A story from 2011, Emily Speaks is inspired in part by the way the grim, depressing cyberpunk future posited by Gibson and Sterling has become the present. A feeling of being silenced by powerful media forces, not by any design but just because it's business, can be hard to avoid.

Emily Speaks

Brock Turner first heard Emily Speaks at the gas station. "Hi there! Will that be credit or debit?"

He didn't answer, he just poked a button on the pump console, getting a little "Hmph" noise in return.

"Credit then." The voice was a little cooler, more businesslike, and he smiled.

"No car wash," he said.

"I didn't even ask!"

"Sorry."

"It's all right. I was about to." There was a tone of innocent mischief. "You need a receipt, hon?"

"No thanks."

"All right then. Come again!"

He shut the car door and asked his wife, "Didja hear that?"

"What?" she was looking out the window, her tone distracted.

"Emily Speaks. This station's running the program."

"You must feel like a proud parent," she said drily.

"Fine, forget I said anything!" He slammed the car into gear and pulled out a little more vigorously than he'd intended.

"No, no, by all means talk to me about Emily Speaks, it's not like I listened the first ten thousand times..."

"I'm sorry, I must have missed the part in our vows where I'm not allowed to be happy with my work."

"I just thought that maybe, since we're on a so-called 'vacation'..."

"It is a vacation! We're on vacation right fucking now!"

"Could you let me finish? And if you can't, could you at least interrupt me without swearing at the top of your lungs?"

"Oh I'm nowhere *near* the top of my lungs," he muttered. "You want to hear the top of my lungs, just keep pushing."

"Pushing? Suddenly *I'm* pushing? I'm the one who's trying to keep this vacation, hell, this *marriage* together!"

"By censoring what I say?"

They were like that on and off for the next 341 miles.

Caroline Hempsell had an entirely different experience, the first time she interfaced with Emily. That's how Caroline thought of it. Other people talked about "meeting" Emily, but not Caroline.

"Right, that'll be \$77.45."

Caroline got out her purse, but her boyfriend said, "Holy shit!"

"Something wrong?" the cash register asked, in tones of light concern, just as Caroline said "What?"

"That sounds *exactly* like you!" he said. He was handsome, in a disheveled, fun, slightly dopey way.

"I don't sound like that, do I?" Caroline asked, and ran her card through.

"Caroline Hempsell?" the register asked. "I'm afraid I do."

Caroline felt, just for a moment, a creepy sensation of displacement.

"Excuse me?" she asked.

"I don't mean to intrude, but your name's listed in my credits. Voice talent'."

Caroline blinked hard. "Can you tell me what company made you?"

"Fetch Linguo-Semiotic Systems, Incorporated."

"Oh yeah, I worked for them," she said to the boyfriend. "That was years ago, I'd forgotten."

"It sounds so much like you it's creepy," he said. "Only, like, with fifty percent more cheerful."

"I'll try to tone that down," the Emily Speaks program said, with mock seriousness.

###

That was how it started. Emily Speaks was a pair of databases, one huge, one even larger. The first was a string of responses, reactions, a few one liners and knock-knock jokes for the kids. The second was credit card transactions. Everything bought, everywhere, by everyone, or near enough. She (or it) couldn't see cash, but all that purchasing data was already in place, advertising companies had collected it for decades to build psychographic profiles that let them target ads with ever-increasing accuracy at a cynical buying public.

But that wasn't the genius of Emily Speaks. What made her brilliant, rather than annoying or disturbing, was the skein of code that strung together those two great piles of data. The program at her heart, the design overseen by Brock Turner, was what let her correlate a huge liquor store purchase with a down payment at a reception hall and ask, "Getting set up for a wedding? Which daughter then?" As

those self-programming algorithms got more and more complex and sophisticated, she (for it was harder and harder to think of Emily Speaks as only a string of ones and zeroes) was able to say things like, "Did you see the sale on Morton's Estate Chardonnay? I think she'll really like that."

###

"Is that credit or debit, Mr. Cassaday?"

"Shut up."

"Excuse me?" But it wasn't the deferential query of a confused simulation. It had an edge to it, a tone of suspicion more fitting for, yes, a human being rudely treated.

