

## SEARCHING FOR MEANING IN THE STARS By Dustin Grinnell

An accident makes the narrator of this story rethink his life and start thinking about life in general. A beautifully written philosophical piece about the most important relationship we have: the relationship with our own self.

Content Warning: Mentions of suicide

Ling realization came to me in winter, as I traveled from Boston, where I worked as a physics professor and mathematician, to my cabin on Lake Winnipesaukee in New Hampshire.

I'd left the city later than usual, and by the time I reached the lake, it was dark and snowing. No bridges or ferries connected the twenty-five-acre island within the lake to the mainland, which meant I had to take a boat across. Crossing at night was dangerous, even without snow. I'd done it once before, navigating by a light from the only other cabin on the island, but this night was moonless and fog hugged the water, making it impossible to see much of anything. I did my best to steer toward the island, but it was only a dim shape in the fog.

Within minutes, I had lost my bearings. When the boat struck a rock, I jerked forward, hitting my head on the dashboard, and toppled to the floor. The boat lost power, and the running lights went out, throwing me into complete darkness.

When I woke, I didn't know how much time had passed, but the snow had stopped falling and a multitude of stars peeked through breaks in the clouds. At that moment, I felt like I had merged with the night sky. My sense of my body disappeared, and I was part of the heavens, connected to the cosmos.

For many, such a sensation might have made them feel connected to something greater than themselves, giving their lives significance. Not me.

For years, I'd had the gnawing feeling that nothing mattered, but it hit a fever pitch that night. In that moment, I knew more clearly than ever that I was a tiny speck in a vast ocean of blackness. I was insignificant. A blip in the cosmic play. It was terrifying.

As a theoretical physicist, I had a scientific view of the world and a cosmic view of human existence. From my perspective, humans were just bags of particles, whirling protons, and electrons, governed by the physical laws of the universe. A young species, almost genetically identical to chimpanzees, we lived on a waterlogged planet circling a medium-sized star at the edge of a small galaxy in a cluster of thousands

of galaxies, among billions of even more galaxies.

When I finally arrived at the island, I was shaken. Thinking about merging with the cosmos and how meaningless my life was, I couldn't sleep. How could I live with the knowledge? If life was so short and insignificant, why go on?

A few days into my stay on the island, I dreamed I was in college and decided not to attend my calculus class or do the assigned homework. I was aware I was damaging my grade by ignoring the class's requirements. My behavior continued, and by the end of the semester, I knew I'd failed calculus, affecting my semester GPA. Yet when my grades were released by my teacher, I didn't log in to the website to check them. I just carried on with my life.

When I woke at three in the morning, I puzzled over the dream. What did it mean? Eventually, I realized it was an unconscious wish. I would *never* have been so neglectful in real life—I had always been studious in school—but in a dream, I could do anything.

But why was I fantasizing about ignoring my responsibilities?

I reasoned that my work to demystify the laws of nature and leave an enduring legacy had exhausted me. The dream represented a nihilistic wish to surrender all my striving.

There was some appeal in giving up. I'd never thought about ending my life, but I recognized the allure of death. It was oblivion. The instant the lights went out, all my desires and dramas would disappear. In a strange way, there was comfort in the thought of leaving my struggles behind.

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The next day, I called my primary care doctor.

"You likely suffered a minor concussion, but otherwise, you should be fine," he told me after I explained what happened.

"I think I'm having an existential crisis."

The doctor paused, likely not knowing how to respond. "I suspected depression, or seasonal affective disorder, but I can't confirm either based on your symptoms"

"What do you think I should I do?"

"I'd advise taking a break from work for a while. Our minds and bodies have ways of telling us to slow down when we're pushing things too hard."

Later that day, I took a stroll around the island, which was a quarter of a mile long and a tenth of a mile wide. Thankfully, most of the snow from the night before had burned away with the morning sun.

As I neared the only other cabin on the island, I saw a strong, stocky middle-aged man with a full beard and a bald head standing on the porch, his big hands wrapped around a cup. Mack was a local handyman and mechanic and the owner of the marina's gas station and convenience store.

"How are ya?" he called when he spotted me.

Usually, I'd walk over and chat for a while, but my mind still swirled from the prior night's dream and the accident a few days before. Instead, I waved and said only "Good morning" before continuing on.

