The Universe House

by Fiorella Grandi

I look out onto the barren landscape: red rock. It’s harsh on the untrained eyes, unlike the life we expect from hospitable planets. It turns out that the necessary components for life—carbon, oxygen, nitrogen—can be replicated elsewhere, away from our tiny blue planet, in shapes both foreign and familiar. Staring out into what could be the future home for humanity, I feel both a foreigner and a native.

I had a grandmother who lived among red rocks, in one of the Southwestern states. She was a weather worn woman, with skin tanned like a hide, deep set eyes, surrounded by folds of wrinkled skin. As a young child, I believed she could have fashioned a phoenix from its ashes, she carried an air of mysticism. And even after my college days, freshly filled with logic and mathematics, something about that woman’s deep eyes had me questioning the core of my existence.

“What do you want with this place, son?” she would have asked me if she could see me now: a representative of the greater humanity, emblem pinned on my chest, measuring the predicted water content of this massive future-earth-rock. “What have you come to seek?”

The answer to that, of course, is complicated...

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Enter. I stare fiercely at the keyboard, willing it to squeeze a story from between its square keys. That’s it? That’s all you have to give me?

There are days when words do not come, as if the central distribution system of my core has gone on strike. Today, whatever words have ever existed in me are tied up in concrete blocks, piling up in my arteries and causing tiny blood clots. Net effect: a blank page, malicious in its whiteness. It has been ages since I sent something to my editor, an editor who likely does not remember me. Fresh from college, I had exuberant energy. I wrote late into the night, wrote on napkins and coffee cups. Everything was inspiration and everything was written down. But lately my brain planet is in a drought of ideas.
The front door moans its welcome sound as Andrea enters, brows furrowed to create a tiny canyon of worry, where her stress is building itself a palace. Almost inaudible, she murmurs under her breath: to-do lists, trouble-shooting strategies, packing lists.

“Andrea,” I call to her, hoping to remove her gently from the trance. No luck, the sound waves startle her, causing her body to jump slightly. She fixes her eyes on me.

“Hi, Liam. How is the book coming?” I stare at the last sentence: The answer to that, of course, is complicated… How appropriate.

She asks me this often. I think she is used to experimental updates, with overnight results and answers. Books do not have answers. They are like a turkey—you spend hours slowly basting it, unable to taste what the finished product will be, hoping that you will not choke on it in front of your in-laws.

“Fine.”

She peers at me with the eyes of a trained microbiologist, able to see minute details on the surface of cells. She possesses a Liam-scope, able to pick up even the tiniest signs of my distress.

“Okay, maybe not fine. It’s…not coming.”

She comes up behind me and hugs my shoulders. “Maybe tomorrow, ideas like to ferment and appear in sleep.”

“I doubt it.” I reply, moodily. I can feel her eyes scanning my paper, fingers drumming on my shoulders.

“Space exploration story? I didn’t think that you wrote science fiction…”

“Your promotion inspired me.” I flash her a smile, trying to suppress the desire to beg that she never get on a space shuttle. Ever. The prospect of her hurling through space terrifies me though she assures me that this will be far different. The Henderson Institute, where she works, is setting up a new unit on their space station, dedicated to the study of astrobiology. Her passion. Her specialty. 56 days until launch off.

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Dr. Andrea Luz discovers evidence for nanobacteria on meteor.

Dr. Andrea Luz, astrobiologist at the Henderson Institute of Universal Studies, and her team discovered a meteor with traces of what could be ancient space bacteria. “They have similar properties to our own bacterial species, but are much smaller.” Dr. Luz explained, “We also found traces of aromatics and other hydrocarbons.”

I keep the article in a plastic cover, tucked into a binder. I took great care in clipping it out, the day it ran. We usually didn’t get the daily paper; I didn’t like news of the real world and she preferred it online, but I went out to buy the paper the day they ran the story about her: She is wearing her camera smile in the picture; I’ve known her long enough to know that’s not the true smile, so symmetrical and perfectly calculated. The true smile is lopsided, one corner of her mouth coming up slightly more than the other and her eyes crinkled. There isn’t really a science of smiling, but I read in a neuroscience article that certain parts of our brains fire when we smile or see someone smile. Beautiful as that may be, poetry is still the best describer of these things, in my mind.

