

Ghost Heart

A jellyfish, if you watch it long enough begins to look like a heart beating. It doesn't matter what kind: the blood-red *Atolla* with its flashing siren lights, the frilly flower hat variety, or the near-transparent moon jelly, *Aurelia aurita*. It's their pulse, the way they contract swiftly, then release. Like a ghost heart—a heart you can see right through, right into some other world where everything you ever lost has gone to hide.

Jellyfish don't even have hearts, of course—no heart, no brain, no bone, no blood. But watch them for a while. You will see them beating.

Mrs. Turton says that if you lived to be eighty years old, your heart would beat three billion times. I was thinking about that, trying to imagine a number that large. Three *billion*. Count back three billion hours, and modern humans don't exist—just wild-eyed cave people, all hairy and grunting. Three billion years, and life itself barely exists. And yet here's your heart, doing its job all the time, one beat after the next, all the way up to three billion.

But only if you get to live that long.

It's beating when you're sleeping, when you're watching TV, when you're standing at the beach with your toes in the sand. Maybe while you're standing there, you're looking at sparkles of white light on dark ocean, wondering if it's worth getting your hair wet again. Maybe you notice that your bathing suit straps are just a little too tight on your sunburned shoulders or that the sun is too bright in your eyes.

You squint a little. You are as alive as anybody else right now.

Meanwhile the waves keep rolling over your toes, one after another (like a heartbeat, almost—you can notice it or not), and the elastic is digging in, and perhaps what you notice, more than the sun or the straps, is how cold the water is, or the way the waves create hollow places in the wet sand beneath your feet. Your mom is off at your side somewhere; she's taking a picture, and you know you should turn to her and smile.

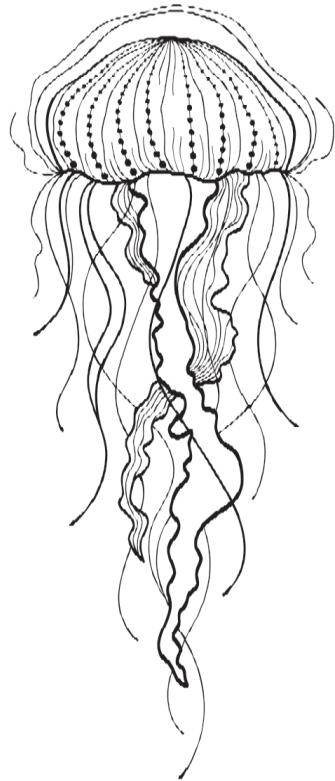
But you don't. You don't turn, you don't smile, you just keep looking out at the sea, and neither of you knows what matters about this moment, about what's about to happen (how could you?).

And the whole while, your heart just keeps going. It does what it needs to do, one beat after another, until it gets the message that it's time to stop, which might happen a few minutes from now, and you don't even know it yet.

Because some hearts beat only about 412 million times.

Which might sound like a lot. But the truth is, it barely even gets you twelve years.

Part One



Purpose

It doesn't matter if you're writing a middle school lab report or a real scientific paper. Begin with an introduction that establishes the purpose for all the information that's to follow. What do we hope to find out from this research? How does it relate to human concerns?

—Mrs. Turton, Grade 7 Life Science teacher

Eugene Field Memorial Middle School,
South Grove, Massachusetts

Touch

During the first three weeks of seventh grade, I'd learned one thing above all else: A person can become invisible simply by staying quiet.

I'd always thought that being seen was about what people perceived with their eyes. But by the time the Eugene Field Memorial Middle School made the fall trip to the aquarium, I, Suzy Swanson, had disappeared entirely. Being seen is more about the ears than the eyes, it turns out.

We were standing in the touch tank room, listening to a bearded aquarium worker speak into a micro-phone. "Hold your hand flat," he said. He explained that if we placed our hands in the tank and held them perfectly still, tiny sharks and rays would graze against our palms like friendly house cats. "They'll come to you, but you have to keep your hand flat and very still."

I would have liked to feel a shark against my fingers. But it was too crowded at the tank, too noisy. I stood in the back of the room. Just watching.

We had made tie-dye shirts in art class in preparation for this field trip. We'd stained our hands neon orange and blue, and now we wore the shirts like a psychedelic uniform. I guess the idea was that we'd be easy to spot if any of us got lost. A few of the pretty girls—girls like Aubrey LaValley and Molly Sampson and Jenna Van Hoose—had tied their T-shirts into knots at their hips. Mine hung over my jeans like an old art smock.

