

Biology: A Memoir

by Gary Fincke

1

Mr. Freitag, your biology teacher, was fond of seeding his lectures with quotes. “Some insects are generated spontaneously out of dew falling on leaves,” he read to your class one February afternoon. “Others grow in decaying mud or dung, some in the flesh of animals.” He paused, his gaze moving from desk to desk as if he was trying to make out who wanted to laugh and who wanted to say “Amen.” Finally, with a flourish, he closed the book and said, “That, class, is an observation by the famous Aristotle. He wrote *The History of Animals* and fancied himself a creation expert. We’re about to make a fool of him.”

2

Fifteen, you thought you knew all about superstitions, how the plots of ancient myths were full of holes that needed to be covered by faith. You had a grandmother who was fond of telling you about the ways people misused the ones you’d learned from Genesis. “Near Galesville, Illinois,” she said, “some thought it was possible to discover where the Garden of Eden rose and fell. Those people thought you could walk right up to where the borders were and imagine Adam and Eve getting kicked out.” Like she always did, she waved one hand up toward the sky as if what she was saying was being overheard. “That’s because they believed what the Reverend VanSlyke preached,” she said. “Can you imagine? He thought God started right there in Illinois with the Garden. And him still preaching about it when I was born.”

3

After Mr. Freitag snickered about Aristotle's mud, you thought about the soft bog behind the lot where a neighbor's house stood a few doors down from your house, a patch of wetlands that looked like something that would digest you if you tried to walk from one side to the other. Somehow, when you were alone there, you half-expected upraised hands or at least a riot of worms to emerge. Your neighbor's dog seemed spooked as well, always skittering when she was anywhere near the swamp. That quagmire, by late winter, always showed an early sign of spring. "That fellow down there," your father said more than once, "he should keep an eye out to see if that swamp is spreading. And here we are downhill from his place." You hadn't quite outgrown half-expecting the gurgling of just-born voices thick with slime, their mythical bodies slipping under your door, bubbling and multiplying like ancestors.

4

A few days after the Aristotle lesson, Mr. Freitag offered a biology riddle. "What do you get if you place sweaty underwear in a barrel and cover it carefully with husks of wheat?" When nobody raised their hand, he said, "What if you wait three weeks, giving all that sweat time to penetrate those husks?" Mr. Freitag paused, looked the class over, and said, "Mice. You get mice that emerge from the wheat." You and everybody else are more puzzled than amused, but Mr. Freitag seemed almost giddy. "Remember the most important thing, class. The mice are created only if the sweat is intimate."

5

Becky Flynn was your lab partner. Earlier in the year you'd stared through a microscope at paramecium and scrapings from the inside of your mouths. You'd examined worms, slicing them lengthwise and pinning back their skin. Her uncle, a fisherman, raised them, she said, creating the proper soil for them to thrive in. "If he knew who Aristotle was," she'd said, "he'd believe every word."

“Sure, he would,” you’d said, eager to agree with her, thankful her last name followed yours in the alphabetical class roster because you loved being near her. You didn’t volunteer your ongoing twelve years of perfect attendance at Sunday school where every teacher you’d had insisted all of the stories in the Bible were literally true. And you didn’t confess that even though your father required you to attend, it had been five years since you had believed those teachers.

6

An extended thaw teemed the south face of your grandmother’s yard with birth. Crocuses bloomed. The stems of daffodils poked up weeks early. Then, March about to begin, deep snow fell. Your grandmother’s body seemed to thicken, making the stairs a trial of labored breathing. From the third floor of her house you could see the Allegheny, Monongahela, and the Ohio where they met. Your grandmother said that Pittsburgh had more chance of being the site for the Garden than any place in Illinois. The triangle where its three rivers converged would remind anybody, she said, of the Bible’s description of Paradise. “Wouldn’t that be something?” she said. “Paradise getting its start in a place that turned to hell with all the mills and smoke and stink down that way.” She paused as if talking caused her to be out of breath. “But don’t you forget,” she finally added, “there’s only that one Garden of Eden where God began us from mud and bone.”

