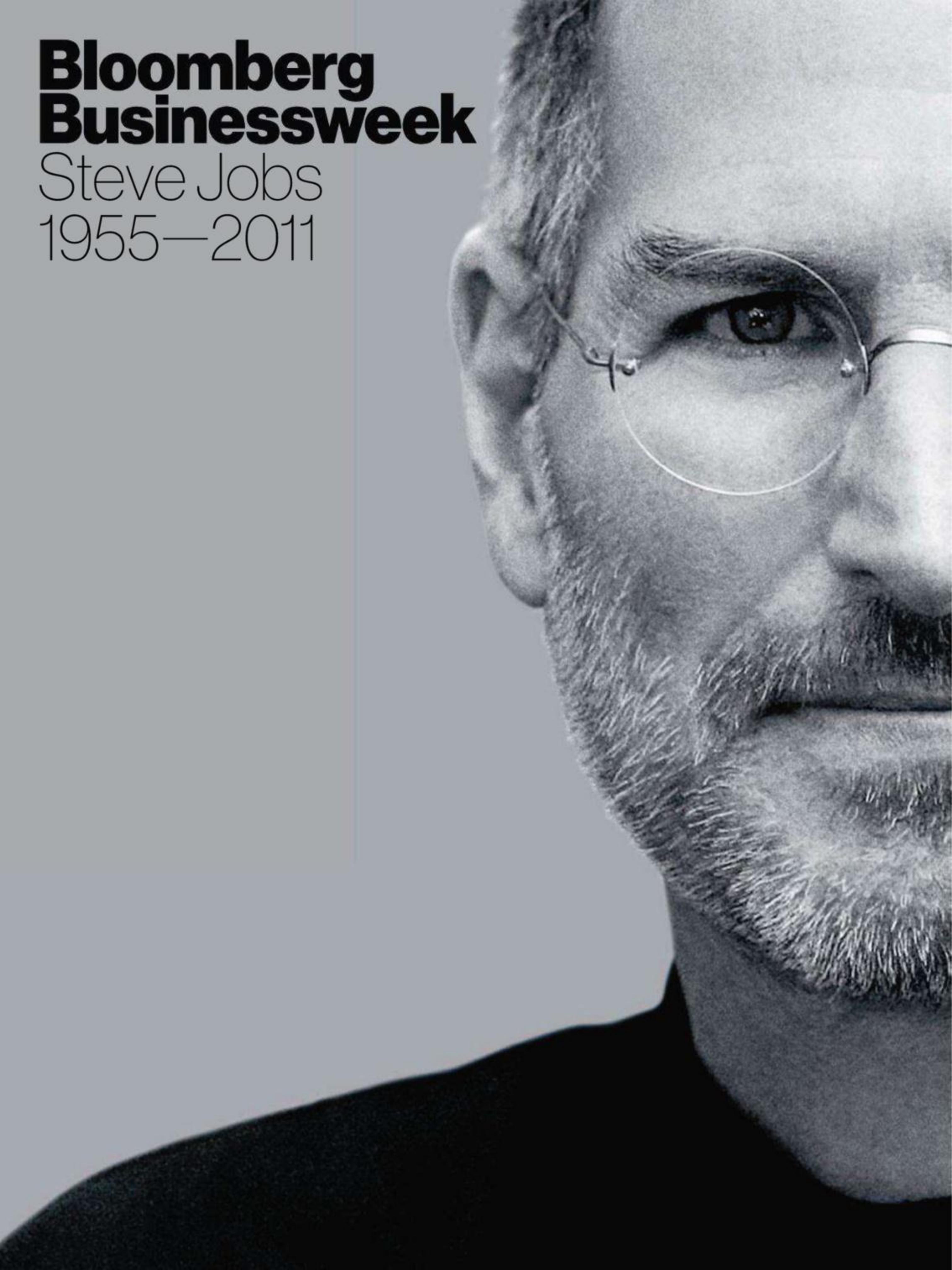
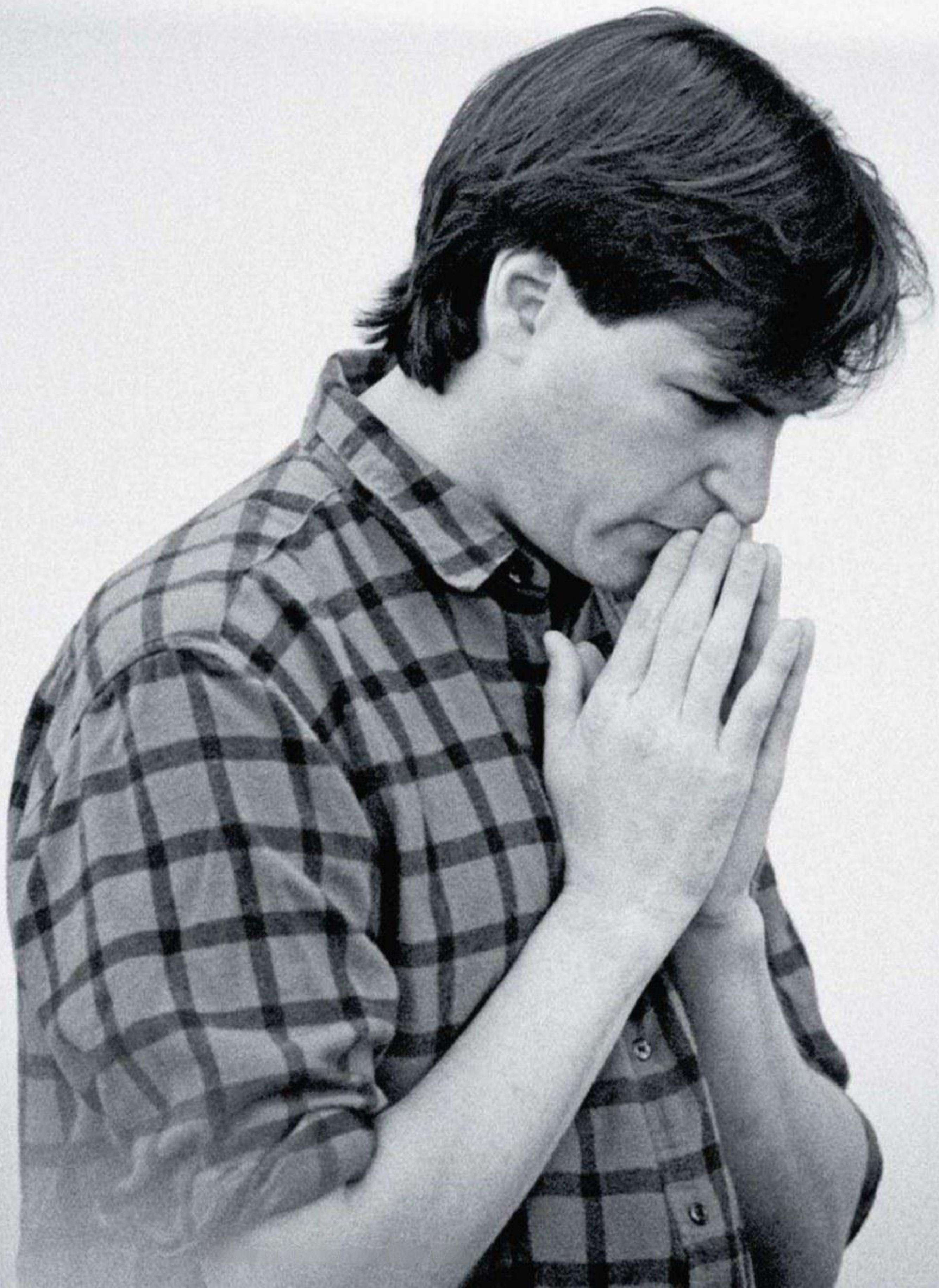


Bloomberg Businessweek

Steve Jobs
1955–2011





**Remembering that you
are going to die
is the best way I know
to avoid the trap
of thinking you have
something to lose.**

You are already naked.

**There is no reason
not to follow your heart.**

**Simple can be harder than complex.
You have to work hard to get
your thinking clean to make it simple.**



But it's worth it in the end.



The only way to be satisfied is to do





what you believe is great work.



Don't be trapped by dogma.



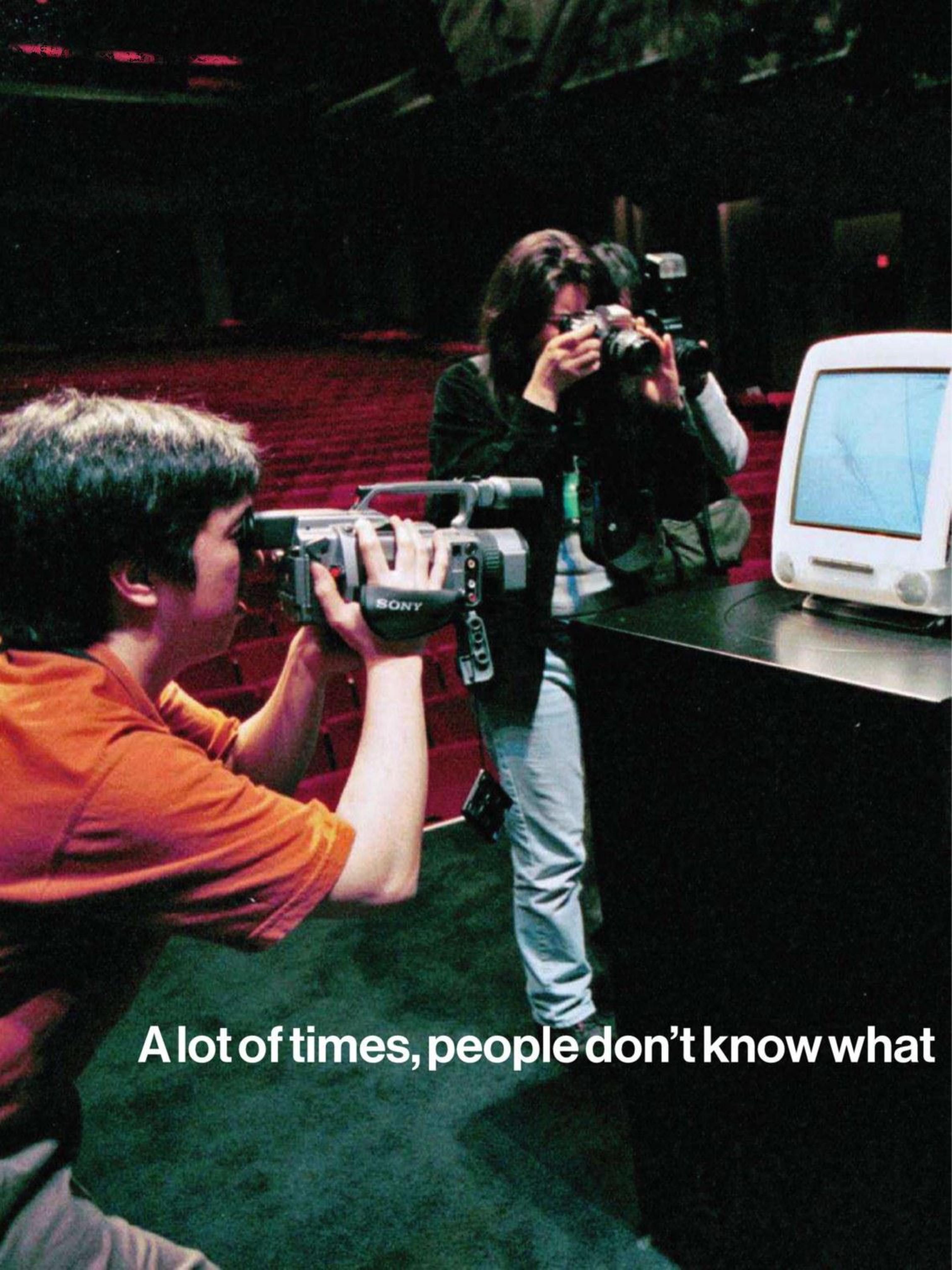
Don't let the noise of others' opinions drown out your own inner voice.



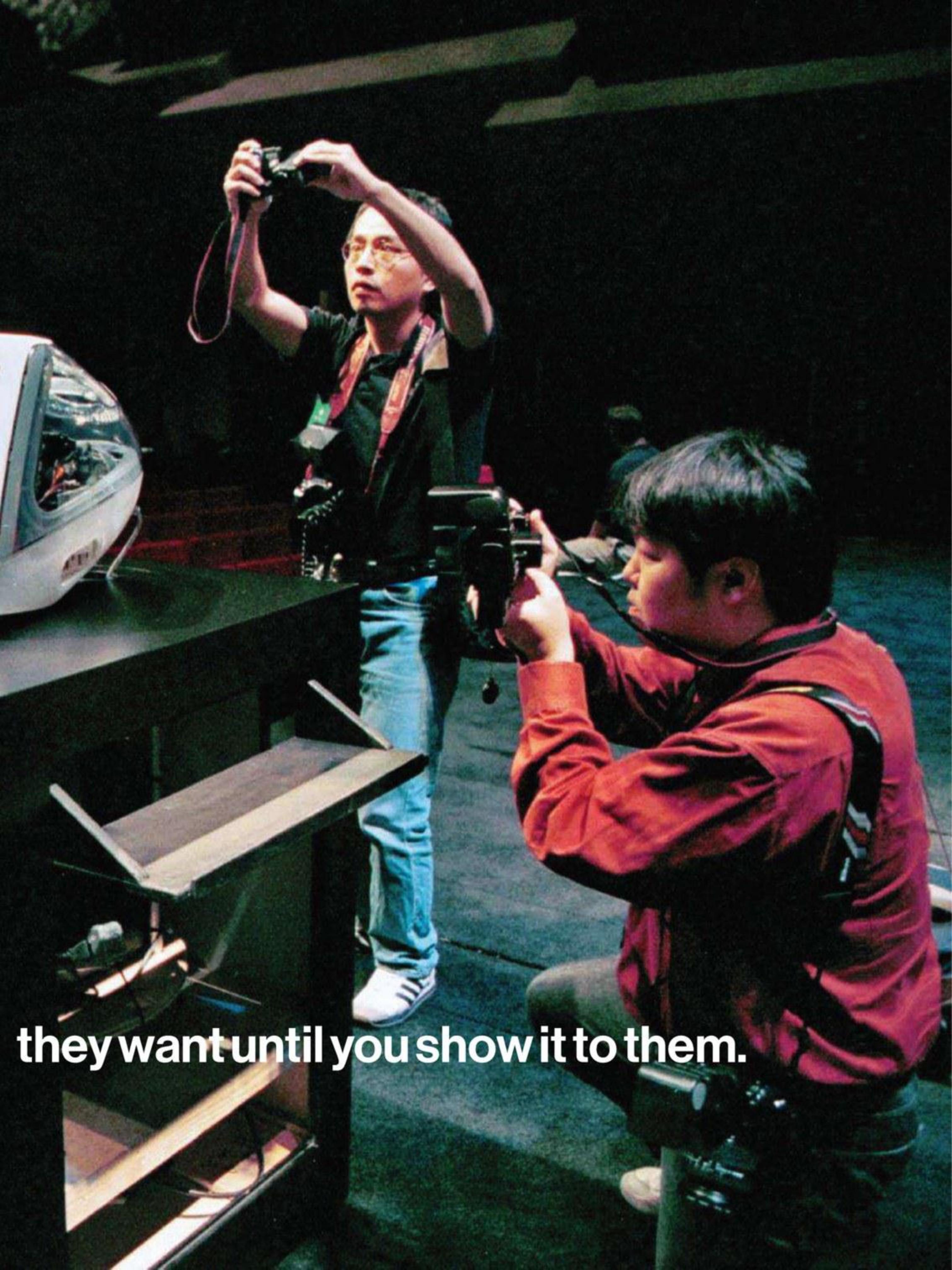
Don't settle.



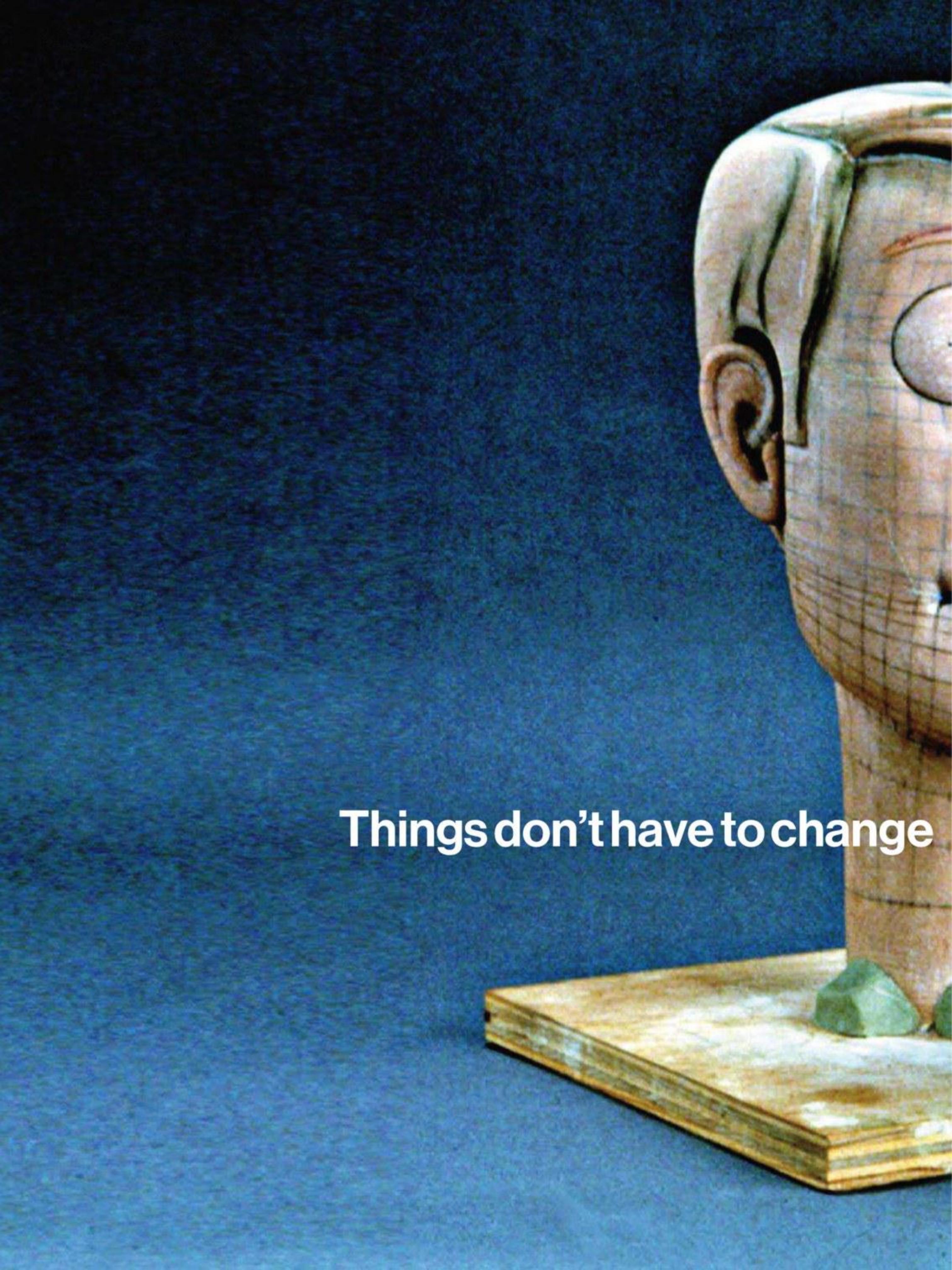
**It's only by saying no that
you can concentrate on the things
that are really important.**



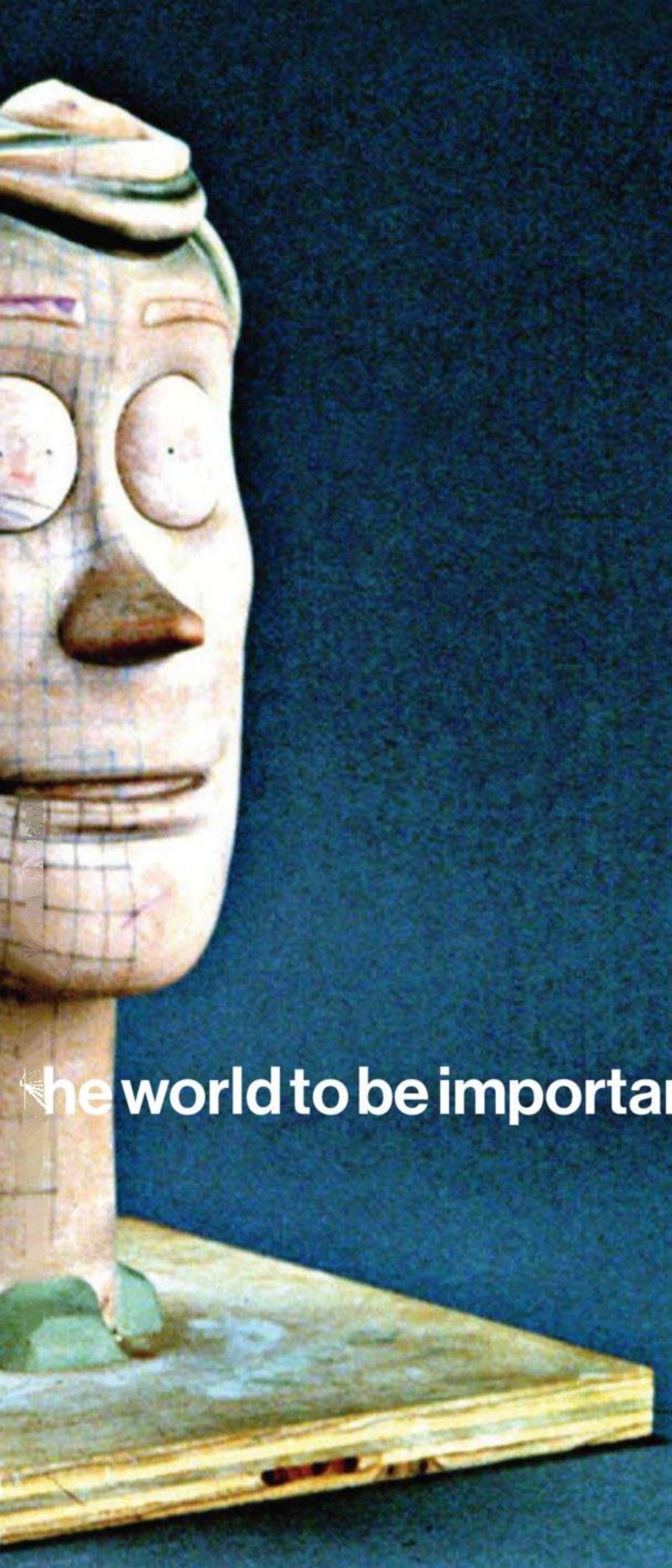
A lot of times, people don't know what



they want until you show it to them.

