

Neal Gabler, *Walt Disney: The Triumph of the American Imagination*

Introduction

He was frozen. At least that was the rumor that emerged shortly after his death and quickly became legend: Walt Disney had been cryogenically preserved, hibernating like *Snow White* and *Sleeping Beauty*, to await the day when science could revive him and cure his disease. Though it is impossible to determine exactly, the source of the rumor may have been a tabloid named *National Spotlite*, whose correspondent claimed to have sneaked into St. Joseph's Hospital where Disney had expired, disguised himself as an orderly, picked the lock on a storage room door, and spotted Disney suspended in a metal cylinder. The story also surfaced in 1969 in a French publication, *Ici Paris*, which said it based its report on individuals close to Disney, and it was repeated in *The National Tattler*, an American scandal sheet, which added that Disney had instructed doctors to thaw him in 1975. Yet another supermarket tabloid, *Midnight*, under the headline "Walt Disney Is Being Kept Alive in Deep Freeze," quoted both a studio librarian who remembered Disney accumulating a vast file of filmed material on cryogenics and an acquaintance of Disney's who said that the producer was "obsessed" with these movies. A writer for the *Mickey Mouse Club* television show, produced under Disney auspices, seemed to corroborate the librarian's recollection by recalling that Disney had once asked him about cryogenics and that the writer had then had the studio library staff research the subject. Ward Kimball, a puckish animator at the studio, took some pride in keeping the rumor afloat. And Disney himself may have lent it credence. According to one account, just weeks after his death studio department heads were invited to a screening room with name-plates on the seats, then watched a film of Disney sitting at his desk and eerily pointing to and addressing each of them on future plans. He concluded by smiling knowingly and saying that he would be seeing them soon.

In truth, Disney's final destination was fire, not ice; he had been cremated and his ashes interred in a mausoleum in a remote corner of the Forest Lawn Cemetery in Glendale, California, not far from his studio. But the persistence of the rumor, however outlandish, testified not only to the identification of Disney with futuristic technology late in his life but to a public unwillingness to let go of him, even to the point of mythologizing him as an immortal who could not be felled by natural forces. Arguably no single figure so bestrode American popular culture as Walt Disney. By one estimate, in 1966 alone, the year of his death, 240 million people saw a Disney movie, a weekly audience of 100 million watched a Disney television show, 80 million read a Disney book, 50 million listened to Disney records, 80 million bought Disney merchandise, 150 million read a Disney comic strip, 80 million saw a Disney educational film, and nearly 7 million visited Disneyland. By another estimate, during his lifetime Disney's live-action films grossed nearly \$300 million and the feature animations just under \$100 million, when these were astronomical figures, and more than 60 million people had visited Disneyland. *The Saturday Evening Post* once called him the "world's most celebrated entertainer and possibly its best known non-political public figure," and *The New York*

Times eulogized him as "probably the only man to have been praised by both the American Legion and the Soviet Union."

But Walt Disney's influence cannot be measured by numbers or encomia. It can only be measured by how thoroughly he reshaped the culture and the American consciousness. Disney was protean. In the late 1920s he began reinventing animation, gradually turning it from a novelty that emphasized movement and elasticity of line into an art form that emphasized character, narrative, and emotion. In doing so, he also helped reinvent graphic design by introducing the soft, round, bold, colorful forms that decades later would be adopted and adapted by a vanguard of fine artists. The critic Robert Hughes credited him with inventing Pop Art itself, not only in the look he bequeathed but also in the convergence of high art and low that he effected. "[I]t happened," Hughes wrote, "when, in *Fantasia*, Mickey Mouse clambered up to the (real) podium and shook hands with the (real) conductor Leopold Stokowski."

Beyond his animations, Disney changed the shape of American recreation with his Disneyland park. Obviously there had been amusement parks before Disneyland, but they had been grab-bag collections of various rides, games, and shows. Disney reconceptualized the amusement park as a full imaginative experience, a theme park, rather than a series of diversions, and just as his animation revised graphic design, his park eventually revised urban design. Detractors called the effect "Disneyfication," meaning the substitution of a synthetic world for a real one, but the urban planner James W. Rouse commended Disneyland as the "greatest piece of urban design in the United States" for the way it managed to serve its function and satisfy its guests, and architecture critic Peter Blake wrote, "It seems unlikely that any American school of architecture will ever again graduate a student without first requiring him to take a field trip to Orlando, [Florida]," the site of Walt Disney World Resort, the East Coast sequel to Disneyland. In time Disneyland, with its faux environments and manipulated experiences, would become a metaphor for a whole new consciousness in which, for better or worse, the fabricated was preferred over the authentic and the real could be purged of its threats. As Robert Hughes put it, "[H]is achievement became a large shift in the limits of unreality."

Disney's influence also impregnated the American mind in subtler, less widely recognized ways. As he reinvented animation and amusement, he changed Americans' view of their own history and values. In live-action films like *So Dear to My Heart*, *Old Yeller*, and *Pollyanna*, he refined and exploited a lode of nostalgia that became identifiable enough to be called "Disneyesque," and in others like *Davy Crockett*, *Westward Ho the Wagons!*, and *Johnny Tremain* he fashioned an American past of rugged heroes and bold accomplishment that for generations turned history into boyhood adventure. By the end of his life it was the saccharine values of the nostalgic films and the sturdy patriotism of the historical ones as much as the cartoons that one associated with Disney and that made him, along with Norman Rockwell, the leading avatar of small-town, flag-waving America. At the same time, however, his forward-looking television programs depicting the future helped shape attitudes about technological

change, and NASA acknowledged that Disney's early drumbeating for its program was instrumental in generating public support for space exploration. It was Disney, too, who created Tomorrowland at his Disneyland theme park and collaborated with Monsanto on a House of the Future attraction there, and Disney who advanced the ideas of monorails, "people movers," Audio-Animatronic robots, and other marvels, even to the point of designing an entire city that would, had it been built, have incorporated the latest in technology and urban planning. It made Disney at once a nostalgist and a futurist, a conservative and a visionary.

Then there was his effect on nature and conservation. By anthropomorphizing animals in his cartoons, Disney helped sensitize the public to environmental issues; with *Bambi* alone he triggered a national debate on hunting. Later when, basically for his own curiosity, he commissioned a husband-and-wife filmmaking team to shoot footage of a remote Alaskan island and then in 1948 had the film edited into a story of the seals who lived and bred there, *Seal Island*, he essentially created a new genre, the wildlife documentary, and though he would be sternly criticized in some quarters for imposing narratives on nature and turning animals into characters, his films may nevertheless have played a greater role than anything else in popular culture in educating the public on conservation and building a constituency for it.

Finally, there were Disney's accomplishments as an entrepreneur, albeit a reluctant one. He was the first motion picture mogul to realize the potential of television as an ally rather than an adversary, and his decision to make a series for the American Broadcasting Company opened the way for a rapprochement between the large screen and the small one. He was also the first to bundle television programs, feature animation, live-action films, documentaries, theme parks, music, books, comics, character merchandise, and educational films under one corporate shingle. In effect, as one observer put it, he created the first "modern multimedia corporation" and showed the way for the media conglomerates that would follow. One critic of Disney's even accused him of having dragged corporatism, in the form of the "precise, clean, insipid, mechanical image," into the daily lives of Americans and advised, "Throw him a kiss every time you get a computer letter."

Whenever someone manages to implant himself in American culture and the American psyche as deeply as Walt Disney did, analysts naturally look for explanations. In Disney's case they have pointed to the seeming innocence of his work, its gentle reassurance, its powerful sentimentality, its populism, its transport to childhood, its naive faith in perseverance and triumph, even its appeal to atavistic images of survival in which, by one analysis, Mickey Mouse's circular shape subliminally summons breasts, babies, and fruit. One scholar has attributed Disney's popularity to his having traversed the distance between the "sentimental populism" of the Great Depression with its nudging critique of the prevailing social order and the "sentimental libertarianism" of the Cold War era that came to embrace the social order. Taking a different tack, the novelist John Gardner, a Disney advocate, located in Disney's work a lightly secularized

Christian theology of hope and beneficence in which "God has things well under control" and life is fundamentally good. Essentially, as Gardner saw it, Disney had reinterpreted Christianity for mass culture.

There are certainly elements of all of these appeals in Disney's work, and its enormous popularity is undoubtedly the result of a combination of factors—indeed, of Disney's knack for splicing many disparate and even contradictory strains together. On the one hand, a Disney scholar could impute to Walt Disney a major role in the creation of a white, middle-class, Protestant ideal of childhood that turned American offspring in the 1950s into disciplined, self-sacrificing, thrifty, obedient consumers. On the other hand, another Disney scholar, citing the questioning of authority, the antagonism toward the moneyed class, the emphasis on personal liberation, the love of nature, and the advocacy of tolerance in his films, could credit him as the "primary creator of the counterculture, which the public imagination views as embracing values that are the antithesis of those that the body of his work supposedly communicated to children."

But if one source of Disney's magic was his ability to mediate between past and future, tradition and iconoclasm, the rural and the urban, the individual and the community, even between conservatism and liberalism, the most powerful source of his appeal as well as his greatest legacy may be that Walt Disney, more than any other American artist, defined the terms of wish fulfillment and demonstrated on a grand scale to his fellow Americans, and ultimately to the entire world, how one could be empowered by fantasy—how one could learn, in effect, to live within one's own illusions and even to transform the world into those illusions. "When You Wish Upon a Star," the song Disney borrowed from *Pinocchio* for his television theme, was his anthem and guiding principle. The key to his success was, as the journalist Adela Rogers St. John put it, that he "makes dreams come true," or at least gave the impression he did, and that he had "remolded a world not only nearer to his heart's desire, but to yours and mine." In numerous ways Disney struck what may be the very fundament of entertainment: the promise of a perfect world that conforms to our wishes.

He achieved this in part by managing, almost purely by instinct, to tap into archetypes that resonated with people of various ages, eras, and cultures. One of his greatest gifts was in finding the elemental and the essential of virtually every form in which he worked—its genetic code. Whether it was his fairy tales or his boy's adventures or his castle or Main Street or the Mark Twain Riverboat in Disneyland, each seemed to have been refined into the fairy tale, the boy's adventure, the castle or Main Street or riverboat of our mind's eye. In an idealized world where wish fulfillment prevailed, Disney had consistently concretized the ideal and provided the pleasure of things made simple and pure the way one imagined they should be, or at least the way one imagined they should be from childhood. He had Platonic templates in his head.

Others, virtually everyone in entertainment, attempt to tap this same reserve, but Disney understood wish fulfillment from the inside, which may be why his own longings connected so powerfully to his audience's. During a peripatetic childhood of material and emotional deprivation, at least as he remembered it, he began drawing and

retreating into his own imaginative worlds. That set a pattern. His life would become an ongoing effort to devise what psychologists call a "parcosm," an invented universe, that he could control as he could not control reality. From Mickey Mouse through *Snow White and the Seven Dwarfs* through Disneyland through EPCOT, he kept attempting to remake the world in the image of his own imagination, to certify his place as a force in that world and keep reality from encroaching upon it, to recapture a sense of childhood power that he either had never felt or had lost long ago.

It was this attempt, in fact, as much as the fairy tales he used for inspiration, that forged the bond between Disney and childhood, a bond he frequently disavowed by insisting that his films were not made for children. Whether in his movies or in his theme parks, Disney always promised a fantasy in which one could exercise the privileges of childhood—privileges he never abandoned in his own life. This will to power also explained why animation was his preferred medium. In animation one took the inanimate and brought it to life, or the illusion of life. In animation one could exercise the power of a god.

