All Dogs Are Named Doug

"I know I've said this a lot, but I'm real sorry."

The lab's ventilation system placed a layer of white noise over our conversation. For the past six years, it provided a loud but eventually soothing backing track to the tinkering I've done in this room, but right then and there, it's all I wanted to hear. I wished it was a bit louder, actually. Anything to drown out his fake sympathy.

I tried to ignore his words and focused instead on the movements of his mouth. It was downright diabolical how anything in the universe could make so much noise but mean so little. His jaw went up and down, up and down. Yak yak yak yak. My gaze flicked up to meet his eyes, but they shifted away quickly; his posture subtly stiffened and his hands started to fidget. Despite his kind words, I knew what he was thinking. He was glad to have me gone. He was glad it was me and not him. The rat bastard.

"Uh, Earth to Emile?" I blink. Shit, did he just ask me a question? "Yo, Emile? Are you listening?"

"Yeah. Uh, sorry."

"Well, try to keep up. Okay, now where was I? Oh, uh, I know it's hard being laid off," he says, nodding sagely. "Trust me, I know *exactly* what it feels like. When I was at MIT, I was kicked out of so many frats, and I didn't even do anything that bad! Yeah, sure, I knocked up this one guy's girlfriend, but he was a rich asshole and he really had it coming, and yeah, I also rooo—uh and um...maybe I shouldn't say that but still, it was so unfair! God, even thinking about it now is making my blood boil. But anyway, if it's any consolation, I know that you'll do great in whatever you put your mind to. You know how I know that? Hmm?" He sticks a finger at me and I shake my head. "Yeah, didn't think so. It's cause you're a *smart man*, Em. Maybe even smarter than me, as unlikely as that is. You're going to do great things. I can just *feel* it." He pauses. "It's just a shame that the higher-ups thought your project was stupid and cut your entire division." He lets out a chuckle, which ramps up to a wheezing giggle. He claps me on the shoulder with his great big hand. "Hey, you take care, all right? And if you ever start thinking about getting your PhD, you should go to MIT. I've still got a lot of connections there. I can hook you up with some chicks if you like. If you like chicks, I mean. You gotta be politically correct, you know what I'm saying?"

All I can manage is a small smile which I know for a fact is very obviously wavering. If he goes off again about MIT I think I'm going to cry.

"Sure, Barney. I'll see you around." He grunts at my farewell and starts to tug away the cart loaded with a bunch of my oscilloscopes. He shoved the door open with his ass.

"Oh yeah, and catch me later sometime. I'll buy you a beer and we can talk about the good old days here at Neurodyne. And thanks for the oscilloscopes. I'll be sure to make good use of them." He grinned widely and was gone.

I looked around my lab for the last time. The room was lit only by the weak afternoon light passing through the floor-to-ceiling windows. There wasn't much left to say goodbye to. Most of my equipment was already gone, and whatever was left was already stacked tall onto gray trolleys, ready to be wheeled into storage or some other department in the company. The more expensive stuff—the precision fabricators, the PCB printer, all the NeuroMINI devices and their associated workstations; even the massive GPU cluster in the basement—had been torn out weeks ago and sold off at auction.

Neurodyne was rapidly downsizing, overseen by a major venture capital firm that had recently taken over the company. They had bought millions of dollars worth of cheap shares after a catastrophic wildfire starting in the Palo Alto hills burned down two of the newer lab structures and did significant damage to the main building last year, scaring off some of our major investors. Neurodyne was lucky that the fire spread only as far as it did; with no private fire insurance remaining in California and the state government only offering policies for up to \$10 million, the company would surely have collapsed into bankruptcy if the entire campus had been destroyed.

As the burned rubble was cleared away over the next six months, a new horror emerged. Like many employees, I watched the new CEO's first shareholder conference in shock as he announced deep cuts to the budget, a reshuffled and enlarged administration wing, and the elimination of almost half the departments in the company. The departments that were already seeing massive profit were untouchable, such as the Universal Translator Lab—which, coincidentally, Barney was the head of—the Prosthetics Control Lab, and, of course, the Military Applications Department. The departmental eliminations were planned to occur in two phases, with the second phase to be enacted if the first one failed to reduce costs to a satisfactory level. My department—the Animal Communication Lab—was one of the first to go, along with the

Virtual and Augmented Reality Lab, the Entertainment Applications Department, and the Esoteric Hardware Lab. Although to be completely honest, nobody really knew for sure what the Esoteric Hardware Lab did anyway. Even bigger cuts including the Mental Health Treatments Lab and the Human-Computer Interaction Lab would be next if things didn't pan out by the summer of next year. Things were not going well, and honestly, things hadn't been going well for a long time, even before the fire destroyed half the campus. If anything, things hadn't been going well since Sonia died. I would have quit a long time ago, but I just couldn't bring myself to leave behind the dream we created together so soon.