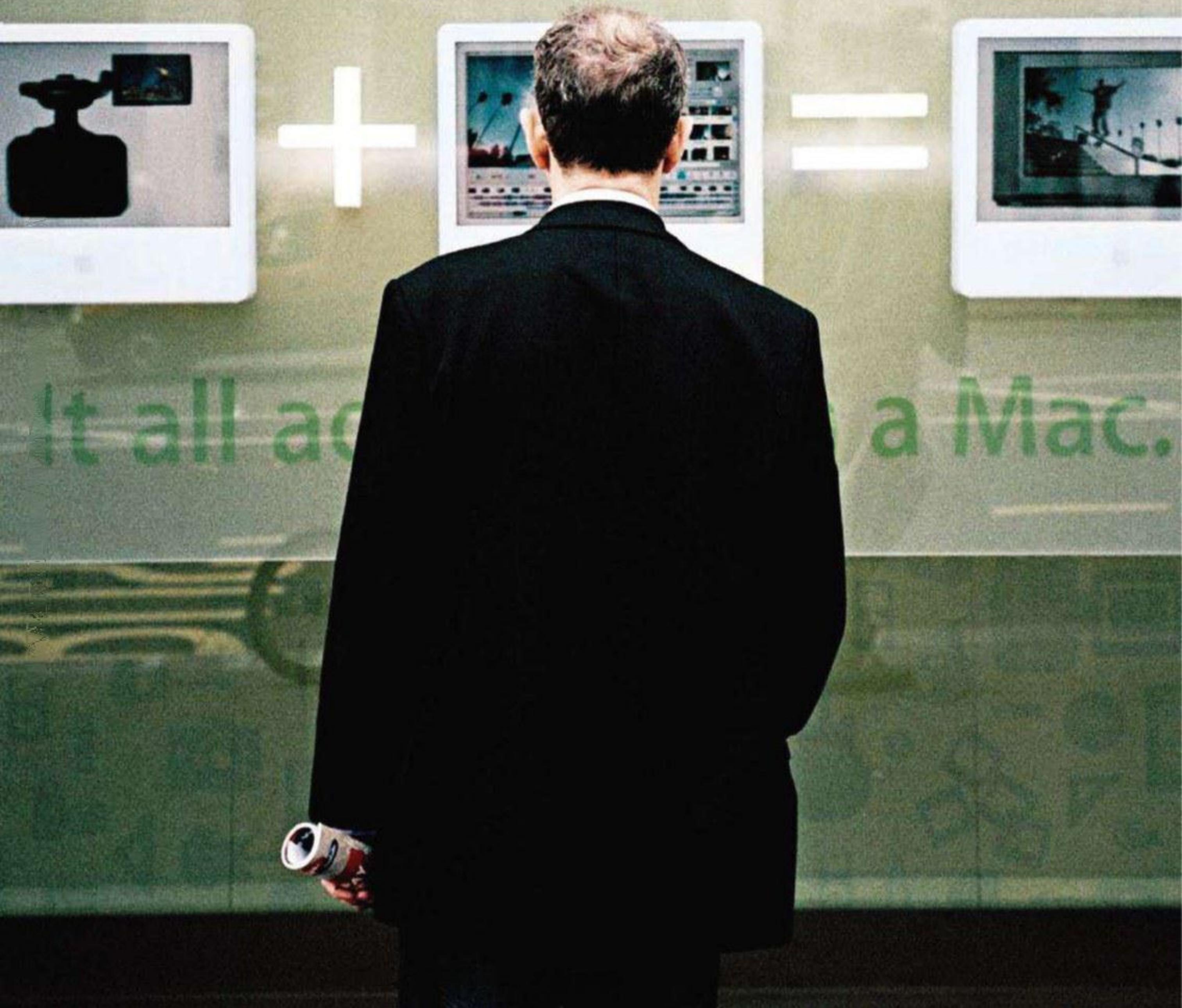


Things don't have to change



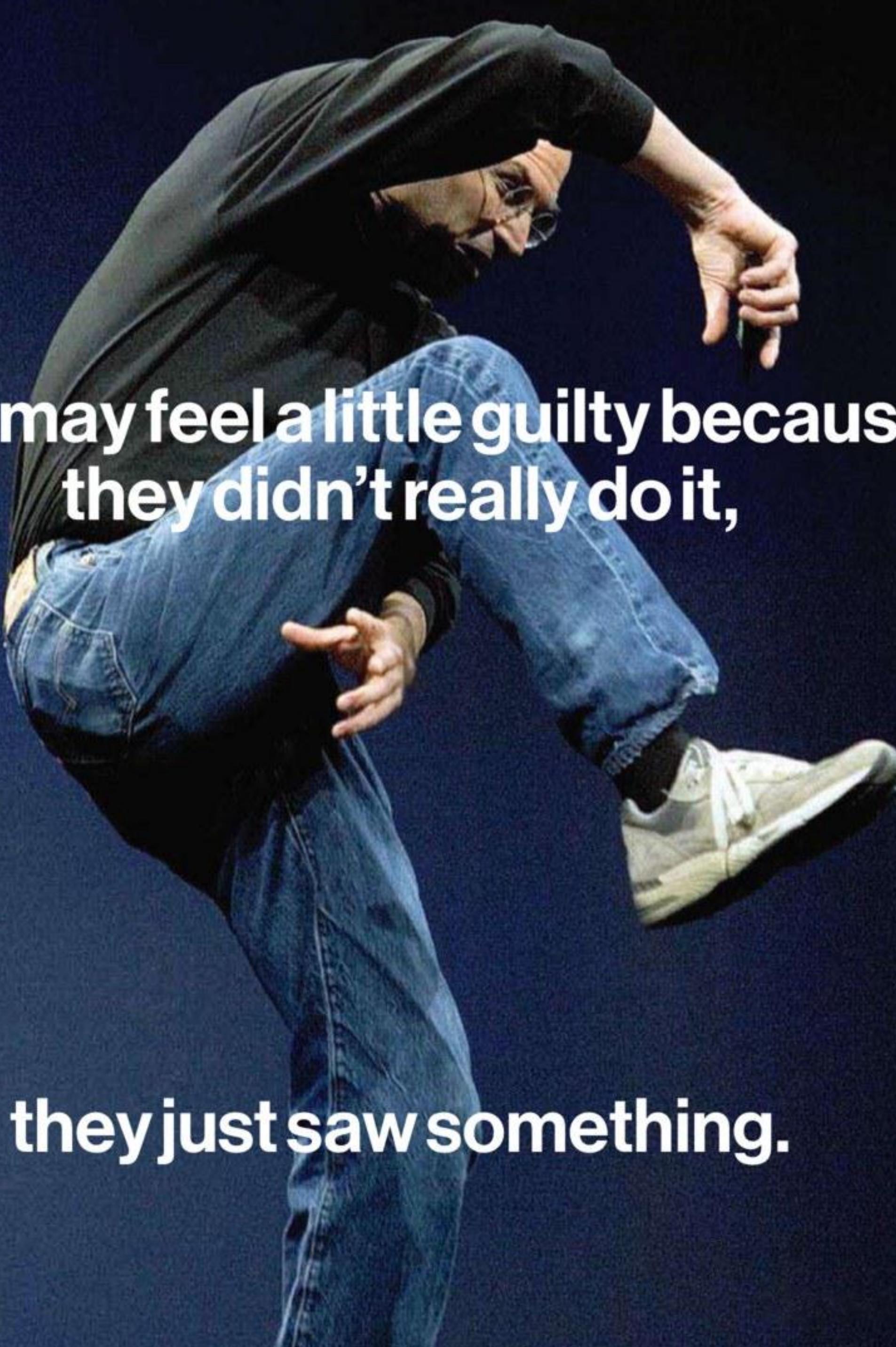
the world to be important.

Creativity is about connecting things.



It all adds up to a Mac.

**When you ask a creative person
how they did something,**



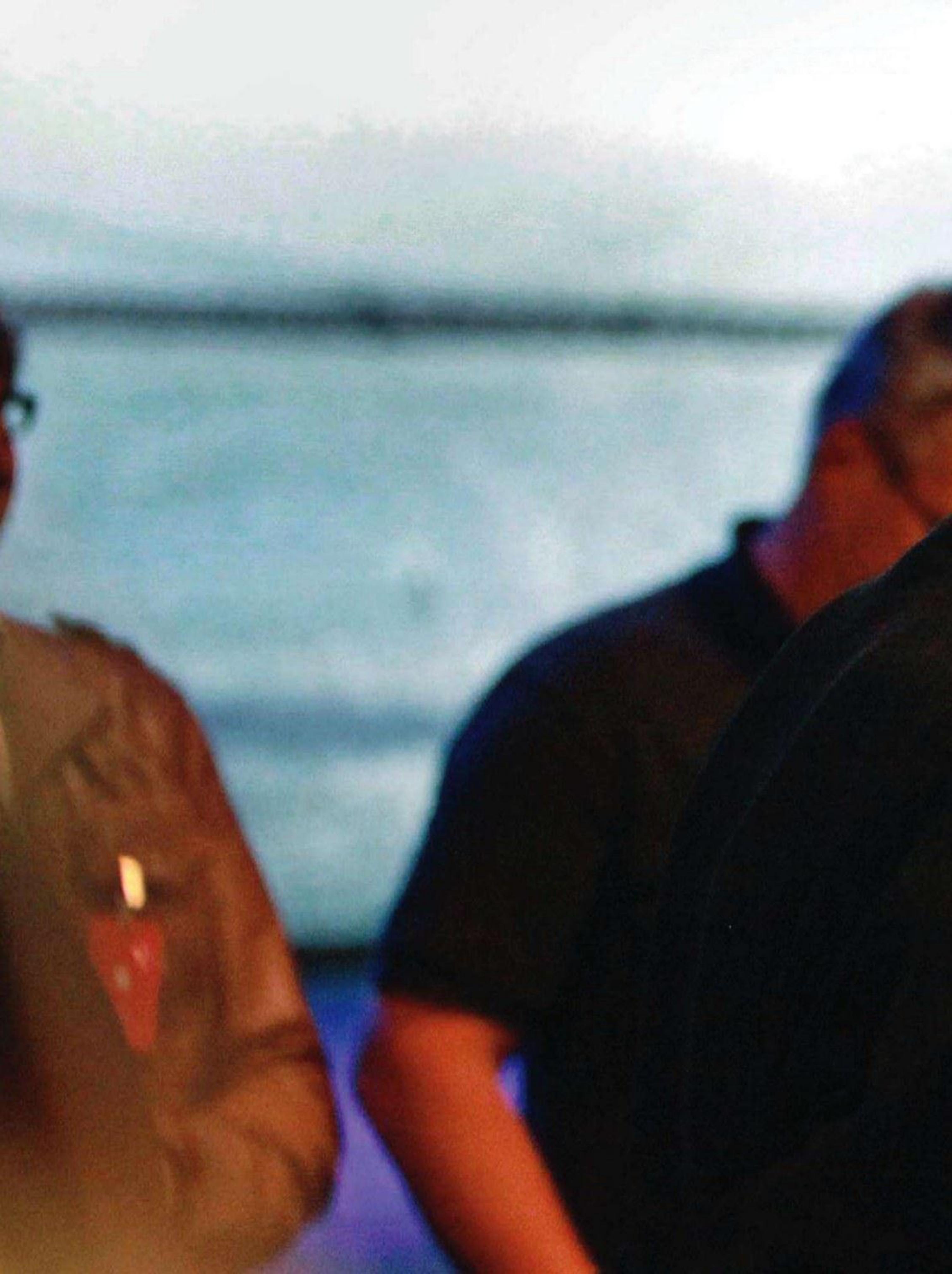
**they may feel a little guilty because
they didn't really do it,
they just saw something.**

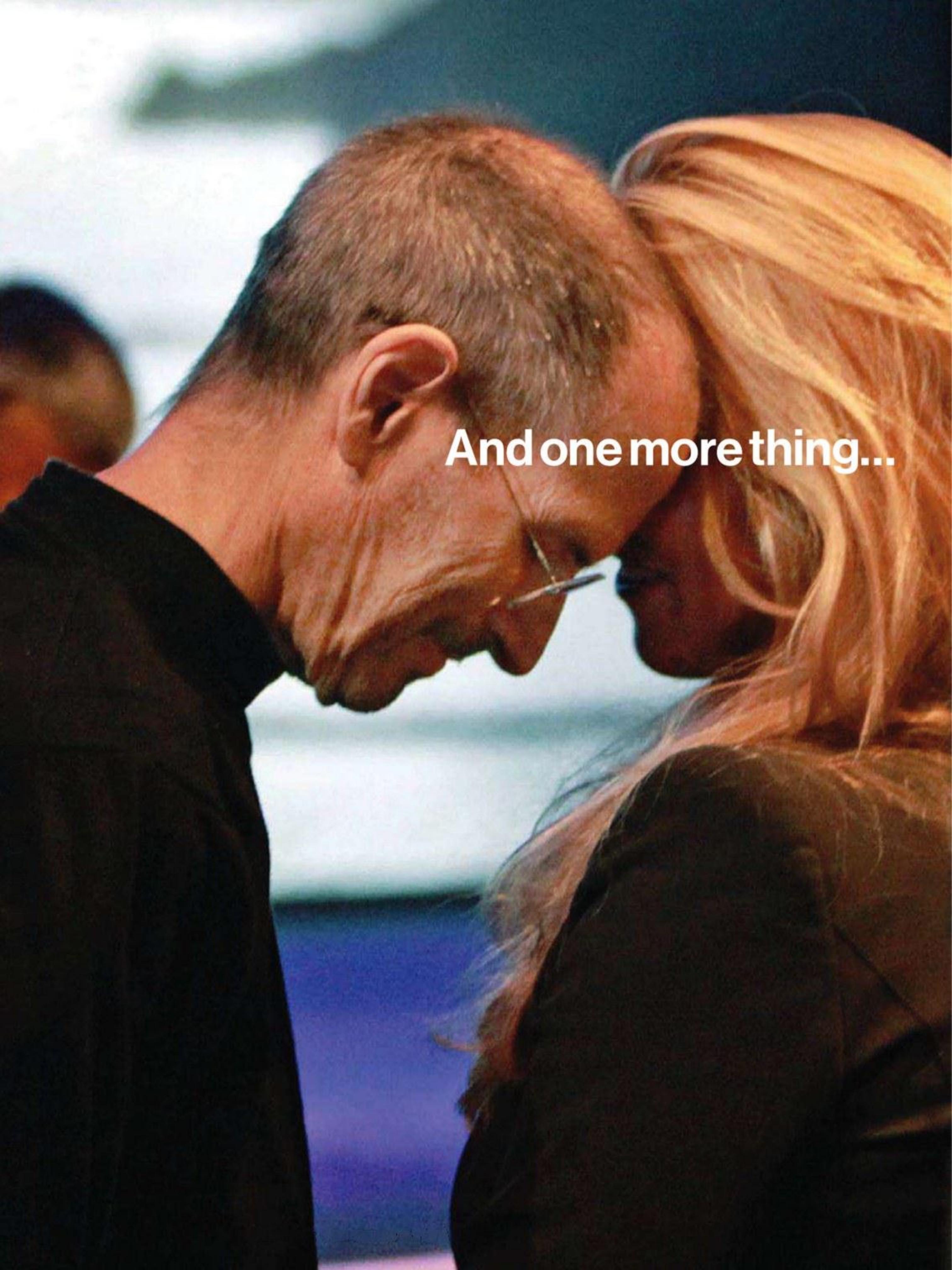


Stay hungry.



Stay foolish.





And one more thing...

Steve Jobs was born in 1955, into an era of rotary phones and room-size computers. He died on Oct. 5, 2011, having put a computer inside a phone and that phone into 120 million pockets.

Jobs was diagnosed with pancreatic cancer in 2003, and while he went to characteristic lengths to control public knowledge about the details of his condition, he could not hide his physical deterioration. First he underwent surgery and took a leave of absence. When he returned as chief executive officer, he guided Apple through a streak of new products that proved his belief that art and commerce, complicated ideas and simple packages, could be merged into a universal aesthetic. Each launch brought more magic, more acclaim, more profits—and less Jobs. There was a second leave of absence in 2009, and pictures of the CEO introducing iPhones and iPads over the last three years show a man disappearing before our eyes. He died at home, surrounded by his family, the day after Apple introduced the latest version of the iPhone without him.

Business leaders are sometimes admired and occasionally revered. Jobs—though prone to the arrogance that can accompany genius—was beloved. The memorials outside Apple stores around the world are a testament to his ability to affect people and expand their sense of the possible. In the coming weeks we'll report at length on Apple's future and take a close look at whether the company Jobs co-founded at the age of 21 and nurtured into the most valuable corporation in the world can continue to dominate technology and popular culture.

This week, we offer the biography of a boundary-breaking thinker and endlessly astute businessman. From his birth and adoption by the Jobs family to his days in the California counterculture making games for Atari; from the peak of the insurgency against Microsoft to his forced exile from Apple; from Woody and Buzz to iTunes and the iPad, it's all here, a signature American life as told by our staff of writers and reporters, and the people who knew Jobs best. It's different from any issue we've ever done, and that's the most fitting tribute there is.

Quotes from Steve Jobs in order of appearance:

- [Commencement address
to the Stanford graduating class,
June 12, 2005](#)
- [BusinessWeek, May 25, 1998](#)
- [Stanford commencement
Wired, February 1996](#)
- [Stanford commencement
BusinessWeek, Oct. 12, 2004](#)
- [Stanford commencement
Wired, February 1996](#)
- [Several "Stevenotes"—keynote
addresses at Macworld Expos](#)

The Beginning

by Jim Aley

The high school loner who figured out what the world wanted from technology. **Page 20**

The Wilderness

by Peter Burrows

Cast out from Apple, Jobs tried—and failed—to make a different kind of computer. **Page 28**

The Return

by Brad Stone

In his third act, Jobs led Apple on a run of success unprecedented in corporate history. **Page 36**

— Stories About Steve

Friends, colleagues, and competitors talk about the man they knew. **Page 44**

The Products

by Sean Wilsey

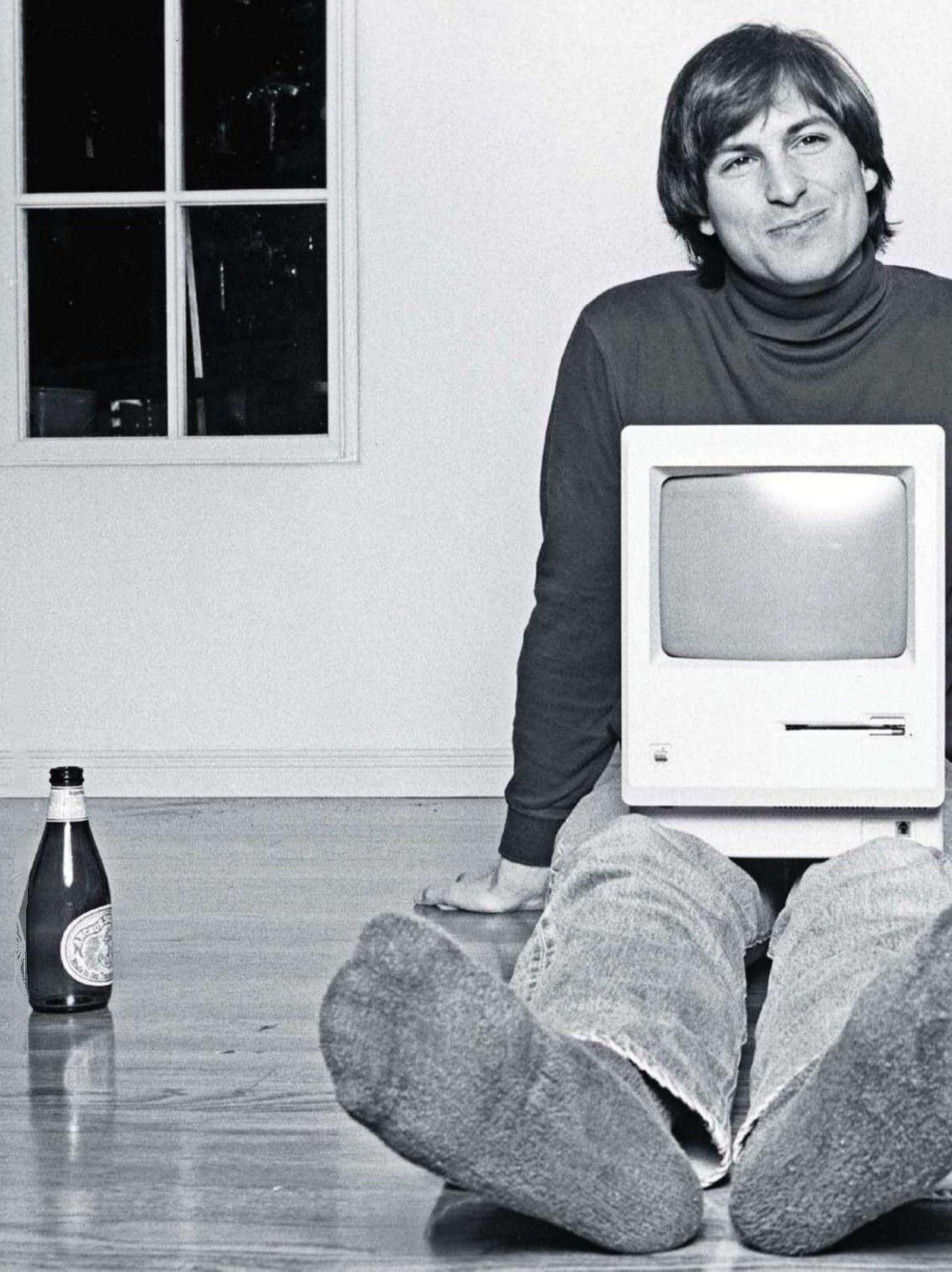
How Apple stokes desire, and what the Apple experience says about the modern world. **Page 48**

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A lexicon of the words and concepts Apple has spawned. **Page 62**





1955—1985 The Beginning
By Jim Aley

1.

Total revenue from U.S. music sales, 1999: \$14.6 billion.
 Total revenue from U.S. music sales, 2009: \$6.3 billion.
 The iPod was released on Oct. 24, 2001.

\$14.6B \$6.3B

2.

Hewlett-Packard was founded in 1939 by Stanford classmates Bill Hewlett and Dave Packard.

The video is close to 35 years old and the picture isn't great, but it's obvious Steve Jobs is nervous. He won't sit still. As the makeup and sound guys in the television studio do the final preparations before the cameras go on, there's the long-haired nerd—he must be 23, 24—swiveling around in his chair, wearing a jacket and tie and a pair of square wire-frame glasses. He hasn't done much media, that's clear to the talent handlers, who try to get him to relax a little with small talk. Jobs isn't paying attention.

"God! Look at that!" he says, squinting at a monitor and running his hand through his hair, which looks washed for a change. "Look, I'm on television!"

"You're on TV in New York, too," says one of the handlers. This studio is probably in San Francisco, though the particulars are lost to history.

"No, no." Jobs leans forward, and watches another studio person brush his sleeve. "Am I really? Are you serious? God! I was just in New York last week!" More swivels and small talk. Jobs looks up at the lights, hand-combs his hair again, and tells the people fussing around him that he's ready to throw up. "I'm not joking," he says. Sip of water. A producer announces he's ready to roll. Jobs swivels. Forced smile. Hand through hair. "God!"

Knowing what Steve Jobs would become, it's endearing to watch him babble with stage fright. He had already started a tiny company that is drawing crowds of hobbyists at computer fairs, but he's decades away from the showman whose product unveilings will become cultural milestones. The music business now comes in two eras: pre-iPod and post-iPod [fig. 1]. Same with mobile and the iPhone, and if history holds, the iPad will mark an epochal split in personal computing. Jobs would claim that he never invented those things; he discovered them. They were always there, someone just needed to "connect the dots," to put the parts together into a whole no one else seemed to see.

The video fuzzes out and cuts before the interview with the anchor in New York. Jobs probably did fine. Even then, he seemed able to convince anyone of anything. If charm didn't work, he'd threaten, weep, whatever worked. The engineers and local high school kids he'd talked into working for him could attest to that. The force of will, the uncompromising aesthetic, the mean streak—he already had a reputation in Silicon Valley. But other people had those traits. Connecting the dots into a persona that can create a \$350 billion empire out of technological desires the world never knew it had—that required something exceptional.

Jobs was born Feb. 24, 1955, in San Francisco to



The cameras are about to roll. Jobs is ready to throw up. He takes a sip of water. "Look, I'm on television!"

a pair of unwed graduate students, Joanne Carole Schieble and a Syrian immigrant named Abdul fattah Jandali. They put him up for adoption when he was an infant, and he was taken in by Clara and Paul Jobs, who raised their son in a ranch house on Crist Drive in Los Altos, about three miles from where Apple eventually would put its headquarters.

Young Steve wasn't easy. He stuck a bobby pin into a wall outlet and had to be taken to a hospital after tasting ant poison. When he was old enough to go to school, his teachers—the ones who bored him, anyway—found him obnoxious and disruptive, when he wasn't inattentive. In the classroom, he'd set off little bombs and let loose snakes. "I was pretty bored in school," he told *Playboy* in 1985, "and I turned into a little terror."

His classmates mostly thought he was "really strange," as Mark Wozniak, the younger brother of his future partner Steve Wozniak, once put it. Jobs himself would later tell an interviewer, "I wasn't a jock. I was a loner for the most part." One foggy day, a gym teacher had the class do laps on a track. When Jobs reached the far end, obscured from the teacher's view by the fog, he sat down and watched his classmates puff by. He rejoined the pack the next lap. "He had figured out how he could get away with half the work and still get credit for the whole thing," a classmate, Bruce Courture, told Jeffrey S. Young in the 1988 Jobs biography *The Journey Is the Reward*.

Jobs wasn't lazy. He wanted to absorb as much of the world as possible. But he was choosy, and one thing he chose was electronics. Silicon Valley was buzzing with promise in the 1960s. Lockheed was doing moon-shot work, Hewlett-Packard was already a geek paradise. Engineers were all over the place. Workshops sprouted in garages up and down Crist Drive, and the garage of Paul Jobs, a machinist, was no exception. He kept a spotless workbench and cleared a space for Steve to tinker. "It was really the most wonderful place in the world to grow up," Jobs told a Smithsonian Institution historian in 1995. For a smart kid in the Valley, electronics, especially computer electronics, was more than a career choice. In those days, he said, "The best people in computers would have normally been poets and writers and musicians.... They went into computers because it was so compelling. It was fresh and new. It was a new medium of expression for their creative talents."

When Jobs was around 12, a neighbor showed him some electronics tricks, such as a microphone that worked without an amplifier. The guy was a ham radio operator as well as an employee of Hewlett-Packard [fig. 2], and Jobs idolized that company and its founders. One

day he called William Hewlett himself, about some parts for a frequency counter he was trying to build. Hewlett must have been impressed or at least amused, because he stayed on the phone for 20 minutes. Jobs got the parts he needed—and, a few years later, a summer gig at HP.

Jobs didn't love just electronics. He read a lot of Shakespeare, listened to a lot of Dylan. This was California in the 1970s, with all the explorations of self implied by that decade and place. By high school he was experimenting on himself. Curious about the mind-expanding possibilities of sleep deprivation, he'd stay up a couple of nights in a row. He smoked pot and hash, and, as he would repeatedly remind employees and reporters over the years, dropped LSD.

When he graduated from Homestead High School in 1972, he declared that he would attend Reed College in Oregon. Reed was known for its mixture of academic rigor and tolerance of counterculture, but it was expensive. His parents were aghast. "We tried to talk him out of it," Paul Jobs later told Michael Moritz, the venture capitalist who wrote *The Little Kingdom*, an early book about Apple. Steve wouldn't budge, and his parents gave in. Jobs dropped out of Reed after six months. He didn't leave right away, though: He stuck around for a year and a half, sleeping on friends' floors and living off the money he raised by collecting bottles for the deposits. He wandered around campus barefoot, stopping in libraries to read about Zen Buddhism and doing some more bodily experimentation. The teachings of Arnold Ehret fascinated him. Ehret, a 19th century physician from Prussia, believed that good health was a matter of eliminating mucus from the body. The Ehret diet was heavy on figs, nuts, grated horseradish, and honey. That sounded about right to Jobs.

The fruitarian, shoeless Buddhist and mendicant ex-student listened in on classes, too, and was transfixed by one in particular: a course on calligraphy. "It was beautiful, historical, artistically subtle in a way that science can't capture, and I found it fascinating," Jobs told Stanford University's graduating class in 2005. He said he eventually combined those calligraphy ses-



Always a tinkerer, Jobs joined the electronics club at Homestead High School, from which he graduated in 1972



▲ Jobs was fascinated by Arnold Ehret, a 19th century Prussian physician who advocated a diet of figs, nuts, horseradish, and honey

3.
Al Alcorn, who hired Jobs at Atari, designed Pong, the company's first big success. Founded in 1972, Atari was sold to Time-Warner for \$28 million in 1976.

sions with computers—beauty with technology, a big connect-the-dots moment.