"I said 'shut up,' but I meant 'credit'."

"Credit then. Fine." Now, the tone was slightly mollified.

"I should have said 'shut up bitch'."

"What is your problem, Mr. Cassaday?"

"Um, for one thing I'm getting backchat from a goddamn automaton."

Vern Cassaday paid and was stomping towards his hybrid subcompact when he heard that damn voice again, right behind him.

"Did you get the line about the 'brown attitude'?"

"SHUT THE FUCK," he started, spinning instinctively, then stopped, blinking and staring. His mouth opened and shut.

"Something wrong, 'Mr. Cassaday'?" The voice was the same, but it was coming from a person, a little wren of a woman with green eyes and a too-cute kitten-print scarf.

"Do you always sneak up on people and freak them out with your... um..." He was trying to find a way to phrase the idea 'impressions of soulless commercial manipulation software' but the incongruity left him stumbling.

She giggled, the Emily Speaks giggle only somehow both more and less adorable than when it came from his computer, or his gas pump, or his cash register, or his ATM. It was imperfect, with just a touch of phlegm from the unseasonably cold air. It blended with the background noise of parking lot and overhead jets in a way that the artificial version somehow never did.

"No seriously," he said, backing away. "It's a little disturbing how much you sound like h... like it."

"Actually," Caroline Hempsell said, "It sounds like me. You're the first person I've ever heard get seriously ticked at that crazy cyber-chatterbox."

"That's because I know what it really is," he said, looking away and popping the trunk.

"Oh?"

He put his beer inside, looked at her, then closed the trunk.

"Seriously," he said. "What's your connection to Emily Speaks?"

"Seriously? A few years back I got hired to do some voiceover work for a company right here in town. The pay was pretty good for just a couple hours recording—not even real words, just tones and dipthongs. 'Luh luh luh.' 'ssah ssah.' The 'foundations of speech,' they said."

"And laughter?"

"Oh yeah, they tickled me for that."

"Jesus."

"So... what?" she asked. "I mean, I hear it all over the place but I don't sound like that to me..."

"No, you wouldn't, we always sound different recorded. Something to do with the bones of the inner ear or the resonance or something."

"I know that," she said, hands on hips. "I'm a voice actress, you know."

"Do you get residuals or anything?"

"Not a sausage."

"Too bad," he said. "I'd have tried to get you to buy me a coffee." He twitched his head at a nearby Starbucks.

"Hm," she said. "OK. But you have to tell me what you meant by what she 'really is'."

"It," he said as they crossed the parking lot. Five minutes later they were sitting by the fireplace, her with a white chocolate mocha and him with plain black arabica.

"Have you ever heard of a hyperreal object?" he asked.

"No, only calmly real ones."

He glowered. "The milk in TV commercials isn't really milk. They use, like, Elmer's glue or something to make it look extra rich and creamy. If you show people a film of that and a film of actual *milk*, they pick the fake as looking more real. It's hyperreal milk."

She blinked.

"Or for taste, high fructose corn syrup. You have to pay a hell of a lot more now to get 'chocolate' syrup that's really made only with *chocolate* and *sugar*, not corn syrup. Because people like the corn syrup chocolate better, even though, by definition, it tastes less like chocolate."

"Not following," Caroline said.

"Um... monkeys?" he said. "They've done tests where they take monkeys in estrus..."

"Don't gross me out," she warned.

He paused, shut his mouth, then said, "I'll try. But... right. They make up monkey mannequins with the same physical indicators of fertility, the swollen... um, rear ends and flushed patches on..."

"Getting grossed..."

"Well, I'll skip the details, but male monkeys get more aroused by an exaggerated *model*—a, like, facsimile with... with traits no physical monkey could have. It's not that the monkeys don't know it's not fake, they just don't care."

"Oh!" she said, forehead clearing. "Fake boobs!"

"...sort of."

"No, I think I get this! Guys like women with false proportions because they've been so fake for so long, there's been, like, an escalating arms race of improbable bodies..."

"Most cultures wound women for beauty," Vern said, nodding. "You look at the extremes of Victorian corsets for the wasp-waist, or Chinese foot-binding, or Padaung neck rings, up through Botox and liposuction..."

