

# People *of the* Century

TIME/CBS NEWS

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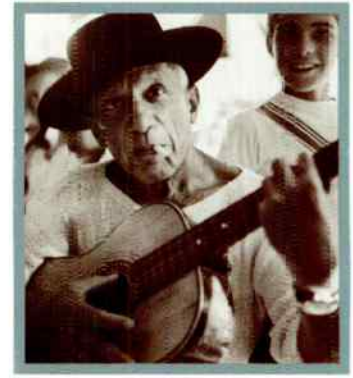
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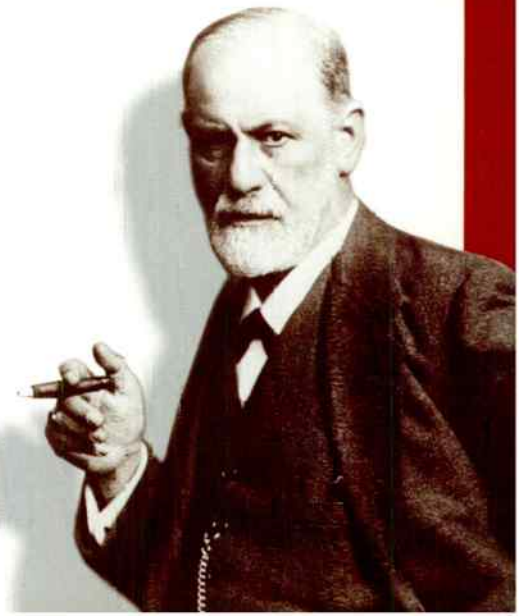
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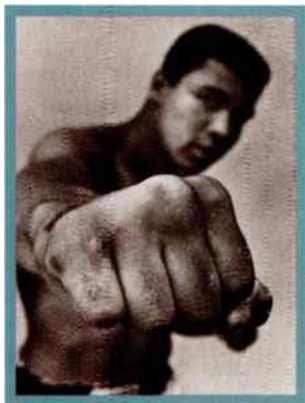


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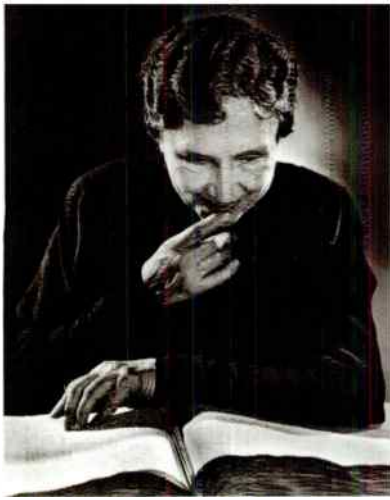




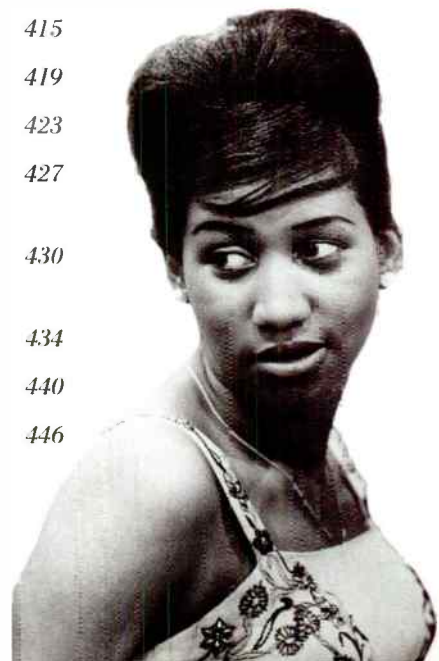
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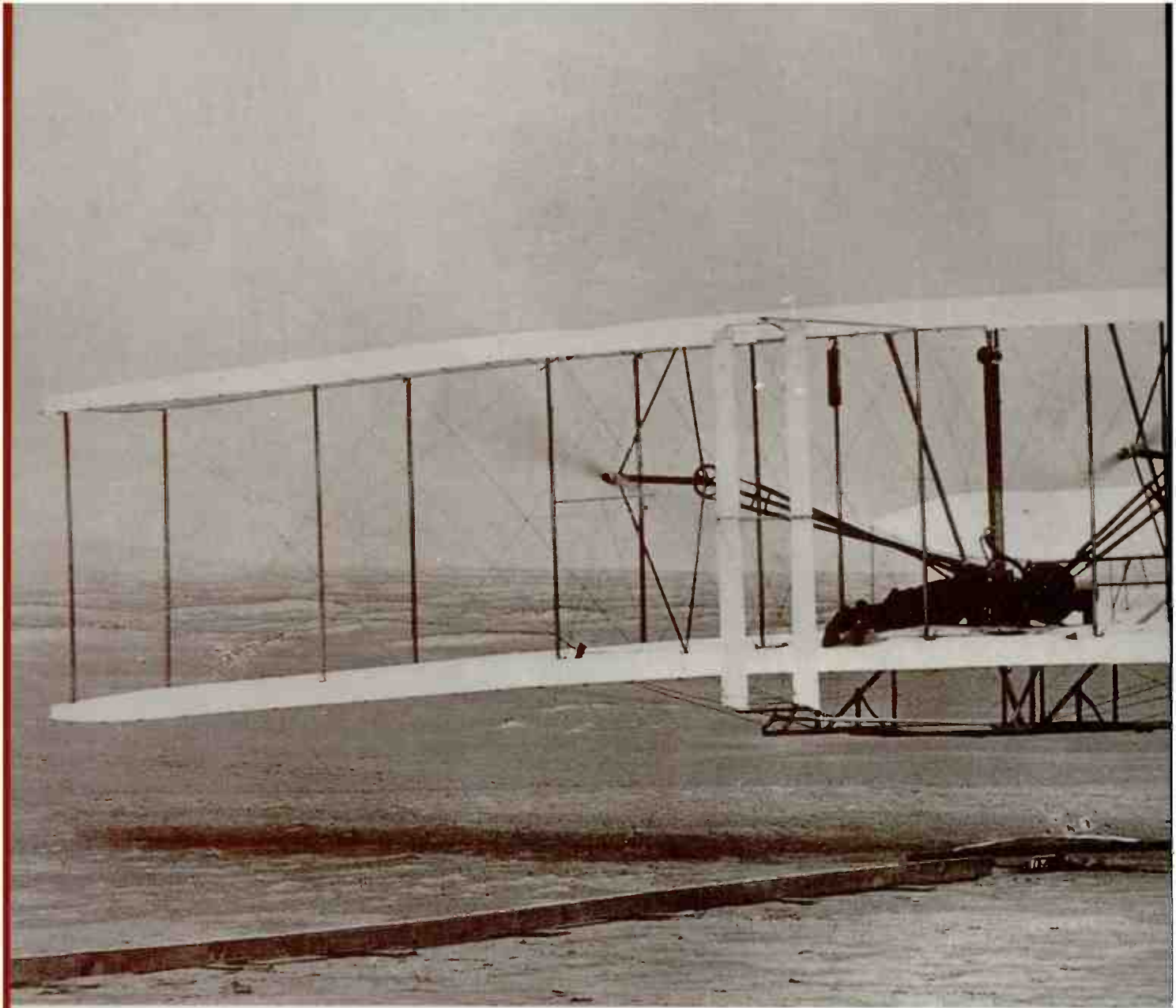




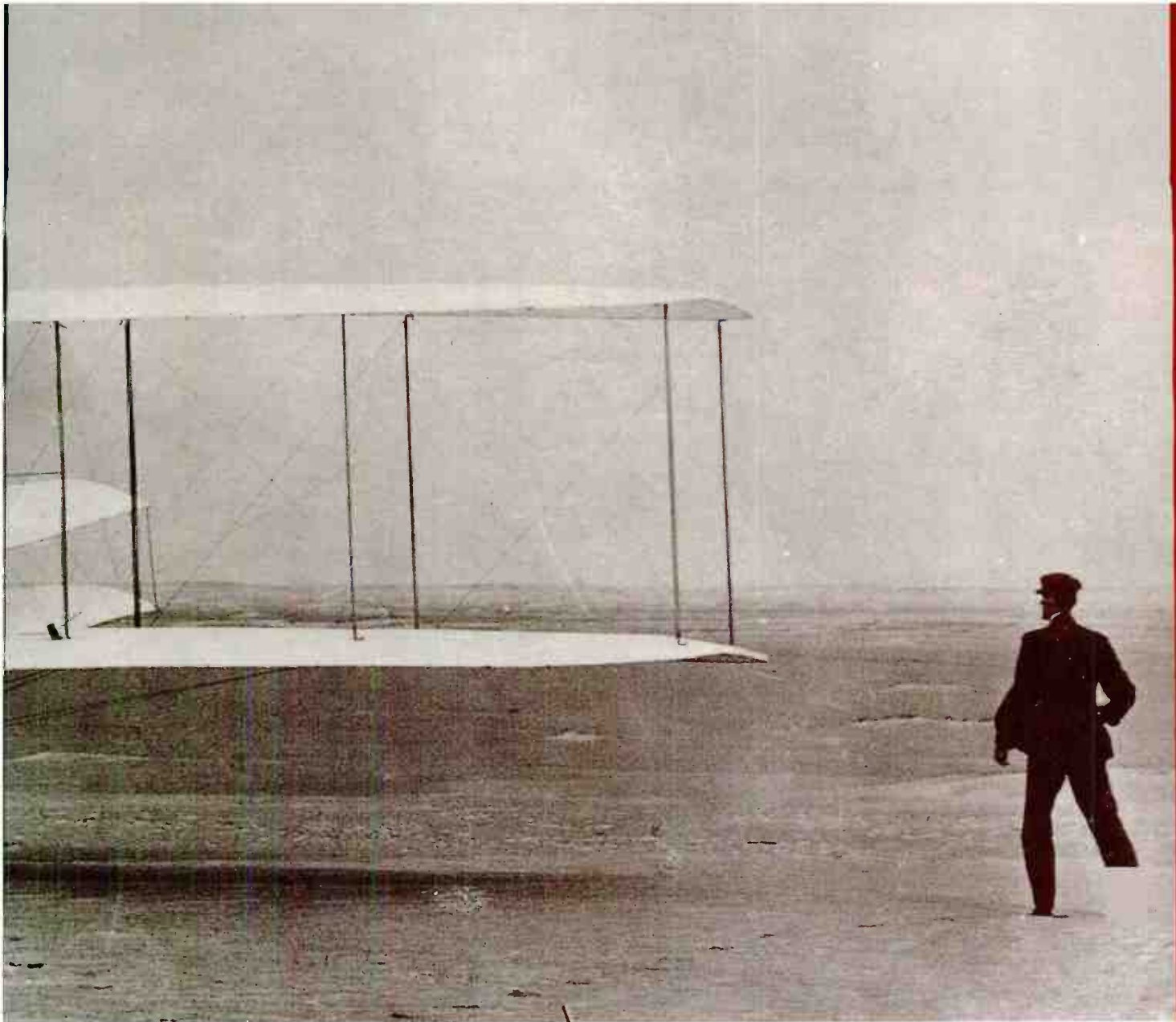
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# People *of the* Century



# *The Reporter's* *Oh, to have been there.* Century



TO HAVE STOOD ON A WINDSWEPT BEACH on a North Carolina morning in mid-December in 1903, and to have seen with my own eyes the impossible: man taking flight. To have been there, to have tasted the salt in the air, to have heard the groan of the engine, to have seen that machine, and a man, rise up and fly. If man could fly, where else could he go, beyond that beach?

*by Dan Rather*

The century was still young. And this was its first great story. A young reporter covering the event, with a pencil in his hand and a notebook in his pocket (and a deadline, no doubt, on his mind) could not have suspected how many other great stories this century would hold—how many times man would soar, how many laws of gravity and physics he'd defy. Kitty Hawk was only the beginning. But what a beginning.

For a reporter, it turned out, this was *the* century to be alive. A century of phenomenal events—and phenomenal people.

This, after all, has been the century of uprisings and revolutions. Dictators rose and fell; walls went up and crumbled. The atom was split. The sound barrier was shattered. Two world wars began and ended. We planted a flag on the moon. Of all the centuries that came before, perhaps in all of them combined, the human race never matched what it accomplished in these hundred years—for good and for evil.

A reporter looking for a story would have no trouble finding one. Or finding a way to tell it. One of the great miracles of this century was a miracle of timing. The journalist of the twentieth century would find his craft revolutionized by two inventions: the microphone and the camera. Journalism would be irrevocably changed. And so would our world.