If he'd had any money while in Oregon, Jobs would probably have headed to Asia to immerse himself in Buddhism. But he didn't, so he drifted back to the Bay Area and talked his way into a job at Atari [fig. 3], the video game maker. He had no formal technical training, but he clearly knew enough about electronics that Al Alcorn, then Atari's chief engineer, detected something in the long-haired kid and hired him as a game designer. It was that or call the police, because Jobs wouldn't leave the lobby until he got work. "He looked pretty grubby," Alcorn later told Moritz. "He was talking a mile a minute and claimed to be working on the HP 35 calculator. He said he could turn the HP 45 into a stopwatch. He implied he was working for HP. I was impressed, said, 'hey, fine,' and didn't bother to check."

Jobs's fellow employees couldn't stand him; he was an arrogant weirdo who smelled funny. The fruitarian diet, Jobs was convinced, purged his body of impurities and thus eliminated the need to bathe. Rather than fire him, Alcorn had Jobs come in after hours so the other employees didn't have to deal with him.

The night shift had its advantages. Jobs remained in touch with a guy who'd graduated from Homestead High a few years before him, a hardcore nerd named Steve Wozniak. Woz had a job at HP and serious engineering talent. He also was addicted to video games, and Jobs let him into the Atari offices to play late into the night. In return, Woz helped Jobs with projects. One was an assignment that came from Atari's founder, Nolan Bushnell (who later founded the Chuck E. Cheese's restaurant chain). Bushnell asked Jobs to figure out a design for the game Break-Out, where players would use a Pong-like paddle to smash a wall of bricks. Unbeknownst to Bushnell or Alcorn, Jobs turned around and made a deal with Woz: Do the coding, and Jobs would split the \$600 completion fee with him. Woz did the work, and Jobs got his money and gave Woz \$300—his "half." Problem was, Jobs got \$1,000 as his fee. Woz didn't find out about Jobs's lie until a year later, according to *iCon*, the 2005 book by Young and William L. Simon. When he did find out, he was so hurt he cried.

They were an unusual pair who shared a love of electronics. Woz was the tech genius and Jobs the brash idea man. They'd first bonded at the Homebrew Computer Club, a local group of engineers and hobbyists who would gather to swap parts and ideas. An early Woz-Jobs production was a "blue box"—a hacker's term for a device that taps into the phone system to make free long-distance calls. It

4.
In November 2010, an Apple I sold for \$212,267 at a Christie's auction in London.

5.
Seeking enlightenment, Jobs traveled to India in 1974 with his Reed College friend Dan Kottke.



worked. They prank-called the Vatican and realized they could make money selling blue boxes handmade by Woz. It was amazing: Build a little machine and fake out the phone company and its billions of dollars of equipment. "That was an incredible lesson," Jobs said in the 1996 PBS documentary *Triumph of the Nerds*. "I don't think there would ever have been an Apple computer had there not been blue boxes."

Wozniak began putting together a contraption that he and Jobs could show off to their Homebrew buddies. The Apple I [fig. 4] was little more than a motherboard. Whoever bought one—Woz and Jobs sold 50 to a local hobby store—had to supply a case to hold the circuitry, not to mention a keyboard and monitor. It may have been primitive, but it was the proof of concept the two needed. They knew they could build a better computer, and Jobs knew people would buy it.

Jobs discovered that he liked business. But he hated it, too, or at least feared the potential of the Establishment-loving monster he'd become if he loved it too much. He couldn't quite square his business self with his hippie-fruitarian self. He did make it to India [fig. 5] while still at Atari. With little money and no shoes, he found a baba, shaved his head, and came down with scabies and dysentery. The poverty in India wasn't the lifestyle choice some hippies were making back home; these people were just plain poor. That experience dispelled any notions that the truth necessarily lay in the mud of the Indian rainy season.

Yet even as Woz struggled to build enough computers to keep up with demand, Jobs yearned to return to Asia and live a monastic life of contemplation. This time, Japan called to him. His friend Dan Kottke sent Jobs a letter making fun of him: "After performing an extensive prana to the lotus feet of suchness, gaze lovingly upon picture with cosmic thoughts of cosmic relevance and profundity until phone rings. Answer phone, haggle furiously, and refuse to sell for less than \$2.3 million." Jobs consulted Kobin Chino, a Japanese Zen master in Berkeley he met after he got back from India. Should Jobs head to Japan or descend into business? Chino, who barely spoke English, observed the dramatic soul-searching and, like Kottke, found it funny. So obvious: Stick with the computers, the Zen master said.

Woz and Jobs officially launched Apple Computer on April Fool's Day, 1976.

In the late 1970s, computer makers were popping up much the way car companies did in Detroit at the turn of the 20th century. Osborne, Commodore, and RadioShack were all selling what were becoming known as "personal computers." Like the Apple I, they were made for hobbyists. They were hard to use and



▲ Jobs and Steve Wozniak built this "blue box" to make free international phone calls. They used it to crank-call the Vatican

didn't really do much. The Altair, the earliest, pretty much just lit up little lights once you laboriously connected a bunch of switches on the logic board.

Jobs wanted the next computer to be something different—an appliance, something anyone could use. That was the Apple II, which came out a year after the Apple I. He hammered at his message as the company grew: Computers should be tools. Trip Hawkins, one of Apple's first 50 employees, remembers Jobs obsessing over an article he'd read in a science magazine about the locomotive efficiency of animal species. "The most efficient species was the condor, which could fly for miles on only a few calories," Hawkins says. "Humans were way down the list. But then if you put a man on a bicycle, he was instantly twice as efficient as the condor." The computer, Jobs said, was a "bicycle for the mind."

"That line was so good it became part of his routine," says Hawkins. "We ended up creating an ad out of it."

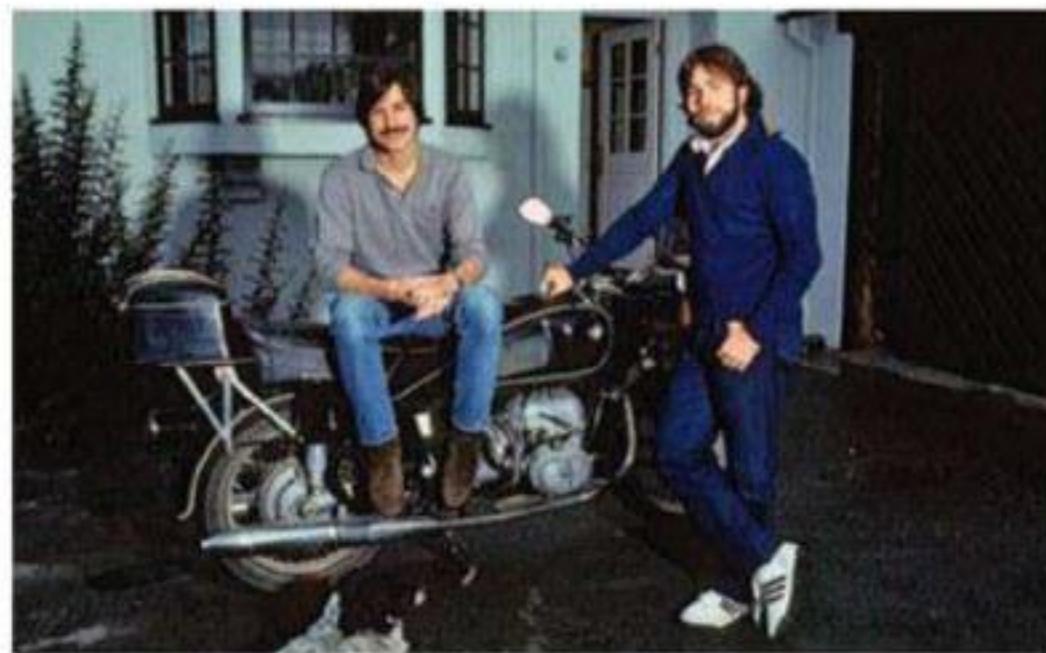
Jobs had another message: These tools had to be beautiful. The Apple II did look great, for then: It had a case and keyboard and fit easily on a desk. Jobs's aesthetic suffused everything, even the circuit boards. He insisted the circuits be redone to make the lines straighter.

The Apple II was a hit that powered the company for the next seven years, through an initial public offering in 1980 and all the way to the release of the Macintosh. Jobs became a star. His hair was still long, but it was styled. He wore suits. He dated celebrities: Joan Baez (who was 14 years his senior, but who once was Bob Dylan's girlfriend) and Diane Keaton (nine years his senior; no obvious Dylan connection). He talked about his company as an anti-Establishment force, waging a crusade to battle the faceless arch-enemy, which back then was IBM. "You always need to have bad guys and good guys in America," says Regis McKenna, the legendary Silicon Valley public-relations man who worked with Apple beginning in the late 1970s. "Apple was thumbing its nose at this big world of monolithic standards. It became a rebel. It became a symbol of fast growth, youth."

Jobs was always charismatic, but as Apple grew, his stage presence became mesmerizing. "He knew how to modulate his voice," says Hawkins. "He always knew how to get an audience in the palm of his hand in seconds—to get them into a story that's emotionally interesting. Then he'd bring his voice down, so people are hanging on every word."

Jobs's inexplicable hold on people got a name, the "reality-distortion field." It was a sardonic term, because once you left the reality-distortion field all jazzed and ready to put in another 20-hour day, you

Apple was thumbing its nose at this big world of monolithic standards. It became a rebel. It became a symbol of fast growth, youth"



remembered that the guy could be such a jerk. In 1978 his onetime girlfriend Chrisann Brennan gave birth to a daughter, Lisa. Jobs denied paternity. After a DNA test confirmed he was the father, he still said Lisa wasn't his. Perhaps he convinced himself by entering his own reality-distortion field.

At Apple, Jobs inspired without inspiring much love. "He'd stop by and say, 'This is a pile of shit' or 'This is the greatest thing I've ever seen,'" Andy Hertzfeld, who helped develop the Macintosh, told Moritz. "The scary thing was that he'd say it about the same thing." The people at Apple had a name for that behavior, too: "the shithead-hero roller coaster." Guy Kawasaki, another early employee who was assigned to recruit outside developers to write software for the new machine, said Jobs once came by his cubicle with an executive Kawasaki didn't recognize. Jobs asked for Kawasaki's opinion about some third-party company's software. Kawasaki replied that he didn't think it was very good. "And Steve turns to the guy and he says, 'See, that's what we think about your product,'" Kawasaki says, laughing. The stranger was the third-party company's chief executive officer. "I'm sure the CEO did not expect to get ripped like that."

Everyone at the company knew Jobs was brilliant, but there were too many tirades and humiliations to let him really run the company. Early on, even Jobs knew Apple needed managerial help. By the time the Apple II came out in 1977, Apple already had some adult supervision. Mike Scott, a former National Semiconductor executive, was CEO. Mike Markkula, who had gotten rich at Intel, got the early financing together; he would later serve both as CEO and chairman over the years. Both were among Apple's first seven employees, and they tried to figure out ways to work with the unpredictable front man. Scott irritated Jobs from the start. They'd argued over who got which employee number and what color the engineers' workbenches should be. (Jobs won that round—the benches were white.) Apple went public in 1980 [fig. 6]. It

◀ Jobs and Steve Wozniak founded Apple on April Fool's Day, 1976. Woz was the serious engineer and Jobs the brash idea man

An Apple TV ad that ran only once, during the 1984 Super Bowl, was a not-so-veiled slap at IBM



6.
Since its IPO in 1980, Apple's stock price has jumped from \$22 to \$378.25 a share.



had \$117 million in revenue and a bureaucratic superstructure like any Fortune 500 company. Woz had mostly checked out by then. The Apple II was his technology, not what came after.

Jobs wanted a computer that was dead simple to use, something where you could just turn it on and the thing worked. He saw the future he was looking for in 1979 on a visit to Silicon Valley's holy of holies, Xerox's Palo Alto Research Center. PARC was the copier company's Bay Area outpost. Researchers had been working on a computer called the Alto, which had a graphical user interface. Jobs saw the prototype and couldn't believe it. Rather than having to type commands to move a cursor around the screen, you just rolled a little box called a "mouse" and clicked on drop-down menus. He immediately started planning on how he'd replicate the technology. "Ultimately it comes down to taste," Jobs said in *Triumph of the Nerds*. "It comes down to trying to expose yourself to the best things that humans have done and then trying to bring those things in to what you're doing. I mean, Picasso had a saying. He said, 'Good artists copy. Great artists steal.'" Over the next five years, Jobs frog-marched a rotating cast of Apple designers and engineers to create what would turn into the Macintosh. The machine did blow people's minds, at least for a while. But there was a problem: Jobs.

Jobs had to have a calla lily. It was 11 p.m. in New York City in December 1983, and he absolutely had to have a calla lily in his suite at the Carlyle Hotel. No other flower would do. He also needed a piano. "Not that he played one," says Andrea Cunningham, who did marketing for Apple. He merely stipulated that his room have one. Cunningham was part of Jobs's entourage in town for a *Fortune* magazine photo shoot to promote the Mac, which was going to be introduced just a month later on Jan. 24, 1984. "He was being such a pill," says Cunningham. "He staunchly refused to do anything the photographer asked." To lighten the mood, she set up a tape recorder and played music Jobs liked—the Michael Jackson album *Thriller*. No dice; Jobs refused to pose. Then the song *Billie Jean* came on. "He snapped to and was a different guy," she says. "And as soon as the song ended, he reverted back. So I kept rewinding the tape to play over and over so he'd behave."

It was the usual Steve, micromanaging and playing with people's heads. Like Cunningham, people developed workarounds. After Mike Scott got fired and Markkula got tired of running the company, Jobs recruited John Sculley from PepsiCo with the now-famous line, "Do you want to sell sugar water for

the rest of your life or do you want to come with me and change the world?" For a time, Sculley's strategy for dealing with Jobs seemed to be, let Steve be Steve. Jobs was the founder; Sculley was the hired help. "At exec staff meetings, all you had to do was watch the body language," Jay Elliot, then an Apple executive, told *iCon* authors Young and Simon. "Steve and John would talk to each other, but everyone else who was supposedly reporting to John spent all their time talking to Steve. He was in charge."

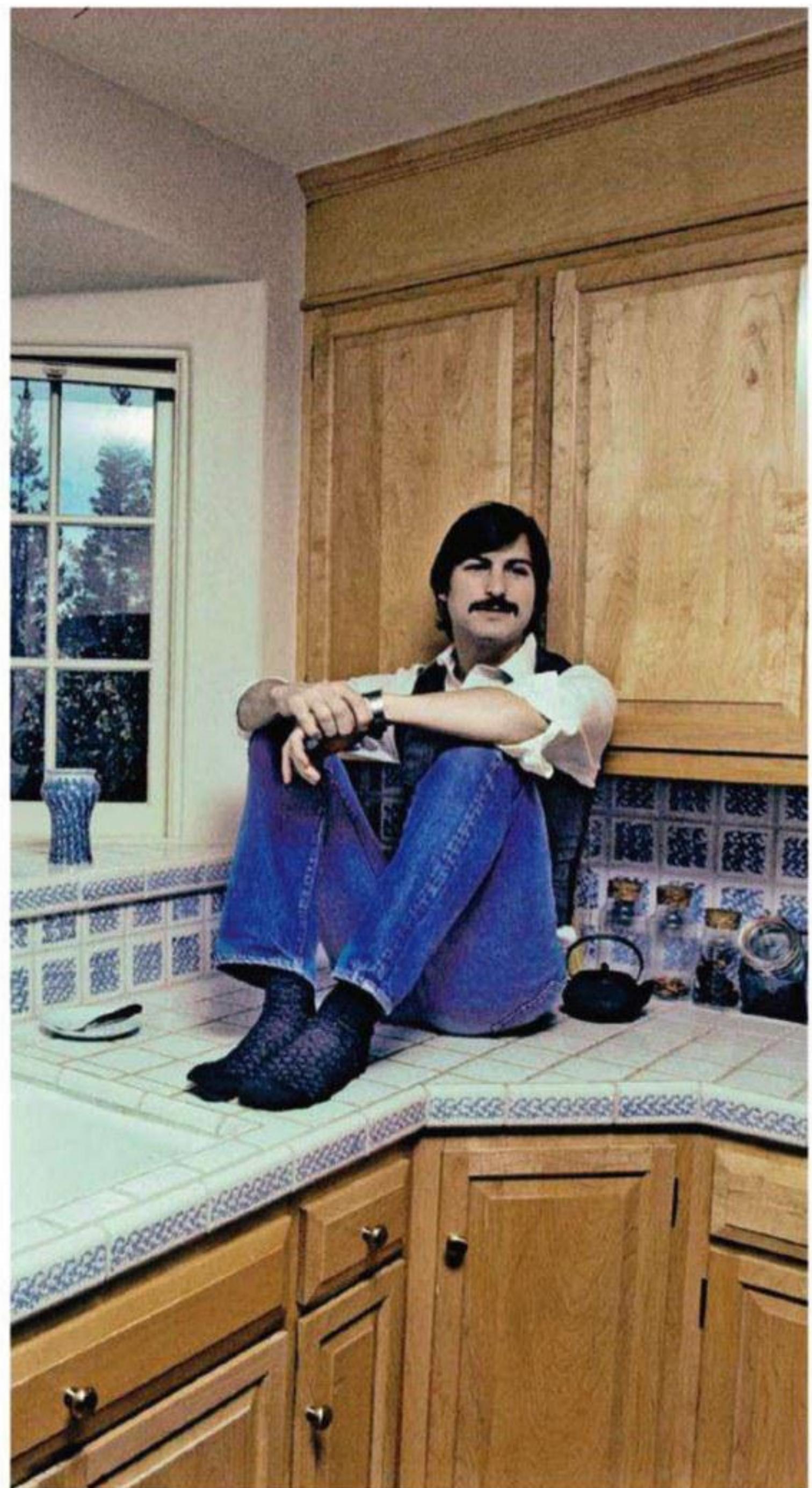
That relationship continued as Jobs introduced the Mac. It was a spectacular performance that began with the Big-Brother-Is-IBM commercial that ran once, during the 1984 Super Bowl. The 60-second spot, directed by Ridley Scott, showed an Orwellian world of grim conformity. A lone woman in a tank top with a Mac logo sprints through the grayness and throws a hammer through a giant screen, shattering Big Brother's droning visage.

Jobs followed that up two days later at the Apple annual shareholder meeting. He walked onstage, took a Mac out of a bag—and the Mac itself started talking. "Hello, I am Macintosh. It sure is great to get out of that bag..." The show was flawless. Jobs had long since transformed from the fidgeting amateur who was so nervous he wanted to barf. Now he was recognizably Steve Jobs, arbiter of culture and center of the universe. He was funny, too, which had hardly been a strong point in his presentation skills.

After the post-launch frenzy, Mac sales slowed. Apple's device was underpowered and didn't have nearly enough software programs to match Big Blue's inelegant PC. Apple's board of directors, especially venture capitalist Arthur Rock, came around to thinking something had to be done about Jobs. "Back then he was uncontrollable," Rock told *Institutional Investor* magazine two decades later. "He got ideas in his head, and the hell with what anybody else wanted to do. Being a founder of the company, he went off and did them regardless of whether it ended up being good for the company."

The board told Sculley he had to act. In April he relieved Jobs of day-to-day duties and made him vice-chairman. Then Jobs lost that title, too. At 30, he lost the thing that most mattered to him. "I didn't see it then," he would say in 2005, "but it turned out that getting fired from Apple was the best thing that could have ever happened to me. The heaviness of being successful was replaced by the lightness of being a beginner again."

Starting over, however, turned out to be tougher—much tougher—than Steve Jobs thought. ▀



▲
Jobs at home, 1981

No Bozos. Ever.

By John Sculley

Sculley was CEO of Pepsi-Cola when Jobs recruited him to be Apple's CEO in 1983. He fired Jobs two years later.

December 1982. A pirate's flag flew over Bandley II, the Cupertino home to Steve Jobs's Macintosh team. In preparation for my visit, Steve had told his team that I was president of Pepsi and they should give me a really cool demo because I could become a big customer. The Mac was only a small motherboard with wires running to a makeshift power supply and another bundle of colored wires leading to a 10-inch cathode ray tube balanced on a bench top. To impress me, Andy Hertzfeld, one of Steve's brightest software engineers, had created a simple animation of dancing Pepsi cans on the screen. I didn't know enough at the time to appreciate how revolutionary this computer animation was.

The fully developed Mac was still more than a year away from its birth as a commercial product. Steve's small Mac team averaged only 22 years of age, and Steve himself had just recently turned 27. Even the iconic Mac 128k case that would resemble a 1950s television set hadn't yet been designed.

But in Steve's mind there wasn't the slightest doubt: Mac was destined to change the world, and it would be the most "insanely great" product ever! He called it a bicycle for the mind. The world would know it as pure magic.

Steve was always Apple's visionary. When I first joined Apple, my priority was to squeeze three more years of cash flow out of the near-end-of-life Apple II so Steve would have enough cash runway to create and launch the Mac.

So began an incredible friendship and partnership that was to last only until the spring of 1985. Now, many decades later, I replay in my mind our times together. I am still learning lessons from Steve Jobs. The advances in technology over these years are extraordinary, but Steve wasn't an engineer. As an artist he barely drew anything recognizable on his white board. But as a master impresario, the clarity and brilliance of his creations was genius. Steve would say, "I have this really incredible product inside me, and I have to get it out." One time, Steve and I sat in Dr. [Edwin] Land's conference room at his office on the Charles River that he used after he was fired from Polaroid. I sat there listening while these two geniuses discussed where great inventions come from. Pointing toward the center of the empty conference table, Dr. Land said, "I didn't invent the Polaroid camera, it's always existed, just waiting to be discovered." Steve replied, "That's right. I knew long before we built it exactly what the Mac

was. It always existed. I never had to ask customers what they wanted. If it's something truly revolutionary, they won't be able to help you." All of Steve's visionary products have always existed, they were just waiting for him to discover them.

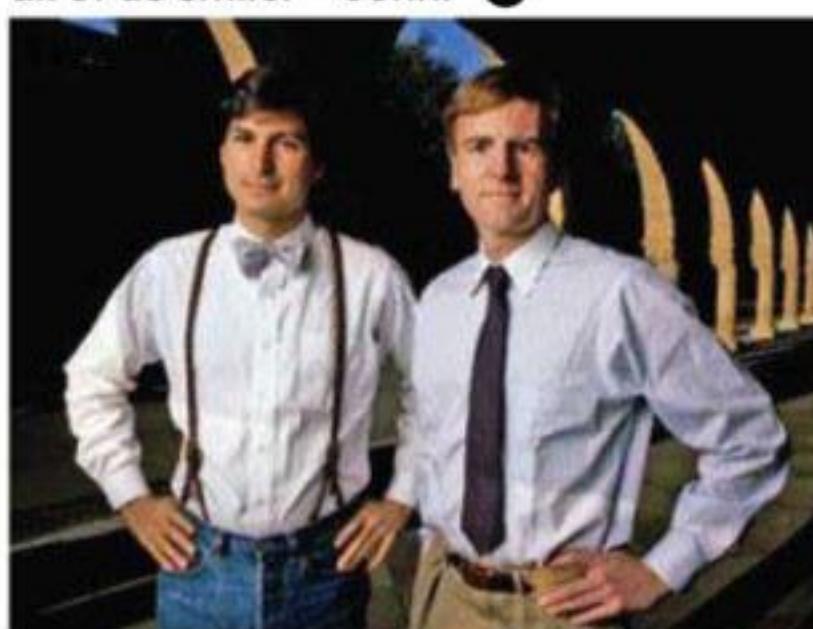
Steve recruited me because he believed the Mac would be such a life-empowering tool for the mind that Apple needed to prepare to sell Macs in the millions. No one else in Silicon Valley knew or cared anything about advertising. But Steve Jobs cared a lot. He believed the Mac deserved the very best entertainment experience advertising campaign ever. He was inspired by Pepsi Generation and Pepsi Challenge and believed that a world-changing product deserved a world-class brand campaign.

Steve's "first principles" from those early days never changed. Steve would say the hardest decisions are what to leave out, not what to put in. He was the ultimate systems designer. Always simplifying. Everything began and ended with the user experience. Simplify the steps. "Look, we can do it in three steps. ... Not good enough, do it in one step." Simplify, simplify, simplify. Sound familiar? This was Steve Jobs in 1983!

In the early 1980s software code was admired as a work of art. Steve only recruited the best code designers in the world. No bozos. Ever. It was always about design. It was also always about taste. Steve's taste, that is, as he controlled every design decision even while by his side was the world's greatest industrial designer, Jonathan Ive.

We spent hours together often just walking around. Sometimes it was the Apple campus, other times it was walks in the hills up at Sky Line. Steve loved to talk through an idea. I remember him saying, "Great companies must have a noble cause. Then it's the leader's job to transform that noble cause into such an inspiring vision that it will attract the most talented people in the world to want to join it."