At the northern tip of the island, I sat next to a spruce tree. I brushed away a thin layer of snow and ran my hand through the spongy moss beneath. I reflected on the conversation with my doctor and realized my problem wasn't neurochemical or

even psychological; it was philosophical. If I suffered from a "disease," it was an ailment of the soul. A crisis of meaning.

The religious people I knew got their values primarily from their faith, but I'd always relied on rational thinking and the scientific method to make sense of life. A scientist relied on facts, and there was no evidence to support the existence of a god.

While I couldn't delude myself, I acknowledged that by choosing not to believe, I had lost an essential source of guidance for navigating the complexities of the human endeavor. The sciences helped me explore the mysteries of our world, but they couldn't help me address the more significant questions my boating accident had raised.

Why was I here? What made life worth living? Would I go anywhere after death? In the face of these big questions, science, in all its glory, could do nothing. Science told me the hows, not the whys. I knew how the big bang had happened, but not why it had happened. I knew how evolution occurred through the process of natural selection, driven by random genetic mutations, but I didn't know why life had begun on our planet in the first place.

As a physicist, I'd spent my decades-long career obsessed with finding the most profound truths about the cosmos. I was no Stephen Hawking in terms of impact or celebrity, but I was a leading scientist, and my research, textbooks, and lectures had pushed the field of theoretical physics forward in significant ways. Yet now . . .

Why search for a unified theory of physics when our species may go extinct due to forces outside our control?

Even if we prevented our demise using technology, Earth had an expiration date. It was a cosmological certainty that in a few billion years, our sun would enlarge, engulf Earth, and explode. If our species was around and escaped that catastrophe, Andromeda, the closest galaxy to our own, was on a collision course with the Milky Way. If that wasn't bleak enough, the known universe was expanding so fast that in a thousand billion years, all the stars in our night sky would have died and gone cold.

If our species, planet, galaxy, and even universe had expiration dates, why play the game of life? Why pay taxes, teach, work, or love? Why not end one's life early?

The next day, I brought my boat to the marina. Though I'd gotten it running again after the accident, I wanted Mack to check it out.

"Of course," he said when I asked. "I'll look it over this afternoon."

"Thanks."

"Everything all right?" he added before I could leave to let him work. "You seem tense."

I told him about the dream I'd had, as well as an idea I'd been haunted by lately, which I'd read in a provocative book by a French writer. "This writer says the most vital question is whether life is worth living."

Mack's eyebrows raised. "In other words, whether or not we should kill ourselves?"

"That's right," I said. "According to the writer, answering that question is more important than knowing how many dimensions our universe has. From his perspective, humans crave meaning in their lives, yet the universe is indifferent to their desires. This leads to the 'absurd'."

"You've gotta be careful with ideas like that, Alexander. I have a cousin who thought life didn't make any sense, that nothing mattered. He's now locked away in a psych ward, like the guy in that flick One Flew Over the Cuckoo's Nest."

I nodded. The French writer warned that realizing life was irrational could lead to despair, but he also said we shouldn't stop at that insight. "He encourages us to fill the resulting existential void with a psychological revolt."

"What's that mean?"

"I'm not exactly sure yet. I need to figure that out."

Mack shook his head and laughed. "I think you just need a hobby, my friend. You're wound up pretty tight!"

I appreciated Mack's perspective. Like him, I had humble origins. We both came from small towns in New Hampshire, where many people were self-employed. When I was tired from hours of straining my brain with equations, I sometimes romanticized Mack's "simpler" life and grew nostalgic for my hometown. Sometimes, I'd even whip up a little daydream about moving back home to start a small business so I could work with my hands and fall asleep every night in a tired body. Maybe I'd meet someone I enjoyed spending time with and open a bookstore or a bed and breakfast.

But alas, it wasn't my life. "What I could be, I must be." I was a man of science who had the tools to discover makes me feel special." answers to complex questions.

When I returned to the marina a few hours later, Mack said, "Well, I've fiddled with a few things, and everything seems to be working fine. Just don't go hitting any more rocks, all right?"

I chuckled. "Roger that, Mack." "And hey, if you want to come by

my cabin this evening, I'd love to have you."

