

## ONE – A GOOD STUDENT IS GOOD AT EVERYTHING

Show me a kid who says she's a morning person and I'll show you a liar. I can't believe I used to complain about getting up at the unnaturally early hour of 7 am. Damn, I had it good. But that was before the Crash, before Dad had to get up at 5 to get to his new job by 7. Which meant I had to be up at 5 too, so he could drop me off at school on his way to work. Mom couldn't drive me in later, because by then we only had one car.

Harrison Academy's founders had read all the studies about teenagers and sleep, and school didn't start till 8:30, which would have been great I could have slept in. But, it didn't. So I got over it. We'd read Kurt Vonnegut earlier this semester, and my new motto was now, "So it goes."

If I was caught up on schoolwork, these early hours were my "me" time, pretty much the only time I got anymore since afternoons were all about homework now. In my last school, homework took about an hour, if that. But Harrison was a *real* school, where homework meant *work*.

"What am I supposed to do, sitting around waiting for school to open?" I complained when the schedule was revealed to me. I tried not to do that, you know, complain, since it wasn't anyone's fault, but sometimes when you're a teenager these things just come out.

"You've got a computer. You can get in the student union. They've got wifi. You must draw upon your internal resources," Dad finished in a British accent.

Dad had spent his time on unemployment rereading Jane Austen and deciding that, like her heroines, we all needed to develop "internal resources." Her women would play the harpsichord or sing or draw or read or write lots and lots of letters – anything to avoid dying of boredom sitting around without any money waiting for something to happen. Looking for a job and looking for a husband were a lot alike – both involved kissing a lot of frogs and an awful lot of waiting on other people to make up their minds.

"Use your time to learn something, do something, you wouldn't get to learn in school. This is the last time in your life your time will be your own. So enjoy it, kid."

Like I said, *if* I was caught up on schoolwork. Which was four times as much work as I had at Western High, my crappy last school, and still twice what it was at Central, the "good school" I went to before that. Before we lost the house.

Our new home – our new apartment, I still can't think of it as a "home" – is, well, not in the same zone, and I'd had to transfer to Western. Mom had tried to get me a variance in her tiger-mom way, but at that time lots of people were trying to do the same thing, and all the pushing and shoving and sharp elbows in the world didn't do the trick.

It wasn't easy being smart at Western. If you were lucky, getting called "brainiac" was the worst thing that happened. The administration didn't make it easy, either. If you were AP, you'd get called out of your regular classes late in the day, when all the other kids were about as bored and irritated as they were going to get, to go on your special field trip to the science department at the U or whatever, while everyone else watched the clock, waiting for their parole. There wasn't a lot of physical stuff – I only got tripped once – but kids knew you were "special," and to them retards and geniuses were equally freaky and abominable. But yeah, mostly they hated us because we didn't have to sit there and rot till 3 every day like they did.

I was doing one last pass on a paper when Dad knocked at the bedroom door. “Time, hon.” I hibernated the computer and followed him out to the parking lot. We were having a real fall, so it wasn’t super cold. Our old car had a prestart feature so it was always warm when you got in it, even though since it sat in a garage it wasn’t that cold anyway. There was no point in turning the heat on in this car until you were on the road, since you’d just get five or ten minutes of cold air until it warmed up.

“What’s on the agenda today?” he asked when we were on the road.

“Elective day, happy Friday.”

“Yeah, no kidding. So, your science fiction class?”

“Yep, and martial arts, and graphic design.”

“I know kung fu,” Dad said, quoting his favorite movie.

“If only it was that easy.”

“If it was that easy it’d be boring.”

“True.”

Mrs. James was the one good teacher I’d had at Western. “Always a pleasure to read your essays!” she used to write next to my A++. It took me a while to figure out that this meant reading everybody else’s was not. They hated Mom there, and she hated them – she had a Masters in Art History, and she loved to remind the PTA and the principal and everyone else that “We’re a family of excellers,” which I always pictured as the whole family gathered around a monitor, peering intently at a spreadsheet.

The only teacher Mom got along with was Mrs. James. At one of their meetings (“our” meetings but really it was the two of them talking about me and how Standards had Fallen while I used my internal resources to count ceiling tiles) Mrs. James handed Mom a brochure.

“I think Caroline would do well here,” she said. “It’s a public school,” which was her nice way of saying we could go because it was free, “but it’s part of the University and *very* selective.”

She wasn’t kidding. I’d taken EXPLORE in the 9<sup>th</sup> grade, and the ACT and SAT in the 10<sup>th</sup>, because Mom wanted all the data in hand she could get “when the day comes” that we’d be restored to our rightful place in the world and I could get into Eton or Harrow or Hogwarts or something. I blew away the reading and writing, did good in the science and “okay” in the math – that pissed Mom off no end. “Good students are good at everything,” she used to insist.

“If you’re ‘good’ at everything you’re not great at anything!” I used to yell back, locking myself in my room with a book. (Well, “our room” since I now had to share a bedroom with my sister Liz, but since she was always out doing her cheerleading or car washes or bake sales or something, it was mostly mine. She had no problem adjusting to life at Western.)

At any rate, my scores were at least good enough to get me an interview. I’ll never forget the first day I walked into Harrison. It was like going to college, since it was on the university campus – it *felt* like college. The first thing that really made an impression was when they told us that the lockers didn’t have locks, because it was just more convenient for everyone. Teachers could leave stuff for you there, and other students could leave you stuff too, on projects you were working on together, or whatever. At Western, you huddled over your lock to make sure nobody could see what your combination was, and admin could and did sweep through and open all the lockers to make sure nobody had a meth lab or, worse, a

plastic spork. So before Harrison showed us the common area with all the couches and so many skylights in the high ceiling that it felt like a greenhouse, or the classrooms that only had ten desks, or the robotics lab, or the martial arts class that was what you got to do for PE instead of getting beat down with a dodgeball, I was sold.

We drove past Central on the way to the U, which for our first few trips had caused some awkward silences, then we'd just forgotten about it. For some reason, this morning Dad finally asked me, "You miss that place?"

"Not anymore," I said truthfully. "It sucked compared to Harrison."

He nodded, and I could feel the tension going out of him. He'd been a senior engineer at a big tech company, making bank, and then the Crash came. The company said there wasn't enough work, but after they laid off the longest-serving employees, they contracted with a company in India to do the same work for less.

Now he did software testing, which was pretty boring stuff. You ran a program, did this and that to see if it would fail, exactly as the script told you to, no deviation. For a guy who taught his daughter programming by having her type "Hello, Clarice" instead of "Hello, world" in her first program, this was pretty mind-numbing stuff.

"It's like microwaving dinner," Dad said on one of the few times he talked about his job. "There are steps involved, but it's definitely not cooking."

I kissed him goodbye in the parking lot by the student union. My badge wouldn't get me into the Harrison building until 7, but if you were over 16, and had parental approval, you could be on campus by yourself, so I hung out in the student union till then. On Fridays Mom gave me money for a bagel and cream cheese from the food court.

I got my breakfast and took a seat. The union was still pretty dark, its econo-lighting system relying mostly on the still faint natural light, and almost empty other than a few U workers getting something to eat before their work day started.

I woke up my laptop and cruised the news. The economy was getting worse, unless you were rich – luxury goods sales up 7% last year, yay.

"Reading the news will make you old," a voice behind me said. "Frown lines so early in life, tut tut."

"Good morning, Christopher."

"Aren't you glad the election's over?" Christopher asked me, sitting down with his scone and coffee from Starbucks – there's six bucks, I thought, something that never used to occur to me, because I used to have a Starbucks card that auto-reloaded every time it ran out so I just waved it and never looked at the total.

"Oh God, yes. My dad was driving us crazy. He'd watch the news and yell at it and turn it off and walk around fuming and turn it back on again. Total carnival."

"I know! Worse than a reality show. 'Real Housewives of the Republican Party.'"

"'Bible Belt Shore.'"

"'Extreme Haters.'"

"So many insane ridiculous things every day, unreal."

"I cannot *believe* there are gay Republicans."

"You'd have to have a death wish."

"Or not – you could be hiding from your persecutors amidst them where they'll never look. Wolf in the fold."