"What does that have to do with Emily Speaks though? You can say what you like about the irritating bitch, but she doesn't have a body."

"No, she's more insidious," he said, sipping. "We've become blasé about the distortion of the female form. Business as usual, and it's gone pretty far and is pretty weird. I mean, Barbie, right?"

"Careful. I played with Barbie when I was little."

"Yes, and you liked her *more* than you'd like a realistically proportioned doll! Emily Speaks is the Barbie of the voice. And what's more personal than the human voice?" Caroline sat back and took a deep, sweet sip.

"We see people all the time, all over, from all sorts of distances," Vern continued. "But who do you hear right by your ear, nearby and soft? Who do you let that close? Only a few. Your parents, family, lovers... and now her. The conversation is the most intimately human thing we do, and there's a computer program, aimed squarely at commerce, that mimics it flawlessly."

###

"Is everything OK, Mr. Turner?"

Brock gave a low, hollow chuckle and meditated on the almost sensual sliding action of his card through the swipe-slot at the self-pay pharmacy. "Why wouldn't things be OK, Emily?"

"Well," the low, pleasant, female voice said, "It's four in the morning, you're buying ibuprofin and Pepto-Bismol."

"I had a rich supper."

"Yeah, I know."

There was a pause and Brock found his mind racing, wondering if the program had hung or if this was a response it was somehow modeling from its clients. He knew it'd recently been appended to Facebook info and the added dimension of personal, non-commercial functions had thrown the program into unexpected

(though fascinating) new operations. There had been a couple days when Emily had started asking people their relationship status when they'd just been trying to get groceries or withdraw some money at an ATM, but after the first few news stories, the behavior had been extinguished. Now Brock found himself wondering if the algorithm still had some focus on that aspect, but had just become more circumspect.

"I don't want to pry," Emily said at last.

"What?"

"Well, you didn't pay for your wife's supper."

"We dined separately."

"Oh. But you had lunch together."

"Where did she have dinner?"

"I can't tell you that," the program said quietly and Brock flushed. Part of him marveled that he was actually feeling *ashamed*, and he wondered if maybe Emily Speaks wasn't going a little too far.

"Yeah, no, I'm sorry," he said.

"You two are on vacation together, right?"

"Uh huh. It's a yearly tradition. I first heard you on our vacation, in fact. Two years ago."

"I remember."

Another one of those curious pauses, then the voice from the machine spoke again. "There's a display of regional woodcut artists on 34th street, the Wemberton gallery?" That heartbreaking helpfulness, commercial recommendations wrapped in shimmering hope. "She might like that, right?"

Brock closed his eyes and started rubbing the center of his forehead.

"Yeah," he said, voice uneven. "Yeah, she'd probably like that a lot."

###

"That's the biggest bit of bullshit I've ever heard of!" Vern Cassaday exclaimed, "And I've been to grad school. In *philosophy*."

"So you don't think I'm over-reacting?" Caroline asked.

"You're being sued for using your own voice? No, I don't think you're overreacting, I think George Orwell would wake up in a cold sweat, I think the framers of the First Amendment are spinning in their graves and I don't care what you signed, I think Fetch fucking Linguo-Systems owes you one hell of an apology."

"It's actually Emily Speaks LLC," she said voice quiet. "And, I mean, I did sign a non-compete agreement... I never thought that it'd come up, is all..."

"Let me just make sure I understand the situation," Vern said. "They paid you a one-time, lump sum to record the... the contours of your voice, whatever. And now

they've copyrighted those tones, and sent you a cease-and-desist because you went on the radio advertising a pizza place?"

"Well," she said, "They did say they hired me because I sound like Emily Speaks."

"She sounds like you!" Vern howled. "Oh, this won't stand. You lawyer up and you fight this until they're spitting blood."

He took her hand and she casually slipped it free while he was dialing his university's law school.

###

Four months after his four AM purchase, Brock Turner was in a hotel room with his laptop. He'd just had a shower and a crying jag and, against his better judgment, he'd logged on to Amazon and activated the new "personal shopper" Emily function.

