

CALCULUS BY CANDLELIGHT

Three hours north of Atlanta on I-85, somewhere in South Carolina, Carl kept the radio low while Dee snored in the back seat. Tranh sat beside him, tight-lipped. A year earlier they had driven in the opposite direction toward Emory in a rented van filled with fresh clothes while Tranh turned Kleenexes into sodden pulp at the thought her daughter was leaving home. Now they were returning, in a station wagon jammed with the stale and stained jumble of a hastily emptied dorm room. Carl gripped the steering wheel and wished the lane markers flashing in the headlights against the midnight blackness would erase the memory of the dresser drawer he emptied into the dumpster on the way out. An empty vodka bottle, a pair of silk handcuffs, and a pack of flavored condoms. Carl snapped off the radio when Steely Dan came on. Those weekends at the college sure didn't turn out the way he had planned.

A month later they were sitting in a dimly lit office furnished with beige corduroy upholstered chairs and end tables bare except for strategically placed boxes of tissues. Dr. Naomi Sharp sat in front of her three framed diplomas and peered over her steel-rimmed glasses, her black hair pulled back in a bun and her colorless lips drawn in a tight line. On the ride over, Dee was making cracks about Miss Gulch in the Wizard of Oz and Carl smiled sideways to Tranh. Counseling had been his idea, and lacking any referrals, he had chosen a female name at random from the directory. Dee had shrugged at the suggestion. "Whatever. Daddy's so noble. He doesn't just want to come out and say I'm fucked up and should see a shrink. So we can all go and feel sorry for ourselves together."

“Try to think of your best memory together,” said Dr. Sharp to no one in particular, in a voice like an answering machine.

Carl and Trinh looked at Dee, and Dee looked at the picture on the far wall. After a minute Carl said, “I think you must have been four. We used to go for walks sometimes, over on the university grounds. We still lived in the apartment then. One day – it had to be summer because there weren’t any students around – we passed this bush and heard thrashing inside. I looked in, and there was this bird, its legs all tangled with string, hanging upside down from one of the twigs. I pulled it out and we untangled the string, and it flew right off. That was a golden moment. The sun was shining, and I felt like a hero. Don’t you remember that?”

Dee looked at the ceiling. “That was the big thing for you? I don’t remember that.” She waited for a minute and eyed the therapist. “It’s my turn now? Well, for me, it had to be the sex.” Carl and Trinh drew their breaths in unison.

“Oh surely you must remember *that*, Daddy. Those nights when Mommy was with Grandma at the hospital, or after she went to sleep, you’d come into my room. First you’d feel up my Barbies, then you’d feel me up.”

Carl jumped up. “What the hell . . . what are you doing?” He looked back and forth at Trinh and Dr. Sharp. “You know I never . . . why are you saying this? Look what you’ve done.” Trinh’s eyes glistened and she clenched her teeth. Carl shouted again, “Say that isn’t true! You know that isn’t true!”

Dee giggled. “Got you going, didn’t I? Somebody needed to liven up this party. But maybe it would have been better that way. Then we’d all be getting along

and we wouldn't need to be coming here to get in touch with our feelings, would we?"

Tranh wiped her eyes and choked, "Dirty mouth girl."

Carl eased back into his seat, still breathing hard, and looked helplessly at Dr. Sharp. "You see? You see what we have to deal with here?"

Dee smirked as the adults fidgeted. The answering machine voice said, "Deirdre. Can you help the process today by describing something true that was good at home?"

"It's Dee now. Deirdre was some name Mom picked because she thought it sounded French and didn't know." Dee glared for a minute and looked at her nails. "Oh, everything was perfect, always. Really. Grandma from Vietnam would squat in the doorway eating rice and fish heads out of a bowl and talk chicken talk to Mom. That was always great. Like I could ever have any friends over to see *that*."

Tranh moaned and pressed her fist to her mouth. Carl tried to find the calm voice he put on when both of them were shouting in front of strangers, "Dee, that's enough. We've been over that. Must you always try to be hurtful?"

"No blaming, Mr. Wilcox," said Dr. Sharp, in a tone that missed being soothing. "Now, Deidr. . . Dee, please try. Can you think of some good memory?"