No doubt because he worked in what was regarded as a juvenile idiom, and because his films seemed naïve, unselfconscious, and unpretentious, the young Walt Disney was regarded in most circles as a kind of folk artist. In the 1930s, when he became a celebrity virtually overnight, intellectuals frequently compared him to another popular artist, Charlie Chaplin, and several, including Thornton Wilder, went so far as to say that Chaplin and Disney were the only true geniuses that the movies had produced. Still, there was always something in Disney that pegged him not just as a populist but as peculiarly American, and though an early biography of him was subtitled *An American Original*, he was less original in many respects than quintessential. He had been born in the Midwest in the very heart of the country at the turn of the century and at the fulcrum of an expiring agricultural nation that looked backward to an idyllic past and an aspiring industrialized one that looked forward to a technological future, and he had a foot in each. His childhood had even been divided between the country and the city. An American Everyman, he lived the American experience and seemed to embody it in his doggedness, his idealism, his informality, and his lack of affectation, perhaps above all in his sudden rise from poverty and anonymity to the summit of success. "[H]e emerged from the very heart of the people," one admirer rhapsodized. "Only so was it possible for him to respond to our subtlest moods." Another remarked that "[o]f all the activists of public diversion, Uncle Walt was the one most precisely in the American mainstream." The synchronicity between Disney and America would become his brand. His imagination formed a double helix with the American imagination.

Obviously Disney's work had universal appeal, but in America, with its almost religious belief in possibilities, his urge to wish fulfillment was especially resonant. In both Disney's imagination and the American imagination, one could assert one's will on the world; one could, through one's own power, or more accurately through the power of one's innate goodness, achieve success. Indeed, in a typically American formulation, nothing but goodness and will mattered. Disney's best animations—*Snow White and the*

Seven Dwarfs, *Pinocchio*, *Bambi*, and *Dumbo*—were archetypal expressions of this idea. In large measure, they were about the process of a child making his or her claim upon the world, about the process of overcoming obstacles to become whatever he or she wanted to be. Similarly, in both Disney's imagination and the American imagination perfection was seen as an attainable goal. In a world that was often confusing, dangerous, and even tragic, a world that seemed beyond any individual's control, Disney and America both promised not only dominance but also improvement. Disneyland was just a modern variant on the old Puritan ideal of a shining City on a Hill, as Disney's Audio-Animatronic robots were just a variant on the American dream of making oneself anew.

The helix between America and Disney was especially tight in the anxiety-ridden Depression America of the 1930s, when his films seemed to capture and then soothe the national malaise. Virtually everyone interpreted *Three Little Pigs* as a Depression allegory, and many others saw in Mickey Mouse's pluck an intrepid American spirit. But among American critics the line between naive populism and cloying sentimentality proved to be thin. Already by the end of World War II Disney's artistic reputation was in decline, and intellectuals who had been swooning just a few years earlier over his innocence and artless artfulness now complained that he had lost his touch and become a mass artist rather than a folk artist. By the end of his life, though his iconic status as America's favorite uncle was probably more unshakable than ever, his artistic status had plummeted. What had once been hailed as an unerring sense of the American temper was now attacked by critics for having transmogrified into aesthetic demagoguery and vulgarization. As one disgruntled animator put it, "Walt Disney had the innate bad taste of the American public."

In the end he was widely identified with cultural degradation—the "rallying point for the subliterate of our society," as critic Richard Schickel wrote. Almost no one took him seriously any longer, except for the indiscriminating hordes who loved his work, and one could almost have divided the country between those who subscribed to the Disney vision and those who abhorred it. "A few years ago when you mentioned Walt Disney at a respectable party... the standard response was a head-shake and a groan," John Gardner wrote in 1973. "Intellectuals spoke of how he butchered the classics—from *Pinocchio* to *Winnie the Pooh*—how his wildlife pictures were sadistic and coy, how the World's Fair sculptures of hippopotamuses, etc., were a national if not international disgrace." The bill of indictment was, indeed, a long one. He had infantilized the culture and removed the danger from fairy tales in the process of popularizing them for a mass market, providing, in novelist Max Apple's words, "the illusion of life without any of the mess." He had promoted treacherous values that seemed anachronistic and even idiotic in a complex, modern, often tragic world and that defined him as a cultural and political troglodyte. He had usurped each person's individual imagination with a homogenized corporate one and promoted conformity, prompting one critic to declare, "The borders of fantasy are closed now." Like a capitalist Midas, he had commercialized everything he touched, reducing it all, in another antagonist's view,

"to a sickening blend of cheap formulas packaged to sell... One feels our whole mass culture heading up the dark river to the source—that heart of darkness where Mr. Disney traffics in pastel-trinketed evil for gold and ivory." And at the same time that he was commercializing his own country, he was regarded by his detractors as perhaps the primary example of America's cultural imperialism, supplanting the myths of native cultures with his own myths just as he had supplanted the imaginations of his audience.

All of this antagonism was aimed at Disney in his role as studio head, but in his later years, and especially after his death, his personal image, at least among intellectuals, underwent a similar if somewhat more gradual transformation from beloved naïf to avaricious corporate kingpin and general villain. Much of this change was politically inspired. Ever since a cartoonists' strike in 1941 that wracked the studio and shattered its owner's utopianism, Disney had grown increasingly conservative, aligning himself with red-baiting anti-Communists and with the most reactionary elements of the Republican Party, thus putting himself in the political crosshairs. Whispered accusations of anti-Semitism and racism clearly eroded his image. But much of the criticism was also culturally inspired. His long identification with small-town, conformist America, which had been one source of his popularity, became a liability in the 1960s, when that America was itself increasingly under attack from intellectuals and political activists and was itself increasingly identified not with America's sinewy strength but with her prejudices. Disney became a symbol of an America facing backward—politically, culturally, and artistically.

One of the most important flash points in both crystallizing and advancing this revisionist view was Richard Schickel's 1968 critical study, *The Disney Version*, which portrayed Disney as mercenary and mendacious, his entire life "an illusion created by a vast machinery," so much so that even his own signature, used as the company's logo, had to be manufactured for him. (In truth, Disney's personal signature was far more flamboyantly loopy than the modified corporate version.) "Disney was a callous man, oblivious to patterns inherent in nature, art, literature," a critic wrote in an approving review of Schickel's book, delivering what rapidly became the standard intellectual verdict on Hollywood's chief fantasist. "He had a magic touch, but it turned things into gold, not art. He lacked perception and sensitivity for genuine artistic creativity, and his compulsion to control made him no respecter of the integrity of the works of others." Another biographer, drawing on the deep hostility that Disney now evoked among intellectuals, accused him of being everything from the illegitimate son of a Spanish dancer to an alcoholic to a bigot to an FBI informant. The book was subtitled *Hollywood's Dark Prince*.

By the 1950s Disney himself was well aware that as a producer he had headed up the river to the heart of commercial darkness and that as a person he had allowed himself to become lost in the corporate haze. He had created the studio; then the studio, with his complicity, created him, making him, he fully understood, as much a commodity as a man—the very sort of diffident, genial, plainspoken, unprepossessing, and childishly enthusiastic character who would have produced Walt Disney movies.

Essentially, he had become his own parcosm. Though he actually possessed all of those qualities, they were now simplified, like his signature, into an image and brand. He told one prospective employee that the studio was in the business of selling the name "Walt Disney." To another associate he commented, "I'm not Walt Disney anymore. Walt Disney is a thing. It's grown to become a whole different meaning than just one man."

Though Disney was anything but a dark prince, neither was he exactly the affable illusion that had subsumed him. For all his outward sociability, associates found him deeply private, complex, often moody, and finally opaque. No one seemed to know him. "He was a difficult man to understand," said Ben Sharpsteen, who worked for him in various capacities from the late 1920s on. "He never made his motives clear.... When I added up thirty years of employment, I found I understood him less at the end." Bill Peet, another longtime studio hand, wrote, "I do believe I knew Walt about as well as any employee could know him," then added, "even though he was never the same two days in a row." "I've always said that if you get forty people in a room together," Walt's nephew Roy E. Disney told an interviewer, "and ask each one of them to write down who Walt was, you'd get forty different Wals."

This book is an attempt to penetrate the image and decipher the mystery of Walt Disney—to understand the psychological, cultural, economic, and social forces that acted upon him and led to his art and his empire. And because Disney was so deeply embedded in the American psyche and scene, understanding him may also enable one to understand the power of popular culture in shaping the national consciousness, the force of possibility and perfectionism as American ideals, the ongoing interplay between commerce and art, and the evolution of the American imagination in the twentieth century. In short, to understand Walt Disney, one of the most emblematic of Americans, is to understand much about the country in which he lived and which he so profoundly affected.

Go-Getter (pp. 54–55)

Based primarily on familiar comic strips, early animations had no more narrative refinement than a day's installment of those strips—no real attempt to tell a story, much less create an arc. Usually when the animators began drawing, they did not even have any narrative master plan to follow. "The scenario would probably be on a single sheet of paper," Dick Huemer, an animator who had worked at Barré's studio back in 1916, said, "without any models, sketches, or anything; you made it up as you went along." Some twenty years after the introduction of animation, it was still largely its novelty that held the appeal, though that appeal was waning. "We got very few laughs," Huemer added. "I can remember taking my family to see some bit of animation I was particularly proud of, and just as it went on, somebody behind me said, 'Oh, I hate these things.'"

But if very little visual or narrative craft was involved, animation nevertheless had a powerful subtext that would slowly emerge and at least subliminally resonate with the public, a subtext of which the first animators themselves may not even have been aware. Most had come to animation as a lark—typically a way to take advantage of

the movie boom for financial gain. Their "distinctive features," as one eminent animation historian described this pioneering group, were a "background in journalism, a compulsion to sketch, 'workaholic' tendencies, and a well developed but idiosyncratic sense of humor." Except for the journalism experience, for which he had once so achingly yearned, Walt Disney certainly fit this characterization. But Walt's growing attachment to animation seemed to be impelled by something beyond the inertia from print to film that ostensibly motivated so many other animators, or the prospect of money, or the technological appeal of the medium, or the possibility of success, or even the attention it might get him—all of which may have been the initial lures. Walt Disney also had a psychological connection to animation, a connection forged by his childhood experiences.

The process of animation was a process of giving life, of literally taking the inanimate and making it animate. It was, at base, a hubristic process in which the animator assumed and exercised godlike control over his materials, which was why it also offered a feeling of empowerment to its viewers who sensed the control. In Walt Disney's case the surge of empowerment was so great one might even have concluded that animation took the place of religion for him, since in his adulthood he showed little or no interest in formal religion and never attended church. Indeed, the animator created his own world—an alternative reality of his imagination in which the laws of physics and logic could be suspended. Though Walt Disney could never fully articulate why he was attracted to animation, falling back instead on vague generalities, it always had these two great and unmistakable blandishments. For a young man who had chafed within the stern, moralistic, anhedonic world of his father, animation provided escape, and for someone who had always been subjugated by that father, it provided absolute control. In animation Walt Disney had a world of his own. In animation Walt Disney could be the power.

The Mouse, pp. 115–119

Since he had no alternative plan, Walt had little choice but to keep forging ahead, making new Mickeys and depleting his treasury. But the same week he received the rejection from Metro, he got another brainstorm that in its own way was just as monumental as the invention of Mickey himself. Lillian recalled that it happened during a conversation between Roy and Walt, when Roy was again dejected over Mickey's faltering future. Walt suddenly blurted, "We'll make them over with sound." Roy had a different version. He said that they had screened a cartoon after *The Jazz Singer*, the Al Jolson film that is credited with being the first motion picture to synchronize the spoken word and the image. "That's it. That's it," Walt allegedly said. "It looks realistic, it'll be realistic. That's what we've got to do. Stop all these silent pictures." As Wilfred Jackson remembered it, Walt first broached the possibility to his staff at a gas meeting for the second *Mickey Mouse*, which most likely was held on May 29, 1928, at Walt's house. Everyone was immediately energized, which may have been part of Walt's calculation to

keep his crew's spirits from flagging. Jackson said he was so excited by the idea of a sound cartoon that he could not sleep that night.

