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WE ARE THE NERDS

The Birth and Tumultuous Life of REDDIT, the Internet's Culture Laboratory

Christine Lagorio-Chafkin

PIATKUS

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THIS GUY HAS NO SHAME

cambridge, massachusetts

(march 2005)

Alexis Ohanian squinted into the silver early evening light, his eyes darting all over Harvard's quad. From the steps of Emerson Hall, he could see spindly trees and an expansive lawn webbed by narrow paved footpaths—but he didn't see a kiosk. What did that even mean, *kiosk*? Ohanian looked at his feet for a moment before taking a breath and locking eyes with Steve Huffman, his best friend for the past four years. Huffman immediately recognized that look. It was Ohanian's "oh shit" face.

Minutes earlier, the pair had left a lecture in a small third-floor auditorium in Harvard's Emerson Hall. To arrive at this auditorium, numbered 304, Huffman and Ohanian had traveled fourteen hours north to Boston on multiple trains; they'd made arrangements to crash for the weekend with distant friends. They had come to see a man little known to the general public. Among a particular niche of programmers, however, Paul Graham was a legend. It was perhaps the nerdiest senior-year spring break in history.

Graham had cofounded Viaweb, an online shopping engine that earned him notoriety once he sold it to Yahoo for almost $50 million. Graham wasn't just a hacker; he was a former artist

who'd gone on to write both a programming language and a renowned spam-fighting technology, and he had most recently become known as a prolific online essayist and author. His essays, with titles such as "Why Nerds Are Unpopular" and "Return of the Mac," had become required reading for programmers and aspiring entrepreneurs like Huffman and Ohanian. When Huffman had discovered online that Graham would be speaking at Harvard—and that it would occur during his spring break—he knew he had to be there.

After the speech, Huffman and Ohanian, determined to make the most out of their long journey, had risen from their seats and made their way to the front of room 304. Soon they were standing just inches from their idol. Ohanian knew Huffman was nervous, so he spoke first. He told Graham they were big fans, and then thrust Huffman's soft and worn copy of Graham's book *On Lisp: Advanced Techniques for Common Lisp* into Graham's hands, asking him to autograph it. Graham chuckled. It was the first time anyone had ever asked him to sign his manual for an obscure computer programming language. As Graham scrawled his name, Ohanian blurted that he and Huffman would love to buy Graham a drink if he'd listen to their pitch for a company they were trying to start.

"I guess since you came all the way from Virginia I can't say no," Graham said, figuring he had part of the evening to kill and that the conversation would at least be flattering. "We'll meet at the kiosk," Graham said. He turned away to shake other hands.

The kiosk? Shit. Huffman and Ohanian had been too stunned in Graham's presence to ask what he meant.

"I had no fucking idea what 'the kiosk' was," Ohanian explained later. For a moment, on the steps of Emerson Hall, Ohanian wondered if their quixotic trip north would come to nothing. He tried to calm himself, but frantically scrolled through the rudimentary web browser on his cell phone, attempting to find contact information for Paul Graham. Nothing.

This looked bleak. Senior year had begun winding down at the University of Virginia, where Ohanian had abruptly ceased study-

ing for the LSAT, having decided that being a lawyer required too much faking and bullshit. He vastly preferred smoking weed, hanging out with his friends, and dreaming up ideas for little companies or charities with potential to make a dent in the universe. Ohanian had majored in business, but he'd always had a philanthropic bent. Since high school, he had made a hobby of assisting not-for-profit organizations. Huffman, who had spent time in Silicon Valley and admired successful technology companies, had an infectious zeal for startups, and, recently, Ohanian had caught from him the startup bug. Now they together dreamed of creating a tech company of their own—and they had an idea. So here they were, at this moment in Cambridge, a day's journey from the house they shared with six other college seniors in Charlottesville, with what felt like their entire future hinging on getting advice from Paul Graham.

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Finally, twenty minutes after the appointed time, Graham appeared in Harvard Square at the tourist information kiosk, which the young men had eventually located. As Graham walked up, they were plain to spot: Huffman, with his thick shock of gold hair, resembled Schroeder from the *Peanuts* comic strip sprung to life and grown tall, and Ohanian, even taller, with warm brown eyes, still beaming as he'd been when he introduced himself earlier.

The trio walked up Brattle Street. Graham—too young to be their father, but rather paternal-looking in khaki shorts and a loose polo, a few grays sneaking into his sandy brown hair—took the lead. Minutes later, the boys were seated across from him at Café Algiers, a Cambridge classic. At the meeting's outset, Graham was tranquil. As Ohanian made small talk with him, Huffman, too socially awkward to know he should order a drink, just slurped down water. But the pair weren't just there to chat. They were there to pitch.

The idea was one Huffman had schemed up, and for which Huffman alone would write the original code. But tonight, he mostly

kept his mouth shut. From the moment he had told Ohanian back in the auditorium that they should go up and talk to Graham, he meant—and Ohanian understood—*we* go up and *you* talk to Graham.

As hummus appeared at the table, Ohanian got down to business.

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Steve Huffman had been both perplexed and thrilled the first time he encountered the name Alexis Ohanian.

It was freshman move-in day at University of Virginia in the fall of 2001. Huffman had just unpacked a couple suitcases into a cramped room on the first floor of a dormitory called Hancock House in the old part of campus. While hauling a load of stuff from his mom's car, he passed doors bearing the names of new occupants. There was ThaiHuu The Nguyen on the first door. Whoa. Huffman couldn't wait to meet *that* guy. Farther down the hall, there was a room with the name Alexis Ohanian. Huffman's mother, who was helping him move in, turned to her son and asked, "Oh, is this a coed floor?" Huffman shrugged. Silently, he thought, *God, that would be fantastic.*

Later that day, a group of freshman girls meandered downstairs from the upper two floors of Hancock—which were in fact occupied by women—to meet the guys who'd moved into the lower two. The ladies popped into Huffman's room, where a few young men were already getting to know each other. "There were girls in my room," Huffman remembers. "And we were talking." This. Was. Epic.

Just then, Huffman heard a rap on his open door, and caught a whiff of melted butter and chocolate. In walked a super-tall guy with a flannel shirt draped over his slouched shoulders. A paper plate was balanced on one of his hands. "Hello, ladies!" he said. "I have this plate of warm cookies."

His name was Alexis, and he most definitely did not possess two X chromosomes. His look seemed modeled after that of Jason

Newsted, the bassist in Metallica: There was the plaid flannel, an oversized, tattered T-shirt, and on his head a stringy, grunge-inspired mop of hair. For some of the year his hair would be dyed green; at times Ohanian also maintained a smattering of lower-chin and upper-neck fuzz, which Huffman would soon refer to as "chin pubes."

As Ohanian handed out his cookies to the young women, Huffman thought, "This guy has no shame."

It wasn't long before Huffman grew to appreciate Ohanian's uninhibited streak. "That's the fun thing about hanging out with Alexis: He will say anything to anybody, either on a dare, or he'll think of it himself first," Huffman said.

As conceited as Ohanian seemed to Huffman that first day, making college friends was something that had put him on edge for months. He worried that he'd be a loner—particularly, that no one would be there to do what he loved: playing video games. Looking back, Ohanian can barely surface a memory of the girls, or the cookies—but what struck him that first week in the dorm was seeing Huffman playing *Gran Turismo*. He thought, "There is hope! There is a gamer in the building."

They became fast friends. Huffman explained, "I was always kind of an asshole, and he always had super-high self-confidence, so we just kind of got along well. I could kind of make fun of him, or we could kind of make fun of other people." Although they communicated differently, Huffman and Ohanian soon realized that they saw the world through similar lenses. Their mutual addiction to video games didn't hurt.

Initially, their joint fixation was *Gran Turismo*, a PlayStation 2 game heralded for its realistic, quick-rendering graphics and accurate—for the era—simulations of the physics involved in auto racing. But *Gran Turismo* was just a gateway fix to a more obscure game called *Wolfenstein: Enemy Territory*. The team-based shooter was still in beta when the guys in Hancock took it up as a collective hobby. For optimal play, the game required many players, each on a computer, to form a team of soldiers in a D-Day-like sea-land

battlefield. One team starts in the water and rushes the beach. The other team defending the land is essentially the Nazis. "We used to play that scenario over and over again, just hundreds of times. So we all got very, very good at it," Huffman said.

When the young men of Hancock House took on neighboring old-campus dorm residents in a *Wolfenstein* competition, it was barely a contest: The first floor of Hancock crushed every other team definitively. "It was so epic and funny, we were just screaming and laughing," said Nguyen, who went by Huu, and who bonded with Huffman and Ohanian over video games and blasting heavy metal.

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Steven Ladd Huffman, born in 1983 in Lansing, Michigan, was always a bright kid, serious and observant. His grandmother called him an old soul. His mother, Jeanette Irby, suspects he was born wired to engineer: His first object of affection as a baby was a vacuum cleaner, which he would investigate and hug. Through his childhood he retained that wrinkled-brow look of skepticism that usually vanishes once a baby reaches toddlerdom.

In school, he was quiet, but excelled easily—that was, when he could focus. Huffman's parents had divorced when he was five, and his mom moved him and his sister to Warrenton, Virginia, a quiet and affluent outer suburb of Washington, D.C. Both his mother and father remarried within a few years and each had two more sons. The resulting family logistics necessitated that Huffman—whose family calls him Steven—and his one-year-younger sister, Amanda, were left largely to their own devices. They were a unit, two bright-blond, saucer-eyed, pale kids, occasionally dressed in matching outfits, often mistaken for twins. Amanda and Steven shuttled between families and states for holidays and long summers in Michigan or Buffalo, New York.

By middle school Huffman was still scrawny, and more outgoing kids pushed him around. His mom stepped in and ushered in a new

era of his life that he recalls as a formative change. She transferred the siblings to Wakefield School, a tiny private college-prep school in nearby The Plains, Virginia. Just twenty-six classmates graduated with Huffman, and most were with him from seventh grade through graduation. At Wakefield, the Huffman siblings excelled. They each won Athlete of the Year (he was MVP of cross-country and volleyball; she of soccer), and together they edited the school's literary magazine. They were student body president and vice president. Outside of school, they together took up ballroom dancing.

The one aspect of Huffman's Wakefield years that didn't seem ripped from a Wes Anderson film was his deep love for computers. He'd been dabbling in programming since he was eight years old. His dad encouraged early web browsing by giving young Huffman access to AOL—before the "Eternal September" of 1993 when AOL opened up Usenet access and connected millions of new users to the Internet proper. Summers with his dad were time for offline engineering, too: He would roam the cul-de-sacs with buddies, find discarded appliances such as a lawn mower or a washing machine, and tinker with and repair them.

Back home in Virginia, Steven's stepdad, Jeff Irby, was also into technology and happily supplied Steven and Amanda with Nintendo and assorted gadgetry. Thanks to Steven's tinkering, his mom, an attorney, would sometimes arrive home in the evening to find that he had fried something electronic; sometimes it would be a singed telephone jack, or on one occasion, all three garage-door remotes. In 1994, in an attempt to give him an outlet for his technical explorations, his mom and stepdad gave their then eleven-year-old boy exactly what he wanted for Christmas: a computer. Steven wept tears of joy.

At one point when Steven was in middle school, his stepdad, Irby, took him along on a trip to Silicon Valley, where Irby worked for a startup called CyberCash. It was a short-lived banking startup, with all the early hurdles PayPal faced, but without the funding to clear them. Some of the dynamic in terms of the ongoing dot-com boom was lost on Huffman (he was still an early teenager), but

he was smitten by the allure of a super-fast Internet connection. Back in Virginia, he had a snail-paced 2,400-bit-per-second modem. Some of his friends had better 56Ks. CyberCash had a T1 line, approximately 1.5 megabytes per second: epic. Huffman went on a video-game-downloading and -playing tear. He was sold on the awesomeness of the Bay Area.

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Alexis Kerry Ohanian was born in 1983 in Brooklyn, the only child of doting parents who built their life around his. When he was a toddler, they bought a home in Ridgewood, Queens, not far from Williamsburg, Brooklyn. Within years they deemed it unsafe, and uprooted to lush and affluent Columbia, Maryland, with its lawns and playgrounds and well-rated public schools. Alexis attended high school nearby, in one of America's quintessential large-scale planned communities, Ellicott City. His mom, Anke, a German immigrant, worked as a pharmacy technician during night shifts so she could be home for as many of Alexis's waking hours as possible. His father, Chris, ran a small travel agency that he'd built from scratch while his son was in school. He made a comfortable middle-class living, modest by the standards of one of the nation's most affluent zip codes.

Ohanian was a confident kid, always outgoing and usually pleasant-natured, though a bit of a rascal. When his German-speaking grandmother visited while he was in preschool, he noticed that she eagerly checked the mail. He took to telling her, "Kein Post für du!" (No mail for you!) In grade school he dreamed of playing professional football, but in his spare time he could mostly be found playing Dungeons and Dragons. When asked where he'd like to be in twenty years, the chubby-cheeked kid with chestnut brown bangs and a bowl cut wrote in his grade-school yearbook, "I will probably have rocket-high sales of my comic book, and live the rest of my life in luxury." But his mother's huge heart had already infected his own: "40% of the money I will earn will be used

to fight cancer and other deadly sicknesses," he added. (Perhaps his father's business sense had influenced him, too: 40 percent. He wasn't looking to give up the whole farm in fifth grade.)

Ohanian was social, outgoing, and remarkably loyal. His earliest friends, a group of about six guys, all of whom he met before second grade, were by high school still his best buddies. One, Jon Swyers, was hospitalized at age twelve, and recalls that Ohanian came to visit every single day. By high school the guys were still close, and they coached Ohanian through losing a bunch of weight (on top of stubborn baby fat, he'd put on some pounds after a leg injury had resulted in a lot of sitting around playing *GoldenEye 007* and eating Andy Capp's Hot Fries). He was tall already, and after the injury he was a hulking 260 pounds. Rejected by girls, he dealt with the social stigma by making jokes at his own expense. With his friends' encouragement, he ditched the junk food, began working out, and dropped 59 pounds. He also emerged more confident, more willing to stand out.

During high school, to earn spending money, Ohanian cobbled together odd jobs. He took pies and pitchers of soda to tables at Pizza Hut; he worked the counter at a deli for a summer. He answered a newspaper ad placed by a startup called Sidea, and spent a summer hawking software at CompUSA. One of the pieces of software was a children's game based on Ludwig Bemelmans's *Madeline* books. He demonstrated it every thirty minutes, on loop, regardless of whether anyone was watching, his unsteady teenage voice booming through the cavernous big-box store. It was the ultimate, ridiculously mortifying crash course in public speaking. But he was getting paid. "So," he said, "it was wonderful."

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If Ohanian's early engagement with computers didn't glorify startup life, Huffman's sure did. Coding was Huffman's primary hobby, and he loved reading accounts of startups, such as Jeff Bezos's founding of Amazon. He thought eTrade was super cool. He

watched the skyrocketing share price of eBay, which had gone public in September 1998, during his freshman year of high school. Why wasn't *he* one of these kids getting rich in Silicon Valley? Huffman felt cloistered by the rigidity and routine of school. He dreamed of moving out to San Francisco—or at very least enrolling in his dream college, MIT. (He ended up applying to UVA after his mom and stepdad explained they'd only pay tuition if he went to a state school.)

During summers starting at the end of high school, Huffman got his first taste of startup life—one in no way connected to the fast times in the Valley. This first job was with a little government-contracting company called Image Matters. A local entrepreneur, John Davidson, whose son also attended Wakefield, led Huffman up to his attic, pointed to a corner, and said, "See if you can get this thing working."

It was a hulking computer, a forty-pound tower the size of an end table. Huffman lit up. He would know that body anywhere: a Sun Ultra 10. While his classmates used hot rods or nature scenes as their own screen's background image, Huffman's 386 PC featured a photograph of a Sun Ultra 10. He had never seen one in person. He giddily hauled it home and got it running. Davidson gave him the job.

Huffman arrived at Image Matters to find five guys working on government security and emergency response technology. He later admitted he didn't fully understand the scope of the work at the time, but one project helped layer locations of disaster responders over a map. Another was sort of a web-based assistant like Siri. What Huffman largely worked on was translating data for the "semantic web," a layer of coding that helps computers understand and catalog a website's contents. Image Matters didn't behave how Huffman expected startups should. "It wasn't very glamorous. All its money was from government contracts, so their projects were kind of boring," he said. "No users, no scaling problems—none of that stuff."

In Silicon Valley, he suspected, there were cool, audacious up-

starts that touched millions of individuals and could effect at least some measure of change in the world. He figured none of the legit hackers in California had to work in residential bathrooms. (Davidson, upon hiring Huffman, had run out of space in the main room of Image Matters HQ—a former colonial home in Leesburg, Virginia—so Huffman was relegated to a restroom, replete with shower stall. It was wide enough to fit a chair, though, so Huffman placed the monitor for the Sun Ultra 10 on the sink.)

During his college summers working for Image Matters, Huffman's programming skills metastasized. Ohanian witnessed his buddy becoming a whiz programmer—and realized he wasn't quite as technical. Ohanian decided to major in history and business (or "Commerce," in UVA speak), while Huffman stuck to computer science. Their approaches to coursework also differed. Ohanian spent evenings reading and rereading his textbooks and course notes at university libraries, while Huffman would put off studying all week, then crank through a project the night before turning it in. He usually did well enough to validate that strategy.

Some of the hours spent not studying, Huffman filled with pranking Ohanian. Once, he hacked Ohanian's political website, eyeswide.org, which Huffman thought took itself way too seriously. He wrote a program that made all outgoing emails from the EyesWide domain appear to originate from a website that sold prom dresses. Other pranks were less ephemeral. Once, Huffman sprayed self-hardening foam insulation into Ohanian's trusty L.L. Bean laptop bag. Ohanian was tipped off before the foam solidified—he jammed his right hand into the bag to retrieve his laptop before it became part of a permanent foam brick. The laptop survived. Ohanian's right hand retained small chunks of foam for a week.

HOW TO START A STARTUP

In their junior year at UVA, Huffman and Ohanian moved into an apartment together, a tidy and compact two-bedroom just off campus in a set of buildings called the Preston Square Apartments. Ohanian shared a room with a good friend and fellow student named Jack Thorman, a lifelong resident of Charlottesville. Huffman took the other bedroom.

At Preston Square, Huffman began a subtle mission to inculcate Ohanian with his passion for startups. While they lounged in the two La-Z-Boy recliners Huffman had nabbed from his mom's house, he told Ohanian stories of Intel and Apple and Viaweb. Ohanian had always wanted to study law and assumed he'd use his education for good—maybe be a human rights attorney or work in nonprofits—but slowly Huffman convinced him that creating something cool in the world, even a business, could effect more change. A few months later, Huffman gave Ohanian a copy of *Masters of Doom*.

The 2003 book by David Kushner tells the story of the founding of Id, a scrappy startup that pioneered massive technological innovations in video gaming and went on to create the gaming

phenomena *Quake* and *Doom*. The book was an admiring portrait of the company's founders: obsessive and antisocial John Carmack and charismatic "idea guy" John Romero. Ohanian adored it—and he could see something of Huffman and himself in the duo. *Masters of Doom* helped breathe life into what Huffman had laid out.

One gray afternoon, Huffman sank into one of the recliners and launched into a rant. A local gas station he liked, Sheetz, had a touchscreen where customers could order their sandwiches. It was high-tech for the time, and, in theory, pretty efficient. But it was inside near the cashier. Huffman would find himself outside pumping gas, thinking about going inside to order—only to have to wait again for his sandwich. Why not use similar technology to order ahead? Ohanian, fresh off reading *Masters of Doom*, and currently perched on the opposite recliner, sprang into idea mode: "That's brilliant!" he thought, saying, "We could totally make a business out of that."

Lots of their friends had cell phones; it would have to be a cellular-phone-based system. Text messaging, which was catching on with some of their friends, was a possibility. Could people just text their order to restaurants ahead of time? What would that look like? Today, that question is quaint. But mainstream smartphones didn't exist in 2004, nor did today's app ecosystem. Huffman and Ohanian didn't really know how it would work, but they did know what they'd call it if it could: MyMobileMenu. It seemed impossibly clever: MMM, like the soft murmur of satisfaction.

Ohanian followed the playbook he'd learned in his business courses: market research and due diligence. He opened an account at Bank of America and filed papers for Redbrick Solutions, LLC, a name inspired by Charlottesville's architecture that he figured sounded more official than "MMM." Ohanian's "market research," however, mostly involved hoofing around Charlottesville, strutting into local shops and talking to business owners. He'd give them the pitch and shake hands that they'd try it out, someday. Not much came of it.

The following autumn, Huffman, Ohanian, Thorman, and

Nguyen, along with three other guys, moved into a big house at 107A Kent Terrace, which they affectionately dubbed "the Shit Box." It was a dingy, drafty mess of a student house, with what they suspected were layers of old carpeting under the current carpeting. Whatever was going on below their feet, it gave walking around a shiver-inducing, springy sensation. When someone stomped or moved too fast, dust and ants, which seemed to have taken permanent residence, kicked up. Sometimes a few pellets of rabbit poop flew, too—Nguyen, who was now majoring in aerospace engineering, had inherited a bunny named Kichu from a friend, and she often roamed free.

