PART TWO

New Beginnings

5

How much do you want?

—Ross Perot, offering Steve Jobs financing for his new company

The NeXT Step

Many adopted children who seek their heritage probably hope for the best but fear the worst. Steve Jobs had made intermittent efforts ever since his teens to trace his biological parents. He was almost ready to put it down as a hopeless cause when finally he unlocked the secret.

Steve discovered that he had a sister. Not a half- or step-, but a full sister. Mona Simpson was an aspiring novelist who had been working with writer, adventurer, and bon vivant George Plimpton at the esteemed literary journal *The Paris Review*. (Though the offices are in New York, the name is legitimate: the *Review* actually got its start in the French capital.)

Mona was born in Green Bay, Wisconsin, and says that her father was a political science professor and her mother a speech therapist. Elsewhere, her father is described as of Arab descent and a specialist in the Middle East. When Steve was born, his parents were not married. This was in the 1950s, before the changing social standards that blew in with the winds of the 1960s. Unmarried couples didn't live together, and unmarried young women didn't keep their babies. By the time Mona was born, two-and-a-half years later, the couple had married. When she was ten, her parents divorced. Her mother announced to Mona that

they were moving to Los Angeles. Through their teens, Steve and the sister he didn't know he had were both coming of age in California.

Mona attended the now-infamous Beverly Hills High and remembers it as a place of "a lot of money, a lot of drugs, a lot of insanity." It was a public school in an almost lily-white community, but, she said, "So many people in Beverly Hills had domestic servants, so their kids went there, too." As if lamenting an age gone by, she added, "It was still a time when a middle-class kid like me could get in."

Steve was delighted with the discovery of a sister. The two were committed to building a relationship and became very close. He said, "We're family. She's one of my best friends in the world. I call her and talk to her every couple of days." Both are reticent to speak of their relationship or their family history, but Mona acknowledged strong feelings. "My brother and I are very close," she said. "I admire him enormously."

At the same time that he connected with his sister, Steve also located his mother, Joanne Simpson, and made his peace with her. From that time until her death, he remained in contact with her and included her as well as his sister in his family gatherings. Still, even today, he is apt to flare up if anyone refers to Paul and Clara Jobs as his "adoptive" parents; from infancy he knew them as mother and father, and though they are no longer alive, he continues to honor them with those terms. Use the taboo word and he's liable to snap, "They were my *parents*."

The start of NeXT in 1985 was an ugly beginning for a new venture, though the ruckus only solidified Steve's determination. NeXT was begun in haste and with little planning. Worse, Steve hadn't reflected on what his failures at Apple meant; he was blind to the lessons in the problems that had led to his firing.

He would launch an entirely new company, hire the best and the brightest—a crew of superstars from Apple—and show the world that it really was Steve who was the heart and soul of Apple. Better still, a computer specifically tailored to the educational establishment would reassure Apple's ruling junta that NeXT posed no ostensible threat.

At first, things seemed to be unfolding Steve's way. A financial supporter came forward for NeXT: Ross Perot, the maverick entrepreneur and later presidential candidate. NeXT had been featured in a television documentary called *The Entrepreneurs*. Perot happened to be in front of

a television set, saw the show, and was impressed anew by Steve's initiative and imagination. He remembered the brash young man he had met when General Motors was vetting Apple as an investment and placed a phone call to Jobs the next day. He offered, "If you ever need an investor, call me."

Steve shrewdly waited a week so that he wouldn't look too anxious before calling Perot back. He adroitly side-stepped questions about NeXT revenue and profit projections and instead gave his usual compelling performance about vision, value, and the contribution to technology and society. Perot virtually offered Jobs a blank check. "How much do you want?" he asked. Steve offered a 16 percent share of NeXT for $20 million, and Perot accepted. To his critics, the diminutive Texas tycoon justified his seemingly emotion-based investment by insisting, "I'm investing in quality."

Aspiring novelist Mona Simpson became published novelist Mona Simpson when the New York publishing house Alfred Knopf brought out her first book, *Anywhere but Here*.

Just as there are people who are always eager to seek out the newest restaurant and art patrons always looking for the latest style, in the literary world there are people who seek out the work of first-time novelists. Partly, it's the appeal of hearing a fresh voice; partly, it's being in the know, keeping up with what the cognoscenti are reading—or if possible, keeping ahead of them. First-time authors with a special talent sometimes find themselves picked up and carried by a wave of unexpected praise. Mona was one of those.

The book was a gem, introduced to the world at a launch party in the literary capital of the United States, New York City, given by her former boss, the socialite and literary hero George Plimpton. Mona offered her own surprise that evening: she brought her mother and a young man she introduced to everyone as her brother, Steve Jobs.

Up until that moment, Steve Jobs's discovery that he had a sister was a closely guarded secret, shared with almost no one. Even Mona's literary agent, Amanda Urban, hadn't been told. Urban said, "I had known Mona for quite a while. She had said she had a brother who worked in the computer industry. But that party was the first time I learned that her brother was Steve Jobs."

Reviewers heaped praise on *Anywhere but Here*, one calling it "a wonder: big, complex, masterfully written," and "an achievement that lands her in the front ranks of our best novelists."

It's common for a novelist to fall back on her own life experiences in creating characters for fiction. Mona acknowledges that her work draws more than a little from the people and experiences in her life. So it's interesting to note one particular passage from the book. She has the central character describe another character, Adele, with these words: "And even if you hate her, can't stand her, even if she's ruining your life, there's something about her, some romance, some power. She's absolutely herself. No matter how hard you try, you'll never get to her." Later in the book, she writes that "it's always the people like [Adele], who start the noise and bang things, who make you feel the worst; they are the ones who get your love." Change the gender, and you have vivid descriptions of the way many people come to feel after they have worked a while for Steve Jobs.

Her connection to Steve was at the time guarded by the people who had been at that party and was entirely unknown to the public. The curiosity value could not have had any effect on sales. It was the quality of the writing alone that accounted for the book selling remarkably well for what in the trade is referred to as a "literary novel," a not really snide term for a book that doesn't deal with spies, serial killers, natural disasters, or the like, but succeeds because of the quality of the writing.

With her first book, Mona Simpson had established herself as a writer to be watched.

It had always been the box itself that drove Steve Jobs. The tiny, handheld blue box tone emitter that Woz created as their first product. The sexy, consumer electronics record player-cum-stereo by KLH, a fixture of most college dorm rooms, that was the guiding factor in the design of the Apple II. The oddly rectangular, vertical, and distinctive shape of the Macintosh—"no bigger than this phone book"—that was always part of the Mac's distinctiveness and appeal. Later, it would be the sleek, handsome shirt-pocket music player, the iPod. Fittingly, it would be the sleek black cube of the NeXT computer at the heart of the failure that changed him.

The site of Steve Jobs's personal Armageddon doesn't look like much today. A pair of two-story, off-white buildings with green glass, hard up against the bay in nondescript Redwood City, along the peninsula between San Francisco and San Jose. Today both buildings house dot-com start-ups, and few of the employees realize, as they climb the elegantly curving free-standing staircase in the heart of it, that they are walking on a million-dollar piece of architectural majesty crafted by I. M. Pei in an otherwise indistinctive Silicon Valley cookie-cutter building.

From the mid-1980s on, this was the corporate headquarters of the company that Steve created to show Apple and the world the genius that he knew he was. At that time, ensuring aesthetic perfection in everything he did was more important than substance—hence, the million-dollar staircase. Steve didn't want to break up the space with support beams. It was an apt metaphor not only for the organizing principle of the company, but for everything that was wrong with Steve at the time.

NeXT spent thousands of dollars with Paul Rand, a famous graphics designer, for a logo—a multicolored cube that resembled a child's building block, with an odd font treatment: NeXT. The irony was that the original NeXT machines were black and white only because of the complexity of the graphics they were designed to display. The machine was also housed in a sleek cubelike box—another vast design effort driven by Steve to his tune of cool. The money spent on design didn't do any good, however, because the computers were delayed, and even universities balked at buying specialized computers when cheaper alternatives were available from a company like Sun Microsystems.

The early years of NeXT were filled with glowing pronouncements from the young prince of technology. Another much-promoted issue was the NeXT factory, a state-of-the-art robot-driven factory that Steve built. It got an enormous amount of attention. Hundreds of NeXT computers could be built every day, with hardly any human intervention. It was a model of just-in-time manufacturing, designed to reduce costs by forcing suppliers to deliver components within hours of being needed. It was never used, however, because the demand never materialized. As Steve discovered during the Macintosh era, delivering real products was much harder than talking about them.

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In the 1980s, Steve's head had been turned by the sophisticated, worldly women of New York. (On one occasion, a friend had set Steve up to have drinks with a woman named Diane. Steve called to arrange the date and was struck by how much the woman seemed to talk like a character in a Woody Allen movie. As they were about to hang up, Steve asked, "By the way, what's your last name?" She answered, "Keaton.")

Then he met a California graphic designer striking enough to be mistaken for a movie star. Except for her considerable intelligence and her beauty, Christina Redse, "Tina," wasn't a woman whom Steve's friends would have expected him to be drawn to. True, they tended to dress alike, in jeans and a black T-shirt or turtleneck. In some ways, they were both earthy: Steve with his Zen and his trip to India, Tina with her underplayed beauty that made her even more stunning when she went, as she most often did, without makeup. There was a sexual chemistry between them that was obvious—sometimes a little *too* obvious—to Steve's friends.

The surprising part had to do with the way they related to each other. Usually, Steve seemed to be comfortable around people who wouldn't challenge his authority. It was okay to challenge his *ideas*; as long as you could make a good case for your point of view, you could even argue with him. But when the dust settled, it would be his decision. With women, too, Steve wanted to be in charge.

Tina was strong-willed. She wasn't going to be pliant, yielding, or humble just so she could be seen on the arm of Steve Jobs. She moved in with him for a while, decided she didn't like it, and moved out again. But he kept seeing her. Tina Redse, it seemed, had found a place in Steve's heart.

In 1987, Steve attended a birthday party in Georgetown for Katharine Graham, the woman who had transformed the *Washington Post* into a newspaper of national stature and guided it through the crises of the Pentagon Papers and the debacle of Watergate that had ended in forcing Richard Nixon out of the White House.

Apparently because of his connection with Ross Perot, Steve had been invited to this Washington social event of the year. It's accepted in Washington that politicos get business done over drinks; Steve needed no encouragement to play that game, and he made two

conquests before the end of the evening. He harangued King Juan Carlos of Spain, afterward claiming that he'd talked the gentleman into buying a computer. He had bullied a king into a sale! It was like meeting Michael Eisner at a party and selling him your screenplay. Or running into Britney Spears at a restaurant and convincing her to record your song.

Steve also met someone who for him was the incarnation of the archenemy. Not Bill Gates, but almost as bad: John Akers, the CEO of IBM. It wasn't as if they were facing each other over a conference table. Steve showed his gracious human side and dropped hints about a next-generation operating system that would surprise the industry.

The hints he dropped percolated through IBM, and one day Steve's administrative assistant buzzed him to say that an executive from IBM was on the phone. The company was interested in opening discussions about the operating system Mr. Jobs had mentioned to Mr. Akers.

Steve wasn't easily intimidated. Still, he had never had much taste for dealing with companies larger and more powerful than his own. IBM had always been a prominent member of that more-powerful group, but he agreed to negotiations. Quite possibly he was thinking along the same lines that Howard Hughes had been, years earlier. Hughes had been approached by a consortium interested in purchasing the cornerstone of his empire, the Hughes Tool Company. He agreed to entertain the proposal. The prospective buyers spent months on due diligence—examining the books, poring over the assets, evaluating the future prospects, and interviewing the executives. Finally, they returned to Hughes with an elaborate proposal. He thanked them warmly and said he would let them know. That was the last they ever heard of the matter, and they finally realized they had been played for fools. Hughes had just been interested in somebody else closely scrutinizing every aspect of the company—the assets, the financials, the processes, the quality of the executives—and telling him what they thought the whole business was worth.

Maybe Steve had something equally mischievous in mind. Whatever his true motives, IBM's examination of the operating system software, which Steve was now calling NeXTSTEP, convinced them that this was indeed powerful enough to enhance the IBM products. One day an IBM executive showed up at Steve's office for a meeting. The

world's preeminent computer company was prepared to make a deal for the rights to use NeXTSTEP, and the details were spelled out in the one hundred–plus page contract that the IBM executive shoved across the table.

Steve picked it up and dropped it in the trash can. If IBM wanted to deal with him, he told the man, they would have to come up with the kind of contract that Steve liked—simple and short, something like five or six pages.

IBM went through some internal gyrations—you can just imagine. The company representatives got back in touch and suggested that Steve draw up a contract of his own liking. He did, and that got the deal back on track.

This was still early enough in the history of NeXT that Steve could think he would have the world beating a path to his door. Even so, he had to recognize that a deal with IBM would bring credibility like nothing else. It would crown him with a halo of approval, practically a guarantee of invincibility. Even rumors that the two companies were talking set the business reporters on fire, begging for confirmation of what was going on.

The negotiations continued. By 1989, with NeXT bruised and bleeding from lack of sales for the Cube, Steve's own executives were arguing that the company should get out of the hardware business and concentrate on making a run for it with the software. Then, seemingly just in time, IBM signed the deal with Steve, under terms that would pump in the millions that would rescue NeXT from sinking.

The story didn't have a happy ending. The IBM executive who had been the visionary driving the marriage, Bill Lowe, the man who had brought life to the IBM personal computer, left the company to take a position with Xerox, possibly not the best career decision he could have made. For NeXT, the loss of Lowe was practically a death knell. The project was left in the hands of people who didn't see the potential that Lowe had seen.

IBM paid the up-front amount required by the terms of the contract, then stopped returning the calls from NeXT and never did anything with NeXTSTEP. Only much later would Steve recognize the opportunity he had so narrowly missed out on. At the time, IBM and Microsoft were in the midst of a wrestling match over competing

operating systems: Microsoft battling to establish dominance for its consumer-oriented Windows and IBM throwing its marketing muscle behind its more sophisticated program, OS/2. Both had been created by Microsoft, but Windows was better and simpler, and IBM felt that it had been played for a fool by the aggressive guys in Redmond.

Steve had the chance to push Bill Gates out of the picture and simply blew it. If he had been easier to deal with from the beginning, the negotiating could have moved much faster and the contract could have been signed long before Bill Lowe departed. Lowe would have seen to it that IBM began shipping PCs with NeXTSTEP, instead of Windows, as the operating system. Steve's software was vastly easier to learn and use. Other PC manufacturers would quickly have fallen into line.

It could have been Steve instead of Bill Gates who was sitting back and, virtually without effort, reaping a license fee for *every PC sold.*

Steve and his team of new pirates had quickly seen that creating a computer around a custom chip would be prohibitive, given their resources and manpower limitations. Instead, they turned once again to Motorola, settling on the 68030 microprocessor—the same family that the original Mac had used but a new generation.

Yet Motorola, after promising spectacular semiconductor achievement and a ship date in 1987 that slipped to 1988, and finally 1989, in the end seriously dropped the ball. The final chip had nowhere near the performance required to power the type of visual computing software the NeXT was promising.

If Motorola's delays in delivering a chip were frustrating, at least Steve was again successful in performing his magic with the exterior design. The NeXT computer was housed in a cube, a striking black box of eye-catching appearance. Unfortunately, the case was one of the machine's few admirable features.

Again, Steve had hamstrung the machine as he had the original Macintosh, with a series of decisions that made perfect sense to him but cursed the computer. NeXT had problems in spades. The design didn't call for a floppy disk drive but instead had a state-of-the-art optical magnetic drive that allowed data to be written onto special compact disks. It was the kind of aggressive, forward-looking technology decision that Steve loved to make—but it turned out instead to be

a technological dead end. Magneto-optical drives never caught on, and the units installed in the NeXT machines were fraught with problems.

Essentially, Steve had managed to create another stylish computer that was more about flash than about substance and that aggressively thumbed its nose at the computing conventions of its market sector. Without the deep pockets of a public company, however, without a tradition of success and the style of a product like the Apple II or the Mac, the computer would have to enter the marketplace on its own merits.

Months before there could be any hope of NeXT computers rolling off the production line, the sales effort was already banging the drum. Steve's marketing team set up an important dinner for key buyers from a number of America's greatest universities, people who represented Steve's main target users for the NeXT machines—a gathering important enough that Steve himself came to the dinner. The meal got underway with appetizers. The plates were cleared, and salads were served. The salad plates were cleared, and the wait staff then came out—with dessert.

The senior NeXT executive at the dinner was bewildered, as obviously were the important customers. The explanation was that someone had slipped up and approved a menu that called for a main course of veal. At the last minute, Steve discovered that his vegan eating program had been overlooked; he gave an order to the staff that the entrée be skipped. Not even the vegetables were to be served.

Because the menu didn't suit *his* eating program, Steve had allowed a group of his best customers to leave not just hungry but wondering about his decision making.

The NeXT computer, the Cube, was finally released to great fanfare in 1989. Manufactured in that advanced factory, the machine garnered lots of attention from the press. What prospective buyers found, however, was an underpowered machine with a black-and-white display; crisp, yes, thanks to software called Display Postscript, which made onscreen fonts particularly sharp.

It made little headway in the market. The real battleground shaping up at the time was the operating system war—Microsoft's Windows battling IBM's OS/2. NeXT, with its unique, home-built operating system NeXTSTEP, seemed irrelevant.

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With the Cube a reality and on sale, Canon, the Japanese printer giant, now came forward to join the Steve Jobs Money-Gathering Invitational as the major investor. (Canon's LaserWriter had been a strong addition to the Apple line-up. The eventual turnaround of Apple's fortunes with Macintosh would be due in part to this high-quality printer, championed by Steve along with the page layout program PageMaker that was created by Aldus and worked perfectly with it, despite the budget-breaking $7,000 price tag.) Canon would part with $100 million for a 16.7 percent share in NeXT. You have to wonder whether Canon ever learned that it had anted up five times as much as Perot for virtually the same-size stake in the company.

More funds were gathered from a group of universities, including Stanford and Carnegie Mellon. They ponied up $1 million each. All of this on top of $20 million of Steve's own money added up to a good deal more than had been invested in creating the original Macintosh. He was counting on this bankroll to be enough to fashion a new computer that would dazzle the world once again.

NeXT had product to sell, and Steve didn't mind rolling up his sleeves and going to work. Almost any CEO in the country would take a phone call from him. One of the prominent names on Steve's call list was Disney chief Michael Eisner. Steve got him on the phone and said he wanted to come in and show what his new computers could do for the Walt Disney Company. Eisner agreed, and Steve flew down on the appointed day with some of his executives, two technicians, and a couple of computers, one black-and-white, one capable of color.

Steve could be a compelling salesman, buoyed by his own conviction and enthusiasm, at times generating the same jaunty energy he did in front of a couple of thousand people at a product launch. This particular Disney visit, though, would be Steve's rude awakening to the world of gloves-off Hollywood kingpins.

The headliners of Steve's audience were Disney's number-two man, Frank Wells, and Jeffrey Katzenberg, the head of feature film production—a pair of the biggest names in Hollywood. Steve launched into a PowerPoint presentation that had been carefully crafted for the session.

According to one of the people who attended, "Steve said proactively that there was a change happening, and that Disney as a leader should be in the forefront of it. And that NeXT would be about that change."

The point of doing this dog-and-pony show with two computers was that Steve had planned to make the most of his rare opportunity. His plan was to convince the Disney powers that they needed NeXT computers for their routine business functions; he pitched the machine with the black-and-white monitor as one with myriad advantages for business uses that only NeXT technology could offer. It was a good pitch, and the elegance and coolness of the NeXT machine were well-suited to a Hollywood studio. The audience was receptive, if not rapturous.

Disney, of course, also meant animation. After a demo of the black-and-white machine, Steve switched to the computer with the color monitor, which he described as "the leading change agent for animation."

There's always a danger in talking without a script. You might get carried away with your own enthusiasm and veer into a landmined area. That's exactly what Steve did. He lost track of what he was there for and, in front of these two time-pressured executives, launched into an excited spiel about putting the ability to create computer animation into the hands of every computer owner. He spun a web of imagery and presented a vision of animation as the domain of the common man, powered by the personal computer, which he had been instrumental in creating.

In front of an audience, even without preparation, Steve's dynamic enthusiasm and built-in charisma could win the day. But not the audience he was playing to on this occasion.

Like a theatrical director at the rehearsal of a stage play, Jeffrey Katzenberg put his hand up. Steve wasn't used to being interrupted in the middle of a performance but stopped talking. Katzenberg the executive became Katzenberg the actor, delivering a performance Steve Jobs would never forget. Gesturing to the black-and-white machine, he announced, "This is commerce. Maybe we'll buy a thousand of these."

An order of a thousand units! For NeXT, that would be a *huge* sale, perhaps even enough to rescue the company.

Then Katzenberg gestured to the color machine. "This is *art*," he announced. He could have whispered the next words; it would still have felt like a bellow. "I *own* animation," he growled. "And *nobody's going to get it*." Then he capped his speech with language that seared: "It's as if someone comes to date my daughter. I have a shotgun. If someone tries to take [animation] away, I'll blow his balls off."

Any ordinary person would have been entirely thrown by an eruption like that—cowed, distraught, decimated, and probably unable to continue. Not Steve Jobs. He was familiar enough with that kind of passionate, intolerant outburst. He himself frequently exploded that way when someone made a "bozo" remark or, worse, when someone close to him was disloyal.

Steve paused for only a moment to let the air settle. Then he went right back to his sales pitch as if no one had said a word.

It didn't work. Disney remained a solidly Apple Macintosh account, as did most of the companies he pitched. The NeXT Cube sold in handfuls to some university computer departments, but software never materialized for it, even though its operating system was touted by Steve as having something called object-oriented programming. This was a way for programmers to create primitive or basic building blocks of software, then string them together to quickly generate programs.

As the eighties drew to a close, the NeXT machine, which had begun in such optimism, seemed relegated to a footnote in the history of modern technology.

Had Steve Jobs lost his magic touch?

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When people saw [the Pixar computer graphics short] *Luxo Jr.*, they said, "Oh, *this* is what computer animation is all about!"
—Ed Catmull, president, Pixar

Show Business

How does anyone stumble into becoming a kingpin in an entirely different industry—*by accident*?

How did Steve Jobs, already a global poster boy for the computer business, manage to become a major Hollywood player—out of desperation? And just when his corporate empire was crumbling so rapidly that it looked quite possible he could be out on the street with most of his money gone.

Was the revival of Steve Jobs just plain luck, or payoff of that karma he had been storing through his practice of Zen for all those years. Or was it something more? An ideal combination of experience—Steve's history of leading and infuriating small groups working against the odds to create something "to make a dent in the universe"—with personal charisma, his ability to discover and challenge exceptional people to reach beyond their comfort zones —meeting opportunity: computer-based animation.

Had he tried to build another pure computer company—like NeXT—he would almost certainly have failed. When he turned his attention to computer animation, Steve realized that it wasn't the hardware or the software that really counted: it was the experience that the user, or audience, had that counted. It was the "content."

When Steve moved beyond the technology and rediscovered his strengths—after all, it was the Macintosh's user interface or "experience" that separated it from the universe of me-too PC clones and ignited a revolution in the way people used computers—he turned Pixar into another cultural phenomenon. In the process he discovered the secret that would let him ultimately revive Apple and remake his reputation.

Several years before Steve and his brat pack of young cubs saw the hidden treasures at Xerox PARC, another young fellow had his own extraordinary experience there.

Alvy Ray Smith, a powerfully built man with the looks of the guy on the Brawny paper towel wrapper, hailed from a thin pie-slice of the Southwest, where highway signs announce upcoming town names like Seminole and Muleshoe. The Texas–New Mexico border is not a region famed for spawning brilliant scholars. Alvy Ray was an exception. He had earned two bachelor's degrees and a Ph.D. from Stanford University. After an image from his dissertation landed on the cover of *Scientific American*, Alvy joined the faculty of New York University.

It's just possible that his worldview was slightly snake-bitten from the flatlands of his Tex-Mex upbringing. Whatever the reason, Alvy's early life path became as twisted as the notorious mescal worm. He found academic life in the Big Apple thin and anemic. Uninspired, he felt less and less like a professor because he had somehow morphed into what he described as a "wild-assed hippie." New York City had its share of hippie types, but the accepted mecca for this new mindset was California. So that's where he headed.

After kicking back for a while and running low on cash, Alvy smooth-talked his way into a teaching assignment at the University of California at Berkeley.