Walt, however, was not the only animator thinking of sound. *The Jazz Singer*, after all, which was acclaimed as having ushered in the sound era, had premiered the previous October, and the Fleischers had already worked with a sound system called DeForest Phonofilm, while Paul Terry had a synchronized sound film in production with the RCA Photophone sound process. Even Mintz and Winkler were planning a sound project. But deploying sound was not just a matter of slapping a sound track onto a silent cartoon, even though that was precisely what Walt would later do with *Plane Crazy*. In the first place, there were psychological hurdles to overcome in the very notion of talking animations. Though audiences expected to hear people talk or sing, they were not initially accustomed to hearing voices from drawings. "Drawings are not vocal," Wilfred Jackson said. "Why should a voice come out of a cartoon character?" Animators were concerned that it would seem unnatural, peculiar, and off-putting, which was one reason why Walt insisted that his sound had to be realistic—in Jackson's words, "as if the noise was coming right from what the character was doing."

In the second place, there was the daunting technical matter of how one synchronized the drawings with the sound—an area in which no one, Walt Disney included, had any expertise. "Damn it, I know how fast film goes," Jackson overheard Walt griping one day, "but how fast does music go?" Jackson was still among the lowest in the Disney hierarchy, but he popped his head in the door, said his mother was a piano teacher, and suggested that Walt use a metronome to determine the number of frames of animation per beats of music. In short order Jackson devised a "dope sheet," later called a "bar sheet," that indicated the number of measures in each piece of musical accompaniment and then related the cartoon actions to the music. "We could break down the sound effects so that every eight frames we'd have an accent, or every sixteen frames, or every twelve frames," Les Clark said. "And on that twelfth drawing, say, we'd accent whatever was happening—a hit on the head or a footstep or whatever it would be, to synchronize the sound effect to the music."

It was the prospect of sound now that motivated the staff—the prospect of doing something no one had done. They finished animating the second Mickey, *The Gallopin' Gaucho*, a silent that was already in production when Walt hatched his plan, then eagerly moved on to the third cartoon—the sound cartoon. Just as Walt had spoofed Lindbergh in *Plane Crazy* and swashbuckler Douglas Fairbanks in *The Gaucho*, he decided to spoof comedian Buster Keaton's Steamboat Bill, Jr. for *Steamboat Willie*. Eager to test the proposition of sound, once again the staff worked quickly. Iwerks said that they resolved the story in a single night, and within weeks he had animated a musical test sequence of Mickey/Willie at the steamboat's wheel, tooting the pipes and whistling. Eager to see whether sound would augment the cartoon as he had anticipated, Walt had the scene inked, painted, and filmed even before the rest of the animation was completed, then recruited Jackson, who was the only member of the staff with any musical talent, to play

"Turkey in the Straw," one of Jackson's favorite tunes, and "Steamboat Bill," Walt's choice, on the harmonica.

One night, probably in late June, at about eight o'clock, Walt had a projector set up in the yard behind the studio bungalow so that the whirring of the machine would not contend with the accompaniment. The image was thrown through a window and onto a bedsheet hung in a large room off of Walt's office where the backgrounds were drawn. He stationed Jackson with his harmonica, animator Johnny Cannon, who could make sound effects with his mouth, and several other staff members behind his office door, which had a window in it that allowed them to see the back of the bedsheet. When Roy started the projector, Jackson played his music, Cannon made his sounds, and the others banged pencils against spittoons that served as gongs—all synchronized to Mickey's actions. They performed repeatedly so that each of the participants could witness the effect for himself. And with an appreciation for the magnitude of the event—the fate of the studio rested on the outcome—they had an audience. Walt had invited Lillian, Edna, Iwerks's wife Mildred, Hazel Sewell, and Jackson's girlfriend, later wife, Jane Ames, to watch what he hoped would be a historic occasion.

"I never saw such a reaction in an audience in my life," the usually taciturn Iwerks would recall, citing encore after encore. "The scheme worked perfectly. The sound itself gave the illusion of something emanating directly from the screen." Walt was exultant. He kept saying, "This is it, this is it! We've got it!" By the time the show finally ended, it was two in the morning, and the guests, hearing Jackson play his two tunes and hearing the staff hit the spittoons again and again, had gotten bored and drifted into the hallway, which only antagonized Walt. "You're out here talking about babies and we're in here making history," he reportedly grouched. Twerks said he had never been so exhilarated, claiming years later that "nothing since has ever equaled it." It was "real intoxication," and like Walt, he said he knew they had been vindicated. "It was terrible, but it was wonderful!" Walt would say, criticizing the quality of the cartoon but appreciating the significance of the showing. "And it was something new!" which was, of course, the main point for the struggling studio. The staff were so jubilant that they reassembled at the studio at six in the morning, just a few hours after they had left, to finish the cartoon.

It would take another four weeks, during which Walt and Roy refinanced their Hyperion mortgage to raise money. On July 14 Walt requisitioned sheet music, and by month's end they held a second preview like the first, only this time of the entire cartoon. In the meantime Walt had become practically messianic about sound. He had his business cards reprinted. "Sound cartoons," they now read. As for *Steamboat Willie*, the eminent animation historian John Canemaker called it the "*Jazz Singer* of animation" for the effect it would have. After the loss of Oswald and most of his staff, Walt had, in a few short months, reinvented his studio and, he thought, the cartoon itself. Now all he had to do was find a way to get the sound and music on the film itself so that he could get a distributor to release the cartoons before his money was exhausted.

The Mouse, pp. 135–136

The biggest difference, however, between the Disney studio and the animation studios in New York was not in preparation or specialization; it was in expectation. Walt Disney had to be the best. As he had with the Alices and the Oswalds, though with indifferent results, Walt insisted upon excellence, and Sharpsteen admitted that he soon had some misgivings about joining the studio when he came to realize how high Walt's standards were. Assigned what he believed was a run-of-the-mill scene in one of the early Mickeys, he saw that Walt did not regard it or any scene that way. "In Walt's estimation, everything that was done had to be executed with a great deal of thought toward finesse in order to make it better." It could be a struggle convincing men who had spent their careers thinking of animation as a throwaway that they could and must accomplish something better. "I have encountered plenty of trouble getting my new men adjusted to our method of working," Walt complained to Giegerich that April, "but things are clearing up now and it looks like we are going to be able to sail along smoothly from now on."

Part of Walt's secret was that in insisting on quality from individuals of whom it had never been required, he inspired commitment. "We'd hate to go home at night," Iwerks recalled, "and we couldn't wait to get to the office in the morning. We had lots of vitality, and we had to work it off." Though only a short time earlier the atmosphere at the studio had been dismal, the success of the Mickeys lifted spirits. The animators would now play pranks on one another—pouring water on a chair as someone was about to sit in it or putting cheese on the light under a colleague's animation board or Art Gum eraser shavings in his pipe tobacco. "But all the horseplay and jokes," Iwerks said, "never got in the way of the work. We all loved what we were doing and the enthusiasm got onto the screen." Indeed, when a reporter glowingly described the carefree atmosphere at Hyperion, Walt actually took offense, griping to Giegerich that "one would gather we are nothing but a happy-go-lucky bunch of fellows without any system or organization about us, and that all I do is sit on my fanny and pass out the checks to the fellows."

There was something else too that gave the Disney studio an esprit and sense of fraternity: Walt's own informality. Freed from the constant demands and financial tensions of the Mintz era, he was a different man. He prided himself on being one of the guys, even cultivated it. "We haven't any president or any other officers," he told a visiting reporter proudly. "In fact, we are not even incorporated. I guess you couldn't call us a company. We voice our opinions and sometimes we have good old-fashioned scraps, but in the end things get ironed out and we have something we're all proud of." Most of the employees even had a key to the studio's front door. Walt could still be demanding and caustic, especially with longtime associates like Iwerks, but having learned from his experience with the mutineers who detested him, Walt drew closer to his animators, stopping by their desks to talk not just about their work but about their

interests and making suggestions to them without seeming overbearing. "The men loved it," Iwerks said, "and they all responded."

But as smoothly as Walt had the new operation running, his pursuit of excellence eventually ran up against an intractable reality that always seemed to bedevil him: money. Quality was expensive, and there never seemed to be enough money to support it. The early Mickeys cost between \$4,180 (*Mickey's Follies*) and \$5,357 (*The Karnival Kid*) to produce, which didn't include the royalties to Powers⁵⁵ for the Cinephone system, or the onerous yearly \$13,000, or the debt to record *Steamboat Willie*, which the Disneys were still paying off nearly a year later. By May, Walt had received nearly \$40,000 in fees and rentals from Powers, but he had to pay distribution costs and expenses, and had to retire loans, leaving him virtually nothing, especially since he had expanded his staff and was paying the new animators well. "The money has been coming in at a pretty fair rate," Roy determined later that summer, saying that Willie alone had grossed \$15,000 and might eventually gross \$25,000, "the question is what are the expenses—and they are enough you can bet." At the same time Walt was carrying the expenses of the recording studio, which despite his sunny predictions had yet to turn a profit and was draining money. He had, in fact, tried to borrow \$2,500 from Powers to help keep it afloat.

Parnassus, pp. 285–286

Given the sudden emphasis on feature animations, it was natural to think of *Snow White* as the beginning of a new era in the studio, a golden age of cartoons in which the values were raised and the studio really was transformed into the communal guild of which Walt had dreamed. The truth as it turned out was something else. *Snow White* may have been less a beginning than an end—of old ways of crafting cartoons and running the studio. For one thing, with the feature's success had come a vast expansion in the workforce, as Walt braced for the new films to come. Nearly eight hundred employees were added to the payroll in the two years following *Snow White*, but because Walt had been slow to advance feature production as he awaited the results of that picture, he wound up creating a glut. Many of the new employees simply sat doing nothing through most of 1938. Sharpsteen didn't want to work with them because they weren't experienced enough. Ham Luske tried to find them assignments, but he remembered it as a "horrible deal."

Because there were so many new employees and because the studio was being converted virtually overnight from one that was dedicated to producing six- and seven-minute cartoons to one that was dedicated to producing seventy- and eighty-minute features, chaos began to descend. *Snow White* had been a long, deliberate labor of trial and error, but it was *sui generis*; it provided little guidance in making

⁵⁵ Patrick Powers was an early sound-film entrepreneur (Cinephone) who helped Disney launch Mickey Mouse. Disney looked up to Powers as a financial and strategic superior. Powers took advantage of Disney's naïvety and became an adversary who attempted to undermine Disney's studio.

features on a regular schedule, which was what the studio needed to do now. By Walt's own admission, the two years after *Snow White* were "years of confusion, swift expansion, reorganization." And he described the training of the new recruits as being "fitted into a machine for the manufacture of entertainment which had become bewilderingly complex"—a far cry from the heady, messy, lurching collaboration on *Snow White*. As he would later tell his employees, "The only way to have a [commanding] position in the field is to have an organization so that there will be no weak sisters coming from the plant." But for all Walt's earlier fitful attempts to routinize the process of animation and for all the increasing specialization, the studio had never really been a machine. Now he had to try to make it one.