The worst thing about the Shit Box was the basement. Not only was it the epicenter of the ant infestation, but it also occasionally flooded. There was a grimy little bathroom separated from the main room by only a piece of plywood hanging askew. No one wanted to sleep in the basement. Ohanian gamely took it; he knew if his roommates were frightened to venture downstairs, they certainly wouldn't care if he never bothered to clean. Plus, it wasn't like he had a girlfriend to impress.

He did think a lot about one of his classmates, a woman named Amber.* She had diverse, fascinating interests that always seemed to lead her off in new directions. But their relationship was on-again, off-again, and he wasn't holding his breath; she planned to study abroad in Germany soon.

Huffman took a more secluded bedroom, so he could have some privacy with his girlfriend, Katie Babiarz. While Ohanian crammed in all the credits he could his senior year, Huffman's schedule was sparse, which left him plenty of spare time to nurture his hobby of competing in ballroom dancing competitions with his sister, Amanda. (He'd continued lessons in college in part to meet girls, but when it came time to compete, the only partner he considered good enough was Amanda.) He also studied Lisp, the programming language about which Graham wrote the coding manual. At nights, alone in his room, Huffman coded a Lisp calendar application for his senior thesis.

Ohanian, plotting his future, wasn't giving much thought to Redbrick Solutions, a.k.a. MMM, either. He was writing an eighty-page thesis about the firebombing of Dresden, preparing for law school, and cramming in seven courses for twenty-one final college credits. When he and Jack Thorman weren't studying, they were smoking weed. One Saturday morning, the two of them woke up at dawn and plodded to a Kaplan LSAT prep class. It was result-based—more about methods for test taking than actual content learning, which frustrated Ohanian. He and Thorman sat down, were simply presented with a practice test, and told they'd get the results in two weeks. This was what he was paying for, more test taking? Frustrated, Ohanian fidgeted, flipping over the Scantron. There, he saw all the correct answers—those promised in weeks—printed right there on the opposite side of his sheet. They walked out and headed to get breakfast.

Over eggs and hash browns, Ohanian and Thorman talked real talk. They looked past the horizon of their senior year and saw the three looming years of law school. They envisioned daunting piles of debt and career uncertainty. If he'd rather be eating hash browns than taking a test he'd already paid for, Ohanian knew it wasn't worth it. He was not going to be a lawyer. Later, in retelling the story, he would come to call this the "Waffle House Epiphany."

Ohanian had already accepted a summer internship at Ogilvy & Mather, a slick public relations firm in New York, when one of his favorite professors, Mark White, offered him the chance to go to Singapore that summer for a tech-entrepreneurship summit. The words "tech-entrepreneurship" sounded a little like jargon to Ohanian. But he was itching to travel more—White had taken him along on a trip to South Africa the prior year, and he had already studied abroad in London for part of sophomore year. Money was a consideration: The internship was unpaid. The Singapore trip was all expenses paid. Ohanian ditched Ogilvy. Within a couple months, he was on a transatlantic flight with White.

The first evening in Singapore, July 11, 2004, Ohanian felt like a beloved son—and, for one of the first times, a little grown up. He

was nestled in that warm and exhilarating feeling of having gone out on a limb—and, for once, wasn't checking his balance for fear of falling. Aside from his own father, White was the man whose judgment Ohanian most trusted. His courses had been the highlight of Ohanian's college education, and his approval had become very important to Ohanian. On this night, White was more like a friend: They decided to go out together and explore Singapore. A couple of drinks into the evening, Ohanian ignited in his belly the courage to explain to White his distinctly nonacademic side project: the mobile food-ordering app. Maybe the Singapore Slings helped. He gave the full spiel, from gas-station inspiration to "MMM."

White loved it. He told Ohanian, "I think you have a chance."

The next morning, in Charlottesville, Huffman woke up to an urgent email from Ohanian:

> hey bro, i'm in Singapore at this technepreneurial seminar, and am basically spending a week learning how to create a tech startup. i spoke to Mark White (a professor in the comm school, the guy who took me to South Africa, and who recruited me to come here, as well as a generally good guy and technophile) over some drinks last nite, and pitched him on our idea . . . but basically said it was one of the best he's heard, perios [*sic*]. Not only that, but he wants to be on the board of directors, and already knows some people to hit up for starting capital . . . I've got plenty of more details, but I am seriously considering putting off law school for this, but i need you, and we'll both need to be doing this full time for about a year to get it off the ground . . . this is the kind of thing that could change our lives . . .

Ohanian remembers writing that email with a giddy excitement. "I just had to get the message across to Steve that I was so amped up and we just had to do it," he said.

Huffman read the email with an eye roll. He needed no sales pitch. He knew Ohanian had cooled on law school. "I'd already by that point made up my mind to do this thing," he said years later.

The pair had even, Huffman later recalled, plotted out how to work on MMM after graduation while paying for rent and ramen and server costs: Huffman would continue working at Image Matters. Maybe Ohanian would get a job, too, but they'd planned on working together, hustling on nights and weekends, whatever it took.

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Katie Babiarz, a pretty brunette UVA pre-med student, was sprawled across her bed, half-reading a magazine. It was a blustery winter evening in typically mild Charlottesville, and there wasn't much to do, even if she could tear her boyfriend away from his computer. She'd met Huffman earlier in the year, after he'd spotted her at a party and announced to Ohanian, "I fancy that girl," before approaching her to introduce himself. Now they'd been dating some months, and here he was in her living room, coding a web calendar application for his senior thesis.

Babiarz heard Huffman holler, "Hey, this guy I'm a really big fan of is giving a talk soon." He explained that he'd been reading the website of Paul Graham, one of his programming idols who frequently posted essays online. That day Graham had posted that he'd be delivering a speech soon.

"You should totally go!" Babiarz said.

"Well. It's in Cambridge. At Harvard."

"You should totally go!"

"Well. It's over our spring break."

"Go! What else are you going to do?"

Huffman emailed Ohanian. Two minutes elapsed.

Huffman was still staring at his screen when the reply arrived from Ohanian: "Absolutely, bro!"

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As Graham, whose hair has a boyish wave and whose shoulders slouch slightly, spoke, he didn't look up much. He didn't gesture.

He didn't boast or tell the sort of seemingly impromptu but actually extremely rehearsed stories the way folks who make a living appearing at college auditoriums like this do. He didn't take questions. He just read, at a lively pace, from sheets of lined yellow paper, into a microphone:

> You need three things to create a successful startup: to start with good people, to make something customers actually want, and to spend as little money as possible. Most startups that fail do it because they fail at one of these. A startup that does all three will probably succeed.

Huffman was in awe. His idol was talking—about the lives of Lisp programmers, about how college buddies should start companies. It was as if Graham's speech was designed with him in mind; everything fit, and each bit of Graham's reasoning seemed sound.

Parts of the speech resonated with Ohanian, too. He latched on to Graham's extraordinarily simple description of how to create a valuable tech startup: Do something better than it's already done, at a lower cost. As Graham read on, describing himself back when he was a young Lisp hacker, Ohanian glanced over at Huffman—it was as if he was describing his best friend. There were glimmers of the inevitability of what they were trying to start back home, from the Shit Box. What Ohanian really loved was the frank, straightforward, indelicate way Graham articulated the basis of a viable business: "I can think of several heuristics for generating ideas for startups, but most reduce to this: Look at something people are trying to do, and figure out how to do it in a way that doesn't suck." Graham described online dating sites as ripe for disruption, because they "suck." He characterized Google's goal at the company's genesis as to "create a search site that didn't suck." The simplicity made Ohanian smile.

In the auditorium, seated not far from Huffman and Ohanian, was a blue-eyed, sandy-haired Harvard physics grad student named Chris Slowe. He'd worked all day in the lab of Danish physicist Lene Hau,

which was working on cooling particles down to a micro-kelvin—very close to absolute zero—to conduct experiments on them. (This Harvard lab had already performed an incredible feat: slowing and then stopping a beam of light in these temperatures, a first, for which many suspected Hau would win a Nobel Prize.)

Slowe hadn't heard of Graham until his buddy from the lab, Zak Stone, a Harvard physics undergrad four years Slowe's junior, urged him to attend the talk. Stone, who possessed a contagious enthusiasm for big ideas, had already convinced Slowe to join a loose cohort of mostly undergrads who met weekly in a campus cafeteria to discuss digital information systems management. Back in 2004, if you'd saved a PowerPoint, article, or Word document you'd downloaded, but you didn't recall where, or what specifically you'd named it, finding it again could be a major pain. Something akin to desktop search—which did not yet exist in any mainstream capacity—they realized, would fix that. They named the code base "Kenny," which was a play on *ken*, the range of knowledge, and would also allow them, should they foul up the code at any point, to shout the nerd-zeitgeist zinger from *South Park*: "Oh my God, I killed Kenny!"

Within months, the after-hours brainstorming and diagramming became a welcome creative outlet for Slowe after his long days at the fluid dynamics lab. Even as Slowe began writing a structure for a program, Stone and his ragtag group of physics researchers didn't consider their project a startup—it was simply, in their physics-major vernacular, an extracurricular "research project." But that afternoon in Emerson Hall, Graham's speech allowed Slowe to think about it differently. Graham said, "For a lot of people the conflict is between startups and graduate school. Grad students are just the age, and just the sort of people, to start software startups." Graham explained that starting a company while studying was not insane; it was ideal, for if the company actually took off, it might just provide you a life path that reduced your burning desire to be an assistant professor.

"Huh," Slowe thought, for the first time in years seeing an option for his future that didn't necessitate a life of near-complete social isolation collecting unending data sets. Nor did this alternate

future necessitate securing a tenure-track job, publishing research, and running a lab full of machines that needed constant upkeep. He found himself smiling at the possibility.

A few rows away, Huffman and Ohanian soaked it all in, occasionally whispering to each other notes of approval.

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That same evening, on the other edge of the continent, a pale eighteen-year-old named Aaron Swartz sat in front of a computer in his dorm room at Stanford University. Harvard was on his mind, too. Swartz was pondering crafting an essay about Harvard president Larry Summers's recent comments about women's representation in tenured university positions in science and engineering. He'd been researching the history of fraud in scientific research, shunning both the California sunshine and his fellow students—whom he'd deemed just weeks into college as insufficiently academically serious. Instead, he locked his door and worked on his writing. When he wasn't blogging, he was sharpening his Python coding skills. He, too, followed Paul Graham's blog—and recently they'd been emailing. Within days, once it got posted online, Swartz would encounter Graham's speech, "How to Start a Startup." And soon he would make his own pilgrimage out to Cambridge to see Graham.

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In the Harvard auditorium, Graham glanced up from his sheaf of yellow papers to see his audience full of youthful faces, and delivered the final lines of his speech:

> If you want to do it, *do it*. Starting a startup is not the great mystery it seems from outside. It's not something you have to know about "business" to do. Build something users love, and spend less than you make.
>
> How hard is that?

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At Café Algiers that evening, Ohanian dipped a pita triangle in the hummus and set it down on his small white plate. He took a breath, and began his pitch. He explained to Graham the startup idea he'd been tossing around with Huffman, from its genesis at Sheetz to its incorporation as Redbrick Solutions, to its startup-y name, MMM.

Huffman sat silently, and noticed a portrait of a young man about their age, but from a past era, staring down at them. He fixated on the painting hanging behind their table while Ohanian spoke.

Some minutes elapsed, probably five, but to Ohanian it felt like an hour, him prattling away, hoping he was doing his buddy's idea justice. Graham suddenly became enthused. Perhaps he was beginning to feel the pulse of a good idea, a technically smart solution behind the silly name and hyperlocal concept. There was a pain point: waiting in lines. There was a massive audience: everyone who ate out, or, hell, anyone who shopped. There might just be a software-based solution. And these kids could be—and this would be awesome—the first to bring that solution to market.

Graham grabbed the reins of the conversation, transforming into an enthusiastic peer, explaining to the undergrads recent innovations in mobile communications and the history of developments in individual messaging. He explained that Charlottesville might be a fine place to start, but it should never stall their vision to end lines everywhere, all over the United States. "This will be the end of lines," Huffman later recalled Graham said. "No one will ever have to wait in line again!"

Ever since Graham had sold Viaweb to Yahoo—his code would over the years become the technological backbone of Yahoo Shopping—he'd been dabbling in early-stage startup investing. These kids were starting to look like they might fit the bill. They were young and enthusiastic classmates, with wildly different personalities, like Larry Page and Sergey Brin. They were a hacker and a computer-competent salesman, like Steve Wozniak and Steve

Jobs. They were tight friends, like Bill Gates and Paul Allen. They were awkward, and smart. Enthusiastic—and almost too young for him to relate to. Maybe they were perfect.

Huffman piped up suddenly, interrupting Graham's monologue about disrupting the act of line-waiting. "No no no! We just want to solve this problem that's huge in, like, fast-food restaurants."

Still, by the time the three got up to leave, Huffman was feeling inspired, looped into the hyperaware state that seems to tag along with incredible opportunity or vast change. Happy and starstruck from speaking with Graham for the past hour, he said goodbye to the host of the restaurant. Returning the pleasantry was an old man Huffman recognized. He was the man from the painting Huffman had been staring at, a few decades aged.

Huffman leaned over and whispered his observation to Graham. Graham had eaten at Algiers dozens of times but had never noticed the painting, likely of the owner as a young man. Who was this kid?

Graham opened the door and they stepped one by one down onto Brattle Street.

"Startups are hard," Graham said. "But I think you guys have a shot."

NOT YOUR STANDARD FIXED-POINT COMBINATOR

Paul Graham was satisfied with the praise he'd received for his Harvard speech and essay of the same name. But one thing he'd said the evening he first met Steve Huffman and Alexis Ohanian was still gnawing at him days later. An attendee had shaken his hand and asked for advice on searching for startup funding. Graham had told him to seek out wealthy people, particularly those experienced in technology. The young man stared at Graham, who fit that bill precisely. Graham realized it, and blurted out, "Just don't come to me!"

Graham knew that his recoil was selfish, but he really didn't want a hundred computer science students bugging him with pitches. The lingering guilt allowed him to reconsider. He'd been wanting to invest more—why shouldn't he put his money where his mouth was?

Around this time, he and his girlfriend, Jessica Livingston, would take long walks from dinner in Harvard Square to his home, talking for hours through evenings as they schemed up grand plans for their lives. Livingston, a thirty-four-year-old with a radiantly blonde bob and easy smile, was a marketing executive at the Boston investment bank Adams, Harkness & Hill. She had recently embarked on a new

project, a book of interviews with company founders, so she was mulling leaving the bank. Together, Livingston and Graham conceived of an experiment, just for the summer, that would give Livingston a new part-time job and allow Graham to dabble in angel investing.

Graham had more than a few conceptual hang-ups about investing. He firmly believed that Silicon Valley's massive and entrenched venture capital firms were to blame for the age of irrational exuberance that had led to hundreds of frivolous websites and tech companies being overfunded, and then bursting into thin air around the turn of the century, in what became known as the dot-com bubble. He saw venture firms as greedy, due to their tendency to bloat well-tracking upstarts with money, eventually overburdening and crippling them with outsized profit requirements. If Graham was truly going to enter this world officially, he wanted not just to tread lightly, but rather to create an entirely different funding system for upstarts.

The premise he had already laid out in his speech was simple: Young people with few life burdens, few resources, and lots of gall were the ideal candidates to embark on a startup. Heck, Michael Dell and Bill Gates were each just nineteen when they'd set out to create their now-iconic corporations. Graham himself had started Viaweb on $10,000, and he had every expectation that his experience could be replicated with even less funding now, a decade later, with faster, cheaper technology available. In order to find and fund these sorts of individuals without betraying his principles, he would disavow the very language Silicon Valley had adopted around nurturing small companies. His project would be an incubator of sorts, never to be called a "tech incubator," and be funded by money from a group of individuals, never to be called a venture fund. This thing, which he and Livingston dubbed first the "Cambridge Seed" and then the "Summer Founders Program," would only be classified by Graham as an "experiment."

Graham and Livingston hashed out details of the "experiment" in a week. They would try to find a dozen or so of the brightest

young hackers, and give them money for pizza and housing for three months. There was no need to choose a precise number of startup teams; they'd accept however many both applied and that they deemed "sufficiently good," starting that very June. By the time they arrived back at his Cambridge home on the evening of March 11, they were both giddy. Graham snapped a photo of Livingston, who was just beaming, to immortalize the moment.

The investment vehicle that would fund the Summer Founders Program soon earned another name: Y Combinator. The name came from an obscure concept in lambda calculus (which uses fixed-point combinators) that allows mathematical equation-writing to achieve something called Curry's paradox. Put into plain English, a Y combinator might help form a sentence such as, "If this sentence is true, mayonnaise is made from peat moss." The same way that sentence defeats itself, a Y combinator can show that lambda calculus is an unsound system, by finding inconsistency in mathematical logic. The concept is referenced in certain computer programming styles, and had become something of a hacker inside joke. Learning what the heck a "Y combinator" is would be a little Easter egg to every applicant who Googled it—so much so that for a while YC's blog included a tagline only a nerd could adore: "Y Combinator: Not your standard fixed-point combinator."

Y Combinator would be not your standard startup incubator. It would start tiny, intended to help a handful of little companies get their legal framework set up, get a product established, and then introduce the founders to bigger, real investors. It would focus on very, very early-stage companies, typically ignored by Sand Hill Road's investment firms, giving them just $6,000 per founder for the summer—enough for rent and pizza, not enough to bloat them or bog them down. It would be a friend and an inspiration, allowing the founders autonomy all week, not chaining them to desks. The founders would gather each Tuesday for a supportive social dinnertime meet-up session. Livingston remembers adoring the little plan, but thinking it so odd that she pondered, "How do we even tell people about this?" Graham had a solution: He stayed

up all night building a bare-bones website describing the mission and including a thirty-five-question application. The next day, he linked to it from his popular blog.

Applications—good, legitimate startup ideas—began arriving that week. Dozens arrived each day; 227 had come in by day ten. Clearly the idea had struck many, many nerves. Graham told Livingston, "You better quit your job."

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Back in Charlottesville, Ohanian paced behind Huffman, who was, as usual, hunched over his computer. After much coaxing by Ohanian, Huffman hit send on an email to Graham, thanking him for the meeting. What he received in return was an appeal to apply to be part of Graham's little summer experiment. They were elated—they'd already spotted mention of it on Graham's website, and now assumed they had an inside track. Still, Huffman and Ohanian agreed they'd have a better chance of getting in if they included another technical founder. Huffman's buddy Andy Barros, one of the smartest guys in Huffman's computer science program, fit the bill. Over a burrito, Ohanian and Huffman convinced Barros to help complete the application. Ohanian emailed around questions and compiled the group's answers.

Most of their answers were standard, if indecisive: To the question "What OS(s) and language(s) will you use?" they wrote, "Steve likes Lisp; Andy likes perl," to "How will you make money?" they wrote that they would charge a commission on every restaurant order placed through the system. One question is illuminating, both for its answer's content and its earnestness:

If you could trade a 100% chance of $1 million for a 10% chance of a larger amount, how large would it have to be? Answer for each founder. (There is no right answer.)

Steve: A million dollars is a lot of money. Considering the paltry amount we need to actually build the system (we need to eat), a million dollars would go a long way. Since we would have only a 10% [chance] of the larger amount, I would expect $1 million to be 10% of the large value (i.e. $10 million).

Andy: The statistician in me wants to say that the expected value of the second item would need to be more than $1 million (so $10 million).

Alexis: See above. I tend to be more risk-adverse [*sic*] (ironic, given how gung-ho I am about this startup despite the pitiful odds of its success), so it would have to be a few million more than $10mil.

Note: Andy and Steve came up with their answers separately. Alexis copied us.

The application also asked, "If you've already started working on it, how long have you been working and how many lines of code (if applicable) have you written?" The trio's answer: "No code written yet."

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Jessica Livingston had grown to adore Paul Graham's quirks. He refused most days to wear pants, or closed-toed shoes. Shorts and Birkenstocks were his uniform—even when they went out to white-tablecloth dinners. He collected old potato mashers; their undulating wires may have appealed to his inner mathematician. Despite appearances, Graham did possess a sophisticated aesthetic sensibility, and had trained as a visual artist. He had for many months admired on his walks around Cambridge an out-of-place, low-slung industrial building on a residential block of Victorian homes. He inquired about it, and heard it had once been a candy factory, and then a porn studio, and after that, some plumber just used it to store his tools. When one day a For Sale sign appeared out front of 135 Garden Street, Graham promptly paid roughly

three-quarters of a million dollars for the property and set in motion renovations.

It would be his own private, sprawling office—Livingston knew Graham well enough to know he was deeply obsessed with his work, his own projects, and that he required both solitude and quiet to truly concentrate. To that end, he ordered the building refitted with double-paned glass windows and two layers of doors, making street noise all but imperceptible. The shell of the bunker was painted bright white, and inside five skylights would usher light down onto oriental rugs topped with a smattering of minimalist-feeling midcentury modern furnishings, courtesy of Graham's architect friend Kate Courteau.