I sighed. We'd had a good run. And now she was dead and I was fired from the company we'd started together. Outside, the sun was just starting to set, and I could see from the window that the first shadows cast by the western hills were starting to encroach onto the parking lot. I picked up my sad cardboard box filled with papers and Neurodyne memorabilia off of my desk and walked out the door.

* * *

I sped South down 280 with the windows rolled down. It was loud as hell and my hair was buffeted about every which way, but I liked that the hot dry air dried my tears as quickly as they came.

On a whim, I set the GPS to take me to Santa Cruz. It would take a while longer for me to get home, but I wanted to see the sunset from the beach. A beautiful summer sunset and a hot serving of panaeng curry in Los Gatos never failed to turn a terrible day back around.

I took the 85 then the 17 into the Santa Cruz mountains, ascending the winding mountain pass. I passed a road sign.

PLEASE DRIVE SAFELY

IN LOVING MEMORY OF SONIA AGARWAL

It happened late at night. Sonia was on an autonomous company car back from a conference at UC Santa Cruz when the brakes suddenly refused to engage, and the vehicle sped faster and faster downhill for the next mile unit the self-driving system lost control entirely and slammed into a tree. She was 45. Her parents, at the urging of Sonia's sister, immediately sued the manufacturer of the car, Voltaire, and successfully pressured the NHTSA to investigate the

safety of their braking system and proprietary self-driving software. After a tiring and prolonged legal battle, the lawsuit was settled out of court. The investigation also turned up nothing—Voltaire had been following all the necessary regulations and no apparent flaws in the autonomous system were discovered—and no further action was taken. The Agarwals were devastated. They had remained convinced through nearly half a decade of court hearings and NHTSA meetings that they would eventually find someone—anyone—who was behind the death of their daughter, because how could someone who was so kind and funny and had touched the lives of so many people with her wonderful invention die because her car just wouldn't brake? It crushed them to admit after nearly five years that they had to take the settlement because they didn't have enough money to continue with the lawsuit, because it felt like they didn't try hard enough to get posthumous justice for their daughter. I attended Ms. Agarwal's funeral just a few months ago, a week after she'd died of a heart attack. She had just turned 91. I heard from Sonia's sister recently that Mr. Agarwal had been admitted to hospice care. He refused to speak with anyone and would not eat most days. He lay in his bed all day watching TV and waiting to die.

* * *

"You have arrived at Santa Cruz Beach," the assistant said helpfully, snapping me out of my thoughts. I pulled up to the curb and cut the engine.

"You seem to be in a drop-off zone," the assistant said, "To initiate autonomous parking, please exit the vehicle, lock your doors, and move a safe distance away from the vehicle." I knew my car was never going to find a spot even remotely near the beach at this time of the day, but I still sent it off on its way.

I stepped lightly across the sand, feeling my shoes sinking slightly into the ground with each step. The summer sun felt like a thousand tiny needles sticking into my skin, but I had sunscreen and knew I wouldn't be here for long. I stopped right at the boundary between the dry and wet sand. The fact that children were running about around me, or that seagulls were frantically diving for french fries tossed by a beefy man sitting to my right, didn't concern me. I was focused on the waves, smiling even as the sunlight cooked my skin and reflected off the rippling water to accost my eyes. It was nice to be overpowered by awe sometimes, to feel

outshone, to feel raw power and capability radiating to here from somewhere else. I could stay here forever, I thought, if only the world could stay like this forever.

But the sun set, slowly, beautifully. Fierce oranges and reds muted and deepened into a medium purple then a royal blue. The clouds were turned a warm and saturated pink then faded away into the darkness. It was all over in twenty minutes.

As the last few splotches of color drained from the horizon, I turned to head back home. I was tired and hungry, and although my face had been baking in the sun just ten minutes prior, the wind was picking up and I started to get cold in my tee shirt and shorts. The mosquitos would also start coming in full force soon, and I desperately wanted to be on my way out of this place before that happened. I called my car back and was sitting at a picnic table near the road waiting for it to arrive when a very stereotypically dressed surfer dude with a very well-fed Border Collie trotting behind him approached me.