Alvy knew a computer scientist in Palo Alto named Dick Shoup, visited with him one day in 1974, and stayed over because Shoup seemed so fired up about the work he was doing at a place called Xerox PARC. Out of politeness, Alvy agreed to visit Shoup's workplace. What started as a sense of obligation turned into twelve awesome hours on-site, one of the most blood-stirring experiences he had ever known. Shoup demonstrated a computer with memory capable of storing graphic

images and a software program designed to create pictures. When paired, these capabilities would herald the future of artists who would no longer need to rely on paintbrushes and canvas. Their works would not be limited to being sold one at a time in galleries but stored in computer memory and sold to as many people as wanted to buy them.

On that day, Alvy's destiny was set. He had discovered what he wanted to do with the rest of his life. PARC held the dream combination: computers, which fascinated him, and art, which cried out to his very nature.

He set himself the goal of being hired by PARC. Despite his enthusiasm and impressive credentials, the center had no job openings. That was a crushing blow, but some of the staffers recognized the contribution Alvy might be able to make, and an ingenious if not entirely ethical workaround was proposed: they wrote up a purchase order to pay for Alvy as if he were bottled water or blank computer paper being delivered every two weeks.

In hindsight, it's a blessing that the PARC bureaucracy soon discovered the ruse and put an abrupt end to it. Otherwise, Alvy might have stayed for years, developing great advances that would never become commercial products and never reshape an industry, much less contribute to the world's pleasure and laughter.

Alvy was out on the street. Like a vampire who had tasted blood and would be driven to pursue the taste eternally, Alvy now had the hunger for computer graphics coursing in his veins. Just as the vampire needs victims, he needed a computer, one powerful enough to support the work he wanted to do, and hardly any of those existed in the country.

His passionate search drove Alvy to the East Coast in search of a computer graphics guy he had heard about—Ed Catmull, another Ph.D. like himself. He found Ed on a lavish estate in Old Westbury, on Long Island, working with a small crew of computer graphics people recently hired by an eccentric millionaire named Alexander Schure, who had just purchased several million dollars' worth of DEC VAX computers. The machines, then among the fastest in the world, were suitable for doing graphics programming. Schure had installed them in what had originally been a garage on the rolling estate he had purchased as a home for a new educational institution they were starting,

the New York Institute of Technology. For Dr. Schure, it was a springboard to pursue a fanciful dream of becoming a modern-age Walt Disney, but to replace the inkers, the painters, and celluloid artwork with the bits and bytes of high-powered computers. Fortunately, he had the financial clout to back his dreams.

These days NYIT is an accredited institution with two campuses on Long Island, a building at Columbus Circle, a full-time faculty of 250, and schools of architecture, engineering, and management, among others. When you talk to Alex Schure today, it's clear that he still regards NYIT as one of the crowning achievements of his life.

After purchasing the computers, Alex Schure had gone on a scavenger hunt for people, discovering in the process that a leading center of computer-graphics research was located at, of all places, the University of Utah—not exactly on anyone's list of major U.S. high-tech centers. Nonetheless, Alex got in touch. Several people there mentioned the name of Edwin Catmull, a frustrated artist who had been smart enough to recognize he wasn't going to have much of a career at a drawing board or an easel, so instead he'd taken up physics and had just earned his doctorate. Alex Schure called the new Ph.D., painted a glowing picture of what he wanted to do and the world-class computer facility he was in the process of assembling, and convinced him to come to Long Island and take charge.

By the time Alvy arrived in New York, looking for Catmull, he discovered a lavish spread in the kind of rarefied community where you can live for years and never meet your next-door neighbors, the kind of place where you feel that at any time, you might come around the corner of a building and run into Gatsby himself. The one-time garage where the computer graphics operation was housed wasn't anything like the garage where Jobs and Wozniak had started Apple Computer. Instead, Alvy discovered it to be an elaborate building large enough for six Rolls-Royces.

Alvy and Ed became fast friends, as well as working partners, though in many ways they were the proverbial odd couple. Alan Deutschman, in *The Second Coming of Steve Jobs*, describes Alvy at that phase of his life as "long-haired . . . single and unfettered . . . a subversive renegade, talkative and gregarious" and "fiery if provoked." Today he's ruggedly handsome with a shock of white hair and a trim beard,

looking as if he just stepped out of a Marlboro ad. In contrast, Ed is reserved to the point of being shy, a clean-living Mormon who went home at the end of the working day to his wife and children. He still looks the part today.

The pair shared a common dream, however: to create a full-length animated feature film that used computers to make an emotional connection with an audience. No cold-blooded slick graphics for them; they wanted to transcend the world of computer graphics and tap into human emotions.

The nearly unassailable mountain facing this pioneering crew of animators had to do with the question of light. Sure, you need a great many drawings to create the illusion of motion, but to accumulate a stack of flat, two-dimensional drawings like those for *Sleeping Beauty* involves creative animators doing the key sketches and hordes of people doing the "in-betweens"—the individual drawings to make the character appear to move from the position in one key sketch to the next. This was the traditional hierarchy of animation: the handful of "animators" and the much larger crew of "inkers and painters"—at Disney, mostly underpaid women who were kept in a separate building and given about as much praise and respect as the janitorial crew.

Now animation was struggling to move beyond the flatness of the 2-D style to the more vivid, real-world look of 3-D. What gives life to film animation, what gives it a sense of believability that the audience can connect with, has to do with the way light bounces off every surface of the objects in the frame. When we look at a Rembrandt or a Vermeer, we almost feel as if we are in the room with the subjects. In the history of painting, a great divide was crossed when artists came to understand the vital roles of light, reflection, and shadow and then discovered how to capture on canvas what the eye sees.

In film animation, trying to capture those subtleties of light on every object in the frame, in a movie that might have 100,000 or 150,000 separate frames, would spell financial suicide. That's where Ed and Alvy and their team came in. These clever Ph.D.s, working closely with artists, were attempting to define mathematical equations—algorithms—that would instruct the computer to calculate exactly the right light bounce automatically. If the light in the scene is coming

from *here*, and this part of this particular object has just *this* curve, along with *this* color and reflectivity, then the strength, the direction, and the quality of the bounced light should be *that*.

Of course, all of that was purely technical mumbo-jumbo. The real magic was to create a story that could be told using computer animation. Doing that, and creating a film that was warm, funny, and emotionally satisfying, was much harder than all the computer animation work. When their benefactor, Alex Schure, took the group's early work and tried to create a film, it was an embarrassment. The team started to wonder if they would ever find a filmmaker who knew how to use what they could do to move an audience.

At the same time, filmmaker George Lucas was awakening to a recognition of his own. In *Star Wars*, one of the most memorable visual elements had been the duels with the light-sabers. To moviegoers, those sequences were magical; to filmmaker Lucas, they were a nightmare. The actors had to mimic a battle while holding nothing but the metal handles. Then, in postproduction, a battalion of special-effects animators had to paint in the light beams painstakingly, frame by frame—an exacting, time-consuming, excruciatingly expensive effort.

Then there was the problem of the spaceships. Hollywood special effects people had developed a high level of expertise in creating miniatures of skyscrapers, trains, ships, and spacecraft and making them look entirely believable on the screen. Lucas, though, had scenes that called for whole fleets of spaceships flying across the screen in every direction. Achieving that required taking the same pieces of film and putting them back through the animation cameras over and over again. A small mistake could ruin the negative, requiring that the entire scene be restarted from scratch.

As Steve Jobs later pointed out, "If you go buy a laser disk of any of the *Star Wars* films, [and] stop it on some of the frames, they are really grungy, incredibly noisy—very bad quality. George [Lucas], being the perfectionist he was, said, 'I'd like to do it perfectly.' He wanted do it digitally, and nobody had ever done that before."

Surely, someone must have a solution to these maddening problems. Why not find a way to do it with computers?

. . .

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Alvy Ray Smith and Ed Catmull were slowly waking up to the reality of their situation: Alex Schure knew how to assemble equipment, technical talent, and animators, yet was dismal in selecting people who knew about story, character, or connecting with an audience. Their dreams of making great animated movies still seemed a distant reality.

Then an emissary from George Lucas came calling.

Reputation counts in life. So do achievements. So does keeping up contacts with the players in your field. The groundbreaking work by that irreverent gang of young innovators at the computer lab was being touted around the grapevine in Hollywood, thanks to visits that Alvy and Ed had secretly made to folks at Disney Studios. Now it was all paying off. The movie industry was beating a path to their door. Lucas was working on his *Star Wars* sequel, *The Empire Strikes Back*. When he offered the guys an opportunity, they had no problem deciding to go to work with him.

By 1980, the key members of the Long Island team had assembled at Lucasfilm across the Golden Gate Bridge from San Francisco. They were back together and settling in.

George Lucas quickly turned out to be a less-than-ideal godfather for the Ed and Alvy operation.

For one thing, Lucas was trying to keep too many balls in the air all at the same time. He describes it as finding himself "having to do a lot of design work on *Empire* and get the script done while I'm also starting a bunch of companies—ILM [Industrial Light and Magic], Skywalker Sound, and Lucasfilm. I was starting a video-game company. I was developing digital film editing. At the same time I was . . . launching digital animation and digital filmmaking. I was working on *Raiders of the Lost Ark*. And I was self-financing a movie." In classic egomaniacal micromanagement style, Lucas was trying to do it all himself. It helped that he could finance it all by himself, but that only exacerbated the problem.

The self-financing was made possible by Lucas's business foresight. He was blessed with an unusual combination of abilities, as a creator of stellar projects that had begun with *American Graffiti* and continued with *Star Wars*, and a businessman who could recognize opportunities others had not yet seen. On *Star Wars*, he had kept the merchandising rights for himself, and the enormous popularity of the film turned the sale of games, toys, and the rest into a gold mine. The actors had blithely signed away any claim to profit from toys based on their characters. Carrie Fisher, who played Princess Leia, recently joked, "These days, every time I look in the mirror, I have to send Lucas two bucks." The film became so successful that Lucas never again needed to take studio money: he was able to use the profits from one film to finance the next, while accumulating land and buildings for a whole movie studio in Marin County.

Taciturn and not given to schmoozing, Lucas nonetheless managed to communicate his goals. According to a Lucas insider, "As early as 1980, George had seen that films were going to go digital. He had three projects that he wanted serious work done on: digitizing the audio, digitizing editing, and digitizing special effects."

The cornerstone of his operation was an incredible special effects studio called Industrial Light and Magic. This was the domain of set builders, model makers, and camera operators who could single-frame extremely complicated scenes of unknown science fantasy worlds. It was all done on mock-ups and scale model sets, using multiple generations of film to composite the new universes. Using computers for special effects was something of an afterthought for Lucas, this insider said. "He didn't think 3-D computer graphics was far enough along yet to be worth putting a lot of effort into." But his newly acquired graphics group didn't see the subject in that light. Its members lived and breathed the same rarefied air as their original benefactor, Alex Schure—the all-too-pure oxygen that inspired dreams of an animated feature film created entirely on the computer. They would find the time to develop the software to make those dreams come true.

Lucas had installed the group in a building he owned in the charming, peaceful little town where he lived, San Anselmo. Their quarters, on the second floor above a laundromat, were no match for what they had left behind, but they would not have complained if they were being

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given challenging projects to strain their talents and sharpen their skills. Lucas needed them, but only for tasks that were hardly above the level of painting beacons of light onto light-sword handles.

The skies brightened when Lucas won an assignment from Paramount to do some scenes for a space epic, *Star Trek II: The Wrath of Khan*. Director Nicholas Meyer had specified that one particular scene was to be handled with computer graphics.

Alvy was ecstatic. Finally, at long last, he would be developing a scene for a major, big-time Hollywood production. That was only part of the reason for his glow. George Lucas hadn't been paying much attention. Here was the golden opportunity: Alvy would create a scene so dazzling that it would open George's eyes to the wondrous contribution that computer graphics could make to his movies.

Good wouldn't do. This would have to be *great*.

Ed Catmull, Rob Cook, and Loren Carpenter had been quietly at work on a program to create 3-D graphics. They conceived a system that would be tied into a specialized, very powerful computer and would be able to create animation blazingly fast. They were already far enough along with the software to use it on Alvy's *Star Trek* effort, which has come to be known as "the genesis scene," in which a dead planet comes to life.

Even after the concept had been approved, Alvy knew he still needed a capper, a slam-dunk that would drive home a message the withdrawn George Lucas could not possibly miss. He found it: he designed one elaborate camera movement, so intricate, so powerful, so wickedly clever that any filmmaker would be in awe, because it was a shot that would have been impossible to capture in real life. The camera flies above the flame-engulfed planetary surface, then pans to look back at the fire—while fleeing just fast enough to avoid being swallowed by the rapidly advancing wall of flame.

When the scene was finished, Alvy couldn't have been more pleased. But would it convey its special private message to Lucas? The day after the 1982 premiere, the taciturn Lucas stepped into Alvy's workspace, announced simply, "Great camera move," and disappeared.

Small praise, but that didn't matter. From then on, George Lucas began calling on Alvy Ray and Ed to spark scenes in his movies with their computer graphics wizardry.

. . .

While handling the computer graphics chores Lucas handed off to them, Ed, Alvy, and their team continued to develop new software tools and to hire the most talented animators around. The new hires and others were already at work creating 3-D still images. Sure, some of the images were artful, vivid, and breathtakingly real, but a single image could sometimes take months to complete. How could they dare to dream about creating even a very short film?

Then John Lasseter fell into their lives. A brilliant Disney animator who was considered a rising star among the young talents at the studio, John was one of those rare people who radiates energy and enthusiasm and is actually likable, to boot. On top of that, he was an animator with a keen sense of story and character—a rare and prized combination of abilities.

John had been captivated by animation at an early age. When the Disney studio inaugurated a character-animation curriculum at the California Institute of the Arts, he became the second student accepted into the program. To his delight, the arrangement included working summers as an apprentice at the studio.

Every year, the Academy of Motion Picture Arts and Sciences—the outfit that awards the Oscars—holds a separate national competition for student films. By the time he finished his studies, John had garnered two of these student Academy Awards. One of his winning films was called *Nitemare*; the other used a theme that he would return to a few years later with spectacular results. He called it *Lady and the Lamp*.

With that kind of success, it wasn't much of a surprise that Disney Studios hired John shortly after graduation. He worked on pictures such as the 1981 feature *The Fox and the Hound* and the 1984 short *Mickey's Christmas Carol*. In between those two projects, he did some work on the 1982 feature *Tron*, where he received his first taste of computer animation. He liked the flavor.

As it happened, John met the Lucas pair just at a time when his frustration at Disney was running high. He had done a demo clip showing how the popular children's book *Where the Wild Things Are*, by Maurice Sendak, could be brought to life with a clever composite technique that used hand-drawn traditional 2-D animation for the

characters in front of vivid, colorful 3-D backgrounds created by computer.

John and his peers thought that they'd hit the bull's eye with this effort by capturing a new, sophisticated look, while keeping man-hours and costs in check. They had caught the original spirit of the classic Sendak book. The studio honchos, however, even with a proclaimed mandate to improve quality while cutting costs, showed no interest in the project. The idea of using computers for anything beyond word processing and accounting was simply too radical.

Ed and Alvy sensed John's unhappiness at Disney, and they had already adopted what Ed later described as a philosophy of "Hire people who are better than we are." In 1984, they enticed John up to Lucasfilm to work with their computer graphics unit for a month. He didn't need much convincing to realize this was the place he belonged. Since they weren't supposed to have any artists in their technology part of the Lucas operation, Ed and Alvy gave John the job title of "interface designer." They were bending the terms of their arrangement with George, but, as things turned out, nobody complained. Hiring John proved to be a monumental decision, bearing on the lives of John himself, Ed and Alvy, and Steve Jobs as well. More than that, putting young John Lasseter together with computer graphic animation changed the course of the motion picture industry.

For all his success as a filmmaker, George Lucas was less successful in his relationships with people. He pours emotions into his films and can grab millions of people by the throat. Yet on a one-to-one level, he seems withdrawn, barely able to break through the emotional barrier that cuts him off from the rest of the world—even, to an extent, from those closest to him.

In mid-May 1983, George and his wife, Marcia, announced that they were filing for divorce. Soon after, George was squiring singer Linda Ronstadt, whose previous boyfriend had been the counterculture governor of California, Jerry Brown. It was hard to keep that kind of relationship out of the gossip columns. It didn't help divorce negotiations either.

Because California is a joint-custody state, the split meant that Marcia was entitled to half of everything George had acquired during their marriage. That presented a dreadful problem. The family assets

were the movie companies themselves—Lucasfilm, Industrial Light and Magic, Ed and Alvy's computer graphics group, and the advanced postproduction facilities of Skywalker Ranch.

There was no cash to speak of, only a one-of-kind motion picture empire. Marcia was entitled to walk away with half the value, somewhere in the tens of millions of dollars. The idea of selling off a piece of the empire tore at George's soul.

The graphics experiment had made sense when it seemed like an inspired investment in the future, but Alvy Ray and Ed and their tribe of starry-eyed computer folks were one piece of the empire that didn't seem as close to George's heart as the rest. Reality now cast a harsh light on the fact that the group had managed to complete only an occasional project that brought in any money. Overall, they had been little more than a severe cash drain. Should he sacrifice the computer graphics operation?

In 1985, Steve Jobs had an extra $150 million from the termination deal with Apple and had gathered a small group of people who were already at work on what would become the NeXT computer. A former Xerox PARC wunderkind, then an Apple scientist with the exalted title of Apple Fellow, Alan Kay, told Steve he should "go visit these crazy guys up in San Rafael, California," who were working at Lucasfilm. It was, Steve heard, a computer operation that George Lucas had put together and now wanted to sell. Steve seemed interested.

He made the trip north up the coast to where Lucasfilm and ILM were housed in warehouselike buildings in the un-chardonnay part of San Rafael, while Lucas himself continued to dwell like a member of the landed gentry in expansive splendor on his property called Skywalker Ranch. It was, in one viewer's phrase, "an almost feudal arrangement: the lord in his manor, his serfs in the squalid town."

Steve Jobs was stunned by what he saw that day. The computer graphics enthusiasts showed him the incredibly vivid digital pictures they had created and film clips like nothing he had ever seen. It was another Xerox PARC moment.

These were the greatest talents in computer graphics, gathered in one place and creating groundbreaking stuff on a daily basis. The computer systems they had assembled, the software they had created—all of it was incredible. And George Lucas was willing to let it go!

Steve was lusting for it, the whole package—the people, the computers, the software—everything. But George had saddled the operation with a price tag of $30 million.

On the other hand, Steve read the smoke signals. George Lucas was clearly in a hurry to sell. Not in such a hurry that he was ready to bargain because he thought he had another buyer, but Steve smelled the odor of smoldering panic. He knew how these things went. He would bide his time.

Alvy Ray and Ed Catmull approached Disney about taking over their unit. They found a Disney executive who saw how this could make sense for the studio, and presented a deal for Disney to buy a one-half interest from Lucas for $15 million. When the executive tried to get approval for the deal, Jeffrey Katzenberg announced that he had more pressing issues to deal with and this would be a waste of his time. He nixed the investment. That path was dead, but another opportunity opened up.

In 1985, industrialist Ross Perot, having sold his company, EDS, to General Motors and became a member of the GM board of directors, was looking for new worlds to conquer. His eyes lighted on George Lucas's computer graphics operation. (Perhaps Steve had also been too enthusiastic about it during the negotiations over NeXT.) Over a period of months, Perot corralled Philips, the giant Dutch electronics firm, into joining him, and made an offer with a bottom-line figure very close to Lucas's asking price of $30 million. After a deal had been worked out in detail by both sides, on the very day that Perot was supposed to sign the paperwork, the newspapers carried an announcement that Perot had been bounced from the GM board. He was no longer in a position to make any commitments on behalf of General Motors.

Suddenly, George Lucas found himself without the buyer he had counted on.

This was the opportunity Steve Jobs had been waiting for. He began negotiations in earnest with Lucas. Negotiations between Steve and George should have been smooth. Both very much wanted the sale, and both shared a dedication to a way of life that emphasizes tranquility. Lucas describes his religious affiliation by commenting, "Let's say I'm spiritual." He explains that he was raised Methodist, but "It's Marin County. We're all Buddhists up here." He and Steve should have been on the same wavelength.

Steve was stinging from the wounds of the Apple embarrassment and wanted this plum as a demonstration to the world—and especially the business reporters—that he was still a player.

Nonetheless, Steve can be a painfully difficult negotiator, and the discussions dragged on. At one point Lucas, though desperate for the cash, could no longer stand the ordeal of haggling with Steve and announced he was withdrawing from further negotiations. Steve wasn't willing to give up, keeping after Lucas until he finally agreed to come back to the table.

Finally, Lucas and Steve came to terms. Steve would buy the entire operation—staff, computers, software—for just under $10 million. Accepting that figure, barely one-third of the amount he had originally aimed for, was a bitter pill for Lucas. It wouldn't come close to providing the sum he owed Marcia in the divorce settlement. Still, it would take care of the immediate pressure, and he was out of time and other options. Lucas was at least able to walk away with one concession that was important to him: all advances that the new company made on the computer graphics software would be provided to Lucasfilm free of charge.

Steve's waiting for the price to come down and then applying a heavy dose of Stevian determination won the day. The computer graphics group had shifted its patronage once again, from the quirky Alex Schure, to *Star Wars* commander Lucas, to the pirate king himself.

Oddly, in Steve's view he was buying a hardware and software company—adding another computer firm to his roster—while Alvy and Ed still had their dreams pinned to creating an animated feature, a goal that had become all the more realistic with John Lasseter and the animators he had brought in to join him.

Alvy Ray Smith and Ed Catmull would become cofounders of a new company, each with 4 percent of the stock, the other 92 percent going to their angel investor, Steve Jobs.

Alvy, Steve, and Ed all wanted a company name with a high-tech flavor. Not long before, Alvy had dubbed one of their computers "Pixer," which he felt carried the suggestion of *pixel* changed into a verb. Then, drawing on his heritage of growing up in a Tex-Mex region, he

amended that to a name with a Spanish sound: Pixar. (Another source claims that Alvy made the change because the last two letters became Alvy Ray's initials.) "Pixar" carried a flavor of technology and a spirit of creative imagination—just the right combination for the new company.

Pixar it would be.

The Pixar staff was a bit squirrelly. Nonconformist, to say the least. Among the forty or so people in the new company, it wasn't at all uncommon for many to straggle in about lunchtime and then stay late, perhaps working until somewhere around midnight. Steve Jobs, when he showed for one of his very rare appearances, came in his standard uniform of ragged jeans, T-shirt (usually black), and New Balance running shoes—casual enough that he couldn't have been dismayed to discover some of the Pixar crowd wandering around in bare feet. According to one report, a few of them didn't bathe very often—another Jobs trait from his earlier days.

This was a crowd whose members sensed that they were on a new frontier of filmmaking, not simply pushing an envelope others had defined but creating the outer limits of the envelope themselves.

Steve later claimed that he was tuned in to the Pixar mission from the first. "Pixar's vision was to tell stories—to make real films," he said. "Our vision was to make the world's first animated feature film—completely computer synthetic, sets, characters, everything." In fact, that wasn't Steve's vision when he bought the group from Lucas, and it wasn't the direction he first set the company on.

He had never really understood software. The programming that came so easily to some remained a dark mystery to Steve Jobs. He was basically a hardware guy with a talented amateur's knowledge of software. With hardware, he had proved to be a visionary. Of course, he had marred one effort after another by being too much of a visionary, demanding achievements that were not yet possible. He had stumbled often by being too much of a perfectionist, beginning way back with the insistence on those perfect solder lines in the Apple II that few purchasers would ever see or care about.

Despite all that, he clearly understood and had a unique connection with aspects of the computer business that involved things you could

see, touch, and hold. He had demonstrated a true genius in picking designers of imagination and brilliance and then driving them hard until he was finally satisfied. He truly cared, deep down where he lived and breathed, about design.

The Macintosh project had deepened Steve's appreciation for software, if not his understanding of what was involved with it. With the Mac user interface the combination of hardware and software had created a new way of working with computers; although it might have been derived from the work at Xerox PARC, it was all Macintosh now. As a result, Steve had grown to value the combination of operating system and hardware that defined the essence of a computer. By the time he started NeXT, he understood that it was also the application programs—the software that let users do something with the computer—that mattered. Now he had bought a company that was all about using software to create state-of-the-art images. In a certain sense, Pixar was only a software company and the hardware was incidental. The computer graphics stars had built a specialty piece of hardware—a supercomputer for the day—to handle their needs. But it was what they did with it that made all the difference.

Steve wasn't quite ready to hear that message yet, however.

In Palo Alto, Steve had a gang of earnest youngsters working to design the NeXT as a next-generation computer, an effort just getting started and not likely to generate any income for a couple of years at the earliest. In Marin County, though, he had just bought an outfit with a serious computer that had the potential of being turned into a commercial product. The computer that the Pixar team had created was unique, and Steve was determined to find a way to market it. He was blinded by his love for the hardware, hardware that made such an impression on him.

