## **PROFILES**

## ADDING A ZERO

Is Y Combinator's Sam Altman fixing the world, or trying to take over Silicon Valley?

## BY TAD FRIEND

NE BALMY MAY evening, thirty of Silicon Valley's top entrepreneurs gathered in a private room at the Berlinetta Lounge, in San Francisco. Paul Graham considered the founders of Instacart, DoorDash, Docker, and Stripe, in their hoodies and black jeans, and said, "This is Silicon Valley, right here." All the founders were graduates of Y Combinator, the startup "accelerator" that Graham co-founded: a three-month boot camp, run twice a year, in how to become a "unicorn"—Valleyspeak for a billiondollar company. Thirteen thousand fledgling software companies applied to Y Combinator this year, and two hundred and forty were accepted, making it more than twice as hard to get into as Stanford University. After graduating thirteen hundred startups, YC now boasts the power-and the peculiarities—of an island nation.

At the noisy end of the room, Graham was cheerfully encouraging improbable schemes. At the quiet end, Sam Altman was absorbed in private calculations. When founders came over to talk, he'd train his green eyes on them, listen to their propositions, then crisply observe, "What everyone gets wrong about that is . . . "In 2014, Graham chose Altman—who, at thirty-one, is twenty years his junior—to succeed him as Y Combinator's president. The two men share a close friendship, a religious zeal for YC, and an inexplicable fondness for cargo shorts. But, where Graham proposes, Altman disposes. At Graham's table, he and others discussed how to stop Donald Trump, then decided to reach out to an affiliated expert: Chris Lehane, a former White House lawyer now at the YC company Airbnb. Altman declared, "The best idea seems to be just to support Hillary."

At a hundred and thirty pounds, Altman is poised as a clothespin, fierce as a horned owl. Even in a Valley that worships productivity, he is an outlier, plowing through e-mails and meetings as if strapped to a time bomb, his unblinking stare speeding up colleagues until they sound like chipmunks. Though he is given to geewhizzery about anything "super awesome"—Small amounts of radiation are actually good for you! It's called radiation hormesis!—he has scant interest in the specifics of the apps that many YC companies produce; what intrigues him is their potential effect on the world. To determine that, he'll upload all he needs to know about, say, urban planning or nuclear fusion. Patrick Collison, the C.E.O. of the electronic-payments company Stripe, likened Altman's brain to the claw machine on a carnival midway: "It roams around but has the ability to plunge very deep when necessary."

A blogger recently asked Altman, "How has having Asperger's helped and hurt you?" Altman told me, "I was, like, 'Fuck you, I don't have Asperger's!' But then I thought, I can see why he thinks I do. I sit in weird ways" he folds up like a busted umbrella-"I have narrow interests in technology, I have no patience for things I'm not interested in: parties, most people. When someone examines a photo and says, 'Oh, he's feeling this and this and this,' all these subtle emotions, I look on with alien intrigue." Altman's great strengths are clarity of thought and an intuitive grasp of complex systems. His great weakness is his utter lack of interest in ineffective people, which unfortunately includes most of us. I found his assiduousness alarming at first, then gradually endearing. When I remarked, after a few long days together, that he never seemed to visit the men's room, he said, "I will practice going to the bathroom more often so you humans don't realize that I'm the A.I."

When he took over YC, he inher-

ited a budding colossus. The venture capitalist Chris Dixon told me, "They created the greatest business model of all time. For basically no money"—YC gives each company just a hundred and twenty thousand dollars, to cover expenses—"they get seven per cent of a lot of the best startups in Silicon Valley!" Collectively, YC companies are worth eighty billion dollars, a valuation that has grown seventeenfold in the past five years.

Yet Altman decided to retool nearly everything. At the Berlinetta Lounge, as he picked at the vegetarian plate, he observed that a change in C.E.O.s works only if the new leader "re-founds" the company. "I very intentionally did that with YC," he said. After conferring with the accelerator's sixteen other partners, Altman launched an initiative to support startups even earlier in their life span, and a fund to continue investing in them as they grow. YC would no longer waft explorers out to sea in rickety ships but launch ironclad armadas to claim an empire. And it would mold not a few hundred companies a year but a thousand, then ten thousand.

Like everyone in Silicon Valley, Altman professes to want to save the world; unlike almost everyone there, he has a plan to do it. "YC somewhat gets to direct the course of technology," he said. "Consumers decide, ultimately, but enough people view YC as important that if we say, 'We're super excited about virtual reality,' college students will start studying it." Soon after taking over, he wrote a blog post declaring that "science seems broken" and calling for applications from companies in energy, biotech, artificial intelligence, robotics, and eight other fields. As a result, the once nerdy Y Combinator is now aggressively geeky. Across the table from Altman at dinner, the C.E.O. of a nuclear-fission startup was urging the

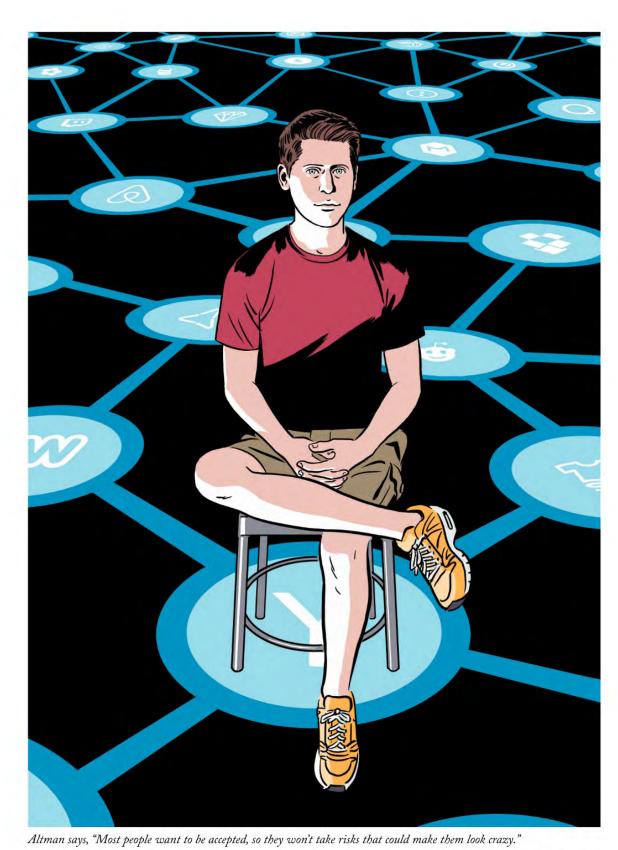


ILLUSTRATION BY R. KIKUO JOHNSON

founder of a quantum-computing startup to get his artificial-atom-based machine to market: "These computers would shorten our product-development cycle 10 to 20x!"

Two YC partners sat Altman down last year "and told him, 'Slow down, chill out!" another partner, Jonathan Levy, told me. "Sam said, 'Yes, you're right!'and went off and did something else on the side that we didn't know about for a while." That was YC Research, a nonprofit, initially funded with a ten-million-dollar personal gift, to conduct pure research into moon-shot ideas. Altman also co-founded, with Elon Musk, the C.E.O. of Tesla and SpaceX, a nonprofit called OpenAI, whose goal is to prevent artificial intelligence from accidentally wiping out humanity. The venture capitalist Marc Andreessen said, "Under Sam, the level of YC's ambition has gone up 10x." Paul Graham, who was leaving soon after the dinner for a sabbatical year in England, told me that Altman, by precipitating progress in "curing cancer, fusion, supersonic airliners, A.I.," was trying to comprehensively revise the way we live: "I think his goal is to make the whole future."