It happened slowly at first: newspapers and magazines brought readers in Des Moines, or Tulsa, or Carson City vivid pictures of the world that lay beyond that last

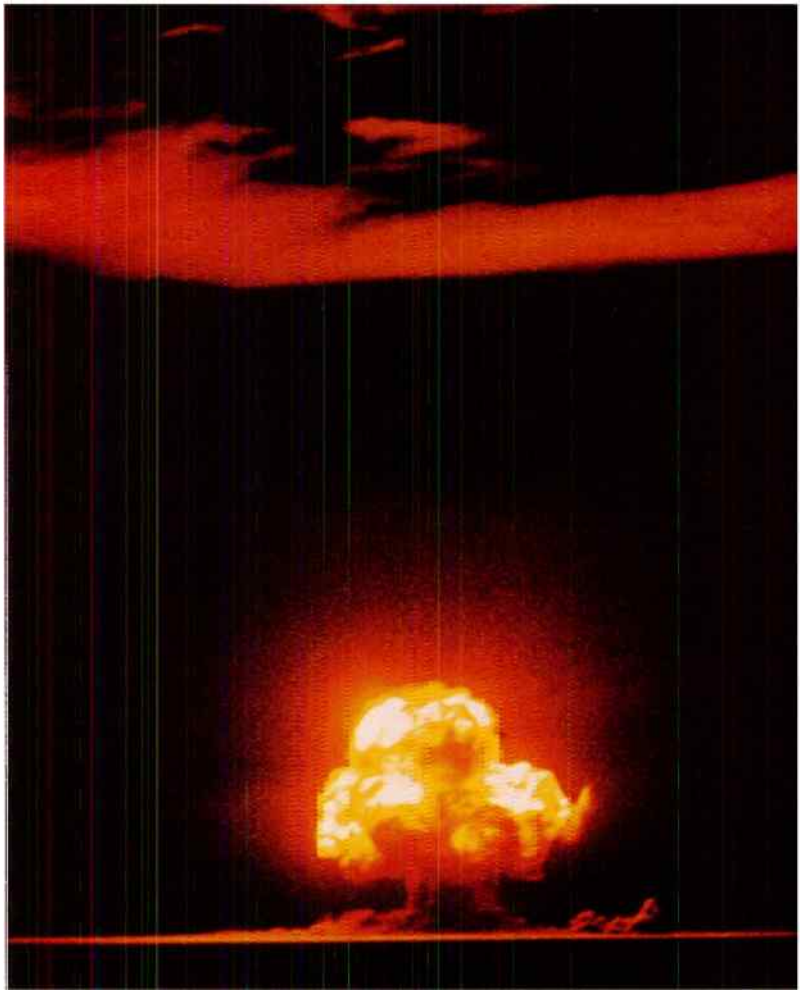


stretch of barbed wire in the back field. Movie theaters brought them newsreels and silent flickering images of a tramp with a cane. The world shrank, mile by mile, moment by moment. Pictures and movies made the distant world recognizable. Then, radio made it immediate.

In September of 1940, as London was bombarded by the Blitz, the voice of Edward R. Murrow came into American living rooms, describing the devastation, giving urgency and humanity to a battle that was no longer an ocean away but as near as the night table. “One night,” reported Murrow in one memorable broadcast, “I stood in front of a smashed grocery store and heard a dripping inside. It was the only sound in all London. Two cans of peaches had been drilled clean through by flying glass, and the juice was dripping down onto the floor.” The war could not get any closer, or more recognizable, than that.

In those days, two men, Henry Luce and William Paley, understood that the news business was two parts: news and business. They were each, in their way, brilliant at providing the public with bold new ways of understanding the world. They had the vision, and good sense, to know that something extraordinary was happening in this most extraordinary century and that the public had a great appetite for it. Luce’s *Time* and Paley’s CBS opened people’s eyes and ears to the many revolutions, large and small, that were unfolding almost every day.

Perhaps, most significantly, *Time* and CBS introduced us to the men and women behind those revolutions: the faces, voices, gestures, and personalities that came to define our age. Readers and listeners, and later viewers, came to understand as never before the courage (and, at times, the cowardice) of the people who shaped the events of this century—people whose struggles and stumbles were not that different from their own.





The result transformed an already shrinking world into a global village. The news of the world became the news of the village; events in Saigon or Sarajevo happened, it seemed, as if they were just across the street, not across the globe. For the first time, we could see the tears on a soldier's face, hear the shattering of glass as bombs fell thousands of miles away. During the most turbulent times, television deepened the bond. The world, it

seemed, in unison watched the young widow on the Capitol steps, could see her eyes behind the gauzy veil, as the flag-covered coffin passed and her son gave a silent salute.

Of course, such indelible images are only part of what this century has bequeathed to us. We have inherited, also, those things which are more elusive, harder to record on film or tape. Scientists have given us weapons that have waged war on smallpox and polio, and genetic marvels that are rebuilding human tissue and pinpointing codes in our DNA. Life is being created in laboratories and test tubes. Expectations, and expectancy, are both soaring. Newborns live, thrive, survive.

On the world stage, democracy and freedom have continued to defy war, and oppression, and demagogues. This has been a century of movements—civil rights, women's rights, gay rights—and the movements have at times been an unstoppable tide. (It is hard to believe, and easy to forget, that for the first twenty years of this century, the only people permitted to vote were white men.) This was not the century to be a King or a Czar; it was a century to be a defiant dreamer. Ordinary people were the heroes of our time, marching and singing and standing in the way of tanks. Government often proved less powerful than those it governed. An American President was assassinated, one was impeached, and another resigned. We, our nation—and the world, for that matter—survived.

So, somehow, did the unquenchable thirst for freedom. This was the century when communism and fascism made their stands, when hot hatred and cold war left their

marks. But the human spirit defied them. In 1989, walking the streets of Beijing, talking to China's young revolutionaries, I could not help but be moved by the depth of their passion, the intensity of their vision. To bear witness to their dreams, and their courage, was to understand how much this century has been shaped by similar dreams, similar dreamers. If there are any lessons to be drawn from this century, it may be this: there is nothing the human heart wants more than freedom.

And then, too, there is this: for all that has been said and written about the rise of the power of the state at the expense of the individual during the past one hundred years, the expansion of individual freedom is the most enduring landmark of the twentieth century.

With this, we have been reminded anew that while events greatly shape history, individual personalities still count mightily. Especially innovators, inventors, and leaders—political, military, and otherwise.

For better and for worse, a few individual men and women have molded this era now ending. Their names cast such long shadows: Roosevelt, Hitler, Lenin, Einstein,

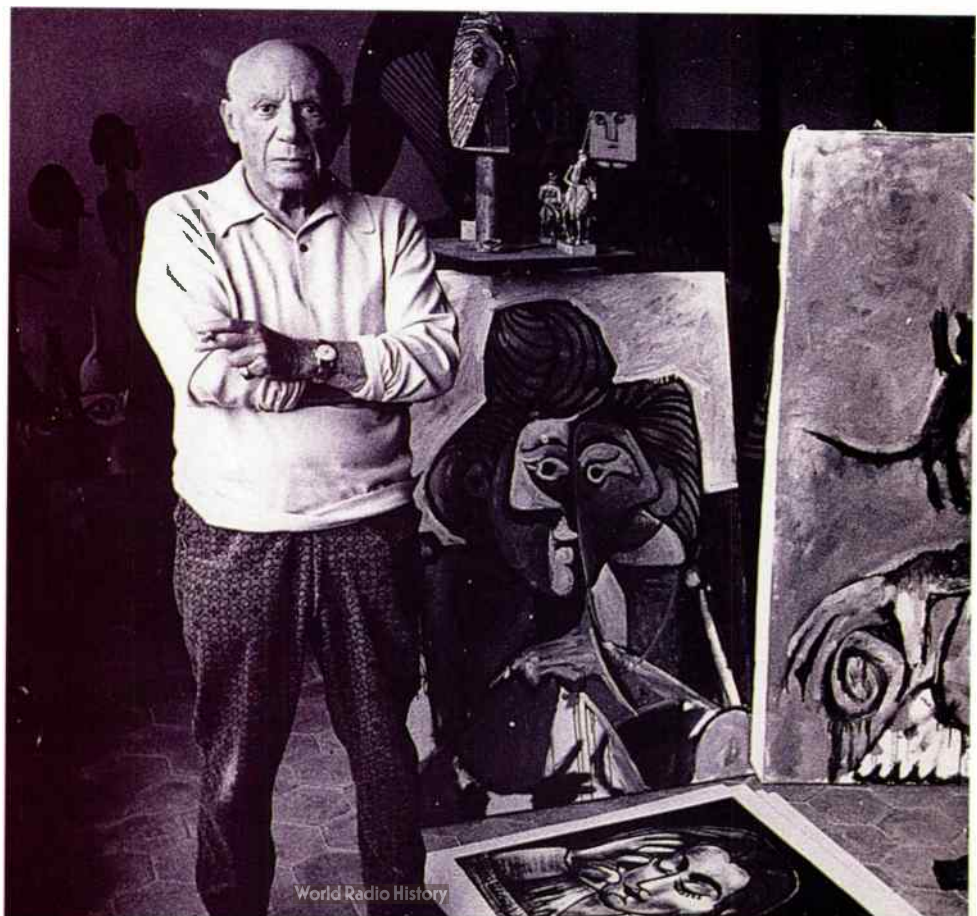




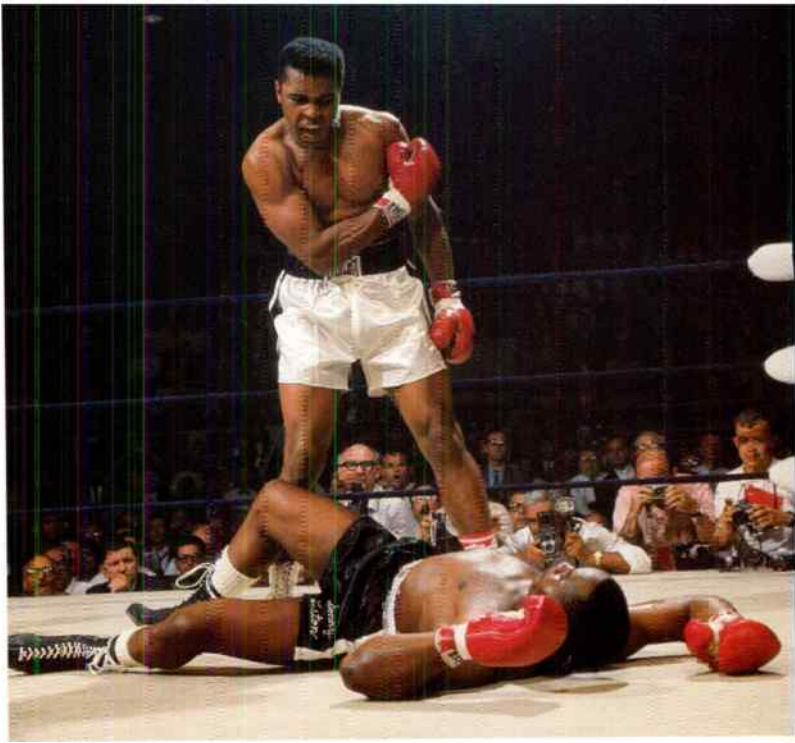
Kennedy, Picasso, the Beatles, Ali, Sinatra. And so on. As this book makes clear, those “few” in the twentieth century were probably more in number than in any previous such period, making this, truly, “The Century of the Individual.”

Reporters, of course, spend much of their professional lives profiling individuals as well as chronicling events. And profiling someone, anyone, who alters the course of history is a high-water mark for any reporter worthy of the name. Sometimes, you can see it coming, the way you can anticipate a tornado when the wind kicks up. But still it can astonish you. The steely determination in the eyes of Lech Walesa, the fleeting look of loneliness on the face of Fidel Castro, the sure stance and quick step of Mikhail Gorbachev—somehow these qualities speak volumes about both the men and the events these men shaped. Only in hindsight do we realize how much history was written into their DNA—how much what they accomplished was because of who they were: their character, their ambitions, their shortcomings, their hopes.

Generally, poets are better than mere reporters when it comes to communicating a sense of the human condition. Reporters can only confirm facts; poets touch the Truth. But the journalism of the twentieth century has enabled us to find a new kind of truth, a new kind of reality, if you will—personal, emotional, immediate.



For this and many other reasons, as a reporter, living in this century has been a blessing and a burden. A blessing to have been able to see and record so much. A burden to have felt, at times, as if events were unfolding much too quickly. How often, when covering the White House or Vietnam, I would file my story and put on my coat and prepare to turn out the light, only to get a late call and learn that already the story had changed. It's been famously said that journalism is the rough draft of history. Too often, for the reporter in this century, the rough draft has been written in sand that quickly shifted.