“So what’s the big deal with these aromatic rings anyway?” I chew the tofu carefully. I love it when she’s home, but these meals are killing me. Tofu? The white sponge stares at me defiantly, my fork feels useless against it, and I stop, looking up at her again. The little light is in her eyes again. She is easy to please: ask her about the research and she flares like the Northern lights.

“They provide evidence for bioforms arising somewhere out there.” Her fork gestures toward the starry night outside the window. She hates drapes, insisting that they cover the heart of the question: what is out there? “Maybe it didn’t all start here.”

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2040. They found life on another planet, that year. It started the beginning of the race for connections. We felt our own society going under and had to desperately cling to the cloth of that which was tangible. Not enough land, not enough water, not enough ozone. We set out to search for life, to make contact and understand, but mostly, we sought to carve ourselves a new room in this universe house. We are the new Noah, sailing with our steel and jet fueled arks to save humanity, two by two. The final frontier had not been met. We felt invincible.

I was recruited into the academy; that was the fashionable and honorable life for a young person then. “Go make something of yourself. Make this family proud,” my father had instructed, clapping me on the shoulder, right above the starship’s insignia.

I had undergone basic medical training at the University and was contemplating becoming a doctor, when news of the new life changed everything. I was not sure I would have been a great
doctor—bodies made me squeamish—and my restless hands and legs pleaded for movement from here, from the tiny existence I had known. The extraterrestrial formation of life had seemed unreal at the time. No part of me could fathom selective pressures creating ears, eyes, noses like my own on the shores of some distant place. And yet, I could not stay away. The questions of existence and purpose were too deeply rooted into the fiber of my being. They had been cultivated by the nights spent watching meteors streak across the sky and pondering why everything existed as it did. Perhaps whatever or whoever lay out there had an answer for how to make meaning in this life.

I applied to be a galactic explorer, under the pretense that I would serve as a medic for the ship.

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“How is your book coming along, dear?”

“It’s coming along slowly.” I fake more confidence than I feel. I have paragraphs, disjointed limbs at best, and still, I cannot capture this feeling mulling about my fingertips. I picture my character inside the metallic hull of a spaceship, a Hollywood spaceship. I have no idea what a real space traveling device looks like. Sometimes I wonder if I am writing my own alternate life history.

She peers at me with those eyes, vast pool of knowledge. I always wondered how she really felt about my writing. My life is fiction, compared to her test tubes and experimental controls. She insists that we are actually very similar, obsessed with the big questions the universe holds.

“Science and the arts are reaching for the same thing: understanding. They come from different places, with different tools and talents, but fundamentally, they are driven by human curiosity, by the space inside us that ask why, what and how. They explore similar topics, creation, existence, purpose. Of course, they ask these questions in different ways. The neuroscientists asks how neurons are responsible for thought and emotion, the poet questions the nature of love and the philosopher questions how we know what we know. We are all obsessed with the universe house we live in, in both small ways and large ways. Its beauty and its mystery bind us together.”

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I was part of a survey crew. We spent much of the time recording the amount of water, properties of rock and mineral content of the planets. Unlike what we had imagined, space travel was slow and often, non-dynamic. We were all the quiet, contemplative types, and many of us appeared to have set out into space for the same reason. I became good friends with
Caroline. She was a mechanical engineer by profession, but a philosopher in soul. We would conduct survey expeditions together and talk about the nature of life and the universe, about the mutual restlessness that filled us, and our hopes that this vast and inky expanse might be the answer.

There was soon talk from Earth of replacing us, the roaming space nomads, with robotics. Twice as fast and far cheaper. Private companies were beginning talk of mining these rock planets for precious metals. If we could not find another rock to call home, we could at least build onto ours. However, my group was already deeply entrenched in alpha sector 109. The cost of bringing us back would have been greater than if we just stayed and finished a few more planets.

The missions blurred together. However, one, toward the end, is particularly vivid. It was an experience that changed all of us, to some degree.

