ASHES by F. C. Brown Cloud
(*Chicago Literati* Pushcart Prize nominee, 2016)

"Many of us are still living in the universe of Newtonian physics, and fondly imagine that real, hard scientists have no use for these misty ramblings, dealing as scientists do with the measurable and known. ... For some reason it has not yet trickled down to the man on the street that some physicists now are a bunch of wild-eyed, raving mystics."
Annie Dillard, "Pilgrim at Tinker Creek"

My father-in-law is still in the trunk of the car. He's been there a few weeks now.

I know what you're thinking. You're thinking it's trashy to treat your car like another closet, storage space for life's detritus that won't fit inside your home. And then there's the trunk itself. With my father-in-law taking up space, along with his laundry hamper full of dusty framed photographs, and a guitar with the fretboard spaced so wrong that no one could ever want it if not for sentimental value, what am I supposed to do when I go shopping? How do I haul home new loot, you wonder.

I haven't done much shopping lately. Certainly not a trip where we'd need more than the small corner of the trunk left free. It was expensive, getting my father-in-law back.

If we'd consented to their scooping him into the pauper pit, they would've cooked the dude *gratis*. But my father-in-law wanted his residual calcium phosphate -- bone ash -- to go someplace nice. Or so he told my wife. Or so she said that she'd been told. At the end, when I might have thought to ask, he couldn't talk. For his final few days all he had was a left-eye wink and a left-arm two-inches-into-the-air flop and a few degrees of neck twist.

The day before he died, he used that neck twist to play peek-a-boo with my daughter.

Even then, he seemed unready to leave. Some people take their final breaths accepting. Or so said the nurse. She'd seen so many strokes that she claimed she could read her patient's eyes. I'd suspect witchcraft, but more likely the aphasic ones never recovered enough to contradict her claims. In any case, the nurse did not attempt to cheer us with such sentiments. Any amateur could look into my father-in-law's eyes and see he still felt scared.

My one-year-old daughter, playing peek-a-boo, didn't notice any fear. Only his wink, which meant, my wife explained, *I love you*.

So the least we could do was honor his last request. Find someplace serene to put the ash. Even though our finances could ill afford the sudden smack, a bill for one thousand fifty-two. Even though I know it's not really my father-in-law back there, inhabiting that jar.

The issue is not -- or, not only -- that low-end crematoriums do sloppy work. The Freakonomics team did a piece for NPR where they stuffed ground chuck into the boneless bodies of mock dead cats; every crematorium still gave them a boxful of ash. Bereaved owners are being taken advantage of, perhaps. Crematorium ash is the residue of superheated bone. Of any of us, that is all that would be left. In those furnaces, flesh vaporizes and floats away.

Perhaps pet cremation is worse. Roast departed friends *en masse* and divvy out the ash and save a couple bucks. More profit for the purveyors of such services. Or perhaps the fraud was caused by the Freakonomics experiment itself. How would an operator feel, opening the door and seeing *nothing* where there should be ash?

Still, even with humans, I wonder how thoroughly they clean. With that whoosh of flame, the molecules of my father-in-law might have mingled with the incinerated bodies of everyone else processed recently in that facility. Based on the gaunt bereaved we saw shuffling through the funeral home, I imagine an appreciable percentage meth-head mixed in that ash.

But my real concern runs deeper. Perhaps you've heard that we are all made of stars. With every breath, some atoms that were you depart, some atoms that were once me might flow in and take up stewardship of you. We blend together.

So, my father-in-law? He was not that matter. Not that calcium, not that phosphate, not that vaporized water or carbon.

My father-in-law was a pattern. A set of linkages. That is where you would find his consciousness, his spirit or his soul. His ghost, perhaps. It hardly matters what you call it. As long as you aren't one of those physicist nihilists who claims, *What we have is not free will, an autonomous spirit or soul, but rather a simulate-able algorithm that constructs elaborate narrative rationales for actions made without volitional input from our conscious minds.* Those physicists always point to data showing a time lag between our actions and our own understanding of what we've done.

I strive mightily never to engage with this stripe of physicist. What I want to do, invariably, is proffer, *If I wasn't free, could I do this?*, and bop 'em in the nose.

My father-in-law was in there. It's only now that he is not.