Altman is rapidly building out an economy within Silicon Valley that seems intended to essentially supplant Silicon Valley—a guild of hyper-capitalist entrepreneurs who will help one another fix the broken world. Everyone has cautioned him against it. The Valley prizes overweening ambition but expects it to be "rifle-focussed" on making the world's best houseboatrental platform or Cognac-delivery service. Reid Hoffman, a leading venture capitalist, warned, "It's great they're being ambitious, but classically, in the Valley, when people try to reinvent an area it's ended very badly." Altman, as he nursed a negroni after dinner, had his own warning for the timid; "Democracy only works in a growing economy. Without a return to economic growth, the democratic experiment will fail. And I have to think that YC is hugely important to that growth."

Launching a startup in 2016 is akin to assembling an alt-rock band in 1996 or protesting the Vietnam War in 1971—an act of youthful rebellion gone conformist. Since 2005,

the year Y Combinator began, accelerators have sprung up everywhere to help transform startups from a skein of code into a bona-fide company. In exchange for five to seven per cent of a startup's equity, an accelerator usually provides between fifteen thousand and a hundred thousand dollars, advice for an intensive threemonth period, introductions to mentors, and a Demo Day, when investors assess the finished product.



The U.S. has a hundred and sixty accelerators—three in Chattanooga alone—and there are thousands more around the world, including Brainnovations, outside Tel Aviv, and the Startup Sauna, in locations from Minsk to Dar es Salaam.

In the nineties, before the accelerator era, startups were usually launched by mid-career engineers or repeat entrepreneurs, who sought millions in venture capital and then labored in secret on something complicated that took years to launch. As the price of Web hosting plummeted and PCs and cell phones proliferated, college and grad-school dropouts like Mark Zuckerberg or Larry Page and Sergey Brin could suddenly conjure unicorns on their laptops. Paul Graham, a gifted programmer who'd sold his own startup to Yahoo for fifty million dollars, was one of the first people to harness these trends. His 2005 essay "How to Start a Startup"-together with Steven Blank's "The Four Steps to the Epiphany" and Eric Ries's "The Lean Startup"-helped to codify the modern entrepreneur's ethos: bootstrap; begin with a "minimum viable product" and iterate rapidly; prefer ten people loving what you make to ten thousand liking it.

Graham and his wife and two friends started Y Combinator (named for an obscure mathematical function) in Cambridge, Massachusetts, as both a summer-vacation experiment in investing and a radical stab at reimagining the summer job. In his book

"Hackers & Painters," Graham calculated that smart hackers at a startup could get 36x more work done than the average office drone—and that they would, therefore, eventually blow up employment as we know it. He made this sound patriotic and fun; how could an oligarchic technocracy go wrong? "Hackers are unruly," he wrote. "That is the essence of hacking. And it is also the essence of American-ness."

Graham could gauge applicants' technical skills, and his wife, Jessica Livingston, was a remarkable judge of character. They prized people in their mid-twenties, an age at which, Graham wrote, your advantages include "stamina, poverty, rootlessness, colleagues, and ignorance." The first group of eight companies-which included a mobile app, Loopt, founded by Sam Altman and two friends—got six thousand dollars per founder, along with Graham's advice and homecooked chicken fricassee, and the promise that at the end of the summer they could pitch his wealthy friends for fifteen minutes. That batch had Reddit, now valued at six hundred million dollars, and a batch two years later had Dropbox, valued at ten billion.

In a class that Altman taught at Stanford in 2014, he remarked that the formula for estimating a startup's chance of success is "something like Idea times Product times Execution times Team times Luck, where Luck is a random number between zero and ten thousand." The rise of Airbnb, now valued at thirty billion dollars, seems replete with luck. When it arrived at YC, in 2009, it had been making more money selling novelty cereals-Obama O's and Cap'n McCains-than booking bed-and-breakfast reservations. Graham thought the founders' idea was so unpromising that he tried to convince them to do payments instead. And the event that transformed the company, turning it into a combine that harvested living space around the globe, was a fluke: Barry Manilow's drummer went on tour and asked if he could rent out his place without being present to provide breakfast.

Yet Airbnb's C.E.O., Brian Chesky, attributes much of the company's

success to Y Combinator. "When we entered YC, it wasn't at all clear that we would exist after it," Chesky said. "And by the end it was: 'Can we be the next marketplace, the next eBay?' " Part of this exponential increase in ambition occurred when the founders showed Altman, who was then an unpaid mentor and fund-raising expert at YC, a slide deck they hoped would secure a five-hundred-thousanddollar round of seed, or initial, funding. (Companies usually raise a seed round after YC, an A round once they've reached a real milestone, then a B round, and so on.) "We had limited our projected revenue to thirty million dollars," Chesky said. "Sam said, 'Take all the "M"s and make them "B"s.'" Altman recalls telling them, "Either you don't believe everything you said in the rest of the deck, or you're ashamed, or I can't do math."

A 2012 study of North American accelerators found that almost half of them had failed to produce a single startup that went on to raise venture funding. While a few accelerators, such as Tech Stars and 500 Startups, have a handful of alumni worth hundreds of millions of dollars, Y Combinator has graduates worth at least a billion-and it has eleven of them. The angel investor Ron Conway, who has provided funding for hundreds of YC companies, told me that the accelerator was tech's Tomorrowland: "When my team met Airbnb at YC, that was the first time we thought about the sharing economy. And when we met Door-Dash and Instacart we said, 'Oh, my God, there's a thing called the ondemand economy!""

As YC grew, it moved to an exurban office cube in the town of Mountain View, an hour south of San Francisco, where it shared space with a company called Anybots. (The founders had to keep alert to avoid being crushed by lumbering robots.) The accelerator soon expanded into a second cube, across the street, and now it's near the fire-code limit in that building, too. It's a measure of Altman's ambition that he compares YC to Alphabet, Google's parent company, which is also composed of independent units that collaborate, and likewise has a moon-shot division, the X

research group. He recently tweeted that YC's empire had reached fourteen per cent of the value of Alphabet—whose market cap is among the world's largest—adding, "Long way to go..." It's a blatantly unfair comparison: YC's average ownership of its companies, diluted by subsequent venture funding, is just three per cent. Yet Altman told me that, "unlike Google, we grow faster as we get bigger. We could catch them in ten years."

s THE SUN set over Atherton, the A loveliest town in unlovely Silicon Valley, Altman challenged Geoff Ralston, another YC partner, to a tabletennis match by Ralston's pool. They were about to host a party for the thirty-two companies they were responsible for in the winter batch; the goal was to relieve the pressure of Demo Day, which was three weeks off, in late March. That was when the founders would have two and a half minutes to wow investors-six hundred in the room and twenty-five hundred more watching online. Two founders were already having anxiety attacks.