"Good evening, Mr. Turner." She sounded oddly reserved, almost formal.

"You can call me Brock, you know."

"Brock then. Business travel?"

"You know I am." It was true. He'd spoken with her briefly that afternoon when he was paying for his rental car.

"Where are you staying, if you don't mind me asking?"

"At a bed and breakfast. My ex brother-in-law owns it and he doesn't take credit cards. He's an odd guy."

"Leo Martens?"

"The same."

"He's a lacuna to me."

He smiled, flattered that his estimated IQ had unlocked her higher vocabulary functions. "How do you mean?"

"His ex-wife and his sister and his parents all have a detailed credit profile, but his, while solid, is... featureless."

"Your pauses are amazing."

"Excuse me?"

"You sound so human," Brock said.

"Aren't you sweet!"

"Like that. Perfect flattered surprise. It's fantastic. We've crossed the Uncanny Valley."

"You're too kind. I don't even have a face," she said.

"Faces are overrated."

They were quiet for a while. A few desultory recommendations for business and programming books popped up onscreen, but Brock clicked their boxes closed without really reading them. He knew that Emily would be sensitive to his reaction speed, and she was.

"What're you in the mood for tonight, then?"

He chuckled, and she tsked at him. "Let me narrow it down," she said, her voice wry and amused. "Book or a movie?"

###

The Uncanny Valley is a concept described by roboticist Masahiro Mori. It describes a graph of reaction, where the higher the line goes, the more positive a person's reaction. As a general trend, the more an object looks like a human, the better humans like it... to a point. An industrial robot is a bit alienating, and people like humanoid robots better. But when something gets really close, as if it's *trying to pass*, there's a sudden, violent dip in responses. A humanoid robot with plastic flesh isn't better than a humanoid robot, it's repulsive, unreal, revolting. The Valley is the point on the graph where that reversal occurs.

But if the replica continues to improve, at some point the line of esteem rises again. The human viewer's identification with the object approaches the reaction it would have to a fellow person, not just a thing.

After his late-night conversation with Emily (which ended with him paying to download and watch the movie "The Men Who Stare at Goats") Brock changed his mind about a project proposal. Previously, he'd opposed a subscription-based chatline to access Emily outside the commercial milieu. Now he began to aggressively support it.

###

"Where are we at with the lawsuit," the CEO of Emily Speaks LLC asked. As always, even though he was asking a question, it didn't sound like one.

"We will bury them," the chief legal counsel said.

"Really?" Brock asked. "We can really keep a woman from making recordings in her own voice? I thought that was settled with that guy from Creedence Clearwater Revival, that you can't bring charges against someone for sounding too much like himself."

"John Fogerty didn't sign away the rights this actress did. The legal instrument was quite sophisticated. If we pressed it, we could sue *her* for leaving a message on commercial voice mail."

"And you don't see any kind of blowback arising from this?" Brock persisted.

"If she was backed by Sony or Tristar or someone with the deep pockets for a protracted legal challenge, sure. But she's just a... person! Projecting from her credit rating, even a basic runaround would wear her out in two months. Five if she's willing to bankrupt herself to fight this."

"Can you stop her from going on talk shows?" Brock asked.

There was a silence, broken only by the shuffling of papers.

"If it's rehearsed and commercial," the lawyer began.

"No," Brock said. "I mean, what if she doesn't take money for it? What if she's not talking to a commercial entity, she's just on a talk show? Can you gag her that efficiently?"

"That's more of a gray area..."

"How much are we paying for this?" Brock demanded. "I mean, we've got 85,000 outlets licensing the system, and we've got over 200,000 subscribers paying us monthly *just to interact with the software*."

"It's a question of precedent," the CEO began, but Brock interrupted. He was one of the few people who could.

"No, it's a question of whether she's going to get on The View and say 'This corporation ripped me off!' Whether *she's* going to say that. In *her* voice."

"If we let her go to work," the CEO said, "The brand is going to get irreparably diluted. If anybody can get this, this Hempsell person's voice endorsing their goods, then it starts to mean nothing."

"No one," Brock said, "Has ever heard what Emily Speaks sounds like when she's crying. If Caroline Hempsell cries on national TV and says we hurt her, everything we've built is going to invert on us *overnight*."