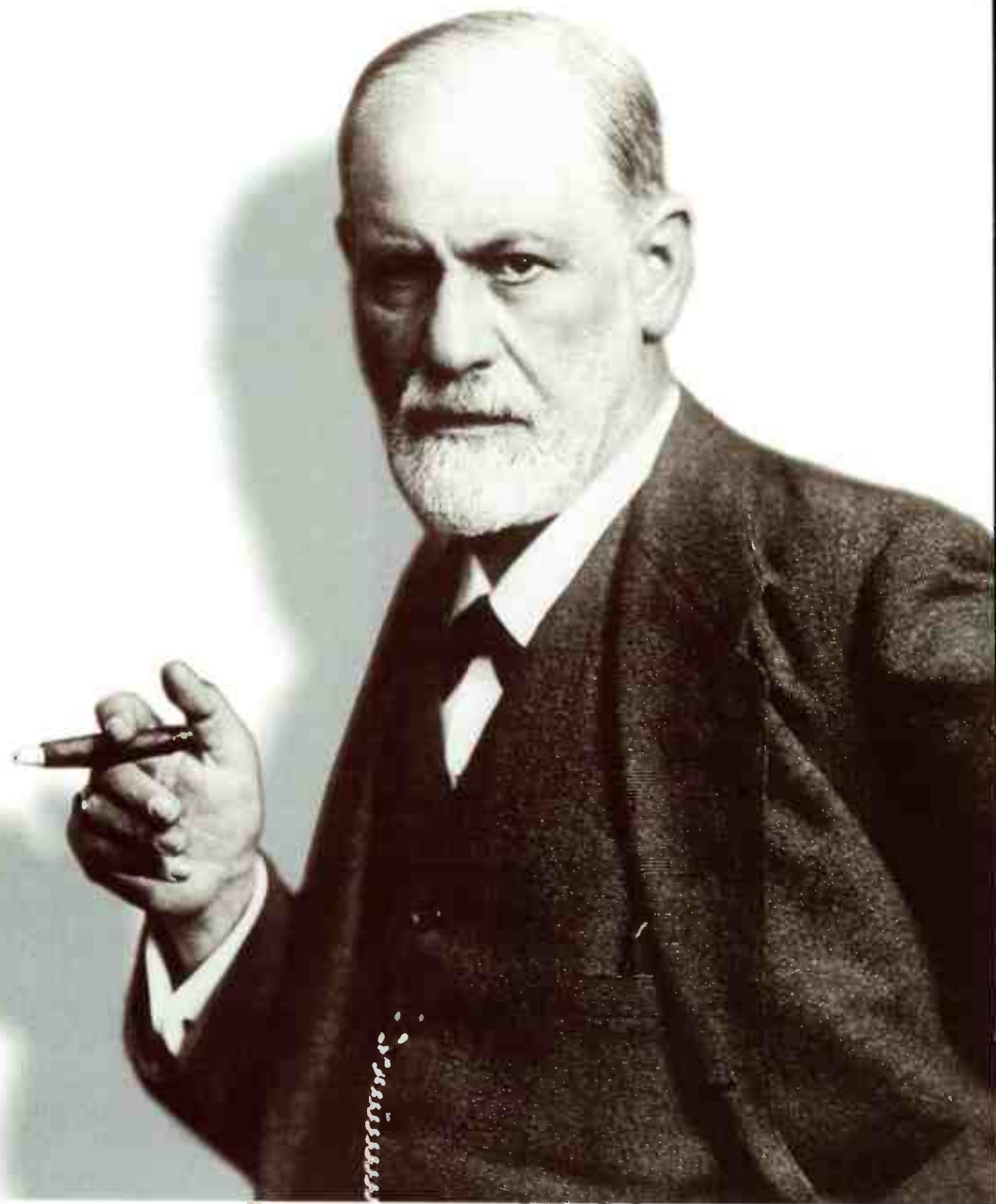


But there are moments that the camera, and the microphone, have preserved forever—permanent records of an impermanent time. We have pictures that freeze the fleeting emotion of a flag raising, whether on Iwo Jima or on the moon's Sea of Tranquility. We have reports that remind us of the urgency and frailty of these times—times rich with drama and comedy and wonder. Times that reflect the breadth and depth of the people who lived them. That is what this project by *Time* and CBS News has sought to capture—and what this book you now hold in your hands has sought to commemorate.

As one century ends, and another begins, these stories and images should serve as a reminder of where we have been, and where we can go. The rough draft of history now has a smoother, more definitive shape. At least for one more century. And some day soon, in the early years of the next century, a reporter equipped with a computer (and burdened, of course, by a deadline) will witness the unexpected miracle, the first great story of the twenty-first century.

A new age takes flight. A new rough draft begins.

# Sigmund Freud



THERE ARE NO NEUTRALS IN THE FREUD WARS. Admiration, even downright adulation, on one side; skepticism, even downright disdain, on the other. This is not hyperbole. A psychoanalyst who is currently trying to enshrine Freud in the pantheon of cultural heroes must contend with a relentless critic who devotes his days to exposing Freud as a charlatan. But on one

by *Peter Gay*

thing the contending parties agree: for good or ill, Sigmund Freud, more than any other explorer of the psyche, has shaped the mind of the twentieth century. The very fierceness and persistence of his detractors are a wry tribute to the staying power of Freud's ideas.

There is nothing new about such embittered confrontations; they have dogged Freud's footsteps since he developed the cluster of theories he would give the name of psychoanalysis. His fundamental idea—that all humans are endowed with an unconscious in which potent sexual and aggressive drives, and defenses against them, struggle for supremacy, as it were, behind a person's back—has struck many as a romantic, scientifically unprovable notion. His contention that the catalogue of neurotic ailments to which humans are susceptible is nearly always the work of sexual maladjustments, and that erotic desire starts not in puberty but in infancy, seemed to the respectable nothing less than obscene. His dramatic evocation of a universal Oedipus complex, in which (to put a complicated issue too simply) the little boy loves his mother and hates his father, seems more like a literary conceit than a thesis worthy of a scientifically minded psychologist.

Freud first used the term psychoanalysis in 1896, when he was already forty. He had been driven by ambition from his earliest days and encouraged by his doting parents to think highly of himself. Born in 1856 to an impecunious Jewish family in the Moravian hamlet of Freiberg (now Příbor in the Czech Republic), he moved with the rest of a rapidly increasing brood to Vienna. He was his mother's firstborn, her "golden Siggie." In recognition of his brilliance, his parents privileged him over his siblings by giving him a room to himself, to study in peace. He did not disappoint them. After an impressive career in school, he matriculated in 1873 in the University of Vienna and drifted from one philosophical subject to another until he hit on medicine. His choice was less that of a dedicated healer than of an inquisitive explorer determined to solve some of nature's riddles.

As he pursued his medical researches, he came to the conclusion that the most intriguing mysteries lay concealed in the complex operations of the mind. By the early 1890s, he was specializing in "neurasthenics" (mainly severe hysterics); they taught him much, including the art of patient listening. At the same time he was beginning to write down his dreams, increasingly convinced that they might offer clues to the workings of the unconscious, a notion he borrowed from the Romantics. He saw himself as a scientist taking material both from his patients and from himself, through introspection.



Most favored in his large family, young Sigmund, standing behind his mother, center, was always her "golden Siggie."



In 1891, Freud was using hypnosis to treat patients' hysteria.

accidents in mental procedures. The most nonsensical notion, the most casual slip of the tongue, the most fantastic dream, must have a meaning and can be used to unriddle the often incomprehensible maneuvers we call thinking.

Although the second pillar of Freud's psychoanalytic structure, *Three Essays on the Theory of Sexuality* (1905), further alienated him from the mainstream of contemporary psychiatry, he soon found loyal recruits. They met weekly to hash out interesting case histories, converting themselves into the Vienna Psychoanalytic Society in 1908. Working on the frontiers of mental science, these often eccentric pioneers had their quarrels. The two best known "defectors" were Alfred Adler and Carl Jung. Adler, a Viennese physician and socialist, developed his own psychology, which stressed the aggression with which those people lacking in some quality they desire—say, manliness—express their discontent by acting out. "Inferiority complex," a much abused term, is Adlerian. Freud did not regret losing Adler, but Jung was something else. Freud was aware that most of his acolytes were Jews, and he did not want to turn psychoanalysis into a "Jewish science." Jung, a Swiss from a pious Protestant background, struck Freud as his logical successor, his "crown prince." The two men were close for several years, but Jung's ambition, and his growing commitment to religion and mysticism—most unwelcome to Freud, an aggressive atheist—finally drove them apart.

Freud was intent not merely on originating a sweeping theory of mental functioning and malfunctioning. He also wanted to develop the rules of psychoanalytic therapy and expand his picture of human nature to encompass not just the couch but the whole culture. As to the first, he created the largely silent

By the mid-1890s, he was launched on a full-blown self-analysis, an enterprise for which he had no guidelines and no predecessors.

The book that made his reputation in the profession—although it sold poorly—was *The Interpretation of Dreams* (1900), an indefinable masterpiece—part dream analysis, part autobiography, part theory of the mind, part history of contemporary Vienna. The principle that underlay this work was that mental experiences and entities, like physical ones, are part of nature. This meant that Freud could admit no mere

#### BRIEF BIOGRAPHY

**BORN** May 6, 1856, in Freiberg, Moravia

**1881** Earns medical degree

**1885** Receives appointment as lecturer in neuropathology, University of Vienna

**1886** Begins private neurology practice in Vienna; marries Martha Bernays

**1900** Publishes *The Interpretation of Dreams*

**1910** Establishes International Psychoanalytic Association

**1938** Emigrates from Vienna to London

**DIED** September 23, 1939, in London

listener who encourages the analysand to say whatever comes to mind, no matter how foolish, repetitive, or outrageous, and who intervenes occasionally to interpret what the patient on the couch is struggling to say. While some adventurous early psychoanalysts thought they could quantify just what proportion of their analysands went away cured, improved, or untouched by analytic therapy, such confident enumerations have more recently shown themselves untenable. The efficacy of analysis remains a matter of controversy, though the possibility of mixing psychoanalysis and drug therapy is gaining support.

Freud's ventures into culture—history, anthropology, literature, art, sociology, the study of religion—have proved little less controversial, though they retain their fascination and plausibility and continue to enjoy a widespread reputation. As a loyal follower of nineteenth-century positivists, Freud drew a sharp distinction between religious faith (which is not checkable or correctable) and scientific inquiry (which is both). For himself, this meant the denial of truth-value to any religion whatever, including Judaism. As for politics, he left little doubt and said so plainly in his late—and still best known—essay, *Civilization and Its Discontents* (1930), noting that the human animal, with its insatiable needs, must always remain an enemy to organized society, which exists largely to tamp down sexual and aggressive desires. At best, civilized living is a compromise between wishes and repression—not a comfortable doctrine. It ensures that Freud, taken straight, will never become truly popular, even if today we all speak Freud.

In mid-March 1938, when Freud was eighty-one, the Nazis took over Austria, and after some reluctance, he emigrated to England with his wife and his favorite daughter and colleague, Anna, “to die in freedom.” He got his wish, dying not long after the Nazis unleashed World War II by invading Poland. Listening to an idealistic broadcaster proclaiming this to be the last war, Freud, his stoical humor intact, commented wryly, “My last war.”



Freud's daughter Anna, here at seventeen with her father, became a famous analyst in her own right, specializing in children.

# Emmeline Pankhurst



NOT EVEN THE NOISIEST PROPONENTS of women's proper place back in the home could seriously suggest today that women should not have the vote. Yet "the mother half of the human family," in Emmeline Pankhurst's phrase, was fully enfranchised only in this century. In Britain, so proud to claim "the Mother of Parliaments," universal suffrage—including

by *Marina Warner*

women's—was granted only in the year of her death, 1928. Mrs. Pankhurst was born a Victorian Englishwoman, but she shaped an idea of women for our time; she shook society into a new pattern from which there could be no going back.