When Steve Jobs resigned as CEO, I e-mailed him a message: "Steve, I owe you a lot. Because you cared so much, the universe is a little bit different. You did it with taste, design, addictive user experience, and no-compromise products that make all of us smile. —John." ▀

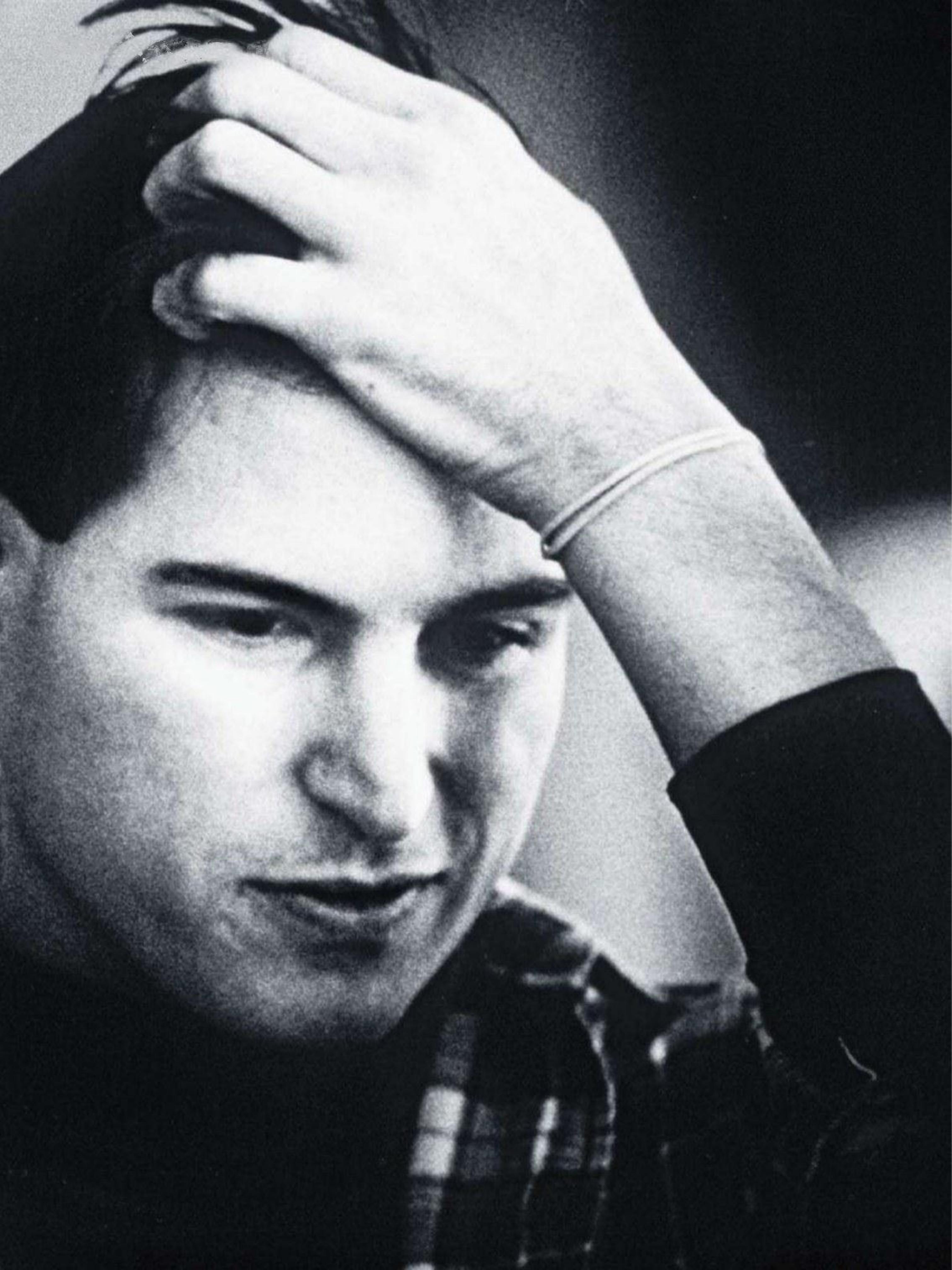


▲
Jobs and Sculley at
Apple's 1984 annual
meeting in Hawaii



1985–1997

The Wilderness
By Peter Burrows



On May 31, 1985, a few hours after he had been stripped of all authority at the company he had co-founded, Steve Jobs sat bewildered and puffy-eyed on a mattress in his nearly furniture-less 30-room mansion. Apple Computer had subsumed his entire adult life. He was 30 and unmarried. With no one to come home to, Jobs spent hours that evening talking to whichever of his friends picked up the phone. He sounded desperate enough that former Apple executive Mike Murray raced over to the mansion. "I didn't think he should be alone," says Murray.

A month later, Jobs had recovered sufficiently to travel with a girlfriend through Russia and Italy, flirt with California's Democratic Party bosses about a possible Senate run, and, after a conversation with Nobel laureate Paul Berg [fig. 1] about the need for more powerful computers for science students, muse about creating a new kind of computer company. In September, Jobs announced that he was quitting Apple and its board, where his role was almost entirely ceremonial, to start NeXT Computer. NeXT machines would power the world's top brains by simplifying powerful UNIX computers for the higher education market. That was the plan, anyway.

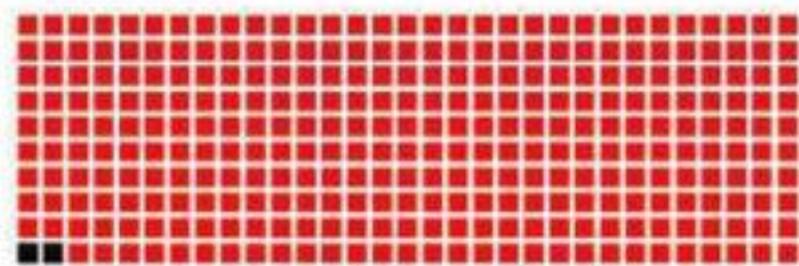
Despite promises not to compete with Apple, Jobs wooed some of Apple's best managers, including Bud Tribble, who'd led development of the Macintosh operating system; education market chief Dan'l Lewin; and Susan Barnes, a graphic artist who had created many of the Mac's famous icons. He either called his targets from the remote office to which he'd been banished or invited them for long neighborhood walks, where he made the NeXT pitch. Jobs ended up landing six recruits, who joined him most days that September at his mansion for brainstorming sessions and meals prepared by a married couple, both chefs, who lived in Jobs's guest cottage. Nothing at these meetings was put on paper. Jobs knew he was daring Apple to sue him—and Apple did just that a few weeks after NeXT launched, accusing Jobs of "nefarious" raiding of Apple staffers who were armed with trade secrets. The company pulled the suit a few days after filing rather than risk revealing trade secrets in the discovery process.

Jobs had sold \$14 million of his \$100 million Apple stake. (He would soon sell the rest.) He poured most of it into making NeXT look less like a startup than an immediate Apple competitor. Millions went into the construction of a state-of-the-art factory [fig. 2] in Fremont, Calif., so posh that Jobs hosted dinners there. It would pay for itself, provided NeXT could sell more than 150,000 of the workstations it planned to offer

1.
Berg won the Nobel Prize in Chemistry in 1980 for his study of the biochemistry of nucleic acids.

2.
A 1990 *Fortune* article reported that robots outnumbered people 13 to 5 on the NeXT production line. Jobs said, "I'm as proud of the factory as I am of the computer."

3.
The U.S. Patent Office shows two design patents for glass staircases under Jobs's name; the staircases are a prominent feature at Apple Stores.



Steve's patents for staircases Steve's patents

Texas billionaire Perot, right, helped launch NeXT by giving Jobs \$20 million in funding, but resigned from the board in 1992



▲
Loaded with features, each NeXT computer cost \$10,000 to produce

Staffers at NeXT put up with Jobs's volatility and insults because "we really thought we had the chance to change the world."

each year. He also rented airy office space in a Palo Alto building that had an I.M. Pei-designed stairway, [fig. 3] and he loaded the place up with \$10,000 sofas and \$5,000 chairs. Famed graphic designer Paul Rand received a \$100,000 fee to create the company's logo.

NeXT had style in abundance, and it had funding. Electronic Data Systems (EDS) founder H. Ross Perot invested \$20 million, and Canon later put in \$100 million. What it lacked was discipline. Apple's 21st century dominance has been built on a limited product line and Jobs's insistence that Apple use only proven outside technologies. At NeXT, by contrast, Jobs crammed the Hartmut Esslinger-designed cube-shaped computer with every shiny new toy he could find. There was an Ethernet port for easy networking; a microphone and speech-processing software; a patented, hard-to-manufacture monitor stand; and a magneto-optical drive he predicted would be faster and cheaper than a floppy. The result was a computer that cost \$10,000 to make—and wasn't worth the price. "We had 350 employees," recalls Chris MacAskill, who ran developer relations for NeXT. "And 349 didn't want to bet the company on that stupid magneto-optical drive."

Jobs received ample feedback that his strategy was as muddled as his product vision. Former Sun Microsystems CEO Jonathan Schwartz sparred with Jobs about software. NeXT didn't run the Microsoft Office suite. Instead it relied on a handful of companies, such as Schwartz's Lighthouse, to make knock-off apps. Jobs wanted the software guys to sell their wares for \$99, similar to PC packages at the time. "When you sell your computer at PC prices, I'll give you PC pricing on my software," Schwartz told him, before pricing Lighthouse software for NeXT at \$1,000. According to former NeXT managers including MacAskill, Lighthouse ended up being one of only a handful of software firms to make money from its NeXT products.

The last year during Ox's film was *Toy Story 3*, which hit theaters in June 2010. It took in \$1.1 billion worldwide.

Apple Q3 iTunes revenue
Toy Story 3
The Lion King

If Jobs knew NeXT was a loser, he rarely let on. He remained demanding, confident, and grandiose. Asked to deliver the keynote speech at a computer trade show at the Javits Convention Center in Manhattan, Jobs told MacAskill to ship out Jobs's own desk—complete with the vase and red rose he always kept there—for him to sit at onstage. He insisted that the desk be placed at a 28-degree angle, to match the angle of Rand's box-shaped logo, which was tipped to one side. A few minutes before the curtains opened, MacAskill begged Jobs not to introduce a new Lotus spreadsheet that hadn't been cleared by Lotus. "Fine," Jobs said, "then you do the speech," and walked off "only to return as the curtain opened." MacAskill says he and everyone else put up with the volatility and withering personal insults because "we really thought we had the chance to change the world."

The hopes of the NeXT team would remain just that, however. The seeds of Jobs's renaissance actually trace back to a different source. While Jobs was still at Apple, he and Alan Kay, a technologist at the company, took a limo to visit a small special-effects outfit in Marin County owned by Star Wars creator George Lucas. Lucas was going through a divorce and looking to spin off the company, which would come to be known as Pixar. It aspired to create the world's first feature-length animated movie made entirely on computers. Given the state of computing power at the time, the goal was years away, but Jobs left the meeting convinced that Apple should buy Lucas's company to help extend its lead in graphics.

Following his ouster from Apple, Jobs made a \$5 million offer. Pixar founders Ed Catmull and Alvy Ray Smith thought it was too low, and worried that Jobs was more interested in computers than movies—and more focused on repairing his legacy than supporting their dreams. "We didn't want to be the first woman after the divorce," Catmull later explained to staffers.

Catmull and Smith instead pursued deals with SGI, Microsoft, and EDS, then a subsidiary of General Motors. None of them worked out. (GM's joint bid with Philips Electronics was all but inked, but fell through when EDS founder and future NeXT investor Perot was booted from GM's board.) In the end, Jobs bought Pixar for \$10 million—roughly a tenth of the opening weekend box office for 2010's *Toy Story 3* and 0.13 percent of the \$7.4 billion Walt Disney would pay for Pixar [fig. 4] in 2006.

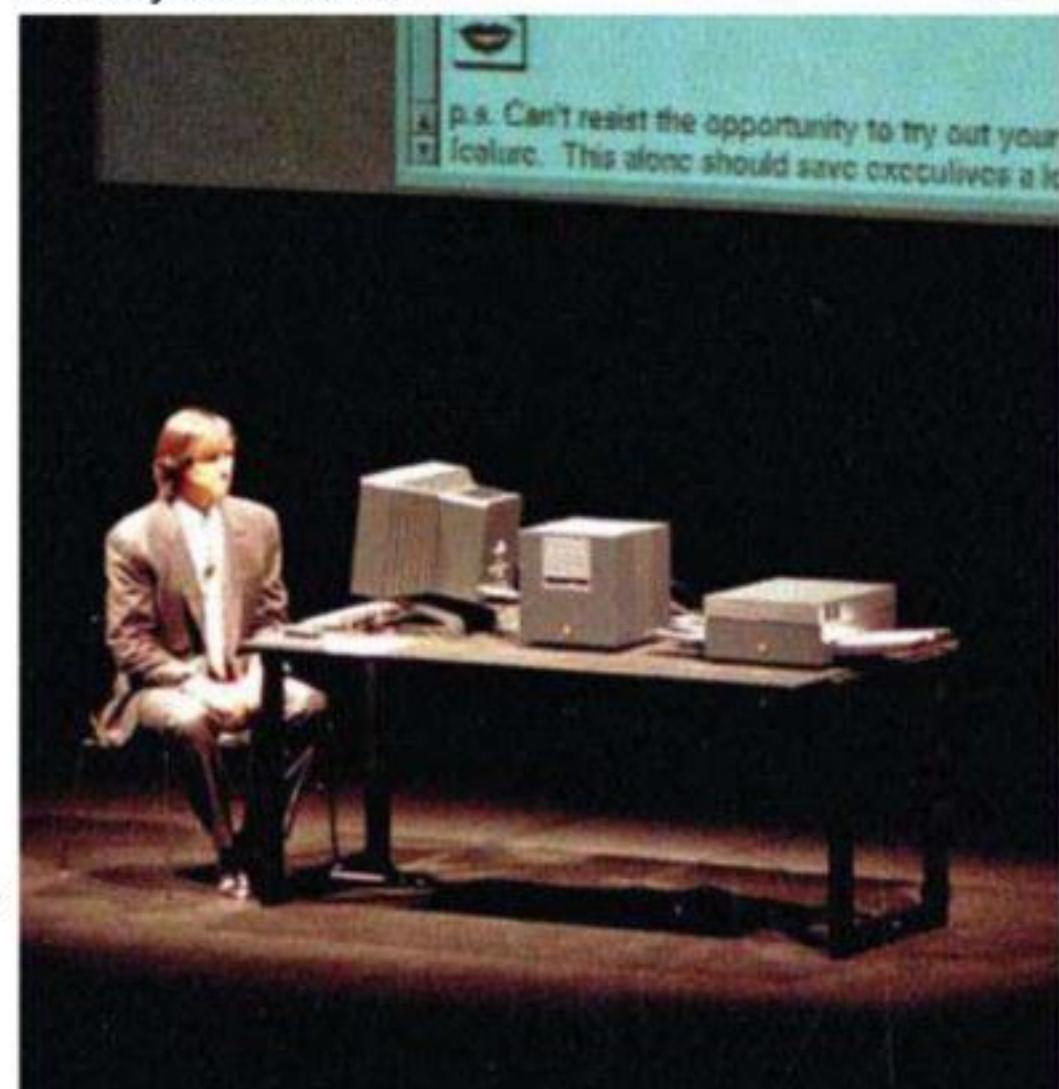
Jobs's initial approach to running Pixar mirrored his approach to NeXT. The suspicions of Catmull and



▲ Graphic designer Rand was paid \$100,000 to design the NeXT logo

Smith were correct: Jobs wasn't that interested in making movies. Rather than special effects, Jobs focused on a corporate-sales business, which he believed was more vital to the company's future. He positioned Pixar to sell \$150,000 computers loaded with Pixar software to corporate graphics departments—and gave the cash-strapped company \$100,000 to hire Esslinger's Frog Design to design the machine. Jobs indulged former Disney animator John Lasseter by forking over a few hundred thousand dollars a year to create three-minute shorts—*Luxo Jr.*, *Red's Dream*, and *Tin Toy*, in which metal objects such as lamps, unicycles, and drummer-boy toys came alive. The shorts wowed the crowd at the annual graphics industry convention each year, even if Jobs remained somewhat indifferent to them.

By 1990, Jobs and co-founder Smith were warring for Pixar's soul. At a board meeting that year, after screaming at each other from just inches apart like an umpire and manager, Smith tried to grab a whiteboard marker from Jobs. "You know how Jobs loves to control that whiteboard, but I'd had enough," says Smith, who says Jobs began making fun of his Southern accent. "He was street-fighting. It was ugly." Smith left less than a year later, when Jobs O.K.'d his plan to use a Pixar technology to create a new graphics company. Then Jobs wrote him out of Pixar's history, says Smith. You won't find any mention of him on the company's website. "It's all true—the good and the bad," says Smith of working with Jobs. "Even if we don't like each other, he financed us when nobody else would."



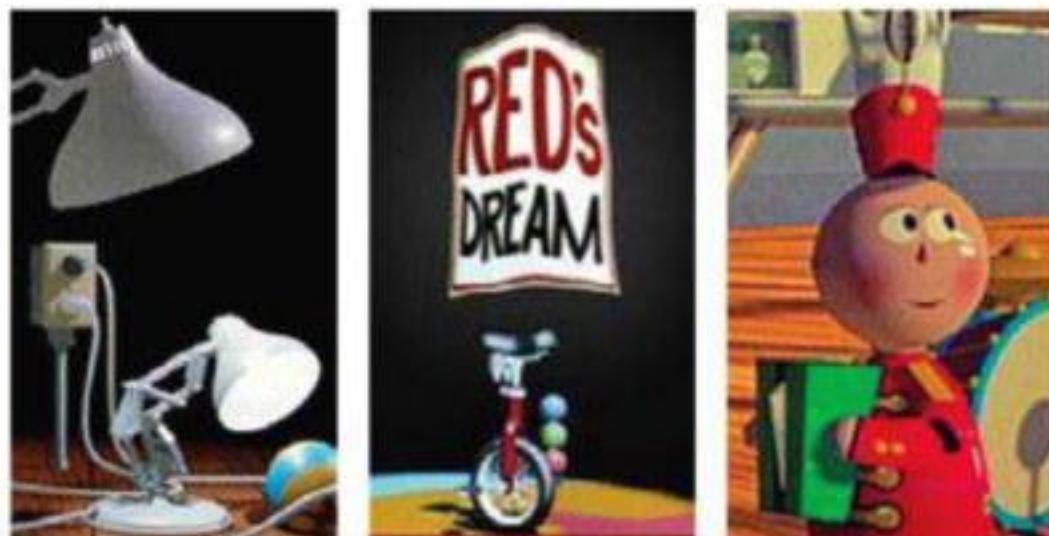
► The young CEO presents his NeXT computer to the public on Mar. 30, 1989

5.

In a 1988 *BusinessWeek* interview, Perot recalled introducing Jobs to the King of Spain at a party in San Francisco. Jobs sold the monarch a computer.

6.

Jobs's net worth as of September 2011 was an estimated \$7 billion.



◀ Pixar's early short films depicted inanimate objects coming to life — precursors to the technological breakthroughs of *Toy Story*

For a while it appeared that both of Jobs's new companies would fail. When he was finally ready to unveil his first NeXT prototypes in October 1988, Jobs pumped up expectations by renting out San Francisco's Davies Symphony Hall. The machine played a duet with one of the symphony's violinists. The first NeXT wouldn't go on sale until a year later, and when it did, no amount of showmanship could distract from its \$6,500 price—which was many thousands more than the price target in the original NeXT business plan. (Jobs never made the mistake of pre-announcing a product again.)

Jobs tried to find more customers by signing distribution deals with IBM and Businessland, a chain of computer stores, and releasing a new 1990 model priced at \$5,000 that at least nodded to consumer needs with a traditional floppy drive. By 1992 key staffers, including Tribble and hardware engineering chief Rich Page, were leaving. At one board meeting around this time, Perot [fig. 5] was discussing how NeXT needed to do a better job listening to consumers. Jobs walked out on him. "Did the CEO of this company just walk out on me?" asked Perot, according to a former NeXT executive. "Does that mean I get my \$20 million back?" NeXT kept Perot's money but lost him from the board. He resigned in June 1992. (Perot did not respond to requests for comment.)

The situation at Pixar was just as dire—and financially worse for Jobs. Without a steady source of revenue, he was forced to write more than \$40 million in personal checks to keep the business afloat. "It was not an insignificant portion of my net worth," [fig. 6] he told *BusinessWeek* in 1998. "There were times that we all despaired, but fortunately not all at the same time."

What changed everything was not Jobs's intuitive sense of the market nor his vision as a product guy but a cowboy and an astronaut. After more than a decade of annual treks to Disney's headquarters in Burbank, Pixar had pushed the state of the art to the point that it finally landed a three-film production contract in 1991. By early 1994 it was clear that the company's

first movie, *Toy Story*, was going to be extraordinary.

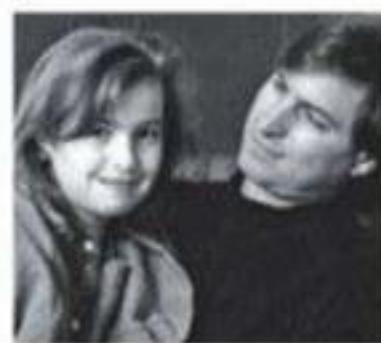
Jobs wasn't born to the movie business, but he'd surrounded himself with creative people during his days at Apple and, as he explained in 1998, it merely took time to adapt that experience from one discipline to another. "Hollywood and Silicon Valley exist in the same state, but they have absolutely no idea about each other," said Jobs. "It's hard work [making good movies]. That's why so much of it isn't any good—just like with software." Jobs would also win respect for knowing the limits of his expertise. After a few unsuccessful attempts to stick his fingers in the movie-making process, he took the hint from Pixar staffers and agreed to stay out of all story meetings, according to several former Pixar staffers. Former Walt Disney Studios head Joe Roth remembers that, before *Toy Story* came out, Jobs argued it should be marketed as the first fully computerized movie. Roth and others disagreed. "I said we're going to sell it as a great story, and let people be wowed by the tech," Roth told *BusinessWeek*. "And you know what? He said O.K."

In the weeks before *Toy Story*'s Nov. 22, 1995, release, Pixar was more than \$4 million in debt, with revenues of just \$10 million, according to SEC filings. The company was tiny. Only the advance buzz about *Toy Story* gave Pixar's future any shape. Former Pixar Marketing Vice-President Pamela Kerwin says that Larry Sonsini, Jobs's friend and the chairman of Silicon Valley law firm Wilson Sonsini Goodrich & Rosati, told her and other Pixar executives that Jobs's idea of an initial public offering at that point was delusional. Yet for the first time in years, Jobs was telling people he felt he had a great product in his back pocket—and one that wasn't aimed at the suits and academics he'd targeted with the NeXT cube, but at the upscale, mainstream consumers he'd won over at Apple.

Jobs told Goldman Sachs's bankers to time a Pixar IPO around the debut of the movie. Ten days after *Toy Story* opened to long lines and soaring reviews, Pixar went public at \$22 a share. When the stock closed at \$33 that afternoon, Jobs celebrated by sampling 150-year-old balsamic vinegar. With an 80 percent stake in the company, he was a paper billionaire. He called his friend Larry Ellison to say he'd made it to the B-club.

Suddenly, Jobs was no longer just a computer guy. There were changes in his personal life, too. In 1991 he married Laurene Powell, whom he had met while preparing to give a talk at Stanford Business School. Avi Tevanian, NeXT's software chief, and another

Steve and his daughter, Lisa, at home in Palo Alto in February 1989



Apple introduced the Lisa computer, named for Jobs's daughter, in 1983. Officially, Lisa stood for "local integrated software architecture." It retailed for \$9,995.

executive arranged for a low-key bachelor party at a well-known San Francisco eatery. After they sat down, Jobs decided they needed to go a nearby spot that made only soufflés. The wedding, a small affair held at the Ahwahnee Hotel in Yosemite National Park, was officiated by a Buddhist monk. The newlyweds moved to Palo Alto and had their first child, Reed, named for the college Jobs attended but never graduated from. Jobs soon welcomed his estranged daughter, Lisa [fig. 7], back into his house, as well.

By all accounts, Jobs had entered a contented middle age, the *Sturm und Drang* of his Apple days now fading into history. During an appearance to promote *Toy Story*'s DVD release on Oct. 30, 1996, Jobs was asked by Charlie Rose whether Apple could turn itself around. "It's just a spectator sport for me now," said Jobs. Rose didn't buy it; he bet Jobs that he'd be doing something in computing within five years. "Oh, I tend to stay with what I start until somebody kicks me out." Jobs wasn't truly indifferent about Apple, of course. He told friends that the company was dying. When Ellison explored purchasing Apple in 1996, Jobs told *BusinessWeek* that he tried to talk him out of it. "I thought he'd lose his shirt."

NeXT wasn't performing any better. With money rapidly disappearing, Jobs had announced in early 1993 that NeXT would get out of the costly hardware business. Instead it would license its NeXTStep software, a variant of the powerful UNIX operating system that could work with many processors and more effectively handle sound and graphics. The move was long overdue, but according to Tevianian, Jobs lost interest once there were no more sleek machines to make. By 1995, Jobs told a family friend that he was prepared to let NeXT go bankrupt.

In 1996, a marketing manager at NeXT took it upon



"I've been gone for 11 years," Jobs said on returning to Apple, "and I'm a very different person"

himself to call Apple to gauge its interest in NeXTStep. It was an open secret in Silicon Valley that Apple had given up on its own crumbling operating system and was in talks to buy tiny software maker Be Inc. so it could start fresh, replacing MacOS with BeOS. Jobs had no idea about any of this. He found out only when he happened to call a NeXT colleague at the same moment that a team from Apple arrived for a NeXT-Step demo, say former NeXT executives.

It did not take him long to capitalize. On Dec. 2, 1996, Jobs demonstrated NeXTStep to Apple CEO Gil Amelio in a conference room at Palo Alto's Garden Court Hotel. "He turned on the charm that day," says former Apple CFO Fred Anderson. Apple ended up paying \$430 million for NeXT, well above the \$185 million price Be CEO Jean-Louis Gassée had agreed to sell his company for. Upon hearing the news, Gassée fumed to *BusinessWeek* that "Steve cast a homoerotic spell on Amelio and the Apple board," though he says now, "It was the best thing for the world." On the night of the deal, Jobs said: "I've been gone for 11 years. Apple's a very different place, and I'm a very different person."

The Jobs who returned to Apple's Cupertino campus for the first time in a decade initially betrayed no signs of wanting to run the company. Although Apple dug up his original ID badge, he rarely came into the office, choosing instead to invite Apple executives for walks around Palo Alto. But as weeks passed he couldn't hide his disapproval of Amelio's strategy for keeping Apple out of bankruptcy. An executive remembers Jobs walking out of one meeting and calling Amelio "a bozo." When Apple's board ousted Amelio in July 1997, Jobs at first refused to take the job full-time, choosing to call himself "the iCEO," for "interim." He only dropped the "interim" in early 2000, when the board gave him a Gulfstream V jet and options for 10 million Apple shares which later turned out to have been improperly backdated, to artificially raise their value to the share price at an earlier date.