The office was nearly complete when Graham and Livingston schemed up Y Combinator in the spring of 2005. Graham ceded the space to his new project. "The joke was that Paul never got to work there," Livingston said. It would be ideal, with its fascinating little rooftop solarium and stylishly mismatched black wire lounge chairs. They'd agreed to only open it up to the founders one day a week, to still give Graham the run of the space. A few offices were tucked into corners, leaving a broad main room entirely open. It would be filled with custom long folding tables and matching benches, so the space could be transformed easily: tables out for dinner, for speeches or presentations; tables folded away for mingling events.

To bolster the effort of Y Combinator, Graham tapped his former business partners at Viaweb, Robert Tappan Morris and Trevor Blackwell, who were already interested in finding fresh ways to collaborate. Each invested $50,000, to match the $100,000 Graham and Livingston would use to initially fund the experiment. The arrangement was that together Graham and Livingston would run Y Combinator; Blackwell and Morris would read applications and help conduct two days of interviews. Morris was one of Graham's closest friends, and was known to him as RTM. (Graham once wrote a computer language and named it RTML. The language was subsequently used by merchants on Yahoo.) To the rest

of the world, Morris was best known as the hacker who created the first computer worm, which he designed at Cornell and unleashed at MIT. For that act, he earned the distinction of being the first person prosecuted under the Computer Fraud and Abuse Act. The other partner, Blackwell, was a Harvard computer science Ph.D. with fluffy white hair who hailed from Saskatoon, Canada. He was fond of building humanoid robots that balance on wheels instead of feet.

As applications arrived in droves, the partners cut off submissions after just ten days. Graham invited twenty groups of young men—there was not a single woman in any group—to Cambridge for interviews the second Saturday and Sunday in April. Livingston tackled logistics.

The applicants who shuffled in and out of Graham's office impressed and fascinated Livingston. One group was composed of three college programmers, each of whom possessed a different severity of Russian accent. Mikhail Gurevich, his cousin Greg Gurevich, and their buddy Mikhail Ledvich pitched an idea for remedying online click fraud, which—theoretically, at least—could boost the effectiveness of online advertising. They called it ClickFacts. Greg Gurevich adeptly and confidently answered Graham's technical questions. (What Graham and Livingston didn't know was that Greg was mostly winging it. He had a talent for mustering confidence; perhaps the shots of vodka chased with Listerine that he, his cousin, and their buddy had just downed helped.)

Nineteen-year-old Sam Altman pitched Loopt, a location-aware social networking application, with two other founders. Only by the time of the interview, Altman's cofounders seemed like they were bailing out. Upon hearing that Altman would be flying solo, Graham emailed him, brushing off a cofounderless endeavor: "You know, Sam, you're only a freshman. You have plenty of time to start a startup. Why don't you just apply later?" Altman responded, "I'm a sophomore, and I'm coming to the interview." In person that day on Garden Street, he impressed Graham immediately.

The same day, Livingston saw a sweaty kid and his out-of-breath

father push through the front door of their office. They'd speed-walked there, fearing being a few minutes late. Graham shook their hands and gave them a tour of the space. The kid was Stanford freshman Aaron Swartz, who in certain Internet circles was a minor legend, having at age fourteen cowritten the RSS 1.0 standard, a new way of syndicating web content, and having written a code layer for the online copyright sharing system Creative Commons. Swartz appeared to have all the markings of a bang-up programmer, and his blog had quite a following online—perhaps larger than that of Graham's own. It didn't surprise Livingston when instead of asking Swartz to provide details immediately about his startup idea (Swartz's application proposed creating a website-making tool he'd dubbed Infogami, which rhymes with "pastrami"), Graham pitched Swartz on a different but related idea. They mulled different names for whatever Swartz's creation would be. When the meeting ended, it was already clear that Graham had mentally accepted Aaron Swartz to Y Combinator.

There was Chris Slowe and Zak Stone's group of Harvard grad and undergrad students, whose concept of a desktop search program had already won a Harvard Business School entrepreneurship contest. A group of Yale students who'd been best friends since second grade pitched a universal calendar with a rare four-letter domain name, kiko.com.

Then there was the duo from UVA who wanted to tackle food ordering, and do it through cell phones.

Sitting down across from the four Y Combinator partners was an entirely different experience for Huffman and Ohanian than having coffee alone with Graham. This time, Graham displayed much more skepticism of their market and their ability to enlist restaurants. He may have also raised an eyebrow at the fact that only two of the three applicants showed up (Barros had already bailed). Most of the questions were highly technical, which required Huffman, uncomfortably, to do most of the talking.

Morris asked how the user's phone would take orders, and how it would communicate with the restaurants. It was far-fetched in early

2005 for a brick-and-mortar store or restaurant to employ mobile technology—heck, it was rare they even had a website. The iPhone would not be released for two years. Huffman hadn't fully thought through communications structure, but said, "The phones will just talk to one of our computers," and prattled on at length about the specifics of how a simple Internet server functioned. Later, he was embarrassed: He realized Morris was quite obviously well versed in the ways servers interacted with the World Wide Web. Despite the blunder, when walking out of the office onto Garden Street after forty minutes of grilling, Huffman felt confident.

Graham had told each group to wait for a call around 7 p.m. on Sunday, not long after the interviews wrapped up. The YC partners made quick work of whittling down from twenty interviews the eight they wanted to fund. Livingston wrote a short list on the whiteboard in their Garden Street office, simply listing nicknames she'd made for each group, such as "The Kikos," the Yale group with the great four-letter domain name. They made the cut. Sam Altman, the solo sophomore: yes. The Russians, whom Graham had started to think of as "The 3 Mikhails" (never mind that one of them was named Greg): yes. Aaron Swartz, the Internet phenom: yes. Promptly at 7 p.m., Graham started dialing numbers.

Huffman and Ohanian were crashing that weekend with their friend Felipe Velásquez, who belonged to one of Harvard's elite finals clubs, the Fly Club, and they spent time roaming the clubhouse at Two Holyoke Place near Harvard Square. Huffman and Ohanian toured the trophy room, where taxidermy game heads lined the walls, and which emitted a decades-accumulated hint of stale tobacco. Huffman was told that a Roosevelt had killed some of the trophies. Modern frat-life touches, though, abounded—billiards tables topped with glass, the better for beer pong, and giant mounted speakers to pump hip-hop through keggers.

On Sunday evening at 7 p.m., Ohanian sat on Velásquez's couch and stared at his Palm Treo, an early smartphone. After an excruciatingly long fifteen minutes, it started buzzing. He answered the call, already excited.

"I'm sorry, we're not accepting you," Graham said.

Ohanian was devastated. Huffman, enraged, turned cold. To Ohanian, he appeared indifferent, but inside, he was fuming. He thought Graham had known all there was to know about their idea already when he invited them to come all the way from Virginia. They had traveled six hundred miles on multiple drafty trains, missing classes and sacrificing one of the precious last weekends of their senior year. For this. That was shitty, thought Huffman. He stayed angry all evening, through dinner, and through drinking more Sol beers than he could count at the gaudily festive Border Cafe. He sublimated thoughts of Graham, instead channeling his bitterness toward his surroundings. The dominant thought for Huffman that evening was, "Harvard has no girls."

Ohanian, whose head was swirling from the mix of beer and rejection, was introduced to some soon-to-be Harvard grads who were boasting about their white-shoe finance job offers. He had just experienced the opulence of the Fly Club, which felt a long way from their Shit Box back at UVA. This scene felt like no place for the awkward nerd with a plate of cookies, a late-night video-game player who spent his senior-year spring break seeing a mildly interesting programmer read from an essay aloud. One of the polished seniors asked Ohanian what he was doing with his life.

Between slugs of Sol, Ohanian giddily spun out a story: Well, it just so happened that he'd received backing from a powerful dot-com millionaire for his startup. He would be moving to Boston to be the executive of a company that was destined to make the world a better place. Who knew where it would go, but maybe they'd sell the company for millions; get rich, move on. He lied to their faces.

Uttering that lie is something Ohanian still regretted years later. He would come to think back on that night as the first rejection in a life otherwise filled with trophies. He didn't fit in, and he couldn't accept it.

Huffman, Ohanian, and their new Fly Club pals wandered home very late. Someone was watching Adult Swim on television, and an episode of *Robot Chicken* was playing. Huffman felt like he should

be high, but he was not: *Robot Chicken* was the most absurd thing he'd ever seen.

By Monday morning, Huffman and Ohanian were all sour stomachs and lingering bitterness heading to the train station to begin their long schlep back to Virginia.

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That Monday morning back at 135 Garden, Livingston was over the moon. They'd established a worthy roster of more than a dozen young men who would move to Cambridge for three months that summer, and give up a small fraction of equity in their soon-to-be companies in exchange for $6,000 each.

But Graham was rethinking the list. He told Livingston he was considering adding another team to the eight they had selected, and she immediately nominated Huffman and Ohanian. Their idea would take too long to find a market fit, sure, but as individuals they were upstanding. They were obviously smart and dedicated enough to trek on a long train ride to Cambridge twice, she argued. On top of that, Livingston thought Huffman was so cute she'd called him a "muffin." It was silly, but somehow it stuck. On the whiteboard in the Y Combinator office's conference room, in the list of the top candidates, along with "The 3 Mikhails," she'd written "Cell food muffin" to describe Huffman.

Graham, midday, dialed Ohanian's number.

When Ohanian saw his phone lighting up, he looked out the train window. Where even were they? Maybe somewhere in the middle of Connecticut. He picked up to hear Graham say, "Hey, Alexis. Listen, I'm sorry, we made a mistake. We really liked you guys. We liked you—but not your idea. Let's figure out something else."

Ohanian explained that he and Huffman were already on the train back to school. It was too late.

Huffman thought, "Okay, well at least he's not stupid."

In that moment, Huffman almost at once admitted to himself

that perhaps Graham was correct about their idea. His arrogance didn't subside, despite that he felt validated and redeemed. He was relieved that at least he could go on intellectually respecting Graham: "If we weren't in, that would have just been stupid." The pair conferred, and within minutes, they decided: *What the hell.*

The train pulled to a stop at a platform, and Huffman and Ohanian rushed to the door. With their bags, they hopped down and ran across the active tracks. When the next train heading north to Boston pulled in, they tried to explain their situation to the conductor, who, exasperated by their manic enthusiasm, reluctantly let them on.

Graham got word and emailed Livingston. "Muffins saved."

FRONT PAGE OF THE INTERNET

Graham pulled out a chair at the conference room table and explained where Huffman and Ohanian had gone wrong. It was too early to be focused completely on mobile development. Few people were yet using their cell phones for much Internet browsing. Text messaging and BlackBerry Messenger were still in their infancy. Graham had an entirely different sort of Internet business in mind.

You know who was on to something, Graham mused: Slashdot. He pulled up the site and showed the young men its trove of interesting but somewhat mainstream tech-centric links. There was also, similarly, Delicious (known often by its curious domain name, del.icio.us), a site many people used to bookmark their favorite websites and articles, or find topical content, based on freeform hashtags suggested by users. Co-created by former Morgan Stanley analyst Joshua Schachter, Delicious had earned Graham's esteem after it directed significant traffic to some of his essays, which had been boosted to its "popular" page. Clicking on that particular tab on Delicious yielded a delightful mix of content, from highly technical Linux how-tos to general-interest links to *Saturday Night Live* clips and Roger Ebert's best movie list for the year.

In Graham's mind, the Delicious page was good—but it could be far better. The root of the site's problem was in its utility: Many people used it as a bookmarking site, which meant its content veered toward longer articles and journals and programming guides individuals were saving for later rather than things they simply loved and were currently reading.

It was a "holy shit" moment for Ohanian. "Yes!" he thought. "We need to do exactly this, but for what people want to share at the moment."

Huffman, too, was seeing the wisdom of Graham's thought train. He jotted down a few notes in a graph-paper notebook he'd taken to carrying. The notebook contained some typical college scribbles ("I'm sorry I'll shut up now") and doodles (3-D cubes, a penis) he'd made during class at UVA, and some coursework notes, too, but on this day it transformed into a place where Huffman would document the origins of, and his progress on, their new, as yet unnamed project.

"The site people go to find something new," Huffman wrote in blue pen. "Points for being the first to recommend," he also wrote, likely transcribing Graham's exact words regarding building a recommendation engine before any of their preexisting competitors could.

The recommendation engine was integral to the success of this hypothetical project, Graham thought, because one would need to dangle a carrot for users to entice them to post links in the first place, and then to return again and again to discover and share.

Discover and share. Ohanian immediately considered his own personal use case: He spent a lot of time navigating to the *New York Times*, the *Washington Post*, and a host of blogs every morning. What if the best articles, the ones he'd naturally click on, were all right there for him in one place? That would be awesome.

It was in that moment that Graham said, "Yes. You guys need to build a front page of the Internet."

They liked it. All visions of MMM had been scrubbed from their imagination. They were in: They would build the front page of

the Internet. As a measure of congratulation, Graham bought the young men airplane tickets home.

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Back in Charlottesville, the rest of senior year slipped by, punctuated by keggers and all-night *World of Warcraft* binges. Ohanian turned in his Dresden thesis. The basement of the Shit Box flooded in dramatic fashion, drowning likely thousands of ants and waterlogging Ohanian's few worldly possessions.

Huffman began settling some matters of logistics and emotion. He'd need to quit his job at Image Matters, which he had already committed to join full-time after graduation. He'd have to part ways with his girlfriend, Katie Babiarz, for the summer, and that wouldn't be easy on either of them. He'd also have to tell his mom. Despite multiple conversations, his mom was skeptical of what he and Ohanian were working on, which made sense, because it didn't exist yet. She wanted her son to take the steady job, with health insurance. He overruled her objections. "We were getting $12,000 for me to quit my job and go live in Boston for three months. I guess when you've had a career and you have kids that seems totally outrageous," Huffman said. "But to us, we were just like, 'Who gives a shit?'"

There was an exclamation point at the end of the school year, a trip to Cancun with their closest friends.

Even as the crew of friends sat on towels on the sand, drinking Coronas, the conversation kept turning back to the website Huffman and Ohanian would be building upon moving to Boston. Ohanian showed off possibilities for the site's mascot—he'd doodled a small alien during marketing class, all round edges, beady eyes, and goofy grin. A favorite game was coming up with possible names for the company, which would also have to be taken from available website domain names. The brainstorming—they asked almost everyone they knew—had begun back in April. Ohanian emailed Huffman a running list on April 22, 2005. It included

thirty-two names for the domain and company, such as "mysnoo," "hotsnoo," "hotagg," "aggpop," "lexpop," "populoo," and "ripefresh."

Huffman wrote back, "I like poplex still. aggpop isn't bad, neither is hotlex, but i think poplex still takes the cake." As the hour neared 2 a.m., Ohanian replied with a few new ideas, including:

> lol how about poptzar
> hehe get it popTZAR
> like in russia?
> eh?
> -
> damn
> ok i sleep now

Huffman's ideas weren't much better. In his little graph-paper notebook he'd written bufflist.com and a few potential taglines, including "surf in the buff" or "read your news in the buff." Five days later, the email chain was still going, and Ohanian was still coming up with crazy new names, such as perkle.com, oopdoo.com, and aeonpop.com. At noon, he emailed Huffman "more name ideas." A list of seven names included at the bottom Reddit.com, with the note, "I kinda like this one."

Huffman had found a website called Stuckdomains, on which visitors could search for domain names whose owners had allowed them to expire. On it, he typed in "News." One of the many related results that came up was "Newstew," or news stew. He also typed in "Read," and hit enter. A long list of weird portmanteau words appeared, words like "Breadpig." Huffman thought, "Oh man, we *have* to buy breadpig.com. It's so hilarious." Ohanian purchased Newstew and Breadpig.

As he considered words related to "News" and "Read," Ohanian re-added "Reddit" to the running list. Huffman jotted in his graph-paper notebook, "Reddit yet?" But he still liked Poplex and Newstew better. Huffman bet Ohanian, "I'll go ask ten people on the

street and no one will know how to spell Reddit properly." Ohanian agreed. The first people they stopped and talked to were a Hispanic-looking couple who spoke little English. Huffman figured he'd gain an early lead in the bet, so he asked them, "How do you spell Reddit?" The man answered: R-E-D-D-I-T.

By the time they were all packed up and ready to move to Boston, Newstew was the front-runner. Over tacos and beers with Katie, along with a few good friends from their freshman-year dorm and their roommate Jack, they hashed it out and took a vote. Newstew won. Everyone drank to the new moniker for the yet-unbuilt site. Ohanian later joked, "I think we liked it . . . because . . . alcohol?" The name soon morphed to an abbreviated 'Snew or Snoo, as in "what's new," which Ohanian mocked up as a logo, with the alien perched right next to it.

Graham, however, shared Huffman's skepticism about the name. In an email, he complained to Huffman about the name 'Snew or Snoo. It was likely doomed anyway, as they couldn't easily secure the snoo.com domain, which was owned by a domain squatter. Graham didn't like the name Reddit either. No one really did. When asked years later when he eventually came around to the name, he replied, "I still haven't. I don't think it's a very good name."

Graham wasn't sure about the little alien mascot either. In an email at the time, he wrote Ohanian, "If you're attached to the little bug guy, put him at the bottom instead of the top; then it looks like a joke instead of branding."

Both Huffman and Ohanian felt for the little alien being demeaned. He wasn't a bug. They kept him. And in an act of defiance masquerading as a backup plan, Ohanian purchased Reddit.com.

IT'S ONLINE

In the center of the sunny second-floor room, two desks were planted back-to-back, so Steve Huffman and Alexis Ohanian could work all day facing each other. A flimsy unvarnished wood bookshelf loomed over Huffman's left shoulder, as if daring him to pile on it yet another programming manual or abandoned beer bottle. Over Ohanian's right shoulder hung a campy centerfold of a blonde woman in a pink bikini tromping through ankle-high waves.

This would be their office, and their home, for the next three months, this summer student sublet in a mint-green duplex at 72 Bristol Road in Medford, Massachusetts. Here, Huffman and Ohanian spent the bulk of their waking hours—roughly 10 a.m., when they'd stumble from their beds to their living room desks and blast Gwen Stefani's "Hollaback Girl," until midnight, when they'd wind down by jamming their thumbs on *World of Warcraft* for a few hours. Their backs to the windows, which were at times hung with makeshift curtains of towels to prevent screen glare, they talked and coded and sketched and designed business cards. For breaks, they sometimes walked to nearby Davis Square to get pizza.

More typically, they simply wheeled their desk chairs over to the PlayStation.

Huffman had arrived in Boston a few days before Ohanian, and brought with him the notebook from college and Cancun, full of potential names, site structures, and concepts. He knew what he wanted: a way for users to submit links, and to give a virtual thumbs-up to content they enjoyed with a single click. That click, or an upvote, would help Reddit rank its homepage—the most interesting, most upvoted stuff would rise to the top. It would be a massively collaborative content popularity contest and key to their model. Their competitors, Delicious and Slashdot, constantly refreshed their "popular" pages; Reddit's homepage would only be a "popular" page.

Also scribbled in Huffman's notebook was the word "karma." Huffman and Ohanian had concocted another secret sauce. They'd give readers feel-good points that would accrue with every activity they partook in on Reddit. Posting a link: karma point. Having your post upvoted by someone else: karma point.

Huffman's notebook also contained a list of four items under the heading "submission." The four items read: "title," "url," "description," and "category." To anyone who's ever submitted an article to Reddit, this list will look familiar. It's a textual mock-up of the site's "Submit" page, which has remarkably remained in nearly this formation since mid-2005.

Now Huffman had to build it. He started out solo, simply learning how to create a system of webpages. PHP, a scripting language for dynamic content of HTML sites, was popular at the time, but Huffman wanted to do something more *Grahamsian*. He had spent a lot of time researching AJAX, a method for organizing the underlying structure of a website that allows data to be retrieved from a server in the background while a user is viewing an apparently static site, and which was becoming more widely used at the time (Gmail, Kayak, and Delicious each employed it). Ruby on Rails, the soon-to-be common back-end framework for sites (Airbnb, Hulu, and Twitter were built on it), would not be released until months later.

One night while working alone, Huffman left his desk and sat with the trusty graph-paper notebook on his bed. In it, he attempted to map out a sample structure of pages for links, and submitting, and the homepage. Despite having coded programs previously, he'd never built a website before, and this night he had gotten stuck on structuring a page with links to different pages, some of which performed a function, others that required continual refreshing. While the homepage of Reddit was to be a list of the most popular links, ranked 1–50, at the top of the page Huffman envisioned tabs that would provide alternative views of the site's content, including by most recent submission, and most popular of all time. These, too, would require constant refreshing, but would need to rely on different versions of a ranking algorithm. His working plan was a cat's cradle of pages and operations, some in AJAX, some in BASIC.

"When I finally had something that made sense, I remember thinking, 'I've been making this way too complicated with all this AJAX shit. They should just be normal pages,'" Huffman said. He ended up creating a Lisp program that would run continually, and that would generate all of Reddit. No more complicated workarounds. No more Googling. He'd just use trusty Lisp, which he'd used a lot during college, and in which he already had written his thesis project at UVA. He pulled some of his old calendar code and got to work.