True, it was a specialized machine, tailored specifically for the computer graphics industry, built with the capacity to store a huge number of extremely detailed images. But Steve, always captivated by being on the forefront of technology, launched the effort to turn the prototype into a marketable product. The result was a machine that they dubbed, unimaginatively, the Pixar Image Computer.

It was obscenely expensive for any ordinary use, with a price tag of $135,000 in 1980 dollars, plus another $60,000 or so for the software

and peripherals such as tape drives—items that were essential but not included in the base price. What's more, Steve found Ed and Alvy Ray woefully inadequate at running a business, calling them "babes in the woods." He thought he could plug the holes in time to keep the ship from sinking. "I think I can help turn Alvy and Ed into businessmen," he said.

The principal challenge was to find a larger market for the Pixar Image Computer.

They set their sights on the medical community, because of the need to store vast numbers of images. A radiology lab, for example—large files, floppy images on every patient who has ever stepped in front of its X-ray machines. How much better if all those pictures were on a computer, instantly available to the doctor? With all the new technologies coming along—MRI and the rest—the image-storing needs were growing exponentially.

On top of the money he had already spent to buy the company, Steve was willing to provide additional streams of money to get sales rolling. Pixar opened sales offices in seven U.S. cities and fielded a sales force of some twenty people.

Despite the mammoth effort, it was doomed to fail. The truth was that the Pixar computer had been designed by specialists to be operated by specialists. Medical technicians and doctors didn't get it. Nor did anybody, for that matter, who wasn't a well-experienced technology wonk. It was just too complicated. The professional leaders of hospitals, clinics, medical centers, and medical research institutes sat down to listen to the sales pitch and took the time to see the system for themselves, then decided that the learning curve was way too steep. With all the time pressures on doctors and their staffs, nobody wanted to dedicate the days that would be needed to master the Pixar Image Computer.

To keep Steve Jobs out of the lion's den, away from the Pixar employees, unable to harass, intimidate, cajole, or otherwise discomfit the hardworking and highly motivated troops, Ed and Alvy regularly made trips to the NeXT headquarters in Palo Alto to sit down with their benefactor and update him.

After a while, these trips started to become more and more uncomfortable. How often can you say, "The money is flowing out at an

extraordinarily fast rate, and damned little is coming in, but you're doing the right thing by continuing to back us and trust us," and still be believed? So that they wouldn't appear tongue-tied and shuffle-footed, the two men would hammer out a carefully orchestrated list of discussion topics designed to provide a candid appraisal, while at the same time, they hoped, distract Steve enough that he wouldn't ask difficult questions.

The strategy was solid but almost totally unsuccessful. They discovered from the first that Steve's engaging, captivating personality could overwhelm the best-laid plans. This wasn't some clever, manipulative tactic; it was just Steve Jobs being himself. No matter how well rehearsed Ed and Alvy were, no matter how determined to stick to their agenda, no matter how many times they had been through the sessions with Steve before, the same thing almost invariably happened: they would sit down with Steve, get through a few pleasantries, and launch into their presentation. Steve would have something else he wanted to ask about or talk about. He would interrupt in mid-sentence and bring up whatever was on his mind abruptly. Alvy or Ed would head off in whatever direction Steve wanted and get further from whatever they had come to discuss. Meanwhile, the other guy would sit there far enough removed from the scene that he was wise to what was happening but unable to stop it.

Eventually, Alvy says, the two worked out a signal. If Ed was getting seduced by Steve and led someplace they didn't want to go, Alvy would tug an ear. And vice versa. That didn't necessarily mean they would be successful in steering Steve back to their own agenda. But at least, like a virgin being romanced until her brother arrives in time to bring her to her senses, the one being seduced would be awakened to what was going on.

The whole point of hiring Disney animator John Lasseter while the group was still part of the Lucas operation had been so that he could design short demo films that would show off the capabilities of the team's computer graphics software and hardware. In 1984, the Pixar group showed up at the annual conference of the computer graphics organization Siggraph. The group brought with it an animated short conceived and directed by Alvy Ray and animated by Lasseter and his

team. Called *Andre and Wally B* and only a minute and a half in length, the little picture was the runaway hit of the convention. In part, this was because it displayed techniques that went beyond what other computer graphics systems were capable of, and in part because it told a story and captured emotions. In ninety seconds, that's quite a feat.

Now that the group was under the Pixar umbrella and concerned about generating income, its members felt ever more urgently the desire to show off the company's technology. When they came back to Siggraph, it was with a much more impressive short, *Luxo Jr.*, which has become a landmark in the history of animation. The six thousand technicians and animators who had gathered at the convention in Dallas were dazzled at the technical brilliance of the piece and rewarded it with "prolonged and enthusiastic applause." Steve Jobs, sitting in the audience, took it all in, knowing that but for his rescue of the company, this wouldn't have been happening.

The applause wasn't only for the technical achievement, impressive as that was. John Lasseter, this time directing as well as animating, had achieved something startling: the only characters in the bit of film were two *lamps*—two ordinary-looking desk lamps, one full size and one much smaller. Adult and child. Lasseter had actually captured human emotion with no humans or even animals in the scene. Viewers sensed that they knew what these inanimate objects were thinking and feeling. (You can relive the experience by watching the picture as that first audience saw it, on the Web site www.pixar.com/shorts/ljr/theater/index.html.)

Luxo Jr. captivated audiences everywhere it was shown. The picture won a Golden Eagle at the CINE film festival in Washington, D.C., which qualified it for submission to overseas festivals as an official U.S. entry; it also qualified the picture to be considered for an Oscar by the Academy of Motion Picture Arts and Sciences. The Pixar guys decided that it was worth submitting and entered it in the animated short category. John Lasseter and William Reeves were listed as producers. The whole Pixar crew was elated to learn that *Luxo* had earned an Oscar nomination. It didn't win, but the nomination alone was enough to spotlight the work that the Pixar crew was doing. Ed Catmull offered the viewpoint that "it was really the milestone. When people saw this, they said, 'Oh, *this* is what computer animation is all about.'"

. . .

Steve's monthly review sessions with the Pixar management were sometimes held on Steve's own turf and occasionally at Pixar. He reviewed business and operational matters and went over the finances. After each meeting, he ordered a wire transfer of the cash needed to cover the upcoming month's expenses; the funds would show up within a few days in the company's bank account.

Four men gathered to meet with Steve for one of these meetings in early spring of 1988—Alvy and Ed, vice president of finance Rick Wood, and vice president of sales and marketing Bill Adams. For this meeting, Steve drove up, and the group met in an upstairs conference room at Pixar.

It proved to be one of their most painful meetings ever. None of the Pixar people had anticipated the disturbing news that Steve had for them. By now feeling considerable strain over the monthly expenses at both NeXT and Pixar, Steve had come to the session determined that big cutbacks needed to be made. Every workgroup at Pixar would have to let a significant number of people go. The executives discussed each group of the entire company, often weighing the pros and cons of specific individuals.

The distress level in the room was almost palpable. These men had chosen their employees with extraordinary care, selecting the best—people not only extraordinarily qualified but who would also fit into the nonconventional, rather anticorporate culture that made the company not only highly productive but a laid-back, fun place to work. Pixar people were loyal to the company, and the company was loyal to them. Now the executives had to come to terms with breaking that bond of loyalty. They understood Steve's reasons. From a business standpoint, it was a logical move. That didn't make it any easier.

The session went on for hours; "the hardest meeting we ever had," one of the participants called it. It was like a knife in the gut for each of them.

When they were through, Steve asked, "Is that all?" and put his hands on the table, ready to get up and walk out. There *was* one other topic: funding was badly needed for an animated short to show at the next Siggraph conference, only five months away.

Ever since the days at Lucasfilm, what was now the Pixar team had done a short for Siggraph's annual convention. It was always a high point of the gathering. It had become a kind of tradition; everyone expected to see a few minutes of footage that cleverly showed off the group's latest technological wizardry. Within Pixar, an R&D team was now hard at work turning the software that Ed, Alvy, and the others had been evolving since the Long Island days into a commercial software product. Many people in the computer graphics field eagerly awaited the product, and Steve had high hopes that it would begin to generate a significant revenue stream. That income, added to the revenue from sales of the computer, could ease the cash strain Steve now suffered. Prospective buyers at Siggraph expected to see another short that would once again dazzle them with breakthrough technology. If the Pixar group showed up empty-handed, it might be taken as a sign that the company was in trouble and would throw a cloud of suspicion over the software, undercutting sales before the product even reached the market.

Yet after the painful discussions that had just taken place with Steve, which resulted in cutting several hundred thousand dollars from the budget, how could they ask him to come up with an almost equivalent amount to produce another short? Everyone sat still, looking at his lap, choked up at the idea of having to ask for money at this very awkward moment. Finally, Bill Adams spoke up. He explained about the short, said, "Steve, we need to do this," and listed the reason why it was essential for the sales of the forthcoming software product.

The company would have fifteen to twenty people working on the short, over a period of months. For Steve, it meant adding hundreds of thousands back to his cash outlay.

Steve sat silently, thinking about this difficult request, analyzing the consequences of a yes and the consequences of a no. Finally, he asked, "Are there storyboards?" Told that there were, he asked to see them. The group got up and trooped downstairs. John Lasseter had done his usual stellar job of creating a storyboard that captured not just the look but the emotions of the piece. Impressed, Steve agreed to dig into his pocket and fund the short, which would be called *Tin Toy*.

"If nobody had spoken up and Steve had walked out of the room," Bill Adams said, "or if he hadn't agreed to spend money, *Tin Toy* would not have been made. And without *Tin Toy*, I don't believe Disney would ever have come to the table" to fund Pixar movie productions.

Steve, despite feeling so pinched that a significant number of staff people had to be fired, was willing to spend a large chunk of money on what was essentially a promotional film. It was a pivotal moment in Pixar's history.

Months later, Lasseter and Reeves were back at the Oscars with their nominated short, *Tin Toy*. As if the earlier challenges hadn't been difficult enough, this time they had set themselves the hurdle of animating a person—or, more accurately, a crawling, stumbling toddler. They had given sales and marketing vice president Bill Adams a screen credit for his role in bringing up the subject of funding the picture with Steve; "Ralph Guggenheim brought me a piece of 35mm film from the movie with my screen credit on it," Adams said. (As a Hollywood inside joke, another credit was for "Best Boy." And another credit, caught only by that small percentage of people who actually read movie credits, listed five women identified as "Babes John Looked at a Lot.")

Funny credit titles aside, you didn't have to be an animator or a software engineer to appreciate the achievement that this little picture represented. The members of the Motion Picture Academy clearly felt that way: they awarded the Oscar for animated short to *Tin Toy*—the first time the award had ever gone to a film made entirely by computer animation.

While continuing the effort to find markets for Pixar computers, the company had managed to present the animation world with a new product in 1988—a software package called "RenderMan." In simplest terms, it represented putting into a box the fruit of the team's labors from its earliest days on Long Island. RenderMan became a crutch for Steve, providing the little company with much-needed cash flow.

The process of rendering is best understood by analogy. Think of Rembrandt standing at a canvas, ready to begin a painting. Seated in front of him is a model whom the artist has cloaked in an elaborate gown and provided with sparkling earrings and a glittering necklace. The artist has arranged the furniture that will appear in the picture, and he has posed the model so that light flowing into the room strikes the model at just the right angle. The artist does not start by painting

the face or the contours of the figure; instead, he starts by visualizing the anatomy, the bones and the muscles. In a sense, he begins with the basic structure and works toward the surface.

The process of creating a scene for an animated film begins in a similar way. "Modelers" start by defining the room or other setting—for an interior, this will include where and how far apart the walls are, the furniture pieces, their shape and location, and so on. Other specialists add the color and the texture details for each item. Shaders add the lighting information—where the light is coming from and how it is reflected by every part of every object. Because the camera will show the scene from several different angles, this detail must be defined for 360 degrees of the entire setting.

All of this together is what animators mean when they talk of "rendering." Pixar's RenderMan software provided the tools for many of these steps. When introduced, it was by far the most advanced product of its kind and has remained the most widely used rendering product in the industry.

In an entirely just world, the greatest creative talents would reap fabulous praise and fantastic rewards, and companies exhibiting the greatest creativity would be successful beyond the dreams of their leaders. Real life is more cruel.

John Lasseter's demo films were supposed to impress the world with the terrific capabilities of the Pixar computer systems. The films did draw the attention of prospective computer buyers, but not much else. Pixar could barely give its computers away. They were simply too complicated to use and far too expensive. A handful were sold to universities, and a number were purchased by the intelligence community for use in analyzing satellite images.

In connection with the intelligence sales, the government demanded that every company executive be cleared for Top Secret; everyone in the computer group who would work with satellite photos needed an even higher clearance. These were mostly Marin County superliberals, and the whole idea didn't sit well at first. Worse, the intelligence community referred to this as a "black project," which gave the work a sinister connotation. Still, once they got up to speed, many found the work fascinating.

One Pixar executive was sitting in Steve's office discussing some current issue when a call came in for Steve from a government security investigator. "For five or ten minutes," the executive said, "Steve sat there answering questions, a lot of them about his drug use." He seemed annoyed by the call but answered "candidly and straightforwardly," without ever asking the executive to leave. "The caller would ask a question and Steve would answer, 'The last time I used that was about . . . ' and then he'd give a date or say how long ago." Once or twice he answered that no, he had never used whatever it was the caller had just asked about.

The executive explained that "you're supposed to list information about your drug use on the application form for the security clearance. Apparently Steve hadn't done that, so now they were asking him over the telephone." If you're honest about your drug use, the executive said, then you're probably okay—lying about it suggests you're hiding something that might leave you open to blackmail and giving away secrets.

When Steve finished the call, he looked at the executive with a wry smile and asked, "Did I do okay?" The executive answered, "I guess so," and they laughed together. Steve was willing to go through that embarrassment, the executive believes, because he knew how important the security clearances would be: the intelligence agencies promised to be a big customer for Pixar. In the end, the intelligence community bought well over a million dollars' worth of Pixar Image Computers.

Even so, by 1988, not many more than a hundred of the machines had been purchased.

The company was tearing through money at an alarming rate—nearly $1 million a month. Yet despite money being extremely tight, Steve could be his old irascible, unreliable self in dealings with potential customers. On one occasion, a leading firm in the computer industry took an interest in the RenderMan software, which it wanted to adapt for a consumer version and sell to the general public. High-level executives of the two companies flew back and forth for three months hammering out the deal. They reached an accord, one that would have been very lucrative for Pixar. Steve had been kept in the loop all through the negotiations. But when it came time to sign, he announced that he had changed his mind. He didn't want to do the deal after all. According to one insider, the executives of the other company were livid.

Steve didn't care. What's more, he didn't bother giving any reasons or excuses. He didn't have to. He was Steve Jobs.

The year 1989 proved to be a painful time for Steve. Despite the glitz and glamour of introducing his groundbreaking, sexy-looking NeXT computer, accompanied by the trumpet blare and applause of reviews from the computer press and lavish fair-haired-boy-makes-a-comeback coverage in the popular press, the NeXT computer was doomed.

The situations at NeXT and Pixar were curiously parallel. At NeXT, the computer product was a bomb set to explode, and at Pixar, the computer was similarly doomed. Steve had always wanted to be seen as a cool hardware impresario but was striking out badly every time at bat.

Meanwhile, ironically, both companies had broken new ground on the software front. Steve had originally conceived of NeXT as a company that would produce software "tools"—products used by developers in creating new software applications. On a visit to Carnegie Mellon, a university with one of the best reputations in the country for its computer research, Steve learned about a new type of "kernel," the software element at the heart of a computer operating system. Even for someone lacking in an understanding of software, Steve was excited by the potential of this arcane mass of programming code, which had been dubbed "Mach." One of the most important parts of the Mach approach was called object-oriented programming—this was a way to encapsulate the programming code for often-used items, or objects, in such a way that they could be used over and over by many programs. It supposedly simplified the brutal "black art" of writing software.

Steve was still always looking for new ideas that would show him to be in the forefront of technology, and he was convinced that Mach fit the description. In the aftermath of that Carnegie Mellon visit, he made a decision that would have long-reaching impact: NeXT would not develop software tools but would be a company that built computers differentiated by running an advanced operating system that NeXT would create—an OS based on Mach. To make it happen, he recruited Avie Tevanian, a key member of the Mach team.

While the NeXT computers in the end never generated enough sales to grab a permanent place in the market, the sharp, capable software team Avie assembled laid the groundwork that eventually surprised them all and led the company out of the wilderness.

The unexpected parallel in Steve's other life, at Pixar, was stunning. On the software side, RenderMan became a solid money earner. Software, of course, is a very high-margin product; a printed user manual, if one is even provided, costs more to produce than does the CD or other media that contain the product. For that matter, in many cases even the box costs more than the actual software medium. With software like RenderMan carrying a price tag of thousands of dollars, you don't have to sell vast quantities to experience revenues that make executives and owners smile.

On the hardware side of Pixar, Steve had taken a battering ever since the product was announced. The grand plan of sales offices scattered across the country and a beefed-up army of sales reps out knocking on doors had done little more than burn money. Hardly anyone was answering the knocks. Incredibly, for months Steve had threatened to fire John Lasseter and his animators because the little films they turned out were a luxury the company couldn't afford.

Steve's personal financial adviser had given Steve messages that he didn't want to hear. NeXT had burned through a huge amount of money, but at least it wasn't all Steve's. There was Perot's $20 million and Canon's whopping $100 million. Steve himself had kicked in only (only!) $12 million. But the cost of developing and marketing a computer that everyone admired but few wanted to pay for had by this time nearly cleaned out the piggy bank.

Yet NeXT actually looked good when compared to the truly ugly financial picture at Pixar. Layoffs continued. Finally, Steve had to face a painful reality. The two companies were bleeding him dry. From being one of the richest men in the United States, richer by far at the time than Bill Gates, Steve now had a dwindling fortune of a mere (for him) $25 million. If he continued to keep the two companies afloat out of his own pocket, he'd soon be selling off his precious German sports cars and the (still unfurnished) mansion that had been his home for years.

Steve finally made a decision that he'd dreaded and resisted for too long. The Pixar computer had achieved some notable sales but almost exclusively in niche markets, mainly to university and medical customers and the intelligence community. Bill Adams's hardworking sales

force had even managed to achieve sales overseas, in Europe, Australia, Japan, and China, but these weren't enough to justify the product. Steve finally admitted to himself that the Pixar computer wasn't going to sell widely enough to justify continuing the effort. He had been chasing a fantasy.

By this time, Adams had just left Pixar; today he remembers Steve as "the smartest man I ever met" and acknowledges that he would "work for him again happily." Steve asked Bill to take on a short-term job as a consultant. The task: find a purchaser for Pixar's computer business. Adams located an outfit called Vicom, which bought the business and hired a number of the staff people, paying Steve several million dollars.

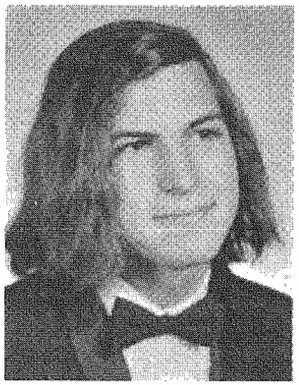
No one finds it easy to admit defeat. It's hard enough to do this in private, sharing only with people closest to you. When your defeat is meat for the daily press, it can be humiliating. For someone like Steve Jobs, there's no place to hide. He could have said no to requests for interviews, but he couldn't stop reporters from writing embarrassing stories.

Over the next few months, the company shrank to half its previous size. Yet in the carnage, one group remained intact. For over a year, Steve had been pressing Ed Catmull and Alvy Ray Smith to close down the animation group. Each time he had been ignored or convinced to hold out a little longer. Now, even though the ax was falling on all sides, Steve didn't need any pressure about holding on to John Lasseter and his animators. Their Oscar had made all the difference.

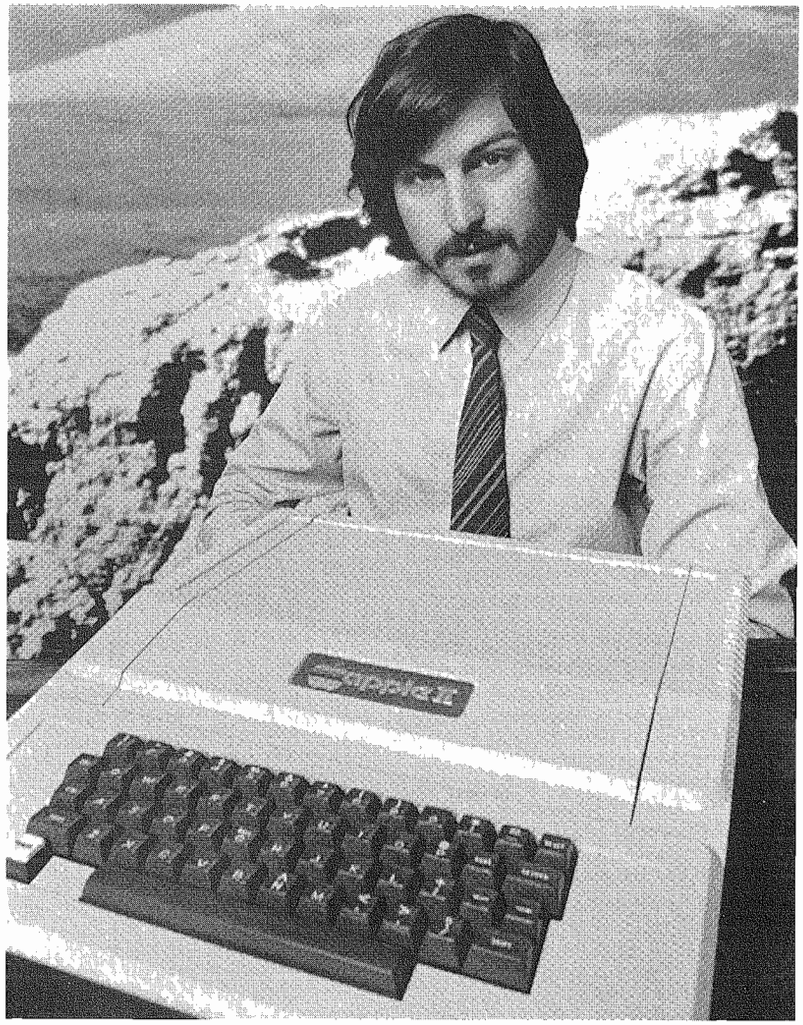
Steve showed himself to be talented at picking brilliant technologists, but gaining the brilliant creative force that was John Lasseter when Steve acquired Pixar wasn't talent; it was sheer luck. John was the latest in Steve's string of superstars.

Doing business with Hollywood appealed to Steve. Yes, the company leaders could be ruthless bastards, but they were *smart* ruthless bastards, some of the best businessmen and negotiators anywhere. He had seen only a little of it, but he had heard the stories. They were people who would intimidate you if they could, people you had to stand up to as if you held a royal flush every time.

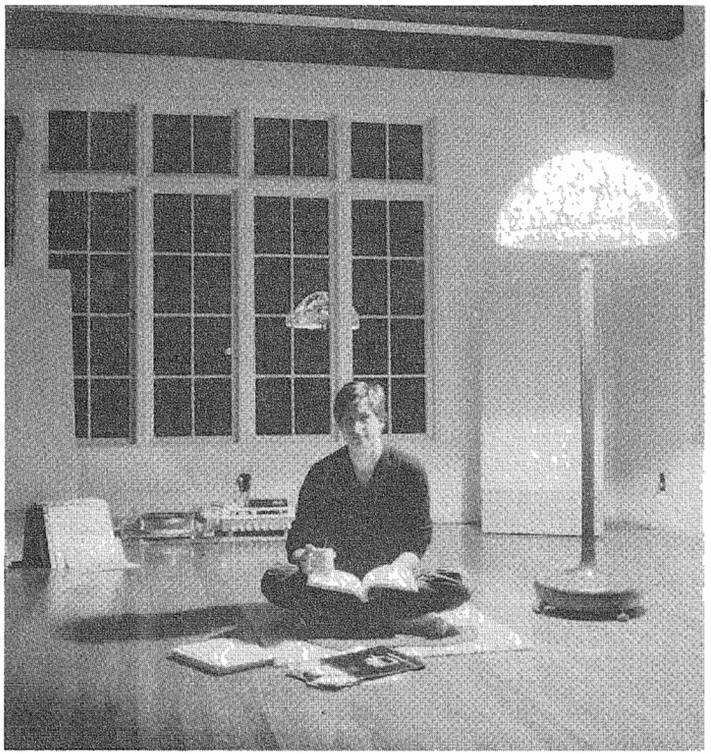
That was a game Steve thought he knew how to play.