Parnassus, pp. 296–298

With *Snow White* winding down at the time, *The Sorcerer's Apprentice* seemed to strike a nerve with Walt. If the former was the story of Walt's youth, the latter was the story of his new power and his vexed relationship to it. Bill Tytla would draw the sorcerer with Walt's own famously cocked eyebrow and had named him Yen Sid, "Disney" backward, to make the connection between the sorcerer's magic omnipotence and Walt's. In the animation universe Walt Disney did control the elements as Yen Sid did in the cartoon. He was the master, the only one with the "whole equation" in his head, while his minions were the apprentices, helpless without him. But another possible interpretation may have been in Walt's own mind as he awaited the reception to *Snow White*: that he was not the sorcerer but was himself the hapless apprentice who dons the sorcerer's hat and summons the elements only to discover that they overwhelm him. As a continuity for *The Sorcerer's Apprentice* described it, "It is the picture of the typical little man and what he would like to do once given complete control of the earth and its elements." This turned *The Sorcerer's Apprentice* into a portent for the studio. (With war brewing in Europe and Asia, it may have also turned it into a portent for the world generally.) Once *Snow White* was completed, Walt must have sensed that the studio no longer served Walt Disney; rather, Walt Disney increasingly served the studio, unable to manage the forces that he had unleashed. In effect, the cartoon, which was itself a form of hubris, might be seen as Walt's own nightmare in which he is defeated by his own hubris.

But if Walt was using *The Sorcerer's Apprentice* to express his own concerns, he had another, more prosaic incentive for making the short: his dedication to one of his most stalwart supporters. Actress Helen Hayes recalled visiting the studio in 1937 and Walt showing her a new Mickey Mouse cartoon. "Of course you know Donald is the big thing now," Walt told her, "but it won't last. Mickey is forever. He'll have his moments in the shade, but he'll always come out in the bright lights again." In truth, if anything the shade had grown even darker for Mickey Mouse. The early Mickey Mouse had been, as John Updike described him, "America as it feels to itself—plucky, put-upon, inventive, resilient, good-natured, game." But as he had become increasingly domesticated, he had also become increasingly a cipher. "Our dilemma became one of trying to find new, logical material for Mickey, more sophisticated material, if you will," Ward Kimball

reflected. "As we got more personality and character into the other cartoons, it became more and more difficult to cope with Mickey... Mickey was really an abstraction. He wasn't based on anything that was remotely real." Animator Friz Freleng agreed: "Mickey Mouse was a nothing, really. After the novelty of animation was over, there was nothing left but a black-and-white drawing moving around. You really don't associate yourself with that character at all." Directors and animators began referring to him as a "Boy Scout" in reference to his lack of spikiness – his blandness.

Walt was not willing to surrender Mickey so easily. He asked Jack Kinney to develop Mickey narratively into something more than a supporting player to Donald Duck, and he charged Fred Moore and Ward Kimball (by one account Moore acted on his own initiative) with redesigning Mickey to make him look more appealing, which was Moore's stock in trade. As Thomas and Johnston reported it, Walt watched footage of Moore's newly redesigned Mickey in the sweatbox, demanding that it be run repeatedly until he finally paused, turned to Moore, and said, "Now that's the way I want Mickey to be drawn from now on!" Moore had made Mickey softer. Where the mouse had previously been constructed as a series of circles, which made him easy to draw, Moore now suggested that the "body is to be drawn as somewhat pear shape, fairly short and plump" so that Mickey had more curve and less rigidity. He also further enlarged the head and shrank the body. "Mickey is cuter when drawn with small shoulders with a suggestion of stomach and fanny and I like him pigeon-toed," he told an action analysis class.

Mickey gained mass and weight—"counter movements, counter thrusts," in Kimball's words. His cheeks began to move with his mouth, and Kimball himself converted Mickey's eyes from large, inexpressive black pupils to ovals surrounding pupils. All of these changes made Mickey even more childlike and less rodentlike, which had always been the direction of his evolution anyway. Though children's heads obviously become smaller in relation to their bodies as they grow, evolutionary biologist Stephen Jay Gould observed that Mickey had "traveled this ontogenetic pathway in reverse": the animators infantilized his appearance by enlarging his head, lowering his pants line, and covering his legs to shorten them, thickening his snout and moving his ears back on his head to make the forehead larger and more rounded.

This new Mickey was indisputably cuter, as Moore had said, than the old Mickey, and cute seemed to be the order of the day. "I think people think of Mickey as a cute character," Walt would tell a story meeting after the redesign. "[H]e is a cute character—and he should be more likable in everything he does." But in making him cuter and more of a child, the animators had removed the last remnants of his rude energy—"his vitality, his alertness, his bug-eyed cartoon readiness for adventure," in Updike's words. The old Chaplinesque devilry was completely expunged. (In truth, Chaplin had lost most of his devilry too.) If he became more expressive, he had less to be expressive about. As Updike wrote, referring specifically to Mickey's new eyes but equally applicable to the entire redesign, "It made him less abstract, less iconic, more merely cute and dwarfish."

Though he had approved the redesign, Walt understood that it had not solved the Mickey problem. (Years later he would say of Mickey's demise, "We got tired & we had new characters to play with.") Mickey needed something more to survive. He needed a vehicle. Ben Sharpsteen denied that Walt had decided to make *The Sorcerer's Apprentice* because he thought it was a way to rehabilitate Mickey, saying that Dopey had been considered initially. Still, apparently very early in the process, storyman Chester S. Cobb had been assigned to investigate possibilities for the film and concluded, "It would be difficult to invent an interesting apprentice—a kid wouldn't be comic enough." But, Cobb went on, "Mickey or the Goof [referring to a subsidiary character] in a good imaginative atmosphere would have a lot more audience value as the apprentice than any symphony-type character we might invent." Stokowski wasn't persuaded. "What would you think of creating an entirely new personality for this film instead of Mickey?" he wrote Walt in November 1937. "A personality which could represent You and Me—in other words, someone that would represent in the mind and heart of everyone seeing the film their own personality, so that they would enter into all the drama and emotional changes of the film in a most intense manner." It was one of the few times Walt disregarded a Stokowski suggestion. Walt did think of Mickey Mouse as "you and me," and in a last-ditch rescue mission, he had decided that the sorcerer's apprentice would be his alter ego.

City on a Hill, pp. 479–483

It had always been about control, about crafting a better reality than the one outside the studio, and about demonstrating that one had the capacity to do so. That was what Walt Disney provided to America—not escape, as so many analysts would surmise, but control and the vicarious empowerment that accompanied it. And that was what America seemed to want from him. Though the immediate postwar period had been triumphant for the country, the mood quickly turned from euphoria to uncertainty—what historian William Leuchtenberg would describe as a "troubled feast" in his account of the time. The feast was the nation's unprecedented economic growth, fueled largely by military spending. In the ten years after the war wages rose and working hours decreased, home ownership jumped, higher education was made available to returning veterans, and general consumption soared. All of which led sociologist Seymour Martin Lipset to declare, "The fundamental problems of the industrial revolution have been solved."

But despite the hopefulness, a general sense of malaise wafted through the nation. In part it was a result of the Cold War between the capitalist and Communist blocs, colder still after the Soviet Union detonated an atomic bomb in August 1949. Americans understandably felt they were threatened from without by Russia. They would also come to feel that they were threatened from within by a cadre of Communists and Communist sympathizers who had wedged their way into the government—the alleged fifth columnists that Senator Joseph McCarthy would ride to headlines. But it wasn't just the Communist threat to government that led to anxiety. No

less an authority than President Truman's attorney general, J. Howard McGrath, said Communists were everywhere—"in factories, offices, butcher stores, on street corners and in private business. And each carries in himself the death of society."

Dire as that sounded, probably more important was the feeling of dislocation that accompanied rapid change during the period. Along with the rise of wages and the growth of consumption, America was undergoing suburbanization, a revolution in mass communication with the introduction of television in the early 1950s, increased physical mobility with automobiles, a national highway construction program and a boom in commercial airlines, new technologies, bureaucratization, and even the development of a new personality type to negotiate the new society—a type that sociologist David Riesman would describe as "other-directed," or driven less by an internal compass than by a need to please others, and what William Whyte would call the "organization man," who was concerned as much with managing the bureaucracy as with acquiring skills. What all these phenomena—from McCarthyism to suburbanization to the organization man—had in common, historian William Chafe would write, was that all were related "to the existentialist dilemma of finding a way to create meaning in the face of forces over which one had no control."

Walt Disney, like General Dwight Eisenhower, who would be elected president in 1952 and hid an iron will behind a facade of affability, promised control. When America was enjoying its burst of self-confidence immediately after the war, critics generally disdained Disney's cartoons, in part because the films were shabbily made and the sense of control in them seemed to have diminished. But once the Cold War began, Americans seemed again to need reassurance, which may explain why Cinderella, an old-fashioned and familiar sort of Disney animation, a controlled animation, found favor. (Walt's own comment on the nuclear peril was, "If people would think more of fairies they would soon forget the atom bomb.") Disney, a tonic force during the Depression, was now a touchstone, providing comfort in a time of foreboding.

As was so often the case, what was true for the country was true for Walt Disney personally. If America found control and reassurance in his films, he had found both in his model trains, which was one reason he pursued them. But that was not the only reason. The trains were also the bridgehead of a much larger scheme that was organizing itself in Walt Disney's mind. At least as early as 1947 he had begun collecting miniatures—furniture, figurines, coaches, boats, farm machinery, even tiny liquor bottles and crates. Ostensibly these were adornments for the train layout and another pastime to take his mind off the studio when, as he wrote his sister, "problems become too hectic." But as Walt scoured miniature shops during his trip to Europe in 1949 and on his various forays to New York and even up into New England; as he attended miniature shows; as he enlisted friends to find miniatures for him; as he solicited miniatures through catalogs, midwestern newspapers, and hobbyist magazines (using the name of a studio secretary as he had used machinist Dick Jones to solicit model train information), he hit upon a plan. With his own two hands he would create an entire miniature

American turn-of-the-century village, a sort of Lilliputian Marceline,⁵⁶ and then display it in large cases across the country. True to Walt's new postwar persona, he said that the project would be a means to convey traditional values, though the underlying metaphor couldn't have been more transparent. Building the village was another way for Walt to assert his control at the very time he seemed to be losing it.

To realize the plan, Walt buttonholed layout artist Ken Anderson and offered to put him on his personal payroll: Anderson was to paint scenes of Americana that Walt would then bring to life with the miniatures. "You can paint some paintings like Norman Rockwell," Anderson recalled Walt saying, "and I'll build them." The work would be done secretly, not so much, it seemed, because Walt was afraid of the idea getting out as because he didn't want the project to be infected and corrupted by the studio's corporate mentality. This was his not the company's. He installed Anderson in a room on the third floor of the Animation Building to which only he and Anderson had the keys. Here Anderson painted. Eventually the two of them would take little expeditions to downtown Los Angeles, hunting for materials. Sometimes Walt would disappear for a day or two, Anderson said, and then return with a "whole sack full" of various items from which to construct the scenes. Walt himself admitted to one vendor of materials, "I become so absorbed that the cares of the studio fade away ... at least for a time." Indeed, as Anderson explained it, Walt was "having such fun making these things that he completely forgot to pay me," and when Walt happened to ask whether Anderson had been compensated and Anderson said he hadn't, "I got paid and paid and paid."

Over time Anderson drew nearly two dozen sketches of archetypal American scenes—among them a blacksmith reading a newspaper, a minister in the pulpit, a klatch of gossiping women, a general store, a granny in her rocker before a hearth. But even before he began constructing his tableaux, Walt came to two realizations. The first was that he couldn't fabricate the scenes completely by himself and that he would need more assistance. He recruited a sculptor named Christodoro to help make the figures and a sketch artist named Harper Goff, whom he had met in a London model train shop during his European trip to oversee Treasure Island. The second realization was that the scenes couldn't be static. They had to move, which required the additional recruitment of machinist Roger Broggie, who had helped Walt build his train, and an animator-cum-sculptor named Wathel Rogers.