Dee glanced at the couch and then back at her hands. "When I was little, before things got screwed up, we would watch TV. Just the three of us. The Muppets. Hawaii Five-O. Little House on the Prairie was Daddy's favorite. He always likes the old-timey stuff."

Carl fastened his gaze on the white strand in Tranh's bangs. How long ago had that been? Dr. Sharp looked at the clock facing outward on her desk, now pointing ten minutes to the hour, and stood up. "I think we've achieved some communication here today. I will see you again in two weeks."

On the ride home Tranh stared hard at the mass of grey clouds roiling over the sunset. "For this we actually are paying that witch a hundred an hour? We can listen to this crap for free." She bit her lip and looked back out the window. "She didn't bother to ask what I remembered."

Dee in the back did not look up from her keypad. "Maybe she could have given us a drink. That might have gotten things going,"

"That is more of the problem than the solution here," said Carl. "We're all in this together, we're all still a family, so it's fair if we all go together."

"I already know what Mom would have said. My piano recital, when she could brag to her Vietnamese friends that her daughter did something that looked high-class American. Too bad I wasn't getting straight A's like the Vo kids."

Carl slowed the Camry to 8 mph and let the silent machine drift like a boat along the river of swirling leaves that was Club Boulevard, nearly empty in the dusk. The late autumn leaves overflowed the curbs, with one yard a solitary patch of green framed by a dozen overstuffed plastic bags. Tranh glanced at Carl and narrowed her eyes, "Are you all right?"

In the back seat Dee's thumbs were flying as she was texting a face with the tongue sticking out - if only Rob on the other end knew how close the screen in her

lap was to where he wanted to be. As the car slowed she said, "Daddy, what the *fuck* are you doing?"

"Hey!" Carl and Tranh shouted simultaneously.

Tranh squirmed in her seat and made a fist but couldn't reach around the seat back. "Slap her!" she hissed at Carl.

Carl gazed at the willow oak trunks sliding past. "See, this is how life was a hundred, two hundred years ago. No cars, no engine noises. People could only walk or ride in horse-drawn carriages. This was all the faster people could ever move. The pace was calmer, saner. People had time to think, reflect on what they were doing." He glanced in the mirror and saw Dee still hunched over her cell. "People had time to think about what they said then too," he continued. "No telephones, no cell phones, no internet. People wrote letters. On paper. And you had a week or two between to think about what you really meant to say. Something substantial. Not just oh muh gawd and punctuation mark faces."

Dee glanced up and forced a yawn. "Yeah yeah, the good old days. Nobody got anywhere or did anything, and the streets were full of horse shit."

She returned to the keypad in her lap and clicked with her thumbs "OMG Daddy's losing it again. Back to the log cabin."

That night Carl smoothed a sheet of graph paper on the coffee table and penciled two arrows at right angles. "x is to the right and left, y is up and down," he explained for the dozenth time. Dee looked at her nails and down at her blinking cell. It was Rob's number. "Can I get this Daddy?"

Carl put on his patient face and kept his voice level. "You have a test tomorrow. They can wait a few minutes and you can too."

Carl returned to the paper and drew a squiggly line. Just stay focused on the equations, he thought. Don't let her derail you with some bullshit. "Any line, any pattern, you can describe as a function." Beside the squiggly line he wrote $y = f(x)$. "For any number x , put it into the function, and the answer is y ." He glanced over and Dee tried to look attentive. "Now a straight line is a simple equation. y is just x multiplied by something, with another number added. The number you multiply by is the slope, the number you add is the y -intercept."

Dee looked down at her cell on the floor, vibrating again. How many times had she heard these words before? Slopes and intercepts? She already knew about slopes. In fourth grade a pig-nosed girl with dirty fingernails asked her if she was Chinese. She screamed she was born in Columbus, she was as American as anyone and ran home crying. The boys who stood by the water fountain and tripped anyone who tried to take a drink pulled at the corners of their eyes and called her chinky and slope.

Dee was tired of answering no, her dad hadn't been in the Army and no, her mom had not been a bargirl and did not work in a nail salon. Carl met Tranh at Ohio State when he was an engineering student and she worked in the cafeteria. Dee had her mother's eyes and her father's nose and mouth. Every time Tranh called the children of her friends with American husbands 'half-half' Dee's skin crawled.