The struggle to get votes for women, led by Mrs. Pankhurst and her daughter Christabel at the head of the militant suffragists, convulsed Britain from 1905 to 1914. The opposition the Liberal government put up looks incomprehensible today, and it provoked, among all classes and conditions of women, furious and passionate protests. The response of the police, the courts, and sometimes the crowds of suffragist opponents still makes shocking reading. Women were battered in demonstrations and, on hunger strikes, brutally force-fed in prison. When these measures risked taking lives, the infamous Cat & Mouse Act was passed so that a dangerously weakened hunger striker would be released and then rearrested when strong enough to continue her sentence. Under its terms, Mrs. Pankhurst, age fifty-four in 1912, went to prison twelve times that year. No wonder she railed. "The militancy of men, through all the centuries, has drenched the world with blood. The militancy of women has harmed no human life save the lives of those who fought the battle of righteousness."

Mrs. Pankhurst's father was a Manchester manufacturer with radical sympathies. When she was small, she was consuming *Uncle Tom's Cabin*, John Bunyan, and abolitionist materials; her earliest memories included hearing Elizabeth Cady Stanton speak. Her father was keen on amateur theatricals in the home; his daughter later enthralled the suffragists with her oratory and her voice. The young Rebecca West described hearing Mrs. Pankhurst in full cry: "Trembling like a reed, she lifted up her hoarse, sweet voice on the platform, but the reed was of steel and it was tremendous."

Richard Pankhurst, whom she married in 1879, when she was twenty and he was forty, was a brilliant lawyer, selflessly dedicated to reform, who drafted pioneering legislation granting women independent control of their finances. Emmeline bore five children but lost two sons, and when Richard died suddenly in 1898, she was left to bring up her children alone, with no private means.

The surviving Pankhurst women formed an intrepid, determined, powerfully gifted band. In 1903 they founded the Women's Social and Political Union. It was, Emmeline Pankhurst wrote later, "simply a suffrage army in the field." The charismatic, dictatorial eldest daughter, Christabel, emerged in her teens as the WSPU's strategist and an indomitable activist, with nerves of tungsten. Mrs. Pankhurst's second daughter, Sylvia, the artist, pioneered the corporate logo: as designer and scene painter of the WSPU, she created banners, costumes, and badges in the suffragist livery of



Emmeline Pankhurst and daughter Christabel in prison garb.



white, purple, and green. Though the family split later over policy, their combined talents powered from the beginning an astonishingly versatile tactical machine.

The WSPU adopted a French Revolutionary sense of crowd management, public spectacle, and symbolic ceremony. They would greet one of their number on release from prison and draw her triumphantly in a flower-decked wagon through the streets, and they staged elaborate allegorical pageants and torchlight processions, with Mrs. Pankhurst proudly walking at their head (if she wasn't in jail). Her example was followed internationally: the U.S. suffragist Alice Paul, who had taken part in suffragist agitation when she was a student at the London School of Economics, imported Pankhurst militancy to the U.S., leading a march five thousand strong in 1910.

#### BRIEF BIOGRAPHY

**BORN** Emmeline Goulden, July 14, 1858, in Manchester, England

**1903** Establishes the Women's Social and Political Union

**1905** The WSPU adopts more militant tactics

**1914** Shifts energy to supporting her country's effort in World War I

**1918** Women over thirty vote for the first time in Britain

**1920** Women win the vote in the U.S.

**1928** Women's voting age lowered to twenty-one in Britain

**DIED** June 14, 1928, in London

The political leaders of Edwardian Britain were utterly confounded by the energy and violence of this female rebellion, by the barrage of mockery, interruptions, and demands the suffragists hurled, and, later, by the sight of viragoes in silk petticoats, matrons with hammers, ladies with stones in their kid gloves, mothers and mill girls unbowed before the forces of judges, policemen, and prison wardens. Many suffragists in Britain and the U.S. argued that the Pankhursts' violence—arson, window smashing, picture slashing, and hunger strikes—was counterproductive to the cause and fueled misogynistic views of female hysteria. Though the question remains open, the historical record shows shameless government procrastination, broken pledges, and obstruction long before the suffragists abandoned heckling for acting up.

Mrs. Pankhurst took the suffragist thinking far and wide: she even managed to slip in a lecture tour of the U.S. between spells of a Cat & Mouse jail sentence. In her tireless public speaking, suffrage meant more than equality with men. While she was bent on sweeping away the limits of gender, she envisioned society transformed by feminine energies, above all by chastity, far surpassing the male's. In this, she is the foremother of the separatist wing of feminism today: the battle for the vote was for her a battle for the bedroom. She wrote, "We want to help women . . . We want to gain for them all the rights and protection that laws can give them. And, above all, we want the good influence of women to tell to its greatest extent in the social and moral questions of the time. But we cannot do this unless we have the vote and are recognised as citizens and voices to be listened to." Her plea to the court in 1912 ringingly concluded, "We are here, not because we are lawbreakers; we are here in our efforts to become lawmakers."

It is hard today not to sigh at the ardor of her hope in what voting could achieve, not to be amazed at the confidence she showed in political reform. But heroism looks to the future, and heroes hold to their faith. Joan of Arc was the suffragists' mascot, Boadicea their goddess, and Mrs. Pankhurst the true inheritor of the armed maidens of heroic legend.



# Theodore Roosevelt

THEY DON'T HOLD WHITE HOUSE lunches the way they used to at the beginning of the century. On January 1, 1907, for example, the guest list was as follows: a Nobel Prize winner, a physical culturist, a naval historian, a biographer, an essayist, a paleontologist, a taxidermist, an ornithologist, a field naturalist, a conservationist, a big-game hunter, an editor,

by *Edmund Morris*

a critic, a ranchman, an orator, a country squire, a civil service reformer, a socialite, a patron of the arts, a colonel of the cavalry, a former Governor of New York, the ranking expert on big-game mammals in North America, and the President of the U.S.

All these men were named Theodore Roosevelt.

In his protean variety, his febrile energy (which could have come from his lifelong habit of popping nitroglycerin pills for a dicey heart), his incessant self-celebration, and his absolute refusal to believe there was anything finer than to be born an American, unless to die as one in some glorious battle for the flag, the great “Teddy” was as representative of twentieth-century dynamism as Abraham Lincoln had been of nineteenth-century union and George Washington of eighteenth-century independence.

Peevish Henry Adams, who lived across the square from the White House and was always dreading that the President might stomp over for breakfast (T.R. thought nothing

of guzzling twelve eggs at a sitting), tried to formulate the dynamic theory of history that would explain, at least to Adams’s comfort, why America was accelerating into the future at such a frightening rate. His theory was eventually published in *The Education of Henry Adams* but makes less sense today than his brilliant description of the President as perhaps the fundamental motive force of our age: “Power when wielded by abnormal energy is the most serious of facts. . . . Roosevelt, more than any other man living within the range of notoriety, showed the singular primitive quality that belongs to ultimate matter—he was pure Act.”

In his youth, as indeed during his infamous “White House walks,” which usually culminated in a nude swim across the Potomac, Theodore Roosevelt’s cross-country motto was “Over, Under or Through—But Never Around.” That overmastering directness and focus upon his objective, be it geological or political or personal, was the force that Adams identified. But T.R., unlike so many other active (as opposed to reactive) Presidents,

also had a highly sophisticated, tactical mind. William Allen White said that Roosevelt “thought with his hips”—an aperçu that might better be applied to Ronald Reagan, whose intelligence was intuitive, and even to Franklin Roosevelt, who never approached “Cousin Theodore” in smarts. White probably meant that T.R.’s mental processor moved so fast as to fuse thought and action.

He was, after all, capable of reading one to three books daily while pouring out an estimated 150,000 letters and conducting the business of the presidency with such dispatch that he could usually spend the entire afternoon goofing off, if his kind of mad exercise can be euphemized as goofing off. “Theodore!” Senator Henry Cabot Lodge was once heard shouting, “if you knew how ridiculous you look up that tree, you’d come down at once!”

### BRIEF BIOGRAPHY

**BORN** October 27, 1858, in New York City

**1897** Named Assistant Secretary of the Navy

**1898** Leads Rough Riders in Spanish-American War; elected Governor of New York

**1900–1901** Elected Vice President; President McKinley shot; T.R. becomes President

**1904** Elected President; begins Panama Canal

**1906** Wins Nobel Peace Prize

**1912** Loses bid for the presidency

**DIED** 1919, in his sleep

The obvious example of T.R.'s "Never Around" approach to statesmanship was the Panama Canal, which he ordered built in 1903, after what he called "three centuries of conversation." If a convenient revolution had to be fomented in Colombia (in order to facilitate the independence of Panama province and allow construction to proceed PDQ), well, that was Bogotá's bad luck for being obstructionist and good fortune for the rest of world commerce. Being a historian, T.R. never tired of pointing out that his Panamanian revolution had been merely the fifty-third anti-Colombian insurrection in as many years, but he was less successful in arguing that it was accomplished within the bounds of international law. "Oh, Mr. President," his Attorney General Philander Knox sighed, "do not let so great an achievement suffer from any taint of legality."

Dubious or not as a triumph of foreign policy, the canal has functioned perfectly for most of the century, and still does so to the honor of our technological reputation, although its control has reverted to the country T.R. allowed to sprout alongside, like a glorified right of way.

But T.R. deserves to be remembered, I think, for some acts more visionary than land grabbing south of the border. He fathered the modern American navy, for example, while his peacemaking between Russia and Japan in 1905 elevated him to the front rank of presidential diplomats. He pushed through the Pure Food and Meat Inspection laws of 1906, forcing Congress to acknowledge its responsibility as consumer protector.

Many other Rooseveltian acts loom larger in historical retrospect than they did at the time, when they passed unnoticed or unappreciated. For example, T.R. was the first President to perceive, through his own pince-nez, that this nation's future trade posture must be toward Asia and away from the Old World entanglements of its past. Crossing the Sierra Nevada on May 7, 1903, he goggled at the beauty and otherworldliness of California. New York—his birthplace—seemed impossibly far away, Europe antipodean. "I felt as if I was seeing Providence in the making."

There was no doubt at all in T.R.'s leaping mind which would be the world's next



Campaigning in Evanston, Illinois, in 1900.



Hunting big game  
in Brazil, 1913.

superpower. Less than five years before, he had stormed San Juan Heights in Cuba and felt what he described as the “wolf rising in the heart”—that primal lust for victory and power that drives all conquerors. “Our place . . . is and must be with the nations that have left indelibly their impress on the centuries!” he shouted in San Francisco.

It’s tempting to speculate how T.R. might behave as President if he were alive today. The honest answer, of course, is that he would be bewildered by the strangeness of everything, as people blind from birth are said to be when shocked by the “gift” of sight. But he certainly would be appalled by contemporary Americans’ vulgarity and

sentimentality, particularly the way we celebrate nonentities. Also by our lack of respect for officeholders and teachers, lack of concern for unborn children, excessive wealth, and deteriorating standards of physical fitness.