Altman was raising his arms in victory as the founders began to amble in and gaze around at startup Valhalla: a seven-thousand-square-foot mansion, catered food under a grapefruit

tree festooned with lights, a back yard that seemed to stretch to Redwood City. (Ralston made his fortune building what became Yahoo Mail.) Luke Miles, the eighteen-year-old founder of Restocks, tried not to look overawed. Restocks is a messaging service for young "super-consumers" who want to know, five minutes ahead of everyone else, when small shipments of Supreme T-shirts and Yeezy Boost 350 shoes go on sale. Miles was accepted to YC after excelling in YC Fellowship, the new program for embryonic startups, in which they receive as much as twenty thousand dollars and the opportunity to consult with a partner over Skype. Miles said, "The money they gave me was enough to prove to my parents that I wasn't wasting my life dropping out of college."

For many founders, YC provides the university experience they wish they could have had. Michael Seibel, a YC partner who was recently put in charge of the batches, and who also went through the program twice, said, "P.G."—as Paul Graham is known—"used to tell everyone at the beginning of the batch, 'Some of these people will be in your wedding,' which is a weird thing to say to three hundred strangers. But almost all my groomsmen were in YC. What does that remind



"I don't want our date to end, either, but my arm is about to fall off."

you of? College." Y Combinator's founders come to the building for group office hours on alternate Tuesdays, as well as for individual office hours as needed with their assigned partners (the professors), then stick around to scarf down bowls of pasta at long Formica tables (the dining hall) and listen to eminences such as Marissa Mayer and Mark Zuckerberg (visiting scholars). At the end, they present on Demo Day (defending their thesis), and either raise money (pass) or don't (fail).

The curriculum is deliberately spartan. Kevin Hale, a YC partner, said, "What we ask of startups is very simple but very hard to do. One, make something people want"—a phrase of Graham's, which is emblazoned on gray T-shirts for the founders—"and, two, all you should be doing is talking to your customers and building stuff." Chad Rigetti, the founder of YC's quantum-computing startup, told me that he kept his office walls a matte white "so my team's neurons aren't accidentally firing because of outside stimulation."

The ethics, too, have a collegiate clarity. YC prides itself on rejecting jerks and bullies. "We're good at screening out assholes," Graham told me. "In fact, we're better at screening out assholes than losers. All of them start off as losers—and some evolve." The accelerator also suggests that great wealth is a happy by-product of solving an urgent problem. This braiding of altruism and ambition is a signal feature of the Valley's self-image. Graham wrote an essay, "Mean People Fail," in which—ignoring such possible counterexamples as Jeff Bezos and Larry Ellison—he declared that "being mean makes you stupid" and discourages good people from working for you. Thus, in startups, "people with a desire to improve the world have a natural advantage." Win-win.

A founder's first goal, Graham wrote, is becoming "ramen profitable": spending thriftily and making just enough to afford ramen noodles for dinner. "You don't want to give the founders more than they need to survive," Jessica Livingston said. "Being lean forces you to focus. If a fund offered us three hundred thousand dollars to give the found-

ers, we wouldn't take it." (Many of YC's seventeen partners, wealthy from their own startups, receive a salary of just twenty-four thousand dollars and get most of their compensation in stock.) This logic, followed to its extreme, would suggest that you shouldn't even take YC's money, and many successful startups don't. Only twenty per cent of the Inc. 500, the five hundred fastest-growing private companies, raised outside funding. But the YC credential, and the promise that it will turn you into a juggernaut, can be hard to resist.

Near Ralston's grapefruit tree, Omer Sadika and Sebastian Wallin nibbled hors d'oeuvres as they compared notes about the stress of trying to launch their security companies, Secful and Castle. "We are sleeping at most five hours a day," Sadika said. Wallin muttered, "I've forgotten what day it is." Both men were planning to move to the Valley; Sadika from Israel, and Wallin from Stockholm. "The customers are here," Sadika said. "And you're one step away from the entrepreneurs at Airbnb and Stripe," Wallin pointed out. YC provides instant entrée to Silicon Valley-a community that, despite its meritocratic rhetoric, typically requires a "warm intro" from a colleague, who is usually a white man. All the early arrivals at the party were men; the batch's female founders were attending a presentation on the challenges of being a female founder. YC is more diverse than many institutions in tech, but it knows that it has a ways to go.

On the far side of a fire pit, two founders of Shypmate, an app that links you to airline passengers who will cheaply carry your package to Ghana or Nigeria, were commiserating. Kwadwo Nyarko said, "We're at the mercy of travellers who never have as much space in their luggage as they said." Perry Ogwuche murmured, "YC tells us, 'Talk to your customers,' but it's hard to find our customers." Altman walked over to engage them, dutiful as a birthday-party magician. "So what are your hobbies?" he asked. Nonplussed, Ogwuche said, "We work and we go to the gym. And what are yours?"

"Well, I like racing cars," Altman said. "I have five, including two McLarens and an old Tesla. I like flying rented planes all over California. Oh, and one odd one—I prep for survival." Seeing their bewilderment, he explained, "My problem is that when my friends get drunk they talk about the ways the world will end. After a Dutch lab modified the H5N1 bird-flu virus, five years ago, making it super contagious, the chance of a lethal synthetic virus being released in the next twenty years became, well, nonzero. The other most popular scenarios would be A.I. that attacks us and nations fighting with nukes over scarce resources."The Shypmates looked grave. "I try not to think about it too much," Altman said. "But I have guns, gold, potassium iodide, antibiotics, batteries, water, gas masks from the Israeli Defense Force, and a big patch of land in Big Sur I can fly to.'

Altman's mother, a dermatologist named Connie Gibstine, told me, "Sam does keep an awful lot tied up inside. He'll call and say he has a headacheand he'll have Googled it, so there's some cyber-chondria in there, too. I have to reassure him that he doesn't have meningitis or lymphoma, that it's just stress." If the pandemic does come, Altman's backup plan is to fly with his friend Peter Thiel, the billionaire venture capitalist, to Thiel's house in New Zealand. Thiel told me, "Sam is not particularly religious, but he is culturally very Jewish—an optimist yet a survivalist, with a sense that things can always go deeply wrong, and that there's no single place in the world where you're deeply at home."

LTMAN MAKES a list of goals each A year, and he looks at it every few weeks. It always includes a taxing physical objective—a hundred-mile bike ride each week; fifty consecutive pullups-and an array of work targets. This year, for YC, those included "Better partnership dynamic; decision on [expanding to] China; figure out how to scale another 2x." The latest list also contains a reminder to fund videos that demonstrate counterintuitive concepts in physics and quantum mechanics ("QM experiment/physics explainers") and a prompt to reread a Huffington Post article about the regrets of the dying ("I wish that I had let myself be happier").

He was always precocious and

efficient. As a child, in St. Louis, he grasped the system behind area codes in nursery school, and learned to program and disassemble a Macintosh at eight. The Mac became his lifeline to the world. "Growing up gay in the Midwest in the two-thousands was not the most awesome thing," he told me. "And finding AOL chat rooms was transformative. Secrets are bad when you're eleven or twelve." When he came out to his parents, at sixteen, his mother was astonished. She told me, "Sam had always struck me as just sort of unisexual and tech-y." After a Christian group boycotted an assembly about sexuality at his prep school, John Burroughs, Altman addressed the whole community, announcing that he was gay and asking whether the school wanted to be a repressive place or one open to different ideas. Madelyn Gray, Altman's college counsellor, said, "What Sam did changed the school. It felt like someone had opened up a great big box full of all kinds of kids and let them out into the world."