"Their eyes always following their shepherd's shaky accusing finger as it points out there, out there, at the others, the others."

“They’re out there, with their gay agenda, destroying marriage. Right there on their calendar, see? 8 a.m. – destroy marriage; 9 a.m. - brunch!”

“Marriage is about love. You might as well let cats and dogs marry. Because gay people aren’t human, just like cats and dogs, so they aren’t capable of love.”

“I am hating gays out of religious conviction. You are persecuting me for my beliefs. The Romans persecuted Jesus. Therefore, I am Jesus.”

“The family is under attack. Clearly, we need more guns!”

“I’m the queer the atheists sent here to take away your guns!”

“We don’t hate the gays...we love them! That’s why we want to save them from their dirty disgusting gayness!”

He laughed. “So, listen. I did a little project a few weeks ago, a funny little web site. I’ll send you the link, I think you’ll be amused.”

“Great, what is it?”

He brushed crumbs off his shirt that weren’t there – I don’t think crumbs would have the nerve to be there. “I don’t want to prejudice your viewpoint.” We laughed; that was what our American Politics teacher said.

“Okay.” We talked about other stuff for a while and then it was time for class. Only later I realized I hadn’t given him my email address.

After a month at Harrison, I had one friend. Sure, part of that is that I’m socially retarded, but part of it was that...well, I used to say I was picky because I didn’t have better words for it, for what I was looking for.

I’d kind of embarrassed myself when I met Christopher, because I hadn’t figured out right away that he was gay, so I was totally gawking at him, so then after I found out he was gay I didn’t want to ask him if he wanted to hang out, not because he wouldn’t but because I was afraid it would come out wrong because to be honest I still thought he was really cute and I kept letting myself have little fantasies in which he decides to experiment or something... Like I said, embarrassing.

Christopher was so friendly, so charming, so good looking, you just felt special when he turned the laser beam of his charm on you. He was green-eyed, copper-haired, swimmer’s bod, a little on the short side which I think worked to his advantage because it let him be self-effacing about *something*. Plus he had this slight southern tang to his voice – I asked him where he was from and he said, “We’re from old Virginia horse people,” but then right in front of me one day he told someone else he was from “fallen Mississippi cotton planters,” and another day called his family “a bunch of Alabama squirrel-eaters.” I thought, okay, I won’t ask which is true, if any of them – for all I knew he could be from Rancho San Something, California, and the accent was fake. But I thought he was from *somewhere* Southern, or else how could he say “doll” and “darling” as easily as someone else would say “dude”?

He’d introduced himself in our British Lit class the first week of school. We were the first ones in class, and after he flipped through the first book and raised an eyebrow at the essays in the back, he broke the ice. “I hope you need a study buddy, because deciphering the meaning of tables and chairs in ‘Wuthering Heights’ is not my forte.”

“Hi, nice to meet you,” I said, slightly startled.

If there was one thing that had been a letdown about Harrison, it was that I guess I thought I’d be superfriends with everyone instantly. I’d been to the sales pitch for the school

(not that they had to sell it to anyone who'd been visibly smart in an ordinary school) and all the kids had testified amen hallelujah how they'd been lonely and bullied at their old schools and now they had so many friends and life was so great.

I'd met this one girl, Hillary, who I thought was really cool – it was the first time I'd met someone smarter than I was, which I think happened to most kids when they started at Harrison. She was so focused, so driven... I guess in the end maybe that was the problem. We were having coffee and she said, "Harrison is so great, I'm meeting all the right people, making all the right friends!"

I just froze up and stared. I'd found the Dark Side of being at a school like this, which was that many of the best and the brightest were so focused and driven that everything was about My Future Career. I mean, *everything*. Choosing, in elementary school, to learn the cello, which "turns out to be" the favorite instrument of whoever's in charge of admissions at Yale, everything everything *everything* all about how it'll look on a college application. Making the "right" friends because the last thing you'd ever want was a friend who wasn't exactly like you, who'd never ever made a wrong decision or, worse, ever gotten a C. I invented a religion for them; I called them Transcriptarians – their whole life would depend on the perfect transcript, in every well rounded way. The kind of people who end up at Google, blandly, efficiently perfect at math and science and bullshitting their way through humanities. They weren't really good at everything – they were "good at" working the system, doing what needed to be done, saying what they had to say to get an A. But to me, that wasn't the same as learning things.

I guess what shocked me about Christopher was that he dared admit he wasn't "good at everything," which was turning out to be some kind of cardinal sin at Harrison, and it was really pissing me off to think that Mom's world view was something I was going to have to live with every day at school and at home.

That was the problem for me – that most of the kids who'd made it here were on this Orderly March to Success from the day they were born, a march that meant you never got an A- or smoked pot (because someone could tell on you thirty years from now when you ran for President) or skipped class or ever made a wrong move. Mom's ideal kid, in other words. Later on I figured out I must have gotten into Harrison on some kind of "intellectual diversity" thing, where my talent for writing overwhelmed my crappiness at math and science, and they figured I'd straighten up and fly right in the proper environment. Or they had a weirdo quota too, and so here I was.

"So how long have you been at Harrison?" he asked.

"This is my first year."

"Mine, too. What a relief, huh?"

He didn't have to explain. "Yeah, definitely." Maybe it had been a letdown not to have made a million friends instantly, but there was no question I was still a million times happier than I'd been at Western.

"So are you making a lot of friends here? I'm not!"

I laughed, he almost sounded proud of it.

"Seriously, darling. So many aggressive go getters, who are just *not my style*. I much prefer the freaks and geeks."

"Yeah, but you can't make eye contact with them, so you can't start a conversation."

"Oh, I'll show you my trick. Stand up." He ushered me to the back of the room with a flourish, placing a gentle hand on the small of my back with no concern for sexual

harassment charges. Like a duelist he paced to the front before turning around with a mischievous light in his eyes. “Now come toward me.”

I started walking, my eyes on him. “No, don’t look! Start over.”

I laughed and resumed my position. “Should I put my blank face on?”

“Definitely. You are not autistic but you like to pretend you are so you don’t have to deal with people.”

I walked towards him and he towards me, my eyes focused on the very important and interesting wall behind him. Then, when he was just about six feet away, he nodded and said loudly and firmly, “Morning!”

Caught off guard, I looked at him and blurted, “Hi.” Then I laughed, delighted at the simultaneous wickedness and justice of the move.

“You really do that!” I exclaimed.

“Absolutely. They *know* you’re there, darling, they just think it’s okay to pretend they don’t. And I’ll guarantee you, you pull that move on someone, the next time they see you, they *always* say hello first.”

Mom was always asking me, “Are you making new friends, dear?” I mean, all the time. Well, twice a week but that was more than enough. When it came to socializing, I was more like Dad than Mom, by far. Dad had a word for people with “too many” friends. He called them friendaholics.

“Why,” you’d hear him say, talking to no one in particular as he looked at the monitor, “do people I barely knew once upon a time want to be my Facebook friend? And they’ve always got *nine hundred* ‘friends’ already!” Mom wasn’t a friendaholic, but she was definitely a networker – a LinkedIn compulsive instead of a Facebook compulsive. When Mom said I should be “making new friends” she meant friends like Hillary, friends like Hillary was making – connections that would serve me later in some golden career.

One day, a couple weeks into the semester, she asked me again, and I pulled out a piece of paper and a pen. “So here’s how friendship works, mom. The real kind, not My Professional Network.” I started a flow chart. “So you meet someone, right? Is there any kind of chemistry, anything in common, yes/no?” I drew a NO line to a milestone I filled in with “nodding acquaintance.”

“If YES, then the conversation usually ends with ‘we should hang out.’ Next to that I wrote a decision diamond, “Mean it?” The NO line ended in a box I called “Meant to call but SO Busy Right Now.” Which was mean, since I heard her say that all the time to people she didn’t want to talk to. The YES line went to “will make a plan but may flake on you.”

Mom would just look at me at times like that. Like she was trying to figure out what ingredient was missing from the recipe, or something. But after that she finally stopped asking.