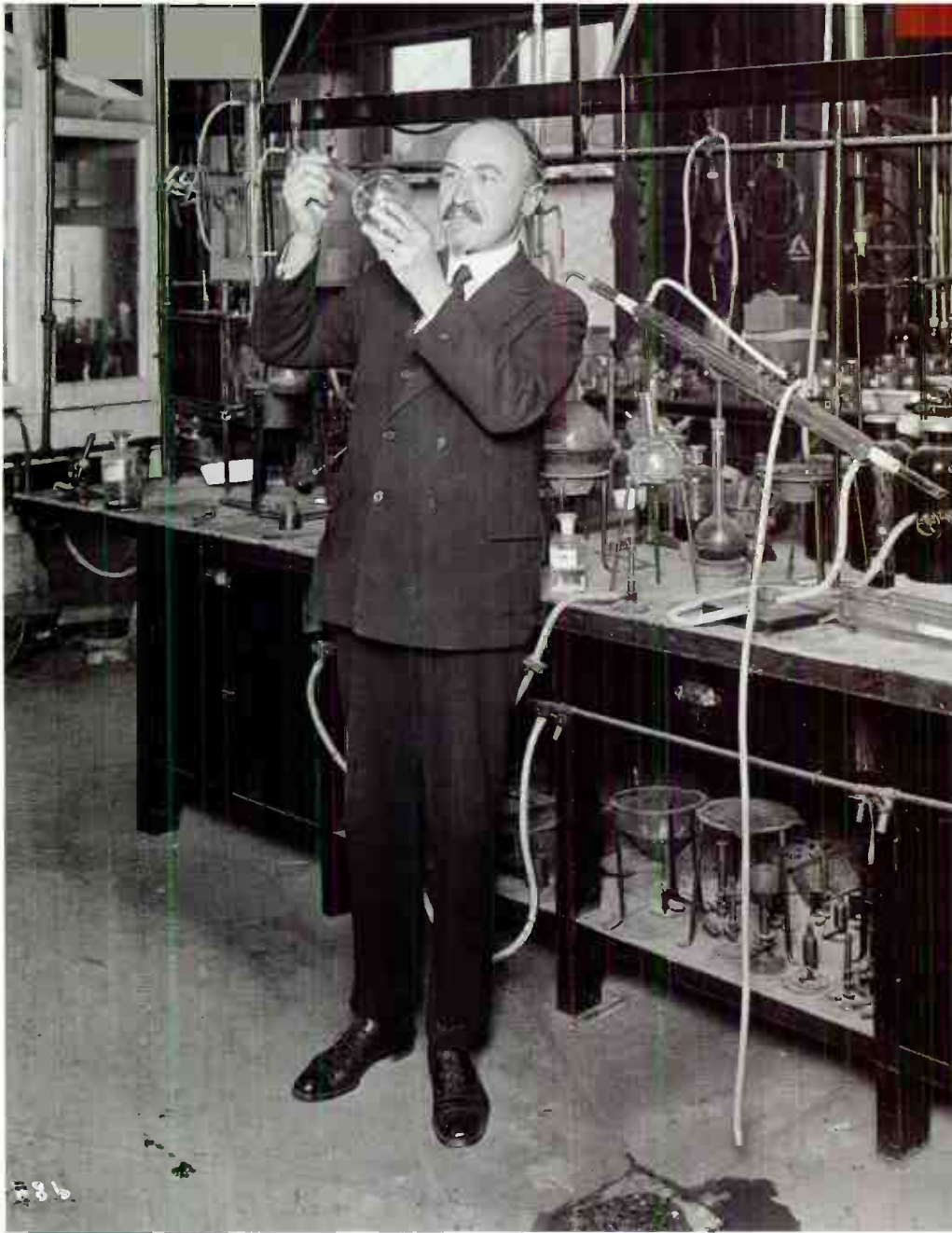
Abroad he would admire our willingness to challenge foreign despots and praise the generosity with which we finance the development of less-fortunate economies. At home he would want to do something about Microsoft, since he had been passionate about monopoly from the moment he entered politics. Although no single trust a hundred years ago approached the monolithic immensity of Mr. Gates’s empire, the Northern Securities merger of 1901 created the greatest transport combine in the world, controlling commerce from Chicago to China.

T.R. busted it. In doing so he burnished himself with instant glory as the champion of American individual enterprise against corporate “malefactors of great wealth.” That reputation suited him just fine, although he privately believed in Big Business and was just as wary of unrestrained, amateurish competition. All he wanted to establish, early in his first term, was government’s right to regulate rampant entrepreneurship.

Most of all, I think, Theodore Roosevelt would use the power of the White House in 1998 to protect our environment. His earliest surviving letter, written at age ten, mourns the cutting down of a tree, and he went on to become America’s first conservationist President, responsible for five new national parks, eighteen national monuments, and untold millions of acres of national forest. Without a doubt, he would react toward the great swaths of farmland that are now being carbuncled over with “development” as he did when told that no law allowed him to set aside a Florida nature preserve at will.

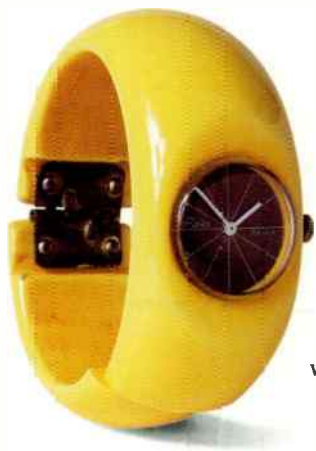
“Is there any law that prevents me declaring Pelican Island a National Bird Sanctuary?” T.R. asked, not waiting long for an answer. “Very well, then,” reaching for his pen, “I do declare it.”

# Leo Baekeland



IN THE OPENING SCENE OF *The Graduate*, Benjamin Braddock (played by a young Dustin Hoffman) is awkwardly working an affluent Southern California crowd at a graduation party arranged for him by his parents when a family friend offers one of the century's most famous pieces of cinematic advice: "I just want to say one word to you. Just one word: plastics."

*by Ivan Amato*



Watch, circa 1938. |

Millions of moviegoers winced and smiled. The scene neatly captured their own late-1960s ambivalence toward the ever more synthetic landscape of their times. They loved their cheap, easy-to-clean Formica countertops, but envied—and longed for—the authentic touch and timelessness of marble and wood. The chord struck by that line in *The Graduate* underscored how much had happened in the six decades since the summer of 1907, when Leo Hendrik Baekeland made the laboratory breakthrough that would change the stuff our world is made of.

A Belgian-born chemist-entrepreneur, Baekeland had a knack for spotting profitable opportunities. He scored his first success in the 1890s with his invention of Velox, an improved photographic paper that freed photographers from having to use sunlight for developing images. With Velox, they could rely on artificial light, which at the time usually meant gaslight but soon came to mean electric. It was a far more dependable and convenient way to work. In 1899 George Eastman, whose cameras and developing services would make photography a household activity, bought full rights to Velox for the then astonishing sum of \$1 million.

With that windfall, Baekeland, his wife, Celine (known as “Bonbon”), and two children moved to Snug Rock, a palatial estate north of Yonkers, New York, overlooking the Hudson River. There, in a barn he converted into a lab, he began foraging for his next big hit. It wasn’t long before the burgeoning electrical industry seemed to say just one word to him: insulators.

The initial tease for Baekeland—“Doc Baekeland” to many—was the rising cost of shellac. For centuries, the resinous secretions that *Laccifer lacca* beetles deposited on trees had provided a cottage industry in southern Asia, where peasants heated and filtered it to produce a varnish for coating and preserving wood products. Shellac also happened to be an effective electrical insulator. Early electrical workers used it as a coating to insulate coils, and molded it into stand-alone insulators by pressing together layers of shellac-impregnated paper.

When electrification began in earnest in the first years of the century, demand for shellac soon outstripped supply. Baekeland recognized a killer ap when he saw one. If only he could come up with a synthetic substitute for shellac.

Others nearly beat him to it. As early as 1872, German chemist Adolf von Baeyer was investigating the recalcitrant residue that gathered in the bottom of glassware that had been host to reactions between phenol (a turpentine-like solvent distilled from coal tar, which the gas-lighting industry produced in bulk) and formaldehyde (an embalming fluid distilled from wood alcohol). Von Baeyer set his sights on new synthetic dyes, however, not insulators. To him, the ugly, insoluble gunk in his glassware was a sign of a dead end.

To Baekeland and others aiming to find commercial opportunities in the nascent electrical industry, that gunk was a signpost pointing toward something great. The chal-

lenge for Baekeland and his rivals was to find some set of conditions—some slippery ratio of ingredients and heat and pressure—that would yield a more workable, shellac-like substance. Ideally it would be something that would dissolve in solvents to make insulating varnishes and yet be as moldable as rubber.

Starting around 1904, Baekeland and an assistant began their search. Three years later, after filling laboratory books with page after page of failed experiments, Baekeland finally developed a material that he dubbed in his notebooks “Bakelite.” The key turned out to be his “bakelizer,” a heavy iron vessel that was part pressure cooker and part basement boiler. With it, he was able to control the formaldehyde-phenol reaction with more finesse than had anyone before him.

Initial heating of the phenol and formaldehyde (in the presence of an acid or base to get the reaction going) produced a shellac-like liquid good for coating surfaces like a varnish. Further heating turned the liquid into a pasty, gummier goo. And when Baekeland put this stuff into the bakelizer, he was rewarded with a hard, translucent, infinitely moldable substance. In a word: plastic.

He filed patent applications and soon began leaking word of his invention to other chemists. In 1909 Baekeland unveiled the world’s first fully synthetic plastic at a meeting of the New York chapter of the American Chemical Society. Would-be customers discovered it could be fashioned into molded insulation, valve parts, pipe stems, billiard balls, knobs, buttons, knife handles, and all manner of items.

It was twentieth-century alchemy. From something as vile as coal tar came a remarkably versatile substance. It wasn’t the first plastic, however. Celluloid had been commercially available for decades as a substitute for tortoiseshell, horn, bone, and other materials. But celluloid, which had developed a reputation as a cheap mimic of better traditional materials, was derived from chemically treated cotton and other cellulose-containing vegetable matter. Bakelite was lab-made through and through. It was 100 percent synthetic.

Baekeland founded the General Bakelite Corp. to both make and license the manufacture of Bakelite. Competitors soon marketed knockoffs—most notably Redmanol and Condensite, which Thomas Edison used in a failed attempt to dominate the nascent recording industry with “unbreakable” phonograph disks. The presence of inauthentic Bakelite out there led to an early-twentieth-century version of the “Intel Inside” logo. Items made with the real thing carried a “tag of genuineness” bearing the Bakelite name. Following drawn-out patent wars, Baekeland negotiated a merger with his rivals that put him at the helm of a veritable Bakelite empire.

Bakelite camera, no bigger than a matchbox, 1934.







Plastic dice,  
circa 1945.



Bakelite became so visible in so many places that the company advertised it as “the material of a thousand uses.” It became the stuff of everything from cigar holders and rosary beads to radio housings, distributor caps, and telephone casings. A 1924 *Time* cover story on Baekeland reported that those familiar with Bakelite’s potential “claim that in a few years it will be embodied in every mechanical facility of modern civilization.”

In truth, Bakelite—whose more chemically formal name is polyoxybenzylmethylenglycolanhydride—was just a harbinger of the age of plastics. Since Bakelite’s heyday, researchers have churned out a polysyllabic catalogue of plastics: polymethyl methacrylate (Plexiglas), polyesters, polyethylene, polyvinyl chloride (PVC, aka vinyl), polyhexamethylene adipamide (the original nylon polymer), polytetrafluoroethylene (Teflon), polyurethane, poly-this, poly-that.

In 1945, a year after Baekeland died, annual plastic production in the U.S. reached more than 400,000 tons. In 1979, twelve years after *The Graduate*, the annual volume of plastic manufactured overtook that of steel, the symbol of the Industrial Revolution. Last year nearly 47 million tons of plastic were produced.

Today plastic is nearly everywhere, from the fillings in our teeth to the chips in our computers (researchers are developing flexible transistors made of plastic instead of silicon so they can make marvels such as a flat-panel television screen that will roll like a scroll up your living room wall). Plastic may not be as vilified now as it was in 1967, but it’s still a stuff that people love and hate. Every time a grocery clerk asks, “Paper or plastic?” the great debate between old and new, natural and synthetic, biodegradable and not, silently unfolds in a shopper’s breast in the instant it takes to decide on the answer.

#### BRIEF BIOGRAPHY

**BORN** 1863 in Ghent, Belgium

**1889** Moves to U.S.

**1899** Sells rights to Velox to George Eastman for \$1 million

**1904** Sets out to find a synthetic substitute for shellac

**1907** Develops the first all-artificial plastic, which he calls Bakelite

**1909** Introduces Bakelite at a chemical conference and founds the General Bakelite Corp.

**DIED** 1944, in Beacon, New York at eighty

# Henry Ford



THE ONLY TIME I EVER MET Henry Ford, he looked at me and probably wondered, “Who is this little SOB fresh out of college?” He wasn’t real big on college graduates, and I was one of fifty in the Ford training course in September 1946, working in a huge drafting room at the enormous River Rouge plant near Detroit.

*by Lee Iacocca*

One day there was a big commotion at one end of the floor and in walked Henry Ford with Charles Lindbergh. They walked down my aisle asking men what they were doing. I was working on a mechanical drawing of a clutch spring (which drove me out of engineering forever), and I was worried that they'd ask me a question because I didn't know what the hell I was doing—I'd been there only thirty days. I was just awestruck by the fact that there was Colonel Lindbergh with my new boss, coming to shake my hand.

The boss was a genius. He was an eccentric. He was no prince in his social attitudes and his politics. But Henry Ford's mark in history is almost unbelievable. In 1905, when there were fifty start-up companies a year trying to get into the auto business, his backers at the new Ford Motor Co. were insisting that the best way to maximize profits was to build a car for the rich.

But Ford was from modest, agrarian Michigan roots. And he thought that the guys who made the cars ought to be able to afford one themselves so that they too could go for a spin on a Sunday afternoon. In typical fashion, instead of listening to his backers, Ford eventually bought them out.

Using a moving line—here workers make the flywheel magneto in 1913—reduced a car's assembly time from 12 hours to 93 minutes.



And that proved to be only the first smart move in a crusade that would make him the father of twentieth-century American industry. When the black Model T rolled out in 1908, it was hailed as America's Everyman car—elegant in its simplicity and a dream machine not just for engineers but for marketing men as well.