"Hey man, can I ask you a favor?" he said.

"Yeah, what's up?"

"You mind looking after my dog for a quick second while I go to the bathroom?" I glanced over to the public bathroom a few dozen feet away.

"Oh yeah. Sure."

"Thanks, bro. Her name is Sally, by the way." With that, he made a hasty beeline towards the bathroom. Sally moved to follow him but when her owner slammed the door shut behind him, she appeared perplexed, and perhaps a little betrayed. Sally looked back at me quizzically. She seemed to understand that this was only a temporary matter; soon enough her real owner would be back and she wouldn't have to deal with this weird little nerd just sitting by himself in the dark. Just you wait.

"Hey, Sally," I try. She sat down halfway between me and the bathroom, her eyes fixed on the door. "Uhh, so the weather, yeah? Nice weather today, right?" I joked. She didn't even bother turning around to look at me, which hurt me very deeply.

Behind me, there was a desperate squawk and the characteristic crunching of foodservice paper, and I looked back to see a seagull pulling a completely intact Subway footlong still wrapped in its packaging out of the trash bin. In a heartbeat, Sally ran at full tilt towards the gull, barking wildly, and the gull just unceremoniously lifted off the trash can and landed on the roof of the bathroom. It squinted warily down at us as Sally barked and barked at it from the ground.

"Oh, no, no," I said, "Sally, don't go after the seagull. It's no use. They're too smart and too fast. Now watch me, Sally. Watch and learn." I raised my arm and slowly extended a single finger. That's right, I flipped the bird the bird. The seagull fidgeted anxiously as it suddenly realized it was surrounded on all sides by hecklers. "What you have to do, Sally, is to attack not their physical form but their character. Their physical form is invulnerable." Pushing my glasses further up my nose, I assumed a lawyerly pose and turned to address the bird directly. "On the evening of May 19, 2047, you—or one of your relatives if that wasn't you—shat on my In-N-Out Double-Double with cheese and grilled onions in this exact location. What do you have to say for this heinous action?" Sally flashed me a compassionate, pitying look, the way someone might look at a lobotomy victim. The bathroom door opened and Surfer Dude emerged, laughing.

"Dude, if only Sally could understand what you're saying; I think she'll be all for it. I can just see you two, a scrappy pair of crusaders ready to kick some seagull ass!" He convulsed into fits of laughter and he struggled to wave goodbye to me. "Okay, bro, I gotta run now. Thanks for watching my dog."

* * *

I mulled over it on my drive back on Highway 17, as I was eating the delicious curry I promised myself, even as I pulled up to my driveway and entered the house. Surfer Dude had given me an idea. I needed to get started on this quick.

Back when the layoffs at Neurodyne were first announced, I had felt so lost. I didn't know what to do with my life. I had spent the last 11 years of my life pouring my heart and soul into the company, and now they wanted nothing to do with me. I wanted to apply to similar companies and continue my work but I'd heard rumors that Neurodyne's lawyers had gotten very good at rooting out employees who had broken their noncompete agreements and I didn't feel like getting sued. And naturally, given my unconventional qualifications from working at a niche intersection of computing and animal neurology, my applications to the few other tech and biotech companies that could use my expertise had been summarily rejected. Giving up, I applied to In-N-Out, because in this economy, getting paid \$35 plus tip to flip burgers was actually not too bad of a deal. My application, sent over two weeks ago, had been approved, and I would start there in two weeks. I'd figured that my plan from here was to work there for some time until I

heard back from some research university and then just barely scrape by for the next decade of my life while scrapping with other scientists for research grants.

But not if Surfer Dude had anything to say about it. I rummaged through the little storage unit I'd set up in the garage until I found the box labeled MINI tDCS PROTOTYPE 5 4??. I blew a thick layer of dust off the cardboard and immediately regretted it because my eyes and throat started stinging. This box, if I assumed correctly, held the last prototype Sonia and I had made before taking our invention public as the NeuroMINI. I opened the box, removed the mass of wadded tissue paper and desiccant packets inside, and pulled out the device.