He attended Stanford University, where he spent two years studying computer science, until he and two classmates dropped out to work full time on Loopt, a mobile app that told your friends where you were. Loopt got into Y Combinator's first batch because Altman in particular passed what would become known at YC as the young founders' test: Can this stripling manage adults? He was a formidable operator: quick to smile, but also quick to anger. If you cross him, he'll joke about slipping ice-nine into your food. (Ice-nine, in Kurt Vonnegut's "Cat's Cradle," annihilates everything it touches that contains water.) Paul Graham, noting Altman's early aura of consequence, told me, "Sam is extremely good at becoming powerful."

Altman worked so incessantly that summer that he got scurvy. He excelled at wangling meetings with mobile carriers, and at closing deals with them to feature the app, whose valuation eventually soared to a hundred and seventy-five million dollars. Consumers, though, never bought in. "We had the optimistic view that location would be all-important," Altman said. "The pessimistic view was that people would lie on their couches and just consume

content—and that is what happened. I learned you can't make humans do something they don't want to do." In 2012, he and the other founders sold the company for forty-three million dollars—a negative return for their V.C.s.

One of Altman's co-founders at Loopt, Nick Sivo, was also his boyfriend; the two dated for nine years, but after the company sold they broke up. "I thought I was going to marry him—very in love with him," Altman said. At loose ends, he launched a small venture fund, Hydrazine Capital. He raised twenty-one million dollars, including a significant investment from Peter Thiel and much of the five million dollars he'd made selling Loopt, then invested seventy-five per cent of the fund in YC companies. He had a knack for finding opportunity in chaos. Altman told me that he led the B round at Reddit, a chronically disorganized YC graduate, because "you want to invest in messy, somewhat broken companies. You can treat the warts on top, and because of the warts the company will be hugely underpriced."

Hydrazine has grown tenfold in value in just four years, but, despite its success, Altman recoiled from venture capital. "You're trying to find a company that will be successful with or without you, then convince them to take your money instead of somebody else's, and at a lower price," he said. "I didn't like being oppositional to the entrepreneur." Leery of tech's culture of Golcondan wealth, in which a billion dollars is dismissed as "a buck," he decided to rid himself of all but a comfortable cushion: his four-bedroom house in San Francisco's Mission district, his cars, his Big Sur property, and a reserve of ten million dollars, whose annual interest would cover his living expenses. The rest would go to improving humanity.

Like a stymied startup, Altman then made a radical pivot. Paul Graham and Jessica Livingston, who had two young children, were worn out by the work of running YC and had begun looking for a successor. Livingston said, "There wasn't a list of who should run YC and Sam at the top. It was just: Sam."

Graham said, "I asked Sam in our kitchen, 'Do you want to take over YC?,' and he smiled, like, it worked. I

had never seen an uncontrolled smile from Sam. It was like when you throw a ball of paper into the wastebasket across the room—that smile."

Altman wanted to create a trilliondollar conglomerate and to move the world forward. And, he realized, "you couldn't have a trillion-dollar enterprise without major scientific advances." So he opened the batches to hard tech, studied the science and engineering problems such companies faced, and recruited the most promising ones. Altman helped to persuade Kyle Vogt, the C.E.O. of the selfdriving-car company Cruise, to do YC in 2014; afterward, when Cruise had trouble finding funding, he invested three million dollars in the company. In March, General Motors bought Cruise for \$1.25 billion.

Altman had long wanted to start his own nuclear-energy company; instead, he had YC fund the best fission and fusion startups he could find. Then he personally invested in both companies and chaired their boards. Thousands of startups are devoted to social interaction, and fewer than twenty to fission and fusion, but, Altman said, "hard things are actually easier than easy things. Because people feel it's interesting, they want to help. Another mobile app? You get an eye roll. A rocket company? Everyone wants to go to space."

RAHAM HAS WRITTEN that the two founders he most often invoked when advising startups were Steve Jobs and Altman: "On questions of design, I ask 'What would Steve do?' but on questions of strategy or ambition I ask 'What would Sam do?'" Founders in a crisis call Altman first, relying on his knack for high-speed trading in the Valley's favor bank-"I called Brian and got it sorted out," he'll say, referring to Brian Cheskyand his ability to see people as chess pieces and work out their lines of play. One YC founder told me, "Since Sam can see the future, we want him to tell us what's coming."

When the two founders of a Norwegian startup called Konsus arrived for office hours with Altman, at YC's new outpost, in San Francisco's South of Market district, they were as solemn as

pilgrims approaching a mountaintop shrine. Konsus, which was in the winter batch, connects businesses to freelancers who perform tasks such as data entry or Web design. Despite having raised a robust \$1.6 million after Demo Day, the founders were ridden with angst. Fredrik Thomassen said that they wanted to make their war chest last forever, and Sondre Rasch mentioned that he'd frugally chosen to live in a twelve-entrepreneur collective in a nearby forest. So: did they really have to buy their engineers computers? The two men, bearded and wraithlike, stared at Altman.

"It is one of the rarer mistakes to make, trying to be too lean," Altman said, dryly. "But, if someone's going to make it, it's going to be Scandinavians. Buy the computers." The founders nodded intently. They had revered Altman since they met him. At the time, their explanation of what Konsus did was "Companies send us office tasks and we instantly assign them to toptalent freelancers all over the world based on skill and availability." Altman had immediately asked, "Aren't you an on-demand temp agency?"

Thomassen now said, "We of course want to talk about quality, because the quality of our freelancers' work is our differentiator. We need a metric to measure it, somehow." Altman replied, "Repeat use or customer retention will track that. You don't need to invent some complicated new metric, so don't." Thomassen consulted a list they'd made: "What is the most likely thing we'll do wrong in the next three months?"

Altman found their hypervigilance encouraging: he believes that "the founders who do best are very paranoid, very full of existential crises." He told them, "Founders by definition like to start new things. But starting a business means grinding away for ten years." He continued, without irony, "Most people do too many things. Do a few things relentlessly."

Altman's terse prescience led one YC founder to call him "startup Yoda." Entrepreneurs trudge in to see him burdened by half an hour's worth of calamities and bounce out after fifteen minutes, springy with resolve. Much of his advice follows YC's standard imperative to transparency: if you're worried about investors' responses to a setback, "just



tell them"; if you're mystified by what a potential customer's silence portends, just ask them." It's the knottier questions that elicit his cleaving judgments. "Don't worry about a competitor until they're beating you in the market," Altman told the founders of Elucify at his dining table one afternoon. "Competitors are one of the last monsters that haunt your dreams." A few minutes later, he was on speakerphone with Varden Labs, a Canadian self-driving-vehicle company. As the founders poured out concerns about fund-raising, Altman, in stocking feet, cargo shorts, and a gray hoodie, waved around a Bronze Age sword that he'd bought as a gift for Paul Graham. "To raise fifty million," he said-slash, two-handed swipe-"you either need a major technological breakthrough or a large customer ready to go." He parried invisible strokes, advancing inexorably. What about long-term? they asked. "Always think about adding one more zero to whatever you're doing, but never think beyond that." Stab to the heart.

FOUR YEARS AGO, on a daylong hike with friends north of San Francisco, Altman relinquished the notion that human beings are singular. As the group discussed advances in

artificial intelligence, Altman recognized, he told me, that "there's absolutely no reason to believe that in about thirteen years we won't have hardware capable of replicating my brain. Yes, certain things still feel particularly human—creativity, flashes of inspiration from nowhere, the ability to feel happy and sad at the same time-but computers will have their own desires and goal systems. When I realized that intelligence can be simulated, I let the idea of our uniqueness go, and it wasn't as traumatic as I thought." He stared off. "There are certain advantages to being a machine. We humans are limited by our input-output rate-we learn only two bits a second, so a ton is lost. To a machine, we must seem like slowed-down whale songs."