His first moments back at the helm certainly seemed like "Old Steve." Minutes after Amelio gave his goodbye to the executive staff, Jobs—clad in shorts and scruffy as a beach bum—walked in and swiveled in his chair at the head of the board table. Rhetorically, he asked the group why Apple was in such poor shape. Before anyone could answer, he roared: "The products suck! There's no sex in them anymore!" Amelio had a plan to vastly simplify Apple's product line, but by the end of the day Jobs had done that and more. From then on the focus was on birthing the iMac, the product that saved Apple

Animator Lasseter, with Jobs in 1997, helped build Pixar into the powerhouse that made Jobs a billionaire



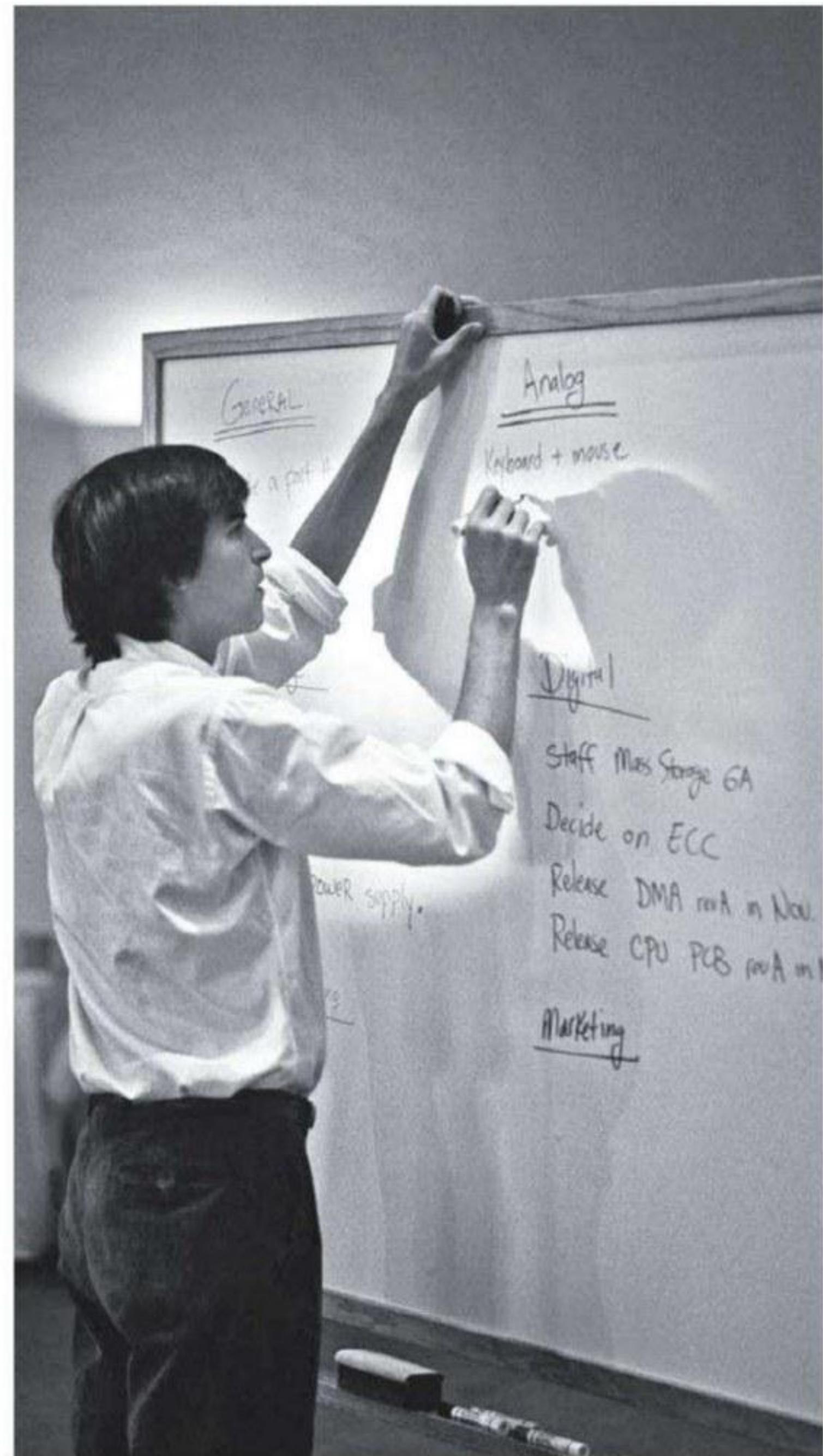
from bankruptcy, and before long he had O.K.'d work that led to the iPod, the product that changed the company's trajectory for good.

Despite the occasional outbursts, a wiser, more effective Jobs was rapidly emerging. While NeXT veterans such as software chief Tevanian and hardware maven Jon Rubinstein were already on Apple's executive staff, Jobs identified and promoted Eddy Cue out of customer service to build Apple's online store. (Cue has run iTunes since its 2001 inception.) Jobs also discovered the design bunker of Jonathan Ive, which was located across the street from Apple's main Infinite Loop [fig. 8] campus—a sure sign that it was seen as a lower priority than other corporate functions. In short order, Jobs moved Ive close to his own office and gave him cutting-edge equipment, his own kitchen, and hefty security to ensure secrecy.

What Apple seemed to have in Jobs 2.0 was all of the features that made the young Steve Jobs great—charisma, vision, rigorous standards—with some new functionality, too. Perot had counseled that the only way investors would let him pursue cool things was by delivering consistent profits, so Jobs became the business world's most unapologetic sandbagger; Apple has beaten Wall Street's expectations by 30 percent, on average, since 2006, according to Bloomberg data. If he wasn't softer, Jobs was at least more considerate; he ended company speeches with thanks to employees and their families for putting up with the grueling hours.

And the simple elegance of his product vision was also coming into focus. A few months after taking over, Jobs called McCluney and hardware engineering chief Rubinstein into his office and dramatically lifted a Styrofoam model of what would be the iMac out of a bowling bag. The duo reported back a few weeks later that it wouldn't work, because they couldn't find room for a floppy drive. Hardly missing a beat, Jobs said, "No worries. Disc drives are over the hill. CDs are going to get so cheap that no one will miss [floppies]." Says McCluney: "It was remarkable. It was a snap judgment."

Before Jobs could begin wowing consumers and delivering profits, he needed some help from a once-hated rival. Microsoft was thinking of discontinuing the Mac version of its Office suite of apps—a move that might well kill the already shrinking Mac business. Amelio had already begun talks with Microsoft that were designed to win huge patent royalty payments. Jobs—the same emotional enfant terrible of years past—had a better idea, though many of his loyalists would initially think he'd sold his soul to the devil. ■



▲ Jobs sketches ideas at an offsite meeting with the NeXT team in 1986, a decade before his triumphant return to Apple

The Master Architect

By Steve Jurvetson

Jurvetson worked with Jobs at NeXT and Apple before becoming a venture capitalist. He is managing director of Draper Fisher Jurvetson

Steve Jobs was intensely passionate about his products, blessed with an infectious enthusiasm that stretched from one-on-one recruiting pitches to auditorium-scale demagoguery. It all came so naturally for him because he was in love, living a Shakespearean sonnet, with tragic turns, an unrequited era of exile, and ultimately the triumphant reunion.

The NeXT years were torture for him, as he was forcibly estranged from his true love. When we went on walks, or if we had a brief time in the hallway, he would steer the conversation to a plaintive question: "What should Apple do?" As if he were an exile on Elba, Jobs always wanted to go home. The Macintosh on his desk at NeXT had the striped Apple logo stabbed out, a memento of anguish scratched deep into plastic.

The NeXTSTEP operating system, object-oriented frameworks, and Interface Builder were beautiful products, but they were stuck in what Jobs considered the pedestrian business of enterprise IT sales. Selling was boring. Where were the masses? The NeXTSTEP step-parents sold to a crowd of muggles. The magic seemed wasted.

Jobs was still masterful, relating stories of how MCI saved so much time and money developing their systems on NeXTSTEP. He persuaded the market research firms IDC and Dataquest that a new computer segment should be added to the pantheon of mainframe, mini, workstation, and PC. The new market category would be called the "PC/Workstation," and lo and behold, by excluding pure PCs and pure workstations, NeXT became No. 1 in market share. Leadership fabricated out of thin air.

During this time, corporate partners came to appreciate Steve's enthusiasm as the Reality Distortion Field. Sun Microsystems went so far as to have a policy that no contract could be agreed to while Steve was in the room. They needed to physically remove themselves from the mesmerizing magic to complete the negotiation.

But Jobs was sleepwalking through backwaters of stodgy industries. And he was agitated by Apple's plight in the press. Jobs reflected a few years later, "I can't tell you how many times I heard the word 'beleaguered' next to 'Apple.' It was painful. Physically painful."

When the miraculous did happen, and Apple bought NeXT, Jobs was reborn. I recently spoke with Bill Gates about passion: "Most people lose that fire in the belly as they age. Except Steve Jobs. He still had it, and he just kept going. He was not

a programmer, but he had hit after hit." Gates marvels at the magic to this day.

Jobs was the master architect of Apple design. Steve's spartan sensibilities accelerated the transition from hardware to software. Apple was able to shift the clutter of buttons and hardware to the flexible and much more lucrative domain of software and services. The physical thing was minimized to a mere vessel for code.

Again, this came naturally to Jobs, as it is how he lived his life, from sparse furnishings at home, to sartorial simplicity, to his war on buttons, from the mouse to the keyboard to the phone. Jobs felt a visceral agitation from the visual noise of imperfection.

When I invited Jobs to take some time away from NeXT to speak to a group of students, he sat in the lotus position in front of my fireplace and wowed us for three hours, as if leading a séance. But then I asked him if he would sign my Apple Extended Keyboard. He burst out: "This keyboard represents everything about Apple that I hate. It's a battleship. Why does it have all these keys? Do you use this F1 key? No." And with his car keys he pried it right off. "How about this F2 key?" Off they all went. "I'm changing the world, one keyboard at a time," he concluded in a calmer voice.

And he dove deep into all elements of design, even the details of retail architecture for the Apple store (he's a named patent holder on architectural glass used for the stairways). On my first day at NeXT, as we walked around the building, my colleagues shared in hushed voices that Jobs personally chose the wood flooring and various appointments. He even specified the outdoor sprinkler system layout.

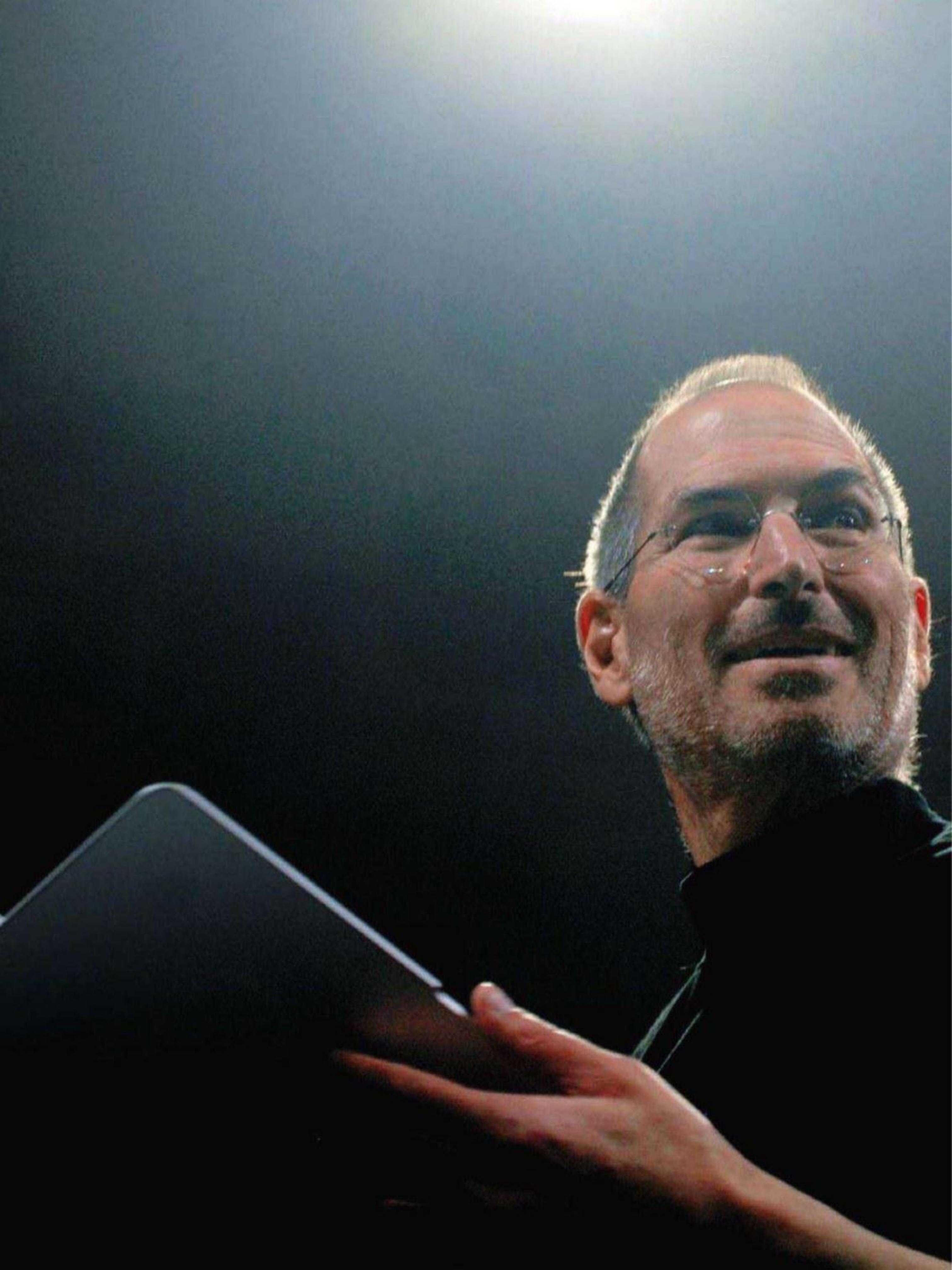
I witnessed his attention to detail during a marketing reorganization meeting. The VP of marketing read Jobs's e-mailed reaction to the new org chart. Jobs simply requested that the charts be reprinted with the official corporate blue and green colors. Shifted color space was like a horribly distorted concerto to his senses.

Jobs's estimation of people tended to the extremes, a black-and-white thinking trait common to charismatic leaders. Marketing execs at NeXT especially rode the "hero-shithead roller-coaster," as it was called. The entire company knew where they stood in Jobs's eyes, so when that VP in the reorg meeting plotted his rollercoaster path on the white board, the room nodded silently in agreement. He lasted one month.

But Jobs also attracted the best people and motivated them to do better than their best, rallying teams to work in a harmony they may never find elsewhere in their careers. He remains my archetype for the charismatic visionary leader, with his life's song forever part of Apple. ▀



◀ From left, Bobby Shriver, Jurvetson, and Jobs in 2007





1997–2011

**The Return
By Brad Stone**

Steve Jobs was not accustomed to boos, but there he was, on stage at the airy and decrepit Park Plaza Castle auditorium in Boston, absorbing a crescendo of unhappiness. It was 1997, the year Jobs replaced Gil Amelio and declared himself “interim CEO” of Apple, saying he was too busy with Pixar and family to take over permanently. At the annual Macworld Expo that August, Jobs told the long-suffering Apple faithful that there was still hope for the computer company but that it would first have to put aside its all-too-consuming fixation with its dominant rival, Microsoft.

“We are shepherding some of the great assets in the computer industry. If we want to move forward and see Apple healthy and prospering again, we have to let go of a few things,” said Jobs, dressed in his trademark outfit of that era, a sweater vest and pleated slacks. Microsoft, he announced, was investing \$150 million in Apple and making a promise to develop Microsoft Office software for the Macintosh for the next five years. Bill Gates popped up on a 100-foot screen, appearing pedantic and flaccid in contrast to Jobs’s swagger. “The era of setting this up as a competition between Apple and Microsoft is over as far as I’m concerned,” Jobs said after Gates’s brief and awkward speech, trying to quell the disappointed audience, some of whom appeared to be in tears.

The détente forged on that August day was, in retrospect, a cold calculation by Jobs that Apple did not need to win the old battle for the PC in order to prevail in a dawning war for digital media devices and the Internet. It was also the first bit of evidence that despite his professed ambivalence, Jobs was fully committing himself to an Apple turnaround. Colin Crawford, who ran Macworld in the 1990s along with publications such as *MacWEEK*, recalls asking Jobs back then why he wanted to return to the company he had founded. “He sort of looked at me quizzically and said that his and Apple’s DNA were completely intertwined,” Crawford says. “He said that Apple’s brand was badly tarnished and that he intended to repolish it.”

It’s difficult to remember how far Apple had fallen. Just a few months away from bankruptcy, the company had a dwindling 4 percent share of the PC market and annual losses exceeding \$1 billion. Three CEOs had come and gone in a decade; board members had tried to sell the company but found no takers. Two months after Apple’s deal with Microsoft, Michael Dell told a tech industry symposium that if he ran Apple, he’d “shut it down and give the money back to shareholders.”

Lucky for the shareholders that Jobs and not Dell was at Apple’s helm. Apple’s market capitalization went

Jobs saw that his competitors, tethered to an old regime, couldn’t innovate rapidly or radically

from \$3 billion at the start of 1997 [fig. 1] to \$350 billion today—more than the valuation of Microsoft and Dell combined—making it the second most valuable company in the world. A single share, worth a little over \$4 the day Dell spoke, is now worth nearly 100 times that. Much would be written about how Apple forever changed the way people communicate, entertain themselves, even the way they absorb information. Here’s a simpler way to sum up Apple’s influence, in four words: iMac, iPod, iPhone, iPad.

Jobs recognized that an industry dominated by Microsoft and Intel would not adapt smoothly in the era of personal media and communication devices. Those companies could not move quickly while in lock-step with their multiple partners in hardware and retail, and Jobs bet that they would not innovate rapidly or radically enough, since their profits relied on the preservation of an old regime. He also understood that in the fluid and rapidly evolving technology business—where new technologies are constantly disrupting the established winners—there was a chance to reshuffle the deck in his favor.

What Apple removed from technology products, Jobs liked to say, was just as important as what it added. He banished elements like separate numerical keypads, floppy disc drives, and computer mice with two buttons. With the help of Apple’s chief designer, a Brit named Jonathan Ive [fig. 2], he ushered in candy colors, gleaming metals with rounded edges, and cone-shaped Wi-Fi base stations. Apple’s commitment to industrial design was infectious. “His legacy of making design a strategic tool cannot be underestimated,” says Robert Brunner, a former Apple designer and now the CEO of the firm Ammunition Group. “Company after company comes in the door here, and in every conversation Apple is discussed. They want to do it like Apple. Steve raised the bar not just for the industry but for the world.”

Cool products demanded cool pitches. When Jobs rejoined Apple, it had more than a dozen ad agencies. He fired them all except Chiat/Day, which had created Apple’s famous “Big Brother” commercial for the 1984 Super Bowl. The 1997 “Think Different” campaign riffed with grammatical apathy off an old IBM slogan, “Think.” Jobs himself selected the famous figures who appeared in the ads, including Albert Einstein, Martin Luther King Jr., Frank Lloyd Wright, John Lennon, and his personal hero, Bob Dylan. He also briefly considered recording the voice-over himself (“Here’s to the crazy ones. The misfits. The rebels...”) before yielding to actor Richard Dreyfuss. For Jobs it was a deeply personal effort and a way to remind Apple’s employ-

1.
Apple’s revenue in 1997:
\$7.1 billion

2.
Jony Ive, hired by Apple
in 1992, holds more than
300 patents.

Design guru Jony Ive, left, and hardware chief Jon Rubinstein, with early iMacs



3.
The iMac was the first Apple product to use the "i" prefix.

4.
The early iMac color spectrum included lime, strawberry, blueberry, grape, and tangerine.



ees, its customers, and perhaps himself what the company stood for. "You can't talk about profit, you have to talk about emotional experiences," he explained.

Jobs said this at a time when other PC firms believed computer buyers wanted boxy beige towers that sat under desks and connected to separate displays on top. Acting on instinct, Jobs bet that the new, more mainstream wave of PC buyers could be attracted to something else. So along came the iMac [fig. 3], a heavy, bulbous, all-in-one computer whose translucent casing came in five flashy colors. Reporters and consumers loved the iMac [fig. 4], and by 2000 Apple's finances had recovered. "We're in such a unique position," Jobs told *BusinessWeek* that year, extolling the benefits of controlling both the hardware and software elements of the personal computer. "If we do our jobs right, no one else should be able to do what we can do. We should be in an incredible place as this convergence of computing and communications explodes in the next few years. I think it's ours to lose."

Not every battle was won. The Power Mac G4 Cube—a minimalist, miniaturized computer, encased in plastic with no display, keyboard, or mouse—flopped. But the Cube showed how to join ever increasing processing power with an aesthetic of clean surfaces and ease of use, a marriage that turned out much happier for the iPod, the cigarette-pack-size digital music player made of white polycarbonate introduced in October 2001. There were other MP3 players on the market, most of them smaller and cheaper. Even at an original price of \$399, the visual

▲
The company's
"Think Different" ads
featured famous
nonconformists

"We're in such a unique position," Jobs said. "No one else should be able to do what we can do"

distinctiveness of the iPod and the way it worked seamlessly with its iTunes music service, made it not just a cool product but an object of desire.

The iPod helped to propagate and commercialize the revolution in digital media first fomented by Internet file-sharing services such as Napster. To Jobs, though, it was also something else: the answer to Apple's existential crisis. In a world dominated by Microsoft, where did Apple fit? It turned out that a company's design talents, software prowess, and ability to exploit cheap but high-quality manufacturing in Asia could produce gorgeous and accessible consumer electronics.

"If there was ever a product that catalyzed Apple's reason for being, it's this," Jobs said in the book *The Perfect Thing* by Steven Levy. "Because it combines Apple's incredible technology base with Apple's legendary ease of use with Apple's awesome design. Those things come together and it's like, that's what we do. So if anybody is ever wondering, why is Apple on the Earth, I would hold this up as a good example."

He called what happened next the "iPod halo effect." Millions of people bought iPods and entered the Apple tent for the first time. They became more willing to consider an iMac, or to walk into one of Apple's proliferating stores—a go-it-alone retail strategy that Jobs unveiled in 2001 with the help of a former Target executive named Ron Johnson. Most pundits (including some at *BusinessWeek*) thought the stores were foolhardy. The move alienated existing Mac dealers and seemed like a lavish waste of resources to showcase a limited product line. But it allowed the company to preside over its own sales pitch and establish customer service hubs (brilliantly called Genius Bars) at a time when all these new customers needed their hands held as they waded into the digital waters.

Apple would not have been so insanely successful if Jobs also did not have a thick streak of the enforcer in him. The music labels succumbed, offering their songs for 99¢ over iTunes and, it turns out, cannibalizing their sales of albums, the most profitable part of their business. Then Jobs hammered away at the television networks and movie studios, adding TV shows and then movies to iTunes in 2006. His sense of entitlement was tested when federal regulators looked into Apple's questionable backdating of options to top executives, which had increased the value of stock grants. Jobs would rail privately to journalists that he had done nothing wrong. The Securities and Exchange Commission ultimately charged two former executives of the company, and Apple promptly set-

5.
Steve Jobs's annual salary
since rejoining Apple in 1997:

\$1

tled. "Jobs was one of these CEOs who ran the company like he wanted to. He believed he knew more about it than anyone else, and he probably did," said Arthur Levitt, a former chairman of the SEC. "He's among the best CEOs I've ever known, in spite of his irreverence, irascibility, and ego [fig. 5]."

There appeared a cloud in all this blue sky that would grow and darken. In a regularly scheduled Monday morning meeting in late 2003, Jobs gathered his management team into the 4th floor boardroom in Building One of Apple's headquarters in Cupertino and closed the door. Other executives also attended these meetings, but on this day, Jobs asked them not to come. He then invited everyone to move in closer, according to one participant, and told them that he had a rare but operable form of pancreatic cancer. "I'm going to need to lean on you guys for help," he said. Some executives cried. The following year, after he had tried out a special diet to beat the cancer, Jobs had surgery, and his illness was publicly announced.

So began Jobs's eight-year struggle, one that pitted a man's desire to keep details of his illness private against a company's duty to keep shareholders informed. Almost to the end, the man won out, with the company telling the public of developments long after they happened. It would be easy to explain this behavior as an arrogant desire to protect the stock price or an obsession with personal privacy. Above all else, though, Jobs was disciplined about what he revealed to customers and competitors. He likely thought news of his health was drawing attention away from his own finely crafted narrative for Apple.

Colleagues say Jobs continued to work harder than ever, even after his illness worsened. In his commencement address to Stanford's graduating class in 2005, he said the crisis had convinced him to place bolder bets. "Remembering that I'll be dead soon is the most important tool I've ever encountered to help me make the big choices in life," he said. "Because almost everything—all external expectations, all pride, all fear of embarrassment or failure—these things just fall away in the face of death, leaving only what is truly important. Remembering that you are going to die is the best way I know to avoid the trap of thinking you have something to lose."