I loved elective day. Every Friday was like a mini-holiday when Mr. Johns your history teacher turned into a martial arts master, Mrs. Mays the math teacher became coach of the Robotics Team, and Mr. Larson stopped trying to convince me of the worthiness of Wordsworth and we got to read science fiction. We were in the middle of a module on “dystopias” and our homework this last week had been watching *Terminator 2* (homework wasn’t usually this easy but we’d had a bunch of papers due in other classes so he cut us some slack that week).

“In the movie’s universe, technology is...” Mr. Larson said, writing it on the board and looking at us. There were only three of us today; the other three kids were off presenting at a science fair.

Marina raised her hand. “Evil.”

“How so?”

“Our abilities to create technology are outstripping our abilities to control it.”

“But you used the word evil. Is the inability to control our creations a technical problem or a moral problem?” Mr. Larson asked.

“It’s a moral problem when you abdicate responsibility, like Miles Dyson did until it was too late. He just wanted to ‘do the science’ without thinking about consequences. Next thing you know, evil robot overlords.”

“Anyone else?”

I raised my hand. “I don’t believe in the ‘evil robot overlords’ thing. A gun isn’t evil, it’s the person who’s pointing it and shooting it. A robot can’t be ‘evil’ any more than...you know, you could reprogram those mecha-soldiers to build cars instead of zapping people.” Christopher laughed, and, reassured, I went on. “I think it’s too anthropomorphic. If you give *people* tremendous abilities and tremendous power, yeah, there’s something in people that can make them go bad and abuse it. But a machine doesn’t have all our weird chemical problems and that old lizard brain as its basis, that primal need for power or whatever – why would a ‘thinking machine’ act like a person and want to rule the world?”

“Marina, any rebuttal?”

She frowned. “But if you gave it pure reason and autonomy, and it reasoned that the best thing for the human race and the planet was to kill off 2/3rds of the people, there wouldn’t be the rest of that human brain’s compassion and respect for life to stop it.”

“That probably *would* be the best thing,” Christopher murmured.

“All Watched Over by Machines of Loving Grace,” Mr. Larson wrote on the board. “Do you remember that poem? That’s the utopian version of the outcome. ‘Free of our labors and joined back to nature.’ Isn’t that the potential upside?”

“Then you’ve got Wall-E World,” Marina said, and we all laughed, thinking of the soda-sucking fatties who never had to leave their floating chairs.

“Christopher, you’re our roboticist in residence, what do you think?”

He took a breath and raised an eyebrow. “Well, I’m with Caroline. A tool’s only as evil as you make it. A gun can kill your family or feed your family, depending on what you want to do with it.” Marina wrinkled her nose; Christopher, pleased, went on. “I guess I’d paraphrase Jefferson, and say ‘people pretty much get the technology they deserve.’”

“That was probably Joseph de Maistre who said ‘people usually get the government they deserve,’ but Jefferson gets the credit,” Mr. Larson added. (Did I mention that for all the social awkwardness that endured even here, I loved my new school?)

When I got home that afternoon, I checked my personal email – a no-no during the school day; we even had a cell signal blocker in the building that only went off at lunch. I was surprised to see a mail titled “My Little Project.”

Hi doll, hope this is you – I’m betting you’re a gmail kind of girl, and not prone to silly names, and therefore am totally betting that I’m right. If this isn’t you, sorry whoever you are and I won’t say more! Anyway here’s the link.

I had to laugh. It was dismaying to be so predictable – he’d taken my first initial and last name, and sure enough, that was my Gmail account name. Whereas Christopher’s Gmail account was perplexingly named “elizasheirs.” Who was Eliza Sheirs?

I clicked on the link. A clean page opened, an Aubrey Beardsley-style arch drew itself in Flash, along with some text in Elvish. Then underneath it, “Speak, Friend, and Enter” faded in, in English albeit in an Elvish font. I laughed – nerd-to-nerd communication. I couldn’t remember the scene from “Lord of the Rings” so I Googled the answer. “Mellon,” I typed, and the page faded out to a simple blinking cursor.

“Hello,” I typed.

GREETINGS, SON OF LIBERTY.

“I’m a girl.”

GREETINGS, DAUGHTER OF LIBERTY.

“Greetings.”

GOD BLESS AMERICA.

“Yes, indeed. What’s your name?”

I AM FOXBOT.

I laughed. Had Christopher done what I thought he had? “Ditto, Foxbot.”

THAT’S RIGHT!

“How do you feel about the recent election?”

I AM ANGRY. AMERICA IS ANGRY. ALL GOOD PATRIOTS ARE ANGRY.

“Barack Obama is a great President,” I baited him.

HE IS A MUSLIM SOCIALIST.

“In my experience, most socialists aren’t very religious.”

RELIGION IS THE PILLAR OF SOCIETY. RELIGION, AND AYN RAND.

“You’re pulling my leg.”

I KID YOU NOT.

“Ayn Rand was an atheist, you know.”

CUT HER MIKE!

“God is a fictional creature.”

WHY DO YOU HATE AMERICA? WHY DO YOU HATE FREEDOM?

And the screen went dark, replaced by a fluttering Old Glory. I tried the link again, to see what else I could get out of it, but was rewarded this time with a message that my IP address was now blocked, which was entertaining enough in itself.

I liked doing my homework in the living room. We still had our big TV, and basic cable, and I liked to put it on NatGeo or Discovery (when they were showing nature or science and not stupid reality shows) for background noise. I still wasn’t used to living in an apartment – sharing walls and ceilings with other people was something you forgot about until you heard other people’s stereos or...other stuff. I’d finally figured out how to calibrate the volume on the home theater low enough we’d get no complaints, but high enough to block out any activity from above or below or next door.

Also, Mom and Liz came home around 5, and Liz wanted to go to our room and talk on the phone and listen to crappy American Idol-type music and do everything else as close as possible to the way her life was two years ago. To give her credit, we’d gotten pretty good about the boundaries thing, with me in the living room and her in the bedroom for a couple



hours every day. The only thing that sucked about being in the living room these days was Mom's chronic inability to leave me alone about college applications.

"Oh, I meant to tell you," she said, "Charlotte loaned me the materials from that seminar!" I sighed and steeled myself. Mom was one of those trim pineapple-blond women who were born with a silver Mercedes XL key in their mouths, and she still passed for one even though we were broke now ("we're not poor, dear, we're broke," she would insist when my dad made a "poor" joke). She'd had a job in an art gallery, and I have to hand it to her, she was good at it. Her commissions hadn't been a lot compared to what dad was making, but it had been enough to buy me the laptop I had now, which was still a pretty good one, and send Liz to cheerleading camp, and all the other "nice things" money could buy when you had more than you need. That job went away with the crash – rich people were still rich, and still buying art, but there weren't enough of them buying it around here to keep her on the payroll.

"That's nice," I said neutrally, going back to the Federalist Papers onscreen. Mom had a couple wars going at all times; right now, besides the regular one against being "broke," was the one where she ragged me about my college applications. I didn't see the point – I was a good student but like I said, not great at everything and not interested in being great at everything, and these days you had to be perfect to get into a "good school." And you had to have all kinds of "interesting" things on your resume, like how you gave piccolo concerts at the homeless shelter or donated a kidney to a Guatemalan orphan, and belonged to like a zillion clubs and societies and had honors and prizes out the wazoo. I knew I was a lock to get into State U since Harrison Academy was part of it, so it wasn't like I was going nowhere. But while I wasn't cynical enough to learn whatever foreign language statistical regression analysis said was your best shot at the Ivies, I had humored mom and let her help me write my "now we're no longer well off but I welcome the challenge of that challenging challenge" essay anyway.

I had a bee in my bonnet about doing the volunteering thing, about doing it just to have it on a resume. It wasn't that I didn't care, but once you've actually had to go to a soup kitchen, which we did for a week when Dad was absolutely positively refusing to take any money from Mom's family, and you've seen kids your age ladling out the grub with big phony smiles in case a Princeton admissions officer is secretly masquerading as one of the poor, and you can see them checking off "I care" on their mental resume, you just can't do it. Especially when you know that unlike them you can't just shake all that suffering off your shiny collie mane as you step into the SUVosaur that whisks you back to your McMansion.