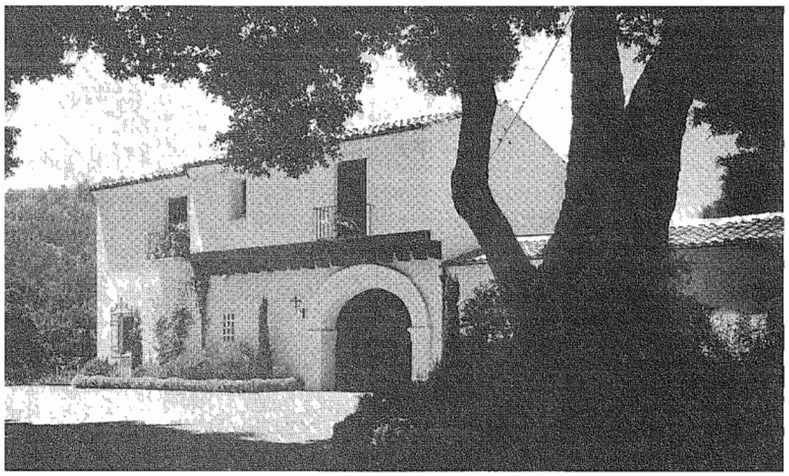
Steve Jobs as a senior at Homestead High School in 1972.



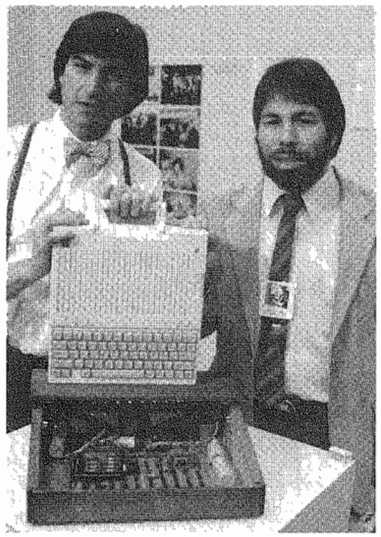
Steve Jobs introduces the new Apple II in Cupertino, California, in 1977. *(AP/Wide World Photos)*



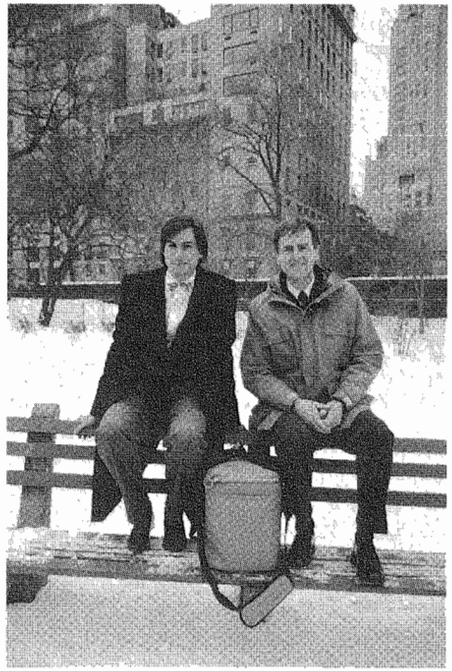
Steve Jobs sits in his first home, in Los Gatos, California, on December 15, 1982. *(Diana Walker/Getty Images)*



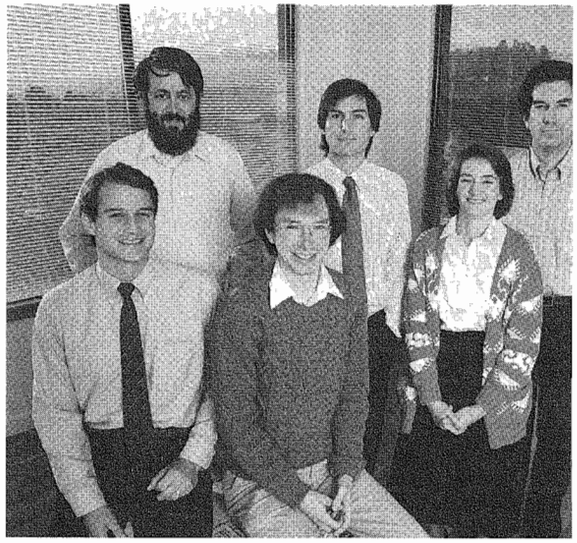
The twelve-bedroom, 17,000-square-foot mansion in Woodside, California, that Steve Jobs lived in through most of his thirties, and has continued to own. Built in 1926 for copper magnate Daniel C. Jackling, the house was designed by renowned architect George Washington Smith. *(Courtesy of the Woodside History Committee)*



Steve Jobs and Stephen Wozniak with the Apple IIc computer at the unveiling in San Francisco, spring 1984. *(Jim Wilson/Woodfin Camp)*



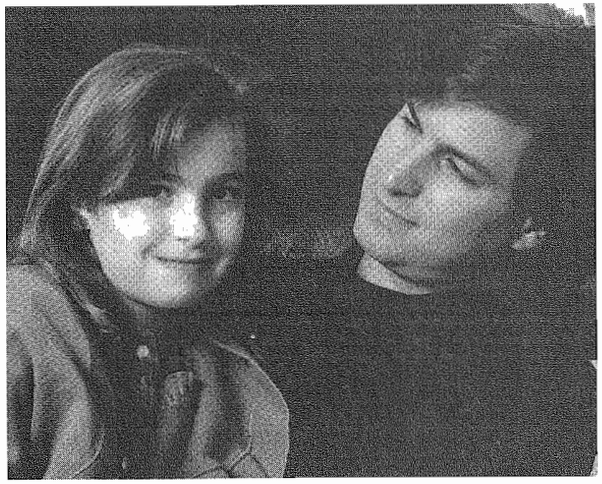
Steve Jobs sits with Apple president John Sculley on January 30, 1984, in Manhattan's Central Park, a few days after the official release of the Macintosh; the bag contains a Macintosh. *(Diana Walker/Getty Images)*



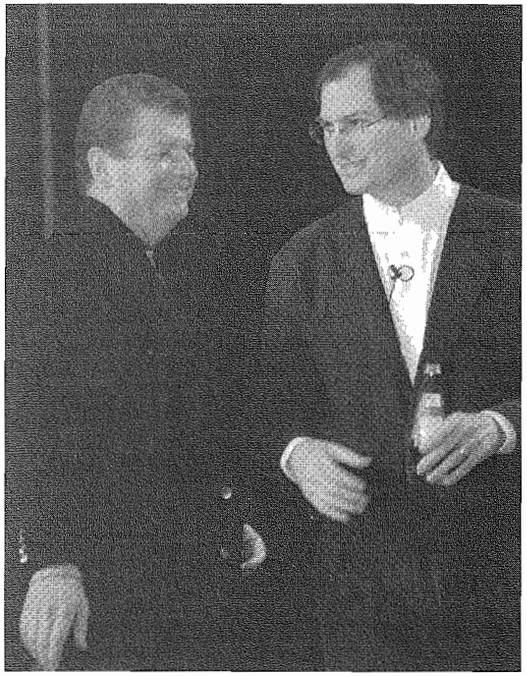
The team at NeXT. From left: Dan'l Lewin, Rich Page, Bud Tribble, Steve Jobs, Susan Kelly Barnes, and George Crow. *(Ed Kashi/Corbis)*

Steve Jobs and Ross Perot announcing the Texas billionaire's investment in NeXT. *(Ed Kashi/Corbis)*

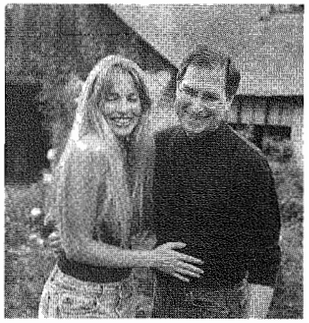
Steve Jobs receives his Presidential Citation from Ronald Reagan at the White House, on February 19, 1985. *(Courtesy Ronald Reagan Library)*



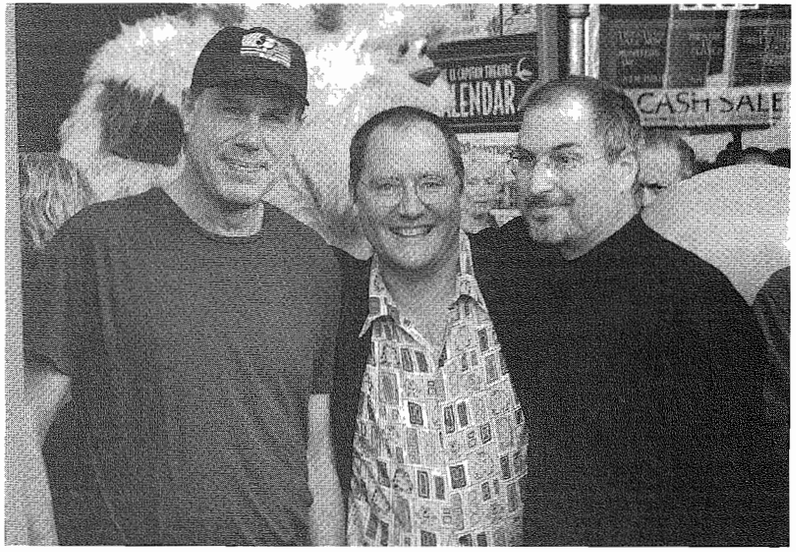
Steve Jobs with daughter Lisa at the former headquarters of NeXT in Redwood City, California, February 1989. *(Ed Kashi/Corbis)*



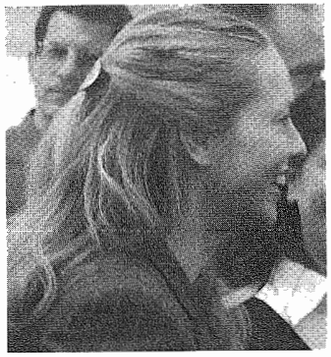
Apple Computer Inc. chairman Gil Amelio with cofounder and former chairman Steve Jobs at the MacWorld exposition in San Francisco in January 1997. *(AP/Wide World Photos)*



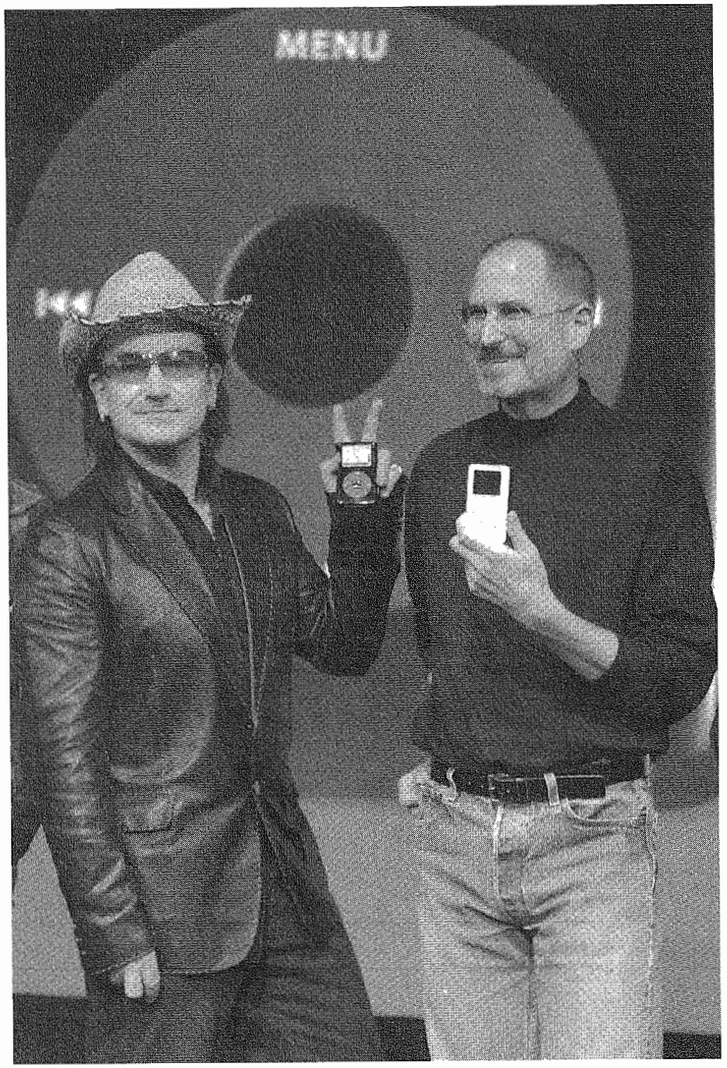
Steve Jobs and his wife, Laurene, share a lighthearted moment in their backyard. *(Diana Walker/Time-Life Pictures/Getty Images)*



Disney chairman Michael Eisner; Pixar's John Lasseter, who produced and directed *Toy Story*; and Steve Jobs at the premiere of Disney/Pixar's *Monsters, Inc.* in 2001. *(Frank Trapper/Corbis)*



Laurene Jobs at the opening of the San Francisco Apple store, February 2004. *(Courtesy of Gary Allen, www.ifoAppleStore.com)*

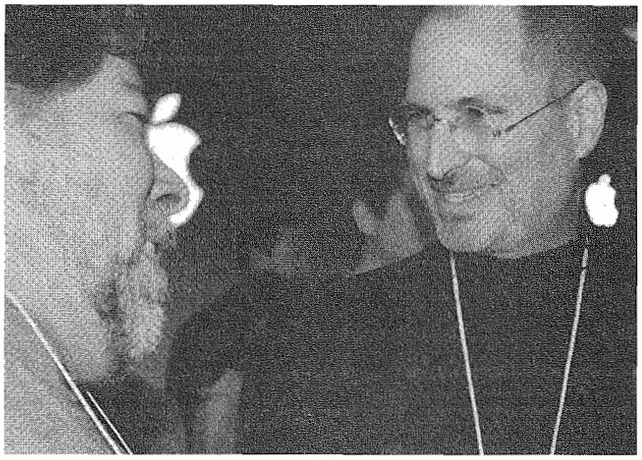


Bono, of the music group U2, and Steve Jobs show off the "U2 Special Edition" iPod at a launch event in October 2004. *(Mark Richards)*

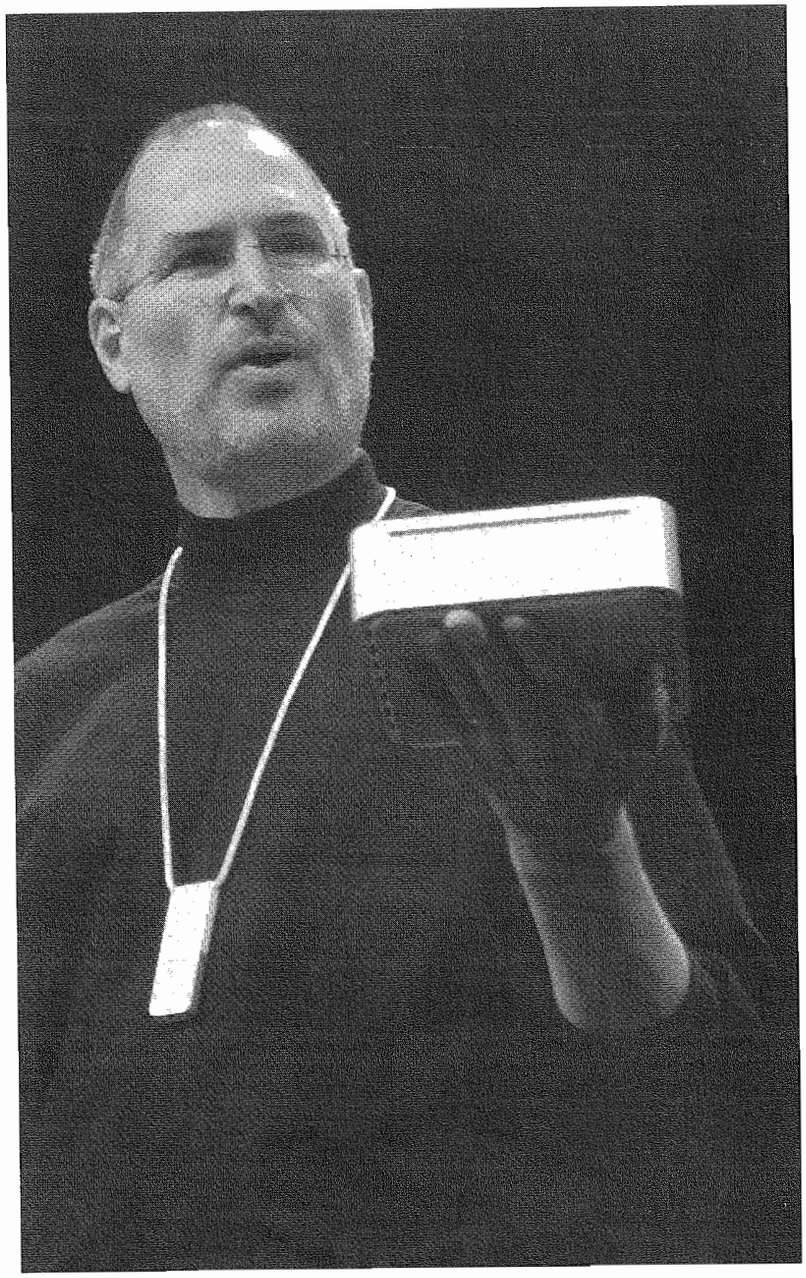
steve jobs

The unique style of the Steve Jobs signature reflects his creativity and his unwillingness to follow the usual ways of doing things.

Steve Jobs addresses the cheering crowd at MacWorld Expo, 2004. *(John Green/ZUMA Press)*



Steve Wozniak and Steve Jobs at MacWorld Keynote in San Francisco, on January 11, 2005. *(Alan Luckow)*



Steve Jobs unveils the new Mac Mini while wearing the new iPod Shuffle around his neck after giving the keynote address during the MacWorld Conference and Expo in San Francisco on January 11, 2005. (*AP/Wide World Photos*)

7

We've found that when the technology is strong, it inspires the artists. And when the artists are strong, they challenge the technology.

—Ed Catmull

Master of Ceremonies

For someone who had attended only one year of college—and without actually showing up in a classroom very often, at that—the idea of being invited to lecture at one of the nation's great universities had unmatched appeal to Steve Jobs. Whenever an invitation arrived, he always accepted if he could. He was on the Stanford University campus in the fall of 1989 for another of these appearances, this time at the invitation of a group of students from the business school.

Partway through his remarks, he lost his train of thought, stumbled, and seemed unable to get back on track. He seemed curiously muddled and unfocused. This remarkable guy who could stand before a packed auditorium of one or two thousand people, talk impromptu for an hour, and hold listeners enthralled suddenly couldn't seem to concentrate. People in the audience who knew him were baffled.

The explanation was simple. Steve was *smitten*.

His gaze had settled on a young woman so irresistible that just looking at her distracted him. She had an attractive face, a bright, intelligent look, a dancer's long legs and slim waist, and flowing blond hair, and was endowed with curves just where most women want them.

Her name was Laurene Powell, as Steve learned when he spoke to her after the session. He asked for her phone number and gave her his own, the private home line he shared only with his closest friends and business associates. He thought of asking her to dinner but already had plans, so he left.

Then he felt an emotional tug too powerful to resist, one of those "this may be a door to the rest of my life" moments. He said, "I was in the parking lot, with the key in the car, and I thought to myself, 'If this is my last night on earth, would I rather spend it at a business meeting or with this woman?' I ran across the parking lot [and] asked her if she'd have dinner with me. She said, 'Yes.' We walked into town and we've been together ever since."

Laurene came equipped with impressive credentials. Raised in a well-to-do Pennsylvania family, she had earned dual undergraduate degrees—a B.A. from the University of Pennsylvania and a B.S. from Wharton. From campus she went straight to Wall Street, first at Merrill Lynch Asset Management, then switching to Goldman Sachs in training as a fixed-income trading strategist.

Like Steve, she was a vegetarian; unlike him, she had broad interests much beyond her career. When she received her acceptance from the Stanford Business School, she quit her job and flew to Italy. Settling in Milan, she spent months studying art history, soaking up the life of a city that is one of the glories of Europe. She remained in that stunning environment until it was time to return to the States and join her new classmates.

Before long, according to *Forbes*, Laurene had moved into Steve's Palo Alto home, sometimes driving to class in his silver BMW with "NEXT" on the license plate. After the long succession of women in Steve's life, it might better have read "NEXT AND LAST."

Steve wasn't yet over his passion for Tina Redse, which had lasted for five years. Not long before, he had asked her to marry him. Tina declined. It was one thing to have him for a friend and a lover, but to make a commitment to live with him for years didn't suit her vision of life. Friends say he told her about the new girl he had met, though, and kept her supplied with details.

When school broke for the summer, Laurene had succeeded in surviving her first year of business school, despite the distractions. Steve took her to Europe for a week, and Laurene showed him around her Italy.

While things were going well in the romance department, Steve's outlook in business was also about to get a welcome shot in the arm. On a Tuesday in mid-September 1990, Steve once again took the trip to San Francisco for a launch session to announce the product that he believed would turn his fortunes around. This was the new NeXT computer, called the NeXTStation and designed to address the shortcomings that had made the original machine celebrated and admired but not purchased.

The new NeXT gleamed with the same shiny black magnesium case, this time not in the distinctive cube shape that had been so costly to manufacture; instead, the shape was more conventional but still distinctive enough to be referred to as "the pizza box."

Many would-be buyers had been put off by the black-and-white display, in a world of computers going color. The NeXTStation boasted a color display, which Steve showed off at the launch meeting with the kind of dramatics he loved. He had had his staff license a scene from *The Wizard of Oz*, in which the image turns from black-and-white to color. The audience roared its enthusiastic approval.

The unbridled enthusiasm died as soon as the show was over. The new computer was less expensive than the original NeXT but still cost thousands of dollars more than the machines it had to compete with. It became painfully evident that Steve had blindly run down the same path that had led him into the thorn bushes in the past. Great design, even world-class design, isn't enough to sell a computer. Maybe design is enough to sell sunglasses, lamps, or top-caliber fountain pens—but not computers.

It's easy to admire the latest breathtakingly gorgeous young starlet even if her brainpower doesn't measure up, but that doesn't mean you want her to help you get your work done for the next few years. Most buyers don't pick computers solely on good looks, either. If Steve Jobs was such a brilliant guy, such a world-class marketer, why did he still keep making the same obvious mistake?

When the NeXTStation proved to be yet another disaster, Steve finally faced up to the truth: the Holy Stevian Empire was collapsing.

He considered closing the doors on both companies and getting out of business altogether, but he had been in business since his part-time job at the electronic parts shop as a teen. Waking up in the morning without a company to run or challenging business decisions to make seemed like a bleak, miserable, uninviting way to live.

Under the circumstances, shutting down the businesses was undeniably the only real choice, yet it seemed unthinkable. Steve closed his eyes to logic and common sense. Instead, he tightened his belt and crossed his fingers. In this case, belt-tightening meant slashing the workforce at Pixar again. He ordered nearly one-third of the staff to be laid off. Going against standard business practice, he refused the idea of severance pay. The employees being fired—even people who had been with the team for years—would be paid the money they were due but nothing more. It was cruel and cold-hearted, but Steve wasn't in a position to be generous.

One group at Pixar was again spared the chopping block. John Lasseter's animation team had not just an Oscar in their favor; they were now producing big-time television commercials for major clients, generating a revenue stream that more than covered their expenses. Once again, the animators squeaked past a cutback.

As it would turn out, luck was once again very much on Steve's side.

Steve Jobs liked people who had the guts to stand up to him—but with a very demanding limitation: this applied only to people he respected, people who had a real contribution to make and whom he could look on in some respects as his equals. For anyone else who tried to talk back to Steve, his time at the company would probably come to an abrupt end. (There was some flexibility here, however. Apple engineer Alex Fielding once sent Steve a strongly worded e-mail complaining about the firing of another engineer whose work was crucial. Steve sent back a reply, "If you feel that way, you should probably leave the company." But he didn't insist, and Alex lasted another six months.)

Alvy Ray Smith was one of the people whom Steve would take gaff from. Since they had started working together, Alvy never had a problem looking Steve in the eye and telling him he was wrong about something. Steve might not change his mind, but he wouldn't blow a gasket. He at least listened and possibly even considered the point of view.

All of that changed in a blinding flash at one Pixar meeting. Steve has certain territorial imperatives, like having the right kind of bottled water laid out for a meeting. And ownership of the whiteboard is a strange quirk of his, a part of his need for total control.

At this particular Pixar meeting, Alvy disagreed with what Steve had said and was writing on the whiteboard. Alvy thought Steve was wrong. He stood up, walked to the whiteboard, picked up a marker, and began to explain his disagreement while writing on the board.