Now Walt, inspired by wind-up toys that he had found and dissected in Europe, began an experiment. In February 1951 he hired the actor and dancer Buddy Ebsen to perform a short tap dance in front of a grid. (Walt directed it himself.) The performance was filmed on 35mm stock and then analyzed by Broggie and Rogers to determine how they might replicate the movements with a mechanical figure that Christodoro had made. Broggie later recalled that they examined the footage frame by frame, only to discover that Ebsen never exactly repeated his steps. Moreover, just as it had been difficult to animate clothing, Broggie and Rogers could never quite get the mechanical

⁵⁶ As a child, Walt lived for four years on a farm in Marceline, Missouri. Although he did not live there long, the farm—and the small town, with its warm and quaint Main Street—left a lasting impression.

figure's pants to flop in the same way that Ebsen's did. Still, they made the man dance, using the same kind of cam system that the wind-up toys employed, and Walt entered a new territory that further extended the metaphor of control. As the historian Jackson Lears would observe of this departure, "The quintessential product of the [Disney] empire would not be fantasy, but simulated reality; not the cartoon character, but the 'audio-animatronic' robot," of which the "mechanical man" was the first. Walt Disney had crept closer still to creating and perfecting life.

Already in January, even before the Ebsen experiment, Walt was writing a specialist in display cases that "it always takes a lot of time to work the bugs out of mechanical contraptions and this one must be absolutely right before I can go ahead on the others," but that he expected to have a "pretty good show worked up by next Christmas." At the time he had the crew work on another tableau, this one of a barbershop quartet, while he personally worked on the scene of Granny in her rocker. By March, when he asked shorts production chief Harry Tytle to handle the logistics of the touring show, he had already spent nearly \$24,000 on the miniatures and the train, and he demanded as much value for his money as he had on the animations. He was constantly having miniatures sent to him on approval, then returning them for shoddy craftsmanship or lack of detail. For a man of his stature, he was also surprisingly concerned about the value of his own craftsmanship. He had designed and fabricated by hand small potbellied stoves that he sent on consignment to a miniatures dealer in New York, but he was incensed when the dealer charged only fifteen dollars and asked that she "keep them on display for a while longer and see what you can really get for them." When the dealer boosted the price to twenty-five dollars and sold one, Walt glowed. "The thing that pleases me is that you sold a stove for \$25.00!"

Meanwhile, Walt forged ahead on his exhibition, which was now called Disneylandia and which he described as a series of "visual juke boxes with the record playing mechanism being replaced by a miniature stage setting." He was considering exhibiting the show in department stores or in railroad cars, where schoolchildren could bring coins to "play" the scenes, though Walt hesitated at having children come to freight yards, and in any case he had been told emphatically that the exhibition couldn't possibly be profitable. In the end, he settled for unveiling the scene of "Granny Kincaid" at a Festival of California Living at the Pan-Pacific Auditorium in Los Angeles in November 1952. The vitrine, roughly eight feet long, contained tiny rugs, a plank floor, a stone fire-place, lace curtains, dishes, and even an outhouse with a potty, and it featured a narration by actress Beulah Bondi, who had played Granny Kincaid in *So Dear to My Heart*. Columnist Hedda Hopper, who had visited the festival, marveled at Walt's handiwork and asked, "Why does he do it?" To which Walt answered, "Damned if I know."

But he knew very well why he did it. Beyond the psychological benisons of control and the tactile exhilaration of his own craftsmanship, beyond the way it preoccupied him while the studio seemed to wobble, he did it because he harbored an even larger, more audacious plana plan for which Disneylandia was only a trial run and

a plan that seemed to sustain him even as he was losing interest in the rest of his company.

It is impossible to say exactly when, but Walt Disney had decided to build an amusement park.

City on a Hill, pp. 496–500

Over the months, as the WED staff loosed their imaginations, the project underwent what one might call a philosophical transformation. From the first, Walt had never thought of Disneyland as a traditional amusement park; the whole idea had been to make something different, something better. But the conceptualization, in part limited by the relatively small site, had nevertheless been narrow too—a sort of combination of Knott's Berry Farm, with its rustic American setting, and a kiddieland with rides. By the time WED and Walt embarked on their constant plussing, Disneyland had evolved into something much more unusual and much more grandiose not just a park that could provide fun and diversion but a kind of full imaginative universe that could provide a unified experience. It was truly a land rather than an amusement park. At least that was how the planners and Walt had come to think of it. Disneyland would be something for which there was no antecedent.

But if there was no antecedent, in its planning the park had been the beneficiary of a host of forces and influences—the Edenic European gardens, like Tivoli, that Walt had visited; the expositions and fairs, like the Century of Progress in Chicago in 1933, the New York World's Fair in 1939, and even the Chicago Railroad Fair; historical re-creations, like Knott's Berry Farm, Greenfield Village, and Colonial Williamsburg, all of which Walt had seen and enjoyed; and, what may have been the most important influence of all, California architecture itself. As Edmund Wilson had once described Los Angeles flamboyance: "Here you see mixturesque beauty," a "Pekinese pagoda made of fresh and cracky peanut brittle then a snow white marshmallow igloo—or a toothsome pink nougat in the Florentine manner, rich and delicious with embedded nuts." Los Angeles was a fantastic, eclectic, architecturally unruly city, affected as it was by Hollywood, which was also fantastic, eclectic, and unruly, as well as by a general sense of possibility. All of Los Angeles was a movie set or, as one commentator in the 1920s called it, the "child of Hollywood out of Kansas" and the "Middle Westerner's Nirvana," which almost perfectly described the city's relationship to Walt Disney. His Disneyland would in many ways be the apotheosis of Los Angeles architecture, an apotheosis of Hollywood, and in talking about the park he would even describe its layout as if it were a movie: "This is scene one, this is scene two, and this is scene three."

Having borrowed the idiom of motion pictures for his park, Walt Disney had also borrowed the movies' intent. Hollywood—the creation largely of Eastern European Jews who expunged their pasts by devising a better world of their imaginations—refined and idealized reality. So would Disneyland, the creation of a wounded man who expunged what he saw as the darker passages of his past by devising a better world of his imagination, though one that was obviously colored by the images of Hollywood. One

of the sources of the power of Hollywood was that it created archetypes that, it was often said, managed to plumb some deep Jungian ocean of collective consciousness. Disneyland, essentially a giant movie set, would deploy the same archetypes and would plumb the same depths. As one Disney historian put it, "One could take every feature of the parks [Disneyland and later Walt Disney World] and explain its appeal in terms of some instinctive or emotional response common to almost all of us."

At Disneyland, Walt imagined a western town that was the movies' idea of the West, even, according to architectural historian Karal Ann Marling, instructing Harper Goff to model the saloon after one that Goff had designed for the recent film *Calamity Jane*. He imagined a jungle cruise ride that would be modeled after another recent film, *The African Queen*, which Goff loved. He imagined a castle that was the Platonic castle of everyone's imagination. He imagined a Main Street with its quaint shops, its horse-drawn carriages, its train station, fire station, and police station, its town hall and town square that was so quintessentially turn-of-the-century American that even Walt's promotional material boasted, "We want everyone to feel that this is MAIN STREET, U.S.A. and that you are actually living this period."

As Walt drew on these archetypal American images, he also drew on the archetypal images that he himself had created and that had become embedded in the American consciousness. "We enter the land of Disney with the sense of having been there before because we return to an America unified by our common experience," wrote one visitor in *The New York Times*, including in that collective past the experience of *Snow White*, *Cinderella*, *Three Little Pigs*, *Peter Pan*, and *Mickey and Minnie Mouse*. It was a testament to how much Walt Disney had helped shape the American imagination. And to make absolutely certain that guests to Disneyland would stay within their imaginations, Walt planned a high berm, or embankment, to surround the park and blot out the surroundings, like the berm he had built at the studio and at Carolwood so that his neighbors wouldn't be disturbed by his train. The berm literally kept the world at bay as Walt had always wanted to do at his studio. "[W]hen you enter DISNEYLAND," the promotional brochure announced, "you will find yourself in the land of yesterday, tomorrow, and fantasy. Nothing of the present exists in DISNEYLAND."

As Disneyland was designed to block out the world, it was also designed to offer a particular kind of psychological experience that one didn't ordinarily find at an amusement park or carnival, much less in reality. Most amusement parks, in fact, were like the Warner Bros. cartoons of the late 1940s—noisy, chaotic, bombastic, subversive. One was made to feel that the social rules didn't apply there, that one was entirely free. Walt Disney, the purveyor of comfort, intended his park to provide just the opposite not freedom but control and order. John Hench, one of its designers, said that the park had been drawn with the same kind of circles and loops as Mickey Mouse and with the same effect. Everything was harmonious, soft, and unthreatening, making Disneyland one of the most profound expressions of what Marling calls an "architecture of reassurance," in which one feels the palpable sense of "an order governing the disposition of things." When critics would later carp that Disneyland was too serene, too clean, too controlled,

too perfect, they were right. It was what one might have called the "tragedy of perfection"—that in seeking perfection Walt seemed to drive out anything human and real. Yet perfection was the whole basis for Disneyland's existence and the foundation of its appeal. It was a modern variant on the City on a Hill of Puritan dreams. It was the consummate act of wish fulfillment.

As such, of course, it was a reflection of its creator and his own overweening sense of wish fulfillment. But it reflected him in a much more personal way as well. By formulating the park with a walk down Main Street at the park's entrance, which led to Sleeping Beauty Castle at the street's end (what Walt, borrowing an old carnival term, called a "wienie" because it enticed guests to it presumably the way a wienie entices a dog) and then to the various lands that radiated from the castle (Fantasyland, Adventureland, Frontierland, and Tomorrowland), Walt Disney recreated his own life's journey: "the road map of Walt Disney's life," as WED veteran Marty Sklar would describe it. One entered the gates of the park into what was essentially the Main Street of Walt's boyhood Marceline. (At "story sessions" for Disneyland he would reminisce about Marceline by the hour.) At the end of the street one was offered a variety of options—fantasy, adventure, the frontier, the future so that a trip through the park became a metaphor for possibility. Like young Walt, visitors to the castle seemed to stand at the portal to their dreams with a child's sense of omnipotence. "The symbolism," Richard Schickel would write, "is almost too perfect—the strangers forced to recapitulate Disney's formative experiences before being allowed to visit his fancies and fantasies in other areas of the Magic Kingdom."

What was uncanny, as always, was how much Walt Disney's personal experience converged with the national experience. Early in the planning stages Walt had described the park as providing a lesson in American heritage, just as Disneylandia had been intended to do, and he wanted visitors to appreciate the kind of bedrock values of which he had become a representative after the war, values that were especially salient with the onset of the Cold War. "There's an American theme behind the whole park," he told columnist Hedda Hopper, which meant that Disneyland was intended to re-create not only Walt Disney's moment of possibility but also America's, when the country, like Walt, had been both innocent and ambitious.

Some regarded this nostalgia for a bygone era in a time of anxiety as yet another form of comfort and another source of the park's appeal. "So the Disney parks touch on two sources of the modern desire to return through time to an earlier state of mind: the childhood of the individual (Main Street; Fantasyland, based on children's literary classics; and the Play orientation of the parks' activities)," wrote one analyst, referring both to Disneyland and to its sequel, Walt Disney World, "and the childhood of the nation (early twentieth century settings and back through the frontier and colonial periods)." Another analyst observed that visitors to Disneyland "found themselves completely submerged in a fantasized but nearly pitch-perfect representation of their deepest commitments and beliefs"—commitments and beliefs that, like so much else in

his life, had now been idealized by Walt Disney. In the end, then, Disneyland was neither just a park nor even an experience. It was also a repository of values.