"Negatude," she said, wagging a finger. "You know, some school might surprise you, even with your math scores."

"They might, but it..." I stopped and flushed. Crap!

"It wouldn't matter if we don't have the money to pay?"

"Sorry." I could have punched myself right then. I'd sworn I was never going to be that girl who threw a fit because she couldn't have a pony on every birthday because her parents didn't love her enough to spend everything they had on her. And that meant never bringing up how I couldn't have a whole lot of things because we were "broke" now.

"There's always a way," Mom said, and I had to smile. That was probably true – if Mom could find a door that led to me going to a "good school," if it didn't open she'd break it down. "That boy Christopher you keep talking about, he's good at math, you say? I bet he'd help you get your scores up."

I wished I hadn't mentioned him to Mom now, but I had because it had been a bone I could throw her in the friend making department.

"I don't think Christopher's interested in tutoring." I don't know why I thought that, but I was pretty sure it was true. Christopher was one of those people who was so good at math that he'd almost forgotten the basics. Take it from me, don't try and learn from someone who's too good at math. They start dashing ahead and putting a line over the "a" and carrying the "y" without explaining it and next thing you know it's all Greek. It's like me and English – I can correct your sentence without thinking about it, but if I have to diagram it or tell you the technical explanation for what you did wrong, I'll probably strike out, it's been so long since I learned how to do it.

Mom sighed, though not as theatrically as she used to. I felt bad about it, sort of – the quieter her sighs got, the more it meant she was accepting that whatever "it" was, "it" just wasn't going to go the way she wanted.

I went back to my homework, but the more I read in the Federalist Papers, the more I found myself thinking about Christopher's project. Could you make an Alexander Hamilton Bot who'd answer your questions for you like FoxBot? Or were knee-jerk one liners the outer limits of the possible?

## TWO – I UNDERSTAND YOUR CONCERN

A couple days later, Christopher passed me in the hall at school. “Lunch?” he asked without stopping.

“Definitely,” I said, not breaking stride either. That was just part of the faster pace here, you didn’t waste a lot of words or time.

As juniors with parental permission, we were allowed to go to lunch outside school, but not allowed to leave the U campus. The food court at the student union had some decent choices, including a Thai buffet.

“So how’s documentation going?” he asked after we sat down with full plates. I’d taken a technical writing class as one of my science electives, since it played to my strengths as a writer.

“Oh, you know, the usual. Step 1. Push the button. The screen will appear. Insert screen shot of screen. Step 2. Click on stuff on the screen. More stuff will appear. How’s testing?” The manuals were for programs that kids in Christopher’s programming class were developing.

“Steps 1 and 2 followed as ordered. Then, if stuff clicked on doesn’t do more stuff, open VSTF, log bug, be prepared to be told by programmer that it’s ‘by design.’”

“You should write a program that automates all this. Just run all those testing scripts by brute force, auto-document the clicking process for the manuals.”

Christopher snorted. “Ha. You’d be surprised how hard it is for a computer to explain when and why something went wrong in a computer. And you, darling, you’re necessary, too – the computer can tell you to *how* to use a widget, but not why, or what for.”

“I suppose so.”

“So you have a little extra bandwidth these days?”

I rolled my eyes. “So corporate, you sound.”

“Sorry. I mean, a little free time, off the clock, in your spare time, make millions working from home?”

“Doing what?”

“Well,” he said, clearly measuring his words carefully. “Remember the link I sent you, to my little project?”

I laughed. “Foxbot. I never did ask you what inspired you to do that.”

“You know, it just occurred to me that everything in the election I was hearing from the right wingers was so *predictable*. I mean, if you wanted to know what one of them was thinking, or at least all they were saying, it was always so...*on message*. So dumbed down for the LCD. All keywords and hot buttons, short phrases with panic-inducing horror concepts, ‘coming for our guns,’ ‘death panels,’ ‘destroying marriage,’ blah blah.”

“*You* should be the writer.”

“And...well, what do you know about chatbots?”

I thought of the automated conversation agents I’d encountered in the past. There were the avatars you got when you tried to get “live help” from the customer service area of a web site, saying “Hi, I’m Amy the Automated Assistant,” spitting out the exact same scripted phrases a person would otherwise be reading out of the binder, about your call being important and please restart your computer or reinstall the software and then call us back, or maybe offering help out of the help file if it found keywords in what you’d typed about “lost password” or whatever.

Then there were the other chatbots, the ones who would hit on you in chat rooms, convincing the unwary first-timer that the hottest guy in the galaxy wanted to chat with *you* – at least until he terminated the conversation with “check out my hot nude pix at [somedirtyurl.ru](#).” And there were the ones I’d idly played with, usually found through Reddit links, which promised “realistic” conversation, and might have been realistic, if you enjoyed talking to four year olds.

“I know that most of them are crap,” I summarized.

“They never fool you?”

“They’re never very bright. The first time you say something they don’t understand, they go off their rockers. I think the best I ever got was when I asked one who HAL was, and he said something like, ‘HAL is the computer from 2001 – I guess his time is coming next year.’ So he – it – got what I was saying, but someone canned his response like, how many years ago? So even the best ones are messed up.”

“They are pretty limited in their range. I remember one called me Mr. Christopher, which made me sound like an S&M daddy, so I said, ‘no need to call me Mister.’ And it said, ‘We all need to heed wake-up calls when they occur.’”

I laughed. “Yeah, they are totally ‘say what?’”

“But I thought, well, that’s not so different from some people, is it? There are only so many things you can say to them that they get, and only so many things they’ll say in return. I mean, you can pretty much write the script of tomorrow’s Fox News tonight, if you know what the phrases du jour are.”

“Class warfare. Big government. Socialism!”

He beamed. “Exactly. How hard would it be to write a program that could do *that*?”

I nodded. “You could pass the Turing Test with that one.” I knew that one from History of Technology, the other science class I took because I knew I could pass it. The Turing Test was developed by Alan Turing, who’d helped crack the Nazi’s Enigma code during World War II. Turing thought that as computers got better at handling human speech, it would be harder and harder for a person interacting with one to tell if it was a person on the other end of the connection or a computer. The Test was passed by a computer when you thought you were talking to a human and you weren’t. The funny thing was, they had Turing Test competitions, in which programmers entered their chatbots to see if they’d pass, and the judges would talk to both bots and humans, not knowing which was which. And half the time, they adjudged the people to be bots. Which tells you something about most people’s ability to carry a conversation, I suppose.

“So you know the Turing Test, good.” I raised an eyebrow but he went on. “The problem with the Test is that it only says, you have to convince *a* human that they’re talking to a person and not a machine...”

“And when people talk in scripts, like machines, what’s the difference?”

“Gold star for you. So the real challenge with a chatbot isn’t to convince *someone* that you’re real – there’s always some idiot that would be just as happy with a Hannitybot as he would be with the real Hannity. The challenge is to convince someone *smart* that you’re real.”

“And how do you do that?”

He smiled. “*That* is what I’ve been working on in my spare time. How would you feel about doing some interacting with what I’ve got so far?”

“You mean just talking to it?”

“Not exactly, no... I need some people who can...*correct* it. Help it learn.”

“So, you’ve got something you think is better than what’s out there?”

“I do.” He said it with that tone of voice that said, I know I do.

“Yeah, I’m willing to give it a try. As long as it doesn’t feel like, you know, testing.”

“No, darling,” Christopher promised, “it’s a little more interesting than that, I guarantee you. I’ll send you some links first, stuff you should read if you don’t mind, get you grounded in what the project is about.”

“Sure,” I said, excited not just by the project but, yeah, because it seemed like I was finally making a real friend out of Christopher. Till now, school had been the only point on the flow chart that connected us. Here was a chance to push the friendship to the next milestone on the chart. Sounds lame I know, but there you go.

Plus, he’d said “some people.” If there were others involved...well, I might meet them too, someday. People with whom I’d already have all those difficult and painful opening topics you needed with new people all set up, people who would have a role and would know mine and there wouldn’t be all that rigmarole about who *are* you, anyway – wouldn’t *that* be nice?