Improbably, his greatest triumphs were still ahead. After Apple had experimented for years with the idea of building its own cell phones and even operating its own wireless network, Jobs finally convinced AT&T to subordinate its brand to Apple's in exchange for exclusive rights to sell an Apple phone to U.S. buyers. "This



▲
Apple's ubiquitous
"silhouette dancers"
promoted iPods on
billboards and TV

He gathered his senior executives to tell them he was sick. "I'm going to need to lean on you guys," he said

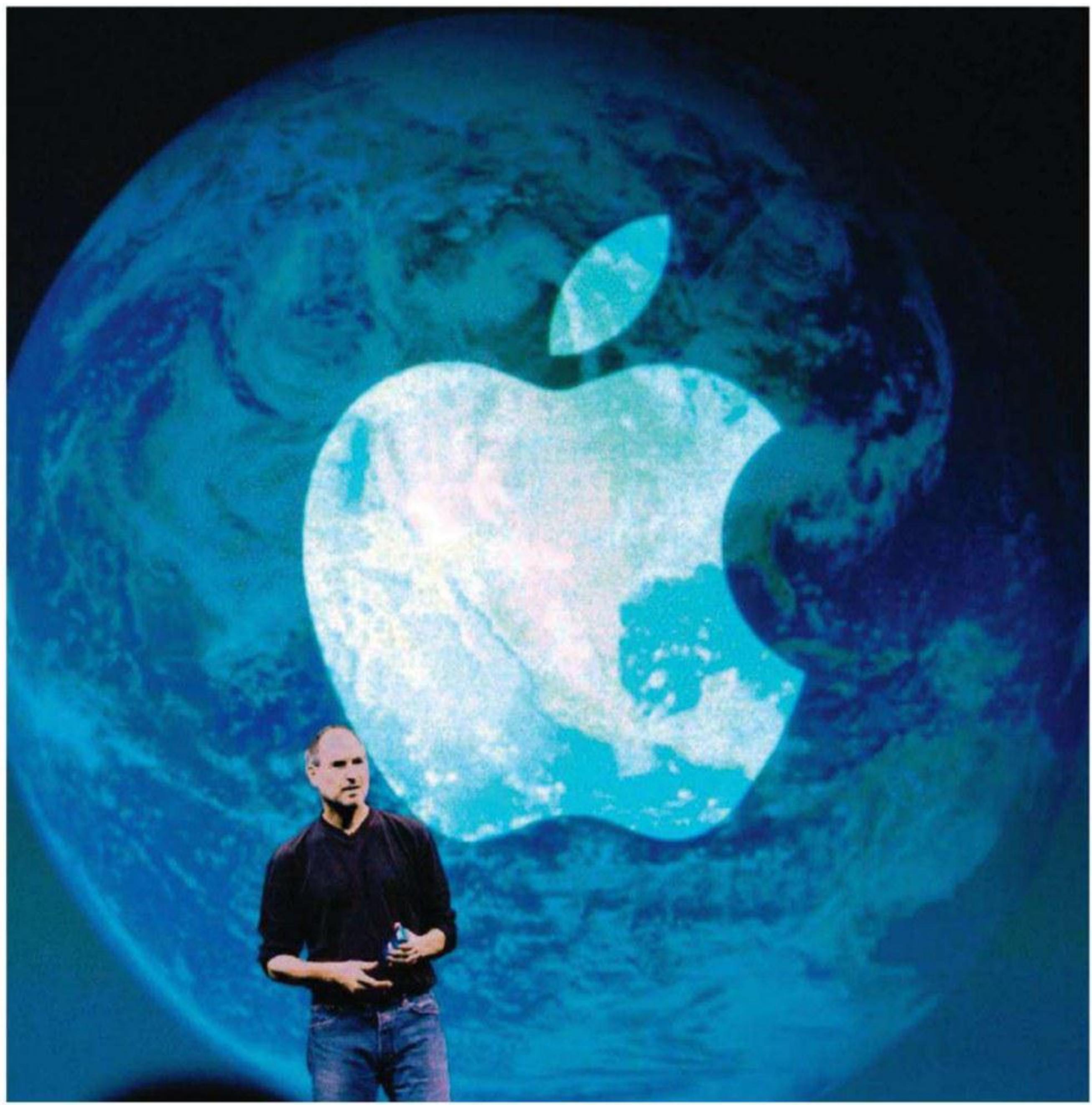
is a day I've been looking forward to for two and a half years," Jobs said, introducing the iPhone in San Francisco in January 2007. "Every once in a while a revolutionary product comes along that changes everything."

How boastful, how self-serving—and how right on the money. Apple exec Bud Tribble memorably dubbed Jobs's charismatic ability to convince himself and others of almost anything "the reality distortion field." With the iPhone and so much else, the field won. The device's large display and touchscreen, and its seamless connection to the App Store, which became home to thousands of innovative programs for mobile phones, would alter the topography of the industry and propel Apple into its golden age. By the end of 2010, Apple had sold 129 million iPhones, which accounted for about 40 percent of its revenue.

And yet there was that cloud. After Bloomberg mistakenly released an unfinished draft of a Jobs obit in August 2008, Jobs joked publicly about his health, riffing off Mark Twain's line that rumors of his death were greatly exaggerated. In January 2009, Jobs announced that a hormone imbalance was responsible for the noticeable drop in his weight and began a five-month medical leave, handing control of the company to Tim Cook, the chief operating officer. He told only a few colleagues and board members about the gravity of his condition. In March he underwent a liver transplant operation at Methodist University Hospital in Memphis, a fact not reported by the *Wall Street Journal* until two months later, after the markets had closed for the week. That spring, Apple board member Jerry York told the *Journal* that Jobs's secrecy over the issue "disgusted him," and he believed that Apple should have been more open with shareholders about his condition.

Jobs obviously disagreed. The man who wanted to control every element of Apple's performance also wanted to control every detail about how his own situation was portrayed. At an event in San Francisco, he made an offhand quip to a CNBC reporter that Apple investors would like to see him gain weight. CNBC reported the remark on-air and on its website, which Jobs learned about just as another journalist entered a private room to interview him. "Fix it," he screamed to his public relations chief, who scurried outside to demand that CNBC remove the report from the Web. (It did.)

Despite his reputation for secrecy, Jobs had personal relationships with many members of the press and tried to dictate perceptions of the company. Apple, he liked to joke, was a "ship that leaked from the top," and calls to reporters to manipulate a



▲
Jobs would spend weeks preparing for his keynotes, insisting on multiple rehearsals

6.
Apple's revenue in 2010:
\$65.2 billion

7.
At the end of Q2, Apple had
327 stores worldwide. The
company plans to open 40
more in fiscal 2011.

story often seemed part of his nightly routine. "Hi, this is Steve Jobs," you could expect to hear when you picked up the phone. In one instance, Jobs called the editor of a news magazine to complain about a story that had been posted on its website, claiming the lead was inaccurate and off-the-record comments about a rival company had been included. Down came the story, and hours later back up went the fixed version.

In early 2010 [fig. 6] a new rival was obsessing Jobs: Google. Its CEO at the time, Eric Schmidt, had sat on Apple's board for two years, and Jobs felt he had forged personal friendships with founders Larry Page and Sergey Brin, with whom he often took long walks. Now the search giant was challenging Apple in the mobile phone business with its Android operating system, which was powering a new wave of touch-screen handsets that mimicked the iPhone. Jobs did not see this as a case of two companies competing. He considered it a personal betrayal.

Of course Jobs, like most artists, also borrowed liberally from the work of others. People credit him as an inventor akin to Edison, but his real genius was seizing upon existing concepts, simplifying and perfecting them, and then putting them forward at exactly the right moment. The iPad was perhaps the best example. Tablets running Microsoft software debuted in 2000 and went nowhere; they were really stripped-down PCs, complex and difficult to use. For years Apple's marketing chief, Phil Schiller, and John Couch, its vice-president of education, wanted Apple to enter the tablet market, too, but Jobs never saw an approach he liked.

The iPhone changed his mind. Its simplified operating system and multitouch technology, derived from



▲ By 2005, the year after cancer surgery, he appeared to be regaining strength

a company called FingerWorks that Apple acquired in 2005, would be perfect for a tablet. The iPad was ready by late 2009. Apple gave a few key developers early access, but in typical fashion swore them to secrecy and chained the devices to desks in windowless rooms. They were really nothing like the old Microsoft tablets. "The real insight was not shrinking the Mac, but growing the iPhone," said Bob Borchers, a former senior director of marketing at Apple. The company introduced the device in January 2010 and sold more than 29 million tablets in the next year and a half.

Apple's new surge seemed to embolden him. He doubled down both on his go-it-alone vision and his efforts to control the Apple narrative in the press. The iPhone and iPad did not run websites that used Adobe's flash video format because Jobs thought it performed poorly on mobile phones and drained the battery. Users were directed to use Apple-sold apps instead. When the iPhone 4 was released that summer and many users complained of losing their signal when they gripped its base, Jobs replied to one customer by e-mail and told him to "just avoid holding it that way." Apple later addressed the problem more sensitively by offering a software fix and by giving users a free case.

Jobs could control everything but his health, and by the summer of 2011, his condition left him no choice but to step down. "I have always said if there ever came a day when I could no longer meet my duties and expectations as Apple's CEO, I would be the first to let you know. Unfortunately, that day has come," he said in a resignation letter on August 24, handing over control of Apple to Tim Cook but retaining the title of executive chairman. "I look forward to watching and contributing to its success in a new role."

In 15 years, Jobs had taken a floundering company that once seemed unlikely to grow past its painful adolescence and turned it into one of the most influential and valuable corporations in the world. He had changed culture, commerce, and the very relationship that people have with technology. The moving tributes that flowed in after his death—on Twitter and Facebook, at Apple Stores [fig. 7], and in statements from public leaders—spoke to his outsized impact.

Rumors about Jobs's health had been buzzing around Silicon Valley all year, but anyone who knew him and read that resignation letter understood the end was near. He had been so good at distorting reality, so good at bending everyone—competitors, consumers, the press, and especially himself—to see the world his way. By relinquishing control, Jobs acknowledged that he had finally met the one force he could not charm or bully or out-think: his own mortality. ■



◀ Apple Stores invite customers to tap, pinch, and swipe before buying

Always Ahead of Me

By Eric Schmidt

Schmidt is Executive Chairman of Google and a former Apple board member.
As told to Jim Aley and Brad Wieners

Everyone knows the transaction where the board sided with John Sculley and Steve left Apple. Steve sold all of his Apple stock, kept one share, and founded NeXT. Typical Steve maneuver. When I was still at Sun Microsystems, I visited him at NeXT—we did a bunch of deals with him. He was exactly the same way he was at Apple: strongly opinionated, knew what he was doing. He was so passionate about object-oriented programming. He had this extraordinary depth. I have a PhD in this area, and he was so charismatic he could convince me of things I didn't actually believe.

I should tell you this story. We're in a meeting at NeXT, before Steve went back to Apple. I've got my chief scientist. After the meeting, we leave and try to unravel the argument to figure out where Steve was wrong—because he was obviously wrong. And we couldn't do it. We're standing in the parking lot. He sees us from his office, and he comes back out to argue with us some more. It was over a technical issue involving Objective C, a computer language. Why he would care about this was beyond me. I've never seen that kind of passion.

At NeXT he built this platform—a powerful workstation platform for the kind of computing that I was doing, enterprise computing. When he came back to Apple, he was able to take the technology he invented at NeXT and sort of slide it underneath the Mac platform. So today, if I dig deep inside my Mac, I can find all of that NeXT technology. Now, this may not of interest to users, but without the ability to do that the Mac would have died. I was surprised that he was able to do that. But he did it.

When he went to Apple, he was basically down to 1 percent market share. Apple was near bankruptcy, the company had been for sale, there were a series of management changes. I talked to him about it. He said, "The thing that I have that no one else has is very loyal customers." He had these fanatical people who would line up all night for a product that wasn't any good. He figured correctly that by upgrading and investing in and broadening the portfolio, he could do it. At some level he foresaw the next 10 years.

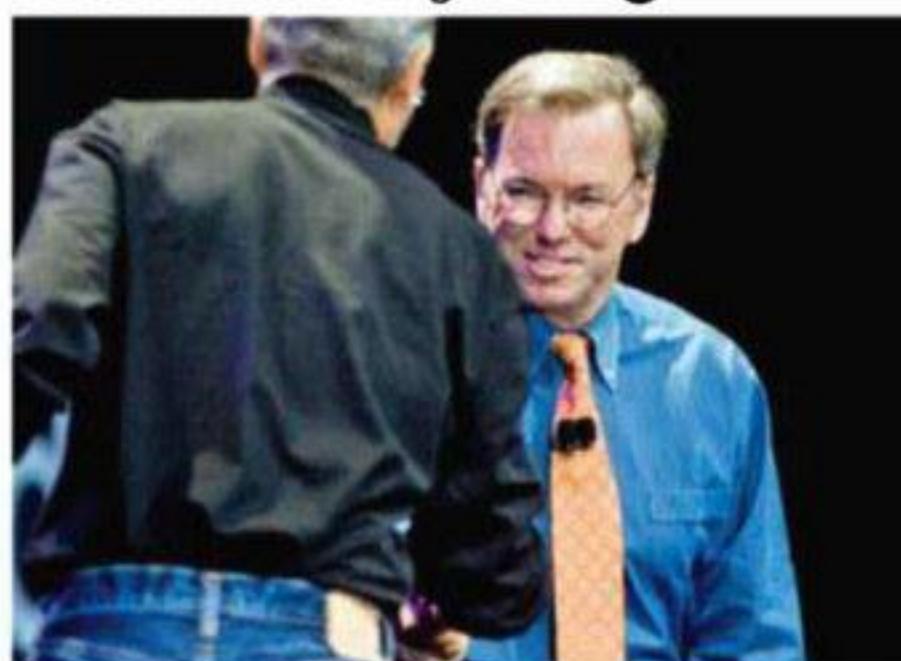
What I remember thinking at the time is that you shouldn't take a job unless you know how to win. I had no clue how to do what he did. When somebody tells you they're going to do something and you say, "I don't understand how you're going to do that," and they succeed? That is the ultimate humbling experience. My interactions with Steve were always like that. He was always ahead of me. When he started working on tablets, I said

nobody really likes tablets. The tablets that existed were just not very good. Steve said: "No, we can build one." One of the things about Steve is, he was always in the realm of possibility. There was a set of assumptions that Steve would make that were never crazy. They were just ahead of me.

I joined Apple's board after the Apple Stores started. It used to be that you would go to a store and you had Macs and PCs. And then, because of volume and because of the Microsoft monopoly, people were not buying any Macs. There was less and less distribution, and many dual Mac-PC distributors were going away. The argument at the time was you shouldn't screw your distributors because they are your lifeline. Steve made the calculated decision to open a series of stores and turn it into a sort of a consumer lifestyle. He also understood that people had trouble with computers, and they wanted to go to a place where somebody could help them. The stores were universally derided as the stupidest idea ever known to man, and they would literally bankrupt the company. It was an incredibly gutsy move. And Apple Stores I believe are the highest-grossing stores in America.

It took enormous courage for Steve to go through the operations, the treatments—without violating his privacy, it's just horrific what he had to go through. I think he made all the board meetings I was at. He was obviously ill sometimes, and sometimes he was fine. But Apple was his passion, along with his family. There was never any question when I was there as to his ability to do his job, and I just felt terribly sorry for him, as everyone else did, over what he was going through physically.

Steve and I were talking about children one time, and he said the problem with children is that they carry your heart with them. The exact phrase was, "It's your heart running around outside your body." That's a Steve Jobs quote. He had a level of perception about feelings and emotions that was far beyond anything I've met in my entire life. His legacy will last for many years, through people he's trained and people he's influenced. But what death means is you can't call—you can't call him. It's a loss. I'll miss talking to him. B



▲
Jobs and Schmidt connect at the introduction of the iPhone, 2007

More Stories About Steve

44

Stewart Brand

Founder, *Whole Earth Catalog*; co-creator of The WELL and Global Business Network

You might say that the creation of Apple Computer was a situation of right seed, right soil. In 1975, Steve Jobs and his buddy Steve Wozniak were messing around with computer components in an exceptionally fertile venue that was just coming to be known as Silicon Valley. The Steves were employed at companies such as Atari and Hewlett-Packard and hanging out with other computer hobbyists at the Homebrew Computer Club meetings, showing off each new design hack and feature of a tiny computer they eventually named Apple. I was nearby, early in that period, running a publication called the *Whole Earth Catalog*.

High-tech innovation was the norm among amateurs as well as professionals in the Midpeninsula region because a Stanford electrical engineer named Frederick Terman in the 1950s and '60s established Stanford Industrial Park and attracted world-class engineering talent to the university and the companies. By 1975 bleeding-edge ideas in computers and networking were boiling out of three superb research centers in the neighborhood—Xerox PARC, Stanford Artificial Intelligence Laboratory, and Stanford Research Institute.

In the mid-'70s the counterculture was still in full flower, with drugs and wide-ranging creativity galore in the area, following patterns set by Ken Kesey and the Merry Pranksters (I was a fringe member), the Midpeninsula Free University, and the euphemistically named International Foundation for Advanced Study, which conducted LSD research. Young computer hackers like Jobs and Wozniak identified with our generation, but they had found something even more psychedelic than LSD—computers you could disappear into, fueled by the constant acceleration of Moore's Law. Drugs were static by comparison.

Across the bay, radicals in Berkeley were still demanding "Power to the People!" Computer hobbyists like Steve and Steve demanded nothing. With personal computers, they knew they were creating the real thing: giving power to people.

Larry Sonsini

Chairman, Wilson Sonsini Goodrich & Rosati

I was with him about a week ago, and we were talking about changes in technology and what was happening in the industry. He was engaged and focused. I think he was the quickest study I ever met.

Jeff Bezos

CEO, Amazon.com

I think you can say he built three companies. He built the first Apple. He built Pixar. And then he built the second Apple. That is pretty extraordinary.

Jay Elliot

Former senior vice-president at Apple who reported directly to Jobs

I met Steve at a restaurant by chance. I was waiting in the lounge for my wife to arrive for dinner. I had a newspaper opened up to the business section and was reading an article about IBM, where I had worked. This guy in jeans and a white T-shirt with a messy beard came by and asked me, "What do you know about computers? I have a company called Apple." I replied that I'd never heard of it, but he said it was a good company and that I should go work for him.

I didn't think it would ever happen, but a little while later this headhunter called me, saying he was following up for Steve Jobs. That was the beginning of an incredible trip. Steve had this amazing ability to absorb things and just this very unique way of looking at the world.

Henry Nicholas

Founder, Broadcom

I never knew when Steve was going to call. But I knew that when he did, it would probably be in the middle of the night. In 2001 my company was developing Ethernet chips for Mac computers. Steve was enormously excited about our product. He was enormously excited about everything. And restless and sometimes agitated—and frankly, he could be a bit of a pain. He was like a bulldog. He worked all the time, day and night, and he expected everyone around him to be that way, too. He insisted that the person at

the top or someone who had absolute control was the guy he interfaced with. He demanded that he get as much time as necessary. If it was 3 in the morning and Steve had a thought or a question or complaint, he picked up the phone and called, right then. The concept of "that can wait until the morning" did not apply. He wasn't going to sleep until he addressed the issue.

Sometimes I was at home in bed, but sometimes I too was at the office working—and there he'd be, on the other end of the line. No small talk. Right to business. "We've got an issue," he would say. When he called he was often worked up about something and he started out aggressively. Were we going to make our delivery date? (Yes, of course we were). Did we solve whatever puzzle he had called about in the middle of the night the week before? (Yes, of course we had). He wasn't overbearing or unreasonable. He just had incredibly high expectations. Once he had satisfied his need for information, he would mellow. We talked about music. I ribbed him about the Rolling Stones. He made fun of me for listening to Metallica. All of Steve's urgency and attention to detail was for a reason: He believed it was up to us to do the hard work of making technology simpler to use instead of more complex, and he made me feel like I was taking part in something special.

When Apple first became our customer it was a major player, but far from the biggest. Steve was able to get me to focus my time and attention on Apple with an intensity that was way disproportionate to its market share. He was able to get me to believe—even half asleep in the middle of the night.

Louis Rossetto
Co-founder and former
Publisher, *Wired*

I saw him give a presentation at NeXT, and he was utterly convincing. He had that presence. The reality distortion field. But the funny thing is, for all the talk of the reality distortion field, if you go back and look at his presentations, they're full of tangible facts. He starts out for the first five or 10 minutes just giving you facts—we sold this much of this ... with a processor that's three times faster than... now larger than, etc. It's this programmatic buildup. He wasn't waving his arms and mystifying you with something that wasn't true. He was mystifying you with reality!

He commanded such attention and loyalty, across disciplines. You had this sense that you should find a way to learn from this guy Jobs. He was a beacon to follow. And even if you were exaggerating what he was in your own mind, or trying to emulate something that he wasn't really, he was still inspiring you to be better—to be like him. Not having that touchstone is perhaps as great as loss as losing a creative genius.

He joins a unique pantheon of American heroes—like Edison, like Ford, like Borlag—heroes who genuinely improved millions of lives and touched the soul of our time.

Andy Bechtolsheim
Co-founder and hardware
engineer, Sun Microsystems

I ran into Steve at a Christmas party in 2006, which was a few weeks before the original iPhone launch, and I asked him how the much-rumored iPhone was coming. Of course he could not say anything about it. Then I said "all I want is a phone that has a real Web browser and can do real e-mail." To which he said with a smile, "I guess you just have to wait a little longer."

We then chatted about various battery and display technologies for portable devices, and I was blown away to which level of detail he knew the best technologies available in that area. Here was the CEO of the company who knew down to the most detailed level what technologies made his products insanely great. It was a memorable moment.

Barry Lam
Chairman, CEO, and founder
of Taiwan-based Quanta Computer,
an Apple laptop supplier

He was very demanding. Best product, best design, best quality, and best delivery. He wanted perfect product, perfect quality, and perfect operation. We had to improve a lot to meet his requirements. In this way he improved the whole operations because of his tough requirements

William Gibson

Author, most recently, of *Zero History*; his debut novel, *Neuromancer*, popularized “cyberspace,” a term he coined in 1982

I recently dug my Apple G4 Cube out from beneath the workbench in the basement. I was looking for otherwise forgotten bits of my published nonfiction for a forthcoming collection and had reason to believe there might be some on the Cube’s drive. I don’t usually keep my old computers, but I’ve kept the Cube because the “cube” itself is one of the best-looking pieces of hardware I’ve ever seen. The coolest thing about it, though, isn’t even visible, ordinarily.

When you flip it upside-down, you see a flat bar of solid matte aluminum, recessed in a sheet of perforated matte aluminum. This bar has an odd, rather unfriendly-looking button at one end. When you press this, it rises an inch or so, smoothly, of its own accord, becoming a handle, while unlocking whatever holds the actual guts of the computer within its housing of transparent plastic and aluminum. This is such a magical touch, yet so modestly hidden, that I loved it immediately on first discovering it.

I didn’t find what I was looking for on that drive, but I was on the Cube’s desktop long enough to note how relatively slow it is and to remember how annoyingly audible its fan is. But then I’m currently most accustomed to an iPad.

I have never owned any computers other than Apple, having started with an Apple IIc, marked sharply down to make way for the first Macs. I was never interested in getting any more intimate with whatever made my computer work. I wanted the most transparent interface possible; that is, the one that least required my personal attention. I wanted my personal attention to be elsewhere, focused on things other than my computer. Design at that level kept me at Apple, but also design at the level of that pop-up handle and the pop-out core it reveals. I never had any practical reason to use that handle, but it delighted me. It’s a really splendid piece of engineering and design.

It didn’t, though, as much of our experience of the world of manufactured objects teaches us, have to be that exceptionally good—but was, because Steve Jobs cared about coherent design. About, as he said, the back of the dresser.

Jim Allchin

Former co-president of Microsoft’s Platforms and Services Div.

I never had a conversation with Steve I didn’t enjoy. Whether sparring over technology, laughing over technical issues (dual booting a PC, etc.), or later talking about cancer. I remember once he and I were on an industry panel, at some conference

or another, together with many other vendors in the early ’90s. We both spent most of our time doing one-liners about the other’s technology during the demos. It was as if the other vendors weren’t even in the room. The audience had a great time laughing as we poked fun at each other. Then when we got off the stage, Steve said a classic Steve line of something like “everyone else hasn’t got a clue, but we’ve got to work together.”

In my view, Steve’s contributions to society grew over time and, although he was always innovative, his best work came during the last 10 years. Steve’s ability to understand user-centric computing was the best I have ever seen. He was a truly remarkable man.

Matt Drance

Former Apple developer/evangelist

I worked at one point for 72 sleepless hours for something that Steve Jobs showed on stage for 9 seconds. It’s top three, if not No. 1, of my professional achievements. It didn’t look any different on that screen as it did on mine, but it was the knowledge that it was good enough to be on the stage that made it suddenly look different. I’ll never get that chance again, and I’m glad I had it

Marc Andreessen

**Founder, Netscape;
co-founder of venture capital
firm Andreessen Horowitz**

For those of us who live in and around Palo Alto, you could often see Steve walking around. He'd often stop by the Apple Store and talk to the customers. I drive up and down Embarcadero Road in Palo Alto a lot. One time I'm booking in my car on Embarcadero and I go by this guy. And I see out of the corner of my eye he's ready to cross the street—black turtleneck and jeans. I'm like "Oh my God, I almost killed Steve Jobs!" Not uncommon for people there to just see him around like that.

We use the phrase "California casual," or "California fake-casual," which is that a lot of people here want to go along and get along, and everybody's nice to each other, smiles to each other's faces. Then when somebody leaves the room, they're like, "Oh, that guy's a real son of a whatever." Steve's not like that. Steve was never like that. He was always somebody who told you exactly where you stood, exactly what he thought. The clarity of the communication you could have with him—there was no wasted time. There was no wasted effort. Everything was crystal clear and unbelievably effective. I think that quality permeates Apple's culture, and it's one of the reasons they're such an amazing company.

Michael S. Malone

**Tech journalist and author
of *Infinite Loop***

He wanted Apple to be like the Beatles and have this amazing run of landmark albums. Well, he did it. He hit one home run after another. Edison didn't do that. Ford didn't do that. Hewlett and Packard didn't do it. Noyce, Moore, and Grove at Intel didn't do it.

I have never seen this happen where someone could introduce one product after another, and their success was a fait accompli. They would be successes because he introduced them. Millions of people would follow him wherever he took them. He reached that unique position.

Mark Frauenfelder

**Editor-in-chief, MAKE; founder,
bOING bOING**

In May 2002 I got a call from my friend Alberta who asked if I'd like to be in an Apple TV commercial. Alberta had a friend who was an art director at Apple, and he needed people in Los Angeles who'd switched from a Windows machine to a Mac. That was me.

The next day, I got calls from Apple and Chiat/Day, and they e-mailed me a thick stack of forms to sign. Most of them swearing me to secrecy.