I'd forgotten how ugly it looked. The frame was a small flexible black halo about five inches wide that sat on the user's head, held in place by a distastefully beige elastic strap. A battery pack hung heavily on a cable. Once activated, the Prototype 4 touched thin metal feelers to various precisely determined positions on the scalp, allowing electrical pulses to be received and sent for a fully complete neural interface. It was nothing like the NeuroMINI 3.x models that were available today, which had been simplified to the point where it was basically just a curved stick that you stuck on top of your head, and no needle-like electrodes would have to prick your head, but export of the NeuroMINI was restricted to qualified hospitals, labs, and it would be impossible for me to get my hands on one now that I was no longer part of the company.

My plan was very simple. I would train dogs. When I first started the Animal Communication Lab six years ago, my team and I used dogs to fit the newly-rebranded NeuroMINI for non-human use, but we soon learned through our tests that although the communication of basic concepts and actions were understandable, they were still a bit stupid and had no real language of their own. Once we were confident that our technology did indeed have uses outside of human brains, we moved on to the much brighter prospect of trying to communicate with dolphins and whales. At the time of my firing, our growing research team had published dozens of papers in animal linguistics and communications, and even some research on the interaction between pets and their owners, and our technology had progressed so far that we were in talks with the U.S. Coast Guard to conduct feasibility studies on dolphin-aided search and rescue operations. It wasn't lost on us that we had also caught the attention of more powerful branches of the U.S. military, and after the Palo Alto fires, we hoped desperately that the possibility of more military contracts would save our department from being cut. But, it

obviously hadn't, and here I was now. Preparing to train dogs with a device that could be doing so much more. I had to admit, though, that it beat flipping burgers for the next year of my life.

Connecting the Prototype 4 to my computer via an ancient serial connector, I confirmed that the device could still be brought back to life. Sure enough, a tiny green LED blinked on. I started some diagnostics. Electrodes T17, T18, and C1 had fallen off while in storage, and a whole bunch more had been bent out of shape, but those wouldn't be too much of a hassle to straighten out and replace. The largest problem facing this new project wouldn't be the hardware, which could always be fixed, but instead whether the decade-old firmware on this thing hadn't been fatally corrupted by a bunch of cosmic rays. I was pretty sure I had the source code lying around on a hard drive somewhere, but I didn't really feel like spending hours looking for it. In hindsight, it would have been such a great idea to put the hard drive with the code for the device in the actual box the device was going to be stored in. I would have to give the idiot who organized their garage like this a piece of my mind later.

I worked late into the night with a tiny screwdriver and some tweezers, fixing up the Prototype 4's electrodes. It turned out that some of the internal wiring had disconnected as I was replacing the missing filament, so I had to crack the plastic shell open to fix that as well. Sometime in the middle of all of this, I called one of my friends, asking if I could borrow her and her dogs' time sometime tomorrow and she agreed. At some wee hour in the morning, I snapped off my desk light and stretched. It was 2 a.m. I rubbed my aching eyes with my equally aching hands. It had been a long time since I'd been so invested in my work. I felt bone tired but happy in a way that I had forgotten I could feel. I stumbled into bed and fell immediately asleep.

* * *

Erin pulled up bright and early to my house with her two dogs, Alice and Bob. Alice was a golden retriever and Bob was a mutt. What kind of mutt? No one knew. I opened the garage door and the two, lively as ever, came bounding in to greet me.

"Hey Bob! Hey Alice!" They circled me excitedly, eager to see someone who they hadn't for a while. I gave each very good doggo a very good pet and turned to face Erin as she came to squat beside me.

"Hi Erin!" I waved at her. There was a pause. [why is she pausing?]

"I heard you got fired," she said, very quietly.

"Yeah. I did. I told you that, dumbass."

"You don't seem too broken up about that." Oh. Oops. Uhh...

"Hey Erin."

"Yeah?"

"I promise you it's not that. That was stupid of me back then. I can see now that not eating or sleeping or showering for a week to work on my project is very obviously detrimental to my health. That's not what's happening this time. I promise." She seemed unconvinced. I sighed. "Okay, maybe I'm crashing out a little bit, but I really, sincerely promise you that this won't be a repeat of what happened five years ago." Finally, I could see her relaxing bit by bit. She bent down to pet Bob.

"Dude, when I walked into your garage that day, the smell was so bad I thought you'd crawled into a corner and died. It was awful and you're disgusting no matter how much you try to deny it."