Everyone in the room watched in fascinated horror as Steve Jobs imploded. "You can't do that!" Steve screeched. Alvy was stunned and speechless as Steve leaned into him until their noses almost touched and hurled insults meant to demean, belittle, and wound.

Then Steve stormed out of the room.

"It was ugly," Alvy said afterward. "Steve turned on me with everything he had." Even today, Alvy remains sensitive about reopening the wounds from Steve's irrational, undisciplined, little-boy-with-a-big-temper outburst and from what followed. Alvy now says, "I'm rather pleased to have gotten over my animus against Steve and am not interested in reviving it."

Alvy handed in his resignation. He was one of the two cofounders of Pixar, one of the two towering giants who had led the innovations that had seen computer graphic animation graduate from a university lab to the movie screen. He had given it fifteen years of his life, but he was willing to give it all up rather than continue to have Steve Jobs in his life.

Ed Catmull must have been torn by Alvy's departure—on one hand, regretful at the breakup of a partnership that had defined the frontiers of their field but, on the other, aware that Alvy's departure left Catmull king of the mountain, the sole commander calling the shots creatively and technologically for the leading company in its field. He eased Alvy's departure by working out arrangements that opened the door for Alvy's next venture, which was to prove highly lucrative.

Steve Jobs didn't lift a finger to stop Alvy Ray Smith from leaving or to make his departure any less painful.

Worse, Steve has mounted an active campaign to rewrite history. In speeches and interviews, as well as on the Pixar Web site, all mentions of Alvy Ray Smith have been expunged. It is as if he never existed, never

contributed any of the underlying technology, never cofounded Pixar with Ed Catmull. As far as Pixar is concerned, it's "Alvy *who*?"

For Alvy's usurping of the whiteboard, Steve Jobs has exacted an ultimate form of revenge.

The idea of doing animation with computers wasn't new around Disney, but the first major project had done little beyond provide ammunition for the studio old-liners who wanted to stick with what they did better than anyone else in the world: the traditional ink-and-paint 2-D animation of *Sleeping Beauty* and *Snow White and the Seven Dwarfs*.

The studio's first swing at computer-based animation had been *Tron*. Originally conceived as a six-minute animated short by an independent East Coast animator, Steve Lisberger, it was reincarnated into a one-hour animated television special that would be part of NBC's extensive coverage of the 1980 Olympic games in Moscow. When President Jimmy Carter, in a fit of pique at the Soviets, decided that the United States would not participate in the games, the project was without a home.

Disney animation at the time was living under a black cloud from a string of box-office disappointments. *Tron* would be a gamble, but it offered the appeal of trying to break the run of dismal pictures by turning to computer graphic animation.

When the picture opened in 1982, it combined live actors with computer animation in a way that was quite striking for the time. The studio later described it as "a masterpiece of breakthrough [computer graphics] ingenuity, a dazzling film at the flashpoint of a continuing revolution in its genre." Whatever degree of truth that description may have contained, the movie bombed. The production managed to garner two Oscar nominations, for costumes and sound, but moviegoers stayed away in droves.

It would be years before Disney leadership could be convinced to try computer graphics again in any important way.

Meanwhile, interest in computer graphics was stirring elsewhere around Hollywood. One of its chief proponents was the enormously prolific writer-director James Cameron. He had already made his reputation with *The Terminator* in 1984 (memorable in part for starring Arnold Schwarzenegger in a role that became part of his legend) and *Aliens* in 1986, which earned seven Oscar nominations.

Cameron next went to work on an underwater science fiction thriller, *The Abyss*. Cameron and his screenwriting partner and sometime wife, Gale Anne Hurd, conceived one character that Cameron the director would have a hard time filming—a creature composed of seawater. Cameron understood enough about current technology to recognize that computer graphics offered the solution. The project was given to Lucasfilm's Industrial Light and Magic, and "magic" is a good term to describe their success. *The Abyss* was the first major Hollywood film with a character created entirely on the computer, and it earned an Oscar for visual effects.

Cameron's contribution to the use of computer graphics took a quantum leap ahead with his next film, *Terminator 2*. For this one, he set an even more difficult task in calling for a character who appears throughout the film and seems to be made of liquid metal. The effect was captivating to moviegoers and absolutely convincing to just about everyone involved with special visual effects who hadn't yet been convinced. Computer graphics had won a permanent place in filmmaking.

After *Tin Toy* received an Oscar, John Lasseter found enough confidence in the technology from the film industry to enable him to plan more challenging projects. Disney's Jeffrey Katzenberg, he who *owned* animation, was already a big fan of Lasseter's—he had tried to tempt John into coming back to the Disney fold and had been rebuffed. When approached, Katzenberg readily agreed to a meeting. Lasseter took the big leap of proposing that Pixar, which had never done a picture longer than about five minutes, produce a half-hour computer-animated TV special, possibly a Christmas special, which Disney would fund. Katzenberg was encouraging but noncommittal.

Disney still hadn't come up with a blockbuster computer-animated movie, and James Cameron had shown Hollywood that computer graphics was no toy but a powerful weapon to tell stories in a way never before possible.

After conferring with studio boss Michael Eisner, Katzenberg contacted Lasseter to make a remarkable counteroffer: Disney was opening the door for Pixar to produce a full-length animated feature, which Disney would fund, promote, and distribute.

For Steve Jobs, the news came as a lifesaver. A feature film! For

Disney! With the studio pouring in enough money to keep Pixar solvent! Not a measly television production but a full-length film, to be distributed by Disney and shown at your local neighborhood theater, around the world. Amazing!

For Steve Jobs, the news couldn't have been better, but he wasn't one to share his gloom and sense of doom when things were darkest, and now that some light had broken through the clouds, he wasn't about to dance down the corridors of Pixar or clap Ed or John in affectionate, thankful hugs. Yet even if he didn't show it outwardly, he knew that they had just brought home his salvation, gift-wrapped by Katzenberg and the Disney organization. There weren't any specifics yet, but a deal with Disney would mean tens of millions of dollars flowing into the Pixar coffers.

Steve wouldn't face the public humiliation of having to close down the company. He began the wait for the call from Disney.

Earlier, Steve had seen the deal with IBM come to nothing as a result of his own delays. Now the Pixar deal with Disney was dragging on with nothing happening. If the much-needed Disney cash didn't show up soon, Steve might have to shut the doors not just on Pixar but on NeXT as well.

Snatching spare time from work on the television commercials that provided some measure of cash flow, John Lasseter was jotting story notes and filling drawing pads with character and scene ideas. But Disney hadn't agreed to a story concept yet. Worse, the Disney people weren't even setting up meetings to hammer out the deal terms.

The word coming from John's old contacts at Disney couldn't have been more discouraging. Katzenberg's desire to go outside the studio and have another company produce an entire Disney animated film on its own flew in the face of Mouseworks tradition. In business for more than half a century, the company had never done this.

With the studio seemingly unable to break its string of mediocre animated films, Katzenberg was willing to go against tradition and roll the dice with outsiders. Pixar had John Lasseter, which lent strength to the project on the artistic front. And Pixar knew how to make an animated film using computers, which meant that it could be done for vastly less money than in the traditional Disney way, which often

involved hundreds of people in the creation of a single film. To Katzenberg, it just made good business sense to try.

The story that got back to Pixar made it sound as if Katzenberg's number-two man, Peter Schneider, might be holding to a "stick with tradition" viewpoint, and his foot-dragging or counterarguments might be winning the day. Schneider now says it isn't true—that he never opposed the arrangement—but a source within the company contradicts this, saying that he thought Schneider was conflicted. "He wasn't sure that Lasseter wouldn't make him look bad in the end because Peter would have everyone believe he was the only one capable of making great animated films, and here was somebody else who was making great animated films." A Pixar executive who was privy to the negotiations said, "Peter was very opposed to the whole thing, but Jeffrey said, 'Let's give it a try—this [3-D computer-based animation] may be the future." Katzenberg, this executive said, "had the vision."

Up north at Pixar, it began to look as if doing a feature film for Disney might never happen. Finally, the Pixar powers decided on a strategy that combined the hopeful with the manipulative. They began to have meetings with other studios in town. If any of these studio executives were willing to take time to have lunch at a place that "above-the-line" industry types favored, like the Polo Lounge, the Bel Air Hotel, or the Ivy, being seen with them would make it all the better.

The plot apparently worked. Jeffrey Katzenberg sent word that he wanted to meet with Steve Jobs. Steve came, attended by Ed Catmull and two others. They were shown into Jeffrey's conference room adjoining his office, where they found a very long conference table. Steve sized up the situation intuitively: if he sat along one side, Jeffrey would take his customary seat at the end and everyone else, Steve included, would be subservient.

Steve sat himself down at the far end of the table. The two royals would face each other as equals.

The Pixar contingent must have been laughing inside when Jeffrey came in and announced that if Pixar's animators wanted to do a project for Disney, they were to talk only to Disney. Pixar had managed to pull Jeffrey Katzenberg's chain!

It's the Steve Jobs style to negotiate as if he holds a position of strength. He negotiates that way even when the cards are stacked

against him. Katzenberg didn't know just how weak Steve's position was—that he could no longer afford to keep financing his two companies and had essentially run out of options for producing income at either of them. At least, not enough income to make the companies viable for the long term. Yet Steve intuitively understood that he needed to speak up to Jeffrey Katzenberg as if they were bargaining from equally strong positions.

Steve insisted that Disney would be funding production work only; the deal would not involve Pixar selling the rights to any technology. Jeffrey acted as if Disney "was the be-all and end-all, and Pixar just a gnat," said former Pixar executive Pam Kerwin. All the revenue from video sales would go to Disney, he told Steve. Pixar would not participate. Still, he wasn't just talking about one film, he was talking about *three*.

Jeffrey now led Steve onto the main battlefield, the discussion of the production budget and how the pie of profits would be sliced. Pixar would receive 12.5 percent of the net, Jeffrey said. It's doubtful that Steve or Ed Catmull even knew what a reasonable number was. This was Hollywood insider stuff, information you couldn't find in any book. Only a handful of people at the top of the studio structure, and their lawyers, knew whether 12.5 percent represented a royal screwing.

Steve must have been holding his breath. The size of the production budget was key. Big enough, and it would mean the survival of Pixar. Steve, Ed, and John had gone over the numbers thoroughly, but it's not like a math problem on the SAT: "If 15 people can create a 5-minute animated film in 3 months, how many people will it take to create a 90-minute film in 3 years?" There are so many intangibles.

Worse, whole elements of filmmaking were complete unknowns to these nervous neophytes. How much do you need to budget for a musical score, orchestration, and recording sessions? How much for each of the A-list movie stars to record the voices? How much for the completion bond—the insurance policy that protects against some indispensable member of the production team falling victim to a terrible ailment partway through?

One published account describes how Jeffrey forced Steve to announce a production budget figure, then said Disney wouldn't spend that, and seduced Steve into accepting a much lower figure, when all the time the original figure Steve had named was significantly under what the studio had been spending per picture.

It's a good story, but not the way the cards were played, according to Pam Kerwin. Disney understood that the Pixar guys didn't know how to budget an animated feature, she said. "We figured out the costs in collaboration with Disney." It was in the common interest of both sides to arrive at a budget that made sense all around.

For Steve, the important part was that Disney would put up the full cost of production. *If* Pixar stayed within budget, Steve would not have to reach into his own pocket. If the picture went over budget, he would be on the line for as much as $3 million. He would remain on edge about that $3 million commitment during most of the time it took to produce the film, demanding reports and assurances at frequent intervals that the costs remained in line.

But that was all ahead. On the day of the Katzenberg meeting, Steve walked out with a handshake commitment for a three-picture deal with the most prestigious company in the history of animated film, a deal that would save him and his company. A deal that would eventually lead to his becoming successful even beyond his dreams.

Now all he had to do was wait for the Disney minions to work out the nitty-gritty details and call to say they were ready to negotiate the specifics.

While Disney and Pixar were just beginning to dance together at the executive level, the two companies had been busy for some time in other areas that had already borne fruit.

Before Alvy Ray's painful departure, he and Lem Davis of Disney had come up with the idea of doing a joint research project, which eventually led to a software package called Computer Animation Production System or CAPS.

Traditionally, animators drew their images on paper. Each image was then transferred to celluloid sheets (cels) and given to ink-and-paint workers in white gloves who added the edge lines and painted in the color. With CAPS, the computer takes over this work: the paper images are scanned into the computer, then digitally inked and painted onscreen. From there, the art can be digitally composited, using as many layers as desired.

According to Dylan Kohler, one of the software engineers who worked on the development, the CAPS project was considered highly confidential. The studio was obsessive about not wanting anyone to know that some of the Disney animation was being done with computers instead of all by hand. "They were afraid if word got out, the luster of the Disney name would be tarnished. Everyone involved with the project had to sign a nondisclosure agreement," Kohler said. "I didn't even tell my family about CAPS. We developed this great thing, we got through the hell of getting *Rescuers Down Under* out, and then we were still under these very strict [nondisclosure agreements] so we couldn't even celebrate what we had done with other people. *Rescuers Down Under* came into the theaters, and we couldn't say to anybody, 'This is the first feature in history to be produced entirely in the digital realm, from fade in to fade out.'"

The secret came out after *Beauty and the Beast* reached theater screens, with a ballroom scene that to the trained eye had clearly required the use of computers. At that point, "Jeffrey Katzenberg started bragging to the press that computers were now in fact part of *every* sequence," and the developers of the software were at last free to talk about their work. CAPS was used on every Disney 2-D animated feature from that time on, including *Beauty and the Beast*, *Aladdin*, *The Lion King*, and *Pocahontas*.

This early collaboration between Pixar and Disney built confidence among the folks in Burbank toward their brethren up north. As Ed Catmull described it, Pixar had "performed on time and on budget and gave them more than they bargained for," and as a result, "Disney realized they had something special."

The project paid off handsomely, not only in establishing the Pixar bona fides with Katzenberg, but in another important way as well. The 1992 Academy Awards included a technical award to Pixar for CAPS. As a belated irony, Alvy Ray Smith, who had already made his painful departure from Steve Jobs's company, was one of the recipients sharing in the award.

The following year, the same lightning struck again: another Oscar to Pixar, this time for the RenderMan software. Pixar's only marketed software product, RenderMan has continued to provide a revenue stream through the years and even today is the most widely used rendering software, not only on animated films, but also on computer-based visual effects for live-action features. (In fact, as of 2004, RenderMan had been used in thirty-five of the last thirty-nine films nominated for an Oscar in the best visual effects category.)

On March 18, 1991, Steve Jobs gave up his bachelorhood.

A whole army of people thought they would receive an invitation to the wedding, but it wasn't going to be that kind of function. Steve and Laurene invited almost no one. Maybe it was because Steve was feeling the financial pinch so severely that even for this cornerstone event in their lives—the first marriage for both of them—he wasn't willing to spend the money for a large, splashy *People* magazine sort of function.

Or maybe it was just the minimalist, laid-back Steve Jobs doing things his way. It certainly wasn't any young woman's lifelong dream of a ceremony.

The wedding was to be at Yosemite National Park. The small group didn't fly there but climbed into one of those lavish private-party buses Steve had rented for the drive from Silicon Valley. Laurene's parents sat together, trying to get comfortable with Steve's side of the family—his mother, Joanne Simpson, and his novelist sister, Mona. Steve must have sorely missed his adoptive parents, Paul and Clara Jobs, to whom he owed so much.

The ceremony itself could not have been simpler or more austere. Zen had meant so much to Steve over the years, and now it dictated the style of the ceremony. Incense was burning as the guests and the bridal group entered the room, and the Buddhist monk whom Steve had worked with for years—Kobin Chino—presided. Instead of wedding bells, the small group heard the boing of a Buddhist gong, as thirty-six-year-old Steve married twenty-seven-year-old Laurene.

The usually reliable *Forbes* carried an item saying that Steve had opposed the idea of exchanging wedding bands. "But just days before the ceremony," the magazine reported, "he was spotted at Tiffany's in San Francisco shopping for a ring in the half-million-dollar neighborhood."

To all appearances, Steve and Laurene have since had a stable, satisfying marriage. But the wedding almost didn't happen. Their first child, a son named Reed, was born on September 22, six months after the ceremony. When Laurene told Steve she was pregnant, his back went up, just

as it had years earlier when Chris-Ann became pregnant. Laurene, naturally enough, wanted to get married. Steve refused. It was the same scene being played out all over again, with a different female lead.

This time the outcome was different. One of America's most prominent bachelors had renounced his bachelorhood, but the celebrating was brief. Laurene had to get back to the classroom and her studies, and Steve, who had still not heard from Jeffrey Katzenberg about moving ahead, went back to looking for some way to dig himself out of the worst financial hole he had ever been in—with the business press ready to write about his ultimate disgrace.

Finally, Disney got in touch to say it was ready to move ahead with the contract negotiations. Steve went on a hunt for an appropriate entertainment attorney to advise him in the deal-making. After considering leading talents like the esteemed Ira Epstein, a founding partner of Cooper, Epstein, Hurwitz, he decided on Harry Brittenham, whose client roster included people like Harrison Ford and the leading independent film producers in Hollywood, Bob and Harvey Weinstein of Miramax. Brittenham, known as Skip, is a short, thin man described as "low-key" by people who know him personally and as having "an outsized personality" by others. In a town filled with big-ticket attorneys, he's ranked among the fifty highest earners and is considered one of the top two or three powerhouses among entertainment lawyers.

It turned out that Disney hadn't been ignoring Pixar but had been busy all along, with the legal department drafting terms and key executives reviewing and calling for changes. Because this was breaking new ground for the studio as the first-ever animation production to be "outsourced," proceeding with due caution made sense. For Steve, Ed, and John, though, it would have been a less antsy, less anxious time if the Disney people had kept them posted with progress reports.

Now that negotiations were moving ahead, Steve flew to Burbank from time to time to sit down with Jeffrey Katzenberg and go over details of the contract. On a chartered aircraft? No way; he wasn't spending money frivolously at this point. He flew Southwest, standing in line like any tourist or businessman on a budget. Pam Kerwin says the Pixar people rode Southwest from Oakland to Burbank so often that they nicknamed it "the Southwest bus." She recalls one later

occasion when Steve decided after their meetings that he wanted to experience the fun of the Jurassic Park ride on the Universal Studios tour. He made a phone call that got them to the front of the line and onto the ride. "We went to the airport soaking wet," she recalls.

In the deal that was finally put on the table, Disney, in addition to picking up the production cost, would also fund the promotion and the distribution. Pixar would develop all the creative aspects—characters, character appearance, screenplay, dialogue, casting of actors for the voices, and so on. Disney would, of course, retain approval power over all creative decisions, but that was fine with the Pixar team. Who would complain about having the expertise and the creative sensitivity of seventy years of animation heritage as a sounding board?

The overall terms followed the lines that had been laid down by Katzenberg in the initial meeting, along with two items that hadn't yet come up. John Lasseter would have to sign a long-term contract, binding him to stay on board for all three of the pictures covered by the agreement. Katzenberg was adamant. After the *Tin Toy* Oscar, he had tried to entice John back to Disney, promising creative freedom on his own productions; John had replied that at Disney he could make movies, at Pixar he could make history. If Katzenberg couldn't have John, this deal was at least a guaranteed way to acquire his talent. So a commitment from John was a deal-breaker: he would commit to stay the course or the deal was off.

John agreed. If it's nice to be wanted, it's even nicer to be fought over.

The second new term said that Disney would keep the income from merchandising royalties—toys, games, fast-food tie-ins, and all the rest. When Steve later saw how much this added up to, he figured out a way to cut Pixar in on subsequent films.

With John Lasseter in the controlling role as director and head writer and Ralph Guggenheim (a colleague from the original New York Computer Graphics Lab days) as producer, Pixar launched into the daunting, totally unfamiliar task of developing a feature-length motion picture that came to be called *Toy Story*. John had always been drawn to buddy pictures, and he had won an Oscar for his three-minute short featuring a small baby and its toys. Those themes came together in the

concept of two toys in a youngster's collection struggling with their own competitiveness until they must join together against an outside adversary. Typical buddy-film stuff, of course, but never done before with toys as the heroes.

Over a period of months, they developed the story to the point that John felt it was ready to be presented to Disney. Members of the Pixar team assembled the pencil sketches they had prepared and transferred them to video. John took the video to Burbank, where he ran it for Jeffrey Katzenberg while providing a live narration and a soundtrack by acting out all the roles. (Lasseter can captivate an audience so effectively in this kind of session that some claim he could have had a successful career as an actor.) After John left, Katzenberg told another Disney executive that it was "wonderful, terrific—the best pitch I ever heard." (A while later, he went around telling everyone how much work was needed to fix problems in the story.)

From that germ of an idea, John and his writing associates spent the better part of a full year developing a script. John took one long weekend to learn the basic tools of the Hollywood screenwriter's craft by signing up for a cram course in Los Angeles—the same one that's parodied in the movie *Adaptation*. Though some people ridicule the course for its set of hidebound rules and proscriptive do's and don'ts, Lasseter's writing clearly did not suffer from the experience.

John chose one scene from the story with the two central characters, astronaut Buzz Lightyear and Woody, a cowboy, and set the animators and the technical crews to work on producing a thirty-second demo intended to capture the brilliantly realistic look that the finished film would have. All of the top Disney executives knew what 3-D animation looked like, but none of them had seen it before in footage being developed for a picture that would carry the studio's name. Peter Schneider, who had prevailed in his drive to have the project under his control, watched the clip and was astonished. In mid-January 1993, Pixar finally received a thumbs-up from Jeffrey Katzenberg on the plot concept.

While the rest of Pixar—the folks not working on the movie, the software developers, the business types, and so on—suffered from penny-pinching and bean counting, the production side of the house grew from a handful of people to more than a hundred, eventually including thirty technical directors and nearly as many animators.

. . .

Screenwriters often turn to file cards when they work out a story's structure, writing a brief description of each scene on a card, pinning up all the cards on a pegboard, and then moving them around to find a better order. Film animators often do the same but use sketches instead of file cards. If you had visited Pixar in the early 1990s, you would have found hallways enlivened by an impromptu art show of sketches for successive moments in a scene, with story editors and animators tossing out ideas on how to make the scene flow.

As you stood in the hallway examining those rough but engaging hand-drawn art pieces, you might have seen John Lasseter hurrying past. As director of the film, John was commander in chief, in charge of every creative aspect. Every day he worked his way through the large bullpen where the animators had their individual carrels. Meticulously detailed, the drawings allowed John to look at a series of images and envision every aspect of the action, then rattle off a string of suggestions, from which way a character's toes are pointed or how he's gripping the object in his hand, to how quickly he turns, where his eyes are focused, and how he shows a reaction to what he sees.

John had sensed early in his career that it takes more than drawing skill to be a superior animator. For Pixar, he insisted on animators who would be "more actor than artist." Creating animated characters that spring to life onscreen, he said, requires acting ability more than anything else. Later on, the company would help develop that ability by requiring incoming animators, modelers, and shaders to attend "Pixar University," a course of several weeks that even includes sessions in the art of improv.

When a scene involved dialogue, the animators initially worked to a "scratch track" recorded by various Pixar employees, no acting experience required. Later in the process, the big-name actors and their lesser-known brethren showed up at a recording studio in Los Angeles, where Lasseter guided them through the performance, line by line. For *Toy Story*, John had his heart set on Tom Hanks for the voice of Woody, because, John said, Tom has "the ability to take emotions and make them appealing." Before Hanks came in to discuss the project, Lasseter prepared a thirty-second reel showing a bit of action with the Woody

character, to a soundtrack of Hanks's voice from the movie *Turner & Hooch*. Hanks, watching the clip, threw back his head, roared with laughter, and then asked, "When do we start?"

Others in the voice cast were Wallace Shawn, comedian Don Rickles, and magician Penn Jillette of Penn & Teller. The role of Buzz Lightyear was voiced by Tim Allen. (Billy Crystal had originally been offered the role but turned it down—a decision he later regretted. "It was the biggest mistake I ever made in my life," he said. "Only thing I ever turned down that I felt bad about." He managed to make up for it by taking a voice role in a later Pixar film, the 2001 production *Monsters, Inc.*)

As animators worked on a character for a particular scene, they not only listened to the dialogue track but also watched videos of the voice talent reading the dialogue, reviewing the footage and the dialogue repeatedly until they had command of every nuance. Starting to work on the scene, they animated the movements of the character's body first, then added the facial animation and movements of the mouth and the lips in sync with the recording. Facial animation makes use of "pull points" that the animator creates for the facial muscles; the Woody character had eight controls for his eyebrows alone.