Ohanian moved in and things got fun: Thinking through big conceptual programming questions was challenging, and was punctuated by rewarding "aha" moments. And Huffman had Ohanian to share them with. While Huffman scoured the few online Lisp directories for inspiration for the site structure, Ohanian worked in a shareware copy of PaintShop Pro 5 on his PC, which ran on Windows XP. He designed static site mock-ups, and perfected the little alien, which had been nicknamed Snoo, a homage to their hopeful but as yet unattained website name. He even designed stickers, with the alien, Reddit.com, and the tagline "what's new online." By July 1, Huffman had added Snoo to the very top left of Reddit.

In early weeks, next to every link and headline was a set of words: "Interesting" and "Boring." For a few days, there were a whole host of different emotions one could select for any given link, but Huffman and Ohanian almost immediately deemed that labeling system overcomplicated. For about twenty-four hours, they tested out a five-star system of rating links. (Huffman determined that the difference between a three-star and a five-star article might not be, well, anything, so they ditched it.) They toyed with a thumbs-up icon, but realized it implied that the link was an inherently positive thing, or that one liked it, when really the action they wanted from users wasn't quite an endorsement of a link; instead it was a click that meant they wanted it to be seen by more people, and to bubble up in popularity (or, of course, the converse, to be pushed down by being downvoted). Huffman and Ohanian wanted to give their users credit for knowing how the site's underlying technology would react to their actions. To that aim, they settled on arrows, one pointing up and one down, to the left of each post.

Those simple arrows fed Huffman's algorithm all the data it needed to sort submissions for the past twenty-four hours by votes per hour, and tally their popularity. That provided the ability to rank the posts on the front page of Reddit. It also provided the extraordinarily simple theoretical framework on which Reddit functions to this day.

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Every Tuesday evening that summer of 2005, the nineteen Y Combinator batchmates gathered at Graham's Garden Street office. They chowed down on a Crock-Pot full of chili or pasta sauce or whatever "slop," as the guys lovingly referred to it, Graham had dumped from cans into the slow cooker that day. Livingston used the weekly meals to dote upon the young men, shopping for special cheeses for their appetizers at Formaggio Kitchen or brewing her grandmother's secret recipe for iced tea with lemonade and mint.

The doting served as part of a tidy veneer Livingston established

early on: to appear as if she was a den mother. She had been mostly silent in the initial interviews, coming across to some of the interview subjects as a secretary, rather than an investment partner. What the young men didn't know was that to a large extent, Livingston was calling the shots. Graham knew her to be a tremendously accurate judge of character, and she made the final call on many applicants, including making that validating push for Ohanian and Huffman. She made other significant judgment calls that summer while running Y Combinator in tandem with Graham. Their lives, home and work, meshed together completely; they were in love (unbeknownst to the young founders) and in love with their new project.

The Tuesday dinners accomplished many aims for Livingston and Graham, the simplest of which was giving the batch of men—who'd spent their weekdays coding alone, headphones on, in front of screens—a chance to meet, collaborate, and commiserate. Before the first dinner, a few of the founders had thoroughly Google searched one another. Huffman knew one he wanted to meet in particular: Aaron Swartz. Huffman had heard he was a hacker prodigy with a libertarian bent and a flair for the dramatic, which was readily on display on his well-read personal blog. "I remember thinking, 'This guy is insufferable. He is so obnoxious.' And the self-righteousness bugged the shit out of me," Huffman said. During the first Tuesday dinner, Swartz was the first person Huffman met. "He was just short, and really shy and quiet, and I just could not believe it was the same guy I had a predisposition to dislike," Huffman said. He came away from that evening thinking Swartz—and his little website company—was really cool.

Other founders shook hands and warned each other of the YC headquarters' most painful "bug": The legs on the benches at the custom-designed long tables in the main room were too close together. If you sat near the end of the bench, the entire other side would fly up in the air like a seesaw, sending you tumbling to the ground. They asked about each other's companies, and some wondered aloud whether Graham and Jessica Livingston were dating.

To several of the other young men, Huffman and Ohanian stood out. Mikhail Gurevich, who had pitched an idea for remedying online click fraud, recalled being impressed immediately by their kind demeanors. Each seemed smart, but neither had an obvious chip on his shoulder. "They were the nicest people I've ever met just in general; the most humble people," he said. Ariel Schwayder, one of the three founders of a company called Simmery Axe (a Gilbert and Sullivan reference; one of the characters lives on St. Mary Axe—say that aloud with a British accent), remembers Huffman and Ohanian being extraordinarily easy to chat with. "They were into other stuff, like video games," Schwader said. "They didn't *only* want to talk about programming or their website."

Huffman made friends easily with the other hackers, but he spent a significant amount of time during those Tuesday meals speaking directly with Graham, asking pointed questions about Lisp programming and website foundations.

Ohanian, an extraordinarily social and courteous guy whose most universal descriptor is "charismatic," had a harder time—not because he wasn't trying. He was trying, perhaps too hard. As the most "nontechnical" cofounder of the batch, he became the subject of a joke among the hackers: "But what does Alexis *do*?"

It didn't help that Graham overtly favored the most talented engineers. He had chosen Huffman and Ohanian in part because they fit a well-observed hacker-slash-business-guy cofounder pair stereotype, but he'd also come dangerously close to calling Ohanian unnecessary. In an interview for a documentary made that summer about incubators, Graham told the camera with a mischievous smile, "The relationship between hackers and business guys, at least in the beginning, is that you need hackers—and you don't need business guys." And despite knowing some web design and HTML, and even having made an attempt to learn Lisp at the summer's outset, Ohanian found that his best defense was to latch on to his identity as a nontechnical founder.

As weeks passed, the answer to the question "What does Alexis *do*?" became clear: He was the charm offensive. He was the guy

designing, producing, and plastering Reddit stickers all over Cambridge. While Huffman coded the site's building blocks, Ohanian envisioned the task of building hype, in person and in the press. He'd manage the community that Reddit would develop, answer questions, and keep users happy. But first . . . they'd need users. In the meantime, he'd do whatever he could do, even if some days that entailed just ordering the pizzas and keeping track of them on a budget spreadsheet.

Tuesday dinners also served as a weekly progress report for each of the teams. They were held accountable there not just to Graham and Livingston, but also to one another. This was also the opportunity for PG, his old Viaweb nickname, to extend his influence over the companies, and the education of these nineteen founders, whose average age was twenty-three.

While eating, they'd listen to a talk by one of Graham's friends, colleagues, or fellow tech luminaries. This first summer, speakers included Stephen Wolfram, the computer scientist known for his controversial tome on applying computational systems to the broader world, *A New Kind of Science*, and Boston-area startup wunderkind Langley Steinert, who'd founded CarGurus and TripAdvisor. Graham's lawyer, Mark Macenka, delivered a talk about patents and copyright, and perhaps, due to his jovial demeanor and ponytail, convinced the young men to drop their fear of lawyers.

The talks offered practical lessons about scaling a company, hiring, and finding customers. They also corroborated the anti-establishment gospel of Paul Graham. Cautionary tales illustrated the ills of the venture capital ecosystem, which Graham thought still entailed too much money chasing too few deals. Venture firms had no lack of interested backing, even from the sorts of pension funds that had suffered so dearly just five years earlier during the dot-com bust. Olin Shivers, a computer scientist at Boston's Northeastern University, included a PowerPoint slide in his presentation that is still legendary. It read: "VCs: soulless agents of Satan, or just clumsy rapists?"

Graham wanted his charges to be wary of investors who, if given

the chance, would wrest control of their board of directors and boot them as executives. More important, he wanted the men to know that the system was not designed to help them. There was a recent law, Sarbanes-Oxley, that levied tighter compliance standards on public companies; Graham had already heard whispers from private companies that they'd avoid going public at all costs due to the new burdens. Graham could envision a cruel world in which startups stayed private longer, continuing their funding cycles longer than ever before, despite what they'd learned from the recent crash. (A scrappy website popular among certain college kids called TheFacebook had just received a whopping-for-that-time $13 million investment from Accel Partners that May. It would not go public for seven years.)

Graham's thumb-nosing of the big Silicon Valley firms permeated everything at YC, its vernacular—Graham would for years implore journalists to not describe his project as a "tech incubator"—and even its aesthetic. For YC's logo and signature color, Graham looked to the finance world, whose logos contained swaths of welcoming teal blues and secure deep greens—and went in the opposite direction. He had the front door to 135 Garden Street painted a glaring persimmon orange. That abrasive hue would become YC's signature color, the color of many cups and plates and the Eames shell chairs in the YC kitchen, and the orange-red that PG often chose for his standard dress of polo shirt.

What was left when Graham removed from startup funding all the things he disliked was very close to the concept that was becoming known as "the lean startup." It entails using existing technologies to iterate fast, initially ignoring certain "best practices" commonly associated with running a functional company, such as scalability, internationalization, and heavy-duty security. He advised the founders, instead of being thorough, to release early versions of their work that were lightweight enough to evolve. Graham later wrote on his blog that "best practices . . . interfere with the primary function of software in a startup: to be a vehicle for experimenting with its own design."

Later, he would clarify this idea of what would soon become

known as "minimum viable product." He said, "The sooner you get it out there, users can start telling you what they want instead of you guessing. If you sit down and think of the perfect implementation, the problem is you're thinking of the perfect implementation of the wrong thing."

Graham's philosophy is counterintuitive for perfectionists, compliance junkies, or straight-A types who thrive within rigorous institutions. It means constantly editing your workflow to favor only the most important tasks, and not getting caught up in the details. Slowe and Stone, the Harvard physicists, spent the summer puzzling over the theoretical organizational structure that would underpin their desktop search tool. They wanted to be inclusive of a variety of individuals' search strategies, because the way a programmer might look for a code file on his hard drive would be very different from how an artist might find a photograph. In other words, they got caught up in building something sturdy that would scale broadly and smoothly. They never launched a product.

Huffman, by contrast, was very good at following the lean-startup doctrine. Stone described Huffman's practical approach as: "Okay, what's the most important thing that we can do right now?" Huffman wrote to-do lists, from which he'd methodically start at the top, most important item, and work his way down. Other lists were titled "where do I spend time?" and "what is the problem I'm trying to solve?"

By the middle of the summer, Graham had added a new catchphrase to his litany of advice. "Make something people want." It stuck, and became a mainstay of Graham's future speeches and a Y Combinator mantra. By the end of summer, the nineteen guys were so accustomed to hearing Graham say, "Make something people want," that they put it on a T-shirt. Well, sort of. The shirt's front bore a Y Combinator logo. On the back were screenprinted the words "Make Something Paul Graham Wants."

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By about three weeks into the summer of 2005, Huffman had become accustomed to panicking roughly twice each day, when the name Paul Graham would appear at the top of his Gmail in-box. This was the same man who'd pledged them thousands of dollars of his own money to let them experiment with code all summer, the same man who'd expressed so much enthusiasm for their startup pitch months earlier. The same paternal figure they felt comfortable enough around to start calling PG. But this was a different side of PG. These were curt notes with feature suggestions (users should email each other!), feedback on the name (he hated it), the alien mascot (what about an octopus?), and, mostly, the dreaded "check-in" email. "Paul in one person is his own good cop and his own bad cop," Ohanian said later that summer. "And there's this amazing dichotomy between the Paul Graham that we often get emails from and the Paul Graham we know in person."

This third week in June, it finally got to Huffman. One note was particularly harsh. It didn't just ask for a progress report; it ranted. Graham wrote, in essence, "I don't know why you haven't launched yet; either you can't do it or you are waiting for it to be perfect, and I don't know which is worse." It deeply irked Huffman. He thought Graham was being a huge dick.

Huffman stewed. He also thought, "Well, *what if*?" He had been writing the back-end code of the site for just twenty days, along with building the architecture that would determine the site's external functionality. It was bare-bones, and far from perfect—Ohanian didn't have the mascot or logo ready yet—but for the most part, it worked. So, *fuck it*, thought Huffman. He put Reddit.com live on the Internet.

Sure, it was passive-aggressive to play his hand silently. But Huffman knew Graham would be proud. Their site was live. Huffman told Ohanian what he'd done, but he knew no one else would notice. Well, maybe Graham would notice, Huffman thought, knowing full well he'd first be pissed to not have been in the loop. After getting over that, he'd be ecstatic. So Huffman waited. All weekend he obsessively checked his in-box for the glorious, "Well, shit, you

did it!" email from Graham. It never came. Whatever. He would see Paul Tuesday.

Tuesday afternoon, Ohanian and Huffman walked into the Y Combinator office, less than two miles from their Medford sublet, and where they were scheduled to see Graham and the others for dinner. Huffman was still fuming. As Graham walked up, the first words out of his mouth were, "Where is Reddit?"

"It's online," Huffman said.

"Really?" Graham's eyes grew wide.

"Yes," Huffman said flatly. He was a little bitter that Graham hadn't bothered to check the URL over the past three long days. "It's online."

Sure enough, when Graham typed www.reddit.com into his browser, he found an actual website with a blue toolbar at the top that read "Reddit" in white, alongside four navigation links, which read "profile," "browse," "submit," and "help." A handful of headlines and hotlinks dribbled down the white page below. It was simple, programmed to display just a default sans serif font, which materialized as Verdana on most browsers. There were no flourishes. To Graham, that was perfect, a truly minimum viable product, live, online. Graham was satisfied to know Huffman and Ohanian *could* do it. It was immediately apparent that they hadn't committed the other sin he'd mentioned, waiting to be perfect. The links were just hyperlinked headlines, though each provided some context: They displayed the user who'd submitted them—at this point either Ohanian or Huffman. More important, perhaps, was that the site had an intangible vibrancy to it; built in were several visual cues to recent activity that had happened on the site, including time of posting, a ranking system, and small "hotness" meters below each link.

For Graham, it was a validation. His persistence at urging Reddit to launch—or "ship" a product, in Silicon Valley parlance—had worked. It was the first of his little funding experiments to yield a real, tangible thing.

Over the following weeks, Graham continued to give Huffman

significant feedback. Reddit was his pet; Huffman suspected Graham was giving extra attention to him and Ohanian because they were earnest people. Other batchmates suspected Graham felt more responsible to "the Reddits," as they were sometimes known, because he'd supplied their idea. He not only stayed in regular contact with Huffman about his progress, but also created a Reddit account, u/bugbear.

As June, the first month of Y Combinator, wrapped, Reddit had something none of the other companies had: a working website. Huffman and Ohanian's batchmates, this class of young men whose ages precisely spanned the tidy demographic of eighteen to twenty-eight, were Reddit's first users. They'd been casually enlisted through Tuesday dinners and over AIM chat, though Graham's primary account, u/bugbear, usually trumped them all in activity. As other founders tinkered with their prototypes and rewrote code, Reddit was another browser window on their screen, one that refreshed regularly with new, interesting links. "Reddit changed every day, so you could see it improving over the summer," said Justin Kan, one of the founders of Kiko.

To say they were the first users is not entirely true. They were the first users aside from Huffman and Ohanian, whose initial, primary—and now long-standing—usernames, respectively, were spez and kn0thing (spez being an abbreviation of another username Huffman favored online, Spengler, as in Egon Spengler, the character who provided the brains of the *Ghostbusters* operation; kn0thing being Ohanian's high school gaming handle, an abbreviation of the title of his favorite song, Metallica's "King Nothing"). A favorite story of Ohanian's is that his first ever post to Reddit on June 23, 2005, was a link to the Downing Street memo, the meeting minutes that exposed the origins of the Iraq War. Huffman, from the desk facing Ohanian's, immediately downvoted Ohanian's post. U/kn0thing's first karma was –1. "Because Steve is a dick," Ohanian said.

Now that the site was live on the Internet, though, spez and kn0thing were not Huffman and Ohanian's *only* usernames. They

each created several, or rather several dozen, in order to make the site appear more vibrant—like it had actual users instead of just two nerds posting news from other websites to the little thing they'd built in their living room. Graham, u/bugbear, did too. It's a concept now known as "growth hacking," the usually not so technical act of actually turning a product into a vibrant business, or, in this case, making it look like their website had early traction. "The first hundred or so Reddit users were video-game characters, or pieces of furniture in our apartment. Lampshade was a big user," Huffman later joked.

Reddit, in its early days, and thanks to the interests of its early users—these young hackers along with their friends and mentors—was a narrow trove of technology news and liberal-leaning politics links. "Move to a new planet, says Hawking" linked to the BBC's report on speculation from physicist Stephen Hawking that an asteroid or nuclear attack could wipe out civilization on Earth. "Top 10 Web Fads" was a link to a CNET report. "Students Combat Click Fraud" was a link to a blog post about the company Mikhail Gurevich and his two friends were building. Huffman took to telling friends, family, and press about this list of headlines they'd built by explaining that its posts were "the best of the web."

With each clumsy attempt to explain this new little company, this new social news hub, more users found Reddit.com. Perhaps a few people even signed up after seeing black-and-white 8½-by-11-inch computer-printer flyers around Boston with an alien mascot dressed as Uncle Sam, reading, "I want YOU for Reddit.com." Slowly, Reddit grew.

Over the next four weeks, Huffman slept with his laptop in order to wake every two hours to ensure the site was still online. During days, he solidified the basic structure of the site, making small tweaks to it and its functionality. Now that it was populated regularly with links, Graham was satisfied, even though Huffman and Ohanian had refused to turn their alien into an octopus, per Graham's suggestion, or change its name. Then one day in July, four weeks after Huffman had put the site live, traffic surged. Huffman

watched Reddit's site error log, which he kept visible at most times, speed up. The uptick in errors wasn't a bad thing in Huffman's mind—because one thing it meant was there were more users. It was apparent: Suddenly, Reddit had lots of visitors.

It didn't take Huffman long to figure out the source of the traffic to their single web server in Medford. Graham had posted a link to it at the bottom of his personal site, where he'd usually link to his latest essay. "New: Reddit is written in Common Lisp." This was Reddit's first real debut to the Internet: It was a launch. Within another month, there were a couple hundred registered users, some of whom were not Graham, Huffman, Ohanian, or their friends. They were like-minded readers of Graham's blog or frequent users of other similar sites, such as Delicious. "Everybody always says this about every early community," said Stone, who was building the desktop search tool, "but in the early days, the people who were using Reddit were literally the Internet's top power users, and every link was awesome."

One day in August, Huffman was away from his computer for most of the day; he'd self-consciously decided to take a mini-vacation from submitting links and attempting to populate the homepage, which only listed the twenty-five most popular posts from the previous twenty-four hours. He expected the page to be mostly blank when he checked back that evening. To his surprise, there were many new posts, some by usernames he hadn't previously seen. He was awed. Reddit was really working. Other people were really making its popularity engine churn. Reddit was truly alive.

HELL SUMMER

One hot midsummer night after a long day of working together, Ohanian and Huffman cracked open beers and fired up *World of Warcraft*. When Ohanian looked at the clock it was after 3 a.m. He strode to his room, threw his clothes on the floor, and thumped down onto his mattress, also on the floor. At least he was now exhausted enough to ignore the heat, and the nagging thought that they should cave in and get an air conditioner.

At 6 a.m., his BlackBerry started ringing. Foggy-headed and damp, he heard an older woman's unfamiliar voice say, "Alexis?" As Ohanian rubbed his eyes, the woman introduced herself as Amber's mother. Amber and Ohanian had been dating on and off for a year. She'd been studying in Germany, and despite their long phone calls, their relationship was rocky. Amber's mom didn't seem to know, or care, at the moment. She blurted through the phone that her daughter was in the hospital. She'd had an accident and was in a coma.

Ohanian sat up and started pummeling his pillow with his fists. He cursed. Once he calmed down enough to speak, he called his dad. He explained the situation: The night before, Amber had

tumbled approximately five stories from a window of the apartment she'd rented while doing a summer abroad in Germany. She'd suffered extreme head trauma and a multitude of other injuries. Improbably, miraculously even, she was alive. He knew he needed to see her—even if she couldn't see or speak to him.

Amber was one of the most exciting people Ohanian had ever met. She was exuberant and curious, and wildly passionate about nearly every new thing she encountered. She was the type who'd strike up a conversation with a stranger and walk away with a newfound interest in fifteenth-century German poetry, or, say, the physics of bumblebee flight. Ohanian relished their wide-ranging phone conversations that summer, in which she educated him about Goethe, and he told her about building a tiny web company. He'd started to think of her as his girlfriend, "even though she probably wasn't," he said.

But now it appeared something awful had happened. A fall seemed unlikely. Had she attempted suicide? Amber was in critical condition, an ocean away.

Chris Ohanian booked his son a flight for the next day. Alexis flew to Baltimore that morning, picked up his passport, and boarded a flight to Germany. He stayed in the hospital with Amber, sitting alongside her mother, for the next ten days. Amber didn't wake from her coma during his trip.

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Amber's initial recovery took roughly six months; once she awoke from the coma, her memory of Ohanian and their relationship was patchy. Still, Ohanian visited again toward the end of summer, and when in Medford took to calling her every day at noon, so he could talk with her while she ate dinner. When not on the phone, Ohanian attempted to return to regular life, but it was hard. Still, he had Huffman. And Reddit, which had turned a corner.

New users, who'd found Reddit through Graham's site or by word of mouth via Ohanian and Huffman's college friends and

their Y Combinator batchmates, or maybe even through the posters and stickers Ohanian plastered around Cambridge and Medford, were becoming regulars.

As summer drew to an end, Huffman observed a flow of content from disparate IP addresses every day. Huffman and Ohanian's goals shifted to nurturing that audience. "Let's not let the users down" became their new mantra. They used their multiple accounts to upvote submissions they loved and spent hours responding to user email. They schemed up new features, and Huffman's patrol of the error log continued. Within months, twelve thousand people would be navigating to Reddit every day.