The invitation wasn't unusual. and I happily accepted.

At dusk, I took the narrow dirt path through the spruce and pine trees to Mack's cabin. He greeted me at the door with a six-pack of beer and walked me into his living room. Over the fireplace hung a framed photograph that caught my attention.

I nodded toward the picture.

"That new?"

Mack smiled. "Got it after one of our recent conversations."

"It's called Earthrise, right?"

"Earth rising above the moon's surface," Mack said with a nod. "An American astronaut took that picture from a space capsule while he was circling the moon. Pretty cool, huh?"

"Absolutely," I said, staring at the image. It was enchanting to see Earth floating in the galactic blackness. There was our home, a magnificent small, blue rock where billions of us strove, fought, hoped, hated, and loved.

"It's amazing to think we're all living out our existence on this rock, just trying to add purpose to our brief stay."

Mack took a sip of his beer. "From this vantage point, there are no religions or nations, no democrats or republicans."

"It makes me feel insignificant." "That's funny," Mack said. "It

We walked out onto Mack's dock, where we chatted. Knowing what I did for a living, he often liked to ask life's "biggest questions," especially about the universe.

"You think there's life on other planets, Alex?" he asked at one point. I shrugged. "With several hundred billion stars in our galaxy and a hundred billion galaxies within the universe? The chances are certainly high."

The next morning, I woke up and tinkered with an equation for a few hours. As I ate lunch, though, I decided to apply my intellect to something other than math or physics. I had thought my way into this crisis of meaning, so I could surely think my way out of it. To start, though, I needed more information.

After lunch, I picked up a book and didn't put it down until I'd finished it. For the next three weeks, I decided to take the advice of Mack and my doctor. I didn't do any math. Instead, I read books like a madman.

I started my quest for meaning by reading books that focused on understanding death and how to think about one's life knowing it had an expiration date. It soon became clear that humans were terrified of death. As an antidote, we busied ourselves in the meaning-making systems of our cultures to distract ourselves from the reality of our demise.

I, too, had spent my entire life repressing this fear. After all, what was more terrifying than knowing that one day, you would no longer *be?* With the accident, however, I could no longer deny reality and had faced the truth of my eventual demise. Facing the truth, however, came at a significant cost. Without denial, where could I find comfort?

No doubt there was comfort in believing a higher power could answer my wishes or I might go to a better place when I died. I'd certainly have company, as 89 percent of Americans believed in God and 74 percent believed in life after death. I was well aware—albeit always

amazed—that 25 percent of scientists at elite universities believed in God. Such belief kept my religious friends buoyant in times of struggle. Yet organized religion was of no use to me on this matter.

If I had been a younger man, I might have tried to relieve my anxiety by binging on self-help books in a desperate search for a thought leader or guru who claimed to have simple answers to complex questions. I'd learned the futility of this strategy in my thirties. No gains were associated with it, and the gurus, motivational speakers, intellectuals, politicians, celebrities, and even therapists were just as much in the dark as I was on life's mysteries. Especially when they said otherwise.

My main preoccupation that winter was to understand what gave life meaning. I turned to those who had crossed this existential divide before me and who, in searching for meaning in their lives, had found a cure for their nihilism. Most of the books I read were written by philosophers and thinkers concerned with human existence.

I read a book by a famous author who'd suffered an existential crisis and fallen into a deep depression in his fifties after recognizing that none of his work mattered. In the writer's account, life seemed like an absurd joke. Knowing this, he felt he couldn't continue with the mundane tasks of everyday life. He'd finally concluded that working-class laborers seemed to live without the existential angst that afflicted the more educated or elite.

Mack confirmed this while we were sitting around the campfire one night. "I feel bad for people like you, obsessing over stuff like the search for the meaning of life. There's significance all around you! Look at my life. Fixing up boats contributes to the community. While customers wait, I tell 'em a joke or story to pass the time. And I'm on the town's zoning committee and am even considering running for sheriff someday."

I nodded, considering Mack's words.

As I continued to read, I realized I needed a new metaphor for life. A friend of mine thought of life as a journey, like a trek up a steep mountain along winding, sometimes perilous trails. I couldn't relate to that, though. It seemed inadequate.