7

Serious at last, Mr. Freitag said, “You’d think people would get over it, but for two thousand years, some of Aristotle’s ideas about spontaneous generation were accepted. Plenty of time to observe more closely. Years of microscopes being in use. There was a menagerie in the soil. The earth was filled with the unborn. And so was dung, and cheese, and bread. The dew itself seethed with miracles, each morning giving birth to insects. It’s hard to dislodge what people want to believe.” Francesco Redi. John Needham. Spallanzani. Swammerdam. Mr. Freitag seemed sad when he mentioned those scientists no one had ever heard of. “Their experiments included at least one small flaw that kept them from producing the

kind of proof that would shut up the ignorant.” Mr. Freitag sighed, then smiled. “Pasteur,” he said triumphantly. “You know why he’s remembered? He conducted his experiment correctly, that’s why. Now everyone had to see what was true. But before you feel too smart, remember that was just one hundred years ago, just one century of truth.”

8

That week, you and your friend Jack launched an experiment of your own. You made a stew of leftover cafeteria food, bits of bread and fruit, filling a paper condiment cup and sliding it into the hollow of one spill-stained leg of the small table where the two of you always sat during the third lunch period. Extra credit, you said, laughing at the recipe for the spontaneous generation of anything at all. You decided to wait a week for something to be born, able to eat lunch above that brew each day without disturbing the fussy demands of science.

9

Mr. Freitag read one more old-time recipe before your class moved to the lab stations: “Lead a young bull into a carefully-dug pit. When you are sure the depth is suited to his size, kill the bull and fill that hole until only its horns protrude from the ground. Wait a month before opening. A swarm of bees will fly from the corpse.” Mr. Freitag didn’t smile this time. “Those people had to sacrifice something very valuable to generate bees,” he said. “That should tell you how important bees must have been to anybody who put stock in the recipe.” You wanted him to keep reading from that book. It was more interesting than the heavy textbook you lugged home every night because Mr. Freitag assigned homework at the end of every class.

10

One afternoon, your father walked you to the three upstairs rooms where you’d lived until you were seven. You noticed there wasn’t a door, that anyone who entered downstairs could walk into those rented rooms. The Kunard’s lived there

now, at least for a few more weeks, because that house and the church next door were about to be razed and replaced by a new house of worship. The Kunard's let you tour those doomed rooms filled with furniture, some of which your parents had left behind. The iron radiators hissed as if they recognized you.

After that brief look-around, your father took you to the church cellar where he told you he was the janitor there when you were born, that he added coal and subtracted ashes right where you stood. "Look close," he said, like he expected the faces of the dead were on the scattered chunks of coal. "For extra income," he said. "For you and your sister, but each morning it was God first, then family," trying to teach you to wear his fierce faith on your back like a hump, and you nodded and shoveled a load, substituting cooperation for agreement.

11

During lab, along the classroom's smooth black counter, you and Becky Flynn arranged your flasks like Pasteur had, openings straight up or s-curved, some covered, some sealed. You boiled broth and poured. You watched for days until that broth clouded and stunk or stayed clear, refuting the presence of what Mr. Freitag said people called "life-force" in air. That test was so simple that every pair of students in the class succeeded, though Ron Eck, standing next to you and Becky, said his father was going to demand equal time for talking about how God's hands had guided everyone's beginnings. Instead of laughing, Becky looked thoughtful. Her father, she said, had told her more than once she was selling her soul for an A in biology. Even when Ron Eck turned away, her expression didn't change.

12

In Latin, you translated the stories of gods and goddesses, and everybody, including Ron Eck, agreed they were myths because what those ancient gods could do was impossible. Nobody mentioned the mythologies of the present.

13

On the seventh day, you and Jack bolted your sandwiches and milk before you raised that table while your small desserts stayed sealed. Jack used his shoe to nudge that tiny womb into the light so you could observe the fine hair of mold and whatever else your recipe had grown with darkness, time, and heat. A flurry of fruit flies lifted from that soggy cup as if you'd fathered them with leftovers. They rose and dispersed, sons and daughters disappearing among three hundred third-shift-lunch-hour students before you and Jack unwrapped your cakes and stood, giddy, hurrying into the hall like missionaries carrying gifts.

14

At the end of your street, one property owner had somehow refused being hooked up to the sewer system that had been installed five years earlier. One late afternoon a few weeks after the fruit flies were born, you cut through that neighbor's yard to save a few seconds walking home from school. You'd missed the bus because Becky Flynn seemed interested in talking to you, and you were so excited about the possibility of going out with her that you nearly walked through the soft ground where the neighbor's cesspool drained. What had warned you was the brilliant green of the grass that surrounded where it was buried.