The day after that, I drove 15 minutes to a soundstage in Hollywood. At least 100 people from Apple and Chiat/Day were on the set. Errol Morris, the director, was hiding inside a white tent on the far end of the warehouse-like soundstage. I could hear his voice booming through an amplifier. Someone on the set told me he was using his invention called the Interrotron to interview the switchers. "Just wait until you see how it works," she said.

My taping was scheduled for 12 p.m. I was a little early, so I grabbed a bagel from craft services and looked for a place to sit. All the chairs on the set were occupied, but not by people. The Chiat/ Day workers had set their laptops and backpacks on all the chairs with hand-drawn signs that said "DON'T TOUCH." I asked a young woman in a smart gray outfit where I could sit. "Someplace outside," she said. "We'll get you when it's your turn." I went out and ate my bagel standing up. I saw Daniel Clowes, the cartoonist and *New Yorker* cover illustrator, leaning on a rail, and we chatted. They'd flown him in from New York to tape the commercial.

So 12 p.m. came and went. I was reading a month-old copy of *LA Weekly* when someone found me at 2:30 p.m. and told me to go to the makeup trailer. The makeup artist powdered my face and plucked some of my eyebrows with a tweezer. When she finished I walked into the soundstage and found the woman who'd called for me. She was on her cell phone. She saw me in her peripheral vision and stuck her free hand out to keep me from talking. I heard her say, "Danny is in the green room. He's ready." A moment later Danny Elfman emerged from a door and walked to the Interrotron. I went back outside.

At 6 p.m. a man from Chiat/Day found me and led me to a white curtain next to the white tent. I was facing a teleprompter displaying Errol Morris's face. It was larger than life, like the Wizard of Oz. He was grinning aggressively at me. A camera behind the teleprompter was taping me. Without introduction, Errol launched into the interview with his electronically amplified booming voice. He challenged every statement I made by repeating it in the form of a sarcastic question.

"I had everything set up on Windows," I said. "You had EVERYTHING set up on WINDOWS?" he asked, incredulously. Using Windows was "like being stuck in a bad relationship," I said. "A bad RELATIONSHIP?" This went on for 20 minutes. I was woozy. When the interview was over Errol thanked me, and his teleprompter visage blinked out. I never saw him in the flesh. I felt I'd done an awful job of articulating what the Mac meant to me and was certain my spot would never air.

Later, I got a call from the Apple art director, and he told me that Steve loved my interview and insisted that it be the first to air, over the objections of almost everyone involved in the production. "Steve is telling them, 'It's gotta be Mark,'" the art director told me. I didn't understand. What did Steve see in my interview that nobody else saw? Thank you, Steve; I miss you terribly. **B**



A woman with short, vibrant red hair is shown in profile, facing right. She is wearing a dark, button-down shirt. Her gaze is directed towards a display of various cosmetic products, which are blurred in the background. The products appear to be arranged in a tiered or hanging display, possibly in a store setting. The lighting is bright and natural, suggesting an outdoor or well-lit indoor environment.

The Products

iConsume

By Sean Wilsey

50

He built.
We bought.
And waited for more.

On 9/11/11, I was detained on my way to the U.S. Open women's final. Security was tight and all spectators were patted down and relieved of food, water, and backpacks. A guard felt my jacket, discovered a hard, deck-of-cards-sized object, and, before I could remove it from my pocket for her to inspect, exclaimed, "Oh, that's an iPhone!" Then she smiled and, in an action emblematic of the relationship between America and Apple, waved me through—as though nobody with such a device could have evil designs.

Apple is now synonymous with American values and enterprise. But it was not always thus. Apple users long constituted less than 6% of the market, even at the mid-'80s peak of the Macintosh. Before owning my first Mac, I wrote code in BASIC and grudgingly learned DOS commands and keystrokes—which required such awkward finger placements it was like playing a jazz chord progression whenever one backed up a file. Apple was already figuring out the seemingly obvious: Computers are meant to work for us. Apple products were simple, but only a rabid minority seemed to care.

Now, thanks to a faultless execution of that principle, the whole world has fallen for Apple. Still simple in appearance, Apple products have the feel of precision chronometers or gunsmith-forged, by-appointment-to-Her Majesty-grade firearms, with none of the exclusivity of such things. A couple of weeks ago I saw a man in filthy clothes lying on a Manhattan sidewalk, fiddling with his iPhone. It looked as though it may have been his only possession.

The conventional notion about Apple is that the company's devices are powerful, intuitive, beautifully designed, and somehow free you to be more ... yourself. They are also dazzling, which I am using in the original sense, as in "they confound with their brilliance." Certainly, there is something not quite rational about the desire they evoke. And I am speaking from experience. There are at this moment six in-use Apple devices on my desk. I estimate that I've owned \$30,000 worth of hardware from the company: four PowerBooks, a G4 tower with Cinema Display, two MacBook Pros, a first-generation iPod, the first black iPod, an iPod shuffle, a G5 tower, the old iPhone, an iPad, the current iPhone, and a MacBook Air. I am a stockholder. I am, it almost goes without saying, writing this on an Apple. And it's increasingly likely that you are reading it on one.

With each Apple purchase, I've always thought: They can't possibly make anything better than this. And they then produce

some new thing that appears to have descended from on high, a child of immaculate gods. At which point the formerly gorgeous thing, as in the case of the 11-year-old Cinema Display that I still use today, just starts to look wrong, despite its ongoing utility—the mix of gray and transparent plastic sad in contrast to the brushed steel of the latest, like something left out in the rain. And so the consumerist reincarnation: There's always going to be a new product coming out. Nothing ever dies, it just gets replaced.

Growing up in San Francisco, 40 miles from Silicon Valley, my first digital experience was on an Apple II Plus. Others may have been crunching spreadsheets on VisiCalc, but I was calculating the launch angle and velocity of a flashing white dot. I typed in coordinates, pressed "Return," and a projectile was fired at an enemy missile battery, operated by a friend on a networked computer. I was nine, it was the late Seventies, and I had a future in ballistics.

The first logo had a line from Wordsworth inscribed around the border, about Isaac Newton: "A mind forever voyaging through strange seas of thought—alone." Now, on each box comes, "Designed by Apple in California/Assembled in China."

As a San Franciscan, the "Designed in California" part makes me proud. Apple couldn't have flourished in any other place. It is of my home state. Like so much about California, though, it is not always what it seems. It is user-friendly, but not ... friendly. Beloved, and rich, the company is famously tightfisted. And any sense of openness is certainly an illusion—whatever's inside headquarters, at 1 Infinite Loop in Cupertino, is as closely guarded as a Soviet secret city during the arms race. One former Apple employee, quoted by *PC Magazine*, summed up the company as follows: "It's a culture of silence." A monastery.

The chief officer of my local police precinct told the neighborhood's most recent community council meeting that there had been 39 robberies over the previous month, and the majority of them involved Apple products. Numerous people have been violently, surreptitiously, or otherwise dispossessed of their iPhones, iPads, and, in at least one case, a computer. Most common, and striking to me, were incidents wherein texting or talking pedestrians simply had their phones snatched out of their hands. In street parlance, an "iMugging."

Venerable George has loaded hundreds of rare texts onto iPads for the perusal of Buddhist clergy

The chief discouraged the use of white headphones and urged residents to engrave serial numbers and "NYC" on portable electronics as a prelude to registering them with the police, who were offering to loan out an engraver for the purpose. When I told my wife all this, she said she had no interest in participating. "If my iPhone gets stolen," my wife said, "I'll be psyched because I'll get to buy a new one."

Designer Alan Kay, inventor of the

laptop, had this to say upon the iPhone's release: "Steve understands desire."

Apple computers are beautiful and work beautifully. They may or may not, to quote Jobs, be putting "a dent in the universe."

Apple computers are simply pleasurable. It's fun to be able to see ourselves as a pulsing dot of significance in a world of fascinating destinations, or to board a plane without waiting in line to get a piece of paper, or to figure out what awesome music is playing in a restaurant without having to be so uncool as to ask. Apple understands how we wish to see ourselves, and a pleasing sense of omnipotence comes of all this power and ease. We feel that we are masters.

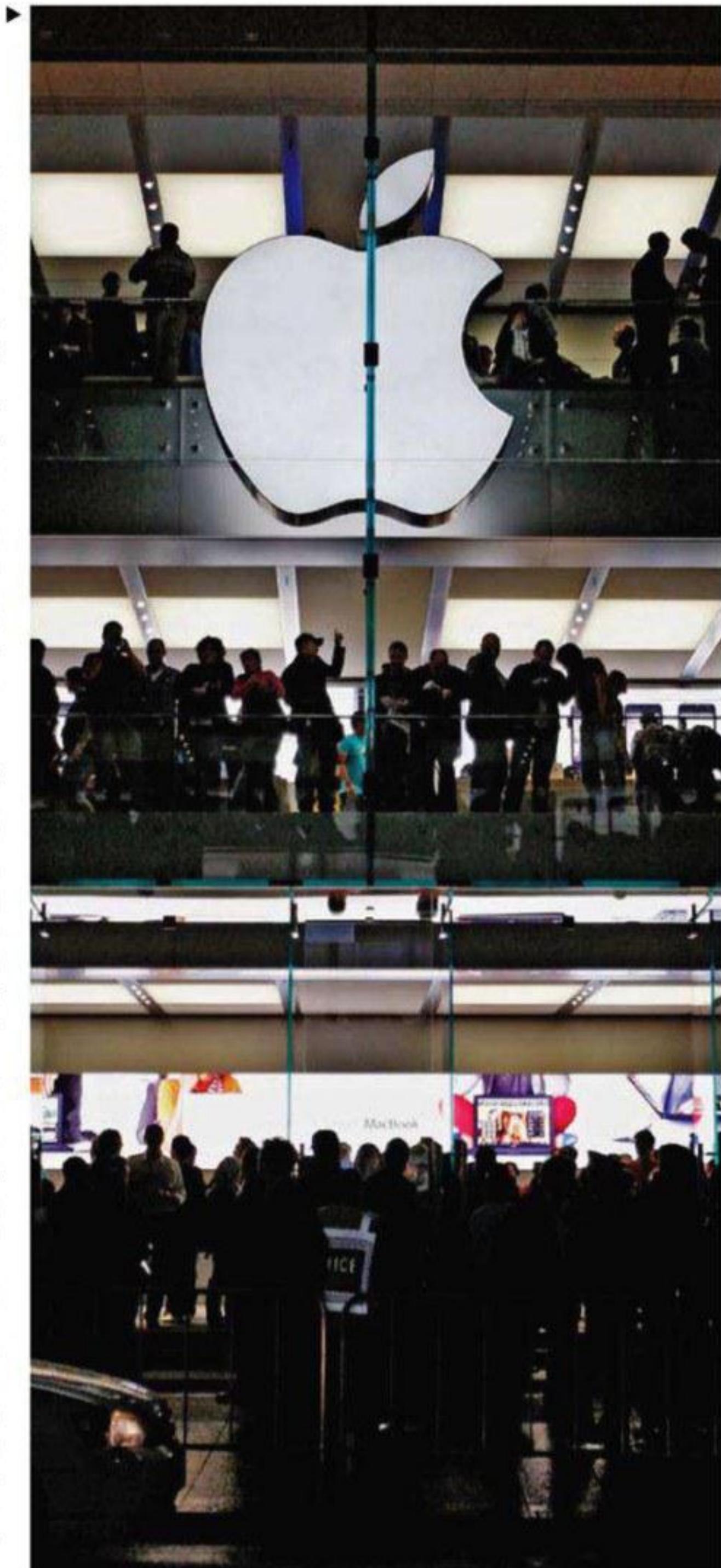
As for dazzling, sometimes I find myself sitting before my computer's screen in a posture previous generations would only recognize as prayer, and doing nothing—as though I'm waiting for it to tell me who I am, what the future will bring, to enlighten me. The moment elongates. I am mesmerized. This is weird enough solo; but it's commonplace to disengage, without warning, from a conversation or meal or steering wheel in the presence of an iPad or iPhone. And who hasn't been disquieted observing their fellow Apple users gathered together, each looking into their own screens, faces lit with a ghostly glow from below? It's a culture of silence.

Last year, a teacher I respected warned my wife and me against "screen time" for our daughter. She instructed us to avoid videos because flashing lights "activate the fight-or-flight instinct," wherein "endorphins are released, your judgment is impaired, your senses are all heightened, your heart rate increases." In making her point, she went so far as to say that screen-centric children could become anesthetized to true experience and to true danger. I have no idea if this is true. But it is plausible, and it certainly goes a long way toward explaining why it has been so easy for neighborhood thieves to snatch up so many iPhones.

George Churinoff, a venerable Buddhist monk, splits his time between a monastery in rural Wisconsin and, when the Dalai Lama is in New York, a relative's apartment in Lower Manhattan. He also works as a Mac specialist. Venerable George, as he is customarily addressed, has loaded hundreds of rare texts from the Indian Library of Congress onto iPads for the perusal of Buddhist clergy.

Churinoff told me, "I got the idea when his holiness the Dalai Lama was in town teaching. I was looking at my iPad. Richard Gere sat next to me, and I said, 'Why don't you get one of these for the Dalai Lama and he can read the texts?'" Churinoff then set out to do this for a number of high-ranking Buddhists. "The lamas were excited and thought it would give them easy access to the entire canon," he said. "One lama was even prepared to offer a tantric empowerment"—a sermon that initiates devotees—"using the text on his iPad." This would be roughly equivalent to the Pope preaching mass with a Mac.

Opening day,
Sydney Apple
Store, 2008



**Sometimes
I sit before
my screen
in a posture
previous
generations
would only
recognize as
prayer**

entity has ever been able to achieve such a thing?

Jobs was well-known for his unbending, and sometimes odd, aesthetic sense. He once rejected the design of some internal Macintosh hardware, invisible to users, based solely on aesthetics. The novelist Mona Simpson, subsequent child of (and raised by) the same parents who put Steve Jobs up for adoption, modeled a character on her brother, and described him in the book's opening line as "a man too busy to flush toilets." (Jobs told an interviewer, "About 25 percent of it is totally me, right down to the mannerisms.") Simpson's novel is centered around the daughter of a brilliant Silicon Valley executive and her misbegotten efforts to connect with her father. Jobs' eldest child, Lisa, wrote an essay in *The Southwest Review*, mentioning, among other things, the dietary habits bequeathed to her. She describes how Jobs "spit out a mouthful of soup after hearing it contained butter" (though it was vegetarian.) "With him," she went on, "one ate a variety of salads."

In the same essay, Lisa Jobs describes a dinner with her father in Tokyo. They are in the iconic '60s-modernist Hotel Okura—a space that so exemplifies Apple's design ethos that I conflate it with the interior of a Macintosh. Seated in the restaurant "with its high ceilings and low couches," they abandon vegetarianism and eat cooked eel and sushi:

"He ordered too many pieces, knowing we wouldn't be able to finish them.... It was the first time I'd felt, with him, so relaxed and content, over those trays of meat; the excess, the permission and warmth after the cold salads, meant a once inaccessible space had opened. He was less rigid with himself, even human under the great ceilings with the little chairs, with the meat, and me."

If there is a connection to be drawn between this anecdote and our own experience as consumers of Jobs' products, perhaps it is the push-pull Steve Jobs embodied that has always animated America, a country of opposed forces: sybarites and skinflints, puritans and hedonists, natural grandeur and heedless development.

He was a monk-like man who seemed to give everything to bring us, as consumers, as followers, everything we wanted. Occasionally he was also "even human." ▶

Perhaps one thing shows above all others how remarkable Apple is: Any assessment of its value, culturally, is as much a referendum on the value of us all. This singular company has been so fully embraced, is so unquestioningly loved, is taken so personally by so many, that it may as well be a stand-in for our own values: speed, ease, and the self-regard we tell ourselves is individualism. Apple, as John Lennon (also co-opted by the company's advertisements) once described the Beatles, is "more popular than Jesus." What other publicly traded

Quest for clarity:
Customers on the
Manhattan Apple
Store's glass
staircase





Steve's Touch

He was a businessman and an orator, but at heart, Steve Jobs was a designer—the kind who studied Italian cars and typography for their beauty as well as purpose. The products Apple created under Jobs have defined more than three decades of innovation.

Photographs by Jamie Chung

54

Music

Mobile

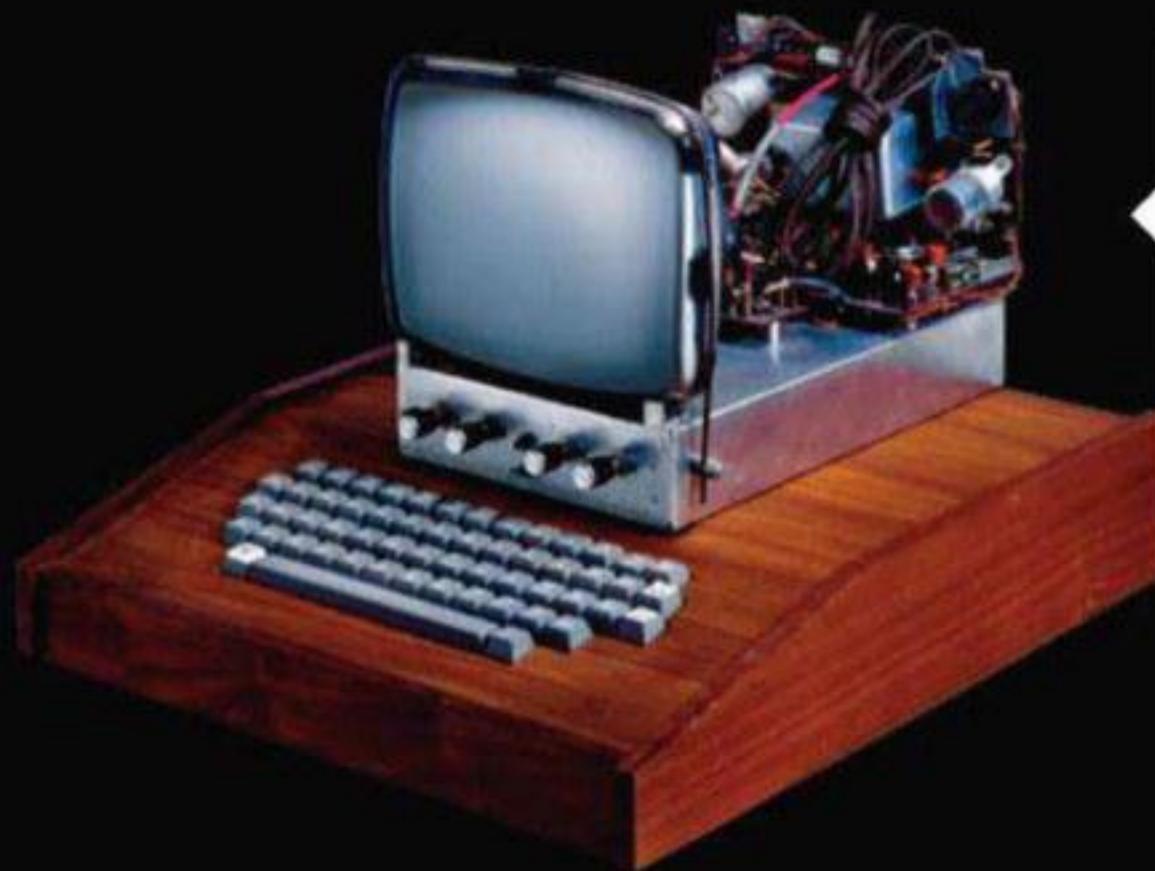
Jobs and Steve Wozniak form Apple Computer to start selling the Apple I, a kit for computer enthusiasts.

Portables

Sony releases the Walkman, the world's first portable music player.

Desktops

Apple I



"With the addition of a keyboard and video monitor, you'll have an extremely powerful computer system that can be used for anything from developing programs to playing games or running BASIC." —Apple I advertisement, 1976

Apple I (April 1976 – September 1977)

Price	\$666	Processor	MOS 6502	RAM	4 KB
		Clock speed	1 MHz	Keyboard	Not included

Circles represent a product iteration

Apple I

Apple II

1975

1976

1977

1978

1979

Lisa



Apple dumped 2,700 Lisas into a landfill in Logan, Utah, in order to write off the unsold inventory.

Apple airs its "1984" ad during the Super Bowl. *TV Guide* later declares it the best commercial of all time. The owner of the television rights to George Orwell's classic sends a cease-and-desist letter to Apple's ad agency. The spot is never aired again.

Apple Lisa (January 1983 - August 1986)

Price	\$9,995	Dimensions	15 x 19 x 4	Clock speed	5 MHz
Weight	48 lbs.	RAM	2 MB		

"It's impossible to tell you everything there is to know about using the Apple IIe because computers are chameleons."
—Owners' manual

Apple IIe



Apple goes public, selling 4.6 million shares at \$22 each. The day Jobs died it traded at \$378.

John Sculley, former president of PepsiCo, becomes Apple's president and CEO.

Macintosh 128K



Macintosh 128K (January 1984 - October 1985)

Price	\$2,495	Dimensions	14 x 10 x 11	Clock speed	8 MHz
Weight	16.5 lbs.	RAM	128 KB		

Apple III

Macintosh

1980

1981

1982

1983

1984

Foxconn, the Taiwanese manufacturer which today assembles iPhones and other Apple devices, sets up its first factory in mainland China.

Macintosh Portable

The crew of the space shuttle Atlantis used a Macintosh Portable to send the first e-mail from space in 1991.



Macintosh Portable (September 1989 – October 1991)

Price	\$6,500	Dimensions	4 x 15 x 15	Processor	Motorola	Int. Storage	40 MB	Display	9.8 in. LCD
		Weight	15.8 lbs.	Clock Speed	16 MHz	Ext. Storage	1.44 MB floppy	Resolution	640 x 400

Macintosh Portable

Steve Wozniak leaves Apple in February. Jobs follows suit seven months later.

1985

1986

1987

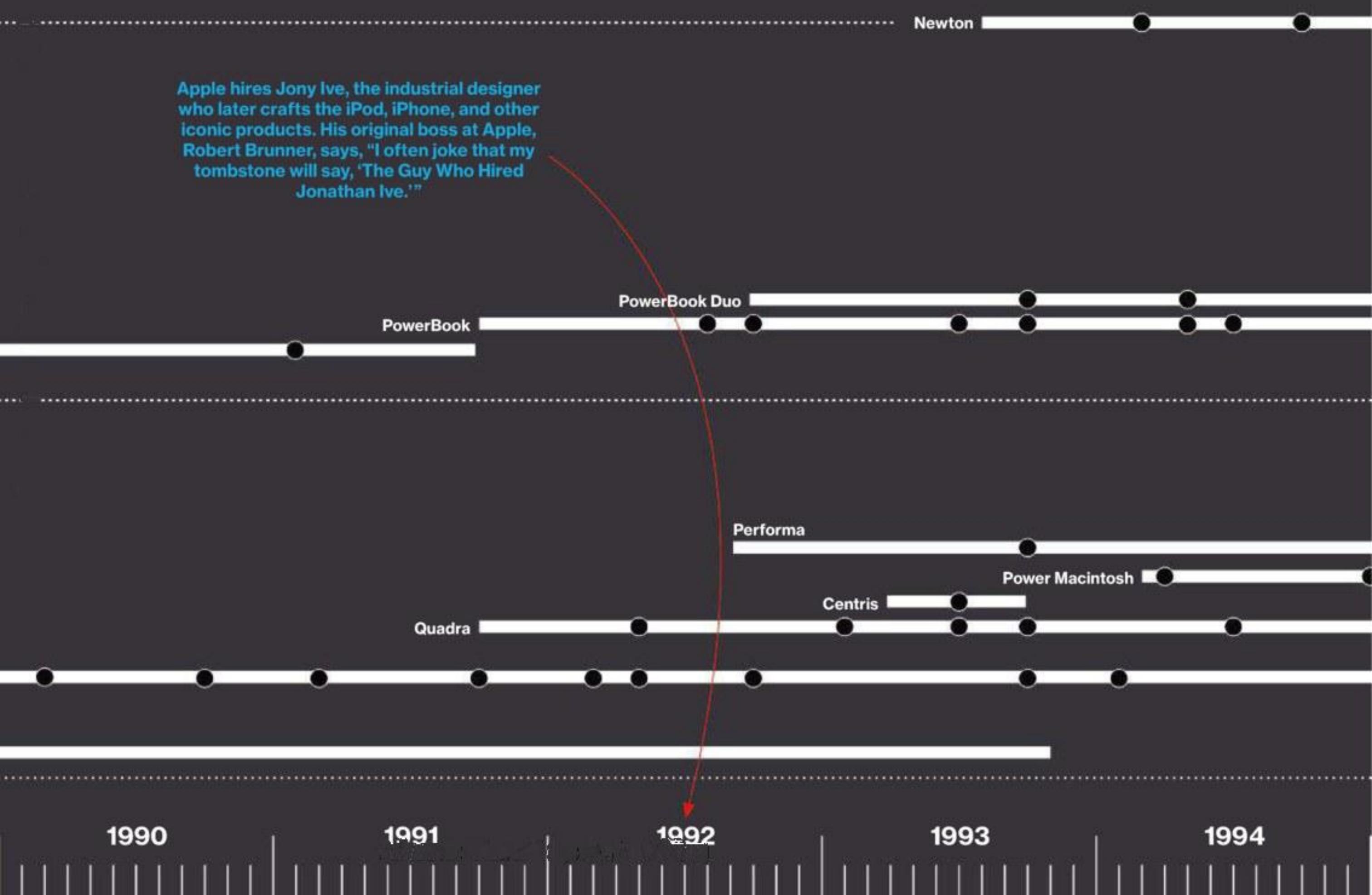
1988

1989

Apple without Steve

Jobs left Apple in 1985 and dedicated himself to a new venture, NeXT Computer. Without its co-founder, Apple lost focus. It pumped out scores of new products at high prices. Some received critical acclaim at the time, but most struggled to find buyers. In 1989, Apple released the Macintosh Portable, an early laptop that weighed 16 pounds and cost \$6,500—earning it a place on *PCWorld's* list of the “25 Worst Tech Products of All Time.” In 1993, Apple moved into living rooms with the Macintosh TV, which lasted just five months. Meanwhile, Apple’s core software—its operating system—went six years without a major upgrade. By 1996, Apple’s stock reached its lowest price in a decade. Apple brought Jobs back to lead the company when it acquired NeXT in 1997.