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Ohanian had much of his heart torn by Amber's accident, and in the waning weeks of summer he called his parents often. One evening in September, before Chris and Anke left for Norway to celebrate their twenty-first wedding anniversary, they had a particularly lengthy, emotional talk with Alexis. He knew life had been a struggle for his mom since her only child had left for college four years earlier, and he was glad for his parents to be able to celebrate now, together, with this vacation.

The following morning, Ohanian was surprised to see his mom's phone number show up on his vibrating BlackBerry. Her voice quivered. It sounded like she was holding back tears. "Alexis, I'm sorry," Anke Ohanian said. "We put Max down."

Max, the Ohanian family's dog, adopted when Alexis was a kid, had for the past two years been sick with Cushing's disease, which is usually caused by a base-of-brain tumor and results in a host of nasty symptoms, such as thinning skin, sagging abdomen, and nervous system malfunction. Max had been a stand-up dog, a living, wagging symbol of Alexis's relationship with his mother. That summer morning, Anke and Chris had dropped Max off at a kennel, where he had a final, terrible seizure. After ten years with the Ohanian family, Max was gone.

Three hours later, Anke Ohanian fell to the floor of a Lane Bryant dressing room in the throes of a grand mal seizure. Within weeks, she was diagnosed with grade IV glioblastoma multiforme. Brain cancer.

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Ask Ohanian about his mother, her diagnosis, or her death two years later, and he's likely to recite a few lines that he has down pat. They are as follows:

> Three months into Reddit she was diagnosed with terminal brain cancer. The first day that we learned of it I flew to Boston to be with her at the hospital. When I got there, literally the first words out of her mouth were, "I'm sorry." That was the type of selfless person she was.

There are the lines he's decided it's okay to say, lines he has repeated over and over down the course of years, so they don't make him cry. He has grown comfortable with the lines, and with her death, through repeating them over the years like a mantra.

There are more lines. Lines that explain, in nerd vernacular, what Ohanian took away from his mother's terminal illness:

> Having that kind of grounding was the cheat code I was gifted by her. It gave me perspective I carry to this day. On the worst day I have at Reddit, it's a reminder that it's not that bad. There's a limit to how bad it can get. I felt like I got all the wisdom someone usually gets later in their life when I was twenty-two.

This period, the "hell summer" in which Reddit was born, has become an enduring ball bearing in the mechanism of Ohanian's public-speaking career and part of the Reddit company legend.

By turning even these most painful moments into part of the

story, Ohanian has helped build scar tissue on his emotional wounds. But his personal issues that summer and over the following years necessitated his absence from Reddit for significant chunks of the site's formative days. There were weeks away in Germany, and weekends in Maryland to be with his mother. Ohanian knows his response to these moments affected Huffman—and Reddit.

What Ohanian doesn't say in his public speeches is that making the decision to go to Germany immediately after receiving the phone call from Amber's mother has become a sticking point for him: It was the first day of so many he'd leave Huffman alone with Reddit—and has become to him a turning point that has taken on outsized importance in his memory.

While Ohanian was away, there was an empty desk in the sunny central room in Medford; there was no longer any point in Huffman blasting "Hollaback Girl" by himself, or wheeling over to the PlayStation. Occasionally they'd talk on the phone, but mostly, Reddit was on Huffman toward the end of the summer of Y Combinator, through the last Tuesday dinner, in which the young men flipped over one of the tip-happy benches and etched their names in ballpoint pen.

Ohanian recalls being on the phone with Huffman while on another trip to Germany after Demo Day, the final presentation day for the scrappy companies, in which they sought investment from Graham's friends. None of the investor friends bit, but Graham offered Reddit another round of funding, $70,000, in exchange for additional equity, which became known as the "Paul Graham special." It was both a show of continued support in what they were building and a plea not to give up and move home with their parents.

Fund-raising was supposed to fall under Ohanian's duties, but "Steve had to drive that whole thing," Ohanian recalled. Years later, he would feel guilty about this. For his part, Huffman, despite not being the overly warm friend—not the one to pass a tissue—never once complained about his additional duties shepherding Reddit during this time. He did what he thought was right. When he

needed to, he scrounged for the piece of paper Ohanian had left him with all the passwords and logins for their credit cards and bank accounts.

"These awful horrible things that happened to us—this stuff beyond our control—this could not break us," Huffman said later, channeling his thoughts from 2006. "So if we have, like, an employee that doesn't want to work anymore? We will figure it out. That will not be the thing that destroys Reddit."

HOW TO ACT LIKE A REAL ADULT

Kanye West's "Gold Digger" bumped from the tinny speakers at Chris Slowe's third-floor walk-up apartment at 368 Washington Street in Somerville. Only a few of the dozens of mostly guys present bopped their heads awkwardly, and their Halloween costumes—some floppy ears, some lightsabers—bopped, too. When the first bare beat of the next song was immediately pierced by Gwen Stefani's voice—"Uhhhh-huh this my shit"—Ohanian cracked a smile, searching for Huffman above the crowd. It was their summer anthem, the song that had gotten them out of bed so many mornings just months earlier, before so much had unfolded in their lives. Before Reddit.com existed.

His Y Combinator friends, and some of their college buddies, huddled in groups. Chris Slowe's physics labmates mulled about. There was one woman he didn't recognize, though. Short, with a dark, nearly black bob, she didn't seem self-conscious—and talked a mile a minute. "This is Jenny 8," Zak Stone said to Ohanian. Jenny Lee shook Ohanian's hand, and explained that "8." was her middle name, and part of her *New York Times* byline: Jennifer 8. Lee.

Lee had met Stone just months earlier; she'd introduced herself after seeing him perform Chinese yo-yo at an unconventional wedding and learned he was a Harvard physics major raised in Hawaii. Lee was drawn to intense quirks, and extremes of talent and intellect. She herself was a study in outlying: a native New Yorker born to Chinese immigrants who'd graduated from Harvard with degrees in economics and applied mathematics, now a reporter for the *New York Times* who specialized in capturing moments in the zeitgeist.

Lee had accompanied Stone to this Halloween party on a whim, and found it impressive that it didn't have a keg; it had a table with a bar setup, and even snacks. Classy, she thought, by student-housing-in-Cambridge standards. Despite her eagle eye for the interesting, Lee had no way of knowing that among these lanky, awkward young men were several who within the decade would change the world—or at least the Internet. In the mix was Justin Kan, the cofounder of Kiko, who would go on to found a live-streaming company that transformed into Twitch, which more than one hundred million people watch per month (Amazon acquired the company in 2014 for nearly $1 billion). There was Trip Adler, the founder of Scribd, an online library and document-sharing platform with more than three hundred thousand titles. There was Aaron Swartz, who would become renowned for his prodigal work on open-Internet projects, and who would become an activist against government regulation of the web. And there were Steve Huffman and Alexis Ohanian.

As Lee shook the hand of the man wearing the floppy brown tricorn hat and fake dreadlocks, her head craned. Ohanian, tonight dressed as Captain Jack Sparrow, was more than a foot taller than Lee. He was gregarious and enthusiastic, and struck her as a showman, especially amid all these engineering and mathematics majors. And, considering that he kept introducing her to new people around the room throughout the evening, he had a dash of social grace that made him seem very mature for twenty-two. Well, maybe not that mature: Later that night, Kan passed out on the couch,

and by morning, Ohanian had drawn a mustache in Sharpie on his upper lip.

Over the following year, Lee invited Ohanian to crash on her couch in her Harlem brownstone whenever he traveled to New York on the no-frills Fung Wah Bus for business meetings. In exchange, he'd bring her take-out dinner during her night shifts reporting for the *Times* metropolitan desk on the third floor at 229 West 43rd Street. There, on slow news nights, in Lee's beige cubicle decorated with just a dried-out houseplant, she taught Ohanian how to act like a real adult.

"If it weren't for her, I still wouldn't know how to write a proper email to someone," Ohanian said. Lee also helped Ohanian navigate the world of New York City journalism and publishing. Over the years, she introduced him to dozens of journalists, editors, publishers, agents, and writers. At one party in her brownstone, Ohanian met Liz Nagle, a literary editor for Little, Brown whom he'd date for the next four years, with whom he'd travel extensively and live with in both Brooklyn and San Francisco. Lee also introduced Ohanian to Rachel Metz, a reporter who'd worked with Kourosh Karimkhany, who'd just been hired by Condé Nast with a mandate to infuse the old-media brand with fresh digital life by way of acquisitions.

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By the autumn of 2005, as fresh packs of college students once again began roaming Cambridge and Medford, Reddit was growing so much that it sometimes struggled to stay online. For Huffman, this was both a rush and a chore. The site crashed frequently, and the maintenance of posting new articles and rebooting the server exhausted a lot of his day-to-day energy. Reddit had been built and launched quickly—so quickly that both Huffman and Graham knew the site would soon outgrow some of its original programming infrastructure. This fact, now daunting, had been by design: Launch fast, with a minimum viable product—and save per-

fection and scalability for later. In startup vernacular, this is known as incurring "technical debt." And Reddit's hulking loan was coming due.

Graham urged Huffman and Ohanian to have dinner with Chris Slowe, their batchmate from Y Combinator. Slowe spent his days writing software and attempting to freeze light, and looked the part, with his T-shirts tucked into his high-waisted, belted light-wash jeans. But he drove a cool car—a white Mustang—and always seemed to possess an easy gravitas.

The startup Slowe and his cofounder, Zak Stone, were building stalled at the prototype phase when summer ended. Apple had launched Spotlight, bringing to market the desktop search tool they'd barely built. Still, Slowe had one foot firmly in startup land and did not want to extract it. He'd developed a daily routine of waking early and working all day in the lab, only taking a break to train for a half-marathon over lunch. In the evening, he'd put in another five or six hours brainstorming about natural-language processing for his startup. He lived on caffeine and adrenaline, and he loved it.

For Slowe, by year four of his graduate work, physics had become a *job* in the most *meh* sense of the word. He wasn't dissatisfied, and he still assumed that his lab life—stuck in windowless rooms modeling out hypotheses on stodgy computers, experimenting only a tiny fraction of the time—resembled his future postdoctoral life. But his little evening endeavors in tech projects were a chance to exhale.

Over dinner with Ohanian and Huffman, Slowe learned that they needed a place to stay that fall as their summer sublet expired. Stone was moving out, back to a Harvard dorm that fall. Dinner was a blast, and he invited Huffman and Ohanian to move into his third-floor walk-up apartment on Washington Street. He figured they'd help pay the $1,650 monthly rent and wouldn't trash the place. He didn't figure their presence would shift the entire trajectory of his life.

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Huffman and Ohanian decided to face the windows this time. They plunked their desks there in the living room, backs to each other. The only view from Huffman's window was the brick-colored siding of the house next door, a few feet away. With Chris's desk, too, there wasn't room for a couch or TV, and one had to shimmy between wheeled desk chairs through the living room to get to the kitchen.

For sleeping, Ohanian claimed the big sunny room in the front of the apartment overlooking the stoplights of the bleak Somerville corner, and Huffman took the other back room. Slowe—congenial and quiet and smart—was a fantastic roommate, they quickly learned. He was unflappable and, bonus, he could cook. He made chicken and rice and even assembled pizza from scratch. He woke up early, around 6 a.m., and, like a rooster for the Internet, would knock on Huffman's door and let him know whenever Reddit's site was down.

Slowe had been a Reddit user from the start. He'd been outed as one of the first posters on the site that past summer at a get-together at Graham's place in Cambridge. While chatting with some friends there, he overheard Graham raise his voice from the other room. "And who is this KeyserSosa?!" Slowe popped his head into the room and sheepishly raised his hand, admitting that the username KeyserSosa, an unintentional misspelling of the name of the notorious (and perhaps nonexistent) crime lord Keyser Söze in *The Usual Suspects*, was him.

One week that fall, the jolly Internet rooster's job became increasingly intense. A few days in a row, Reddit had been offline at dawn, and Huffman, a night owl, was sick of being woken so early. He demonstrated to Slowe how to connect to Reddit's server and restart it.

At the time, Slowe still held out the dream of his own startup; he and Stone were halfheartedly trying to turn the code they'd written into a dating site called Cryptomatch. Now—restarting the server

here, reviewing some code there—he was increasingly devoting his out-of-lab hours to helping solidify Reddit. It was a bittersweet slide.

Speaking about it many years later, Slowe still has mixed feelings over effectively leaving Stone for Huffman and Ohanian. "It was the same kind of feeling as you have when someone's cheating on you. We didn't talk a lot after that, and he went off and did his own thing, and I did my thing." Stone had over that past summer become the closest friend Slowe had ever had. Now they were both, separately but in unison, letting their dream project stagnate. One afternoon they together moved out Stone's final boxes, and they had a hug goodbye that felt oddly final. Slowe, who is rarely inarticulate, struggled to find words to describe the parting, offering up only "sad" and "awkward," and saying, "I guess we talk about it at therapy now."

After Stone walked away with his boxes, Slowe took a deep breath and walked back up the two long flights of stairs to the apartment, to find Huffman and Ohanian, feet up, letting their wheeled desk chairs slowly drift across the slightly slanted wood floor. He laughed. He'd long ago become accustomed to the sloping floor. He grabbed a roll of duct tape, with which he'd stabilized his own chair's wheels by wrapping them, so he could work without rolling away from his computer. He tossed it to Huffman.

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The Washington Street apartment was on a desolate block, had slanted floors and a rickety back stairwell that led to a dirt-floor basement with a single bare light bulb and, mysteriously, a grave-sized pit dug into the dirt. But the apartment was bright and just a ten-minute walk from Harvard's campus. Not all the Y Combinator guys were so lucky. Aaron Swartz had spent the past summer awkwardly cohabitating in a tiny MIT dorm room with a foreign stranger he'd met on the Internet, whom he'd lured with the promise of 10 percent equity in his not-yet-launched company. But

the cofounder of Infogami, Simon Carstensen, had thrown up his hands by summer's end—Swartz seemed to not trust his code and rewrote it frequently. Carstensen flew home to Denmark.

Swartz had no desire to return to Stanford for sophomore year and more sociology classes. He'd found a calling—and it didn't involve what he called the "fake world of school doing some silly assignment that has no real purpose." But to continue making something "real," he'd need a roof over his head.

Graham and Livingston agreed to take him in. They had plenty of room in their home in Cambridge, and after all, Swartz was only eighteen years old—a boy, really. His company, Infogami, had impressed all his colleagues by late summer, but Swartz had failed to put it online or secure additional investment. Despite his connections, nothing panned out. "I found myself stuck without any money, any partners, or any place to live. The whole experience was incredibly trying. There were many days when I felt like my head was going to literally explode," Swartz wrote on Infogami.

He brought his concerns to Graham over dinner the first week of November, saying he would be giving up on Infogami if he hadn't found funding, a new partner, or an apartment by the end of the week, he later wrote. The subject of his birthday—the following day—came up. He was asked what he wanted as a gift. "A cofounder," he joked. He wrote:

> The next morning was [November 8] my birthday and I was awakened by a knock on the door from Paul. "I thought of a solution to your problem," he exclaimed with his inimitable energy. "Merge with Reddit!" "That's an interesting idea," I said, still picking the sleep out of my eyes. As we discussed it, we just got more and more excited—it seemed like such a perfect fit. I still can't even imagine a better solution.

ROUNDING ERROR

Huffman and Ohanian were listening to the mix CD they'd compiled specifically for this November 2005 trip to San Francisco when they pulled up to the Googleplex in Mountain View. After locating their designated parking space, they were greeted by Chris Sacca, who had been hired at Google as corporate counsel in 2003 but had already amassed a wide range of responsibilities, including helping to create the company's New Business Development organization. Sacca, with his auburn hair and a signature uniform of cowboy boots, jeans, and a vintage-looking Western-style shirt, had confidence to rival Ohanian's, which was evident from his saunter as he led them inside a glass building.

Ohanian expected scooters and Ping-Pong tables and plentiful snacks; still, what he saw awed him. There were, among the many sprawling lawns and all-the-lobster-bisque-you-can-eat cafeterias, some true marks of luxury: a row of miniature swimming pools with jets that allowed their user to swim in place; a full-size replica of a dinosaur skeleton.

Sacca had invited the duo out to California after being introduced to them by Graham—and after seeing a small but noticeable

bump in traffic to his site following a link being posted on Reddit. He had set up a day packed with impressive meetings, including with a minor idol of theirs, Evan Williams, whose startup, Blogger (an early tool for letting anyone easily post online), had just been purchased by Google. They also sat down with a bunch of Google engineers, who joked with Huffman and asked him mind-expanding questions like "Give us three different ways you could scale Reddit" and "What would you do with unlimited resources?" Huffman loved shooting the shit with the group of talented engineers. "It just felt awesome," he said. He'd initially missed the entire point of the exercise, which would have been apparent to anyone with more experience in the workings of Silicon Valley: This was a formal "tech interview." Reddit was being sized up for acquisition.

After leaving the Googleplex, Huffman and Ohanian visited Yahoo—also thanks to Graham's connections. Huffman felt dread upon entering Yahoo's campus, which, after Google, struck him as very quiet. His view was perhaps colored by a meeting he'd had with a couple Yahoo business development executives back in Cambridge. They'd questioned the efficacy of usernames and suggested Reddit scrap them, because they didn't correspond to real human identity—something that felt at the time a little privacy-intrusive but that Facebook, then just a year old and exclusive to college campuses, was making inroads on. Huffman took offense.

"They were just the biggest bunch of pricks," he said. A vice president of Advanced Development scoffed at Reddit's total traffic, which was indeed meager, muttering that it amounted to a "rounding error" to Yahoo. "Which it was," Huffman admits. "But you don't need to be a jerk about it."

Still, thanks to Google, by the time Huffman and Ohanian returned home to Somerville, they were feeling incredible. Traffic on Reddit had risen while they were gone. It was now steadily growing week by week. They were the sort of company Google might just be interested in buying. Indeed, within days and several emails exchanged with Sacca, he was asking whether they'd be interested in coming to work for Google.

It was an offer to begin acquisition talks—but the phrasing, Ohanian knew, meant what Sacca had in mind was an "acqui-hire," or an acquisition common for Google at the time, a small deal that technically absorbed a startup, but with the primary aim of hiring its talented engineers rather than developing its technology. There wasn't a figure attached, but it didn't take much sleuthing for the young men to assume that it would be a salary, bonus, and a couple hundred thousand dollars in Google stock. They called it $800,000.

It wasn't enough. Graham and Y Combinator had invested a total of $82,000 in Reddit—even if they had a 10 percent stake, it wouldn't be a significant payday. But the hint of an offer was affirming: Ohanian and Huffman came away with the sentiment Ohanian later characterized as, "We're doing well enough that they think we're not going to screw this up."

Huffman wasn't ready to give up building Reddit and work for Google. He came to agree with what had already become Graham's sentiment: If Reddit wouldn't sell, it would have to grow. That meant bringing on at least one other full-time developer.

Graham pitched Huffman on taking Aaron Swartz. Huffman admired young Swartz, and despite Infogami's stagnation, Swartz was already a legend among certain programmers, an Internet wunderkind whose online clout could only bolster Reddit's. Ohanian remembers Huffman coming home and pitching him on the idea. Huffman knew that Google had also interviewed Swartz—and was sniffing around at Slowe's YC company, Memamp, too, though it didn't seem to be biting. Together, Huffman posited, the four of them could create a dream team. Ohanian was skeptical. He and Swartz had never clicked. But he knew Huffman desperately needed programming help, and so deferred to him on the decision.

Swartz was in, with little hesitation. The wild card was Slowe—his schedule was already overloaded. He likely wouldn't want to give up his doctoral work. Still, Huffman was optimistic about turning Reddit into a band of four and immediately called Slowe's cell phone.

Slowe remembers the moment with the clarity of mountain air.

He was standing in a Peet's coffee shop in Harvard Square, taking a break from his lab work. "I didn't even have to think about it," he said. "I was like, 'Yes, absolutely yes! One thousand times *yes*!!!' "

The foursome started work in earnest the very next day. Swartz later wrote, "Together, we felt unstoppable."

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While Reddit and Infogami bore a surface-level similarity—both were sites empowering users to post what was on their mind—their core DNA structures were incompatible: They'd been programmed using different languages. To merge, they'd need to speak the same language. Reddit had been written in Lisp, the obscure language favored by Graham. It lacked the extensive online code libraries other languages already possessed, which meant that Huffman spent a lot of time engineering unique solutions to wide-ranging problems, and writing simple functions out himself. Swartz insisted that Reddit would function better if they rewrote it in Python, a general-purpose, highly readable programming language. Huffman agreed.

The pair went heads-down and rewrote most of Reddit over a single weekend. Huffman and Swartz didn't just rebuild the functions that made Reddit tick, they also built an entirely new foundation on which the site—and others—could rest. (It was called web.py, and wasn't widely adopted, but several companies and websites were built on it, most notably Russia's answer to Google, Yandex.) The rewrite of the code gave the founders significantly more ability to do future database migrations, and to add future features or elements, such as messaging between users, into the site. It also allowed the capacity for certain structural elements of Infogami, which was essentially a blogging platform, to conceptually exist within Reddit.