As it happens, though, another set of nihilist physicists is giving us hope. They're investigating the fabric of our universe to learn how special we all are. The long answer involves a lot of math, but the short answer is, *We're not.*

Which is not nearly so bad as it sounds.

It means that, in this universe of ours, an unbounded eternal space of which we can see only a thirteen-billion-light-year-wide sphere, my father-in-law had more than one chance. The laws of physics say that if you find something you like and then look again, far enough away, you will always find another copy. With infinite space and finite possibilities, nothing can be unique.

Somewhere out there is another world that looks just like Earth where there lived a man who looked just like my father-in-law and he crumpled with a stroke at the exact same time and spent those same four days lolling in the hospital. Then died, leaving a couple who look like my wife and me to collect the ash.

That's not the part that should give you hope.

Hope springs from the fact that there is also a world that looks very much like Earth, but where my father-in-law survived. The stroke came and he recovered. Or he suffered no stroke at all.

If you find this hard to believe, there is a way to prove it to yourself. The "many worlds" precept of modern physics. You'll need a contraption for quantum-mechanical suicide. This consists of an "emitter" -- a machine that produces one photon, one particle of light, every single second -- and a "polarizer" -- a sieve that lets only half those photons pass, with *Which half?* chosen at random -- and a gigantic laser to lay your head in front of that would snuff your consciousness instantly if a wrong-polarized photon passes through to a detector and turns the laser on.

If you gathered your resolve and constructed this contraption, what you would see is the giant laser flashing approximately once every other second. Perhaps on, on, nothing, on. Or nothing, nothing, on. Pulsing or not, with no discernible pattern in time. That would be while you stood beside it, admiring your creation. But after you lay your head in the laser's path, a minute or more can pass and the laser will never flash. Lift your head and you see the laser pulsing once more, approximately every other second, just like before. Because there are many

copies of you in this unbounded universe of ours, and your consciousness can perceive only a world where you survive. Even if that world is very rare.

Of course, you can prove this only to yourself. Your friends and family, who no doubt derided your plan as folly, would see you die. The space where your head had been ablated by the laser. Their minds, with almost unitary probability, will inhabit one of those humdrum worlds where the laser always works just the way anyone would expect. Since they can consciously perceive *any* world, the many where you die and the lonely one where you do not, they will remain in the most likely place. If you plan to lay your head in the laser's path for an entire minute, you will almost assuredly die. Best preface your experiment with goodbyes.

Somewhere, though, an analogue of *you* choosing to do this will live. In our unbounded, eternal universe, that somewhere is a real place.

And there is one more strangeness. The reason we have not scattered my father-in-law yet, despite his wish. Because, yes, we know, he died, he was cremated, he most likely will never be coming back. This is the Second Law of Thermodynamics for you, the "law" that discusses entropy, meaning something akin to "randomness," and whether it is decreasing. It is not. Not ever. Not if you consider the universe as a whole.

Or so says the Second Law.

But the Second Law of Thermodynamics is not physics, exactly. It is probability. To be more precise, the Second Law says that entropy *probably* is not decreasing. That the probability of decrease is very, very small.

Yet, still. The chance that something else can happen? It is not exactly zero.

This same idea powers perpetual motion machines. If you search exhaustively, you will somewhere find -- billions upon powers of billions of lightyears away -- a device that draws energy out of nothing. For any arbitrarily large but finite spell of time, which is to say, almost eternally, order can be summoned from chaos. We have known of such devices for many years. Since long before I was born. The trick is knowing where to find them. To dream of *reaching* one is perhaps too bold. Most certainly, none resides within this thirteen-billion-light-year-wide sphere that we can verify exists.

Somewhere, my father-in-law will return.

The man was an ordered structure. His spirit was a pattern. And the Second Law says that, now that the pattern is gone, it *probably* will not come back. Our universe progresses constantly toward more and more disorder. But those nihilist physicists -- the hopeful ones, not those jerks who claim we lack free will -- say that our universe contains so many copies of this world, so many copies of the dead man riding in my trunk, that even though *dead is dead* and he is never coming back ... in one world, he is. He will be fine. Re-coalesced. Irritated, perhaps, that it is so cramped back there in the trunk, that he was rattled so much during our drive, but well enough to cough out a mouthful of ash and complain.

And the thing about probability is, until that moment, we can never know whether that world is our own.