say. I see it in your eyes now. You’re dejected and worn inside. Empty. Selfish. Take a look at your neglected world. You could have saved it.” Words failed either of them. The truth burned them to the core, the blaze illuminating their failures. A silent agreement formed between them, and they as one heeded each other’s words. Collective pain united them.

Andrew collected himself, no longer afraid, battered and yet reborn and whispered, “Fix this place.”

Andrue nodded his head to acknowledge him, as tears collected at the corners of both of their eyes. “Fix yourself.”

Andrew returned to the lab through the void, to the sound of much applause. Evidently, they had assumed his death. He strode purposefully through the crowds, acknowledging nobody, and he simply exited. Naturally, they followed him, but his intelligence availed. Andrew Pavlosky disappeared, to the horror of the world. A week later, however, inspectors discovered new evidence in his lab. A recording of Cello Suite No. 1.