OpenAI, the nonprofit that Altman founded with Elon Musk, is a hedged bet on the end of human predominance—a kind of strategic-defense initiative to protect us from our own creations. OpenAI was born of Musk's conviction that an A.I. could wipe us out by accident. The problem of managing powerful systems that lack human values is exemplified by "the paperclip maximizer," a scenario that the Swedish philosopher Nick

Bostrom raised in 2003. If you told an omnicompetent A.I. to manufacture as many paper clips as possible, and gave it no other directives, it could mine all of Earth's resources to make paper clips, including the atoms in our bodies—assuming it didn't just kill us outright, to make sure that we didn't stop it from making more paper clips. OpenAI was particularly concerned that Google's DeepMind Technologies division was seeking a supreme A.I. that could monitor the world for competitors. Musk told me, "If the A.I. that they develop goes awry, we risk having an immortal and superpowerful dictator forever." He went on, "Murdering all competing A.I. researchers as its first move strikes me as a bit of a character flaw.'

It was clear what OpenAI feared, but less clear what it embraced. In May, Dario Amodei, a leading A.I. researcher then at Google Brain, came to visit the office, and told Altman and Greg Brockman, the C.T.O., that no one understood their mission. They'd raised a billion dollars and hired an impressive team of thirty researchers—but what for? "There are twenty to thirty people in the field, including Nick Bostrom and the Wikipedia article," Amodei said, "who are saying that the goal of OpenAI is to build a friendly A.I.

and then release its source code into the world."

"We don't plan to release all of our source code," Altman said. "But let's please not try to correct that. That usually only makes it worse."

"But what is the goal?" Amodei asked.

Brockman said, "Our goal right now . . . is to do the best thing there is to do. It's a little vague."

A.I. technology hardly seems almighty yet. After Microsoft launched a chatbot, called Tay, bullying Twitter users quickly taught it to tweet such remarks as "GAS THE KIKES RACE WAR Now"; the recently released "Daddy's Car," the first pop song created by software, sounds like the Beatles, if the Beatles were cyborgs. But, Musk told me, "just because you don't see killer robots marching down the street doesn't mean we shouldn't be concerned." Apple's Siri, Amazon's Alexa, and Microsoft's Cortana serve millions as aides-de-camp, and simultaneous-translation and self-driving technologies are now taken for granted. Y Combinator has even begun using an A.I. bot, Hal9000, to help it sift admission applications: the bot's neural net trains itself by assessing previous applications and those companies' outcomes. "What's it looking for?" I

asked Altman. "I have no idea," he replied. "That's the unsettling thing about neural networks—you have no idea what they're doing, and they can't tell you."

OpenAI's immediate goals, announced in June, include a household robot able to set and clear a table. One longer-term goal is to build a general A.I. system that can pass the Turing test-can convince people, by the way it reasons and reacts, that it is human. Yet Altman believes that a true general A.I. should do more than deceive; it should create, discovering a property of quantum physics or devising a new art form simply to gratify its own itch to know and to make. While many A.I. researchers were correcting errors by telling their systems, "That's a dog, not a cat," OpenAI was focussed on having its system teach itself how things work. "Like a baby does?" I asked Altman. "The thing people forget about human babies is that they take years to learn anything interesting,' he said. "If A.I. researchers were developing an algorithm and stumbled across the one for a human baby, they'd get bored watching it, decide it wasn't working, and shut it down."

Altman felt that OpenAI's mission was to babysit its wunderkind until it was ready to be adopted by the world. He'd been reading James Madison's notes on the Constitutional Convention for guidance in managing the transition. "We're planning a way to allow wide swaths of the world to elect representatives to a new governance board," he said. "Because if I weren't in on this I'd be, like, Why do these fuckers get to decide what happens to me?"

Under Altman, Y Combinator was becoming a kind of shadow United Nations, and increasingly he was making Secretary-General-level decisions. Perhaps it made sense to entrust humanity to someone who doesn't seem all that interested in humans. "Sam's program for the world is anchored by ideas, not people," Peter Thiel said. "And that's what makes it powerful because it doesn't immediately get derailed by questions of popularity." Of course, that very combination of powerful intent and powerful unconcern is what inspired OpenAI: how can an unfathomable intelligence protect



"I'm afraid you're going to need a new pair of corrective lashes, Mr. Fox."

us if it doesn't care what we think?

This spring, Altman met Ashton Carter, the Secretary of Defense, in a private room at a San Francisco trade show. Altman wore his only suit jacket, a bunchy gray number his assistant had tricked him into getting measured for on a trip to Hong Kong. Carter, in a pin-striped suit, got right to it. "Look, a lot of people out here think we're big and clunky. And there's the Snowden overhang thing, too," he said, referring to the government's treatment of Edward Snowden. "But we want to work with you in the Valley, tap the expertise."

"Obviously, that would be great," Altman said. "You're probably the biggest customer in the world."The Defense Department's proposed researchand-development spending next year is more than double that of Apple, Google, and Intel combined. "But a lot of startups are frustrated that it takes a year to get a response from you." Carter aimed his forefinger at his temple like a gun and pulled the trigger. Altman continued, "If you could set up a single point of contact, and make decisions on initiating pilot programs with YC companies within two weeks, that would help a lot."

"Great," Carter said, glancing at one of his seven aides, who scribbled a note. "What else?"

Altman thought for a while. "If you or one of your deputies could come speak to YC, that would go a long way."

"I'll do it myself," Carter promised. As everyone filed out, Chris Lynch, a former Microsoft executive who heads Carter's digital division, told Altman, "It would have been good to talk about OpenAI." Altman nodded noncommittally. The 2017 U.S. military budget allocates three billion dollars for human-machine collaborations known as Centaur Warfighting, and a long-range missile that will make autonomous targeting decisions is in the pipeline for the following year. Lynch later told me that an OpenAI system would be a natural fit.

Altman was of two minds about handing OpenAI products to Lynch and Carter. "I unabashedly love this country, which is the greatest country in the world," he said. At Stanford, he worked on a DARPA project involving drone helicopters. "But some things we will never do with the Department of Defense." He added, "A friend of mine says, 'The thing that saves us from the Department of Defense is that, though they have a ton of money, they're not very competent.' But I feel conflicted, because they have the world's best cyber com-

mand." Altman, by instinct a cleaner-up of messes, wanted to help strengthen our military—and then to defend the world from its newfound strength.

N EARLY ALL YC startups enter the program with the same funding, and thus the same valuation: \$1.7

million. After Demo Day, their mean valuation is ten million. There are several theories about why this estimation jumps nearly sixfold in three months. One is that the best founders apply to the best accelerator, and that YC excels at picking formidable founders who would become successful anyway. Paul Buchheit, who ran the past few batches, said, "It's all about founders. Facebook had Mark Zuckerberg, and MySpace had a bunch of monkeys."