"Now if you have equations with higher powers of x , you get curvy lines." Carl was animated now, caught in the pure and simple beauty of the math, and the

words were spilling out. Parabolas and hyperbolas, inflection points where the curved lines changed direction. “Now here’s the trick - taking the derivative will give you another equation, and setting that to zero will tell you where the inflection points are.”

Dee looked at the symbols blankly. The first time she failed algebra in high school everyone said she was lazy. She had been placed in advanced math, because after all, it should be easy for her. Everyone knew that. She just wasn’t trying. All the Chinese kids are good at math. Or half-Vietnamese, all the same.

The curves Dee was thinking about weren’t on graph paper. Once again she heard Taylor Coate’s reedy laugh in that geometry class in tenth grade, when he held up a straight edge along his line of sight with her standing in the doorway. Her face burned as the boys hooted and the girls – all those fat girls who bounced when they walked – covered their mouths and snickered. Was she always going to be as flat as Mom? She had cried for a week and vowed she would show them – show them all. She drank milkshakes and shoplifted creams from the GNC store, and now, three years later, she could pull her shoulders together and make a cleavage line between her breasts.

“Dee! Are you listening?” Daddy’s voice cut through the memories. He had drawn another lumpy curve and cross-hatched the space underneath it. Then he drew a straight line just grazing the curve. “Now here, at point x . Say you move just the tiniest way along the curve, you move over Δx and up Δy .” He wrote the letters with triangles in front of them and drew a thin strip down through the cross-hatched area. Dee knew where this was going. She had been through this three

times before – twice in high school, then at Emory with the incoherent Indian teaching assistant who was so not hot, and now here it was back at home again. Maybe being dragged through a year of community college would let her be admitted to State. A big deal for Daddy and even a bigger one for Mom. They wouldn't just let her scream that she was stupid and didn't get it.

“It's starting to rain,” she said.

“Never mind that, just watch. See, if you go one way, you get the derivative of the function. The reverse operation is the antiderivative, which is the integral.” Carl was filling the sheet with capital and small f's and putting apostrophes after some of them. “You see how it works?”

A sizzling flash of light and a clap of thunder half a second later made them jump and the lights flicker. The pencil line had skidded across the page but Carl tried to sound casual. “That was close. Now where were we?”

With the sound of a shotgun boom the lights went out, and all the background noises were stilled - the fan, the TV in the kitchen, the drone of the refrigerator, even the hum of the electric clock, with hands now frozen in mid-second. “Transformer,” said Carl. Being able to name a problem was almost as good as solving it. Using Dee's cell phone as a flashlight, Carl groped through the darkness to the kitchen, where already Tranh was fumbling with the drawers looking for matches. They found some votive candles and put a pair on the countertop, and Carl brought a handful of tapers back to the living room where Dee was still sitting in the dark. Carl took the unused candelabra from the bookshelf and

arranged a trio of candles, and in a moment a triangle of flames filled the space of the tabletop with a quiet yellow glow.

Dee said nothing. Power was out in the whole neighborhood, and the world was shrunken to this simple pure space. This was calm and peaceful, like being in a church but without anyone preaching. She felt safe and warm, just her and Daddy here, like when he would read her the Poky Little Puppy or Charlotte's Web before she went to sleep.

Carl felt his aura merging with the sphere of light around the coffee table and was inspired. He would make this a teachable moment. "This is how life was for most of the people who ever lived," he said. "Shakespeare, Jefferson, DaVinci, Dante. Their light was the sun by day and candles at night, they wrote with their hands, and that was enough to permit greatness."

He looked again at the papers with the penciled curves arcing across the grid lines. There it was, the simple and clean universe of his boyhood. The slope of the line is the derivative, the area underneath is the integral, and with some magic you can go back and forth between the two. That was The Fundamental Theorem of Calculus. Isaac Newton. This time, this time for sure, she would understand. She would pass her test, and more. This lesson would be a revelation, like for the children who visited Honduras and came back appreciating all they had. This would become one of his golden moments, like that day of freeing the little bird in the sunshine and letting it perch on her finger, of watching his daughter laugh in delight as it flew off home.