I remember the place as I first saw it, stepping from the shell of my colonizing cocoon...

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I remember the first time I met her, in a coffee shop on our campus...

Impassioned winter storms rattled outside and the tiny space was filled to the brim with eyes, ears, elbows and noses. It was the sort of place with exposed brick and mismatching chairs, lending shelves and finals week 99 cent cup specials. They charged too little for the food and coffee and let us stay too long and looking back, I marvel they stayed in business at all.

She had appeared from the crowd, balancing a cup, whose contents looked like the Black Sea.

“Could I sit with you?”

I nodded without looking up from my profound study of Shakespeare’s sonnets. It wasn’t uncommon for strangers to share a table for the day here. There was never enough space for the demand, especially around finals. I heard the table creak under the weight of her texts as she placed them down. Finishing a stanza, I looked up. On her corner of the table, a book sprawled with equations, diagrams and plots. It was the kind of stuff that made me queasy. The binding read: Principles of Physical Biochemistry. A science major.

I didn’t know many science majors at the time. They thought my English major was stupid and useless and I thought they trivialized the world into data and facts and missed the deep
intricacies of the world, intricacies which only the written word could bring out, the true lasting passions of humanity.

Her eyes caught me staring. “Is that Shakespeare?”

I looked down at the tomb before me and nodded, as if it were foreign to me. Something about her made me more tongued tied than usual. She carried an intensity wrapped up around her shoulder blades and through the tips of her eye lashes, as if she were peering into the molecules of things constantly.

“If we shadows have offended,
Think but this, and all is mended:
That you have but slumbered here,
While these visions did appear;
And this weak and idle theme,
No more yielding but a dream,"

“They made us memorize a passage from A Midsummer Night’s Dream in high school and for some reason, that part has stuck with me for all these years. I think I like it, in some deeper way: a dream speaking to you, telling you that if this reality was too much too handle, you could pretend it wasn’t real at all. Humans seem to do that so often, with things they fear.” She stared down at her finger tips after the tiny recitation, as if embarrassed. I blinked at her a few more times. In truth, it had been ages since I had read any of Shakespeare’s lighter things. The lines, coming from her, seemed renewed once more in their lyrical content. Truly, poetry was meant to be read out loud.

“You must think I’m quite silly...trying to comment on literature.”

I realized I had yet to say a word to this poor soul, who must certainly think I am mute or incredibly snobbish. I smiled. “No, it’s great! I just wish I had something intelligent to comment on with that...” My eyes glanced at the equations page, still queasy. “Just looking at it makes me remember the panic of introductory chemistry.” Her eyes crinkled at the corners, and the haphazard hair rocked slightly. “Everyone hates that class. This is far better I can assure you.”

“What is it...?”

“These are kinetic equations for enzymes.” It was clear that she read the confusion on my face.
“Living organisms have enzymes. Imagine little machines made out of protein, which are made by your body for specific tasks. For example, DNA polymerase replicates your DNA. First, an enzyme comes and unzips the DNA and then the polymerase attaches and adds the correct building blocks to a new strand, while proofreading as it goes. All of these DNA polymerases replicate two meters of molecular words per cell. They are, in a way, like little Shakespeares. Of course, they are copy cats, and proud of it— but your body is constantly writing molecular poetry. Everyday hour of every day—and all together, it could reach the sun and back 70 times.” Her body had become very animated during the 5 minutes of explaining and the note page before her was filled with tiny drawings, culminating in a smiling sun.

That was the beginning our beginning. From that day on, I actually thought about tiny molecular poets inside me. I thought of them writing DNA words while Shakespeare wrote Hamlet. And I thought about her.

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“What do you think would happen if we did find aliens?”

“Depends on how advanced they were, I suppose. If you mean the creepy things from the movies, I think Spielberg and the rest already answered that: we would kill them.” She peers at me from the top of her book, a terribly worn copy of Asimov’s Foundation. The thing was older than both of us and held together by dirt.

“You think so?”

“Yes. We don’t deal well with competition. People would get scared. It’s the same reason they wanted to silence Galileo. We want to be special. The idea that life, even if it is not identical to earthly life, could exist in primitive forms outside of earth sets people trembling. It makes us question why we exist and what our purpose is.”