The metaphor for life the French author proposed was the myth of Sisyphus, who had been cursed to push a boulder up a mountain, only to watch it roll down again every time he reached the top. But Sisyphus, the writer claimed, had learned to find some dark enjoyment in the monotony. He had been cursed, but every day he had a job to do, and he did the best he could.

Was I not like Sisyphus? Every day, the same routine: wake up, shower, brew coffee, scribble in my notebook for hours, walk, read, sleep, and do it all over again. Could I, like Sisyphus, enjoy the struggle and find some dark happiness in the monotony? There were plenty of boulders to push in my field. Solving a complex equation was always a struggle, but it was invigorating when a problem was cracked.

However, this parable still didn't help me understand *why* I should push boulders in the first place.

Moving on, I read books by a provocative philosopher with some exhilarating ideas. He created one thought experiment, "the eternal return," that urged readers to think about living their life repeatedly, the same joys and pains, in the same order, for eternity. If the thought of living every moment over and over again horrified me, then I hadn't become who I was destined to be.

Putting myself to the test, I realized I wasn't as dissatisfied as I might have guessed. In fact, I was rather content with my place in the world as a physics professor and mathematician. That said, if my life were to repeat endlessly, there were some changes I would make.

The ideas I encountered in my reading led me to make some of those changes. First, I spoke to the head of my physics department and requested a sabbatical for the spring semester. It took some convincing as it was late notice, but I was granted the approval. Thinking I could live in my cabin, I put my studio apartment on the market, and within a week, it was sold. Mack helped me fully winterize my cabin.

The day I moved all my belongings into the cabin, I was filled with joy. I'd always admired Henry David Thoreau and his experiment living in a small cabin on Walden Pond near Concord, Massachusetts. Now I was making my own experiment! I had the solitude to read, think, and work on my projects. I had enough savings to live comfortably, but if I needed funds, I could teach classes at the University of New Hampshire.

For the following month, all I did was read, work, and walk around the island, stopping to record ideas in a notebook. I was alone much of the time, but I seldom felt lonely.

Mack had become a friend, and I looked forward to his visits after he closed his shop for the night. Sometimes, we'd sit around a fire for hours, drinking beer and discussing whatever was on our minds. Mack

liked to stargaze, so I'd bring my telescope to the end of his dock, and we'd examine craters on the moon. Sometimes, we'd see as far as Venus or Mars or even the moons around Jupiter.

Mack was always astonished by facts about space. When I told him our planet spun on its axis at about 750 miles per hour and that Earth orbited the sun at 65,000 miles per hour, he rubbed his beard while he looked across the dark lake, lost in thought.

One night, after a few beers, I told Mack about the books I'd been reading, and he offhandedly suggested I should write about what I had learned. It was a strange time in my life, and the idea of attempting to make sense of it through writing piqued my curiosity. With each day, I took the idea more seriously.

It was spring when I felt the welling up of a spiritual revolt inside me. A revolt against the despair of knowing the universe was indifferent to my desires and that a human life had no intrinsic meaning. The antidote, I realized, was to create my own personal significance.

For me, that involved engaging in projects and activities that energized me and gave my life zest. The field of physics had already given me these opportunities. Through my work, I expressed my unique talents and contributed to the advancement of knowledge. Perhaps, through my work, I was rebelling against the meaninglessness?

There was no outside authority or standard to confirm whether this was true. No parent, teacher, politician, or god could know what the right choices were for me. It was something of a eureka moment to realize that each choice I made gave my

life meaning. For me, a life dedicated to physics was a good life. The many authors I'd read had helped me come to this realization. Thinking my experiences could perhaps help others and knowing that storytelling and mythology had helped humans comprehend their existence for centuries, I took Mack's advice and began writing a book about my crisis.

All through spring, my daily routine involved waking up and writing feverishly until lunchtime. The manuscript began with the bleak certainty that our species was irrelevant in the vastness of the cosmos. To put things in perspective, I included the "cosmic calendar," where the time span of the universe—from the big bang 13.7 billion years ago to the present day—was overlaid on a single-year calendar.