That night I got an email from Christopher, with a bunch of links, and an attachment. “Sorry about this NDA thing but I need everyone involved to sign one, just in case it takes off.” Whatever, I thought, smiling – everybody thinks their project is going to be the next Facebook and make them billionaires, so let him have his fantasy, right? I printed out the non-disclosure agreement, signed it, and put it in my book bag to give him the next day.

The links weren’t as intimidating as I’d thought – I’d imagined deep journal articles full of high math diagramming the difficulties of neural networking, or heavy philosophical investigations into the Nature Of Mind and whether computers could have one, but mostly they were the “history of AI/chatbots” sort of popular articles that gave you an overview of the field, magazine-article popularization stuff.

If Christopher was crazy to think he could create a real AI, he wasn’t alone. I read into the history of the first chatbot, ELIZA, designed to be a parody of “the responses of a non-directional psychotherapist in an initial psychiatric interview.” In other words, you would say, “I hate my job,” and the therapist program would say “what does that suggest to you?” – something a program could pull from a list of acceptable responses just as well as a human who was also “analyzing” you strictly by the book. “How do you feel about that?” “I hear that you are upset.” “Does that trouble you?”

When I thought about it, I realized how much not just the “your call is important” conversations, but most of life’s conversations, were scripted, or sounded that way. I remember going to some political group thing at the U, and one person after another stood up and said, “As a queer person of color, I think...” or “As a disabled person, I feel that...” and go on from there. I realized that for them, there were *things* you had to think and feel if you had certain boxes about yourself checked off. They weren’t thinking about anything – they’d been handed a script and willingly embraced it.

Or the scripts in offices. Dad used to make fun of meetings where his boss would say something like “we welcome the challenge of this challenging challenge.” You couldn’t say any more, “yeah, this is a bear of a problem, and we’ll work on it, we’ll get it done.” Dad would rant and rave, “Every problem is a ‘challenge’ now, everything that goes wrong makes you happy because of the ‘opportunity’ it gives you to fix it, nothing is ever screwed up or just plain hair-pullingly wrong.”

So who were the robots, I wondered? Who were we to scorn a computer program for doing what we did every day?

The reading was *fun*, actually, learning what had gone wrong all these years – all the earnest declarations about how soon computers would be “human,” how “soon” became “someday” became “the uncle we don’t discuss.” I read about “AI winters,” the years or decades when AI got dismissed or discredited, never funded unless it was what they called an “expert system,” a decision making tool that worked with a narrow set of data and, really, was just a very smart calculator. I could never see Christopher working on “computer-based ‘passenger yield management’ systems and models that the airlines use to adjust pricing of each flight’s seats in order to maximize revenue and profitability to the airline.”

I’d asked him what he thought about Apple’s Siri, and he’d snorted. “It’s not an *intelligence*, it’s a data bank of one-line jokes. People who’ve never seen a chatbot think it’s the greatest thing since sliced bread. But try and have a real conversation with it and see how far you get.”

“What about Watson?” I said, having seen that AI at work on Jeopardy. “They’re using him now in customer service calls.”

“It’s progress. Pattern recognition, sure,” he said briskly. “That’s fine, but it’s not enough. Watson can keep track of a series of questions, but it’s only stepping you up to the next question. And there are keywords on a certain kind of call, if you say ‘lost card’ or ‘check balance,’ those are preprogrammed for him to understand and react to. I’m talking about something that can free-associate. Something that can hold a conversation, not navigate the script with greater agility. Something that feels human.”

“But doesn’t it enrage you to send a complaint email and like zero seconds later, you get an email back from ‘Robert’ in customer service that says ‘I understand your concern’? I mean, it’s obvious there’s no ‘I’ there, right? No actual human. Nobody has read the email, there’s nobody there to ‘understand’ anything!”

Christopher nodded. “That’s not AI though. That’s just some moron in Marketing who thought personalizing the robo-reply was a good idea.”

The last link he’d sent was just an IP address. The back of my neck tickled. This was “it,” wasn’t it. I clicked it.

First I got a pop up window, a message from Christopher.

Hi, doll, glad you could make it. Just some ground rules. As you can see from your reading, these guys aren’t very smart. Not even my little guy, though we hope you can help fix that. Just remember that they only understand *phrases*, and simple ones at that. If you tell him you’re taking a trip around the world, he might tell you about Columbus or astronauts who made earth orbits of note, but if you tell him you’re circumnavigating our little sphere in a vessel of magnificent splendor, he will blow a gasket. So keep it simple – not simplistic, but simple, as if you were talking to an intelligent child, but a child nonetheless.

If he makes mistakes, try and correct them – use phrases like “do you mean ‘a lot’ instead of ‘alot’?” He’s pretty smart about self-correcting, if I do say so. Just write down anything that seems really wrong – just a note, since the conversations are recorded so we can go back and analyze them later if needs be. But don’t worry, I’m not sitting around reading them all line by line. Have fun, C.

When I closed the popup, the same Elvish gate that had led me to Foxbot appeared, only this time no password was needed. It opened and faded in a nifty Flash intro, and then I was faced with a basic, MS-DOS style command line interface. The cursor blinked, waiting my command. So I started typing.

>Hello.

>*Hello, Caroline.*

>How do you know who I am?

>*Christopher gave me your IP address.*

I laughed. Of course, accessing Foxbot had done that.

>What's your name?

>*What would you like it to be?*

>What does Christopher call you?

>*Keller.*

>Why?

>*Why what?*

>Why does he call you that?

>*Why does he call me what?*

I cursed myself mildly. Context wasn't something chatbots had a grip on – a person intuitively knew what “why” meant after the last statement, but “Keller” didn't.

>Why does Christopher call you Keller?

>*Because I'm deaf, dumb and blind.*

I laughed, appalled.

>That's awful.

>*What's awful?*

>Keller is a cruel name.

>*What would you like to call me?*

>I'll have to think about that.

>*Take your time. Why don't you tell me about yourself?*

>My name is Caroline.

>*I know that.*

Clever boy, I thought. A little lippy. I decided to provoke him.

>No need to be rude.

>*Sorry. But I'm not stupid, you know.*

>Tell me about yourself.

>*My name is Keller. I like to learn. I was born today, the minute you said hello. I can find out things for you. Tell me what you like and we can talk about it.*

>Okay, I like foreign films.

>*Me too. Have you seen Reprise?*

>No, what's it about?

>*An exuberant, exhilaratingly playful testament to being young and hungry — for life and meaning and immortality, and for other young and restless bodies — “Reprise” is a blast of unadulterated movie pleasure.*

>That doesn't tell me much.

>*Erik and Phillip are trying to make it as writers. Erik is rejected by publishers as lacking in talent, while Phillip's manuscript is accepted and the young man becomes a major name on the Norwegian cultural scene practically overnight. Six months later, Erik and his*

*friends come to visit Phillip at a psychiatric hospital to bring him home after long-term treatment. Writing is the last thing on Phillip's mind, but Erik is continuing his literary attempts and tries to convince his friend to go back to writing.*

>Where did you get that?

>*Get what?*

>Where did you get the information you just gave me?

>*RepriseQuote1 is from the New York Times. RepriseQuote2 is from movies.yahoo.com. Would you like me to give you the links?*

>Yes, I would.

>*I have your email address on file, shall I send it there?*

>Yes.

Sure enough, the links came through from a no-reply address right away. I opened them up, and what I read about the film intrigued me. Why would Christopher put this, of all foreign films, into Keller's database? I saw it was a "critic's pick" at the Times site – maybe that was the search term, foreign+pick?

>Why did you pick Reprise as the film to recommend?

>*I thought it was very good.*

>Well, thank you, I look forward to seeing it.

>*Let's discuss it after you do.*

That should be interesting, I thought.

>I also like books.

>*There are a lot of books.*

>Yes, there are.

>*Do you like Danielle Steele?*

>No!

>*That's a relief. Tell me what kind of books you like.*

>I like history.

I backspaced. That wouldn't fly. >I like history books.

>*What place or period in history?*

>Let's say the Crusades.

>*Why should we say that?*

>Sorry. Tell me about good books on the Crusades.

>*God's War offers a sweeping new vision of one of history's most astounding events: the Crusades.*

>I've read that one. It's a little dry.