City on a Hill, pp. 517

Reclamation of the past was not all that Walt Disney promoted on his Disneyland television program. He also offered the appeal of *Tomorrowland*. While preparing the Disneyland show, he instructed Ward Kimball to hunt for subjects for the *Tomorrowland* episodes, and Kimball came upon a three-part series on space exploration, in *Collier's* magazine by three of the foremost experts on space, Wernher Von Braun, Willy Ley, and Heinz Haber. Walt read the series in one night and came to the studio the next day fired with enthusiasm. He told Kimball to get Von Braun, Ley, and Haber to the studio to prepare the programs. The result was another three-part miniseries, beginning with an animated documentary called *Man in Space*, that premiered on March 9, 1955. More than two years before the Soviet Union launched its Sputnik satellite and heated up the space race, *Man in Space* went a long way toward building a large constituency for space exploration, and President Eisenhower ordered that it be shown to his rocket experts. At the end of 1955 Walt met with nuclear scientists Glenn Seaborg, Edward Teller, and Ernest Lawrence about a program on atomic energy, to be titled *Our Friend the Atom*, that would have the same effect in creating a consensus behind that technology. As a result Walt Disney, who had become one of the chief purveyors of American values from the past, also became one of the chief popularizers of and cheerleaders for American science in the future.

Whether or not Disney had, as Watts believed, really shaped an American ideal—and he doubtless contributed to it—one could meaningfully speak in the 1950s of "Walt Disney's America." Evolving in the postwar decade, as the new Walt had, this America drew on democratic traditions of modesty, self-effacement, naïveté, and determination, which was what Crockett personified. Yet it also was forward-looking, evincing an almost childlike confidence in science and technology, the very sorts of things that seemed to threaten those old democratic traditions. On the one hand, it projected a quaint, white-picket-fence nostalgia of the sort Walt had celebrated in *So Dear to My Heart*; on the other, it projected a futuristic vision of the sort he expressed in *Man in Space*. Like Walt's own image, "Walt Disney's America" was a confection and an aesthetic—smoothly blended from Hollywood, Booth Tarkington, Horatio Alger, Norman Rockwell, Thomas Edison, and Buck Rogers—but in the same way that Walt had begun to internalize his image, America in the 1950s began to internalize hers. As *Time's* chest-thumping suggested, "Walt Disney's America" was a reassuring artifice that was embraced as a reality the spiritual equivalent of Disneyland. It was the face, or the carapace, that the country had assumed to show to itself and to the world.

Slouching Toward Utopia, pp. 632–633

He had changed the world. He had created a new art form and then produced several indisputable classics within it—films that, even when they had not found an audience or been profitable on first release, had, as Walt predicted, become profitable upon reissue. He had provided escape from the Depression, strength during war, and reassurance afterward, and he had shown generations of children how to accept responsibility while at the same time allowing them to vent vicariously their antagonisms toward the adult world they would soon enter. He had refined traditional values and sharpened American myths and archetypes, even if, as his detractors said, he may have also gutted them. And from another vantage point, he had reinforced American iconoclasm, communitarianism, and tolerance and helped mold a countercultural generation. He had advanced color films and then color television. He had reimagined the amusement park, and in doing so he had altered American consciousness, for better or worse, so that his countrymen would prefer wish fulfillment to reality, the faux to the authentic. He had encouraged and popularized conservation, space exploration, atomic energy, urban planning, and a deeper historical awareness. He had built one of the most powerful empires in the entertainment world—one that would, despite his fears, long survive him. And because his films were so popular overseas, he had helped establish American popular culture as the dominant culture in the world. He had founded a school of the arts, and nearly forty years after his death his name would adorn a concert hall in downtown Los Angeles financed largely with Disney family money. Yet all of these accumulated contributions paled before a larger one: he demonstrated how one could assert one's will on the world at the very time when everything seemed to be growing beyond control and beyond comprehension. In sum, Walt Disney had been not so much a master of fun or irreverence or innocence or even wholesomeness. He had been a master of order.

The master of order had been so terrified of death that he hadn't left instructions for his interment. He had told Lillian only that he wanted to be cremated and that he wanted the ceremony to be small and private because he desperately wanted to avoid the undignified public displays he had seen at other celebrity funerals. It was his sons-in-law who chose the Little Church of the Flowers at Forest Lawn in Glendale for the funeral service, which was held at five o'clock the day after his death. Only the family attended, and even then Ruth didn't appear for fear that she might be hounded by the media on her way from Portland to California. At Lillian's request the Episcopal minister from Diane's church in Encino officiated. Bob Brown had suggested that "Battle Hymn of the Republic," which Walt had loved, be played at the close of the service, and as the song concluded Lillian slowly made her way to the front of the church where the coffin was, placed her hands on it and keened, "I loved you so much. I loved you so much." No one spoke publicly about the funeral afterward.

For nearly a year after the cremation, Walt Disney's ashes remained at Forest Lawn uninterred, the family resisting making a decision on a final resting place. It was

only after Bob Brown, Sharon's husband, was suddenly felled by cancer less than a year after Walt's death that Sharon, having decided her father and her husband should be interred together, moved to take action on burying her father's ashes. She and Diane chose an inconspicuous plot outside the Freedom Mausoleum at Forest Lawn, dedicated as a "sacred memorial to the freedom bequeathed to us through the courage, the wisdom and the faith of our forefathers," located at a remote corner of the three-hundred-acre cemetery where their father, resting with Bob Brown, would not be alone in death as he had so often been alone in life.

A plain, rectangular bronze plaque now adorns the white brick wall of the mausoleum that encloses a small garden to mark the burial place of his ashes. It bears only the name "Walter Elias Disney." It was here, guarded by a hedge of orange olivias and red azaleas, and hidden behind a holly tree and behind a white statue of Hans Christian Andersen's Little Mermaid gazing contemplatively at invisible water, that Walt Disney seemed to have fulfilled his family's destiny. He had escaped. And it was here that he fulfilled his own destiny, too, for which he had striven so mightily and restlessly all his life. He had passed beyond the afflictions of this world. Walt Disney had at last attained perfection.

Walter Isaacson, *The Real Leadership Lessons of Steve Jobs*

His saga is the entrepreneurial creation myth writ large: Steve Jobs cofounded Apple in his parents' garage in 1976, was ousted in 1985, returned to rescue it from near bankruptcy in 1997, and by the time he died, in October 2011, had built it into the world's most valuable company. Along the way he helped to transform seven industries: personal computing, animated movies, music, phones, tablet computing, retail stores, and digital publishing. He thus belongs in the pantheon of America's great innovators, along with Thomas Edison, Henry Ford, and Walt Disney. None of these men was a saint, but long after their personalities are forgotten, history will remember how they applied imagination to technology and business.

In the months since my biography of Jobs came out, countless commentators have tried to draw management lessons from it. Some of those readers have been insightful, but I think that many of them (especially those with no experience in entrepreneurship) fixate too much on the rough edges of his personality. The essence of Jobs, I think, is that his personality was integral to his way of doing business. He acted as if the normal rules didn't apply to him, and the passion, intensity, and extreme emotionalism he brought to everyday life were things he also poured into the products he made. His petulance and impatience were part and parcel of his perfectionism.

One of the last times I saw him, after I had finished writing most of the book, I asked him again about his tendency to be rough on people. "Look at the results," he replied. "These are all smart people I work with, and any of them could get a top job at another place if they were truly feeling brutalized. But they don't." Then he paused for a few moments and said, almost wistfully, "And we got some amazing things done." Indeed, he and Apple had had a string of hits over the past dozen years that was greater than that of any other innovative company in modern times: iMac, iPod, iPod nano, iTunes Store, Apple Stores, MacBook, iPhone, iPad, App Store, OS X Lion—not to mention every Pixar film. And as he battled his final illness, Jobs was surrounded by an intensely loyal cadre of colleagues who had been inspired by him for years and a very loving wife, sister, and four children.

So I think the real lessons from Steve Jobs have to be drawn from looking at what he actually accomplished. I once asked him what he thought was his most important creation, thinking he would answer the iPad or the Macintosh. Instead he said it was Apple the company. Making an enduring company, he said, was both far harder and more important than making a great product. How did he do it? Business schools will be studying that question a century from now. Here are what I consider the keys to his success.

Focus

When Jobs returned to Apple in 1997, it was producing a random array of computers and peripherals, including a dozen different versions of the Macintosh. After a few weeks of product review sessions, he'd finally had enough. "Stop!" he shouted. "This is

crazy.” He grabbed a Magic Marker, padded in his bare feet to a whiteboard, and drew a two-by-two grid. “Here’s what we need,” he declared. Atop the two columns, he wrote “Consumer” and “Pro.” He labeled the two rows “Desktop” and “Portable.” Their job, he told his team members, was to focus on four great products, one for each quadrant. All other products should be canceled. There was a stunned silence. But by getting Apple to focus on making just four computers, he saved the company. “Deciding what not to do is as important as deciding what to do,” he told me. “That’s true for companies, and it’s true for products.”

After he righted the company, Jobs began taking his “top 100” people on a retreat each year. On the last day, he would stand in front of a whiteboard (he loved whiteboards, because they gave him complete control of a situation and they engendered focus) and ask, “What are the 10 things we should be doing next?” People would fight to get their suggestions on the list. Jobs would write them down—and then cross off the ones he decreed dumb. After much jockeying, the group would come up with a list of 10. Then Jobs would slash the bottom seven and announce, “We can only do three.”

Focus was ingrained in Jobs’s personality and had been honed by his Zen training. He relentlessly filtered out what he considered distractions. Colleagues and family members would at times be exasperated as they tried to get him to deal with issues—a legal problem, a medical diagnosis—they considered important. But he would give a cold stare and refuse to shift his laserlike focus until he was ready.

Near the end of his life, Jobs was visited at home by Larry Page, who was about to resume control of Google, the company he had cofounded. Even though their companies were feuding, Jobs was willing to give some advice. “The main thing I stressed was focus,” he recalled. Figure out what Google wants to be when it grows up, he told Page. “It’s now all over the map. What are the five products you want to focus on? Get rid of the rest, because they’re dragging you down. They’re turning you into Microsoft. They’re causing you to turn out products that are adequate but not great.” Page followed the advice. In January 2012 he told employees to focus on just a few priorities, such as Android and Google+, and to make them “beautiful,” the way Jobs would have done.

Simplify

Jobs’s Zenlike ability to focus was accompanied by the related instinct to simplify things by zeroing in on their essence and eliminating unnecessary components. “Simplicity is the ultimate sophistication,” declared Apple’s first marketing brochure. To see what that means, compare any Apple software with, say, Microsoft Word, which keeps getting uglier and more cluttered with nonintuitive navigational ribbons and intrusive features. It is a reminder of the glory of Apple’s quest for simplicity.

Jobs learned to admire simplicity when he was working the night shift at Atari as a college dropout. Atari’s games came with no manual and needed to be uncomplicated enough that a stoned freshman could figure them out. The only instructions for its Star

Trek game were: “1. Insert quarter. 2. Avoid Klingons.” His love of simplicity in design was refined at design conferences he attended at the Aspen Institute in the late 1970s on a campus built in the Bauhaus style, which emphasized clean lines and functional design devoid of frills or distractions.