"That's nothing to mess with," your father said when you described the landscape at dinner. "You could pick up anything there if you're not careful." And though you understood that the "anything" he meant were the consequences of invisible bacteria, the extraordinary shade of green seemed to signal that someone like Ron Eck's father or Becky's uncle would be right to believe that saturated earth was capable of giving birth to more than grass.

15

At the spring sophomore party, you danced with Becky Flynn for the first time, both of you dressed as if you were twenty years old in the Roaring 20s. She was a flapper in a dress she'd found at a thrift store. You wore your grandfather's silk

vest and watch chain. The music was early 1960s. There was no Charleston to make a fool of you, and you managed a passable Bristol Stomp. When the music slowed, you shuffled to late doo-wop hits like “My True Story” and “Daddy’s Home.”

“I hate biology,” Becky said during the pause between records, but she stayed pressed against you. “Mr. Freitag talks like the Bible is a book of fairy tales.” Your favorite slow song, “Lover’s Island,” began, and you wrapped both arms around her, dancing with her the way you’d noticed couples going steady did.

16

During May, Mr. Freitag lectured your class about how organisms change over time because of heredity and behavior. “Those who better adapt survived more often and had more offspring,” Mr. Freitag said. “Think descent with modification, one of the best substantiated theories in the history of science.”

Though science, sometimes, made you sad, you decided that people like Ron Eck’s father imagined hell because they needed to believe everybody they despised would be punished. Religion was for people who hated being mortal, so they made up another kind of life, becoming simpletons who experienced nothing but happiness.

17

That summer, finished with Mr. Freitag and biology, you were called from Sunday school because your grandmother had died suddenly just after dressing for church. There was a three-day flurry of phrases like “crossing over” and “God’s will.” Your relatives and family friends provided variations on the certainty of paradise.

18

Ron Eck, at the viewing, said his father was working on compiling a book of “begats” through every century in the six thousand years since human beings had sprung from dust, everybody a distant cousin to everybody else descended from

a pair of parents. He said his father had already spread all of the Bible's fathers and sons across rolls of butcher paper, taking care of the first 4,000 years. Now he was working his way back from the twentieth century. He'd reached the 1700s and expected to fit the newer generations to the Bible's roll call like two ends of a pipe meeting each other after circling the earth. "He's going to prove everything the Bible says is true," Eck said, before he drifted away, and you thought of how, instead of finishing geometry homework one weekend, you'd calculated Pi to one hundred places on paper taped together for a panorama of numbers, using up so many hours on proving or disproving the infinite that you had a headache for three days from pounding your head against the mathematics of chance.

19

The night before your grandmother's funeral, Becky Flynn, a few months older than you were, had a brand-new driver's license and her father's car. She flicked the headlights on, then off, sending some signal into the game lands where she'd parked, creating, she said, the evening and the morning of the first day. "We're alone as Adam and Eve," she said, reciting the passages about God's simple, yet perfect recipes for births from clay and rib. She flicked the lights again as if she wanted God's finger pointing at you as you opened her blouse and found her breasts in the dark, secretive as your long-ago, newly created ancestors. And though she didn't allow you to do anything more, you were so in love with the partial knowledge of her body, you said "yes" to whatever she believed about dirt and bones.

20

After the funeral, searching through your grandmother's house, you tried to hear her voice over the nearby construction, a water line's network of underground pipes being dug up for repair. Nobody followed you upstairs where you opened drawers and examined the decades-old lingerie and negligees. Where you sat on her bed and imagined her and your grandfather, half a century before, lying down together after returning from a weekend's honeymoon. And then you told yourself

that if only the work crew would leave, if only there was no traffic, if only the relatives downstairs would shut up and sit and hold their breath, you might hear her distant voice confirm the location of the extraordinary site of Eden.



Gary Fincke's new essay collection, *The Mayan Syndrome*, will be published in late September by Madhat Press. Its lead essay, "After the Three-Moon Era," originally published at Kenyon Review Online, was selected to be reprinted in *Best American Essays*, 2020. An earlier collection, *The Darkness Call*, won the Robert C. Jones Prize (Pleides Press, 2018).