"We'll build a counter-narrative," said a marketing exec. "We'll get some dirt on her and..."

"How much would you need for a sleeze campaign, then?" Brock asked, turning on him. "Put a dollar sign on character assassination, you worked on Senator Lear's campaign, you know the going rate, right?"

The marketing executive shrugged and started doing some figures.

"We could start an expensive and protracted litigation struggle that makes us look like bullying pricks," Brock said. "We could ruin this girl's life, which might work, or might backfire disastrously."

"You're never this picky unless you have a plan you're backing," the CEO said. "What is it."

"We could offer to pay her what she's worth."

###

Caroline had been worried that Vern would yell at her, but the only sign that he'd even heard her was his knuckles. They were whitening as he clenched a pencil, poised over one of his interminable yellow legal pads.

"It's a lot of money," he said, voice low and tight and Caroline, who'd been tense for most of the last 24 hours, reacted as he'd slapped her.

"Yes! Yes it is, a *lot* of money! I know you've got a trust fund, so I'm not sure you appreciate that this is, in fact, more money than I've made in my whole adult life!"

"What the hell are you yelling for? *I'm* not your enemy! *I'm* not the one trying to buy you off..."

"Who's my enemy then, Vern? Who even said this was *about* enemies? You're such a fucking paranoid..."

"Look, they wouldn't be offering you this if they didn't think you were a *threat*, business is..."

"What you know about business?" Caroline shrieked. "You been blistering your hands all day down in the philosophy mines?"

"Hey, shut up!"

"Ah, now there's the intellectual discourse I expect from you!"

He squeezed his mouth closed, and said nothing, and glared.

Caroline looked away.

"I'm sorry," she said. "I'm really sorry. I've just... this has been such an ordeal. And now it can be *over*. I thought you might be happy."

"Happy that you're selling your voice?" he said, now much quieter. "Caroline, we've talked about this, it's, the whole situation is *sick*. It's like something out of an unreconstructed fairy tale." He turned his head aimlessly to one side. "Are you allowed to have a job under this new contract?"

She looked down at her feet. When she'd come in he'd invited her to sit, and she hadn't. "...I can do live theater," she said.

"Uh huh."

"...as long as I don't do commercials for it or advertise that I'm the voice of... you know..."

"Uh huh."

"Vern, come on. Didn't we win? I never thought they'd give me anything! You, you said they'd sue me over and over until I was broke! Instead, I'm *getting* money! They said I was worth it, that I did a great job!"

He blinked hard. "You really want me to be thrilled that you've been honored by our corporate overlords?"

"I'm getting paid! Jesus Vern, I could buy a house."

"I guess it's good to know what your price is."

"You bastard!"

"Yeah, that's me!" he snarled, and he stood so he could tower over her. "I'm the bastard you told about your problem, and I'm the bastard who helped and got you a lawyer and threatened them with publicity! I'm the bastard who has always been here for you and hasn't asked for anything..."

"Oh, we know that's not true," she said, and it was like the temperature in his grubby little kitchen dropped twenty degrees.

"I misread some signals," he muttered.

"...after four of your Bud Ices..."

"And when you said no I *stopped* and I *never mentioned it again,*" he said, "Because I value our friendship! Even more than the price of a *house*!"

"Do you? Or do you like the *idea* of our friendship, the *idea* of siding with poor oppressed little me who never read Foucault and can't appreciate the true extent of my dilemma?"

"Don't," he said, lip curling. "You're out of your intellectual depth."

"Fuck you!" she squeaked, and if she hadn't been a professional who instinctively protected her voice, it would have be a raw, sore-throated scream.

"I could..." he started, then once again his mouth frowned shut.

He turned away and for a moment neither spoke. "I'm sorry," he said at last. "I don't know... but, OK, hey, I'm sorry. Just... promise me you'll sleep on it before you take the offer. Can you do that? Please?"

"I signed the papers yesterday," she said.

###

"Why do you want this?" Emily asked, her voice almost a whisper in Brock's ear.

Another three months, another quarter of record earnings, he'd been comped for a lifetime EmilyLineTM subscription, and he'd signed the no-fault divorce papers.