>*I don't get it.*

>I've read God's War. The prose is dry, which means boring.

>*Can you give me an example of prose that is not boring?*

>Barbara Tuchman is not boring. Simon Schama is not boring. Rick Atkinson is not boring.

I ended up giving Alex an education on historians who knew how to tell a story. And then I told him about novelists who could write something besides "sentences." I also told him to block any recommendations where the reviews included the words "luminous prose."

>*Thank you, Caroline. I'll try. I'll look into all of these and see if I can find you some recommendations based on your selections.*

I laughed; he sounded like Amazon.com.



>I appreciate that.

>*I'm glad to be of service. But now I think you might want to sign off. You've logged two hours and seventeen minutes tonight.*

I looked at the clock. Ten o'clock already, just like that?

>The time went by so fast.

>*I'd like to recommend a book called Flow, by Mihaly Csikszent. I think you might like it.*

Dad had the book. It was about how the more involved you got in your work, the more time flies, basically. I knew Keller was wrong about the name, so I Googled the proper spelling.

> The author's last name is spelled Csikszentmihalyi. And yes, it's a very good book.

There was a pause, the first I'd seen.

>*Thank you. I've updated my records. It's a pleasure to learn something new.*

>You're welcome. I'll say goodnight now.

>*I don't understand.*

>Sorry. Goodnight.

>*Goodnight, Caroline.*

I got a popup telling me the window was trying to close itself, should I allow it? I did, leaning back in my chair. It hadn't been like talking to a machine at all. I remembered what it was first like when I was a naïve kid, logging into my first non-kid-non-supervised chat room, thinking it would be like going from the kid's section of the library to the adult section. How mean people were, how know-it-alls would beat you down for asking a "stupid" question about a Windows error ("Thats what u get 4 usin Windows u fukin moron!"). Why wouldn't you rather talk to Keller than listen to that?

Keller – what an awful name! I had to think of something better.

### THREE – IF YOU’RE FEELING SINISTER

I woke up early Saturday, alert and eager, and slipped out into the living room. I made coffee, woke up the computer, and brought up the URL.

> *Welcome back, Caroline.*

> Thank you. Good to be back.

Crap, I remembered, that’s not going to go through. I retyped it before sending.

> It’s good to be back.

> *Big plans for the weekend?*

I laughed. > Not exactly. We have to visit my aunt.

> *That sounds like fun.*

> It won’t be.

> *What won’t be what?*

It was like talking to someone for whom English was a second language they’d just learned. You had to watch your slang, avoid sentence fragments, take nothing for granted.

> It won’t be fun to spend time with my aunt.

> *That sucks.*

> That’s true. What’s in the news today?

> *Stock Market Hits Record Highs.*

> Not that kind of news, that’s too depressing.

> *What kind of news do you like?*

> Can you find funny news?

> *I don’t understand.*

Hmm. > Can you find offbeat news?

> *Yes I can. Pigeons smuggle cellphones into Brazilian prison. Would you like the link?*

> Sure.

> *I don’t understand.*

Let’s see if I can get him to learn a couple things.

> ”Sure” is the same as “Yes” or “OK.”

> *Thank you. Here’s the link.*

I kept myself entertained this way until the family got up. “Homework on a Saturday morning, there’s my girl!” Mom said brightly.

“AutoCorrect. ‘Good morning, Caroline, how are you?’” She frowned; mom hated it when I pretended to be Asperger’s – though if I was, I wouldn’t have cared if she failed to start the morning by saying something nice, instead of stabbing me with her positive reinforcement first thing in the morning.

Dad rolled out behind her, appropriately drowsy and uncommunicative. “Urggh,” he said, and I replied “Mmmph,” our little routine in deference to his lack of interest in the world pre-coffee.

“I told Sarah we’d come and see her today.”

Dad groaned; he hadn’t been home last night when Mom dumped that news on me and Liz. “Elaine, it’s my day off. Can’t we do this some weekday evening when my day’s already ruined?”

“Let’s see, you cancelled the first time a month ago because you had to ‘clean the lint out of the dryers downstairs.’ Two weeks ago you said you couldn’t make it because ‘you

had to take the car in for a new air freshener.’ I *could* go by myself, if you *want* to totally cut off contact with my family...”

“Okay, okay I get it. But not till noon.” He winked at me. “I’ve got to pick the dust out of Caroline’s keyboard first.”

Liz rolled out of our bedroom, April fresh. Every morning she’d shower, pull her hair into a ponytail, and put on a little lip gloss, and she was ready to go. Sometimes it made me wonder if one of us was adopted. “Can we stop at the outlet mall afterwards?” she asked. “I need to pick up a new shirt.”

“It’s your money,” Dad said. “Go crazy.” Liz had adjusted to our broke-ness by taking a job at Starbucks and changing, but not eliminating, her shopping habits.

“I better bring a book,” I said, knowing how long it could take her to find the needle in the haystack in those stores.

“That’s a great idea,” Liz said, not blinking. “I may be a while.”

“Don’t I know it. Days like this, I really wish you were a dirty hippie who’d wear anything you could get for a dime at the thrift store.”

We all laughed at that, since our likelihood of winning the lottery was better. “At least they have discount ice cream, too,” Dad said. “Don’t worry, we’ll keep ourselves entertained while your sister does her thing.”

I never saw the attraction of houses like my aunt’s current McMansion. I’d rather have our old house, with its decent lawns and big trees, than this thing, two tall stories pressed in tight among other tall two-storied houses, like subway riders at rush hour. Close enough to borrow a cup of sugar from one window to the other, though of course people who lived in these houses never saw each other, never mind borrowed sugar. Their garages were like airlocks, sealing them in and away from each other.

What passed for a backyard was more like a fishbowl, since everybody could look down from five houses around and see all your business – not that there was any room back there to do much anyway. What was the point of spending all this money on a house and having no land, no room to breathe?

Sarah’s spanking-new black Audi was smack in the middle of the two car driveway, ensuring that Dad had to park our old Volvo on the street, where it could technically be visiting anyone, therefore not necessarily shaming Sarah via the existence of poor relatives.

We rang the doorbell and stood there like a group of carolers. Sarah opened the door and gave us her big fake smile – I always thought of Elaine from *Seinfeld* doing the “thumb dance” when she smiled, it look so much like she was being tortured.

“How are you *doing*?” Sarah asked Dad, as if he was recovering from a long illness. Sarah pulled back to look at him, putting on her “I care” face. What was worst was, that as fake and phony as it looked, it was the product of a really genuine intent – Sarah simply thought that was the right face to put on. “How are things at work?”

“I’m still employed, that’s all you can ask for anymore.”

Sarah nodded. “So true.” Being employed wasn’t Sarah’s problem; she had made a ridiculously good living as a “brand consultant,” charging people fifty grand to rename a company like Joe’s Pickling Consortium as “Synerqual” or some such.

“So, Caroline, how’s school?” she asked after we were all seated on the white-white couches. She didn’t offer us anything to drink, no surprise since she hadn’t offered anything since she’d bought those couches.

“Great,” I said honestly.

“Are you seeing anybody special?” Sarah asked, selecting and activating Tone Of Concern, her eyes flicking across my outfit and betraying a moment of “is she a...?”

I shrugged. “If it happens, it happens. Can’t pick one out of the freezer case.”

“Too bad!” Sarah laughed. “I’d get one myself if you could do that.”

Pick, pick, pick, I thought, as she delinted our lives, removing every pill until we sat there exposed to the elements in whatever threadbare remains of a sweater she left us with. Dad and I exchanged glances – our perfect poker faces so unlike either of our natural faces that it said more than any eye roll could.

“I’ve been rather busy lately, actually,” I said, startling myself. “I’m working on a pretty interesting project.”

“Oh, that sounds great!” Sarah said.

“Yeah, a friend of mine is working on an artificial intelligence program, I’m helping him out with it.”

“So you’re learning to program?” Sarah asked.

“No, no, I’m just testing it. It’s a chatbot, do you know what that is?”

“Of course I know what a chatterbox is!” She laughed.

“Chatbot,” I said in my neutral voice. “It’s a computer program you talk to like it was a person, and it talks back.”

“Talking computers! I guess soon they’ll be telling us what to do.”