It was exactly one month since the Worst Thing had happened, and almost as long since I'd started *not talking*. Which isn't refusing to talk, like everyone thinks it is. It's just deciding not to fill the world with words if you don't have to. It is the opposite of *constant talking*, which is what I used to do, and it's better than *small talk*, which is what people wished I did.

If I made small talk, maybe my parents wouldn't insist I see *the kind of doctor you can talk to*, which is what I would be doing this afternoon, after today's field trip. Frankly, their reasoning didn't make sense. I mean, if a person isn't talking—if that's the whole point—then maybe *the kind of doctor you can talk to* is the very last person you should have to see.

Besides, I knew what the *kind of doctor you can talk to* meant. It meant my parents thought I had problems with my brain, and not the kind of problems that made it hard to do math or learn to read. It meant they thought I had mental problems, the kind that Franny would have called *cray cray*, which is short for *crazy*, which comes from the word *craze*, which means "to fill with cracks and flaws."

It meant I had cracks and flaws.

"Keep your hands flat," said the aquarium worker to no one in particular—which was fine, because nobody was listening to him anyway. "These animals can actually feel heartbeats in the room. You really don't need to wiggle your fingers."

Justin Maloney, who is a boy who still moves his lips when he reads, kept trying to

grab the rays' tails. His pants were so loose that every time he leaned over the water, I could see several inches of his underwear. I noticed his tie-dye was inside out. Another ray passed, and Justin reached in so fast that he splashed water all over Sarah Johnston, the new girl, who was standing next to him. Sarah wiped the salt water off her forehead and moved a few steps away from Justin.

Sarah is very quiet, which I like, and she smiled at me on the first day of school. But then Molly walked over and started talking to her, and then I saw her talking to Aubrey at the lockers, and now Sarah's shirt was knotted at the waist, just like theirs.

I pushed a clump of hair out of my eyes and tried to tuck it behind my ears—*Mizz Frizz, hair so impossible*. It immediately fell back in my face again.

Dylan Parker snuck up behind Aubrey. He grabbed her shoulders and shook them. "Shark!" he shouted.

The boys around him laughed. Aubrey squealed, and so did all the girls around her, but they were all giggling in that way that girls sometimes do around boys.

And of course that made me think of Franny. Because if she had been there, she would have been giggling, too.

I felt that sweaty-sick feeling then, the same thing I felt whenever I thought about Franny.

I squeezed my eyes shut. For a few seconds, the darkness was a relief. But then a picture popped into my head, and it was not a good one. I imagined the touch tank breaking, the rays and tiny sharks spilling out all over the floor. And that made me wonder how long the animals could last before they drowned in the open air.

Everything would feel cold and shrill and bright to them. And then the animals would stop breathing forever.

I opened my eyes.

Sometimes you want things to change so badly, you can't even stand to be in the same room with the way things actually are.

In a far corner of the room, an arrow pointed down a staircase to another exhibit, jellies, on the floor below. I walked over to the stairs, then glanced back to see if anyone would notice. Dylan flicked water at Aubrey, who squealed again. One of the chaperones walked toward them, already scolding.

Even in my neon tie-dye, even with my *Mizz Frizz* hair, nobody seemed to see me.

I walked down the stairs, toward the jellies exhibit.

No one noticed. No one at all.

Sometimes Things Just Happen

*You were dead for two whole days before
I even knew.*

It was afternoon, late August, the end of the long, lonely summer after sixth grade. My mom called me in from outside, and I knew something was wrong—really, really wrong—just by looking at her. I got scared then, thinking that maybe something had happened to my dad. But since the divorce, would it even matter to my mom if he got hurt? Then I thought maybe something was wrong with my brother.

“Zu,” Mom started. I heard the refrigerator hum, a poink poink from the shower dripping, the ticking that comes from the old clock on the mantel whose time is always wrong unless I remember to wind it.

Long streaks of sun crossed through the window, like spirits through walls. They lay down on the carpet and were still.

Mom spoke evenly, her words coming out at normal speed, yet everything seemed slowed down, as if time itself had gone into slow motion. Or maybe like time had stopped existing altogether.