Ford instituted industrial mass production, but what really mattered to him was mass consumption. He figured that if he paid his factory workers a real living wage and produced more cars in less time for less money, everyone would buy them.

Almost half a century before Ray Kroc sold a single McDonald's hamburger, Ford invented the dealer-franchise system to sell and service cars. In the same way that all politics is local, he knew that business had to be local. Ford's "road men" became a familiar part of the American landscape.

By 1912 there were seven thousand Ford dealers across the country.

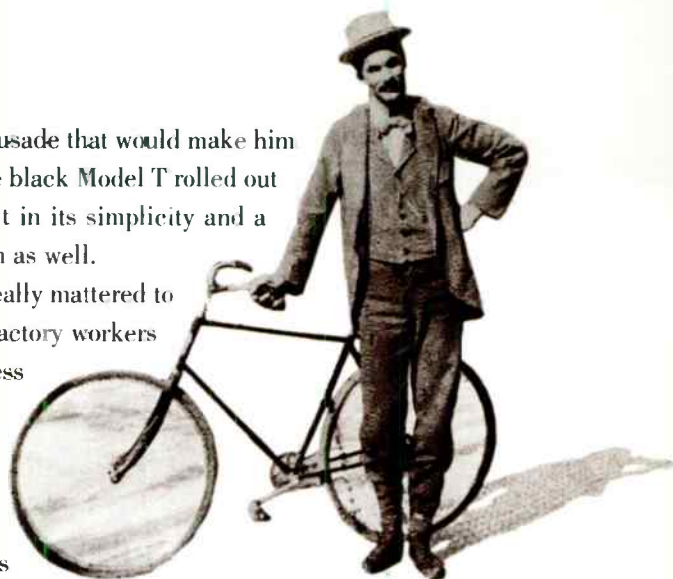
In much the same fashion, he worked on making sure that an automotive infrastructure developed along with the cars. Just like horses, cars had to be fed—so Ford pushed for gas stations everywhere. And as his tin lizzies bounced over the rutted tracks of the horse age, he campaigned for better roads, which eventually led to an interstate highway system that is still the envy of the world.

His vision would help create a middle class in the U.S., one marked by urbanization, rising wages, and some free time in which to spend them. When Ford left the family farm at age sixteen and walked eight miles to his first job in a Detroit machine shop, only two out of eight Americans lived in the cities. By World War II that figure would double, and the affordable Model T was one reason for it. People flocked to Detroit for jobs, and if they worked in one of Henry's factories, they could afford one of his cars—it's a virtuous circle, and he was the ringmaster. By the time production ceased for the Model T in 1927, more than 15 million cars had been sold—or half the world's output.

Nobody was more of an inspiration to Ford than the great inventor Thomas Alva Edison. At the turn of the century Edison had blessed Ford's pursuit of an efficient, gas-powered car during a chance meeting at Detroit's Edison Illuminating Co., where Ford was chief engineer. (Ford had already worked for the company of Edison's fierce rival, George Westinghouse.)

After the Model T's enormous success, the two visionaries from rural Michigan became friends and business partners. Ford asked Edison to develop an electric storage battery for the car and funded the effort with \$1.5 million. Ironically, despite all his other great inventions, Edison never perfected the storage battery. Yet Ford immortalized his mentor's inventive genius by building the Edison Institute in Dearborn.

Ford's great strength was the manufacturing process—not invention. Long before he started a car company, he was an inveterate tinkerer, known for picking up loose



Ford in 1892, then building his first car: a motor on a frame fitter with four bicycle wheels.



Ford with Thomas Edison, presidential aide George Christian, Warren Harding, Harvey Firestone, and Bishop William Anderson

scraps of metal and wire and turning them into machines. He'd been putting cars together since 1891. Although by no means the first popular automobile, the Model T showed the world just how innovative Ford was at combining technology and markets.

The company's assembly line alone threw America's Industrial Revolution into overdrive. Instead of having workers put together the entire car, Ford's associates, who were great tool- and diemakers from Scotland, organized teams that added parts

to each Model T as it moved down a line. By the time Ford's sprawling Highland Park plant was humming along in 1914, the world's first automatic conveyor belt could churn out a car every ninety-three minutes.

The same year, Henry Ford shocked the world with what probably stands as his greatest contribution ever: the \$5 a day minimum wage scheme. The average wage in the auto industry then was \$2.34 for a nine-hour shift. Ford not only doubled that, he also shaved an hour off the workday. In those years it was unthinkable that a guy could be paid that much for doing something that didn't involve an awful lot of training or education. *The Wall Street Journal* called the plan "an economic crime," and critics everywhere heaped "Fordism" with equal scorn.

But as the wage increased later to a daily \$10, it proved a critical component of Ford's quest to make the automobile accessible to all. The critics were too obtuse to comprehend that because Ford had lowered his costs per car, the higher wages didn't matter—except for making it feasible for more people to buy cars.

When Ford stumbled, it was because he wanted to do everything his way. By the late 1920s the company had become so vertically integrated that it was completely self-sufficient. Ford controlled rubber plantations in Brazil, a fleet of ships, a railroad, sixteen coal mines, and thousands of acres of timberland and iron ore mines in Michigan and Minnesota. All this was combined at the gigantic River Rouge plant, a sprawling city of a place where more than 100,000 men worked.

The problem was that for too long they worked on only one model. Although people told him to diversify, Henry Ford had developed tunnel vision. He basically started saying "to hell with the customer," who can have any color as long as it's black. He didn't bring out a new design until the Model A in 1927, and by then GM was gaining.

In a sense Henry Ford became a prisoner of his own success. He turned on some of his best and brightest when they launched design changes or plans he had not approved. On one level you have to admire his paternalism. He was so worried that his workers would go crazy with their five bucks a day that he set up a "Sociological Department" to make sure that they didn't blow the money on booze and vice. He banned smoking because he thought, correctly as it turned out, that tobacco was

unhealthy. “I want the whole organization dominated by a just, generous, and humane policy,” he said.

Naturally, Ford, and only Ford, determined that policy. He was violently opposed to labor organizers, whom he saw as “the worst thing that ever struck the earth,” and entirely unnecessary—who, after all, knew more about taking care of his people than he? Only when he was faced with a general strike in 1941 did he finally agree to let the United Auto Workers organize a plant.

By then Alfred P. Sloan had combined various car companies into a powerful General Motors, with a variety of models and prices to suit all tastes. He had also made labor peace. That left Ford in the dust, its management in turmoil. And if World War II hadn't turned the company's manufacturing prowess to the business of making B-24 bombers and jeeps, it is entirely possible that the 1932 V-8 engine might have been Ford's last innovation.

In the prewar years there was no intelligent management at Ford. When I arrived at the end of the war, the company was a monolithic dictatorship. Its balance sheet was still being kept on the back of an envelope, and the guys in purchasing had to weigh the invoices to count them. College kids, managers, anyone with book learning was viewed with some kind of suspicion. Ford had done so many bizarre things—from terrorizing his own lieutenants to canonizing Adolf Hitler—that the company's image was as low as it could go.

It was Henry Ford II who rescued the legacy. He played down his grandfather's antics, and he made amends with the Jewish business community that Henry Ford had alienated so much with the racist attacks that are now a matter of historical record. Henry II encouraged the “whiz kids” like Robert McNamara and Arjay Miller to modernize management, which put the company back on track. Ford was the first company to get a car out after the war, and it was the only company that had a real base overseas. In fact, one of the reasons that Ford is so competitive today is that from the very beginning, Henry Ford went anywhere there was a road—and usually a river. He took the company to thirty-three countries at his peak. These days the automobile business is going more global every day, and in that, as he was about so many things, Ford was prescient.

Henry Ford died in his bed at his Fair Lane mansion seven months after I met him, during a blackout caused by a storm in the spring of 1947. He was eighty-three. The fact is, there probably couldn't be a Henry Ford in today's world. Business is too collegial. One hundred years ago, business was done by virtual dictators—men laden with riches and so much power they could take over a country if they wanted to. That's not acceptable anymore. But if it hadn't been for Henry Ford's drive to create a mass market for cars, America wouldn't have a middle class today.

#### BRIEF BIOGRAPHY

**BORN** July 30, 1863, near Dearborn, Michigan

**1879–1902** Works in machine shops and builds various cars and engines

**1903** Forms Ford Motor Co.

**1908** Debuts the Model T, an affordable, instant hit

**1913–14** Introduces assembly line and \$5 daily wage

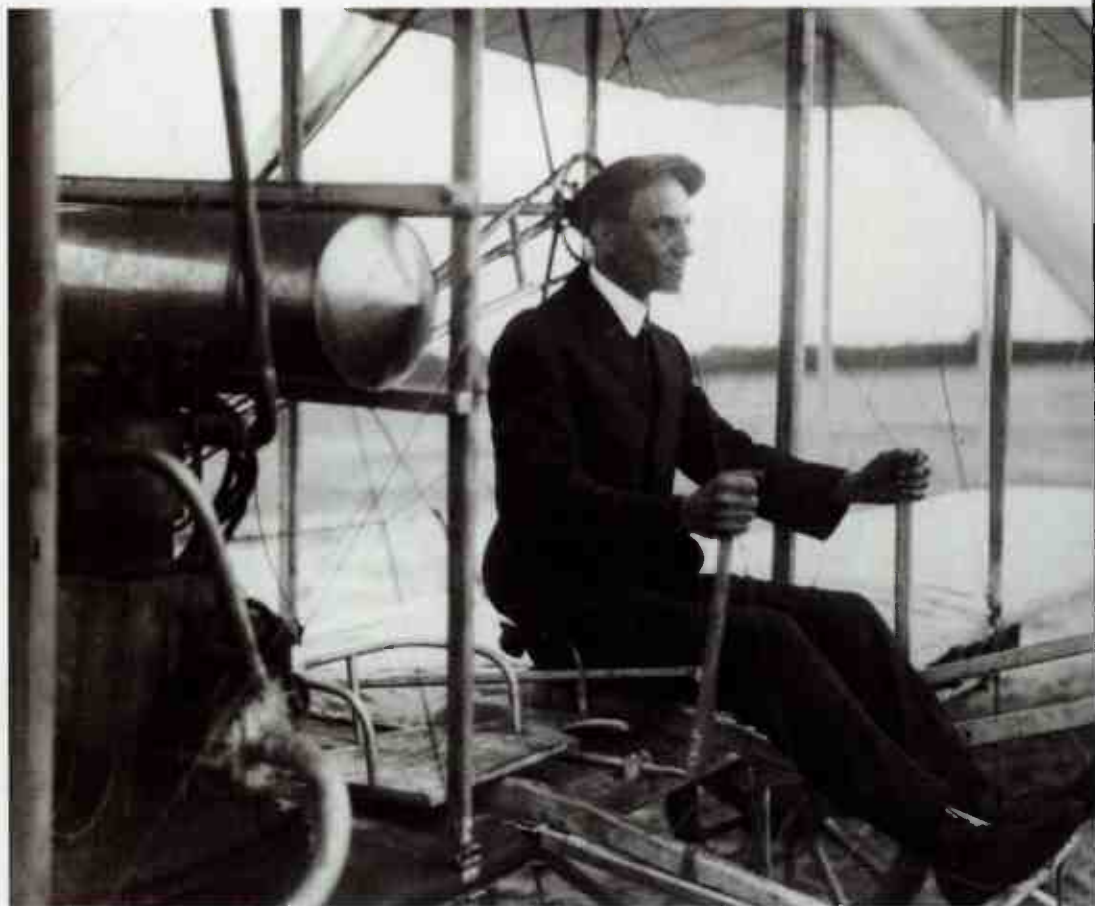
**1918** Narrowly loses campaign for U.S. Senate

**1936** Establishes the Ford Foundation

**1941** Reluctantly agrees to union presence at Ford

**DIED** April 7, 1947, at Fair Lane, his estate

# The Wright Brothers



WILBUR AND ORVILLE WRIGHT were two brothers from the heartland of America with a vision as sweeping as the sky and a practicality as down-to-earth as the Wright Cycle Co., the bicycle business they founded in Dayton, Ohio, in 1892. But while there were countless bicycle shops in turn-of-the-century America, in only one were wings being built as well as

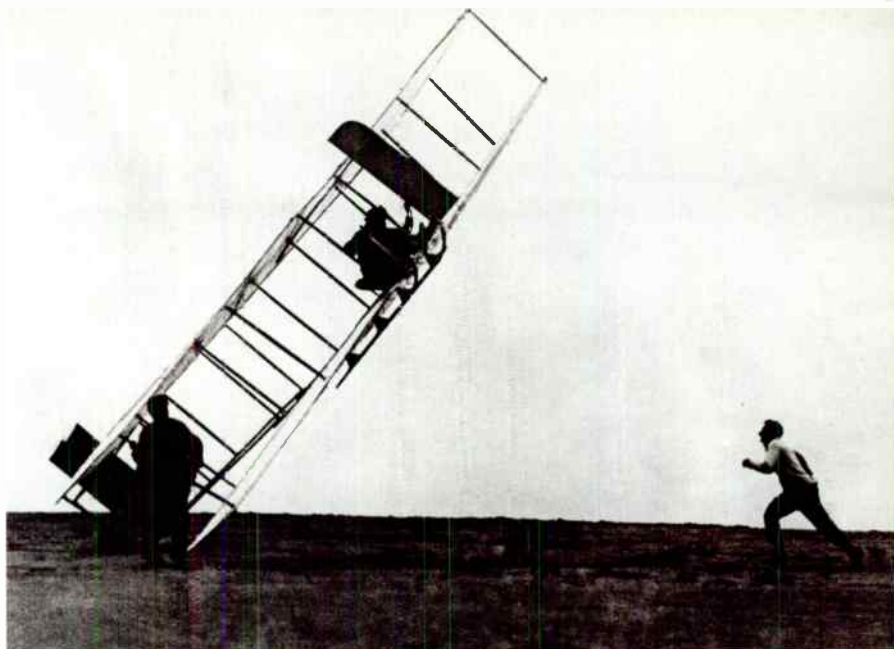
*by Bill Gates*

wheels. When the Wright brothers finally realized their vision of powered human flight in 1903, they made the world a forever smaller place. I've been to Kitty Hawk, North Carolina, and seen where the brothers imagined the future, and then literally flew across its high frontier. It was an inspiration to be there, and to soak up the amazing perseverance and creativity of these two pioneers.