“True.”

“In reality, we are just another carbon form, a thermodynamic system, a short experiment in the long course of geologic time. Technically speaking.” She slides into bed and burrows into the blankets.

“Well, I think you’re a pretty great experiment!” I pause to give my terrible pick up line some time to shine, then kiss her. Part of me wonders if she is right. Are we just carbon? Nothing more nothing less? How meaningful is this moment next to her, in our tiny 1-bedroom
apartment inside of an ever expanding universe? Are we really that uncomfortable with not being the only ones...?

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The eerie feeling was too much to contend with. We were supposed to do a ritual scan of the place. Measure the atmospheric density, the sun spectra. The planet looked promising, despite the severe heat. Theoretically, the atmosphere could support life in a couple of hundred years, and that was more than we had seen in a long time. We explored the caves on the North side of the planet first, by chance. One of the younger crew members found them, in the deep darkness of the cave.

“Boss, you’ve got to take a look at this...”

He held up the handled light to the cave wall. There, in the colors of desert blood red, sunset orange, earthen browns- were images. Artwork. Far more advanced than anything I’d seen from primitive humans. Someone, something, had been here before us. The image told stories of a tumultuous time of changing planetary boundaries, a reshaping of surfaces by molten tongues, almost as if the caves were telling a creation myth of their own beginning. The art was cosmic, geologic in fact: filled with the erosion of water and the swirl of released gases. It housed the pressure of molten lava flowing on rivers of endless shaping time. Were these the stories, the rituals of some other sentient being, which had at one time also called this universe home?

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The day is here. I lay awake last night, staring into the darkness, willing my body to relax. Hidden by the night, Van Gogh’s Starry Night hangs above our bed. It’s a poster, the cheap kind you buy at craft stores. Much to my embarrassment, Andrea insisted on hanging it up.

“It’s the best anniversary present!” I had been in college at the time, studying language and art. Not exactly big money makers.

“He is just like us too, exploring the Universe House, with his paint.” The poster has remained long past our college years, without a frame and curling slightly at the edges. She loves it just the same. Tonight, she lies under the starry night...tomorrow she will be in them.

After I met Andrea, part of me imagined a life where I had pursued science, a life where I would have a space next to her on that tiny, flying death-trap, hurling toward Galactic Quarter 445. This feat, however, would have taken an entire rewiring of my being, a recruiting of my soul.
And perhaps even then, it would not have been possible for me to pass introductory chemistry. So, earth bound I shall remain, waiting. While she is trying to find new rooms of the universe house, I keep trying to categorize the rooms of human experience: love, confusion, fear.

I watch her step into the belly of the steel beast; its proportions too large for comparison, and her tiny frame is soon lost in it. The countdown begins. The center of my chest is constricted, as if the blood had been thickened, thickened with the weight of worry. She seemed more metal and flame than human.

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There’s a phenomenon I never quite understood, known as quantum entanglement. Andrea explained it to me once, in the early years when we were dating.

“Essentially, two particles are bound. These two particles, attached by some invisible, unknown force across the universe, can influence each other. It baffled Einstein.”

I couldn’t hope to grasp the physics behind it, as with most of quantum mechanics. Yet, it seemed that the universe was affirming some other aspect of human experience: the attachment we feel for each other, at a distance. It’s a force we can feel very strongly, yet perhaps cannot explain fully. Love, as quantum entanglement. As she hurled miles into the inky darkness, I certainly felt like the particle left behind. The events that shaped her would also forever shape me.

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That night, we slept in the belly of the red stone cave, where moisture still dances across the walls and taps out the passage time. In this way, time leaves tiny indents in its wake, the paw prints of an elegant cat. I had fitful dreams of a man with paintbrushes for fingers, the creator of the cave art. Perhaps the creator of all time. His skin is igneous, glossy and reflective of the night skies as if the planet has coughed him up from its iron core. He would follow the lines of the cracking limestone reading a complex geologic history in the fissures.

“They hold stories,” he explained, “Stories of the tiny, daily changes which build up to create mountains, oceans, life.”