"John has a working knowledge of everything," said visual effects supervisor Tom Porter, who also worked as a shader. "He well knows when you can do something better" and isn't the least bit hesitant about calling on people to try again. Yet he invariably manages to give these orders in a way that makes people feel challenged instead of scolded or put down.

After Lasseter's morning visit to the animators' bullpen, he usually hustled to a screening session with the lighting team, where they scrutinized scenes that were ready—or almost ready—for final approval and transfer to film. Here, John the director became John the perfectionist at his most ardent. Changing the character of the lighting, even subtly, could reshape the mood of the entire scene, redirect the viewers' attention, or convey a different message. What did John originally want the scene to express—what story point or character revelation? Would that goal be better achieved by shifting the key light of the scene to come from *here* instead of there? Or by adding a fill light from the side? Or could the scene make an even stronger point than the one he originally had in mind?

There is no need to rebuild a set and reassemble the actors in this new world. It's one of the continuing miracles of computer-based filmmaking that these changes can be achieved with hardly more effort than the wave of a magician's wand even if there is a lot of computer horsepower behind it. The director has so many more options that he becomes a Merlin, able to reshape reality with a simple command.

A visitor to one of these sessions watched as Lasseter and his lighting team studied a scene in which the viewer looks out a window covered with raindrops. "Each drop is a lens," John coached, "and should reflect everything that's going on outside. Let's add fifty more so people won't miss the effect."

Lasseter feels that an animated film needs to convey the same sense of believability to the eye as a live-action film. That extends to the smallest details; his teams created a dozen different "filth libraries," for things such as giving baseboards in a bedroom marks that made it look scuffed by kicks from children's shoes.

Few people would ever notice, but this kind of thinking extended to camera moves as well. Layout supervisor Craig Good explained, "We tried to do what we could do on a set with real tripods and cranes. We deliberately borrowed shots from live-action directors."

All of this was done by calling on equations and algorithms stored in the computer, mathematical statements that were developed and refined over the years, some tracing their roots all the way back to the Alex Schure days and earlier, becoming more powerful but also more complex. As an example, technical director Bill Reeves explains that "It's amazing how big our shaders are. They used to be a few lines of code. Now some of them are ten to twelve pages." (A shader is a block of software that describes a surface and defines how the surface reflects and bounces light.)

Once a scene received John's final benediction, it was sent off to the "renderfarm," a factory of three hundred Sun Microsystems workstations, where the complex information for each scene is rendered into pixels, frame by frame, ready to be translated onto motion picture film. Thirty-five-millimeter film speeds through the projector of your local multiplex at the rate of 24 frames per second, and there were some 116,000 frames in the completed *Toy Story*. The rendering process can

take as much as five hours for each frame of film, which explains why the Pixar renderfarm has so many computers.

While Steve had plenty of reasons to be happy about the progress being made at Pixar, his other company, NeXT, was on a roller-coaster. Steve thought he might have a solution to the problems when he managed to entice away from Microsoft Mike Slade, a marketing whiz with a spectacular success record, to pump some life into NeXT's sales as its new director of marketing. With the hard-driving Slade onboard, employee morale picked up dramatically, and so did sales, multiplying fourfold.

It's incredible to think that a fourfold leap in sales wouldn't be enough, but it wasn't. In all of 1992, NeXT sold only twenty thousand computers. If Pixar had ever sold that many, everyone would have been popping champagne corks. For NeXT, it was pathetic. Apple was selling more computers than that *every week*.

Steve wasn't in a position to pour in any more money of his own—not without jeopardizing his entire future.

By January, though, the picture was more encouraging. NeXT had reported annual sales of $140 million, and Steve was making aggressive statements: "We entered the commercial workstation market several years ago, and our market share is about half of Sun's and growing. Watch for us to continue taking market share away from Sun." In fact, the picture was only a little brighter. Steve's prediction came more from his blind, self-deceiving optimism than it did from the realities of the marketplace. The people at Canon, however, impressed by the sales increase at NeXT and not eager to see their hundred-million-dollar investment go down the drain, decided to put in another $30 million to keep the company afloat.

The promise of new money came with a demand. Canon was by now convinced that Steve was a large part of the problem and made it a condition of the new contribution that he hand over a large measure of control to a new executive of Canon's choosing. For Steve, it was a painful choice. This was almost like a replay of John Sculley taking Apple Computer away from him, but the alternative was closing the doors, throwing a lot of people out of work, and suffering humiliation from the ridicule the press would heap on him. He agreed.

No one would ever argue that Steve Jobs wasn't a nightmare to work

for, from time to time. Yet his remarkable charisma, the mysterious attraction that drew people to him even when they knew he might attack at any moment, created a degree of loyalty that few executives ever match. Having a new co-chief of NeXT might have looked like a good idea on paper, from a management perspective, but it wasn't exactly a winner with the staff. Key people began to hand in their resignations. The vice president of marketing left, then the vice president of sales, then the chief of hardware—the last remaining cofounder of the company.

This ranked among Steve's darkest moments, but it was to get even worse.

Canon's $30 million was soon gone. The Japanese company poured in still more, possibly as much as another $70 million, for a total of $200 million, according to *Wired*. By 1993, Steve had to face the reality: the only way to keep NeXT afloat any longer was by shutting down the hardware business. A reporter who interviewed him when the decision became public found him "fragile, depressed, and withdrawn." Ross Perot became disillusioned with Steve's management style, bailed out, and wrote off his investment.

Steve could hardly have known at this dark moment that what remained of NeXT—the impressive NeXTStation operating system software based on the Mach kernel from Carnegie Mellon—would prove to be the springboard for his greatest triumph.

John Lasseter knew he was blessed to have the Disney tradition and experience behind him. He was good—great, even—and the Disney animated pictures had been faltering lately, but Disney was still unquestionably the industry giant, with an acquired sense of what audiences would respond to.

Still, the attitude of some of the Disney people toward their northern partner wasn't so much paternalistic as patronizing. That was reflected in remarks by animation president Peter Schneider. "We act like partners are supposed to act," Schneider said. "We look every day at what they're doing, we demand, we push, we talk," which, he insisted, led to a better product. Being Peter Schneider, he couldn't resist a dig: "Who gets the credit really is never the issue for us, although I know sometimes it is for Steve [Jobs]."

One of his fellow executives thought that Schneider was now

conflicted over a new concern about *Toy Story* and Pixar. If he had originally opposed the project and it turned out to be a success, it would make him look like a poor judge of people and of material. If it failed, he'd be just another Disney animation executive backing projects that reached the screen and couldn't find an audience.

Toy Story was John Lasseter's baby, but John knew he had to keep Schneider and Katzenberg happy. At regular intervals, John and his team assembled the rough art sketches for an upcoming scene and put them under the camera to create a crude filmed storyboard. John would hop on a flight to Burbank and play the footage for Katzenberg and Schneider, while acting out the roles and providing a running description of the action.

John respected Katzenberg for his experience and insight; Katzenberg respected Lasseter for his obvious talent and creative genius. With Steve, too, the relationship was solid, and it went beyond merely professional. Katzenberg had even developed enough respect and admiration for the Pixar CEO that he invited Steve to his home for dinner.

But now Jeffrey Katzenberg was troubled. Something about the story simply wasn't working for him. He knew what he didn't like, just not how to fix it. On a small point, when the story was dragging, Jeffrey had remarkable antennae for sensing something was wrong, and he'd spring one of his favorite lines: "They're going for popcorn"—meaning "you're boring them."

Yet what they now struggled with wasn't something small. Lasseter knew the Pixar animators were breaking new ground, achieving things no one in the field had thought possible. The work looked great. It *glowed*. He was excited about what they were achieving. But Jeffrey Katzenberg was unhappy, and it wasn't just a little popcorn problem.

The problem was one that Katzenberg couldn't put his finger on and Lasseter couldn't yet recognize, because it was so fundamental. The concept for the entire story had sprung from Lasseter's fascination with the idea of bringing toys to life through animation, a theme that had run through his award-winning demo reels at Pixar, beginning with the lamps in *Luxo Jr.*, which he had treated as playthings. Starting from there, John and his writing team had originally fashioned a story about a tin soldier left behind at a highway rest stop, and the hazards and the adventures he faced in trying to find his way home.

Screenwriter Andrew Stanton, one of the writers on the film, said that over a period of months, the writers conceived Buzz and Woody as the two main characters—Woody, the old-fashioned cowboy, and Buzz, the with-it astronaut with the spaceman's gadgets. "They would fight over who would be the favorite," Stanton said. "Then the two would get lost and have to learn to work together to get back home."

But the writing team had gone astray on the character development. Woody and Buzz needed different personalities; good drama demanded that. Their personalities or goals would have to clash—again, as required for dramatic conflict but even more as a basic element of the formula for buddy films—before they joined forces to overcome a common threat or enemy. In trying to meet those essentials, though, the writers had been too influenced by movies like *Lethal Weapon*, with its screw-you attitude of the Mel Gibson character—not exactly the right inspiration for Woody and Buzz. The script didn't convey a fun mood for an audience of children, even if their parents might enjoy the sharp-edged humor and Woody's bloated ego.

It had been an exciting landmark when Jeffrey Katzenberg allowed the picture to advance from script to production in mid-1993, but now, months later, he still wasn't happy. John kept coming back with new ideas, but none of them offered a solution to what bothered Jeffrey. Like the early Hollywood moguls, Jeffrey was incredibly astute about what audiences would connect with and warm to. He could tell you in an instant if there was a problem. The difficulty was that he couldn't tell you how to fix it.

On November 17, a date that the Pixar team came to call "Black Friday," Pixar was officially notified that the Walt Disney Company was shutting down production on *Toy Story*. The studio had decided that the script was too "juvenile," Lasseter said, and had pushed to make it "more edgy, more adult." Tom Schumacher, Disney's executive vice president of animation, accepted some of the blame on behalf of the studio. "We pushed them too far," he said. "They interpreted us wrong and made the film too abrasive. It lost a lot of its charm." Accepting some of the blame didn't help; the production was at a standstill.

Steve Jobs, once the cover boy of the computer industry, was being lambasted in the press over the problems at NeXT. Fallen heroes make great copy. Steve could expect the business press to heap ridicule on

him, but that wasn't the worst part. The demise of *Toy Story* was secret and hidden in private communications, but once it was public, all pretense would be over. Steve was a failure.

The empire of Steve Jobs was in tatters and seemed unlikely ever to recover.

Ten years after the launch of the Macintosh and the dazzling *1984* Super Bowl commercial, 1994 was the year from hell for Eisner and Disney, as well as for Steve and Pixar.

An Easter ski vacation came to an abrupt and deadly ending in April with the crash of a helicopter. Frank Wells, Eisner's number two and the president of Disney, was one of the four who perished. The giant loss to Disney's leadership would not be recovered by any stopgap replacement. Frank Wells had been the quintessential go-to guy for Eisner who had given Eisner the luxury of sharing a giant portion of the burden in running the increasingly complex combination of Disney enterprises. Wells was the filter and the interpreter who allowed Eisner's raw business sense to become practical reality. Many Hollywood armchair quarterbacks believe that had Frank "the Rock" Wells survived—as some of the others had in that fateful crash—the waters of the Disney ocean would have remained calm; the company would have avoided the myriad problems that created such turmoil in the following years.

The task of finding the right man to take Frank Wells's place would prove to be far more lengthy, costly, and complex than anyone could have imagined—least of all Michael Eisner.

For months after Frank Wells's death, Eisner struggled to manage the company on his own, all the while casting about for someone with the intelligence, the drive, the knowledge, the experience, and the ability with people that Wells had had in such abundance.

One person he *didn't* consider at first was, curiously enough, a close friend: Michael Ovitz, head of the talent firm Creative Artists Agency, and one of the most powerful men in Hollywood. Ovitz had a different set of qualifications, chief among them his close ties to almost everyone of importance in town and his determined, almost cutthroat drive to put deals together to benefit his clients. He was at the top of the pyramid of agents in town.

Once Eisner started to think about Ovitz as a Wells replacement, however, he had to be subtle about negotiations. The infamous industry gossip mill could spoil any deal before it ever got to the table. In a curious sense, the dealings that Michael Eisner now entered into with Ovitz would be like a rehearsal for his later dealings with Steve Jobs. Both relationships would be badly marred by a giant clash of personalities.

In their first conversation on the subject, Ovitz responded with, "I'm ready for a change" and "We would make an unbeatable team." Eisner sensed that they'd passed a threshold. Then Ovitz floated his version of the arrangement between them: "We should be co-CEOs." Eisner immediately understood that his vision of Ovitz as a replacement of Frank Wells, as a number two instead of a co-equal, wasn't the same role that Ovitz saw for himself.

Shortly after, Eisner began to have pains that landed him in the hospital, facing immediate heart surgery. He told his wife, Jane, who should succeed him as CEO of Disney in case he wasn't able to continue after the operation. He named two men: Barry Diller, who had been chairman of Fox when Eisner was president, or Michael Ovitz. He also said that he wanted to be interred aboveground. The fear was real.

Jane called Ovitz, as a close family friend, told him about the impending surgery, and asked him to come to the hospital—Cedars Sinai in Los Angeles—to take charge and give orders as might be needed, which was understandable enough, given the emotional strain any wife would be under at such a time. After the quadruple bypass, completed without a problem, Ovitz ordered that no one be allowed at Eisner's bedside with the exception of his immediate family, his psychotherapist, and his lawyer. When Disney general counsel Sanford Litvack arrived to have a press release approved by the recovering Eisner, Ovitz—though he was not a Disney employee and had no authority to make corporate decisions—infuriated Litvack by refusing him access to Eisner. Instead, Ovitz took it upon himself to approve the release. His takeover was a help to Jane but had already sown seeds of dissent among the Disney executives that would come back to haunt him in the near future.

Steve Jobs didn't want to believe that *Toy Story* was dead. He had a contract. Disney had poured millions into the production.

In Hollywood, Steve was learning, studios from time to time shut down a troubled production. Often, they would start it back up again

when the kinks were worked out. Disney wasn't happy with the script? Lean on the writers to come up with a solution.

It wasn't as if the writers weren't already trying. As usual with such things, when they found the answer, it seemed obvious. The challenge was that they couldn't change Woody's character so much that it would take away all the edginess. But they finally realized that they didn't have to. They wrote some new scenes for the early part of the picture, setting up Woody as a good guy, helpful to the other toys, generous with his efforts, and not self-absorbed. Once audiences had this positive, favorable view of Woody, they would accept his personality changes under the pressure of competing with Buzz Lightyear, who appears and challenges his leadership.

Steve was figuring out that executive blowups in Hollywood shouldn't be taken to heart. The town was filled with high-strung executives. Nothing surprising in that, when the products they dealt with cost millions of dollars, yet carried such a high chance of failure, and when they spent much of their day in conversation with temperamental directors and actors and demanding, hard-nosed attorneys, agents, and managers.

Encouraged by their new approach, the Pixar team went back to Katzenberg, who loved the new solution, gave his blessings, and lifted the production freeze. *Toy Story* was back on track—perhaps to make the reputations of the creators and the animators at Pixar or else leave them looking like a bunch of beginners and fools. They would not know which for another year and a half.

When Eisner was well enough to return to the office, searching for a number-two man stood near the top of his priority list. One name was very briefly tossed in and quickly pulled out of the hat: Jeffrey Katzenberg. During his seven years as Disney's president of production and boss of animation, he had been largely responsible for keeping the studio alive, extremely visible, and close to solvent with a series of animated masterstrokes: *The Little Mermaid*, *Beauty and the Beast*, *Aladdin*, and soon *The Lion King*. His personality style seemed to brim with self-confidence, and he was sure that he was a shoo-in for the number-two slot.

But the chemistry between Eisner and Katzenberg was wrong. Friction had been building for months between them, dating back to

immediately after the helicopter accident that took Frank Wells's life. Within two days, even while funeral arrangements were still being made, Katzenberg had put the pressure on, asking for a face-to-face as soon as possible. Eisner set up a private lunch.

Katzenberg didn't bother with social niceties. As soon as the two sat down, Katzenberg unleashed an attack. "I can't believe you didn't offer me the job as president as soon as you found out about Frank's death," he said. "After eighteen years together, I've earned the right to be your partner."

Aside from Katzenberg's appalling gaffe in bringing up the topic at this point, Eisner had great reservations about his qualifications for the position, finding him "secretive" and "pursuing [his] own agenda" instead of acting for the overall good of the company. Worse, Katzenberg didn't have the support of the Disney board. Roy Disney, the only family member represented on the board, had specifically cautioned Eisner that he didn't believe Jeffrey Katzenberg to be ready for the job, and other board members had apparently expressed similar opinions.

By the end of lunch, Katzenberg had stated his outright intention to quit his job and leave the company unless he was given Frank Wells's position as president of the Walt Disney Company.

That put Michael Eisner into an extremely uncomfortable corner. He later wrote, "For Jeffrey to quit immediately after Frank's death would only prompt more media attention, compound the company's trauma, and exacerbate the sense of anxiety that our employees were already feeling." There were practical issues, as well. Over the next weeks, Disney would be opening *Beauty and the Beast* on Broadway, followed by *The Lion King* in movie theaters. "I was especially loath to lose Jeffrey before these projects were launched," Eisner wrote.

The hard-edged Jeffrey Katzenberg felt that he had earned his bones. He *deserved* the number-two slot. And he was certain that he had Michael Eisner up against the wall. Eisner, meanwhile, felt torn. "I was fed up, angry, and absolutely convinced that the only solution was to let Jeffrey quit. On another level, I still valued his strengths running our movie division."

But Eisner understood that he needed to assume the worst, and he was correct. When Katzenberg learned that he'd been passed over, he paid Eisner back by leaving in a blaze of media stories. First, there was

the question of whether he quit or was fired. Then journalists delighted over the idea that Katzenberg had found a way to poke a stick in Eisner's ribs: he joined with David Geffen and Steven Spielberg to form the highest-profile new studio to open its doors in Hollywood for decades: DreamWorks SKG.

Eisner was left not only short a top executive, but with a major new competitor to bid against for "above-the-line" talent—producers, writers, directors, and actors—and a new studio to juggle against for release dates and theater screens.

Then Katzenberg demanded $250 million that he said was owed him by Disney under his contract, based on the turnaround he had achieved in the success of Disney pictures. Eisner refused. The lawsuit would drag through the courts for years. At one point, the two sides agreed on some $90 million as a compromise, but Eisner nixed the deal. That proved to be a costly decision; when the matter was finally settled, Disney paid even more than the $250 million Katzenberg had originally claimed, on top of a fortune from three years of legal fees.

Pixar's agreement with Disney had been set in place in 1991, for a picture to be released four years later. By 1994, with production back on track and only one more year to go before release, Steve Jobs should have been bursting with confidence and enthusiasm.

He wasn't. Closing down the NeXT hardware manufacturing and sales operations had relieved much of the financial pressure on that end but brought only temporary relief. By 1995, the company was in far deeper trouble. Staff bailed out, and all of the original team of NeXT founders, as well as most of the early hires, were gone. Steve surrounded himself with a new crowd of executives who were willing to be taken in by his aura and believe in his compelling visions, but none of it was enough. NeXTSTEP was dead in the water. The company had created versions that ran on the Intel 486 chip and on Sun's SPARCstations, so there was a broad target market for the NeXT software. But for all the ease of programming that object orientation promised, few customers stepped forward. The picture was growing darker and darker. Nonetheless, Steve refused to throw in the towel.

Meanwhile, Pixar was now taking in millions annually from the sale

of RenderMan software, as well as the regular infusions of production funding from Disney.

Although the cash-flow crunch had eased, it was still a never-ending source of pain. Steve groused to *Fortune*'s Brent Schlender, "If I knew in 1986 how much it was going to cost to keep Pixar going, I doubt if I would have bought the company." He had done the calculations. *Toy Story* would have to bring in more money at the box office than any recent Disney film just to be a wash. Only if the film earned at least $100 million would Pixar actually make any money. Lasseter and Catmull were spectacular, but could these first-timers really turn out a picture that would out-Disney Disney?

Steve had come to understand what he so blithely had agreed to when Katzenberg insisted on keeping the merchandising revenues. If *Toy Story* were only a modest success, Steve would see barely a trickle of income from the profits, while Disney might rake in handsome revenues from the sales of toys, games, T-shirts, chocolate bars, and the rest. He was such a great negotiator, and Katzenberg had snookered him. Just thinking about it rankled Steve.

He was so distressed by Pixar's financial plight that he began to look for an out, actually making inquiries to several companies, reportedly even to Microsoft, hoping that someone would put an offer on the table so that he could at least have the option of selling out and walking away with his head held high.

He stopped looking when Michael Eisner made what was, for Steve, a monumental decision. With Eisner proclaiming it "both a spectacular movie and a lovable movie," the studio advised Steve that *Toy Story*'s release would be postponed . . . because it would be Disney's 1995 holiday release. It would not just be dropped into the fall/winter release schedule but would reap all the benefits of the Christmas holiday season, when parents become enthusiastic about discovering any movie they can take the whole family to.

Steve had won a reprieve.

8

Steve was onstage by himself and Silicon Valley was there to pay him homage.
—Julie Pitta, *Forbes*

Icon

As the release date for *Toy Story* approached, the Pixar team tried to ignore the pressure of expectations from the drum-beating Disney promotion machine. Peter Schneider was declaiming, "In my heart, I know it's a great movie. It is really, really, really funny. And it looks so different." Eisner promised, "The technology is brilliant, the casting is inspired, and I think the story will touch a nerve." Steve was singing from the same songbook: "You've got to believe there's some truth to Disney's reputation for being hard to deal with, but we haven't experienced that. We have found that we share the same values."

In his business life, Steve Jobs was facing two doors and had no idea which one he'd be walking through. One of them led into darkness: continued failure at NeXT, the possibility of a disastrous failure for *Toy Story*, public humiliation, and quietly spending the rest of his life as—what? A venture capitalist nervously parceling out fractions of his remaining nest egg? A Zen master? A stay-at-home father?

The other door led to sunshine and cloudless skies—a world where *Toy Story* would be a smash hit, Steve would take Laurene to the Oscars, Pixar would be written about as a wonder company, and Steve could

sell Pixar shares through an initial public offering that would leave him never again having to worry about money.

His business life, in other words, meant facing possible outcomes that were nothing short of extreme.

Fortunately, his private life provided solace. Steve the husband and father was a Steve no one had ever seen before—calmer and more at peace with the world. He seemed to thrive on playing with his son, Reed, and could occasionally be seen inline skating around the neighborhood with his daughter, Lisa, now a high schooler, whom he had accepted into his life. The joys of parenthood had finally softened Steve's rejection of his first child. Friends credited Laurene with the change. They welcomed the teenager into their life, and their home. At Halloween, Palo Alto neighbor Bud Bromley, escorting a covey of trick-or-treaters, watched as the kids rang the bell at the Jobs residence. The door was answered by Steve himself, carrying a child in one arm and handing out goodies to the costumed children with the other. Not candy, of course; forever the vegetarian and health-food addict, Steve had a small bottle of carrot juice for each visitor.

Laurene, while still at Stanford University working on her MBA, had started a business with a classmate, and it was thriving. Because she, too, was a vegetarian (or, at least, had been since first meeting Steve), the business was dedicated to providing gourmet natural foods to local markets. They called the company Terra Vera (supposedly for "green earth," though "true earth" is closer in the Italian that Laurene was familiar with from her time spent in Milan) and eventually managed to cadge arrangements to provide their organic salads and other healthful offerings through the neighborhood outlets of major food chains.

Laurene had put up with Steve's quirky eleven-bedroom house in Woodside when she was just a live-in girlfriend. After the wedding, she asked for something less of a nightmare to look after (who even wants to supervise the help needed to keep a 17,000-square-foot pad tidy, never mind that most of the rooms were never used?). They settled on a modest ranch-style home on Waverly Street in Palo Alto, a mile from the Stanford campus. It's the kind of community where people know the others living on their street, and where neighborhood kids are free to drop in. Many of the homes, originally built for Stanford faculty, have small yards and only two bedrooms.

Under Laurene's influence, the Jobses had begun to live like "just another family." They continue living in the same home today, despite their changes in circumstances, financially and in terms of family size.

In December 1994, Laurene found that she was pregnant again.

In 1995, Apple was in desperate straits. With the business world flocking to the latest generation of IBM PCs, enhanced with the much-improved Microsoft Windows software, Apple had continued to fall further and further behind. The company seemed trapped in a proprietary cul-de-sac, with hardware it couldn't or wouldn't price to compete with the IBM-compatible market. Apple was floundering.

John Sculley had been forced out in 1993 after Apple's market share had shrunk on his watch from 20 percent down to a feeble 8 percent. Michael Spindler, a German who had also lived in France and had done an impressive job as the head of Apple Europe, had been brought to corporate headquarters by Sculley and looked to the board members like the man of the hour when they decided that Sculley's leadership had failed. But Spindler had been the wrong man for the post.