When Jobs visited Xerox’s Palo Alto Research Center and saw the plans for a computer that had a graphical user interface and a mouse, he set about making the design both more intuitive (his team enabled the user to drag and drop documents and folders on a virtual desktop) and simpler. For example, the Xerox mouse had three buttons and cost \$300; Jobs went to a local industrial design firm and told one of its founders, Dean Hovey, that he wanted a simple, single-button model that cost \$15. Hovey complied.

Jobs aimed for the simplicity that comes from conquering, rather than merely ignoring, complexity. Achieving this depth of simplicity, he realized, would produce a machine that felt as if it deferred to users in a friendly way, rather than challenging them. “It takes a lot of hard work,” he said, “to make something simple, to truly understand the underlying challenges and come up with elegant solutions.”

In Jony Ive, Apple’s industrial designer, Jobs met his soul mate in the quest for deep rather than superficial simplicity. They knew that simplicity is not merely a minimalist style or the removal of clutter. In order to eliminate screws, buttons, or excess navigational screens, it was necessary to understand profoundly the role each element played. “To be truly simple, you have to go really deep,” Ive explained. “For example, to have no screws on something, you can end up having a product that is so convoluted and so complex. The better way is to go deeper with the simplicity, to understand everything about it and how it’s manufactured.”

During the design of the iPod interface, Jobs tried at every meeting to find ways to cut clutter. He insisted on being able to get to whatever he wanted in three clicks. One navigation screen, for example, asked users whether they wanted to search by song, album, or artist. “Why do we need that screen?” Jobs demanded. The designers realized they didn’t. “There would be times when we’d rack our brains on a user interface problem, and he would go, ‘Did you think of this?’” says Tony Fadell, who led the iPod team. “And then we’d all go, ‘Holy shit.’ He’d redefine the problem or approach, and our little problem would go away.” At one point Jobs made the simplest of all suggestions: Let’s get rid of the on/off button. At first the team members were taken aback, but then they realized the button was unnecessary. The device would gradually power down if it wasn’t being used and would spring to life when reengaged.

Likewise, when Jobs was shown a cluttered set of proposed navigation screens for iDVD, which allowed users to burn video onto a disk, he jumped up and drew a simple rectangle on a whiteboard. “Here’s the new application,” he said. “It’s got one window. You drag your video into the window. Then you click the button that says ‘Burn.’ That’s it. That’s what we’re going to make.”

In looking for industries or categories ripe for disruption, Jobs always asked who was making products more complicated than they should be. In 2001 portable music

players and ways to acquire songs online fit that description, leading to the iPod and the iTunes Store. Mobile phones were next. Jobs would grab a phone at a meeting and rant (correctly) that nobody could possibly figure out how to navigate half the features, including the address book. At the end of his career he was setting his sights on the television industry, which had made it almost impossible for people to click on a simple device to watch what they wanted when they wanted.

Take Responsibility End to End

Jobs knew that the best way to achieve simplicity was to make sure that hardware, software, and peripheral devices were seamlessly integrated. An Apple ecosystem—an iPod connected to a Mac with iTunes software, for example—allowed devices to be simpler, syncing to be smoother, and glitches to be rarer. The more complex tasks, such as making new playlists, could be done on the computer, allowing the iPod to have fewer functions and buttons.

Jobs and Apple took end-to-end responsibility for the user experience—something too few companies do. From the performance of the ARM microprocessor in the iPhone to the act of buying that phone in an Apple Store, every aspect of the customer experience was tightly linked together. Both Microsoft in the 1980s and Google in the past few years have taken a more open approach that allows their operating systems and software to be used by various hardware manufacturers. That has sometimes proved the better business model. But Jobs fervently believed that it was a recipe for (to use his technical term) crappier products. “People are busy,” he said. “They have other things to do than think about how to integrate their computers and devices.”

Part of Jobs’s compulsion to take responsibility for what he called “the whole widget” stemmed from his personality, which was very controlling. But it was also driven by his passion for perfection and making elegant products. He got hives, or worse, when contemplating the use of great Apple software on another company’s uninspired hardware, and he was equally allergic to the thought that unapproved apps or content might pollute the perfection of an Apple device. It was an approach that did not always maximize short-term profits, but in a world filled with junky devices, inscrutable error messages, and annoying interfaces, it led to astonishing products marked by delightful user experiences. Being in the Apple ecosystem could be as sublime as walking in one of the Zen gardens of Kyoto that Jobs loved, and neither experience was created by worshipping at the altar of openness or by letting a thousand flowers bloom. Sometimes it’s nice to be in the hands of a control freak.

When Behind, Leapfrog

The mark of an innovative company is not only that it comes up with new ideas first. It also knows how to leapfrog when it finds itself behind. That happened when Jobs built the original iMac. He focused on making it useful for managing a user’s photos and videos, but it was left behind when dealing with music. People with PCs were

downloading and swapping music and then ripping and burning their own CDs. The iMac's slot drive couldn't burn CDs. "I felt like a dope," he said. "I thought we had missed it."

But instead of merely catching up by upgrading the iMac's CD drive, he decided to create an integrated system that would transform the music industry. The result was the combination of iTunes, the iTunes Store, and the iPod, which allowed users to buy, share, manage, store, and play music better than they could with any other devices.

After the iPod became a huge success, Jobs spent little time relishing it. Instead he began to worry about what might endanger it. One possibility was that mobile phone makers would start adding music players to their handsets. So he cannibalized iPod sales by creating the iPhone. "If we don't cannibalize ourselves, someone else will," he said.

Put Products Before Profit

When Jobs and his small team designed the original Macintosh, in the early 1980s, his injunction was to make it "insanely great." He never spoke of profit maximization or cost trade-offs. "Don't worry about price, just specify the computer's abilities," he told the original team leader. At his first retreat with the Macintosh team, he began by writing a maxim on his whiteboard: "Don't compromise." The machine that resulted cost too much and led to Jobs's ouster from Apple. But the Macintosh also "put a dent in the universe," as he said, by accelerating the home computer revolution. And in the long run he got the balance right: Focus on making the product great and the profits will follow.

John Sculley, who ran Apple from 1983 to 1993, was a marketing and sales executive from Pepsi. He focused more on profit maximization than on product design after Jobs left, and Apple gradually declined. "I have my own theory about why decline happens at companies," Jobs told me: They make some great products, but then the sales and marketing people take over the company, because they are the ones who can juice up profits. "When the sales guys run the company, the product guys don't matter so much, and a lot of them just turn off. It happened at Apple when Sculley came in, which was my fault, and it happened when Ballmer took over at Microsoft."

When Jobs returned, he shifted Apple's focus back to making innovative products: the sprightly iMac, the PowerBook, and then the iPod, the iPhone, and the iPad. As he explained, "My passion has been to build an enduring company where people were motivated to make great products. Everything else was secondary. Sure, it was great to make a profit, because that was what allowed you to make great products. But the products, not the profits, were the motivation. Sculley flipped these priorities to where the goal was to make money. It's a subtle difference, but it ends up meaning everything—the people you hire, who gets promoted, what you discuss in meetings."

Don't Be a Slave to Focus Groups

When Jobs took his original Macintosh team on its first retreat, one member asked whether they should do some market research to see what customers wanted. “No,” Jobs replied, “because customers don’t know what they want until we’ve shown them.” He invoked Henry Ford’s line “If I’d asked customers what they wanted, they would have told me, ‘A faster horse!’”

Caring deeply about what customers want is much different from continually asking them what they want; it requires intuition and instinct about desires that have not yet formed. “Our task is to read things that are not yet on the page,” Jobs explained. Instead of relying on market research, he honed his version of empathy—an intimate intuition about the desires of his customers. He developed his appreciation for intuition—feelings that are based on accumulated experiential wisdom—while he was studying Buddhism in India as a college dropout. “The people in the Indian countryside don’t use their intellect like we do; they use their intuition instead,” he recalled. “Intuition is a very powerful thing—more powerful than intellect, in my opinion.”

Sometimes that meant that Jobs used a one-person focus group: himself. He made products that he and his friends wanted. For example, there were many portable music players around in 2000, but Jobs felt they were all lame, and as a music fanatic he wanted a simple device that would allow him to carry a thousand songs in his pocket. “We made the iPod for ourselves,” he said, “and when you’re doing something for yourself, or your best friend or family, you’re not going to cheese out.”

Bend Reality

Jobs’s (in)famous ability to push people to do the impossible was dubbed by colleagues his Reality Distortion Field, after an episode of Star Trek in which aliens create a convincing alternative reality through sheer mental force. An early example was when Jobs was on the night shift at Atari and pushed Steve Wozniak to create a game called Breakout. Woz said it would take months, but Jobs stared at him and insisted he could do it in four days. Woz knew that was impossible, but he ended up doing it.

Those who did not know Jobs interpreted the Reality Distortion Field as a euphemism for bullying and lying. But those who worked with him admitted that the trait, infuriating as it might be, led them to perform extraordinary feats. Because Jobs felt that life’s ordinary rules didn’t apply to him, he could inspire his team to change the course of computer history with a small fraction of the resources that Xerox or IBM had. “It was a self-fulfilling distortion,” recalls Debi Coleman, a member of the original Mac team who won an award one year for being the employee who best stood up to Jobs. “You did the impossible because you didn’t realize it was impossible.”

One day Jobs marched into the cubicle of Larry Kenyon, the engineer who was working on the Macintosh operating system, and complained that it was taking too long to boot up. Kenyon started to explain why reducing the boot-up time wasn’t possible, but Jobs cut him off. “If it would save a person’s life, could you find a way to shave 10

seconds off the boot time?" he asked. Kenyon allowed that he probably could. Jobs went to a whiteboard and showed that if five million people were using the Mac and it took 10 seconds extra to turn it on every day, that added up to 300 million or so hours a year—the equivalent of at least 100 lifetimes a year. After a few weeks Kenyon had the machine booting up 28 seconds faster.

When Jobs was designing the iPhone, he decided that he wanted its face to be a tough, scratchproof glass, rather than plastic. He met with Wendell Weeks, the CEO of Corning, who told him that Corning had developed a chemical exchange process in the 1960s that led to what it dubbed "Gorilla glass." Jobs replied that he wanted a major shipment of Gorilla glass in six months. Weeks said that Corning was not making the glass and didn't have that capacity. "Don't be afraid," Jobs replied. This stunned Weeks, who was unfamiliar with Jobs's Reality Distortion Field. He tried to explain that a false sense of confidence would not overcome engineering challenges, but Jobs had repeatedly shown that he didn't accept that premise. He stared unblinking at Weeks. "Yes, you can do it," he said. "Get your mind around it. You can do it." Weeks recalls that he shook his head in astonishment and then called the managers of Corning's facility in Harrodsburg, Kentucky, which had been making LCD displays, and told them to convert immediately to making Gorilla glass full-time. "We did it in under six months," he says. "We put our best scientists and engineers on it, and we just made it work." As a result, every piece of glass on an iPhone or an iPad is made in America by Corning.

Impute

Jobs's early mentor Mike Markkula wrote him a memo in 1979 that urged three principles. The first two were "empathy" and "focus." The third was an awkward word, "impute," but it became one of Jobs's key doctrines. He knew that people form an opinion about a product or a company on the basis of how it is presented and packaged. "Mike taught me that people *do* judge a book by its cover," he told me.

When he was getting ready to ship the Macintosh in 1984, he obsessed over the colors and design of the box. Similarly, he personally spent time designing and redesigning the jewellike boxes that cradle the iPod and the iPhone and listed himself on the patents for them. He and Ive believed that unpacking was a ritual like theater and heralded the glory of the product. "When you open the box of an iPhone or iPad, we want that tactile experience to set the tone for how you perceive the product," Jobs said.