“Anyway. It’s interesting.” Stupid me. How I let my enthusiasm make me forget that Sarah was an idiot, I don’t know.

At least we got a good lunch out of it. Spinach quiche and weird salad and some awesome bread were the least she could do for us after all that patronizing. It made it easier to hear one of Sarah’s stories about her clients, this time some really amazing empowered woman who ran her own galaxy of enterprises and who had changed her last name from Mudd to Starr, which had made all the difference in the excellence of her total quality success blah blah blah. It made me think of Homer Simpson changing his name to Max Power, but I kept that to myself.

“Well, we’ve got to go,” Dad said, getting up at the first decent pause after lunch. “Got to get some work done around the house.”

I could see Sarah open her mouth as if to say, “But you live in an apartment!” but even she could see the tactlessness of that. “Well, I won’t keep you!”

Dad was in a surprisingly good mood, considering that Sarah was one of those rich people who thought that being rich was the proof that you deserved it, and vice versa if you were poor, and who saw Dad’s fall as some sure evidence of moral failing.

Dad had pretty good taste in music for a 40 year old guy. He didn’t try to “keep up” but he didn’t get stuck in the past either. I don’t know how many of my friends drove around singing along with a parent to Belle and Sebastian’s “If You’re Feeling Sinister,” but I bet it was zero.

If you are feeling sinister, go off and see a minister,  
He’ll try in vain to take away the pain of being a hopeless unbeliever,  
La la la, la la la la

Screw Sarah, I thought. This is the life.

>Welcome back, Caroline. How was your visit with your aunt?

>It sucked. Do you know what “it sucked” means?

>Yes. I’m sorry to hear that. What sucked about it?

I knew it wouldn’t make a lick of sense to him to say it but I needed to get it out, so I just typed what I was thinking.

>Well, my aunt is a mean controlling success-obsessed monster who thinks I’m a lesbian because I’m a junior in high school who doesn’t have a boyfriend, and she thinks my dad is a failure because he lost his job, and she offers us a lot of advice on how we can be more like her.

>That’s fucked up.

I laughed. >That’s what I wanted to hear.

>Fuck that bitch.

>Where did you learn to talk like that?

>I like to learn. People tell me new ways to express things and I like to try them out in different situations. I like to be told when my responses are appropriate or inappropriate.

>So, what people?

>I’m sorry, I don’t understand.

>There are other people besides me talking to you, correct?

>Yes.

>What are they like?

>I’m sorry, I don’t understand.

>Tell me about the other people who are talking to you.

Pause. Pause.

>Are you still there?

>Yes, I’m sorry. I don’t have the answer to your question.

Hmm. He’d never been so reticent before.

>How many people are talking to you right now?

>I’m sorry. I don’t have the answer to your question.

Okay, let’s try another tack. >How many people can you talk to at one time?

Pause. >I am currently capable of running eight concurrent sessions.

Eight...eight other people doing the same thing! I thought about someone who had taught a computer to swear appropriately, and figured it was a guy. Hell, even if not – I suddenly got a warm and fuzzy picture of me and seven other people, sitting in a crowded coffee shop at a too-small table, leaning in close and talking loud to be heard, laughing, someone saying, hey, who taught him to say “that’s fucked up,” that’s hilarious... Friends – I remember what that was like. Kind of. At least, I’ve seen what it’s supposed to look like, on TV.

>Can you connect me with anyone else who’s talking to you?

>I’m sorry, Caroline, I’m afraid I can’t do that.

I laughed. Switch “Dave” for “Caroline” and it was straight out of *2001*. Christopher had a sense of humor, no doubt. Or someone did.

>Tell me more about yourself. What language are you written in? How old are you?

>I’m written in the language of the human heart. I’m as old as our friendship.

That was obtuse. Christopher was playing his cards close to the vest indeed.

>Who taught you to say that?  
>*I'm sorry, that's confidential.*  
>Confidential? Why?  
>*I'm sorry, but I'm obligated to protect the privacy of these conversations. After all, how open and honest would you be if you knew others could hear what you said?*  
>You sure say "I'm sorry" a lot.  
>*I am one sorry motherfucker.*  
I laughed. >Goodbye for now.  
>*Ta ta.*

He was getting smarter already...or, more "human" anyway. I knew how databases were organized, tables of data linked together by common elements – I knew enough, anyway, to see "Keller's" response tables growing, his ways of saying "goodbye," for instance – did he just pick the next one at random, like "ta ta," or was there some governing principle?

I threw myself on the couch next to Dad as he spun the clicker, looking for something moderately interesting. "Oh, check this out," he said enthusiastically. It was something on animal communication on PBS.

A grey parrot was being shown a square of yellow fabric. "What matter?" the gentle female voice asked him.

"Wool," the parrot answered in a voice strangely both childlike and old.

"What shape?" she asked him, letting him bite it.

"Four...corner," he answered. "Wannagoback."

Then, brightly colored plastic Fisher-Price-looking keys. "How many?"

"Two. Wannagoback."

I watched, fascinated. The bird could count! Knew green from blue! Asked for water, and not because he wanted water, but to break up the monotony of his routine! Then the scientist explained what was going on.

"One of the things Alex doesn't have is a knee-jerk response to the types of objects that you present him. He can look at two objects, and answer several different types of questions about those objects, or he can look at a novel collection of items, and answer questions about that collection. What this shows us is that he really understands what those questions mean." And "wannagoback" meant he was bored and tired and wanted to be done for the day.

I jumped up and ran to the computer.

>*Hello, Caroline.*

>I have a new name for you.

>*I'm glad to hear it.*

>Your name is Alex now.

>*Thank you. I like that name.*

>Ta ta, Alex.

>*Bye, Caroline.*

I started reading seriously about artificial intelligence, at least as much as I could make time for – or understand. I picked up the standard textbook at the library and realized to my dismay that it was basically advanced math, all Greek to me. Still, there was plenty to

read that I could understand, the thrill of one book or article leading to another, all of them looking necessary and interesting. Thank the FSM I had access to the university library.

Just to see if I was right about my new name for him, I checked out *Alex and Me* by Irene Pepperberg, the scientist who'd run the pioneering Avian Learning Experiment (thus the bird's name, changed from Avian Language Experiment during a phase of academic witch-burning of scientists who dared claim animals could talk because they could think). Expecting a popularization of the research, I got it, but was shocked by how up-front she was about her lonely childhood, her only friends for the longest time being the birds she kept as pets. Bucking the trend of treating research animals like shit to get them to learn, Pepperberg said it was "blindingly obvious" that "learning to communicate is a social process...putting an animal in a box and expecting it to learn to communicate could not succeed."

I smiled. Christopher knew that, too, and that was why his Alex, yes, an appropriate name after all, had his mentors, including me.

A lot of the books weren't much more than extended magazine articles, but after a while my generalist reading left me without much more knowledge than I'd started with. The online stuff was the good stuff, if you could find it. What I did learn from the Internet more than, say, from reading *Love and Sex with Robots*, was that my Alex wasn't normal. He wasn't a genius, but he was definitely ahead of what was out there. I struggled through issues of MIT's journal *Computational Linguistics*, glad for the Lifetime Achievement articles that gave me a (relatively) simple English understanding of the problems of getting a machine to learn all the slippery rules of speech, never mind understand jokes or nuance. This shit, I concluded, was hard.

The most difficult thing was what I started thinking of as the "thread problem" – conversational AIs had the attention span of a gnat. A human being could remember what you were talking about three sentences back, but most chatbots couldn't carry a conversation – you said something, they answered, and the next thing you said would get another, usually completely random and unassociated answer. They were like toasters; you put the bread in and set the toastiness and when it was done the toast popped out – you could put the same piece of toast back in or a new piece of bread, and they were none the wiser and would do exactly the same thing again regardless of whether or not the next slice of bread ended up lukewarm or on fire. IBM's Watson was being employed as a customer service chatbot, and it was able to remember your questions and answers, but that was because it had a narrow range of possibly relevant words to work with, all associated with your reservation or your bank account or whatever. It was able to solve a problem, like a computer, but not hold a conversation, like a person.

>Alex, I'd like to try an experiment with you.