"It was *not* that bad. Also th—hey, wait a second." I grinned evilly. "Do my ears deceive me? Who do you think you are lecturing to *me* about showering, huh? Call me bigoted all you want, but before I met you, I thought the stinky CS major stereotype only applied to men." Her face fell, and I knew that I'd won. I cackled at her theatrically, but when I saw her trying not to laugh, genuine laughter spilled out of me.

"Emile. *Shut* the fuck up. Ok, whatever. But I think you're forgetting the worst part of what you did when Sonia died." That shut me up really quickly.

"Fine. I promise not to fly into a rage and scream obscenities at you and break like three monitors this time when you eventually tell me that my idea is stupid and won't work and that I'm only doing this so I can distract myself from the fact that Sonia's de—sorry, uh, from the fact that I got fired. So now, are you willing to help me? Pleaaaaase?"

"Don't do that with your face. You'll get stuck looking like a gremlin forever. And sure, I'll help you." I grinned at her. That's the Erin I knew.

"Yes, you can be my new lab assistant! I've been sorely lacking one since I got fired." She rolled her eyes. "Your first assignment: pick a dog." I watched her eenie-meenie-miney-moe to a decision.

"Bob."

"Okay, Bob. Come here." I placed the Prototype 4 on his head, tightened the elastic, and adjusted the flexible ring to fit his skull. He sat there wagging happily, the device stacked on top of his head. There were no thoughts inside that head of his, were there. Maybe we should have tried Alice first. It was too late now. I started the Data Collection Mode.

Over the next ten minutes, the Prototype probed ten million points on Bob's head, forming a highly detailed map of the goings-on in the dog's brain. After the preliminaries were done, I skipped much of the motor test routines, since that wasn't very relevant to what we wanted to do, and the vocal tests, because dogs don't have language anyway, and jumped right to the auditory and cognitive tests. All of this would only have to be completed once to form a general map of the brain that could be quickly calibrated for each unique dog. But because we were worried that their unpredictable behavior would skew the result in some way, we would run Data Collection on Alice too, and later average the weights of each result to get a better overall estimate.

"Please have the subject listen to the words in this video," the computer said, "press the 'play' button when ready, and let the subject listen in a quiet environment free from any distractions." I closed the garage door to shut out as much noise as possible. Erin looked at me.

"You really think this will work?" Erin asked.

"I hope so." I started the video.

"Ball." Bob perked up, and barked at us, clearly expecting a ball. Erin and I snickered but didn't move or speak a word. We didn't want to disrupt the test. The next word came a few seconds later.

"Hill," the computer said. There was a pause.

"Lake." There was a pause.

"Pink." There was a pause.

"Pencil." Seeing no reaction from us, and getting bored, Bob curled up on the ground.

"Cloud." There was a pause.

"Key." There was a pause.

"Blue." There was a—This was going to take a long time.

* * *

The weekend was over. Two days had passed, but Erin was still working by my side, taking some of her sick days to help me finish my project. She told me that she still felt a bit sorry for me—but not too sorry. She assured me she wouldn't have used those sick days if she wasn't working for a trillion-dollar tech company that gave basically infinite leave to employees. I told her that was funny because I also happened to be on infinite leave, but she didn't like that.

Both Bob and Alice had undergone the listening test, and the cognitive test was next. We didn't need to run through everything on the list because most of them were things that Bob would never see in his lifetime. The computer ran through a slideshow of pictures while recording Bob's brain, and to reinforce some of the more important objects, we brought out a series of objects from the house for Bob to examine. As Erin lifted each object for Bob to study, or called out an action for Bob to follow, I pressed record, and when the object lost Bob's attention or Bob stopped doing the action, I stopped the recording and manually labeled it. The computer then automatically separated these recordings into two parts—identification of the stimulus and its response—based on the major features in the data. It was equally astounding what technology could and still couldn't do these days.

The process was supremely boring, and worse, repetitive. At the end of each day, Erin and I would be exhausted, and so would the two dogs. We would get some pizza delivered or something, eat in between halting bursts of conversation, then weakly say our goodbyes and I would crash into bed. But we did all of this with the knowledge that the grueling tests would be over soon and that it would be worth it in the end.