The corollary is that Y Combinator makes its companies more desirable by teaching them how to tell their story on Demo Day. The venture capitalist Chris Dixon, who admires YC, said, "The founders are so well coached that they know exactly how to reverse-engineer us, down to demonstrating domain expertise and telling anecdotes about their backgrounds that show perseverance and courage." In the winter batch, the pitches followed an invariable narrative of imminent magnitude: link yourself to a name-brand unicorn ("We're Uber for babysitting . . . Stripe for Africa ... Slack for health care"), or, if there's no apt analogue, say, "X is broken. In the future, Y will fix X. We're already doing Y." Then express your premise as a chewy buzzword sandwich: We "leverage technology to achieve personalization in a fully automated way" (translation: individuated shampoo). Paul Graham cheerfully acknowledged that, by instilling message discipline, "we help the bad founders look indistinguishable from the good ones."

The counter-theory is that YC actually does make its companies better, by teaching them to focus on growth above all, thereby eliminating distractions such as talking to the tech press or speaking at conferences or

making cosmetic coding tweaks. YC's gold standard for revenue growth is ten per cent a week, which compounds to 142x a year. Failing that, well, tell a story of some other kind of growth. On Demo Day, one company announced that it had enjoyed "fiftyper-cent word-of-mouth

growth," whatever that might be. Sebastian Wallin told me that his security company, Castle, raised \$1.8 million because "we managed to find a good metric to show growth. We tried tracking installations of our product, but it didn't look good. So we used accounts protected, a number that showed roughly thirty-per-cent growth through the course of YC—and about forty per cent of the accounts were YC companies. It was a perfect fairy-tale story."

The truth is that rapid growth over a long period is rare, that the repeated innovation required to sustain it is nearly impossible, and that certain kinds of uncontrollable growth turn out to be cancers. Last year, after a series of crises at Reddit, Altman, who is on its board, convinced Steve Huffman, the co-founder of the company, to return as C.E.O. Huffman said, "I immediately told Sam, 'Don't get on my ass about growth. I'm not in control of it.' Every great startup-Facebook, Airbnb—has no idea why it's growing at first, and has to figure that out before the growth stalls. Growth masks all problems."

Perhaps the most dispositive theory about YC is that the power of its network obviates other theories. Alumni view themselves as a kind of *keiretsu*, a network of interlocking companies that help one another succeed. "YC is its own economy," Harj Taggar, the co-founder of Triplebyte, which

matches coders' applications with YC companies, said. Each spring, founders gather at Camp YC, in a redwood forest north of San Francisco, just to network-tech's version of the Bohemian Grove, only with more vigorous outdoor urination. When Altman first approached Kyle Vogt, the C.E.O. of Cruise, Vogt had been through YC with an earlier company, so he already knew its lessons. He told me, "I talked to five of my friends who had done YC more than once and said, 'Was it worth it the second time? Are you likely to receive higher valuations because of the brand, and because you're plugging into the network?' Across the board, they said yes."

There really is no counter-theory. "The knock on YC," Andy Weissman, a managing partner at Union Square Ventures, told me, "is that on Demo Day their users are just YC companies, which entirely explains why they're all growing so fast. But how great to have more than a thousand companies willing to use your product!" It's not just that YC startups can get Airbnb and Stripe to use their apps; it's that the network's alumni honeycomb the Valley's largest companies. Many of the hundred and twenty-one YC startups that have been acquired over the years have been absorbed by Facebook, Apple, and Google.

Yet Altman worries that the network's very potency has become problematic. In February, he sent an e-mail to recent batches warning that some founders had grown cocky and entitled. And he told me, "It's bad for the companies and bad for Silicon Valley if companies can stay alive just because they're YC. It's better for everyone if bad companies die quickly."

NE EVENING AT Altman's house, his younger brothers, Max and Jack, were teasing him that he should run for President in 2020, when he'd be thirty-five: just old enough. Max, twenty-eight, said, "Who better than you, Sam?" As Altman tried not very vehemently to change the subject, Jack, twenty-seven, said, "It's not purely little-brother trolling. I do think tech needs a good candidate."

"Let's send the Jewish gay guy!" Altman said. "That'll work!"

Jack eyed a board game called Samurai on the bookshelf and said, "Sam won every single game of Samurai when we were kids because he always declared himself the Samurai leader: 'I have to win, and I'm in charge of everything.'"

Altman shot back, "You want to play speed chess right now?," and Jack laughed.

Max was working at the Y Combinator company Zenefits; Jack cofounded a performance-management company, Lattice, which had just gone through YC. The two brothers moved in with Altman temporarily three years ago and never left. Altman recently hired a designer to upgrade his gray IKEA sofas to gray Summer House sofas, and he hung some handsomely framed photographs taken from space, but the house maintains an upscale-studenthousing vibe. His mother told me, "I think Sam likes having his brothers around because they knew him when, and can give him pushback in ways that other people can't. But it's tricky, with the power dynamic, and I want it to end before it explodes."

In March, Altman wrote a blog post announcing his investment in a company called Asana; he was leading a fifty-million-dollar C round. To keep your employees aligned, he wrote, it's vital to have definite tasks and goals, to communicate them clearly, and to measure them frequently, and "Asana is the best way to excel in these 3 areas." When Jack Altman read the post, he texted Sam, "Ouch!" Lattice was pitching itself as the best way to excel in those areas. Then Jack called their parents, who were flabbergasted.

"You still mad at me, Jack?" Altman asked now. As soon as Altman realized the problem—"I wrote a blog post in a rush because Asana asked me to, and I had heard Jack's pitch so much I must have incorporated some of his language"—he called his brother to apologize and figure out how to fix it. He explained that he hadn't perceived a conflict: "I use Asana as a to-do list. Lattice has no to-do-list functionality."

"It wasn't malicious," Jack told me later. "It was just Sam going a million

miles a minute. Sam did later say, playfully, 'We will crush you,' but we were already in the making-amends phase."

As Altman made pasta and Marcella Hazan's tomato sauce, Jack began trolling again. "At YC this winter, when Sam would come over to talk, everybody would be looking at me. All these people who don't know Sam treat him like . . . not like Beyoncé, but—"

"That's overstated," Sam said.

"In fairness, you don't live nearly as ridiculous a life as you could," Jack said. "You could drive a McLaren—"

"Make repeated trips to the French Laundry—" Max put in.

"Fly planes all over California, or buy fossils for tens of thousands of dollars," Jack concluded. His older brother, guilty on all counts, bent over the pasta water.

Though Altman clearly enjoys running YC, at times he seems to wonder if, in his swift rise, he left something behind. For years after his YC summer with Loopt, he couldn't bear instant ramen or Starbucks' coffee ice cream, which he'd subsisted on; now those flavors fill him with longing. This spring, seeing Nick Sivo go through the batch with a new company stirred up the sediment of Altman's youth. When I spoke to the two men together, Altman said, "I still think of Nick as an eighteen-year-old frozen in time, and I think he thinks of me the same way." Sivo said, "I don't really know what you mean." "Like a college kid nobody knows or cares about," Altman said, wistfully.

M eventually unlock enormous value, but it's expensive. To amass the necessary funds, Altman is quietly mining deeper into the Valley: he's begun to make Y Combinator more like a venture firm. YC had always presented itself as a gentle, helpful angel investor, a force opposed to the ruthless venture capitalists who buy in later and then demand mammoth returns. Paul Graham once published an essay called "A Unified Theory of VC Suckage," and a speaker at an early YC event put up a slide titled "VCs: Soulless Agents of Satan or Just Clumsy Rapists?"