“Franny Jackson drowned.”

Three words. They probably took only a couple of seconds to come out, but they seemed to last about half an hour.

My first thought was: That’s weird. Why is she using Franny’s last name? I couldn’t remember my mom ever using your last name. You were always just Franny to her.

*And then I realized the thing she’d said after she said your name.
Drowned.*

She said you had drowned.

“She was on vacation,” Mom continued. I noticed how perfectly still she was sitting, how rigid her shoulders were. “A beach vacation.”

Then she added, as if it would somehow help the thing she’d said make any sense at all, “In Maryland.”

But of course her words didn’t make sense.

There were a million reasons they didn’t. They didn’t make sense because it hadn’t been that long since I’d seen you, and you were as alive as anyone then. Her words didn’t make sense because you were always such a good swimmer, better than I was from the instant we met.

They didn’t make sense because the way things ended between us was not the way they were supposed to end. They were not the way anything should ever end.

And yet here was my mom, she was right in front of me, and she was saying these words. And if her words were true, if she was right about this thing she was telling me, it meant that the last glimpse I’d had of you—walking down the hallway on the last day of sixth grade, carrying those bags of wet clothes and crying—would be the final one I’d ever have.

I stared at my mom. “No, she didn’t,” I said.

You hadn’t. You couldn’t have. I was sure of that.

Mom opened her mouth to say something, then closed it again. I saw tears fill her eyes.

“She didn’t,” I insisted, louder this time.

“It was Tuesday,” Mom said. Her voice was quieter than before, as if my getting louder had sucked the strength from her own breath. “It happened on Tuesday. I only

just found out."

It was Thursday now.

Two whole days had gone by.

Whenever I think about those two days—about the space between you ending and me knowing—I think about the stars. Did you know that the light from our nearest star takes four years to reach us? Which means when we see it—when we see any star—we are really seeing what it looked like in the past. All those twinkling lights, every star in the sky, could have burned out years ago—the entire night sky could be empty this very minute, and we wouldn't even know it.

"She could swim," I said. "She was a good swimmer, remember?"

When Mom said nothing, I tried again. "Remember? Mom."

Mom just closed her eyes and placed her forehead in the palms of her hands.

"It's impossible," I insisted. Why couldn't she see how impossible this was?

When Mom looked up, she spoke slowly, like she was trying really hard to make sure I heard every single word. "Even good swimmers can drown, Zu."

"But it doesn't make sense. How could she—?"

"Not everything makes sense, Zu. Sometimes things just happen." She shook her head and took a deep breath. "I understand that this probably doesn't even seem real. It doesn't seem real to me, either."

Then she closed her eyes for a few long seconds. When she opened them again, her face twisted up in a terrible way. Tears began spilling down her cheeks. "I'm sorry," she said. "I'm just so sorry."

She looked grotesque, her face all crumpled like that. I hated the way she looked. I turned away from her, those nonsense words still tumbling in my head.

You drowned.

Swimming in Maryland.

Two days ago.

No, none of it made sense. Not then, and not later that night when the Earth dipped toward the stars. Not the next morning when it rolled back around to sunlight again.

It didn't make sense that the world could roll back to sunlight again.

All this time, I'd thought that our story was just that: our story. But it turns out you had your own story, and I had mine. Our stories might have overlapped for a while—long enough that they even looked like the same story. But they were different.

And that made me realize this: Everyone's story is different, all the time. No one is ever really together, even if it looks for a while like they are.

There was a time when my mom knew what had happened to you, when the weight of it had already hit her and I was just running through the grass like it was any other day. And there was a time when someone else knew and my mom didn't. And a time when your mom knew and almost no one else on the planet did.

And that means that there was a time when you were gone and no one on Earth had any idea. Just you, all alone, disappearing into the water and no one even wondering yet.

And that is an incredibly lonely thing to think about.

Sometimes things just happen, my mom had said. It was a terrible answer, the very worst.

Mrs. Turton says when something happens that no one can explain, it means you have bumped up against the edge of human knowledge. And that is when you need science. Science is the process for finding the explanations that no one else can give you.

I'll bet you never even met Mrs. Turton.

*Sometimes things just happen *is not an explanation. It is not remotely scientific.*
But for weeks and weeks, that was all I had.
Until I stood in that basement room looking at jellyfish on the other side of glass.*