The transition to Python permitted Huffman and Swartz to nix a number of deep-rooted glitches in Huffman's early design of Reddit. His post announcing the move ended with a textual wink: "I

can't wait to introduce some of the new bugs we've been working on as well."

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Swartz and Huffman became inseparable. They even shared a computer most days, swapping Huffman's Mac iBook G4 laptop back and forth, tandem programming. Several times a week they'd take two-mile walks together between Huffman's home on Washington Street and Graham's home in Cambridge where Swartz lived, or to the Y Combinator office on Garden Street. They'd theorize about the future, about the real integration of their ideas. One theory they talked out was that the Internet could be seen as being comprised of three elements: search engines, such as Google; applications, such as Yahoo Mail; and lists of things, such as Wikipedia, news sites, and blogs. Under this theory, Infogami and Reddit were both lists.

Huffman and Swartz knew that within Reddit, they could also allow users to have their own page, and power their own blog or publishing site, right there—thus integrating Infogami. Everyone seemed sold on the idea of a multipurpose publishing platform, from Graham to Slowe, who said, "Together, you kind of have this whole platform. You can build content, you can make content, this whole thing." None of them could have foreseen what they were getting into.

Slightly more than a month later, the arrangement became lawyer-official. Infogami, or Oubliable.com Corporation, the name it had been registered under as a Delaware corporation, merged with Reddit, a.k.a. Redbrick Solutions, Inc. The surviving company would be renamed Not A Bug, Inc. The name was both a joke on a common programmer refrain, "It's a feature, not a bug," and a response to Graham's quip from the past summer in which he referred to Reddit's mascot alien as a "bug." Huffman and Ohanian signed the board resolution, in lieu of actually having a board.

Huffman, Ohanian, and Swartz were named new directors of

Not A Bug, Inc. in January 2006, and given the respective titles of president, secretary, and treasurer. Each was issued equal shares of the company, roughly 24 percent. Graham and Y Combinator likely retained about 7 percent each, and a percentage remained for future options. Swartz had convinced his former partner, Simon Carstensen, to hand over his meager shares of Oubliable, so he didn't require a cut. None of the shares required the passage of time to vest. Swartz, nineteen years old, was now nearly one-third owner of Reddit.

Chris Slowe was brought on as first employee, with some stock and a salary. He wasn't treated on paper like a cofounder, because he simply couldn't put in the hours. He'd be working on his Ph.D. for at least the next year. Ohanian described the arrangement as casual, satisfying everyone involved. "We said, 'Okay, we'll just take as much of your time as we can writing code.'"

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Forks clinked against the china at UpStairs on the Square, a Baroque masterpiece in fuchsia, lavender, and gold paint two blocks from Harvard. Huffman and Ohanian once again sat at dinner across from one of Huffman's idols: Joel Spolsky, founder of Fog Creek Software and something of New York City's answer to Boston's Paul Graham.

Spolsky, known as much for his popular tech blog *Joel on Software* as for founding New York City–based Fog Creek Software, was intrigued by Reddit, at least for its caches of programming news. Huffman and he talked programming; Ohanian gregariously joked, as had become his standard line, to Spolsky, "I only make the little alien." Spolsky, unlike so many other coders, was impressed by that statement—and not just for its humility. Spolsky had noticed that the alien mascot at the upper left-hand corner of Reddit.com would be on some days embellished with varying costumes in nods to minor holidays or sporting events. Occasionally Snoo the alien would be shown over the course of a week partaking in a series of

events. To Spolsky, the subtle changes to Snoo gave users an addictive little story to follow and another reason to love the site. Visually, Reddit was chalk-dry. Snoo was warm and friendly; Spolsky loved its "big baby eyes."

Spolsky, who has bushy eyebrows and a sly, friendly smile, told Ohanian to keep it up. "It makes the site friendlier," he said. He likened Snoo's shenanigans to miniature marginalia cartoons from decades-past *Mad* magazines.

Huffman asked Spolsky his opinion about a feature he was ready to add to Reddit: comments. Up to this point, Reddit's site consisted of headline links whose original submitters received karma points to their username when their post was upvoted. Beyond amassing karma, usernames weren't good for much—though they did serve to differentiate Reddit from message boards like 4chan and 8chan, on which all posters were strictly anonymous.

Huffman had the distinct impression that Graham disliked the way comments worked on competing sites, such as Slashdot, and wouldn't welcome them on Reddit. Spolsky joined that camp, telling Huffman that he didn't think comments worked well *anywhere* on the Internet; they were a write-only medium, meaning, individuals loved to type in their thoughts the same way they loved to hear themselves speak. His conclusion: "Comments are going to ruin Reddit."

Huffman, though, had already made up his mind. At the time, Slashdot's comments relied on an intricate moderator-based system for ranking and displaying comments, in order from best to worst. "That dynamic, I totally just copied right from them. Except I didn't want to implement the moderation system," Huffman explained. "We already had this voting system, so I decided just to put voting on the comments, too."

Ohanian designed multiple ways comments could appear when visible on the site. Huffman launched the whole feature suddenly on December 12, 2005. He posted to Reddit's blog, "We added a commenting system today for your enjoyment. The comments are votable and can be sorted just as all the other links on reddit."

Many users were livid: A lack of comments had differentiated Reddit from Slashdot, where lots of the most frequent Reddit visitors were also contributors. But for Huffman, comments, which were initially powered by Blogger, were instantly validating. All of a sudden, links to articles elsewhere online became their own dynamic pages, containing discussions between real people. Huffman immediately witnessed something online that he'd only seen before in his onscreen chat logs: the real-time flow of information and opinion. Before comments, his primary way to monitor Reddit's growth and traffic was to examine its error log or its "new" page, which displayed the twenty-five most recent entries at a time.

Before long, Reddit's commenting system would be seen as visionary. Its unique combination of displaying comments by popularity and threading them together, which kept all responses to a comment or question in one movable block of text, served a few important purposes. One of the major problems with comments online—on news sites, blogs, and social media alike—was that they displayed chronologically, allowing trolls and spammers an equal voice to informed critics and enthusiasts. "To me, that's the dumbest thing ever," Huffman said. With his approach of letting users' votes power the ranking of comments, and simply not displaying the most downvoted ones, Reddit deftly hid dull, promotional, harassing, or simply idiotic comments (all of which Huffman simply called "shitty comments"). Negative 5 points, and a comment turned gray and became collapsed, so a user would need to click, or opt in, to read specific threads of unpopular comments. Well, except for those that were gloriously atrocious, Huffman later explained with a sly smile. "If it had fewer than negative 100 points we would show it again, because it was either so offensive or so stupid that it was probably worth reading."

As dinner at UpStairs on the Square wrapped up with coffees and dessert, one subtle comment from Spolsky illuminated that he was already a true Reddit believer. He told Huffman, "You will never write a résumé again." Huffman thought, *That sounds nice, and is*

something worth chasing. It stuck in his mind for years, as highly complimentary—if at the time more than a little unbelievable.

Sure, most nights the Reddit foursome ate leftover pizza for dinner; Huffman worked day in, day out staring out a window at a wall of brick-colored siding. He didn't even have a salary. But Spolsky had been correct: Huffman would never have to write a résumé again.

THE ALGORITHM AND THE CUPBOARD

Slowe's working hours were unorthodox, but they allowed a measure of independence that resulted in extraordinarily meaningful contributions to Reddit's growth. He typically joined the rest of the team in the evenings, once he came home from the lab and cooked dinner, for just a few hours before everyone was bleary-eyed and shuffled off to bed. To fit that workflow, Huffman handed him discrete tasks involving algorithmic equations or big, conceptual questions. One of the first was to create a reliable source of site analytics, denoting traffic and tracking it. This was before Google Analytics was available to little companies like Reddit; Slowe adeptly tackled the challenge by rendering graphs for easy viewing of the site's access logs. A few other minor projects also went well. Then he was handed the algorithms. A set of three managed on-site spam, algorithms that Huffman created in part inspired by Graham's work on categorizing certain types of incoming email. Reddit's versions at the time detected likely spam user patterns, such as when a newly registered user immediately posted to the site.

Then there was the elusive hotness algorithm. As Slowe, ever humble, remembers it, he helped Huffman recraft the hotness al-

gorithm so that it could "scale nicely." As Huffman remembers it, Slowe tinkered and learned, and within a month delivered a seriously improved hotness ranking system that was both simple in its code structure and sophisticated in its output; it was difficult to game and accurate in its effect. Previously, the algorithm Huffman had deployed performed a ranking of posts based on their upvotes per hour, roughly every ten minutes. More upvotes on a post equaled more "hotness," and thus a higher ranking on the popular homepage. Slowe's formula did this constantly, in real time and in the site's background. More important, perhaps, it also accounted for time. It created a total score for each submitted post based on upvotes and downvotes, but that total score would be more valuable in the present than in the past. That ensured that newer posts, or newly popular posts, gained momentum quickly, and older ones could keep their rankings only if their popularity kept up. In short, it foresaw the nature of virality that would emerge online over the next decade, and allowed it to exist on Reddit. Huffman said, "That was 100 percent Chris."

What Slowe wrote was exceedingly effective and in fact did scale along with Reddit. For the next decade of Reddit's life, this algorithm served as the foundation for the site's front page and the popularity ranking of posts on every page throughout the site.

One midwinter evening, instead of tromping back to the Washington Street walk-up after lab, Slowe ventured out across the Charles River to drinks at a pub called Clerys in Boston's Back Bay neighborhood. It was an outing organized by friends, and they'd brought friends, one of whom had enormous twinkly brown eyes and shiny hair. She was effervescent—Greek, confident, funny, and just so different from anyone he knew. She talked a mile a minute. Slowe chatted with Kristen Sakillaris all night. She worked in fashion but could hold her own when the conversation turned to his lab work, due to her social grace and a familiarity with it; her father was a chemical engineer.

After a couple weeks of chatting on Gmail (the first time a message from Slowe popped up on her screen, Sakillaris, who had never

used Google Talk, a.k.a. Gchat, said she thought, "Oh my God, he is so smart, he is *in* my computer!"), they decided to go out. Awkwardly—it was Valentine's Day *and* a terrible snowstorm was under way. Still, Sakillaris scrubbed her nails and put on heels and told her girlfriends she was going out to a movie at the AMC Loews in Boston Common.

"Wait, with who?!" two of her friends demanded. She told them they'd met that night at Clerys. "Oh my God, the nerdy one? No!" They cracked up.

Slowe was beaming as he got home a bit after 11 p.m. from his Valentine's date, even though it was just a mediocre Steve Martin film and all they'd had for dinner was popcorn. It'd been a long time since he'd had a good date, with someone he wanted to see again. He definitely wanted to see Kristen again. Suddenly Slowe's phone rang. It was Swartz calling.

"Hey, can you come get me right away? I'm moving, I just need some help with some things," Swartz said. Slowe sighed; he was going to put in a couple of hours on his Reddit work anyway, so what was the difference? He agreed to help Swartz and drove his 2001 white Mustang over to Cambridge, to Graham's house, which was otherwise deserted. Graham and Livingston had moved out to the Bay Area to run a winter program of Y Combinator, leaving Swartz alone in their massive home for the past couple months. What had once been a fantastic arrangement for Swartz—a free room in a spacious home, with free food and plenty of dinners out with Livingston and Graham and their tech luminary friends—must have become somehow unbearable. Slowe hauled Swartz's twin mattress out to the driveway and shoved it into the backseat of the little sports car. On the way back to Washington Street, Swartz rode shotgun with a couple of cardboard boxes on his lap.

Swartz moving in had been discussed—*floated*, Slowe thought—and like the rest of the Reddit crew, he assumed they would have more convincing to do before getting Swartz out of his free, exceedingly nice Cambridge home. Whether something had come to a head with Graham and Livingston, Slowe wasn't going to question it.

Swartz crashed on the living room couch that night. In the morning there was the matter of what, physically, to do with him. There wasn't an extra room. Huffman was willing to share, but his was the smallest bedroom. Swartz joked, "Oh, I won't take up any room. I'll just stay in the cupboard." Over beers, it made everyone laugh, and they played along. But then Swartz removed dishes and cereal from a lower set of kitchen cupboards and equipped it with a pillow and a bare light bulb. He crawled in.

Quickly, Swartz's little cubby hideout became more of an annoyance than a joke. Sakillaris came over to visit Slowe and was bewildered by seeing a man popping his head out of the cupboard. She later recalled the bizarre imposition of what Swartz assumed was the opposite, an act of shirking away, making himself meek and unimposing. "It was like, *What are you doing? I'm trying to make some tea and you're sleeping in the cupboard and I'm probably going to burn you because you're in . . . a . . . cupboard.*"

Swartz possessed a combination of youthful frailty and the pale puffiness of a formerly chunky kid. He was small and doe-eyed, and people, particularly older people, doted on him like the child he almost still was. (Right after he arrived in Boston, having been dropped off by his father, Livingston delivered an air conditioner straight to his dorm room at MIT. This was months before taking him into her home, where she had to force him to cut his fingernails when one in particular grew an inch beyond reasonably long.) Swartz had the habit of wearing dark, oversized T-shirts, his favorite being one from Foo Camp, an annual hacker gathering, and although he could argue fervently for his beliefs in a conversation, to the point of offense, he generally attempted to cut an unimposing figure. He worked tucked in corners, or with his legs pulled under his body in the corner of a couch, with his laptop and his Sidekick phone in front of him—together they formed a shield, a technological invisibility cloak.

Swartz loved making things. He loved producing small bits of writing on his blog and solving problems with code, and some of the awkwardness of daily interactions also reinforced the behavior

of hiding behind a device. He disdained authority, and disliked the feeling of being in any sort of position of perceived superiority—down to asking for help from librarians or asking for a beverage from a flight attendant. He posted on his blog in 2007:

> If I rang the call button, I tell myself, I wouldn't ask for a Sprite. I'd just ask for water. Asking for a Sprite, it'd seem like I was interrupting them just so I could get my soda fix. Like I was some sort of petulant child who had to have his soda and was going to throw a temper tantrum if they didn't get it. Like a troublemaker, the kind of person they look down on. But water? Water they'd understand: it was a genuine medical request, a normal, physical human need. Something totally worth taking the extraordinary step of pressing the flight attendant call button.
>
> But I can't bring myself to do it. It seems like such an imposition.
>
> This, I suppose, is the actual problem: I feel my existence is an imposition on the planet. Not a huge one, perhaps, not a huge one at all, but an imposition nonetheless. When I go to a library and I see the librarian at her desk reading, I'm afraid to interrupt her, even though she sits there specifically so that she may be interrupted, even though being interrupted for reasons like this by people like me is her very job.

His insistence on a sort of social austerity had a tendency to actually deprive him, and make others at best feel awkward, and at worst take pity on him. His introversion, though, did not apply when it came to the Internet. Swartz wrote frequently and in great detail about his real-life conundrums: the needing water, the horrible stomach troubles, the cupboard. Posts like these, to his friends, read as cries for help. But then what did it mean when Swartz posted a media clip or shared an accomplishment? He clearly relished being written about in the press—and when the opportunities arose, he wouldn't shirk. He smiled for cameras, and

was eloquent when interviewed. A 2005 *Wired* write-up of the Summer Founders Program hailed his not-yet-launched Infogami as a site that would let people "create rich, visually interesting websites" and quoted Swartz as saying, "Being around some of the bright lights of the technology world and having them expect great things helps you sit down and do it seriously."

When Reddit made it into the news later in 2006 he posted twenty-one links to press articles about it on his blog, apparently basking in the limelight. But the following day, he changed tack, writing a self-deprecating post that said he thought Reddit, at its start, was "childish," and even by 2006 was "just a list of links. And we didn't even write them ourselves."

In his frequent online writings, Swartz harnessed control of the story of his life. He was his own narrator and chorus, and it was in this style that "the cupboard," an annoying blip to Huffman, Ohanian, and Slowe, which lasted a matter of mere days, became a cog in the grander narrative of Reddit. "It became his thing, *the cupboard*," Slowe said later. "It went too far, and then he played it up—and he made it a story about how we put him in a cupboard."

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As 2005 turned into 2006, that winter was all time-sucks and misdirection for Reddit. There were more users, twelve thousand a day and counting, and after the code rewrite, Huffman was back to the habit of listening to users' desires. More than anything, users wanted tags. They wanted not an unending, perpetually flowing stream of random links, but rather, specified topics, and sorting of those topics. Delicious, the bookmarking site now also known as a popularity engine, was one of the first websites to popularize tagging and let users categorize content themselves.

Huffman was firmly opposed to tagging. Users' thoughts, even on fairly banal topics, were not subjective, he'd already learned. What might be considered "politics" by one person might be tagged as "left-wing liberal bullshit" by another. For about a week

that winter, he was swayed by a combination of user pressure and Ohanian's willingness to experiment with it. Ohanian spent a week sifting through and adding categories to every single post that had ever been contributed to Reddit.

When Reddit launched its content-tagging system, Graham hated it. Perhaps more influential was the opinion of Zak Stone, Slowe's former cofounder, who was still close friends with Huffman. "He really brought me back to reality," said Huffman, who abruptly turned off the entire feature. Ohanian was pissed: He'd spent every waking hour for the past week fine-combing all of Reddit, a herculean effort, and just like that Huffman turned it off.

Huffman had a different idea of how to segregate out some of the content being submitted to Reddit. He envisioned separate pages, Reddits within Reddits, for topics. He made a page for content related to the 2006 Winter Olympics, Olympics.reddit.com. It felt newsy and current, and helped him and Ohanian hone the vision for what would eventually become subreddits. He then went on a tear of making international "Reddits" (a French subreddit, fr.reddit.com; a Bahasa Indonesia site, id.reddit.com; and an Esperanto page, eo.reddit.com). Users could submit their ideas for new sections on request.reddit.com. One user created ask.reddit.com, which would stick, and spez created NSFW, which very much stuck. It was originally intended to be content riddled with profanity, nudity, or simply not safe for viewing at work.

"Anything goes here, enjoy," Huffman wrote on the company's blog. Asked later about it, Ohanian said he expected a lot of curse words. "It wasn't supposed to just descend into porn." But the descent was deep, and almost instantaneous. Huffman later estimated that the first ever porn was uploaded to Reddit within five minutes of his having created the NSFW community. Within a month, NSFW was almost entirely porn, and the ecosystem of pornographic material on Reddit, which has since accounted for upwards of 10 percent of the site's traffic, began to develop.

Politics followed NSFW as the second significant and enduring subreddit ever created—simply because Huffman was sick of wad-

ing through political posts on the Reddit homepage. This segregating of content was a matter of personal taste: He'd always disliked reading political coverage, and the glut of it on Reddit was getting to him. To ensure users complied with posting all political links to the politics section, Huffman logged on as any username other than his main one, u/spez, and berated posters for not using r/politics for political content. It worked like a charm, effectively quarantining politics. At this point, and for roughly the next year, there were three subreddits linked to in a box on the right-hand rail of the site: popular, politics, and programming. NSFW would have to be discovered by users on its own; there was initially no linking to it from the homepage.

Before long, Huffman opened up a feature that let anyone create any subreddit—though that URL was hidden at first and therefore rarely used. It was another step toward giving the masses power over what they chose to see online—regular people rather than editors—and that decision steered the course for the company's future more than they ever could have foreseen at the time.

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In early December, TechCrunch's curmudgeonly founder and chief writer, Michael Arrington, began to hear whispers that Delicious, which had built up a loyal following of about three hundred thousand users, was talking with Yahoo. Apparently that sort of traffic registered as more than a "rounding error" to Yahoo's acquisitions team, because when Arrington phoned Delicious's founder, Joshua Schachter, to hound him for information, Schachter informed him that the deal was already done.

Arrington's post on TechCrunch pointed out that as of that day Yahoo owned the two most important players online in "tagging," Delicious and Flickr, which had been founded by Canadian entrepreneurs Caterina Fake and Stewart Butterfield, and which allowed users to store and categorize their photos. (Yahoo had purchased Flickr's parent company earlier in the year for upwards of $22 million.)

Huffman found Delicious to be far less interesting as a competitor after its acquisition. Was he still bitter about Yahoo? Sure, but he'd also begun to notice Delicious copying Reddit's features, and that had given him confidence. He started considering Reddit a serious threat to the userbases of both Delicious and Digg.

To outsiders, that seemed laughable. "When [Reddit] first came out, I remember looking at them and saying, 'They are a copycat, they're a clone,'" said Owen Byrne, a Canadian developer who built the first iteration of Digg. Although Slashdot was a nerd haven and Delicious appealed more to mainstream news junkies, Digg was widely seen as the strongest competitor in the nascent social news arena. It had launched more recently, in November 2004, as a collaborative project by four friends: Byrne; Kevin Rose, already a minor tech celebrity because of his appearances on the TechTV cable network; Ron Gorodetzky, a software engineer; and Jay Adelson, a former film editor and sound engineer. It functioned by letting users endorse ("digg") or dislike ("bury") links submitted by other users. It had a young, male, and geeky following, with front-page links often to gaming tips, tech product news, or sci-fi content. But in the ecosystem that was developing of similar news aggregation sites, it had a distinct advantage: In 2005 the Canadian web-design studio Silverorange had redesigned the site. Now it wasn't just a list of links. It had lovely fonts, visually appealing spacing, and little orange buttons showing the "digg" count of each link, which streamed down the site and could in short order be found around the web on news articles and blog posts. Digg, as a company, also had the benefit of acting like a tech company rather than a media startup: It raised a significant round of venture capital in October 2005. It could worry later about how it would make money.