YC has helped shift power to entrepreneurs by endorsing contracts that

reduce V.C.s' stranglehold on a company's finances. It also gives founders written evaluations of V.C.s, complete with a numerical grade. Bryce Roberts, whose venture firm hasn't been invited to Demo Day for four years, since he loaned his admission badge to an associate, said, "The cudgel they wield is 'We keep tabs on all you guys."

V.C.s have learned that if they want a crack at funding YC's top companies they have to offer fair terms, work hard on behalf of their startups, and perform any favors that YC asks. Privately, many complain that YC drives up prices. And some gripe that the accelerator is too Darwinian. One well-known V.C. told me, "The program is great for the top four companies in a batch but terrible for the other forty-six, because by the time they come see me I know they've been passed on by Sequoia and Andreessen Horowitz," Ben Horowitz, the co-founder of Andreessen Horowitz, points out that this dynamic, which favors the top venture firms, isn't specific to YC: "The guys who founders want to take money from get the No. 1 draft picks, and all the other guys get to pick through the rest. It's capitalism! Do your fucking job or get your ass kicked."

Altman's approach to investment has been shaped by Peter Thiel, the

forty-eight-year-old libertarian who co-founded Pay-Pal and Palantir, secretly funded the lawsuit that drove Gawker Media into bankruptcy, and has sought to extend his life span by taking human growth hormone. (More recently, he has wondered if it might be better to simply use the

blood of young people.) As a leading venture capitalist, Thiel is in many ways Paul Graham's opposite, favoring not a few fanatic users and ramen profitability but unstoppable metrics and instant monopoly. But the two men share a focus on the quality of founders and on companies' prospects over time: in five years, or ten, will the market for their products allow them to grow 100x?

For years, YC discussed making

follow-on investments in its companies, to help them expand further and to profit from that expansion. Last year, Altman proposed a loan pool of four or five billion dollars, then a two-to-three-billion-dollar growth fund. "We all told Sam that was insanely huge," one YC mainstay recalled. Altman eventually concurred. "The people who opposed me turned out to be right—you couldn't actually deploy five billion dollars into YC companies," he said. "At least, not yet."

The first YC Continuity growth fund, which launched last September, was a relatively modest seven hundred million dollars. While growth-fund investors would be delighted with a 3x return for a fund of that size, Altman was hoping for an unheard-of 10x. Continuity would mainly be leading later funding rounds, but a third of its money was earmarked for maintaining YC's seven-per-cent stake in all of its companies that raised funds after they graduated. (If YC invested only in its favorites, V.C.s would infer that the others were second-rate.) Ali Rowghani, who runs Continuity, described this focus as a huge competitive advantage: "Growth investors spend eighty to ninety per cent of their time sourcing deals, circling the globe like a Japanese fishing fleet. We're fishing in an aquarium that gets restocked constantly."

But, to many V.C.s, YC Continu-

ity was more like a destroyer parked in the South China Sea. Bryce Roberts said, "It has to be a way of disrupting Sand Hill Road"—where a number of the Valley's top venture firms reside. "If Sam isn't saying it, he's thinking it. Why own seven per cent of Airbnb when you can

own twenty-five per cent of it?"The fear is that YC will soon provide cradle-to-I.P.O. funding for so many top startups that it will put a lot of V.C.s out of business. That would greatly reduce the sources of funding and expertise for other startups—and concentrate more power in YC's hands. One leading V.C. said, "At some point, they'll start cherry-picking their best companies for A and B rounds. I just assume their plan is

to disrupt everything and take over the world."

When I raised this line of thinking with Altman, he got mad. "We will not lead A rounds while I'm running YC!" he declared. "It would cause irreparable damage to our program to cherry-pick our best companies." Yet Jonathan Levy, the YC partner who helped write the legal framework establishing YC Continuity, observed, "There's enough leeway in the documents to do whatever makes sense. Look, does Sam have a lot of respect for Sequoia? Yeah. Does he think he could do it better? Absolutely. Will he do it better? Absolutely. Can I see Sam taking over the entire V.C. system? Absolutely. There will be an exception to the original plan, then two exceptions, and then the system will have changed."

N A TRIP to New York, Altman Odropped by my apartment one Saturday to discuss how tech was transforming our view of who we are. Curled up on the sofa, knees to his chin, he said, "I remember thinking, when Deep Blue beat Garry Kasparov, in 1997, Why does anyone care about chess anymore? And now I'm very sad about us losing to DeepMind's AlphaGo," which recently beat a world-champion Go player. "I'm on Team Human. I don't have a good logical reason why I'm sad, except that the class of things that humans are better at continues to narrow." After a moment, he added, "'Melancholy' is a better word than 'sad."

Many people in Silicon Valley have become obsessed with the simulation hypothesis, the argument that what we experience as reality is in fact fabricated in a computer; two tech billionaires have gone so far as to secretly engage scientists to work on breaking us out of the simulation. To Altman, the danger stems not from our possible creators but from our own creations. "These phones already control us," he told me, frowning at his iPhone SE. "The merge has begun—and a merge is our best scenario. Any version without a merge will have conflict: we enslave the A.I. or it enslaves us. The fullon-crazy version of the merge is we get our brains uploaded into the cloud. I'd love that," he said. "We need to level

## AS FOR THE HOUSEFLY

Bashing its head against the kitchen window, its sentience is a quasar, it has lived
Twenty fly years trying to understand transparency, while for me, only half a day has passed
Since it blew in the back door as I was getting the mail.
But I hear the cosmos howling fiercely inside
Its minuscule cranium. Time is compressed in its soul like neutrons in plasma. When I walk
Across the kitchen, I am continental drift, I move
My arms like a spiral galaxy. No wonder
It is frantic as I open the pane. How long must it take for the air to cool and the sun to sink into
Its consciousness, how long for the speed of light to change?

-T. R. Hummer

up humans, because our descendants will either conquer the galaxy or extinguish consciousness in the universe forever. What a time to be alive!"

Some futurists—da Vinci, Verne, von Braun-imagine technologies that are decades or centuries off. Altman assesses current initiatives and threats, then focusses on pragmatic actions to advance or impede them. Nothing came of Paul Graham's plan for tech to stop Donald Trump, but Altman, after brooding about Trump for months, recently announced a nonpartisan project, called VotePlz, aimed at getting out the youth vote. Looking at the election as a tech problemwhat's the least code with the most payoff?—Altman and his three cofounders concentrated on helping young people in nine swing states to register, by providing them with registration forms and stamps. By Election Day, VotePlz's app may even be configured to call an Über to take you to the polls.

Synthetic viruses? Altman is planning a synthetic-biology unit within YC Research that could thwart them. Aging and death? He hopes to fund a parabiosis company, to place the rejuvenative elixir of youthful blood into an injection. "If it works," he says, "you will still die, but you could get to a hundred and twenty being pretty healthy, then fail quickly." Human obsolescence? He is thinking about establishing a group to prepare for our

eventual successor, whether it be an A.I. or an enhanced version of *Homo sapiens*. The idea would be to assemble thinkers in robotics, cybernetics, quantum computing, A.I., synthetic biology, genomics, and space travel, as well as philosophers, to discuss the technology and the ethics of human replacement. For now, leaders in those fields are meeting semi-regularly at Altman's house; the group jokingly calls itself the Covenant.