Apple hires Jony Ive, the industrial designer who later crafts the iPod, iPhone, and other iconic products. His original boss at Apple, Robert Brunner, says, “I often joke that my tombstone will say, ‘The Guy Who Hired Jonathan Ive.’”



iMac

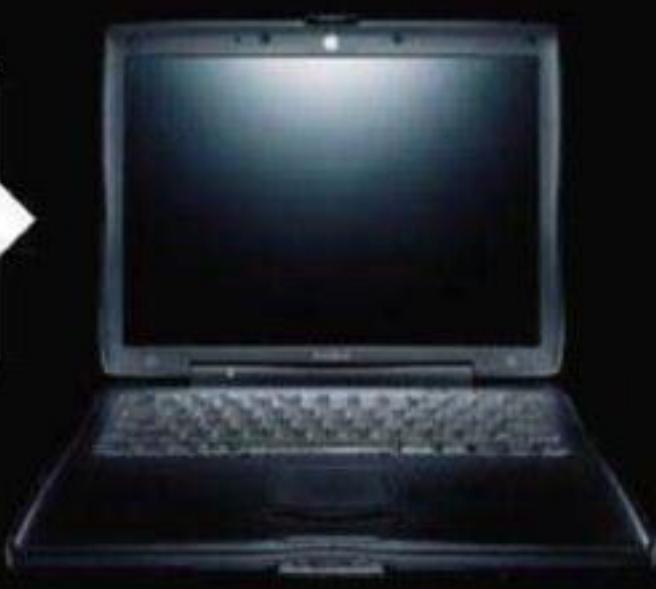


"iMac is next year's computer for \$1,299, not last year's computer for \$999." —Jobs at Macworld Expo, 1998

iMac (May 1998 – January 1999)

Price	\$1,299	Dimensions	16 x 15 x 18	Clock speed	233 MHz
		Weight	40 lbs.	RAM	384 MB

PowerBook G3



"Big and beautiful, the PowerBook G3 is perhaps the first portable computer that warrants being called sensual." —New York Times review, 1998

Cube



Cube (July 2000 – July 2001)

Price	\$1,799	Dimensions	10 x 8 x 8
Weight	14 lbs.		

Network Server

Apple launches its "Think Different" campaign, which offers a toast: "Here's to the crazy ones."

The first BlackBerry is released.

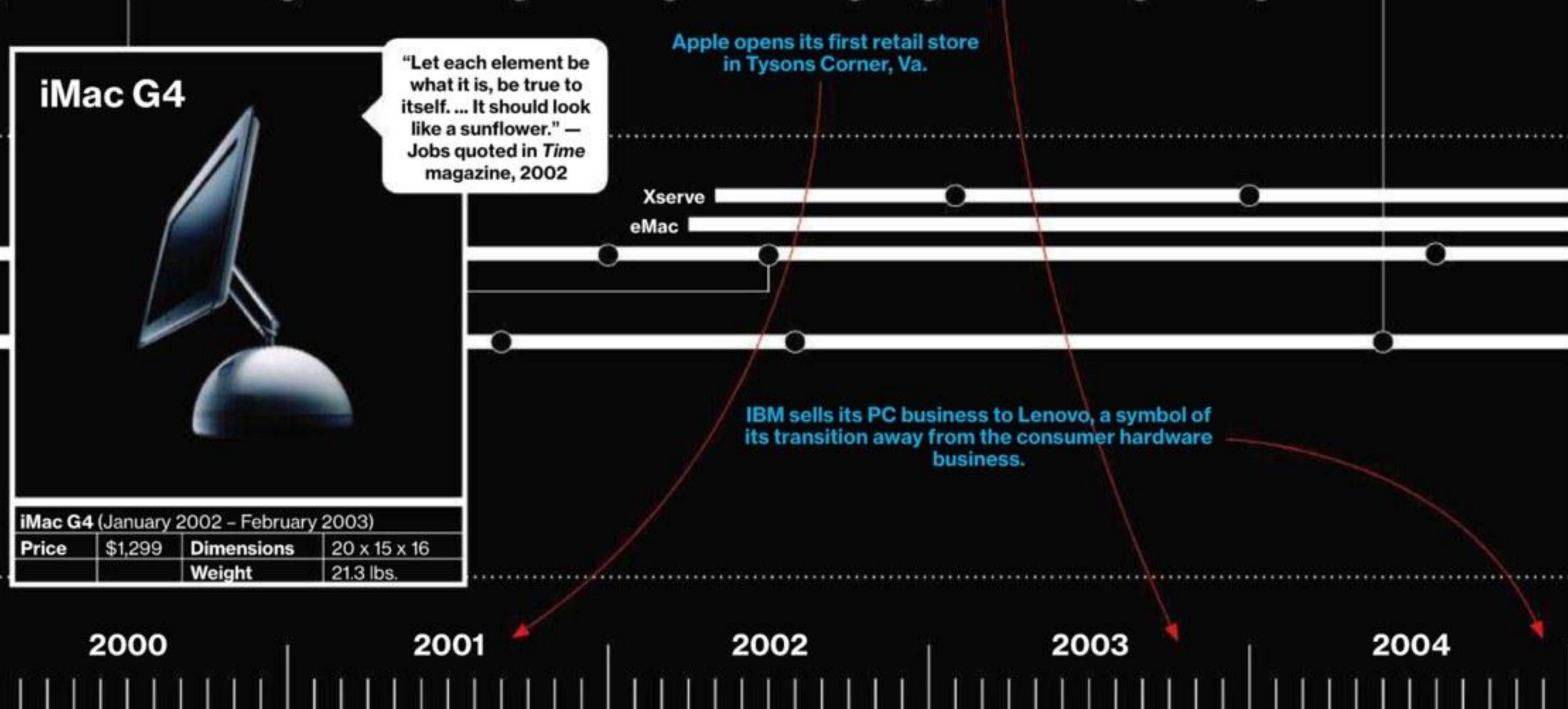
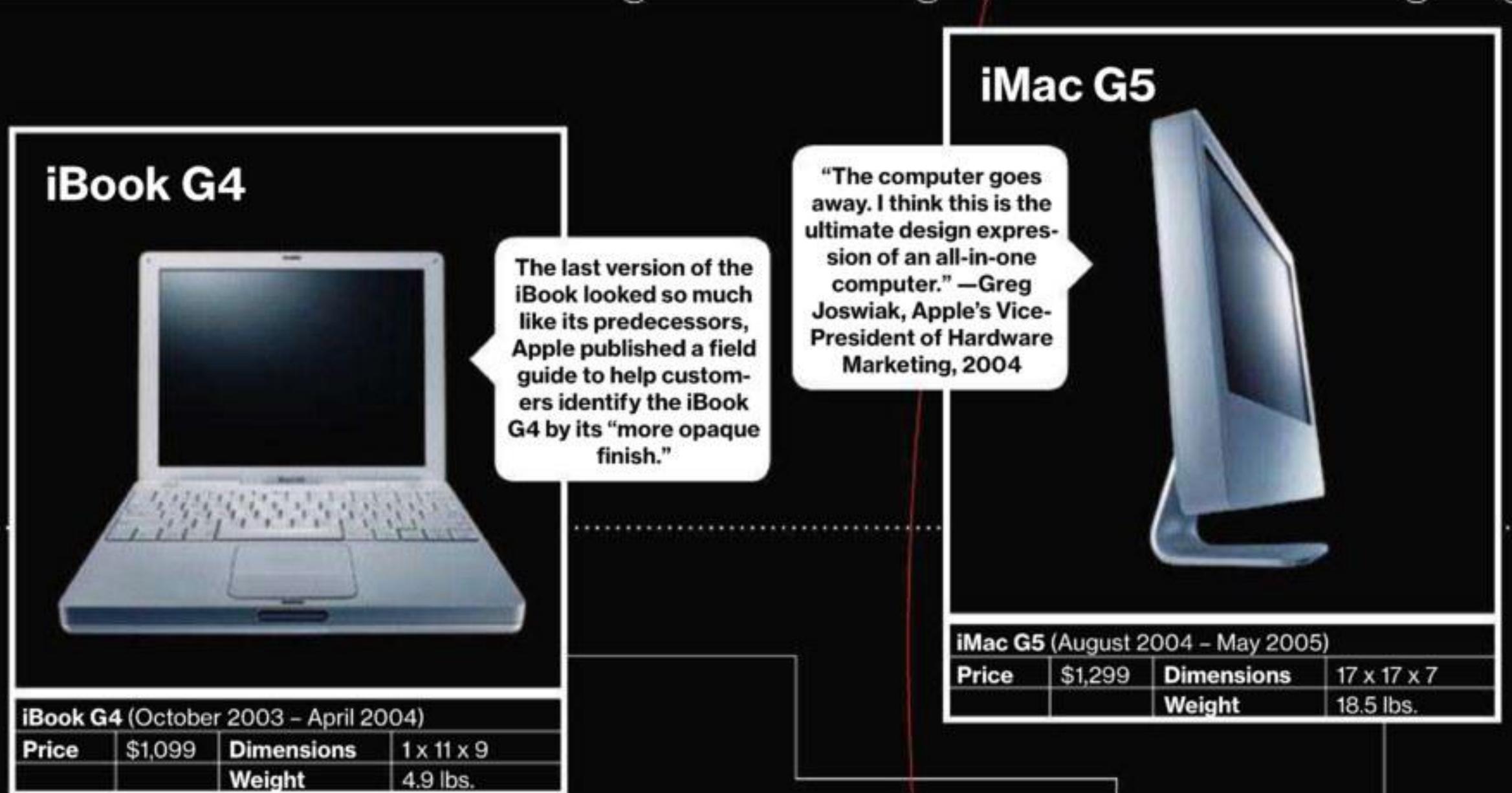
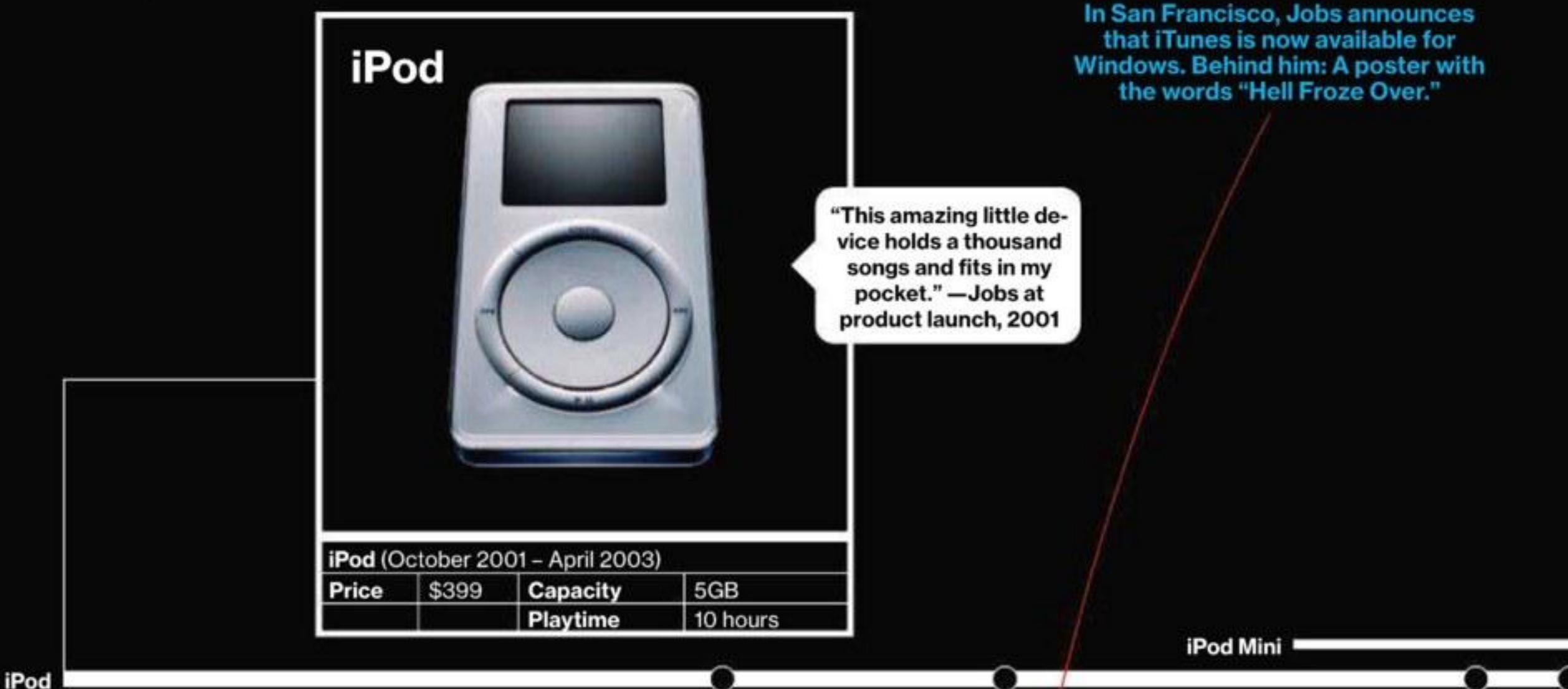
1995

1996

1997

1998

1999



MacBook Air



"To fit an entire Mac on this thing was an amazing feat of engineering." —Jobs at Macworld Expo, 2008

Microsoft releases the Zune, an iPod rival. The company discontinues Zune hardware in March 2011.

iPod Shuffle
iPod Nano

iPod Touch

iPhone



"We're going to use the best pointing device in the world. We're going to use a pointing device that we're all born with—born with ten of them. We're going to use our fingers." —Jobs at Macworld Expo, 2007

iPhone

Apple creates the App Store, a year after the iPhone's debut.

MacBook
MacBook Pro

MacBook Air

Mac mini

Mac Pro

Apple officially drops "Computer" from its name.

Apple switches to Intel chips.

2005

2006

2007

2008

2009

iPad

"Our most advanced technology in a magical and revolutionary device at an unbelievable price." —Jobs at product launch, 2010

iPad (January 2010 – March 2011)

Price	\$499	Dimensions	10 x 7 x .5	Clock speed	1 GHz	Screen	9.7 in. LCD
		Weight	1.5 lbs.	Capacity	16GB	Resolution	1024 x 768

What's next?

Smart TVs, LTE phones, NFC sensors, pocket projectors, haptic keyboards, brain implants—pundits and fans have never been shy with their opinions about what Cupertino should solder or code next. In the near future, there will almost certainly be an iPhone 5, an iPad 3, a thinner MacBook Air, and other iterations on Apple's current hits. They'll delight many, disappoint a few, and bring in billions of dollars. As for the next magical, revolutionary device, it's key to remember Apple started work on the iPhone in 2005, two years before it reached the public eye. The seeds of the next big thing from Apple are already germinating—and they have Steve Jobs's DNA at their core.

Apple passes Microsoft in market value.

DATA: MACTRACKER.COM; LOWENDMAC.COM; EVERYMAC.COM; APPLE-HISTORY.COM
APPLE I: GETTY IMAGES

Glossary

62

An abridged lexicon of the world of Apple

1984

1. Dystopian novel by George Orwell. 2. The title of an iconic Apple commercial directed by Ridley Scott that ran during Super Bowl XVIII and presented the Macintosh as the computer of choice for the independent-minded.

AAPL

1. Ticker symbol of Apple Inc., which went public in 1980. 2. A defiance of the rule that whatever goes up must come down.

Apple



1. A round, tart, thin-skinned fruit. 2. Record label founded by the Beatles in 1968. 3. Maker of supremely elegant, era-defining personal electronics, founded by Steve Jobs in 1976. 4. The largest publicly traded company by market capitalization on the planet.

B-Club

1. An unofficial club to which billionaires belong. 2. The organization Jobs told Larry Ellison he had joined, after Pixar's IPO, in 1995 (page 32).

Beachball

1. A colorful, inflatable ball that appears out of nowhere at parties and sports events and is synonymous with fun. 2. A colorful, spinning icon that appears out of nowhere on Apple computers and is synonymous with torturous frustration. Also known as "pinwheel of death" and "spinning wheel of doom."



"Bicycle for the mind"

One memorable Jobs coinage, a prescient reference to the future utility of personal computers.

Blue box

1. A type of illegal phone hack that allows one to make long-distance calls. 2. The first successful collaboration of Jobs and Apple co-founder Steve Wozniak, in 1968.

Bomb



1. An explosive device. 2. One of the more frightening glyphs in the history of Apple's otherwise benevolent iconography.

Brushed metal

1. A sleek, abraded metal frequently used in modern furniture design. 2. A common visual

theme of Apple's graphical user interface, starting in 1999.

Calla Lily

1. *Zantedeschia aethiopica*. 2. A flower that Jobs demanded be brought to a *Fortune* photo shoot, along with a grand piano, which Jobs couldn't play (page 20).

Calligraphy

Jobs's study of calligraphy was said to inspire Apple's distinctive fonts.

Chicago

Monaco



Geneva

Los Angeles

New York

San Francisco

Toronto

Venice

Geneva italic

Chicago (outline)

Coyote, Peter

1. Multitalented actor-writer-director who never truly broke out. 2. The warm, mellifluous voice of iPad ads.

"Designed by Apple in California"

1. The reassuring and authoritative inscription on most Apple products. 2. A marked contrast from the inscription that often accompanies it: "Made in China."

Dock

1. A structure onto which boats can be moored. 2. The most practical, user-friendly addition to Apple's OSX operating system, introduced in 2001.

Dogcow

1. A widely beloved, bitmapped chimeric creature—also called Clarus dogcow—created by Apple designer Susan Kare in 1983. 2. The letter "Z" in the pictorial Apple font known as Cairo (see "Calligraphy").



Feline OSX Namesakes

10.0
Cheetah



10.1
Puma



10.2
Jaguar



10.3
Panther



10.4
Tiger



10.5
Leopard



10.6
Snow Leopard



10.7
Lion



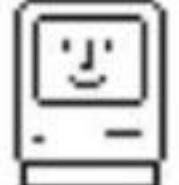
Unused:
Lynx
Cougar
Maine Coon
Kitties

Fruitarian

1. One whose diet consists exclusively of fruit. 2. Steve Jobs, at one point.

Genius

1. A person of exceptional intellectual power. 2. An Apple salesperson.



Happy Mac

1. A seemingly ubiquitous icon representing an anthropomorphic, smiling Apple II. 2. A sign that your computing experience is going well (as opposed to "Sad iPhone").

i

1. Ninth letter of the alphabet. 2. Prefix used to denote Apple's appropriation of household products and/or abstract concepts, e.g. iPhone, iTunes, iLife, iCloud, iWork.

iMugging

Stealing a mobile Apple device (page 50).

"Insanely great"

A Jobsian superlative.

"It just works"

1. A phrase that expresses Apple's greatest advantage over its competition. 2. A mostly true statement (see "Beachball").

Jailbreaking

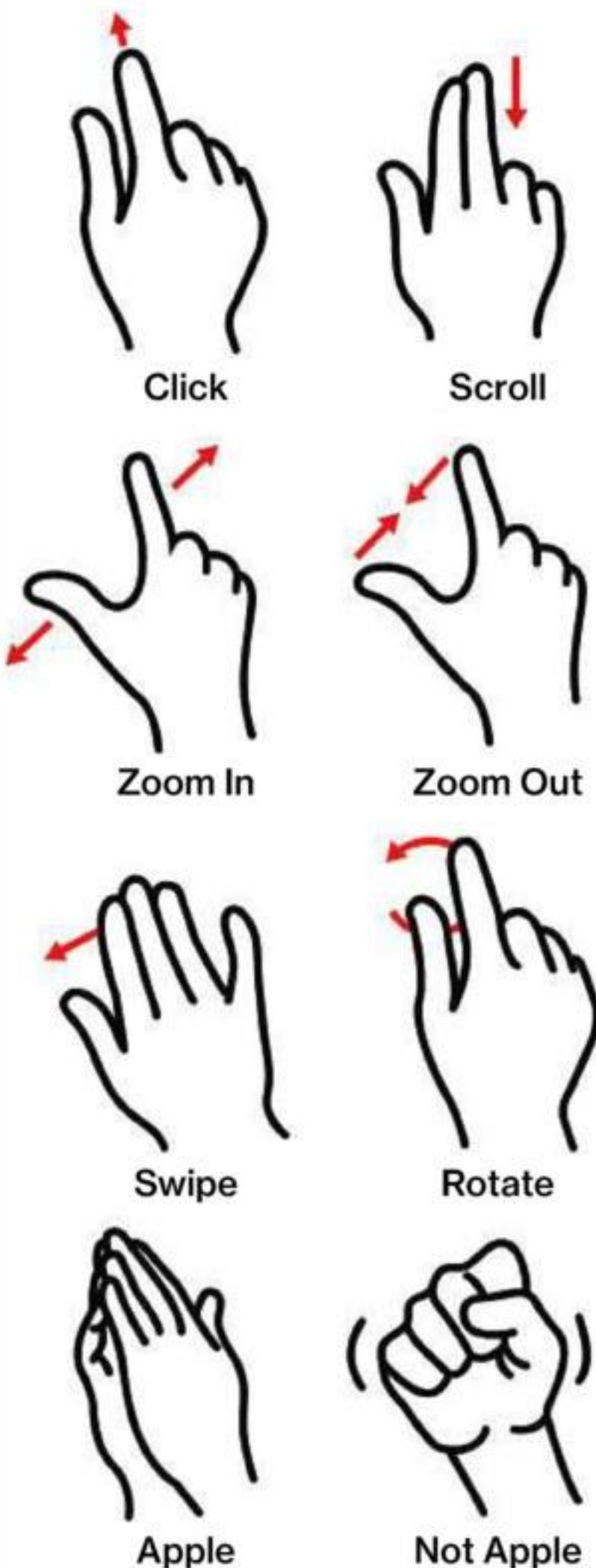
1. Escaping from prison. 2. Hacking an Apple mobile device to override the company's tight restrictions (see "Sad iPhone").

Lisa

1. The name of Jobs's firstborn child.
2. The name of a line of personal computers Jobs designed alongside the Macintosh in the early 1980s.

Multi-touch

A technology co-opted by Apple to enable users to operate their computers with intuitive hand gestures. A handy chart:

**"One more thing"**

1. Phrase popularized by TV's rumpled, idiosyncratic Detective Columbo.
2. Jobs's favorite way to introduce groundbreaking products at the end of Apple conferences.

Psychedelic

1. A quality of Lysergic acid diethylamide (LSD), referred to by Jobs as "one of the two or three most important things [he has] done in [his] life" (page 44).

"Reality distortion field"

The effect of Jobs's charismatic presentations on one's perceptions and expectations.

Revolutionary

1. A word frequently used by Jobs. 2. A word frequently used about Jobs.

Sad iPod

1. An anachronistic, pixelated error message that appears most often on "jailbroken" mobile devices. 2. A sign that your computing experience is not going well.

**St. Croix**

1. One of the U.S. Virgin Islands. 2. A make of cotton and microfiber mock turtlenecks that owes its business almost exclusively to Jobs (see "Turtleneck").

Stevenotes

1. The street name for Jobs's highly anticipated, live-blogged, and tweeted keynote

Start-Up Chime

The arpeggiated, aural breath of fresh air that has accompanied the bootup of most Apple computers since the late 80s.



speeches. 2. Gripping pieces of corporate theater. 3. Not-so gripping displays of fashion.

Switch campaign

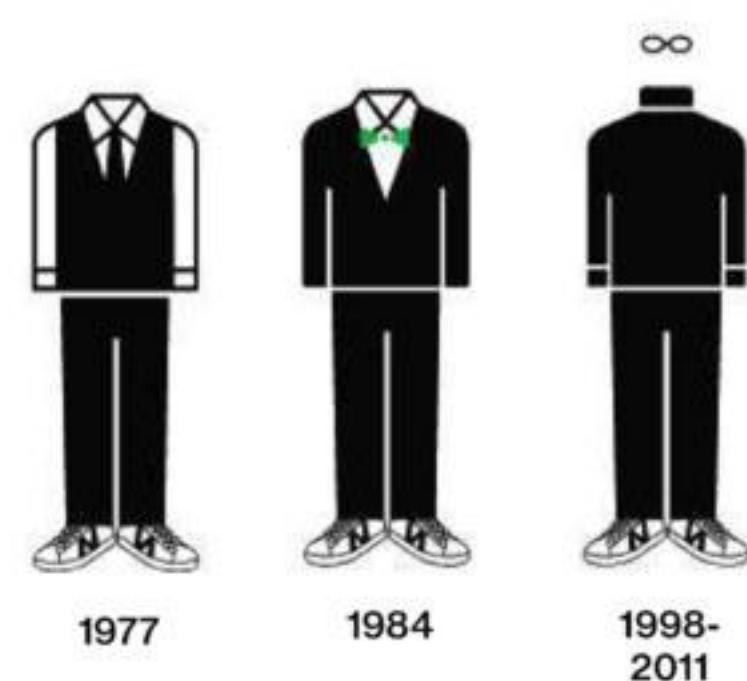
A seminal, 2002 ad campaign that featured real people who had changed their personal computing allegiance from PCs to Macintosh. Participants included Yo-Yo Ma, Will Ferrell, Erroll Morris, and Mark Frauenfelder (page 47).

"There's an app for that"

An Apple slogan that acts as a testament to Apple's universality.

Turtleneck

The culmination of Jobs's sartorial evolution (see "St. Croix." Note, too, the constancy of New Balance 991 sneakers and Levi's jeans).

**"Vertically integrated advertising agency"**

A phrase once used to characterize Apple's business model, according to onetime CEO John Sculley. It was not a compliment.

VisiCalc

1. A spreadsheet program, developed for the Apple II in 1979, that helped the personal computer gain wider adoption. 2. Apple's first "Killer App" (page 50).

White

1. The combination of all colors of the spectrum.
2. The background color of Apple's minimalist, oft-copied TV ads for the last decade.