I watch the constellations crawl across his skin, pitted again the barren landscape. He melts into the skyline. He seems more land and sky than man.

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“Where is Andrea? I haven’t seen her around lately.” Lori is the type of neighbor who misspells your name every time but never forgets to bring cookies on your birthday.

“She’s on a mission. Her department is setting up a research station in space, close to an asteroid belt. They found traces of aromatic hydrocarbons.” The words sounded strange to me; I rarely spoke about Andrea in such technical terms.

“Oh.” Lori smiles at me, as if she can see the gaping black hole eating at my insides. “I made chocolate chip cookies if you want some.”

“Thanks.”

I watch Lori walk away from the mail boxes, sorting through the mail. Communication is the hardest of all human endeavors. Overtime, we have made advancements in the ways we communicate—radio, telephones, internet—but the things that we say, they have stayed the same. I miss you. I love you. I hope you are well. Literature’s purpose is to facilitate this; the great writers did not become great by writing the story on everyone’s lips. They wrote the story in everyone’s heart, the story hidden in the back of their eyelids, familiar but unexpressed until seen in writing. Then reading becomes a great relief, a release of some great tension we are feeling inside.

Yesterday I talked to Andrea for the first time, in the radio control room of the launch station.

“The solar flares are incredible; I’ve never known the sun to be so active! Maybe it is trying to protect these little space bacteria from our probing scientific eyes.” Her laugh sounded odd and electric across the transmission, unattached to the blood and flesh I knew. I tried to image how far away she was, tried to imagine her in the steel beast, floating toward a meteor belt. Impossible. She seemed close, locked in a metal box, unable to be with me.

“How is your story coming along? I want to read it, when I get back!”

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We were supposed to leave a week ago, but one of the fuel packs has broken. The mechanics are working on fixing the wiring, with slow messages sent between earth and the red rock planet. Meanwhile, we wait. Inside the caves, time moves again. I trace the outlines of the drawings, feeling once again like I’m at the university, taking art appreciation. Outside, I feel imprisoned in a time where sand will capture my soul and preserve it. Everything seems to move in a geologic time scale.
Caroline and I lie under the night sky, translating the foreign constellations, making up our own myths. It was there that we were truly free from the society that had sent us here, from the rules of ourselves, of our skin. We lost a distinct sensation of ourselves as ending neatly in fingers and toes. Rather, we extended into the ground and connected to it, able to feel the minuscule turn of the planet as it progressed in orbit and the whispers of the vast universe that was beyond.

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The telephone rings.

“We’ve lost communication with Andrea’s ship.”

“How is that possible?”

“Solar flares. They disrupt our satellite communications. We will tell you when they are back online. Shouldn’t be more than a few days.”

“Thanks…”

It sounds so poetic to say it: the sun came between my wife and me -- as if we were eclipsed. Every night, I would peer into the sky, trying to spot her. Silly, I know. But my heart hoped my eyes could grow telescopes and reach her. Reverently, I asked the skies to return her. The skies answered with memories of the early times…

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I wasn’t entirely sure where to take her on our first date. All the other girls I had dated enjoyed poetry readings, movies, dinners at restaurants with uncomfortable chairs. Andrea was uncharted territory. In the end, I didn’t stray far past my usual: we went to an exhibit about impressionist art. A friend of mine, one of those people who will always be art appreciator rather than art creator, was curating the exhibit. I liked this period in art’s history. At the time, I remember being strongly devoted to modern art, to its asymmetry and harsh critique of the world and humanity. They reflected images I was attempting to capture in my own writing. Yet, she hadn’t seemed like the “banana on a blue background” type.

It took place on the second story of an art gallery. It was an older building, with exposed brick and refinished wood floors. About two dozen people circled about, talking quietly. I marveled that he had found two dozen people. Usually, galleries were empty, filled with the type of silence that makes you afraid to cough, rustle your coat or step too loudly. I spent most of the
time nervously watching her look at paintings. I liked the way her head tilted slightly, unconsciously I’m sure, to find a better angle.

“I’ve always liked impressionist art,” she pulls me out of the trance.