Digg's userbase and traffic dwarfed Reddit's tiny following. Huffman, though, was steadfast in his conviction that Reddit would beat Digg. "I just had so little respect for what they were doing—I thought they were incompetent," he said, noting that he could see it plain as day on their site: Digg's engineers were

struggling with issues he'd already solved, such as comment sorting and keeping spam at bay. "I knew how Digg worked. And I knew how Reddit worked. And I knew we were smarter."

He also thought Digg was messing up on another front: self-promotion. On Reddit, self-promotion—say, posting your own personal blog and voting it up from multiple user accounts you'd created—was considered spamming. The practice was also beginning to be culturally frowned upon by online communities. On Digg, however, there were loopholes often gamed by users, networks of friends, and newsrooms. Digg's front page was also somewhat chronological at the time, which made it feel like a blog rather than a popularity engine. "The Reddit way in my mind was so much better," Huffman recalls. "Good stories would be on the front page longer, and bad stories wouldn't be on the front page as long."

By early 2006, as the online social sharing space heated up, mentions of Reddit online weren't uncommon, and some sites were adding a Reddit social share button (a little alien) alongside the Twitter and Facebook icons. As the year rolled on, so did Reddit's momentum. Traffic grew, thanks in part to the new NSFW subreddit. By the middle of the year, media companies large and small started to notice traffic boosts when their links gained popularity on Reddit and landed on the site's homepage. Editors joked about Reddit's "hug of death," which lovingly bestowed upon a publisher so much traffic when their link hit Reddit's homepage that it sometimes crashed their entire website.

It was no longer so easy to dismiss Reddit as a Digg knockoff. "It became fairly obvious, fairly quickly, that they were more than just a clone," Byrne said. "They were a viable competitor."

As soon as the traffic was flowing, of course, there were those with blogs and websites trying to get a piece of it by posting and upvoting their own links. Reddit was, in part, self-policing: Other Redditors would readily downvote moneymaking schemes or spam, if it hadn't already been filtered by Huffman and Slowe's algorithms. Huffman himself banned users on the regular, most

often "neutering" their content from being viewed by others, even though from their own device it would appear as if nothing about their account had changed. This concept now has a name, "shadow banning," and it would become infamous over time. Back in 2006, it was simply a superpower wielded by Reddit's founding team without much question or awareness by the community.

This cultural distaste for promotion was instigated by Huffman's philosophy that Reddit should be a place for genuine discussion, earnest free speech, and anonymity, but users solidified it even as there were those looking to exploit it. In July 2006, online media entrepreneur and investor Jason Calacanis posted on his blog that he was seeking to offer any of the top fifty users of a major social news or bookmarking site $1,000 a month to control their posts. He posited that sites such as Digg and Reddit were mostly driven by their power users, who spent hours each day on their social site of choice, making posts, upvoting posts by friends or acquaintances, and creating mini-communities within these sites. "I'm absolutely convinced that the top 20 people on Digg, Delicious, Flickr, MySpace, and Reddit are worth $1,000 a month and if we're the first folks to pay them that is fine with me—we will take the risk and the arrows from the folks who think we're corrupting the community process (is there anyone out there who thinks this any more?!)," Calacanis wrote. Before the era of corporate social media marketing, and "influencer" as a job title, it was a cringe-inducing but visionary perspective on how the social ecosystem would shape up over the following decade. Huffman couldn't help but repost Calacanis's crass proposal on Reddit, joking, "Ching! We're outta here!"

Ohanian's job by this point had grown to include handling media attention. He did so deftly, emailing and Gchatting reporters and courting them in person. (Huffman had found his own media-friendly way of describing to the world *what does Alexis do?* He said, "I made Reddit. Alexis made Reddit *cool*.") One week, Ohanian took the $15 Fung Wah Bus from Chinatown to New York City to meet with reporters, and that included a coffee-and-cannoli date

with Rachel Metz, a reporter for *Wired*. She didn't end up writing about Reddit. But she told some of her friends in the office about the fascinating little Boston-based company. One of them was Kristen Philipkoski, the wife of Kourosh Karimkhany, who'd recently been brought on at Condé Nast with a mandate to increase the old-media juggernaut's web presence. On February 22, 2006, a note from Karimkhany appeared in Alexis Ohanian's in-box.

> I'm a friend of Rachel Metz. I'm also the director of biz dev for CondéNet, the internet arm of Condé Nast, which, as I'm sure you know, publishes magazines like Wired, GQ, Vogue, New Yorker, Vanity Fair, etc. I'm intrigued with your technology and was hoping to set up a time to talk about possibly working together. I'm open the rest of the day today and Thursday, but will be traveling for a week starting Friday. Do you have time for a phone call? Also, are you based in Boston?

YOU ARE MAKING US SOUND STUPID

After repeatedly Googling "Condé Nast," Huffman, Ohanian, Slowe, and Swartz boarded a flight in early March 2006 to San Francisco to meet with Karimkhany. They rented a car and stayed with friends in the South Bay. None of them had spent much time in San Francisco, and they got turned around on one-way streets around *Wired*'s South of Market office. They found parking with just minutes to spare.

The *Wired* office was just as awesome as they'd anticipated. Karimkhany showed them the "beer robot" (basically a small kegerator) and "The Berlin Hall," which separated magazine staff from all the tech and online folks, and they were invited to try the arcade-style machines in the game room. They were fed lunch in the company cafeteria, run by Phil Ferrato, who treated the whole endeavor like his own farm-to-table restaurant. The tour ended in an oddly angled conference room in one corner of the former factory building. It had a remarkable view; its massive steel-frame windows gave an urban panorama topped with a distant view of the Bay Bridge.

The guys sat down, and in walked a distinguished, shiny-headed

man whom Karimkhany rightly suspected would impress Ohanian and Huffman: *Wired*'s editor in chief, Chris Anderson. Swartz tried to play it cool; he adored *Wired* and had befriended a couple of the tech-and-gadget publication's writers already. He'd submitted articles, too, hoping to be published. It was plain to see he was self-conscious; Swartz did a lot of the talking, and bristled visibly every time Ohanian spoke. Huffman later recalled Swartz snapped at Ohanian, "You are making us sound stupid."

Keeping cool was, in this situation, imperative. They knew this little meeting had the potential to open up acquisition talks—and, like on a first date, they knew the subject of commitment should be avoided at all costs. They could not appear overeager.

Huffman and Swartz agreed together that they wouldn't be entertaining an acquisition offer. Not yet. But at that very meeting, Karimkhany brought up the concept of creating a partnership. Details were vague, but the four young men, who'd entered the meeting all stifled and sniping at each other, left giddy. To celebrate, the guys embarked on a couple days of earnest tourism in San Francisco, hiking up Coit Tower together and driving over the Golden Gate Bridge.

Within weeks, Karimkhany offered Reddit not an acquisition, but rather a way to test the waters on a partnership, to see if Reddit could really work with a major media company.

Despite the fact that the Condé Nast company is known for its glossy magazines, catering largely to a female audience, Karimkhany and his bosses, up to Steve Newhouse, liked the idea of bolstering the young, male, educated audience that its *Wired* title reached. But the opportunity that Karimkhany extended was one that seemed as if it could test Reddit's limits—and experiment in getting the site's infrastructure to reach an entirely different market: the women's-magazine demographic. To Newhouse, if they succeeded, it would be "proof of concept." The experiment would be a custom Reddit-like site, with all of Reddit's algorithmic power, but with the content (and color scheme) of a fashion and lifestyle blog. It would be called Lipstick.com. And for building and

maintaining this pink Reddit clone, Condé Nast would pay Not A Bug, Inc. $10,000 a month.

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Karimkhany's proposal was incredibly fortuitous. Huffman forked Reddit and completed the build of Lipstick.com in a few hours. The new income meant Reddit would be able to pay Slowe, who'd been living on a meager grad student stipend. It would also easily cover their other expenses: rent, meals, and the few hundred dollars a month to keep the servers running. Not only did they have assurance that they wouldn't need to start scouring Graham's contacts for new investors within months, but they also had spending money. They went shopping for servers. Now they'd have not two but ten of them, which was too many to keep in their living room. They racked up their shiny new servers in a colocation center in nearby Somerville.

To Reddit, $10,000 a month for Lipstick.com was a boon. To Condé Nast, it was pennies tipped into a tidy experiment. To Karimkhany, it was a subterfuge. At the time he proposed Lipstick.com, he was already neck deep in a deal to help Condé Nast finally acquire Wired.com, which had eight years earlier been spun out from *Wired* magazine and existed as a separate web property operated by Lycos, which merged with a Spanish company, Terra, but later was sold to a South Korean one. At each juncture the parent company of Condé Nast, Advance Publications, had been party to attempts at reuniting the web property to the title. Newhouse later recalled it being a years-long, relentless pursuit. In 2006, once more, Karimkhany was hot on the case.

Karimkhany did like the idea of acquiring Reddit; he'd felt an affinity for the scrappy site from the moment he'd clicked through to a link of a blog post espousing an extremely well-thought-out theory to explain the victory of the rebels in *Star Wars*. "It was a community that was exactly who I was and what I was interested in at the time," he said.

Karimkhany had been hired in February 2006, hoping to bring into the Advance family something like MySpace—at the time the most popular social network, which Rupert Murdoch's News Corp acquired in July 2005 for $580 million—but for a women's-magazine audience. Websites such as Polyvore, a social commerce platform on which people expressed their fashion sense, were in his sights. But after visiting Reddit, Karimkhany started to see a different vision. He had in mind getting Wired.com and Reddit together under one roof, and harnessing a wide swath of young, Internet-savvy men, interested in tech and gadgets and video games. Steve Newhouse, the non-powerful scion of the Newhouse family that created Advance Publications, saw potential, too. Facing a changing media environment, in which web traffic was a potent tool for both sourcing of content and advertising, he recalled thinking, "If Reddit could build the right kind of community, it would be very compelling for that community to discover and share news."

To make it work, Karimkhany simply had to bide his time and keep Reddit occupied—which he did with the Lipstick.com contract. He figured he could simultaneously woo them. He heard that writer-actor-comedian Ricky Gervais would be attending *Wired* magazine's Rave Awards in San Francisco, and thought he shared some of Reddit's sensibilities and its wry humor. Karimkhany emailed Ohanian asking him to come out to meet the comedian at the party at San Francisco's St. Regis hotel by his side.

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Ohanian was feeling burnt out by the spring of 2006. His mother's health was deteriorating, and his workload only increased along with Reddit's popularity. He decided to take a short break, a weekend in the Outer Banks of North Carolina with his college buddies Thorman, Nguyen, and a few others. They'd done this same journey the year before, when they were all still in college, and it was epic. They'd taken flip cup to a new level by introducing an elimination component—when your team lost, you'd have to vote a

member off, à la *Survivor*. Ohanian flew to Norfolk and drove to the Outer Banks. Then, before a single game of *Survivor* flip cup commenced, he opened his email.

Ohanian sighed but replied yes to Karimkhany. Yes, Condé Nast could book him a flight to San Francisco for the next day, a twenty-four-hour coast-to-coast trip. He explained to Karimkhany that Norfolk, Virginia, was the closest airport. He packed up his swim trunks, got back in the car he'd rented, and drove three hours to Norfolk for the flight.

The Rave Awards was the ritziest event Ohanian had ever attended, but he'd barely slept. The parade of minor Internet, film, and design celebrities was a blur. He never actually met Ricky Gervais. But it didn't matter to him in the slightest. What mattered to him was that he was putting in the effort with Karimkhany. Because whenever Karimkhany said, "Jump," Ohanian needed to be poised to say, "How high?"

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Back home, a host of factors had led Ohanian to make the potential acquisition his priority. Most of the factors stemmed from one human being: Aaron Swartz. Swartz and Huffman had grown very close over that winter while rewriting the site, building out its infrastructure, and managing its growth with new servers. They shared a bedroom, so the pair had been inseparable night and day.

Recently, though, the relationship had begun to fracture. Swartz had grown distant. He'd drifted away from his Reddit projects, including building feeds.reddit, and managing the Infogami integration. Huffman recognized that Swartz needed support and coaxing, and Ohanian sought advice from Graham and others about managing him. He tried complimenting Swartz's programming prowess, pleading, *Please build this, you will save us!* and incorporating Swartz in decision making, in hopes of giving him a stronger feeling of ownership of his work. Nothing helped. Swartz had taken to arguing that Infogami's old features should be inte-

grated into Reddit. On other days, he'd campaign for rebuilding Infogami separately. Huffman and Ohanian didn't have time for Swartz's erratic ideas. They were plowing ahead with the site, bolstering subreddits and creating an on-site chat system. "We all started getting touchy from the stress and lack of productive work. We began screaming at each other," Swartz wrote later.

Swartz turned away from the group. Most days, he refused to work along with them. He took off abruptly and would vanish for hours. He was blogging on his personal site regularly, posting lengthy book reviews alongside his theories on dieting. He relaunched Infogami. Other projects were more quixotic. He wrote a program that would download material from the Internet Archive's Wayback Machine website, archive.org. He built and released a bare-bones Amazon search that loaded more quickly than the full Amazon.com site. He began researching early childhood development and education, with the aim to author his own text on the matter.

Swartz's physical and mental health began to concern the others. He'd bolt out of the apartment in the middle of the night; later he would explain that he'd run up and down the street as fast as he could for a few minutes. Sakillaris, Slowe's girlfriend, wanted him to eat more: Swartz had grown skinny, and possessed a staunch aversion to vegetables. A pathologically picky eater, he subsisted on mostly bland, white foods, claiming that too much flavor offended his sensitive "supertaster" palate. Even his mentors tried to intervene, albeit jovially. The writer Cory Doctorow, who cofounded the beloved nerd blog *Boing Boing*, joked, "You'd think, this is a kid who's really going to go somewhere—if he doesn't die of scurvy."

Sakillaris suspected Swartz might have a form of Crohn's disease—she spotted medicines taken by a friend of hers who'd been diagnosed with it—but she was never sure. Swartz had written on his blog about everything from ulcerative colitis to coughing up what he assumed were pieces of stomach lining. It was hyperbolic, a tone that illuminated not just physical but also mental anguish.

One particularly eyebrow-raising recent post was called "Eat and Code." Really it was about his Cheerios fixation.

In the post, Swartz claimed he'd found the perfect food for him: He could eat it anytime, it had little flavor, and it was readily available at the corner store. He ate it in his room, over his computer, handfuls at a time. Soon, yellow Cheerios boxes piled up in the corner. There was one problem: Cheerio dust. Pulverized oats had made their way under Swartz's fingernails, between pages of books, under keys on his computer, and in his phone. He became fixated on scraping the dust out of his electronics, where it had "apparently bonded with the metal." The dust was everywhere. "I began to discover that the Cheerio dust was also in my system, possibly even my lungs and giving me some Cheerio form of silicosis; they made it difficult to breathe deeply." He gave up the Cheerios. It didn't help.

Everyone working on Reddit agreed it might help to change their living situation. Swartz might be happier if they were closer to cafés and a vibrant neighborhood. Plus, maybe he needed some privacy? They found another three-bedroom apartment, this one on Elm Street near Davis Square. Slowe would move in with Sakillaris, allowing Swartz to have a bedroom to himself. The apartment at 279 Elm Street was a redbrick building on a commercial strip, above a one-hour photo developing shop, in between a tobacco store and an insurance agency. Across the street was a café, Diesel, which had the magical combination of Wi-Fi and air-conditioning, and became a de facto office once days got longer and hotter.

Now that he had his own private space, Swartz retreated into himself further. He stopped contributing code to Reddit altogether. Soon his daily routine involved little more than locking himself in his room, reading, blogging, and working on his book. "He wouldn't even come out," Huffman said of his friend. "I wouldn't see him for weeks. I would just hear him, and I would yell at him to, like, 'stop running around.' Yeah, he would basically jog in his room to get exercise."

Unlike Huffman, Ohanian had never clicked with Swartz. He

had mostly shrugged that off, having over the past year come to expect some lesser degree of respect from programmers because he was a "nontechnical" cofounder. "The challenge was he and I never had a relationship. I mean, he could always be a little rough and condescending," Ohanian said. "I never felt like he ever totally respected me." It had been a tough year, knowing that his mother's brain cancer was incurable; knowing that his friend was still suffering from the injuries of her fall. Huffman, who'd been by his side through it all, was a source of comfort. Swartz was the opposite. "I'd walk into the living room and there's someone who greets you with a smug grin as they get back to writing their book on childhood development, in the face of the fact they are ostensibly part of a team that you have given them equal equity for . . . That sucked."

Ohanian mostly kept his mouth shut. To vent, he'd call his parents.

By May, Swartz took his disenchantment public. He wrote on his blog, "I don't want to be a programmer. When I look at programming books, I am more tempted to mock them than to read them. When I go to programmer conferences, I'd rather skip out and talk politics than programming. And writing code . . . is hardly something I want to spend my life doing." He continued by announcing he was done programming.

A month later, Swartz had apparently gotten some blowback from that piece of writing. He posted what he called "a clarification," noting that he believed "many people misunderstood" his post, which had been titled "A Non-Programmer's Apology." He wrote, "I am 19 and live in Cambridge, Massachusetts, in an apartment with two others. The three of us together work full-time on the site reddit.com and I spend most of my days working on programming and various related tasks for it. In the nights and weekends I read and think and write. I'm working on a large book project, which I expect to take years, and which I don't discuss much on the Web."

Ohanian and Huffman gave up trying to manage Swartz. They had come to the realization that they had allowed a founders' share of their company to be owned by a very talented guy who was

no longer interested in working with them, this nineteen-year-old genius with barely a lick of higher education who was writing a child development book. And they had allowed their tendency toward conflict avoidance to prevail in their relationship with Swartz. Reddit the website was thriving, doubling its audience every few months. Reddit the company was floundering. Ohanian repeatedly brought the situation to Graham, and they both came to the realization that "this is not a healthy company right now." Huffman knew it, too, and explained later, "The situation was so toxic we were, like, 'This is not gonna succeed; we should just sell while we can.'"

In hindsight, Graham knows they were all naïve. "Nowadays, if I saw a startup that was growing like Reddit was growing, I would really try hard to talk them out of being bought. But back in those days, especially since they were so young, it seemed like a lot of money for them, you know?"

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Karimkhany invited Ohanian to breakfast at the *Wired* office not long after the awards ceremony. Despite Ohanian's exhaustion, he again jumped. It was at this point that Ohanian recalls Karimkhany used the "a" word: acquisition.

This meeting single-handedly powered the next five months of Reddit's life. Now that an acquisition was on the table, Ohanian and Huffman finally cornered Swartz about being checked out of Reddit. The three made an informal agreement that as long as Swartz showed up to acquisition meetings and phone calls, "We would just let it go. We would make you really rich for really doing nothing and having almost destroyed this company—as long as you go along with this," as Ohanian described it later.

When matters needed to be discussed by all three, Swartz would come out of his room and hop on a phone call or listen to Huffman talk, as if nothing had changed, as if he'd been there the whole time.

Huffman remembers it coming to a head a couple of times. Once, he recalled, Swartz bristled at Huffman being "in charge." Huffman, who at the time was setting up conference calls with the lawyers and doing most of the talking while negotiations progressed, snapped back, incensed, "If I'm not in charge, who is? Somebody has to do this stuff."

Swartz replied, "If you don't want me here, I'll just give you back my stock and leave."

Huffman thought, *That sounds great. That's exactly what we want.* But he sighed and looked at his old friend and said, "Oh, Aaron, you don't have to go that far."

Years later, Huffman realized his mistake in not taking Swartz's bait. "We should have fired him and moved on," he said. But back then, the arguments were still few, the negligence easily dismissed as innocent. "We didn't hate each other yet. Things weren't really that bad. That was sort of the beginning of the bad times."

WE ARE THE NERDS

When Sakillaris pulled up to the house, the sun was just starting to bounce over the rooftops of the shops lining Elm Street. She was accustomed to waking up early and driving to work, so it wasn't too much of a stretch to leave home before dawn and pile four boys into her car to take them to the airport before heading to the office. After all, this was going to be a big day for her boyfriend—Slowe was going to New York City, just for a meeting! Now *this* was executive behavior, she thought. Could her boyfriend soon be an executive at Condé Nast? Could this dysfunctional crew somehow manage to impress some of the savviest media-company poobahs in the world? She sighed. Maybe it was all just wishful thinking.

"Good morning, loves! Your ride is here!" Sakillaris called as she swung open the door to the walk-up. The guys were still rushing around, lacing up their sneakers and taking swigs of coffee. Sakillaris, the fashion buyer, caught a glimpse of Ohanian, and was disturbed that he was wearing his typical T-shirt and jeans. This probably meant Huffman was wearing his usual khakis—and Swartz was in two-sizes-too-big jeans and a saggy hoodie. "Put on a suit, guys! At least a tie!" she yelled to all of them.