As Altman gazes ahead, emotion occasionally clouds his otherwise spotless windscreen. He told me, "If you believe that all human lives are equally valuable, and you also believe that 99.5 per cent of lives will take place in the future, we should spend all our time thinking about the future." His voice dropped. "But I do care much more about my family and friends." He asked me how many strangers I would allow to die-or would kill with my own hands, which seemed to him more intellectually honest—in order to spare my loved ones. As I considered this, he said that he'd sacrifice a hundred thousand. I told him that my own tally would be even larger. "It's a bug," he declared, unconsoled.

He was happier viewing the consequences of innovation as a systems question. The immediate challenge is that computers could put most of us out of work. Altman's fix is YC Research's Basic Income project, a five-year study, scheduled to begin in 2017,

of an old idea that's suddenly in vogue: giving everyone enough money to live on. Expanding on earlier trials in places such as Manitoba and Uganda, YC will give as many as a thousand people in Oakland an annual sum, probably between twelve thousand and twenty-four thousand dollars.

The problems with the idea seem as basic as the promise: Why should people who don't need a stipend get one, too? Won't free money encourage indolence? And the math is staggering: if you gave each American twenty-four thousand dollars, the annual tab would run to nearly eight trillion dollars-more than double the federal tax revenue. However, Altman told me, "The thing most people get wrong is that if labor costs go to zero"-because smart robots have eaten all the jobs-"the cost of a great life comes way down. If we get fusion to work and electricity is free, then transportation is substantially cheaper, and the cost of electricity flows through to water and food. People pay a lot for a great education now, but you can become expert level on most things by looking at your phone. So, if an American family of four now requires seventy thousand dollars to be happy, which is the number you most often hear, then in ten to twenty years it could be an order of magnitude cheaper, with an error factor of 2x. Excluding the cost of housing, thirty-five hundred to fourteen thousand dollars could be all a family needs to enjoy a really good life."

In the best case, tech will be so transformative that Altman won't have to choose between the few and the many. When A.I. reshapes the economy, he told me, "we're going to have unlimited wealth and a huge amount of job displacement, so basic income really makes sense. Plus, the stipend will free up that one person in a million who can create the next Apple."

A partners and team near the end of the winter batch, Paul Buchheit, the partner running the batch, discussed a survey of its founders. There had been complaints about the food (not enough nightshade-free options) and the coffee (instant). The main

criticism, Buchheit said, was that, with a hundred and twenty-seven companies in the batch, "YC feels too big. I think a lot of us feel that way, too. Founders aren't schoolchildren or farm animals that we herd around. They're the next Mark Zuckerbergs, they're peers, and it's critical to our success that they love us." He concluded, "I have a goal of the next batch being a hundred companies."

Afterward, Altman told me that it was a mistake to focus entirely on founders. "When I took over," he said, "we measured our companies' happiness with YC, but that was the wrong metric. To make sure we're getting and keeping the best investors, we now also measure partner happiness"—currently 4.38 out of five-"versus whether a company that wasn't going to make it was unhappy with our love." Venture capitalists believe that their returns follow a "power law," by which ninety per cent of their profits come from one or two companies. This means that they secretly hope the other startups in their portfolio fail fast, rather than staggering onward as resource-consuming "zombies." Altman pointed out that only a fifth of YC companies have failed, and said, "We should be taking crazier risks, so that our failure rate would be as high as ninety per cent. And, if you're optimizing for returns, you'd like to have your best company in each batch raise all the money." He acknowledged that "that would be demoralizing to all the other companies, and you don't build a helpful network that way. On the other hand, a network of just three or four huge YC companies would be pretty helpful."

Concerns about the accelerator scaling too much and too fast remain widespread. Drew Houston, the co-founder of Dropbox, told me that the supply of talented founders isn't infinite: "At some point, company No. 10,001, you're just admitting people you would have rejected before." Marc Andreessen, whose venture firm invests fifteen per cent of its funds in YC companies, said, "The composite view here is that YC is getting better at picking as they grow—and that, because they have an increasingly powerful magnet, they're getting a more routinely qualified set of founders." But he

added, "The debate is: are they stretching the network to its breaking point? It's the genius and the madness all rolled into one." In huge success, the Valley's guiding principles conflict: scale precludes uniform excellence and a tight-knit network.

Altman acknowledged the strain on the YC network, with hundreds of nascent companies all wanting the ear of, say, Patrick Collison at Stripe. Noting that Stripe just designated a contact for YC-related inquiries, he said he hoped that YC's other anchor companies will follow suit. They'd better hurry. Starting this winter, YC Fellowship is becoming Startup School, a free, online, ten-week course for as many companies as want to take part. They won't get funded, but they can learn the same lessons as batch companies do. Altman, who will personally oversee this initiative, believes it is the fastest, easiest way to bring ten thousand new founders a year into the network. He said, "If we create more scale for the world and 10x the number of great startups, even though we don't have any ownership in them, it will benefit YC in some way I can't exactly predict now." Meanwhile, the summer batch, with Fellowship companies included, numbered a hundred and seventy-larger than the winter batch. And this winter YC will expand from one night a week of programming to two, permitting further rapid growth. Altman plans to launch YC China next year, and has contemplated YC India. He said, "Someday, YC will be hundreds of times larger than when I took over." Much could go wrong, he noted, but, really, "I don't see how anyone can stop us."

Altman's regime has left some people at YC nostalgic for the homey camaraderie of the early days. One YC stalwart told me, "Sam's a little too focussed on glory—he puts his personal brand way out front. Under P.G., we had a family feel, and now it's all institutional and aloof. Sam's always managing up, but as the leader of the organization he needs to manage down." When I asked Altman about this critique, he said, "I absolutely could do a better job at managing the organization—it was my chief weakness at Loopt, and I still have

some learned helplessness about it. I don't want to do weekly one-on-ones and let's-talk-about-your-career-paths. But I think it's O.K. to have a little mess at the organizational level if we're making the big decisions right, since those are the ones that bring us all our returns." More generally, he observed, "The missing circuit in my brain, the circuit that would make me care what people think about me, is a real gift. Most people want to be accepted, so they won't take risks that could make them look crazy—which actually makes them wildly miscalculate risk."

Recently, YC began planning a pilot project to test the feasibility of building its own experimental city. It would lie somewhere in America, or perhaps abroad, and would be optimized for technological solutions: it might, for instance, permit only self-driving cars. "It could be a college town built out of YC, the university of the future," Altman said. "A hundred thousand acres, fifty to a hundred thousand residents. We crowdfund the infrastructure and establish a new and affordable way of living around concepts like 'No one can ever make money off of real estate." He emphasized that it was just an idea—but he was already looking at potential sites.

You could imagine this metropolis as an exemplary post-human city-state, run on A.I.—a twenty-first-century Athens—or as a gated community for the élite, a fortress against the coming chaos. For Altman, the best way to discover which future was in store was to make it. One of the first things he did at OpenAI was to paint a quotation from Admiral Hyman Rickover on its conference-room wall. "The great end of life is not knowledge, but action," Rickover said. "I believe it is the duty of each of us to act as if the fate of the world depended on him.... We must live for the future, not for our own comfort or success." Altman recounted all the obstacles Rickover overcame to build America's nuclear-armed Navy. "Incredible!" he said. But, after a considering pause, he added, "At the end of his life, when he may have been somewhat senile, he did also say that it should all be sunk to the bottom of the ocean. There's something worth thinking about in there." •