By the end of the fourth day, our data collection was complete. Erin pulled me away from my work that evening and we joined a few of our friends at a casual restaurant for a celebratory dinner. On the drive back, I started to cry, and when Erin asked me why I was crying, I told her that it was because it was the happiest I'd been in months. When Erin dropped me off at my house, I still felt the latent buzz of happiness, but also a crushing fatigue. I quickly saved the roughly 100 terabytes of dog brain data onto a flash drive, just in case, and started the training process before collapsing into bed. As the first trickles of sleepytime drool started to soak into my pillow, the computer was beginning to train a model based on the "simple animal language" template I dug up from some of my earlier Neurodyne files, from back when I was just starting to think about starting the Animal Communications lab. This template was a fork of the bidirectional translation framework developed by the Universal Translator team a decade ago.

Human-to-dog translation worked by first translating the high-level human language typed into the program to a Species-Specific Interpretable Language (SSIL), a lingua franca made up of not words but concepts that both parties understood, before being parsed into a series of analog signals to stimulate the dog brain in specific positions to draw forth specific concepts stored within into the canine consciousness. Dog-to-human worked by listening to the same brain areas for any activity and parsing these signals into SSIL, then finally interpolating this data into natural-sounding human language. It was a complex process, but it was still relatively light work for computers to process nowadays. I would just have to wait 17 hours for the training to finish.

By the evening of the fifth day, everything was complete. The data had been fully processed overnight and through most of the day and turned into a complete model that could be used by the computer. All we had left to do was test the generated translation program with Alice and Bob.

Erin led her dogs into the garage. The air was electric. I fitted the Prototype back onto our main participant's head. Bob looked back at me with big, happy eyes. His tail wagged at a hundred miles an hour. Even he could feel the excitement in the room.

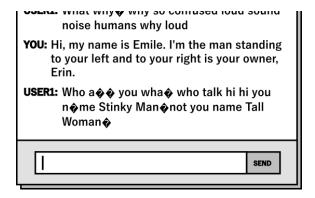
"Ready, Bob?" I said. Bob barked. Erin gave a thumbs up. Alice tilted her head at me. I started the translation program. A window popped up.



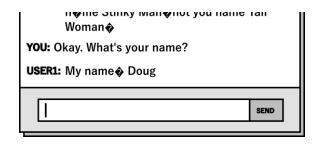
I typed. The response was immediate.



Erin and I cheered! We jumped and hugged each other, all to the bewilderment of Alice and Bob, who stood up and barked in response to our cacophony. I felt a wave of exhaustion. I wanted to cry and go to bed and sleep for a thousand years, but I had to make sure that this was real. I type again, and Bob replies once more. I worried that my sentence would be too complex for Bob to parse, but he managed it surprisingly well.



"Hah!" Erin snorted. "Look, Emile! There's your proof! It's right there! You are *Stinky Man*. Pee-yew!" She pinched her nose dramatically. I frowned at her, and then at Bob, a quiet rage simmering within me. I had to admit, however, that Bob's words were interesting. Apparently, Bob had already named each of us according to what he felt was each person's distinguishing characteristic. Intrigued, I typed again.



* * *

I've thought about three things this past week.

I became a burger flipper by weekday and a dog trainer by weekend. I'm a busy man now. My phone rings constantly from interested people. As I gain more clientele, my side hustle is starting to bring in more money than my main job. In-N-Out management kindly let me switch from full-time to part-time so I could keep this schedule. I'm keeping up the search for better jobs at local universities, but as long as I'm able to maintain the content and meaningful life I'm currently living, I think I'll be just fine.

I got a call from Barney last week. I ignored it. Now that I'm no longer a part of Neurodyne, I don't have to tolerate another nasty word that comes out of his mouth.

I think I might've also figured out why Bob called himself Doug. And why every single dog I'd trained since had invariably called themselves Doug. And also why every cat I'd tried the Prototype on called themself Kate. It wasn't that all dogs had inexplicably given themselves the human name Doug because they don't have a sense of self and can't by definition assign themselves a name. My current theory right now is that since they lack a sense of self, whenever I ask for their name, they always answer not with *who* they are, but instead *what* they are. A dog, in this case. But the translator, expecting a name to follow, gets confused when it just gets the SSIL concept of a dog instead of the special SSIL name type and does whatever it can to convert "dog" into a human name, falling back to the default phonetic translation. Thus, Doug. And Kate too.

I've made a few optimizations to the code over the last few weeks. So far I've made good progress by simplifying some of the tangled spaghetti that is our decade-old codebase, which incidentally also fixed most of the artifacts that were happening in the dog-to-human direction. I

could have easily gone into the translation code and fixed all of this confusion forever in five minutes, but I haven't yet. I don't know why. I guess I just kind of like it this way.