The Wright brothers had been fascinated by the idea of flight from an early age. In 1878 their father, a bishop in the Church of the United Brethren in Christ, gave them a flying toy made of cork and bamboo. It had a paper body and was powered by rubber bands. The young boys soon broke the fragile toy, but the memory of its faltering flight across their living room stayed with them. By the mid-1890s Wilbur was reading every book and paper he could find on the still earthbound science of human flight. And four years before they made history at Kitty Hawk, the brothers built their first, scaled-down flying machine—a pilotless “kite” with a five-foot wingspan, and made of wood, wire, and cloth. Based on that experiment, Wilbur became convinced that he could build an aircraft that would be “capable of sustaining a man.”

While the brothers' bicycle business paid the bills, it was Wilbur's abiding dream of building a full-size flying machine that inspired their work. For many years, he once said, he had been “afflicted with the belief that flight is possible.” The reality of that obsession was a lonely quest for the brothers in the workroom behind their bike shop, plotting to defy gravity and conquer the wind. Yet that obsessive kind of world-changing belief is a force that drives you to solve a problem, to find the breakthrough—a force that drives you to bet everything on a fragile wing or a new idea. It was a force that led the Wright brothers to invent, single-handedly, each of the technologies they needed to pursue their dream.

When published aeronautical data turned out to be unreliable, the Wright brothers built their own wind tunnel to test airfoils and measure empirically how to lift a flying machine into the sky. They were the first to discover that a long, narrow wing shape was the ideal architecture of flight. They figured out how to move the vehicle freely, not just across land, but up and down on a cushion of air. They built a forward elevator to control the pitch of their craft as it nosed up and down. They fashioned a pair of twin rudders in back to control its tendency to yaw from side to side. They devised a pulley



By 1911, Orville (between crack-ups) had set a powered-flight record of nearly ten minutes.



system that warped the shape of the wings in midflight to turn the plane and to stop it from rolling laterally in air. Recognizing that a propeller isn't like a ship's screw, but becomes, in effect, a rotating wing, they used the data from their wind-tunnel experiments to design the first effective airplane props—a pair of eight-foot propellers, carved out of laminated spruce, that turned in opposite directions to offset the twisting effect on the machine's structure. And when they discovered that a lightweight gas-powered engine did not exist, they decided to design and build their own. It produced twelve horsepower and weighed only 152 pounds.

The genius of Leonardo da Vinci imagined a flying machine, but it took the methodical application of science by these two American bicycle mechanics to create it. The unmanned gliders spawned by their first efforts flew erratically and were at the mercy of any strong gust of wind. But with help from their wind tunnel, the brothers amassed more data on wing design than anyone before them, compiling tables of computations that are still valid today. And with guidance from this scientific study, they developed the powered 1903 *Flyer*, a skeletal flying machine of spruce, ash, and muslin, with a wingspan of forty feet and an unmanned weight of just over 600 pounds.

On December 17, 1903, with Orville at the controls, the *Flyer* lifted off shakily from Kitty Hawk and flew 120 feet—little more than half the wingspan of a Boeing 747-400. That twelve-second flight changed the world, lifting it to new heights of freedom and giving mankind access to places it had never before dreamed of reaching. Although the Wright brothers' feat was to transform life in the twentieth century, the next day only four newspapers in the U.S. carried news of their achievement—news that was widely dismissed as exaggerated.

The Wright brothers gave us a tool, but it was up to individuals and nations to put it to use, and use it we have. The airplane revolutionized both peace and war. It brought families together: once, when a child or other close relatives left the old country for America, family and friends mourned for someone they would never see again. Today, the grandchild of that immigrant can return again and again across a vast ocean in just half a turn of the clock. But the airplane also helped tear families apart, by making international warfare an effortless reality.

The Wrights created one of the greatest cultural forces since the development of writing, for their invention effectively became the World Wide Web of that era, bringing people, languages, ideas, and values together. It also ushered in an age of globalization, as the world's flight paths became the superhighways of an emerging international economy. Those superhighways of the sky not only revolutionized international business; they also opened up isolated economies, carried the cause of democracy around the

### BRIEF BIOGRAPHY

**BORN** Wilbur: April 16, 1867, Millville, Indiana; Orville: August 19, 1871, Dayton, Ohio

**1892** Open bike shop

**1899–1902** Build and test kites and gliders

**1903** Pilot first manned, powered flights of heavier-than-air craft

**1906** Establish patents on airplane-control system

**1908** Contract to manufacture planes for U.S. Army

**1912** Wilbur dies of typhoid

**1915** Orville sells interest in airplane factory

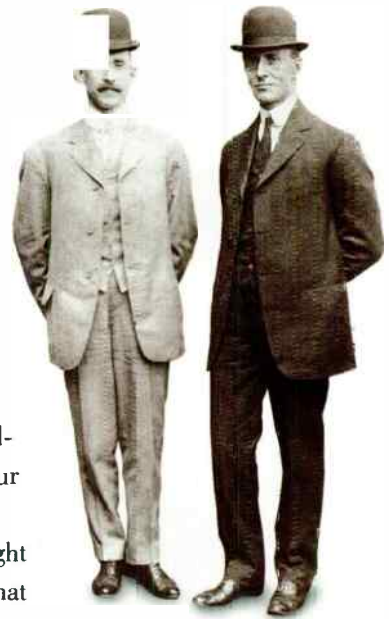
**1948** Orville dies of heart attack

world, and broke down every kind of political barrier. And they set travelers on a path that would eventually lead beyond Earth's atmosphere.

The Wright brothers and their invention, then, sparked a revolution as far-reaching as the industrial and digital revolutions. But that revolution did not come about by luck or accident. It was vision, quiet resolve, and the application of scientific methodology that enabled Orville and Wilbur to carry the human race skyward. Their example reminds us that genius doesn't have a pedigree, and that you don't discover new worlds by plying safe, conventional waters. With ten years of hindsight, even Orville Wright admitted that "I look with amazement upon our audacity in attempting flights with a new and untried machine."

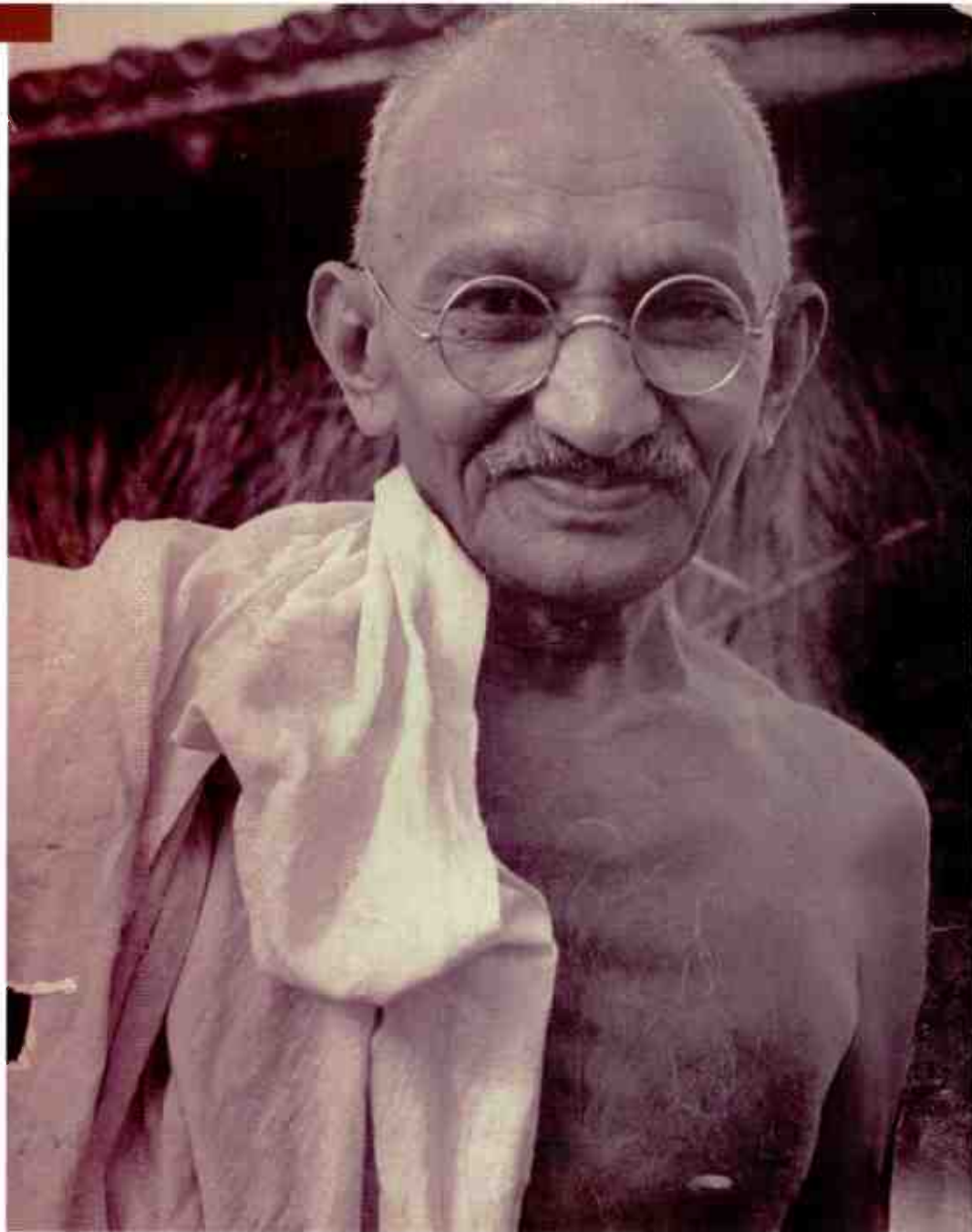
Now, on the eve of another century, who knows where the next Wright brothers will be found, in what grade of school they're studying, or in what garage they're inventing the next Flyer of the information age. Our mission is to make sure that wherever they are, they have the chance to run their own course, to persevere, and follow their own inspiration. We have to understand that engineering breakthroughs are not just mechanical or scientific—they are liberating forces that can continually improve people's lives. Who would have thought, as the twentieth century opened, that one of its greatest contributions would come from two obscure, fresh-faced young Americans who pursued the utmost bounds of human thought and gave us all, for the first time, the power literally to sail beyond the sunset.

The twentieth century has been the American Century in large part because of great inventors such as the Wright brothers. May we follow their flight paths and blaze our own in the twenty-first century.



Orville, left, and Wilbur: bicycle mechanics who had a vision as sweeping as the sky.