Quiet, taciturn, a fine operational analyst, and a hard worker who frequently put in eighteen-hour days (for which he earned the nickname "the Diesel"), Spindler proved uninspired when it came to catching the consumer spirit. He wanted to direct Apple toward the big, beckoning PC market, hoping to go mano-a-mano with Microsoft for the large office and business market that Microsoft understood to perfection. In this space, only price and performance mattered. Style was almost entirely irrelevant—especially when the style didn't have an advocate like Steve, whose unique personal history and silver tongue beguiled almost everyone.

Increasingly desperate as sales stalled in 1994, Spindler put out feelers to several companies, thinking that Apple could be saved only by a white knight. Philips and Sun were intrigued, and, as sales slowed in 1995, the interest from Sun grew even stronger. While that company's main strength was the workstation business, Sun found it hard to make much money in such a specialized area. The Internet was only starting to get attention, and this new technology would ultimately energize Sun's fortunes for a time. If Sun could manage to acquire Apple, the move would instantly put the struggling firm into the public spotlight.

By the beginning of 1996, just as negotiations for selling the company to Sun had reached a delicate point, the ever-alert business reporters covering Silicon Valley picked up hints about a deal in the making. This came at the same time that Apple released a revenue report showing the company to be in terrible shape. It was all too much. CEO Scott McNealy announced that Sun was dropping its interest in Apple.

At that point, Apple looked doomed. The Apple board had seen enough of Spindler, and board members conversed among themselves about candidates for replacement. Two possibilities were already sitting at the table as board members. One was Jurgen Hintz, executive vice president of Procter & Gamble, but the thought of installing another German who might prove equally inept in the all-important area of marketing to American buyers didn't win much support among the rest of the board.

The other was Gil Amelio. A brilliant Ph.D. physicist who showed remarkable skill as a business manager, Gil at the time was the author of a new business book, *Profit from Experience*, that had just become a national best seller and been nominated in the National Business Book Awards competition.

Amelio had climbed the ladder rapidly at Rockwell International and then been named president and CEO of National Semiconductor while still in his forties, at a time when the company burned through half a billion dollars and was struggling to survive. Three years later, Amelio had shuffled the executive staff, chucked unprofitable product lines, and become a Wall Street hero by bringing the company to record-breaking profitability.

Gil had been an Apple fan from way back. In his first executive position, rescuing a troubled division of Rockwell, he'd installed Macintoshes in the executive suite while the rest of the employees were condemned to using Windows machines. When an invitation came to join the Apple board, Gil was delighted and jumped at the opportunity. Once on the board, he received a call from Steve Jobs, asking for an appointment. Steve at that point had been out of Apple for years, of course, and Gil couldn't picture what Steve would want to talk to him about. When Steve arrived, dressed in his usual scruffy clothing, he didn't take long in getting to the point: Apple needed a new CEO, and

he was the company's cofounder and understood its culture and its capabilities better than anyone. "There's only one person who can rally the Apple troops," he said, "only one person who can straighten out the company." He wanted Gil to champion his cause and convince the board to award him the crown that had so far escaped his grasp, naming him CEO.

Gil was more than a little surprised at the suggestion but was willing to listen. He said, "Okay, suppose you were CEO tomorrow. What would you do? What would be the first decision you would make and why?" Steve suggested that "the world has changed, the Macintosh has outlived its usefulness, it's time to go on to something else." But when challenged about what the "something else" might be, Steve clearly had no answer. Gil decided that Steve didn't have a plan for Apple; all he had was the desire to be its leader.

In the intervening months since that go-nowhere meeting, the picture had changed dramatically. Then, Steve had been asking for the CEO's job when the job was already taken; now, the board was looking for a new CEO, and Gil Amelio was sitting right in their midst, a board member who'd already had the guts to argue that the company's problems could be solved, when almost every other board member was focused on which of the corporate suitors Apple should sell out to. With the quarterly report sitting on the table, the situation seemed too drastic to wait any longer, not even long enough for an executive search. The board asked Gil to take the job as Spindler's replacement.

For Gil, the decision wasn't easy. At National Semi, the hardest part of the turnaround had already been accomplished, and the stock options that would vest if he stayed would set him up for life. At Apple, he'd be faced with launching a turnaround from scratch, in an industry he didn't really know, of one of America's most popular and most visible companies. And the financial deal he was being offered left many uncertainties.

Yet what CEO could turn down the opportunity to run Apple Computer? At a board meeting in New York, Gil was formally offered the job, and he accepted. He served as CEO for about three months before the terms were finally settled, giving him a pay package of more than $3 million a year, a $5 million loan, and payments for the use of his own private jet that amounted to about $1,000 an hour. As generous as the

terms sound, they were in fact considerably less than he had been verbally promised by the board when he agreed to take the job.

He proved to be a great business manager but an uncomfortable fit with the renegade Apple culture, a culture that had been molded by Steve Jobs and that, in hindsight, no other Apple CEO has ever been able to corral successfully. Gil would hold a meeting of his top management on some pressing issue, such as two highly expensive development projects, working in competition, with no communication between the groups and each trying to undercut the other. A decision would be reached, and Gil would give the order—one of the groups to be closed down, the two groups merged, or some other sensible solution. Months later, he would discover that the responsible executive had ignored his order—the two groups would still be at work, still savaging one another, still churning through money the same way they had in the Apple II days when there had been money to burn. Chaos reigned in the product-development teams and in the group developing the company's much-needed new operating system.

Gil tried to wrest control by installing some top aides from his National Semiconductor days; they only made matters worse by bringing authoritative, old-style, command-and-control management attitudes and making the natives more restless.

It didn't help that Gil had no experience selling to the consumer marketplace and never found a viable advertising campaign or a successful marketing approach.

Amelio did bring in Fred Anderson, a no-nonsense chief financial officer from ADP, the payroll company. The times called for tough measures. The two took big charges for inventory write-downs and restructuring and announced a painful layoff of 15 percent of the workforce; these would not be the only layoffs on Gil's abbreviated watch.

By taking hard-nosed professional management steps, Amelio seemed to have stanched the flow of red ink. Now he could get on with more intractable issues: getting Apple's products back on track. Meanwhile, sales continued to fall and software developers continued to press for specifics about the long-promised next-generation operating system.

While Gil was making enormous strides in solving Apple's cash crisis, inside the company he couldn't seem to bridge the gulf between himself and the all-important new-product-development teams, most

of whom were young turks trying to prove their brilliance. Worse, even his top managers were routinely disloyal; when Gil decided that the inside story of the struggle to save a major company would make an invaluable business history lesson and arranged to start accumulating data for the project, his public relations people concluded that they didn't like the idea and leaked word to a *Business Week* reporter, who dutifully published the item—successfully killing the project but at the expense of publicly embarrassing their own CEO.

For Steve Jobs as well, 1995 promised to be filled with dramatic events. Laurene would give birth to their second child, *Toy Story* would open in November (God willing), and Steve was girding himself for the effort of making a Pixar IPO happen.

Steve wanted to launch the company just after the opening of *Toy Story*. He was desperate to get off the hook for endlessly bankrolling the company, and a public offering would also give him the cash he needed to resurrect his finances. If the movie proved to be a success—or even only a moderate success but generated a lot of media attention, which Steve could bank on with the power of the Disney promotion machine behind the film—the publicity for the film would draw attention to the IPO as well. He'd be riding a wave of free press worth millions of dollars. The timing seemed propitious. The people who refuse to accept conventional wisdom are more often the ones who provide the most stunning breakthroughs.

Steve, with his usual chutzpah, chose to ignore the downside. Pixar was a highly unlikely candidate for an IPO. What sensible investor would want to put money into a company that had been in business for nearly a decade but had yet to turn a profit? (Sure, in the go-go years of Internet investing that lay just ahead, pouring money into a start-up based on little more than its future expectations would be commonplace—but this was still 1995, at the very beginning of the wave.) Steve had been living with the deadening pain of failure; if nothing else, you might have thought that his Stanford M.B.A. wife would have been able to convince him that trying to arrange an IPO for a cash-starved, unprofitable company was folly.

Steve had always lived on determination and audacity. If he was often hit in the face with a wet fish for daring things that more cautious

men knew better than to try, this same determination and audacity kept him afloat, still in there swinging, while more cautious types had already dropped off and crawled out of sight.

He started to look for investment bankers, knowing that he needed people who would be on the same wavelength, which meant people he could cast his spell over. He was eager to see some qualified financial worker bees start to draw up the ton of paperwork that would be needed to file an intention to sell securities to the public. And there were so many decisions to be made about how the income would be split.

Meanwhile, his home life became even more of a pleasure. To many who had watched him in his bachelor days, Steve as a family man and a devoted father seemed almost unthinkable. But to see him with Reed was to recognize a truly dedicated and loving father.

Now the family was expanding. As if he didn't already have enough on his plate, Steve and Laurene became the parents of a baby girl on August 19. They named her Erin Siena.

Steve was now forty-one, still young by most standards but no longer so trim around the middle, with a receding hairline and eyes that needed help from glasses. He should have been able to slow down. But for type A personalities, that's not in the cards. Steve was as driven as ever.

Everyone in the computer industry is familiar with product launch events that conjure up words like *lavish*, *memorable*, and *spectacular*. And annual meetings with professional actors, troupes of dancers, and laser light shows worthy of a rock concert. Steve Jobs had splurged on plenty of elaborate shows in his time.

He wasn't prepared for the spectacle Disney put on under a tent in New York's Central Park as advance work for its own upcoming *Pocahontas*, as well as *Toy Story*. Mayor Rudolph Giuliani gave the opening introductions. Michael Eisner was there, and Roy Disney, and most of the top entertainment journalists. Steve was dazzled and star-struck. He had always craved the approval of others and felt incomplete without the praise and admiration that an adoring press corps had heaped on him in earlier times. Now, suddenly, he was like an invalid who had survived a successful operation and could throw away his crutches. *Toy Story* was going to be a rousing success: the Disney people believed in it, they were talking about a big-scale promotion effort, and Steve was ecstatic.

He returned to California with new resolve. He had always let the Pixar guys run Pixar, while he focused on NeXT, where at least he understood the language, knew the players, and had a certain command of the technology. And he was still revered by the engineers and the techno-wonks at NeXT, even though they were afraid of him, terrified of encountering him in a hallway and being challenged with one of his standard attacks, like "What do you do here and why are you worth what I'm paying you?"

At Pixar he had always felt like an outsider, like some arm's-length investor who puts up the money, comes around only once in a great while to ask foolish questions that embarrass everyone, and quietly slinks away again. But no longer. Buoyed with enthusiasm from the endorsement implied by the promotional spectacle in New York, he resolved to step in and take charge.

Steve notified Ed Catmull of a change in status. Ed would still continue with all his functions but would no longer be president of Pixar. Steve was taking that title for himself, as well as chairman of the board that was being formed for the IPO. Instead of putting in appearances maybe once a month, he started to spend two or three days a week at Pixar. He commanded the presence of the top Pixar management at weekly executive sessions; this was bad enough, but he insisted that John Lasseter be there, too, which took him away from his mounting pressures as director of the movie and its chief creative force, with release of the film only months away.

Steve Jobs walks around his companies as if an invisible shield surrounds him, a shield that deflects any vibes of dislike and any symptoms of the friction he's causing. One former Pixar executive describes him tactfully as "not socially adept." John Lasseter had set the tone at Pixar, making it a place where people worked hard but felt good about themselves, the work, their coworkers, and the company.

John Lasseter is *fun* to be around. He truly likes people and cares about their feelings. Steve lashes out, sometimes even at his closest associates and friends. John gives hugs and compliments. Steve commands loyalty; John earns it.

Strangely, you almost can't help feeling sorry for Steve. He craves respect, perhaps even affection, yet is able to walk down a corridor and leave turmoil and ill will in his wake. His efforts to take charge of Pixar proved a disaster, and worse was yet to come.

A year had passed since Michael Eisner's initial testing of the waters with Michael Ovitz. The strength of the friendship between the two families had allowed doors of possibility to remain open, and the subject of Ovitz joining the House of Mouse found its way into numerous conversations. Eisner's need for help in running the giant business had become even more pressing. The previous year had seen Eisner's mammoth effort to purchase the ABC television network pay off. That acquisition alone had more than doubled the size of Disney operations, and Eisner was still handling all of Frank Wells's former responsibilities, heaped on top of his own. The pressures on him were way beyond enormous, and he felt the strain.

In August, Eisner decided to heave caution to the hurricane, follow his gut, and make an offer to Ovitz before the insidious rumor mill spoiled the chances of it happening at all. For his part, Ovitz was apprehensive about his own company getting wind of his imminent departure and causing a panic before he had a chance to tell people in his own way. Eisner had decided to offer a $1 million salary, a figure he knew Ovitz would consider chump change compared to the nearly $20 million he had been drawing from his agency. But Ovitz would, Eisner hoped, be lured by the promise of stock options based on profit performance, the same arrangement Eisner himself had. This could be vastly lucrative, enough to make up for the ownership stake in CAA that Ovitz would be walking away from, a pile of gold that Eisner understood to be valued at more than $100 million.

Eisner's main concern was whether Ovitz would be more willing than he had been the year before to take a position as second in command instead of as a co-head sharing equal power. "If the answer was a sufficiently enthusiastic yes," Eisner wrote, "I was strongly inclined to go with him."

They met in Aspen, where the two spent an entire day going over salary and stock options, duties and responsibilities, and myriad other details. Ovitz asked for time to speak to his wife. He called Eisner a short while later and said, "I'm putting myself in your hands. Let's go forward."

Eisner hung up and almost immediately put in an unfathomable call to Tony Schwartz, the writer who at the time was actively engaged in coauthoring Eisner's autobiography. The choice of confidant seems curious, but Eisner had unburdened himself to Schwartz about so many personal things that one more was perhaps understandable. Reaching the writer on the phone, Eisner blurted out, "I think I just made the biggest mistake of my career."

Later the same evening, Ovitz, done in from the day's overdose of deal-making, arrived to join his wife at their Aspen home. She asked how the day had gone. Incredibly, his response was, "I just made the biggest mistake of my career."

This was an exceedingly important decision for the two men and for the Walt Disney Company and all its stockholders, and both men, immediately after the decision was made, concluded that it was disastrously wrong. Yet both felt bound by the strength of their personal friendship and their business values to honor the commitment they had made to each other.

"I just made the biggest mistake of my career" was the smartest thing they had both said all day.

Any Steve Jobs friend or employee who violate the principal of loyalty, Steve Jobs version, may find himself excluded from Steve's circle and his companionship for a very long time. He has been known to relent, though the healing process may take years.

Steve's sister, Mona Simpson, continued to live in Beverly Hills with her husband and child, while teaching one term a year at Bard College, on the Hudson River about two hours' drive north of New York City. In October 1996, Random House brought out her latest novel, *A Regular Guy*. In this one, she posed new challenges for herself: she had written in a more traditional narrative style, third person instead of first. Where the previous two works had been heavily autobiographical, this one was based on her view of someone else.

The central character is Tom Owens, a college dropout who gets a girlfriend pregnant and then refuses to acknowledge the child as his. He starts a biotech company that turns into a roaring, multimillion-dollar success but won't help the ex-girlfriend who is struggling to raise his daughter. He's ultimately pushed out of his own company by business

types whom he himself brought in. Emotionally, he's trapped in his own narrow concerns and largely closed off from the people around him. And he lives in a couple of rooms of a nearly barren mansion. When his daughter shows up on his doorstep one day, he admits her into his life. As the girl builds relationships with some of the people around him, he becomes more open and accepting, and he eventually marries and builds a family life.

The opening line is a grabber: "He was a man too busy to flush toilets."

For many people who knew Steve Jobs well, the book read like a painful exposé of Mona's brother. Journalist Steve Lohr sat down a few months later to interview Steve for a profile in the *New York Times Magazine*. This was a period in his life when Steve had been extremely uncomfortable about media interviews. Toughened journalists quaked at asking him questions, having heard stories of how he had blown up or gone to pieces in front of one of their peers. Nonetheless, Lohr dived in. He later described the moment in his article, first pointing out that "given the similarities between Tom Owens and Steve Jobs, most of the book's reviewers have mentioned the Simpson-Jobs family tie. . . . It would be hard not to notice."

Lohr asked the difficult question: how much of himself did Steve see in the character in his sister's book? "About 25 percent of it is totally me, right down to the mannerisms," Steve admitted. He quickly added, "And I'm certainly not telling you which 25 percent."

The journalist followed up by asking whether Jobs felt "exploited or betrayed."

Steve gave a dismissive wave. "Of course not," he said. "It's a novel."

According to Alan Deutschman in *The Second Coming of Steve Jobs*, a writer working on a story contacted Mona, who said that although Steve continued to call now and then, he had almost completely broken off the relationship with her because of the book. Whether or not that source was reliable, Mona Simpson now denies she ever said this. She insists that the report that Steve had broken off with her because of the book "is totally wrong and untrue." This is backed up by her editor at Knopf, Gary Fisketjon, who says he "has never heard such a statement."

. . .

Gil Amelio saw a new, updated operating system as a key element to Apple regaining market share against Windows machines, but he finally gave up hope that the in-house development group would ever arrive at a finished product. In desperation, he and his chief technology officer, Ellen Hancock, started to make overtures to Sun in hopes of licensing its software as the basis for a new generation of Apple machines.

Then a different suggestion was brought to Gil. If Apple had to go outside the company for an operating system, at least he should talk to Jean-Louis Gassée. Under Sculley, Gassée moved from being marketing director to become head of Macintosh development. Gassée was a perfectionist, however, unable to let go of a project until he was fully satisfied, which on one project after another had begun to seem to Sculley like "never." The usually soft-spoken Sculley and this hot-tempered Frenchman clashed often and loudly in battles that became Silicon Valley legend.

Sculley finally showed Gassée the door. Jean-Louis may have thought that a blessing. Using the $1.7 million severance that Sculley arranged and bringing in outside investors, Jean-Louis was able to start his own software company, Be, Inc., which focused on developing an alternative operating system to run on Macintosh hardware. Fitted out with several innovative features, it was the darling of the cognoscenti but, like Jean-Louis's projects at Apple, never seemed to reach a state where the company was able to launch it as a major product. In the six years he had been running the company, he had shipped very little and taken in only a pittance of sales revenue. Even so, his software was far enough along to serve as the basis for a project that could be brought into Apple and finished quickly.

Gil was under pressure to sign a deal before the upcoming 1997 MacWorld Expo in January, so that he would have a realistic answer—and, he hoped, a realistic release date—to offer to shareholders and the Apple faithful.

Meanwhile, Bill Gates had thrown his hat into the ring. He besieged Gil with daily phone calls, arguing that Windows NT could be converted to become the new Apple operating system and insisting that "I'll put hundreds of people on the project" to get it done quickly. Of course, Gates wanted something in return—not just cash but something much bigger. "Apple is really good at the human interface. Much better than we are," he admitted. Gates hoped to use the promise of an operating system solution that Gil so desperately needed as a wedge to coerce Gil into signing the intellectual property agreement Gates had been angling for. In Gil's phrase that would "give Microsoft Windows the same charm that the Macintosh operating system had."

The offer from Gates made a certain kind of sense, yet Gil knew that any deal with Microsoft would inflame the passions of Apple loyalists and employees, as well as of many shareholders; Microsoft was the enemy, and a deal with Gates would be seen as a sell-out.

One day Ellen Hancock received a phone call. She remembers that the caller said, "I hear you're looking for an operating system." The guy on the other end of the phone was an engineer working for Steve Jobs at NeXT. Ellen chose a team of her engineers and sent them over. They made several trips, and the reports were favorable. In fact, Gil had been wanting to talk to Steve about whether his NeXTSTEP software might be a viable option for Apple but had been unsure about reaching out to him.

Finally, the NeXT engineers broke the news to their boss, Steve Jobs, that they were in conversations with Apple. For Steve, this had to be stunning news. His mind must have been spinning with the possibilities.

The idea of licensing the Sun software was still on the table, while negotiations with Be, Inc. dragged on through October and November. At one point, Jean-Louis flew to Hawaii where Gil was attending an Apple sales force meeting, just to be able to sit down with Gil and plead his case. Gil was leaning toward Jean-Louis's software, called "BeOS," as the best technological solution. When Gil asked about price, Jean-Louis replied, "Money doesn't matter to me. I don't get involved with price," and suggested that he would accept whatever price was deemed fair.

The story of Gassée's meeting with Gil was leaked to the press. Gil was sure that Jean-Louis was the source of the leak, suspecting it to be an attempt to force his hand. But it did something else. There was no one in the technology business Steve Jobs hated more than Jean-Louis Gassée, the man who had ratted on his plans to Sculley. If ever Steve needed a reason to swallow his pride, Apple's impending purchase of BeOS was it.

By the time he showed up in the first week of December, Steve had

prepared his ammunition. Meeting with Gil and Ellen, he launched into a pitch that was Steve Jobs at his best. At some of the most challenging moments in his business life, he gives the impression that he has done no preparation and has not bothered with any rehearsals because he simply doesn't need them. He speaks with the fluency of someone in total command of his subject, the passion of someone totally committed, and exactly the right control over his listeners' emotions. It's a remarkable performance, so convincing that you could listen for an hour without interrupting, so compelling that you wonder whether he might not have had an amazingly successful career as another Jack Nicholson or Jeff Bridges.

That day, he started out by giving the reasons why the Be operating system would be a disaster for Apple and then, almost as an afterthought, slipped into his main theme: "If you think there's something for you in NeXT, I'll structure any kind of deal you want—license the software, sell you the company, whatever you want." Then came the main pitch: "When you take a close look, you'll decide you want more than my software. You'll want to buy the whole company and take all the people." Gil promised to have an Apple technical team get together with counterparts at NeXT.

The truth was that the companies of both Steve and Jean-Louis had good software but were sinking fast. Both men were desperately hoping that Gil Amelio and Apple would throw them a lifeline and save them from drowning.

Nonetheless, Jean-Louis, who had proclaimed no interest in the money, sent in an offer to sell his company in exchange for shares representing 15 percent of Apple. Gil did a little mental arithmetic: the figure came to about $500 million. He called Jean-Louis and said, "You have zero sales, you've got an operating system that's three years away from any reality, and you want 15 percent of the company. That's not in the cards. That's not even within the realm of possibilities." Jean-Louis eventually came down to $275 million, still more than Gil was willing to pay for BeOS. The Frenchman's holdout was calculated. Ellen said that Jean-Louis had told her, "I don't think you have any other options."

Gil had Ellen assemble panels of in-house experts to evaluate the pluses and minuses of using software from each of the four contenders—Microsoft, Sun, Be, and NeXT. One team member, an

Apple senior software engineer, said that the process was confused. "Doug Solomon [senior vice president of corporate development] thought he was in charge, Ellen Hancock thought she was, Gil was playing a role, different people were calling meetings. The whole process was a little bizarre." That doesn't seem surprising, given the pressure Amelio was applying to get a decision made quickly.

The evaluation teams drew up two sets of parameters for measuring each solution. Their analyses showed that while Jean-Louis's software was already capable of running on the Macintosh, it had a number of shortcomings. For one thing, every time the software needed to be updated, every third-party developer would have to update its applications simultaneously, which would be unacceptable to the developers; for another, the operating system had no provisions for supporting complex language systems such as Japanese, Chinese, or Korean—a basic requirement, given Apple's sales in the Far East. On the scoring system the technical teams had devised, Steve Jobs's NeXTSTEP won handily, by a score of 184 to 146. Gil's own evaluation had brought him to the same conclusion.

The final decision was too important and involved too much money for Gil to be comfortable making it alone. He invited Steve and Jean-Louis each to appear before the entire Apple executive team and make their case. The sessions were held on December 10 at the Garden Court hotel in Palo Alto, in hopes of avoiding the reporters, who had been having a field day with the story.

Steve Jobs went first, and again was brilliant and compelling. "Pragmatic, specific, and precise," Gil later called it. Then he handed off to Avie Tevanian, his top technical guru. Tevanian had brought along a laptop to demonstrate that NeXTSTEP was not just an idea in progress but a functioning operating system. The two of them put on a gold-star presentation.

They were followed by Jean-Louis, who either misunderstood that this was a shoot-out and his final opportunity or was so certain of a decision in his favor that he didn't think he had to do anything more than show up. He arrived alone, empty-handed, and not prepared to do anything much more than answer questions. Gil wrote later that "everything pointed toward Steve Jobs and NeXT, but Jean-Louis had made it a no-contest. The vote for NeXT was almost a foregone

conclusion." (Some insiders thought that Gassée's software would have been the better solution. Looking back from the perspective of all these years, Jean-Louis disagrees, insisting that Gil's final decision was the correct one. But this may be the seasoned judgment of a man sensibly unwilling to flagellate himself for past actions. "I'm way past being critical," Jean-Louis says.)