Ohanian shouted back, "No way!" He left his coffee mug in the kitchen sink and headed for the door. Crammed in the backseat of the car, the guys were laughing and trying not to elbow each other. Sakillaris answered a phone call and the guys whispered to one another, mimicking her bubbly phone voice. "Okay, byeee! Love you!" she said. ("Okay, byeeeee! Love you!" she heard four falsetto voices echo.)

Sakillaris gave a side-eye and warned the men they'd need to show some respect to Condé Nast, one of the biggest media companies in the entire world. They should take this seriously, she said.

Ohanian explained that this *was* serious. He'd given it thought, and his Reddit T-shirt was not accidental: The lack of pretense involved in *not* putting on a tie can go a long way for founders, he said. It would show the fancy-pants executives at the most esteemed magazine publisher in New York City that they mean business—in that they didn't give a shit about big-business convention. On this, he saw eye-to-eye with Swartz, who'd later write on his personal blog, "Suits . . . are the physical evidence of power distance, the entrenchment of a particular form of inequality." A banker wears a suit. Real hackers wear T-shirts and sandals, or a hoodie and shorts—or whatever the fuck they want, while they devote all their mental energy to building something awesome, Ohanian argued. As Sakillaris pulled into Logan International Airport, Ohanian ended the conversation, finally, by declaring, "We are the nerds!"

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The T-shirts worked. Or at least they hadn't derailed the acquisition courtship, which was still gaining momentum by midsummer. In July, Slowe and Sakillaris had been together just four months when they decided to travel to Paris. Slowe needed to attend a physics conference in Austria, so tacking a week onto the trip seemed logical.

They stopped over in London, where they did a whirlwind tour:

Buckingham Palace, London Bridge, Piccadilly Circus, the London Eye. Slowe stopped to take Sakillaris's photo in front of a Starbucks, where they'd spotted a Reddit Snoo sticker on a concrete pillar. Next stop, Paris. It was sweltering there in July, but as they trekked to the Eiffel Tower, Sakillaris looked *très Parisienne* in a black lace top and massive black shades.

They were taking a rest on a beige bench when Slowe's BlackBerry started buzzing. He knew the guys back home had a conversation slated for that day with Karimkhany from Condé Nast, so he took the call and got the updates. Sakillaris paced around him, occasionally wandering off to buy a bottle of water or look at street vendors' souvenirs, before heading back to the bench to wait. It was here, under the Tour Eiffel, that Ohanian told Slowe that Karimkhany had called, and said that Condé Nast was ready to begin officially discussing an acquisition. Not A Bug, Inc. would need lawyers to connect to Condé Nast's legal team. There was lots to hammer out, but at this moment, it looked like it might just happen.

Around dusk, Slowe and Sakillaris wandered over to the Left Bank and sat down to dinner in a café. Another buzzing in his pocket. This time, it was Huffman. Yes, everything was in order. Yes, Swartz seemed to be on board—at least enough to hope to make this work. Huffman and Ohanian had spoken with Karimkhany. They'd spoken with Graham. YC was in; Condé Nast was in. Condé Nast was going to, should their lawyers be able to hammer out a deal that would make everyone happy, acquire Not A Bug, Inc. It would be a multimillion-dollar deal. The Reddit guys were going to be rich. Or at least a little bit rich.

"Wooooohoo!" Slowe shouted as he hung up with Huffman. "Woohoo!" Sakillaris hollered. They hugged. The French couple at the next table over sent them a bottle of wine, assuming they'd just gotten engaged.

Two days later, on Bastille Day, Slowe and Sakillaris toured the Louvre. Slowe was still high on the Reddit news, and high on life, here in Paris with the woman he loved. He bought a crazy cos-

tume ring at the Louvre gift shop, and, once he and Sakillaris were outside near the glass pyramid, Slowe got down on one knee to propose. He didn't know much about how these things worked, but he rightly figured that with the single-digit fraction of Reddit that he had been promised, he'd soon have enough money to buy her a real ring.

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Back home, Slowe's life returned to its usual pace. He spent his daytimes at the lab and his evenings making dinner for himself and Sakillaris in their little $2,000-a-month flat in Somerville. He spent countless lab hours hunched over his computer, ostensibly reworking configurations for his experiments, but really, thanks to a pair of earbuds, listening in on hours upon hours of conference calls between the Reddit team and their lawyers, including Boston-based Mark Macenka, Condé Nast's lawyers, and Karimkhany's team. It was Slowe's first exposure to concepts like "due diligence," and it was a slog.

Days turned into weeks, and soon, three months. It was the most drawn-out, complicated deal Karimkhany worked on at Condé Nast—including the ostensibly more complicated *Wired* digital deal (which took roughly a month). In the scheme of corporate acquisitions, this was not a particularly complex deal at its outset. The assumed price tag was roughly $10 million, but the exact figure would fluctuate a bit based on how the founders' and investors' stock and stock options would be paid out.

Huffman had thrown a wrench into the conversation. He wasn't persnickety about the contractual language; he had one big, if simple, request—and it was one that required altering the acquisition price and the payout schedule, and the percentages allocated to all parties, including Y Combinator, Graham, and a stock option pool to be left open for future employees. At the close of the deal, Huffman wanted to be a millionaire.

It was a weirdly rigid demand that ruffled Condé Nast's lawyers:

They were not accustomed to this sort of Silicon Valley–style acquisition, where Huffman's behavior was not just the norm, but mild, even. Graham recalls Condé Nast's lawyers being draconian, "partly because they were just inexperienced" in the way Silicon Valley deals Graham had experienced worked, but also all Reddit parties involved recall there being a "New York" vibe to the negotiations, a particularly curt and abrasive nature that felt like a combination of bureaucracy and backlash.

Still, Huffman's monetary demand and the rash of paper cuts from the Condé Nast lawyers were nothing compared to how Swartz complicated matters. Swartz took umbrage with specific wordings and general concepts alike, particularly relating to intellectual property and the types of ownership Condé Nast would have over Reddit's future development. He had real and perhaps valid concerns about how a corporation as large and formal as Condé Nast would treat Reddit, which had already developed an ethos of free speech and openness, highly valuing user anonymity. Reddit was an unusual company, and Swartz insisted it should be treated as such going forward. He also wanted to protect his own intellectual property. His concerns repeatedly gummed up the works. Karimkhany would be on the phone with Condé Nast's legal team in New York, another business development chief, and from Boston, the four guys, plus Macenka. Swartz would throw out an objection, such as, "Well, if I write a book, do you guys own it?" The teams would assure him no, but he'd want to carve that out in the contractual language.

Huffman recalls that at times, Swartz would tweak wording in the contract without telling anyone—altering a line like "The company has the right to use your likeness" to "The company does not have the right to use your likeness." Sometimes, weeks later, a lawyer would notice the wording change and be irate. "It was like, 'Dude, we all signed this. This is not a joke,'" Huffman said. He fumed about it privately.

But, as usual, he and Ohanian avoided conflict, and chalked the behavior up to Swartz's immaturity. "It's hard to be mad to some-

one to their face—especially Aaron," Huffman said. "He was so hapless."

From the Elm Street apartment, perhaps the most difficult thing to uphold wasn't just decorum but their agreed-upon deception. "Aaron was doing zero work, but we made believe to Condé that we were still one big happy family," Huffman said. "He would come out of his room, and we'd basically talk about acquisition stuff. He would help with that. The plan was, we were going to sell, we would all get paid, and then he was going to quit on day one."

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By summer 2006, Ohanian had become a regular on the short flight between Boston and Baltimore. He took the first flight the morning his mom, Anke, was slated to have yet another brain surgery, this one at Johns Hopkins Hospital. Chris and Anke departed for the hospital at dawn so they could swing by Baltimore–Washington International Airport and pick up Alexis.

When Chris pulled up to arrivals, their son—usually easy to spot—was nowhere to be seen. Chris started calling Alexis's phone, which went straight to voicemail. He finally decided to leave Anke, who was dressed and ready for admission into pre-op, in the car to go search for Alexis. How could Alexis keep them waiting so long? They were lucky to have gotten Anke into Johns Hopkins for her treatment; now they'd be late for what could be a life-changing surgery. Chris kept dialing Alexis's cell phone, and his voicemail messages grew increasingly frantic. Finally, he left a message saying, "We're getting the hell outta here, buddy. I don't know where you are but we're gone!"

As Chris and Anke raced to the hospital in a panic, Alexis Ohanian woke up in a start, in a pleather airport seat. Shit. He'd fallen asleep. How come he hadn't heard his phone? He pinched it out of his pocket and saw it flashing. There were a dozen messages now, likely all from his dad. He grabbed his bag and ran outside, knowing he'd fucked up, eager to feel his mom's embrace, hoping they

were still waiting. He paced down the line of unfamiliar cars and cursed himself: He'd stayed up all night working, so he could be sure to not oversleep for his super-early flight. He hadn't timed it well: He'd ended up in Baltimore earlier than his parents could get there. He'd found a seat—and apparently had dozed off.

Fuck. He was disappointing Steve by not being there this week to help. He had utterly let down his dad. He wanted to be there to hold his mom's hand. Now he was just standing on a curb in a city he knew mostly for its hospitals, feeling guilty and alone.

THE DEAL

The other year, when I was living in a cabinet, someone emailed me to ask if I had found a decent place to stay. 'Oh, don't worry,' I said. 'I'm sleeping outside the Coop,'" Swartz wrote on his blog the last week of October 2006.

His friend didn't believe Swartz for a minute—that he'd sleep outside of the Harvard University bookstore, which was known colloquially as "the Coop." In fact, he was lying to her. He hadn't slept there—yet. He'd scouted it out, noting that it was a popular spot for homeless people to camp out, in sleeping bags or on cardboard boxes. It had a nice, semi-sheltered alcove. And, hell, it was in one of his favorite places in the world, Harvard Square. Why shouldn't he sleep there? Why shouldn't Swartz, whose bank account would receive a seven-figure deposit within one week, not scuff up a sleeping bag and rest his head where the homeless do? And if he did, why shouldn't he blog about it?

It made perfect sense to him. So one day in late October, Swartz made meticulous preparations for becoming temporarily homeless. He buried a set of his house keys in a park. He dressed in sweatpants, multiple pairs of socks, and a bland T-shirt, so as not to stand

out. In hopes of further blending in, he dirtied his sleeping bag by rolling it on the ground. He slid precisely enough change into a pocket for two subway fares, spending one on the way to Harvard Square, then burying the other along with his house key in a patch of dirt nearby.

Swartz unrolled his sleeping bag alongside a wall of the Coop, just down an alley off Brattle Street. From 10 p.m. until midnight, he watched a musician play, sell CDs, and encourage listeners to visit his website. Then Swartz tucked into his sleeping bag, positioned alongside the building, away from the five or so others who had done the same, "all tiled in nicely with each other, all in a different sort of gear." He slept until 5 a.m., when he woke briefly, and then dozed until 8 a.m. It had rained. Gear in tow, he tiptoed to avoid puddles as he went to unearth his subway fare.

"It was right where I left it and I got onto the train without incident," he wrote. He rode the train home.

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By October, sixteen months after its launch, Reddit had amassed one million monthly readers. And the deal with Condé Nast was nearly done.

The final price tag of just more than $10 million was not one that stood out in 2006, the largest ever year for corporate deals. Reddit's was not the sort of corporate M&A that made evening news headlines, as did Disney's nearly $8 billion acquisition of Pixar, or the $1.65 billion that Google had recently paid for YouTube. Instead, it was one of hundreds of small deals each year that don't bubble to front pages and rarely slipped through the lips of those at Silicon Valley cocktail parties. Media companies, such as Reddit—particularly fledgling ones, unproven by time or market forces, and unprofitable—were typically flying under the radar. (Wired.com's acquisition by Condé had been in the same ballpark, at $25 million.)

There were outliers, though, even in the media industry, and

those had the result of making the Reddit deal feel awfully small. In August 2006, Digg cofounder Kevin Rose had appeared on the cover of *BusinessWeek* wearing a backwards baseball cap and headphones and giving two thumbs up while the headline blared, "How This Kid Made $60 Million in 18 Months." The amount wasn't remotely accurate, but the cover stuck, making the Reddit cofounders' few million dollars feel small.

Perhaps the most similar deal with a major, head-turning price tag was the sale of MySpace's parent company to News Corp the prior year, for $580 million. At the time, MySpace had roughly sixteen times the number of monthly users as did Reddit—and, unlike Reddit, it was already profitable.

For Reddit, a media company just one year old, with two founders, one co-owner, and one employee, the acquisition price was reasonable—and perhaps also generous. Especially considering the then-unknown fact that the team behind the company was burnt out, fractured, and frustrated. Ohanian and Huffman had come to see the acquisition as an out, of sorts. It was a path "to part ways with someone who's been pretty toxic for the team, and also to give Reddit the support it needed," as Ohanian characterized it later. He couldn't wait for the feeling of relief when, hopefully, it would all be over. When he'd be a millionaire—imagine that, he thought—and he'd be able to tell his parents that all his complaints and all this suffering he'd gone through over the past year and a half were worthwhile.

Huffman, who had been working largely alone in the apartment that summer and fall, surrounded by the pain his two best friends were going through—Ohanian flying and driving so often to see his mom, and Swartz right there, feet away from him, rarely coming out of his room—knew the arrangement needed to end. He missed his girlfriend, Katie, who'd stayed in Charlottesville, and he wanted a new life—to move to San Francisco and get out of this damn apartment. He was frustrated after the months of negotiations, months he'd been treading water and upholding the deception that they were a functional team.

From where Steve Newhouse sat, the acquisition process seemed

neither arduous nor unusually long. But Huffman, Ohanian, and Slowe were beaten down after nearly six months of phone calls hammering it out. Still, they chose to view their uncertain futures optimistically. They began to see the forthcoming acquisition not as an endpoint but rather as their smoothest path to keep building cool things. (Karimkhany's gentle coaxing may have had something to do with that.) Now they did not need to worry about the fact that they didn't have the funding to scale, to hire another programmer, or to do anything aside from keep Reddit.com online. An acquisition would make their bigger problems someone else's.

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As October wound down, a final sprint of phone calls led to a sense of calm. There were no more questions. The deal was closing. There were papers to sign on October 30, but they were the final papers, and they'd be finalized the following day, on Halloween. Ohanian, Huffman, Swartz, and Slowe hung up with Macenka, with Karimkhany, and with the legal team at Condé Nast. Good riddance, Huffman thought. Then he started shaking.

He walked to his bedroom, shut the door, and sat down on his bed. The months of stress, of keeping a poker face, of hiding his fear that this would all fall apart—all the emotion he'd built up seeped out and he was a puddle. Tears welled up and he laid his body down, just sobbing and sobbing into his pillow.

When day broke, Huffman stood upright.

"And then we signed the papers," he said. He was a twenty-two-year-old millionaire. Ohanian was, too, at twenty-three, and Swartz, at nineteen.

Huffman had known for months that this day would come. The day came. "I was just kind of like, yeah, whatever."

NOTES

PART I

This Guy Has No Shame

"There is hope!": "2005 Reddit Interview" (video interview of Paul Graham, Steve Huffman, and Alexis Ohanian), YouTube, July 14, 2015, https://www.youtube.com/watch?v=6kzhtIuh1qQ. Likely source: outtakes from *Aardvark'd: 12 Weeks with Geeks*, Boondoggle Films, 2005.

"I will probably have rocket-high sales": Fifth-grade yearbook, Thunder Hill Elementary School, Columbia, Maryland, 1994, courtesy of Alexis Ohanian.

Rejected by girls: Alexis Ohanian, *Without Their Permission: How the 21st Century Will Be Made, Not Managed* (New York: Business Plus, 2013), 21–22.

How to Start a Startup

an eighty-page thesis: "Our Y Combinator Summer 05 Application," posted by Alexis Ohanian on November 29, 2010, AlexisOhanian.com.

Swartz was pondering: Aaron Swartz, "The Case Against Lawrence Summers," aaronsw.com, March 9, 2005.

"If you want to do it": Paul Graham, "How to Start a Startup," essay delivered before the Harvard Computer Society, posted online March 2005.

Not Your Standard Fixed-Point Combinator

Graham snapped a photo: Paul Graham, "How Y Combinator Started," blog post on Y Combinator's former website, March 15, 2012.

"How do we even tell people": Jessica Livingston, *Founders at Work: Stories of Startups' Early Days* (New York: Apress, 2007), 448.

"You better quit your job": Ibid.

"You know, Sam": Ibid., 449.

When the meeting ended: Aaron Swartz, "SFP: Come see us," aaronsw.com, April 16, 2005.

Modern frat-life touches: Sarah Maslin Nir, "Are Finals Clubs Too Exclusive for Harvard?," *New York Times*, August 2, 2016.

eight they had selected: In *Founders at Work*, Livingston notes that seven teams were accepted initially—before Huffman and Ohanian's team was accepted. Graham, in a separate video interview, says that nine were, and one of the companies "imploded before the summer started." Their memories on this are now unclear.

Front Page of the Internet

owned by a domain squatter: Comment by Paul Graham (username: pg), "Guy Who Copied Digg Slams Digg for Copying Twitter," Hacker News, May 30, 2010.

"If you're attached to the little bug guy": Ohanian, *Without Their Permission*, 60.

It's Online

"Hollaback Girl": Ohanian, *Without Their Permission*, 61.

He even designed stickers: Alexis Ohanian, "Time Machine," Reddit's blog, December 5, 2006.

Their lives, home and work: Paul Graham, "Jessica Livingston," paulgraham.com, November 2015.

"The relationship between hackers": *Aardvark'd: 12 Weeks with Geeks.*

"VCs: soulless agents of Satan": Tad Friend, "Sam Altman's Manifest Destiny," *New Yorker*, October 10, 2016.

"Paul in one person": *Aardvark'd: 12 Weeks with Geeks.*

Hell Summer

Within months, twelve thousand people: Richard Adams, "Innovations: Reddit.com," *Guardian*, December 7, 2005.

"Having that kind of grounding": Interview with Alexis Ohanian, *Real Biz with Rebecca Jarvis*, ABC News, accessed March 15, 2018, http://abcnews.go.com/Business/video/reddit-founder-alexis-ohanian-real-biz-rebecca-jarvis-40771917.

How to Act Like a Real Adult

had thrown up his hands: Justin Peters, *The Idealist: Aaron Swartz and the Rise of Free Culture on the Internet* (New York: Scribner, 2016), 148.

"fake world of school": *Aardvark'd: 12 Weeks with Geeks.*

"I found myself stuck": Aaron Swartz, "Introducing Infogami," Infogami.com, accessed through Internet Archive, https://web.archive.org/web/20070308114441/http://infogami.com/blog/introduction.

Rounding Error

"Together, we felt unstoppable": Swartz, "Introducing Infogami."

The Algorithm and the Cupboard

"just a list of links": Aaron Swartz, "The Aftermath," *Raw Thought* (blog), November 1, 2006.

when Arrington phoned Delicious's founder: Michael Arrington, "Yahoo.icio.us?—Yahoo Acquires Del.icio.us," TechCrunch, December 9, 2005.

You Are Making Us Sound Stupid

"We all started getting touchy": Aaron Swartz, "How to Get a Job Like Mine," speech, as prepared, for the Tathva 2007 computer conference at NIT Calicut.

He wrote a program: Aaron Swartz, "Some Announcements," *Raw Thought* (blog), January 5, 2006.

He built and released: Aaron Swartz, "Wassup?," *Raw Thought*, March 27, 2006.

"You'd think, this is a kid": *The Internet's Own Boy: The Story of Aaron Swartz*, documentary film by Brian Knappenberger, 2014.

"The situation was so toxic": Peters, *The Idealist*, 157.

We Are the Nerds

"Suits...are the physical evidence": Aaron Swartz, "The Anti-Suit Movement," *Raw Thought*, March 16, 2010.

The Deal

"The other year": Aaron Swartz, "A Night at the Coop," *Raw Thought*, October 24, 2006.

PART II

Chasing That Moment

Swartz whiled away a portion: Aaron Swartz, "The Aftermath," *Raw Thought*, November 1, 2006.

On the phone a little later: Audio recording, Michael Arrington, "Talk Crunch," episode 17, "Wired Acquires Reddit," http://web.archive.org/web/20070723115645/http://talkcrunch.com/wp-content/TalkCrunch-EP017-WiredAcquiresReddit.mp3.

Millionaires' Ball

"I looked them straight in the eye": Aaron Swartz, "The Afterparty," *Raw Thought*, November 2, 2006.

The opening price: "Web Startup for Sale on Ebay," Bloomberg News, August 24, 2006.

a final price tag of $258,100: Jeff Yang, "Man with a Cam," *San Francisco Chronicle*, March 27, 2007.

"Wired has tried to make": Aaron Swartz, "Office Space," *Raw Thought*, November 15, 2006.

A Moment Before Dying

"Heh. I bet the first time": "A Chat with Aaron Swartz," transcript of interview by Philipp Lenssen, Blogoscoped.com, May 7, 2007.

"I know exactly what to do": Aaron Swartz, "Last Day of Summer Camp," *Raw Thought*, January 22, 2007, accessed through Internet Archive, https://web.archive.org/web/20070127190324/http://www.aaronsw.com:80/weblog/.

"He was freed of all": Larissa MacFarquhar, "Requiem for a Dream," *New Yorker*, March 11, 2013.

"She never says": Swartz, "Last Day of Summer Camp."