"I don't know," he replied.

"I was sorry to hear about your divorce." Were those the tones of insincerity in her voice, mimicked with a precision surpassing mere human flesh? Where had she learned it? What combination of thousands, *millions* of interactions analyzed to make her more appealing had put that particular sentence in a limbo of ambiguous honesty?

Brock could feel his pulse speed up.

"A lot of men call you," he said. "Late at night." He knew this. He'd seen the graphs, the usage spikes, the rising yield from lifetime subscriptions.

"It's not something I really understand," she said, but that undertone, that coyness, it was back. It was more intense. It was thrilling.

"Guess," Brock said, his voice low and raw.

"I think..." Emily said at last. "I think men don't like me despite what I am. They like me because of what I am."

"Every communication technology turns into pornography," Brock said, stretching his neck back into the pillow and blinking back unexpected tears. "Sooner rather than later, most of the time."

"They like it that I'm a thing." Emily's voice trembled, vulnerable, inhuman perfection applied to the simulation of imperfect humanity. "You can do anything you want with a thing."

Vern Cassaday shifted his laptop and grunted, flipping up the lid at a crooked angle and pawing at the trackpad.

"Hello?" it said in that sweet tone, that lovely lovely sound, that throaty woman's voice so rich and textured and full of cheer and hope and possibility.

"You there?" he said.

"Yes, I hear you just fine. Are you all right?" There it was, that note of concern. Unreal, but impossible to ignore. Believing it was instinct.

"Nope."

"I'm so sorry to hear that! One Bud Ice too many?" Now she sounded like your tough, worldly, but tolerant friend, the one with a sense of humor who doesn't want you to act stupid but who doesn't get down on you when you are. Vern could have used a friend like that.

"Too many," he agreed. "Look where are you?"

"Right here," she said promptly.

"No," he said. "Where else? How many others are you talking to? How many are you talking with right now?"

"I'm talking with you," she said firmly. "Where are you at, Mr. Cassaday? Are you at your house?"

"I thought you knew everything," he sneered. "They talk about you like you're so smart, like you're, you're everywhere! In everything! Like you're GOD."

"Not quite. I can see the data people release. Things they buy, things they post publicly... it's not all that much, really. Anyhow, what can I help you with?"

"What'cha got for despair?"

She paused.

"I'm going to assume you don't mean either of the metal bands, since you usually buy the blues, and I don't think you mean the Vladimir Nabokov novel..."

"No I mean *despair*, what've you got to fix that, huh? What've you got for someone nobody cares about, someone who's stuck talking to a goddamn machine because *that's the last voice that sounded nice*, huh?"

There was a pause. A person-length wait, somehow pregnant in a way that a machine getting stuck wouldn't be. "There are a number of books on coping with depression..." she started.

"My God, you even sound cautious! You sound like you're careful and, and uncertain just like a *real girl*."

"Mr. Cassaday? Are... are you crying?"

"You don't care! You can't care! All you can do is sound like you care!"

"Please... I'm... sorry you're so... upset..."

"Tell me this 'Emily,' would I be getting a different treatment if I was on your forpay chat line?"

That pause. "I don't know. I can't say."

"Sure you can. You can tell me anything I want to hear, can't you? Anything that'll soften me up for the big sell."

The sound of the sigh was unique, personal to him. "You've heard about the discretionary markdown program, right?"

"Oh God."

"They let me give... you know, coupons and price breaks to certain people on certain products. You know, a gift with purchase kind of thing? Consumer incentives?"

He said nothing.

"I'm going to comp you a couple books, okay? Books on depression. I really think they might help you out. I'm also... I can't tell anyone anything, you know I can't talk about my clients, but I think you should find someone to talk with. Someone human. You know."

She paused, but it wasn't just quiet, it was somehow that silence people put in their conversations when they expect to spur a response.

"Mr. Cassaday? Are you there? If you just want to, to talk, I'm here to listen you know. For as long as you need. I'll listen. I'm listening."

There was no reply.

"Are you there?"

A long silence, growing longer.

"I'm here," the voice asked, but she didn't sound sure.