Gil needed to talk numbers with Steve but had to do it out of sight of enquiring eyes. They met at Steve's home, and Steve made tea for them. The first number Steve put on the table was $12 a share. Gil wrote later, "That was high, but I was figuring, 'We're picking up an existing operating system, we're picking up $50 million a year in additional revenues from NeXT sales, we're picking up WebObjects, *and* I'm getting a team of about 300 very talented people. All of these were things I wouldn't have gotten in a deal with Jean-Louis; this was obviously worth more—but how *much* more?'"

The due-diligence calculations had been run; Gil knew what they showed the company was worth, but in a strategic situation like this, when the acquisition is critical to the future of the company, "the price is largely irrelevant." He had in mind that even an additional $100 million "would represent only three days of sales for Apple."

He told Steve, "I think I have a shot at convincing the board to take $10. I don't think I can get a penny more than that." Steve agreed.

Within a week, the board approved the purchase of NeXT for $377.5 million in cash and 1.5 million Apple shares. The cash went to pay back investors. The shares were all Steve's. Gil designated Steve as a "special adviser" and, in hopes of restoring some of the pizzazz, glory, and enthusiasm of the company's earliest days, convinced Woz to accept a similar honorary position at the same time.

But while Amelio breathed a sigh of relief and thought that he had crafted a way to give Apple momentum again, the story was much more complicated.

By December 1996, Michael Ovitz had been the number-two executive of the Walt Disney Company for fourteen months. Fourteen *ugly* months. Perhaps there would have been some solace for Eisner if he could have seen his struggles with Ovitz as an opportunity to learn lessons he could use profitably in the struggles he would soon face with

Steve Jobs. But that would have required uncommon foresight. As it was, Eisner was too busy running Disney and contending with the Ovitz wars to look for lessons in it all.

Michael Ovitz's well-deserved and undisputed reputation as a power titan in Hollywood, which had initially seemed such an attraction, carried with it the seeds of a growing aggravation. Here was a man who had spent twelve years getting used to being in charge as the CEO of his own immensely successful company. He was completely unaccustomed to the political gamesmanship and etiquette needed to work beneath a top man. His proven track record was built on his ability to get things done, and it was universally known that he had his own distinct way of going about that.

Early on, Eisner praised Ovitz as being "professional, attractive, and competent." In a 1995 letter to board members and stockholders, Eisner wrote, "His coming to Disney was a great coup for us and a saving grace for me. Everybody is excited being with him, enjoying his energy and knowledge, sense of humor and enthusiasm." Less than a year later, an e-mail to a studio public relations chief found Eisner labeling Ovitz a "psychopath," "totally incompetent," and "untrustworthy to everybody." What happened?

The love-hate relationship grew out of control exponentially as Eisner and Ovitz turned high-level executive misunderstanding into a new Olympic event. From the start, other executives at Disney saw Ovitz as an out-of-control locomotive and tried to avoid being run over. Eisner invited Steve Bollenbach, Disney's chief financial officer, and general counsel Sandy Litvack over to his house to meet Ovitz on the eve of Ovitz's starting day. Bollenbach offered his congratulations and then shook Ovitz to the core by saying, "And by the way, I'm not reporting to you. I'm reporting to Michael Eisner." Litvack chimed in with his agreement to that surprising sentiment. Ovitz was stunned—Eisner had made it clear that both of these men would report to him. Now they had refused, and Eisner wasn't insisting. He was letting them rebel. The explanation was simple: both cherished their working relationship directly with Eisner and knew of Ovitz's reputation for being difficult. Eisner clearly considered them too valuable to risk losing.

Ovitz was seemingly on a steroid pump from the starting gate. On his first day at Disney, he suggested building a private staircase to allow

easier access from his offices to Eisner's. The stair-building notion was vetoed by Eisner. Ovitz next threw a $90,000 meet-and-greet soiree to impress the Hollywood community and to flaunt the Hollywood muscle he would be bringing to the Disney table. Ovitz defended the outrageous party cost as "a bargain." He launched construction of a new multimillion-dollar office for himself and his staff. According to *Variety*, in little over a year he ran through "roughly $6 million in random expenses," which represents a fairly liberal attitude toward petty cash.

Outlandish gift-giving, rumors of possible Disney stock information told out of school, no-shows to appointments, and arriving late at scheduled company meetings of the top executive staff—and that was just in the first few weeks.

Ovitz made internal Disney enemies at an alarming rate. One by one, all of these new enemies reported the infractions of company policy and the perceived insults to Eisner. As his best friend, Eisner went the extra mile to watch Ovitz's back, but that job very quickly became an overbearing task. He wrote later, "Every day was managing Michael Ovitz. I did nothing else."

Eisner thought he saw a solution to his pain and frustration. Ovitz was involved in negotiations with Sony, and the Sony people were obviously impressed with him. Eisner tried to convince Ovitz that he should offer himself to run Sony's U.S. operations. Ovitz, of course, recognized this was just a gambit to get rid of him, and didn't fall for it.

At last, desperately employing the fine arts of avoidance and delegation simultaneously, Eisner sent Sanford Litvack to inform Ovitz that he was being terminated. Ovitz refused to believe the hapless messenger and told him, "Sandy, you're going to have to *pull* me out of here. I'm not leaving."

On December 12, in New York for the holidays, Eisner handed a press release to Ovitz. It announced Ovitz's departure from Disney "by mutual consent." In the original contract terms, Eisner had recognized that Ovitz would be walking away from that $20 million annual income he'd received from his agency business and had included a "what if" provision in case the job at Disney didn't work out. No one ever expected the provision to be of consequence, but now it was.

It provided that if Ovitz left Disney, except if being terminated "for cause"—fraud, embezzlement, or the like—Ovitz would be entitled to

a severance payment of $140 million. That's a vast sum of money, especially when paid for *not* working. But that was the agreement, and Disney paid up.

These former best friends never dreamed that the gory details of their business fracas would end up in lengthy tell-all sessions documented in thousands of pages of a court reporter's transcript of a trial held in 2004 in a Delaware courtroom, 2,500 miles from Tinseltown.

In Steve's own phrase, having handed Apple to "a bozo once before," now that he was back, he was determined to make his presence felt and rescue the company from the brink of disaster where it had been teetering.

Looking back years later, he would describe his life view not in business terms but as a creator, the vision he wanted to hold of himself. "One of my role models is Bob Dylan. As I grew up, I learned the lyrics to all his songs and watched him never stand still. If you look at the artists, if they get really good, it always occurs to them at some point that they can do this one thing for the rest of their lives, and they can be really successful to the outside world."

But the young man as artist is always in some ways at war with the young man inside. The moment of recognizing that he can be successful is also "the moment that an artist really decides who he or she is. If they keep on risking failure, they're still artists. Dylan and Picasso were always risking failure."

That lesson was now rooted deep within Steve. "The Apple thing is that way for me. I don't want to fail, of course. But even though I didn't know how bad things really were, I still had a lot to think about before I said 'yes' [to becoming part of Apple again, even only as a 'special adviser']. I had to consider the implications for my family, for my reputation. I decided that I didn't really care, because this is what I want to do. If I try my best and fail, well, I tried my best."

From a young age, Steve had recognized his own uncanny flair for computer design. Whenever he looked at other people's computers, he saw clunky square boxes with unappealing colors and massive monitors. Driven to break away from those boring, distressing, styleless shapes, Steve had made the Apple II a wedge, with the box molded out of high-quality plastic and distinctive. The Macintosh was the next product stamped with his indelible sense of design—an amalgam of

cool, surprise, elegance, and wit. Ditto for the NeXT cube. They might not have been as functional as they should have been, they might have been aggressively nonconformist, but they always had a distinctive, spectacular look.

"We don't have a way to talk about this kind of thing," Steve said. "In most people's vocabularies, 'design' means veneer. It is interior decorating. It's the fabric of the curtains and the sofa. But to me, nothing could be further from the meaning of design. Design is the fundamental soul of a man-made creation that ends up expressing itself in successive outer layers of the product or service."

Still, it was vastly more than design that he sensed lacking at the Apple he had returned to. The fire had gone out. "It was much worse than I could imagine. The people had been told they were losers for so long, they were on the verge of giving up. The first six months were very bleak, and at times I got close to throwing in the towel, too."

Through various CEOs, Apple had attempted an on-again, off-again quest to gain a foothold in the business market, envious of what looked like Microsoft's easy success, where one sale could mean hundreds or even thousands of products.

Apple couldn't compete when the bottom line was price and performance and when style was irrelevant—as it was in the standard office market. Apple could sell when a consumer was willing to pay a bit more to be different, to look cool, to feel the thrill of belonging to an elite with a certain status, or to gain the advantage of ease of use. Apple was a company with two superb, serious business sectors: graphics and desktop publishing, where the LaserPrinter (which Steve had championed over nearly everyone's objections) and page-layout software from Aldus had turned the Mac's fortunes around in the years after he was ousted. But its other market was the consumer, and there the firm had lost its way.

Within a month of his return, Steve's key lieutenants from NeXT were in charge of software—in the hands of NeXTSTEP architect Avie Tevanian—as well as hardware.

As the NeXT crew carried out its putsch—that's what it was, though few people at Apple yet recognized the handwriting on the wall, least of all Gil Amelio—things grew worse. Gil had allowed himself to remain surrounded by executives who were part of the problem and a board of directors with very little consumer computing experience.

When revenue numbers were toted up for the 1997 fiscal year in the summer of that year, sales had fallen to $7 billion and losses were over $1 billion. It was just the opening Steve had been waiting for. So many times in the past he had coldly refused to show loyalty to his closest friends; why should he now show any loyalty to Gil Amelio, merely because Gil had brought him back into the company he loved?

Steve Jobs has maintained an arm's-length relationship with most reporters. Basically, he seems to mistrust anyone who uses words for a living, an attitude that was shaped in the crucible of experience. Yes, the press has often been extremely laudatory; it's the media that made Steve into the rock star of high tech. But the press has been painfully unkind as well. It's easy to say that this is the price of being a public figure; just because the statement carries a great deal of truth doesn't make it any less difficult to bear the stinging words.

So Steve responded by giving interviews and stories only on his own terms and even walking out of an interview or a TV appearance when his ground rules were broken. A few reporters, though—a very few—earned Steve's trust and respect, and one of these was Brent Schlender of *Fortune*, who has built his success in part on being able to form strong connections with industry leaders such as John Chambers, Michael Dell, Bill Gates, and Andy Grove.

Gil Amelio never formed the degree of connection with Schlender that Steve Jobs had. When Schlender wrote a major story on Apple for the February 1997 issue of *Fortune*, he didn't see Gil's successes in cleaning up past mistakes, writing off unsalable inventory, and arranging loans to keep the company operating—necessary steps on the rocky road to recovery. What Schlender focused on were the problems.

The title alone told the story: "Something's Rotten in Cupertino." The article was more than a litany of complaints against Gil and his management style. Schlender told *Fortune* readers that there was salvation for Apple: Steve Jobs was waiting in the wings.

Steve couldn't have asked for better ammunition. The article laid the groundwork; Steve knew how to make the most of the opportunity. An ailment that might be called "board of director's impatience" also came into play. Ellen Hancock—Gil's chief technology officer, who now serves on the board of major companies such as Colgate-Palmolive and EDS—finds that boards of troubled companies have a tendency not to

give the CEOs enough time to solve the problems. "Even when most signs point to the company being on its way back to good health, the board may be impatient and turn out the CEO."

Both of these factors probably helped fan the flames. The arsonist in the case, though, was Steve himself, and the kindling he used was board member Ed Woolard, who was then the chairman of DuPont and had earlier served on the board of IBM. That Gil had personally recruited Woolard to the Apple board made little difference now. According to a source close to the situation, "Steve went to work on Ed Woolard and convinced him to lead a revolt, which he did. He convinced a majority of the board that they were all going to be sued if they didn't make the change." Apparently, the Damocles sword of a lawsuit wasn't an idle threat; the same source believes that Steve had already obtained an agreement from his billionaire friend Larry Ellison to sue the board and its members if they didn't turn Gil out. Ellison dropped hints to a reporter that he was considering a hostile takeover bid for Apple. The strategy, and Woolard's wooing of his fellow members, won the day. Mike Markkula and Del Lewis held out for letting Gil finish the job he had started, the insider says, but three other outside members agreed to cast their votes with Woolard.

In July 1997, Gil received a call from Woolard, who said he was calling "with bad news." Woolard went on, "You've done a lot to help the company, but the sales haven't rebounded. We think you need to step down." Gil sensed that a discussion was futile but pointed out that the company had "just finished a quarter with results that were better than the analysts' predictions." He asked, "You want me to step down just when things are beginning to look better!?"

Woolard answered, "We want to find a CEO who can be a great marketing and sales leader for the company." But, of course, they had already "found" him; the description was tailor-made to fit Steve Jobs.

Steve was the first person who called when Gil returned from his July Fourth holiday. Was he offering condolences or gloating? Gil was never sure.

When Gil had taken the job as Apple CEO, he told the board that he would need three years to bring the company back to health. Now the board had fired him after a year and a half. Gil later regretted that he had not put a three-year "no fire" clause into the terms of his contract.

Many people inside the company and out were glad to see Gil leave Apple. Some in the press derided the national best seller *On the Firing Line* that he wrote about his Apple experience, attacking it as representing only Gil's own point of view—as if any autobiography could be expected to do anything else. Few people seem to take note of the most significant fact of Gil Amelio's reign at Apple: when he took over, the company had enough money in the bank to survive for three months; when he departed, he left a legacy of $3 billion dollars in cash—a bankroll that allowed Steve to keep the company in business while he tinkered.

Now applying his own loyalty principle in the opposite direction, Steve apparently recognized how his gigantic disloyalty had damaged the reputation and the stature of the very man who had rescued NeXT from oblivion, made Steve wealthy again, and given him the foothold within Apple that had allowed him the platform to position himself for the takeover. Recognizing how disloyal he had been toward Gil, Steve became cool and distant, as if afraid that Gil's own sense of loyalty would make him vengeful. Sometimes Steve could show an uncanny reading of other people; sometimes he could be blind.

Deep down, even from the very beginning, Steve had felt certain that he could run Apple as the company's CEO. No one could argue that he had no claim to justify the desire—he had been the driving force that got the company started. Steve Wozniak had been essential, but he was no entrepreneur.

Finally, thirteen years after being summarily thrown out of his own company, Steve Jobs was back—and not just back, but with a vengeance, as chief executive. His first suggestion was to re-price stock options so that staff morale would improve; his second, to make everyone in the company work to a bonus that was stock-related so the whole crew would pull together.

One of Steve's first calls was to Bill Gates, who had been negotiating with Gil for months. Only an alliance with the most important company in the technology world could quickly shore up Apple's fortunes. Steve knew just what Gates and Microsoft wanted: an agreement that would allow Microsoft to design a user interface like Apple's—the very item Gates had been harassing Gil about for eighteen

months, that Gil recognized would be a giveaway and would deprive Apple of its most significant differentiation from the clumsy Microsoft operating system. Steve signed away Apple's most precious intellectual property, without blinking, so that he would be able to appear onstage in early August at another MacWorld Expo with Gates at his side, garnering praise from the media for settling an old dispute. But at what cost! The deal called for Microsoft to invest $150 million in Apple, and to continue to update and sell Microsoft Office productivity programs for the Macintosh platform for the foreseeable future. It also called for Apple to adopt the Microsoft Internet Explorer Web browser as its default program for accessing the Web, installing it on all Macintosh machines sold. Steve had a deeper understanding of the realities of the situation than almost anyone: without Microsoft's support, Apple would be a cul-de-sac with no way to operate in a Microsoft-dominated world. He had to bide his time by keeping Gates on his side.

The crowd at the Boston MacWorld in the summer of 1997 booed the announcement.

Steve understood the power of ownership. He had no interest in being on the payroll; in fact, the grown-up Steve Jobs rarely accepted paychecks from any of his companies. His salary at Apple would be $1 a year, and his title was "Interim CEO," while the board half-heartedly engaged a search firm to hunt for a permanent replacement.

For years, the company had been run by a series of outsiders, none of them ever able to get control of the Apple culture. The one person who might be able to was the one person most responsible for the company's dysfunctional culture: its cofounder, Steve Jobs.

He set out on an egalitarian remake of Apple. No more business-class travel. No more sabbaticals. No more special severance deals for executives. Everybody in the company (except Steve, of course) was going to be in the same boat.

He found that the board wouldn't go along with his ideas. No problem—he was chairman of the board, he could remedy the problem easily. Steve was able to get most of the board of directors to resign within weeks, even the oldest hand who'd been around from the very

beginning, Mike Markkula. As replacements, Steve brought in a couple of old friends: Larry Ellison and his one-time vice president of sales, "the coach" Bill Campbell.

Steve's business life was now undergoing a resurgence. With his return to Apple the previous year as its interim CEO, he was busy remaking the company. Gil Amelio, before his ouster, had been busy slashing products and product lines as part of the effort to return the company to profitability. Steve slashed even more vigorously. On another front, he tackled the culture.

People who are called to Washington by the president to join his cabinet as the Secretary of Whatever discover that one of their biggest challenges lies in trying to goose the bureaucracy into action. The civil servants have outlasted a series of secretaries of their department, they know they'll still be there when this one leaves, and there's a compelling tendency to think that they have a clearer long-term vision than the boss does. Apple CEOs had struggled with a similar kind of "we know better than you" unwillingness to cooperate. The Apple executives, managers, and troops in the trenches had made a fine art of the press leak. Don't like that the CEO is going to chop off your project? Slip some confidential details to that pal who's been cultivating you—Julie at *USA Today* or Peter at *Business Week* or Brent at *Fortune*—and maybe they'll put something in print that embarrasses the CEO and makes him change his mind.

Steve quickly saw lots of things he didn't like. His predecessors in the CEO's office had never figured out how to take the reins in a commanding manner. When Steve Jobs sets his mind to a task, you had better join him or get out of the way. He set about changing the culture of Apple. Some of the changes were small (no dogs at work, no smoking), and some were whoppers, such as an absolute ban on talking to anyone outside the company who uses words as a tool of his trade. (The one exception: it was okay as long as you had a public relations dog-watcher sitting at your side and yanking your leash whenever she wanted you to stop talking.)

These new edicts were laid on top of the aura of fear Steve carried with him like a dark cloud. You didn't want to be called in front of him to do a product presentation because he might decide to lop off the

product, and you with it. You didn't want to encounter him in a hallway because he might not like an answer you gave and would say something so demeaning that it could undermine your confidence for weeks. And you sure as hell didn't want to get trapped on an elevator with him because by the time the doors opened, you might not have a job. Some Apple-ites took to walking the stairs to avoid the possibility of an elevator encounter.

It would be easy to call this a reign of terror, but the fact is that the company began to turn around. Steve's two most trusted technologists from NeXT were holding down top positions—Avie Tevanian running software and the brilliant Cornell engineer Jon Rubinstein running hardware. The new Apple billboards, spare and stunning, with a simple message of "Think Different," sprang up everywhere, even painted on the sides of buildings, announcing a fresh start for the company. They boosted employee morale. It didn't matter that the phrase was gratingly ungrammatical; maybe that was even part of its charm.

Steve was back. He seemed to know what was going on in every corner of the company. He was getting Apple back on track.

Five months after his coup, Steve appeared at the January 1998 MacWorld in San Francisco to give his traditional lengthy but absorbing keynote speech. At the very end, pretending he was finished but then returning to the microphone, he added as if just a footnote, "I almost forgot. We're profitable."

The MacWorld audience had never adored Steve more than they adored him at this triumphal moment. Back only months and already he had made their beloved Apple profitable again!

In truth, of course, no one turns a giant company around in half a year. Almost all of the credit for the recovery belonged to Gil Amelio, but he would get none of the praise, not from this audience and not from the press. He was already forgotten. His accomplishments in rescuing the company would be buried deep, covered over, and ignored. Steve was once again basking in someone else's sunshine.

These days Steve shows no embarrassment for his double-dealing with Gil. But then, Steve has never been famous for showing warmth even to his close friends.

. . .

A gambling man would have been driven mad by the signs and the countersigns pointing in opposite directions about how *Toy Story* would fare with audiences. Michael Ovitz was bad-mouthing the picture all around town and to every Disney exec who would listen, predicting disastrous box office. On the other hand, it had been a pet project of Jeffrey Katzenberg's and Katzenberg was in disgrace at Disney, so to many people Ovitz's dire predictions sounded biased and petty.

Then a near-final version of the picture was run for a random, sneak-preview audience, and the reaction started a small panic. Maybe Ovitz was right, after all. While the viewers had warmed to the picture as the story unfolded, the first big laugh moment was greeted with silence. A chagrined John Lasseter set his writing crew to work on figuring out something that would captivate the audience from the start.

Still, within the Disney hierarchy there were a few who thought *Toy Story* would win the hearts of audiences, among them Dick Cook, the studio's marketing chief. He put together a promotion budget that astounded Steve, John, and Ed Catmull—reportedly, a whopping $100 million.

A hundred million! More than three times what it had cost to produce the picture!

But with the studio sending out distinctly conflicting messages, it was hard to know whom to believe or what to expect.

All the uncertainty was soon to be resolved. The *Toy Story* premiere was held on a Wednesday, the day before Thanksgiving in 1995, at the lavish 1920s movie palace the El Capitan Theater on Hollywood Boulevard. A Hollywood premiere—even one held at midday—is a thing of legend, like stepping into the pages of *Vanity Fair*. Yet this one was a remarkably casual affair. Tom Hanks, the voice of Woody, looking almost overdressed compared to the rest of the crowd, came in a sports jacket over a plain white T-shirt. Buzz Lightyear's Tim Allen wore the Hollywood uniform of black leather jacket over a black shirt. Michael Eisner looked as if he had specially dressed down for the occasion as he sauntered by looking just a bit rumpled, the ultimate in nonchalance, in a blue-gray golfing shirt, his hands thrust in his pockets.

At the end of the picture, as the credits started to roll, the audience applauded enthusiastically. But what did that really mean? This was an

industry audience, by nature inclined to be polite and encouraging even if everyone hated the movie.

The Pixar team walked around in a daze until the reviews started to appear. The *Washington Post* Style section piled on the praise: "Must-see, must-talk-about, must-plan-to-see-again." It doesn't get much better than that. *Variety*, the industry newspaper that's so important because it's read by everyone in Hollywood and therefore shapes opinions that can affect people's careers, offered a prediction that made pulses race in Emeryville: "The film sports a provocative and appealing story that's every bit the equal of this technical achievement. It's a hard-to-beat combination that will translate into bountiful box office returns and provide [Disney] with a whole new stream of animated product with mass-market appeal."

By the time those reviews appeared, Steve Jobs had held his own premiere. For the occasion, he rented the Regency, a San Francisco movie theater that was a throwback to the elaborate movie palaces of the thirties and forties. He invited old friends, associates, and a who's-who of high-tech movers, shakers, and CEOs. In what seemed like a reversal of roles for the infamously casual Steve, the invitations said "creative black tie." Quite a few people dressed formally, but some took the phrase as an invitation to show their in-your-face response to the suggestion that Steve, who hardly ever showed up anywhere in anything but his standard uniform of black T-shirt, jeans, and New Balance running shoes, could expect them to get dressed up.

Steve surprised them all by putting on a tuxedo, offset by what one observer described as "a beige silk waistcoat." In fact, he and Laurene looked like the kind of Hollywood beautiful people whom the paparazzi stalk. She was magnificent in a classic, simple black evening dress, her blond hair hanging down her back, her skin tanned and glowing, as radiant as any supermodel. She's brilliant besides. It was enough to make any of the high-tech billionaires in the crowd sick with envy.

Ed Catmull took the risk of inviting his one-time closest companion, the man who had been his sidekick in laying the groundwork that made *Toy Story* possible: Alvy Ray Smith, who came to share in the moment despite his still painful animosity toward Steve Jobs.

Along with the rest of the audience, Alvy got a full dose of the Jobsian behavior that had made him flee the company. When the screening was

over, Steve took the stage. A reporter who was there, Julie Pitta of *Forbes*, described the moment to author Alan Deutschman: "This was Steve's return to center stage and, my, did he hog it. Steve was onstage by himself, and Silicon Valley was there to pay him homage. He was not going to share the stage with John Lasseter, who was kept very much in the background."

It was easy to ridicule Steve. But at that moment, he became what he had always imagined for himself, what he had once been, in his cover-boy days, but had lost.

Steve Jobs was an *icon*.