Later that night Carl lay in bed, pretending to sleep, until Tranh slid silently under the sheets beside him. This was their routine, Tranh always staying up later, polishing the kitchen spotless, then being careful not to disturb her husband. She held her breath for a moment, determining that his breathing was not the unconscious pattern of sleep, and then asked, "Did she learn it this time?" Her voice revealed no conviction.

Her baby had grown into a stranger, and she went back and forth between hope and resentment. Earlier Tranh had dreams of her girl becoming an eye doctor or store owner, and when those fantasies were thrown back at her with a laugh she hoped Dee would spend time working as a waitress or hospital orderly. "She has to do something. This is what they told us, so many times in the camp. When you get to America, it doesn't matter what you do. As long as you work you will be respected."

Carl knew not to interrupt the story he had heard many dozens of times. Tranh spoke to the ceiling as much as to her husband, "Six days we were on the boat, my mother and three of us children, and then two years - more than - in the camp in the Philippines, waiting for papers. They called it Viet Ville, all the locals smiling but we knew they resented us. They knew we were going to get to go to the west sometime, like they wished they could. "

Carl remained still, hoping the reminiscence would not turn again to the Canadian English teachers that 14-year-old Tranh adored. This time it was different.

“Two years we had to wait,” Tranh’s voice was almost choking. “If our boat had been picked up by US or German ships, we would have gotten papers right away. Instead we were hauled in by Filipino fishermen who wanted bribes, then taken to the camp in Palawan to wait for processing. This girl,” she said, waving toward Dee’s room, “this girl knows nothing of hardship, knows nothing of what people must do to survive. To be able to go to a school, any school, was a blessing for us. But this girl, all she can think is play and talk on telephone.”

There was more to the story, much more, that she would never tell Carl, and only selected bits to her daughter. But now she had gotten to say what had been denied her at the counselor’s office, and soon her breathing turned into a light snore.

Tranh had lectured her daughter to be careful, to guard herself. Those years at the camp, she watched as the former bar girls and hostesses who flirted with the officials got papers rapidly while her own family waited. Tranh’s mother refused to behave that way, as a model to her own children. And that was the lesson Tranh tried to teach Dee, beware of men, don’t be desperate, don’t compromise yourself.

Dee had listened carefully, very carefully, to what her mother said and what she didn’t say. This story always ended awkwardly, with a catch in Tranh’s voice at the gap between the waiting for papers and the airplane trip to the church group welcoming them in Dayton. In her own mind Dee began to fill in what other lessons the 16-year-old Tranh had learned, what she had been willing to do for the sake of her family.

The next night, Dee lit a candle in Rob’s room. Rob had shoulders and smoky eyes and did something repairing copy machines downtown. She had met him three

weeks earlier at O'Brian's, where they didn't card, the week after being dragged home from one college in disgrace and pushed into another. Rob wasn't loud or obnoxious like most of the guys there, so she gave him her number. Dee had a strict rule, not until the third time out, and the past two Fridays he had taken her to dinner twice and then to miniature golf, which she thought would be lame but he was kind of funny. Now it was time to take this car on a test ride.

"Don't you have some class on Thursday nights?" he asked.

Dee knew they had passed out the exams ten minutes earlier. She had until the middle of the next week to drop the class, and then it would be two months before records were sent. She would have time to get sick or get a job before then.

"Oh, that. That's just boring, and I know all that stuff already. Here, turn off the TV, just come sit here and be quiet a minute. I'll show you something." She took the graphing calculator from high school out of her purse and held it on her knees. When the gray light of the calculator screen flashed on, Dee pressed the memory recall key and the number 8. Daddy had put in some equations, and he said this one was called a cardioid. "Here, if you want to know why, you solve for y." A heart shape appeared on the screen.

Dee had learned how to be popular, and it wasn't by being a math nerd. There were ways to get whatever you wanted, if you dared, and Dee had her mother's eyes. She clicked off the calculator. She wasn't wearing a bra tonight, and she pressed her shoulders together and leaned forward. The light from the candle just filled the space between them. She lowered her voice. "Now a hundred years

ago, people just sat around at nights. They didn't have these, they didn't have TV. Makes you wonder what they did to pass the time."

Dee had calculated this equation precisely. She knew that when she counted to three and looked up, his mouth would be right there. Math was difficult, but men were so easy. She had learned this from her mother without ever being told.