Sometimes Jobs used the design of a machine to "impute" a signal rather than to be merely functional. For example, when he was creating the new and playful iMac, after his return to Apple, he was shown a design by Ive that had a little recessed handle nestled in the top. It was more semiotic than useful. This was a desktop computer. Not many people were really going to carry it around. But Jobs and Ive realized that a lot of people were still intimidated by computers. If it had a handle, the new machine would seem friendly, deferential, and at one's service. The handle signaled permission to touch

the iMac. The manufacturing team was opposed to the extra cost, but Jobs simply announced, "No, we're doing this." He didn't even try to explain.

Push for Perfection

During the development of almost every product he ever created, Jobs at a certain point "hit the pause button" and went back to the drawing board because he felt it wasn't perfect. That happened even with the movie *Toy Story*. After Jeff Katzenberg and the team at Disney, which had bought the rights to the movie, pushed the Pixar team to make it edgier and darker, Jobs and the director, John Lasseter, finally stopped production and rewrote the story to make it friendlier. When he was about to launch Apple Stores, he and his store guru, Ron Johnson, suddenly decided to delay everything a few months so that the stores' layouts could be reorganized around activities and not just product categories.

The same was true for the iPhone. The initial design had the glass screen set into an aluminum case. One Monday morning Jobs went over to see Ive. "I didn't sleep last night," he said, "because I realized that I just don't love it." Ive, to his dismay, instantly saw that Jobs was right. "I remember feeling absolutely embarrassed that he had to make the observation," he says. The problem was that the iPhone should have been all about the display, but in its current design the case competed with the display instead of getting out of the way. The whole device felt too masculine, task-driven, efficient. "Guys, you've killed yourselves over this design for the last nine months, but we're going to change it," Jobs told Ive's team. "We're all going to have to work nights and weekends, and if you want, we can hand out some guns so you can kill us now." Instead of balking, the team agreed. "It was one of my proudest moments at Apple," Jobs recalled.

A similar thing happened as Jobs and Ive were finishing the iPad. At one point Jobs looked at the model and felt slightly dissatisfied. It didn't seem casual and friendly enough to scoop up and whisk away. They needed to signal that you could grab it with one hand, on impulse. They decided that the bottom edge should be slightly rounded, so that a user would feel comfortable just snatching it up rather than lifting it carefully. That meant engineering had to design the necessary connection ports and buttons in a thin, simple lip that sloped away gently underneath. Jobs delayed the product until the change could be made.

Jobs's perfectionism extended even to the parts unseen. As a young boy, he had helped his father build a fence around their backyard, and he was told they had to use just as much care on the back of the fence as on the front. "Nobody will ever know," Steve said. His father replied, "But you will know." A true craftsman uses a good piece of wood even for the back of a cabinet against the wall, his father explained, and they should do the same for the back of the fence. It was the mark of an artist to have such a passion for perfection. In overseeing the Apple II and the Macintosh, Jobs applied this lesson to the circuit board inside the machine. In both instances he sent the engineers back to make the chips line up neatly so the board would look nice. This seemed particularly odd to the engineers of the Macintosh, because Jobs had decreed that the

machine be tightly sealed. “Nobody is going to see the PC board,” one of them protested. Jobs reacted as his father had: “I want it to be as beautiful as possible, even if it’s inside the box. A great carpenter isn’t going to use lousy wood for the back of a cabinet, even though nobody’s going to see it.” They were true artists, he said, and should act that way. And once the board was redesigned, he had the engineers and other members of the Macintosh team sign their names so that they could be engraved inside the case. “Real artists sign their work,” he said.

Tolerate Only “A” Players

Jobs was famously impatient, petulant, and tough with the people around him. But his treatment of people, though not laudable, emanated from his passion for perfection and his desire to work with only the best. It was his way of preventing what he called “the bozo explosion,” in which managers are so polite that mediocre people feel comfortable sticking around. “I don’t think I run roughshod over people,” he said, “but if something sucks, I tell people to their face. It’s my job to be honest.” When I pressed him on whether he could have gotten the same results while being nicer, he said perhaps so. “But it’s not who I am,” he said. “Maybe there’s a better way – a gentlemen’s club where we all wear ties and speak in this Brahmin language and velvet code words – but I don’t know that way, because I am middle-class from California.”

Was all his stormy and abusive behavior necessary? Probably not. There were other ways he could have motivated his team. “Steve’s contributions could have been made without so many stories about him terrorizing folks,” Apple’s cofounder, Wozniak, said. “I like being more patient and not having so many conflicts. I think a company can be a good family.” But then he added something that is undeniably true: “If the Macintosh project had been run my way, things probably would have been a mess.”

It’s important to appreciate that Jobs’s rudeness and roughness were accompanied by an ability to be inspirational. He infused Apple employees with an abiding passion to create groundbreaking products and a belief that they could accomplish what seemed impossible. And we have to judge him by the outcome. Jobs had a close-knit family, and so it was at Apple: His top players tended to stick around longer and be more loyal than those at other companies, including ones led by bosses who were kinder and gentler. CEOs who study Jobs and decide to emulate his roughness without understanding his ability to generate loyalty make a dangerous mistake.

“I’ve learned over the years that when you have really good people, you don’t have to baby them,” Jobs told me. “By expecting them to do great things, you can get them to do great things. Ask any member of that Mac team. They will tell you it was worth the pain.” Most of them do. “He would shout at a meeting, ‘You asshole, you never do anything right,’” Debi Coleman recalls. “Yet I consider myself the absolute luckiest person in the world to have worked with him.”

Engage Face-to-Face

Despite being a denizen of the digital world, or maybe because he knew all too well its potential to be isolating, Jobs was a strong believer in face-to-face meetings. “There’s a temptation in our networked age to think that ideas can be developed by email and iChat,” he told me. “That’s crazy. Creativity comes from spontaneous meetings, from random discussions. You run into someone, you ask what they’re doing, you say ‘Wow,’ and soon you’re cooking up all sorts of ideas.”

He had the Pixar building designed to promote unplanned encounters and collaborations. “If a building doesn’t encourage that, you’ll lose a lot of innovation and the magic that’s sparked by serendipity,” he said. “So we designed the building to make people get out of their offices and mingle in the central atrium with people they might not otherwise see.” The front doors and main stairs and corridors all led to the atrium; the café and the mailboxes were there; the conference rooms had windows that looked out onto it; and the 600-seat theater and two smaller screening rooms all spilled into it. “Steve’s theory worked from day one,” Lasseter recalls. “I kept running into people I hadn’t seen for months. I’ve never seen a building that promoted collaboration and creativity as well as this one.”

Jobs hated formal presentations, but he loved freewheeling face-to-face meetings. He gathered his executive team every week to kick around ideas without a formal agenda, and he spent every Wednesday afternoon doing the same with his marketing and advertising team. Slide shows were banned. “I hate the way people use slide presentations instead of thinking,” Jobs recalled. “People would confront a problem by creating a presentation. I wanted them to engage, to hash things out at the table, rather than show a bunch of slides. People who know what they’re talking about don’t need PowerPoint.”

Know Both the Big Picture and the Details

Jobs’s passion was applied to issues both large and minuscule. Some CEOs are great at vision; others are managers who know that God is in the details. Jobs was both. Time Warner CEO Jeff Bewkes says that one of Jobs’s salient traits was his ability and desire to envision overarching strategy while also focusing on the tiniest aspects of design. For example, in 2000 he came up with the grand vision that the personal computer should become a “digital hub” for managing all of a user’s music, videos, photos, and content, and thus got Apple into the personal-device business with the iPod and then the iPad. In 2010 he came up with the successor strategy—the “hub” would move to the cloud—and Apple began building a huge server farm so that all a user’s content could be uploaded and then seamlessly synced to other personal devices. But even as he was laying out these grand visions, he was fretting over the shape and color of the screws inside the iMac.

Combine the Humanities with the Sciences

“I always thought of myself as a humanities person as a kid, but I liked electronics,” Jobs told me on the day he decided to cooperate on a biography. “Then I read something that one of my heroes, Edwin Land of Polaroid, said about the importance of people who could stand at the intersection of humanities and sciences, and I decided that’s what I wanted to do.” It was as if he was describing the theme of his life, and the more I studied him, the more I realized that this was, indeed, the essence of his tale.

He connected the humanities to the sciences, creativity to technology, arts to engineering. There were greater technologists (Wozniak, Gates), and certainly better designers and artists. But no one else in our era could better firewire together poetry and processors in a way that jolted innovation. And he did it with an intuitive feel for business strategy. At almost every product launch over the past decade, Jobs ended with a slide that showed a sign at the intersection of Liberal Arts and Technology Streets.

The creativity that can occur when a feel for both the humanities and the sciences exists in one strong personality was what most interested me in my biographies of Franklin and Einstein, and I believe that it will be a key to building innovative economies in the 21st century. It is the essence of applied imagination, and it’s why both the humanities and the sciences are critical for any society that is to have a creative edge in the future.

Even when he was dying, Jobs set his sights on disrupting more industries. He had a vision for turning textbooks into artistic creations that anyone with a Mac could fashion and craft—something that Apple announced in January 2012. He also dreamed of producing magical tools for digital photography and ways to make television simple and personal. Those, no doubt, will come as well. And even though he will not be around to see them to fruition, his rules for success helped him build a company that not only will create these and other disruptive products, but will stand at the intersection of creativity and technology as long as Jobs’s DNA persists at its core.

Stay Hungry, Stay Foolish

Steve Jobs was a product of the two great social movements that emanated from the San Francisco Bay Area in the late 1960s. The first was the counterculture of hippies and antiwar activists, which was marked by psychedelic drugs, rock music, and antiauthoritarianism. The second was the high-tech and hacker culture of Silicon Valley, filled with engineers, geeks, wireheads, phreakers, cyberpunks, hobbyists, and garage entrepreneurs. Overlying both were various paths to personal enlightenment—Zen and Hinduism, meditation and yoga, primal scream therapy and sensory deprivation, Esalen and est.

An admixture of these cultures was found in publications such as Stewart Brand’s *Whole Earth Catalog*. On its first cover was the famous picture of Earth taken from space, and its subtitle was “access to tools.” The underlying philosophy was that technology could be our friend. Jobs—who became a hippie, a rebel, a spiritual seeker, a

phone phreaker, and an electronic hobbyist all wrapped into one—was a fan. He was particularly taken by the final issue, which came out in 1971, when he was still in high school. He took it with him to college and then to the apple farm commune where he lived after dropping out. He later recalled: “On the back cover of their final issue was a photograph of an early morning country road, the kind you might find yourself hitchhiking on if you were so adventurous. Beneath it were the words: ‘Stay Hungry. Stay Foolish.’” Jobs stayed hungry and foolish throughout his career by making sure that the business and engineering aspect of his personality was always complemented by a hippie nonconformist side from his days as an artistic, acid-dropping, enlightenment-seeking rebel. In every aspect of his life—the women he dated, the way he dealt with his cancer diagnosis, the way he ran his business—his behavior reflected the contradictions, confluence, and eventual synthesis of all these varying strands.

Even as Apple became corporate, Jobs asserted his rebel and counterculture streak in its ads, as if to proclaim that he was still a hacker and a hippie at heart. The famous “1984” ad showed a renegade woman outrunning the thought police to sling a sledgehammer at the screen of an Orwellian Big Brother. And when he returned to Apple, Jobs helped write the text for the “Think Different” ads: “Here’s to the crazy ones. The misfits. The rebels. The troublemakers. The round pegs in the square holes...” If there was any doubt that, consciously or not, he was describing himself, he dispelled it with the last lines: “While some see them as the crazy ones, we see genius. Because the people who are crazy enough to think they can change the world are the ones who do.”