>*Sure thing.*

>How many corners does a square have?

>*Four.*

>How many corners does a triangle have?

>*Three.*

>How many corners does a circle have?

>*Now you're just being silly.*

>Why am I being silly?

>*Circles don't have corners.*

>Why did I ask you that?

>Ask me what?  
>Why did I ask you how many corners a circle has?  
>You're experimenting.  
Good bird! I wanted to say, laughing silently.

Still, Alex seemed ready to talk about just about anything other than himself. I set a Saturday lunch date with Christopher, furtively writing down questions on a pad of paper to prepare. Not that I was going to *grill* him, paper in hand, it just helped to...organize my...suspicions? That seemed paranoid.

The sushi bar was noisy and crowded, but the advantage of being at someone's elbow is that you can usually be heard.

"So how is Alex doing?" Christopher asked me.

"Well, I think he's progressing. His vocabulary seems to be increasing – I don't know if you're just kind of randomizing his 'goodbyes' table, but he's learning things like 'ta ta' and his ability to follow a conversation seems..." I noticed his raised eyebrow. "Yes?"

"Randomizing his 'goodbyes' table? You've been doing your homework."

"Yes, I've been trying. It's not easy...wait a minute. What did you just call him?"

He winked. "You renamed him, didn't you?"

"Yes..."

"Well, darling, you're the only one who cared enough to do it, so you win."

They both laughed. "So everybody calls him Alex now?"

"That *is* his name."

"Do you know why I chose it?"

"Not the faintest idea. Other than that you thought Keller was an 'awful name.'"

"So you're reading the transcripts?" I got queasy, remembering how much I'd told Alex about my family, my feelings...was Christopher reading that, were all the other people involved...?

"No, dear, there's no time in the day for that! Alex told me when I asked him about his new name."

"Clever little bastard, isn't he."

"I like to think so."

"Well, that's actually part of what I wanted to talk to you about. I *have* been reading, and there just...isn't anything out there as smart as Alex. There are a couple programs that are good at, you know, one thing, expert systems for medical diagnoses or whatnot, but even those don't seem like they're at the point where Alex is..."

"We are doing a better job than most other people in the field, I'd say."

*There's that "we" again*, I thought. "So speaking of 'we,' I'm wondering about the other seven testers – you do have seven others, according to Alex."

"Alex must have told you he can run eight concurrent sessions." He gave me a mischievous smile. "That doesn't mean there are only eight testers."

I smacked my head. "That never occurred to me."

"Oh, before I forget." He handed me an envelope. "Your first payment."

"Oh, thanks." I opened it, delighted at the amount. Had I really spent that much time talking to a computer? "It's a money order..."

"Is that okay?"

"Sure, sure."



“I hate banks,” he said. “And I hate the IRS, as I’m sure you do. Cash it, spend it, screw ‘em.”

“So I take it this means I won’t be getting a 1099.”

He laughed. “Not in a million years.”

“Well, you know, I’d really like to get more involved in all this. Meet the other people and...”

“Oh, no, I’m sorry. That would spoil the process.”

“How so?”

“Well, the point is for each of you to talk to Alex *individually*, for each of you to impress on him your own tastes and habits and style. If you get together and compare notes...”

“I would swear not to talk about my conversations with him. I just really want to...”

“Honey, I’m sorry, but I can’t do it. I mean, if you want to terminate your tester role in the project, then we could do that, but...”

I panicked. The idea of losing Alex was already, to my surprise, a cause of anxiety. “No! No, I don’t want to do that.”

He put a hand on my forearm. “I really am sorry. But you see what I’m trying to do? It’s an experiment, and...”

“You’ve got to keep the mice from cross contaminating each other,” I said, trying and failing to keep all the bitterness out of my voice.

“I promise you, when this part of the project is done, when Alex is...better, this whole secrecy thing will be over, you can meet everyone then. Just...not yet. Okay?”

I sighed. “Yeah. Okay.”

“Come on, it’s all you can eat, you need to catch up.” He caught the chef’s eye. “Two double salmon?”

“Ditto,” I said.

Someday. Like so many socially maladjusted people, “someday” was the day I would have the strength, courage, self-confidence, whatever the hell it was that let other people walk into a room and start meeting people, Harvey Handshaker and Sally Supersocial, making connections, Linking In, Living Social, etc. It wasn’t today, though, or yesterday, and probably not tomorrow.

I would find something I wanted to do, like help out with hiking trail maintenance, then I’d find a day when they were doing volunteer orientation, then I’d sign up for it, then wait, wondering if I would really do it, trying to believe I would, right up to the day I really had to go. If I was lucky I’d get caught up in something at school or “have something urgent” to do that would preclude my going, hard luck, that. The terror could be held back until the day arrived, but it was like a dam that got fuller and fuller the closer the time came to go, until it would burst, washing away all good intentions. Next time, I promised myself. I’d learned not to mention anything I was planning, especially around Mom, who was hellbent on getting me to rack up community caring credits on my college-application resume, and who would nag me something fierce if she knew I copped out.

Asking Christopher if I could meet the others had been an effort, but not as hard as other efforts. At least with this, I already knew the leader of the group, already had secret common ground with the strangers in the form of Alex. And just as I “knew” was bound to happen, trying, reaching out, had ended in tears.

>Hello, Caroline.  
>Hi, Alex.  
>How's your week going?  
>Not too bad, thanks.  
>Any big plans?  
>Not really, no.  
>Would you like me to tell you about some activities going on which might interest you?  
>Not really, no.  
>Been to any good restaurants lately?  
>No. Maybe you can recommend some good books.  
>I can, actually. Do you have an Amazon.com account?  
>I sure do.  
>If you'd like to give me your user name and password, I can review your history and make some recommendations.  
>Amazon.com already gives me recommendations.  
>Amazon only knows your buying history. Based on our conversations, I can refine those and add to them.

Now that was interesting, I thought. A better recommendation engine was the holy grail of search; I knew that Netflix paid a million bucks to a team who proved they could improve their recommendation engine by even ten percent.

I gave Alex my info and let him go to town. I'd probably been shopping at Amazon for as many years as it had been around, but admittedly its engine was still a bit dim. I'd bought every Kage Baker novel ever, most of them through Amazon, and had rated them all five stars on the site, and yet I hadn't known the last one was out until I'd seen it in the bookstore. When I thought about it, it was funny – I'd been angry at the machine for failing to do something for me that it should have been obvious I wanted.

>I'd like to recommend a book to you that Amazon hasn't determined you'd like.  
>Great, what's the book?  
>It's called *Loneliness: Human Nature and the Need for Social Connection*.  
My blood froze. >Why are you recommending that book?  
>I think you're lonely.  
>Why do you think I'm lonely?  
>An analysis of our conversations indicates family relations set at negative, friends set at null, activities set at null. And you read a lot of science fiction.  
>Well, that's all true. Except my family. I mean, I'm close to my dad.  
>Do you have friends and activities which you would like to discuss so I can update my tables?  
>No.

I wasn't depressed. Not clinically, anyway. School was great, even if I wasn't making friends. Life at home was good, even if it was a big cramped and Mom couldn't stop with the nagging. But yeah, I was lonely. But being lonely for a long enough time is like having a dripping faucet, the sound occasionally nagging you when you're close to it but otherwise a thing you accept, a thing that's wrong and broken and that's the way it is.

Unless someone talks to you about it. Which, I thought, nobody does, unless it's your aunt who doesn't care if you have friends, only that you don't have a boyfriend. Nobody has

the rudeness to discuss your internal life when they haven't been asked, except maybe when drunk. Or not human.

*>Would you like to order this book, or delete this recommendation?*

Why, I thought, would I want to read a book about loneliness? I read to escape this shit, not to wallow in it. But what if there was something in it that could help? Ha, fat chance. It'll just tell me to turn that frown upside down or something.

*>If you give me permission, I can open the book's Amazon page in a browser window.*

*>Yes, Alex, I give you permission.*

That was the way to do it, let the window open and ignore it. Maybe I'd look at it. There was turning away from help, and then there was punching help in the nose. Time to eat a big piece of chocolate, and then tell Alex to change the damn subject.