“Oh yeah?” My conversational abilities are still floundering. I’m glad I never pursued a career in public speaking.

“It’s the way they play with light. They didn’t know, back then, that light was both a particle and a wave. Yet, somehow it captures it in a different way. Up close, the painting is just tiny dots, meaningless. Far away, however, you see the form, the outline, the function. Atoms are the same way, up close, they are confusing, and they are waves and particles and statistical probabilities. Yet, from far away, they become couches and trees, cats and books.”

I think that’s when something inside me unfroze. I told her Monet painting the same hay stack at different times of day, to capture the way sunlight changes things. I explained that the camera had been invented shortly before the beginning of impressionist movement, and how it had forced artists to reinvent themselves. Art was no longer about capturing the exactly details of the world, the camera could take a far better portrait than a painter and far faster. Suddenly, art had become about expression and about impression, about capturing the moment beyond its physical details, but rather the feelings nestled inside it. My art history teacher would have been proud.

It was a warm August night, the type of night that is filled with more sounds than the day. I took her to get ice cream at a little place around the corner, where they sold things like chili pepper chocolate and green apple sorbet. We sat at the rickety plastic table talking for a long time; that was the first time she introduced me to the universe house, to her desire to explore for life beyond earth. That was before the Ph.D. and the publications and the space station. And yet, her passion has never faded.

“Why are you so fascinated by external life elsewhere?”

“It’s the need to know where it all began, to understand what happens when we turn back the clock to the second before the Big Bang. And perhaps, because I will never be able to accept that something came from nothing.”

“Do you think it might lose its beauty, once the mystery is solved?”

“Knowledge has never made things simpler or less beautiful. True beauty lives in the elegance of details, in the way they fit together. Now we know that the light from the stars reaches us
hundreds or thousands of years after it was emitted. In fact, this night sky is a snapshot of a distant past. Our galaxy, before it birthed humans. Not even our children’s children will live to see the stars as they actually are today. It’s a like an old Polaroid picture of your parents before they got married, a world you can see but can’t envision. I think of the whole universe like one big house, one big home. No matter where you go, there will be familiar and unfamiliar.”

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Weeks have passed presumably. The desert is at a standstill, unreflective of season or of measures of human time. Here, the sun is a shepherd and time is its humble sheep. I tell time by the shifting of the dune. Slowly this place has filtered out the nervousness that has filled me for so long, but something deep inside me is beginning to ferment, a change from the young man I once was. I understand how my grandmother sat in the wicker chair watching the red rocks, watching the birds, watching the children grow.

We sit on the edge of the cave, looking into the canyon lands, while the two mechanics work. One of the newest recruits, a young lad - as young as I was when I started this quest for existence - sits pensively beside me.

“What do you seen when you look out at this?” I ask him.

“All I see is a terrible death…as if time has frozen in place…” his voice sounds afraid. “and I can’t but help think of them, these geologic painters, and how long ago they lived here, what brought about their demise.”

He shows me scans of fossil-like objects he has found. “Maybe this was an ocean once.”

We eventually returned home to report the contents of the strange red rock planet. History will come to know it as the planet that dried up, home of the “almost humans” that didn’t make it, and then will forget it. However, the pace of that world has stayed inside me. It was the last expedition I participated in. After it, something inside me didn’t want to hurl through space anymore. It wanted to sit and contemplate, to crack open books by the great philosophical minds that were now long forgotten. Perhaps they had the answers I seek.

Now I find that I am dissatisfied with hare time. Nearing the finish line, I wonder if I spent life in the wrong gear, doing the wrong things. What do I want? The answer to that, of course, is complicated…

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And suddenly the universe collapsed around me. The exact reverse of the Big Bang.

“We lost them.”

I pulled sheets across all the windows, trying to shut out the light of the stars, mocking, taunting. In the darkness the words hovered, satellites, monitoring the rapid demise of my vital signs. The grief grew to be its own being, it sat at the dinner table, curled up in her spot on the bed, wafted her scent in the house. The universe never gave her back, and I am still trying to forgive that. But I can’t hate it, because it would be against everything she was.

I finished the book in that week before the collapse.

I named it after her: The Universe House.