On this calendar, the Milky Way didn't form until May, our solar system only coalesced around September, and single-celled organisms didn't show up on Earth until November. Dinosaurs appeared on December 24 and went extinct six days later. Astonishingly, modern-day humans appeared in *the last second*, at 23:59:59 on December 31. Dinosaurs lasted six days, and humans were only in their sixth second. If that didn't put life into perspective, I didn't know what could.

While I walked readers though the workings of the universe, the book was also part memoir and an attempt to answer the problem I'd set out to solve when I moved into the cabin: How did we go on living when life was brief and nothing seemed to matter? How did we accept Nabokov's description of a human life as "a brief crack of light between two eternities of darkness"? Writing was philosophy in action. Every day, I brought order to disorder by transforming personal insights and ancient wisdom into sentences, paragraphs, and chapters. Writing was similar to physics: they both involved discovery. I developed a strong belief that if I got the correct words in the right order, then perhaps I could help readers make sense out of the chaos of their lives.

While I enjoyed the process of discovery in writing, it was challenging to transform vague impressions and feelings into coherent sentences and give the big mess of ideas form. Yet writing allowed me to think critically about what I believed and helped me in my quest to find meaning—and I would share what I learned in the book: We all had to make it up as we went. We found meaning in our lives by discovering our own reasons for living.

From this, I realized the book was my attempt at a second grand unified theory: not one that searched for laws transcending time and space but one encompassing the human endeavor. A guide for life.

As summer drew to a close, the crisis my boating accident had sparked in my soul was resolving. My voracious reading on the meaning of life and the self-reflection I'd done was providing diminishing returns. I knew I had to stop reading and thinking, and just live. And to make sense of life through writing, as much as I could.

One night, as we sat around the fire, Mack suggested that perhaps it was impossible for humans to solve the physics problem to which I had devoted my life.

"Maybe no human can crack it," he offered. "Maybe humans are like frogs trying to understand geometry.

Frogs will just never figure out geometry."

"Maybe the problem is beyond our cognitive capacity," I agreed.

"How's that search for the meaning of life coming?"

"I'm still unsure whether my life has meaning from a cosmic perspective," I said. "But it does have meaning from a terrestrial one—at the level of my local community and the people I know. Whether I have the ability to solve my equations, I've found my work life enhancing; it exercises my strengths and gives me a reason for being alive."

Mack tipped his beer in congratulations. "I knew you'd figure it out."

Beyond my work, there were countless reasons to be alive. Friendship gave life meaning. Creativity gave life meaning. Freedom gave life meaning. Watching the humming-birds around the feeder was meaningful. That first sip of coffee in the morning was meaningful. An afternoon of reading in the hammock near the water was meaningful. Life was so short, but these things kept us alive

At the end of the summer, I decided not to return to the university in Boston. I began a part-time teaching position at UNH. This gave me time to work on my equations and finish my manuscript.

When I did my first reading at a local bookstore, I shared the story of the night I crashed my boat and lost myself in the stars. I explained how that incident had prompted me to retreat into solitude and find reasons for living. After the reading, several people told me the book had inspired them to find meaning in their own lives.

After that summer, I no longer felt insignificant when I gazed at the

sky at night and lost track of my body and mind connecting to the cosmos. Knowing I would die no longer brought me dread. I knew my place in the world. I cherished the brief time I had to play my part on this planet.

Every day, I took pencil and coffee-stained pages to the work desk to bang away at calculations. Perhaps I'd solve the problem and help us better understand our place in the heavens, or maybe I wouldn't. Maybe the problem was beyond my abilities. It didn't matter. I was working, participating, playing. I was alive.

Many months after the accident, I worked up the guts to take my boat onto the lake at night. The moon was out, and the stars were shimmering. In the middle of the lake, I dropped the anchor, laid on my back, and looked up at the sky.

Suddenly, I understood what the meaning of life was. Simply put, life itself had no meaning; there was only meaning *in* life. Meaning came from participating in life, even if you knew it was all fiction.

I came up with a new metaphor for living then.

Why not view my life and work on developing a unified theory as a sophisticated form of creative play? Why not see myself as a character in a novel overcoming challenges in pursuit of goals? It was an illusion, completely fake, but at least it was an illusion of my choosing. With this metaphor, life was a creative act, a work of art from beginning to end.



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