# Mohandas Gandhi



A THIN INDIAN MAN WITH NOT MUCH hair sits alone on a bare floor, wearing nothing but a loincloth and a pair of cheap spectacles, studying the clutch of handwritten notes in his hand. The black-and-white photograph takes up a full page in the newspaper. In the top left-hand corner of the page, in full color, is a small rainbow-striped apple. Below this,

*by Salman Rushdie*

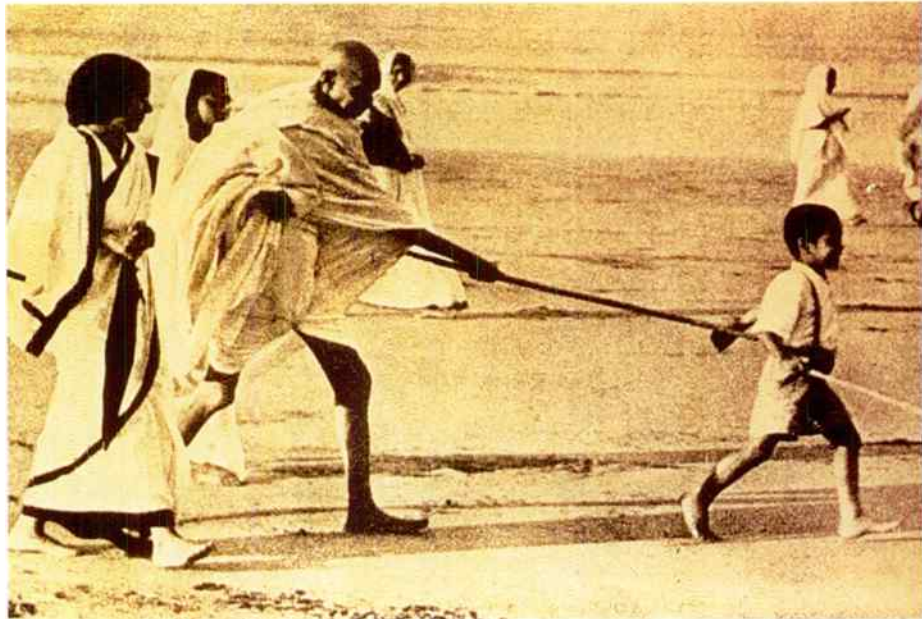
there's a slangily American injunction to "Think Different." Such is the present-day power of international Big Business. Even the greatest of the dead may summarily be drafted into its image ad campaigns. Once, a half-century ago, this bony man shaped a nation's struggle for freedom. But that, as they say, is history. Now Gandhi is modeling for Apple. His thoughts don't really count in this new incarnation. What counts is that he is considered to be "on message," in line with the corporate philosophy of Apple.

The advertisement is odd enough to be worth dissecting a little. Obviously it is rich in unintentional comedy. M. K. Gandhi, as the photograph itself demonstrates, was a passionate opponent of modernity and technology, preferring the pencil to the typewriter, the loincloth to the business suit, the plowed field to the belching manufactory. Had the word processor been invented in his lifetime, he would almost certainly have found it abhorrent. The very term word processor, with its overly technological ring, is unlikely to have found favor.

"Think Different." Gandhi, in his younger days a sophisticated and Westernized lawyer, did indeed change his thinking more radically than most people do. Ghanshyam Das Birla, one of the merchant princes who backed him, once said, "He was more modern than I. But he made a conscious decision to go back to the Middle Ages." This is not, presumably, the revolutionary new direction in thought that the good folks at Apple are seeking to encourage.

Gandhi today is up for grabs. He has become abstract, ahistorical, postmodern, no longer a man in and of his time but a free-floating concept, a part of the available stock of cultural symbols, an image that can be borrowed, used, distorted, reinvented to fit many different purposes, and to the devil with historicity or truth.

Richard Attenborough's much-Oscared movie *Gandhi* struck me, when it was first released, as an example of this type of unhistorical Western saint making. Here was Gandhi-as-guru, purveying that fashionable product, the Wisdom of the East; and Gandhi-as-Christ, dying (and, before that, frequently going on hunger strike) so that others might live. His philosophy of nonviolence seemed to work by embarrassing the British into leaving; freedom could be won, the film appeared to suggest, by being more moral than your oppressor, whose moral code could then oblige him to withdraw.



Gandhi plays with one of his grandchildren on a beach in Bombay.

But such is the efficacy of this symbolic Gandhi that the film, for all its simplifications and Hollywoodizations, had a powerful and positive effect on many contemporary freedom struggles. South African anti-apartheid campaigners and democratic voices all over South America have enthused to me about the film's galvanizing effects. This posthumous, exalted "international Gandhi" has apparently become a totem of real inspirational force.

The trouble with the idealized Gandhi is that he's so darned dull, little more than a dispenser of homilies and nostrums ("An eye for an eye will make the whole world go blind") with just the odd flash of wit (asked what he thought of Western civilization, he gave the celebrated reply, "I think it would be a great idea"). The real man, if it is still possible to use such a term after the generations of hagiography and reinvention, was infinitely more interesting, one of the most complex and contradictory personalities of the century. His full name, Mohandas Karamchand Gandhi, was memorably—and literally—translated into English by the novelist G. V. Desani as "Action-Slave Fascination-Moon Grocer," and he was as rich and devious a figure as that glorious name suggests.

Entirely unafraid of the British, he was nevertheless afraid of the dark, and always slept with a light burning by his bedside. He believed passionately in the unity of all

the peoples of India, yet his failure to keep the Muslim leader Mohammed Ali Jinnah within the Indian National Congress's fold led to the partition of the country. (For all his vaunted selflessness and modesty, he made no move to object when Jinnah was attacked during a Congress session for calling him "Mr. Gandhi" instead of "Mahatma," and booed off the stage by Gandhi's supporters. Later, his withdrawal, under pressure from Jawaharlal Nehru and Vallabhbhai Patel, of a last-ditch offer to Jinnah of the prime ministership itself, ended the last faint chance of avoiding partition.)

He was determined to live his life as an ascetic, but, as the poet Sarojini Naidu joked, it cost the nation a fortune to keep Gandhi living in poverty. His entire philosophy privileged the village way over that of the city, yet he was always financially dependent on the support of industrial billionaires like Birla. His hunger strikes could stop riots and massacres, but he also once went on a hunger strike to force one of

Bapu with Earl Mountbatten, the last viceroy of India, and his wife, Edwina.



his capitalist patrons' employees to break their strike against the harsh conditions of employment.

He sought to improve the conditions of the untouchables, yet in today's India, these peoples, now calling themselves Dalits and forming an increasingly well-organized and effective political grouping, have rallied around the memory of their own leader, Bhinrao Ramji Ambedkar, an old rival of Gandhi's. As Ambedkar's star has risen among the Dalits, so Gandhi's stature has been reduced.

The creator of the political philosophies of passive resistance and constructive nonviolence, he spent much of his life far from the political arena, refining his more eccentric theories of vegetarianism, bowel movements, and the beneficial properties of human excrement.

Forever scarred by the knowledge that, as a sixteen-year-old youth, he'd been making love to his wife, Kasturba, at the moment of his father's death, Gandhi later forswore sexual relations but went on into his old age with what he called his "brahmacharya experiments," during which naked young women would be asked to lie with him all night so that he could prove that he had mastered his physical urges. (He believed that total control over his "vital fluids" would enhance his spiritual powers.)

He, and he alone, was responsible for the transformation of the demand for independence into a nationwide mass movement that mobilized every class of society against the imperialist, yet the free India that came into being, divided and committed to a program of modernization and industrialization, was not the India of his dreams. His sometime disciple, Nehru, was the archproponent of modernization, and it was Nehru's vision, not Gandhi's, that was eventually—and perhaps inevitably—preferred.

Gandhi began by believing that the politics of passive resistance and nonviolence should be effective in any situation, at any time, even against a force as malign as Nazi Germany. Later, he was obliged to revise his opinion, and concluded that while the British had responded to such techniques because of their own nature, other oppressors might not.

Gandhian nonviolence is widely believed to be the method by which India gained independence. (The view is assiduously fostered inside India as well as outside it.) Yet the Indian revolution did indeed become violent, and this violence so disappointed Gandhi that he stayed away from the independence celebrations in protest. Moreover, the ruinous economic impact of World War II on Britain, and—as British writer Patrick French says in his book *Liberty or Death: India's Journey to Independence and Division*—the gradual collapse of the Raj's bureaucratic hold over India from the mid-'30s onward did as much to bring about freedom as any action of Gandhi's. It is proba-



Gandhi with his wife, Kasturba, in 1915.

ble, in fact, that Gandhian techniques were not the key determinants of India's arrival at freedom. They gave independence its outward character and were its apparent cause, but darker and deeper historical forces produced the desired effect.

These days, few people pause to consider the complex character of Gandhi's personality, the ambiguous nature of his achievement and legacy, or even the real causes of Indian independence. These are hurried, sloganizing times, and we don't have the time or, worse, the inclination to assimilate many-sided truths. The harshest truth of all is that Gandhi is increasingly irrelevant in the country whose "little father"—Bapu—

he was. As the analyst Sunil Khilnani has pointed out, India came into being as a secularized state, but Gandhi's vision was essentially religious. However, he "recoiled" from Hindu nationalism. His solution was to forge an Indian identity out of the shared body of ancient narratives. "He turned to the legends and stories from India's popular religious traditions, preferring their lessons to the supposed ones of history."

It didn't work. In today's India, Hindu nationalism is rampant in the form of the Bharatiya Janata Party. During the recent elections, Gandhi and his ideas have scarcely been mentioned.

In the early 1970s the writer Ved Mehta spoke to one of Gandhi's leading political associates, a former Governor-General of independent India, C. Rajagopalachari. His verdict on Gandhi's legacy is disenchanted, but in today's India, on the fast track to free-market capitalism, it still rings true: "The glamour of modern technology, money, and power is so seductive that no one—I mean

no one—can resist it. The handful of Gandhians who still believe in his philosophy of a simple life in a simple society are mostly cranks."

What, then, is greatness? In what does it reside? If a man's project fails, or survives only in irredeemably tarnished form, can the force of his example still merit the extreme accolade? For Jawaharlal Nehru, the defining image of Gandhi was "as I saw him marching, staff in hand, to Dandi on the Salt March in 1930. Here was the pilgrim on his quest of Truth, quiet, peaceful, determined, and fearless, who would continue that quest and pilgrimage, regardless of consequences." Nehru's daughter Indira Gandhi later said, "More than his words, his life was his message." These days, that message is better heeded outside India. Albert Einstein was one of many to praise Gandhi's achievement; Martin Luther King Jr., the Dalai Lama, and all the world's peace movements have followed in his footsteps. Gandhi, who gave up cosmopolitanism to gain a country, has become, in his strange afterlife, a citizen of the world: his spirit may yet prove resilient, smart, tough, sneaky and, yes, ethical enough to avoid assimilation by global McCulture (and Mac culture too). Against this new empire, Gandhian intelligence is a better weapon than Gandhian piety. And passive resistance? We'll see.

## BRIEF BIOGRAPHY

**BORN** October 2, 1869, in Porbandar, India

**1893** Goes to South Africa and battles for the rights of Indians

**1915–20** Begins his struggle for India's independence

**1930** Leads hundreds on long Salt March to Dandi to protest a tax on salt

**1947** Negotiates an end to 190 years of British colonial rule in India

**DIED** 1948, killed by a fanatic opposed to Gandhi's tolerance of other religions



# Vladimir Ilyich Lenin

NOT LONG AFTER THE BOLSHEVIKS had seized power in 1917, Vladimir Ilyich Lenin filled out a bureaucratic questionnaire. For occupation, he wrote “man of letters.” So it was that a son of the Russian intelligentsia, a radical straight from the pages of Dostoyevsky’s novel *The Possessed*, became the

*by David Remnick*





Lenin with his wife, Nadezhda, in 1919.

radicalized him—came in 1887, when his eldest brother, Alexander, a student at the University of St. Petersburg, was hanged for conspiring to help assassinate Czar Alexander III. As a lawyer, Lenin became increasingly involved in radical politics, and after completing a three-year term of Siberian exile, he began his rise as the leading communist theorist, tactician, and party organizer.

In his personal relations with colleagues, family, and friends, Lenin was relatively open and generous. Unlike many tyrants, he did not crave a tyrant's riches. Even when we strip Lenin of the cult that was created all around him after his death, when we strip away the myths of his "superhuman kindness," he remains a peculiarly modest figure who wore a shabby waistcoat, worked sixteen-hour days, and read extensively. (By

author of mass terror and the first concentration camps ever built on the European continent.

Lenin was the initiator of the central drama—the tragedy—of our era, the rise of totalitarian states. A bookish man with a scholar's habits and a general's tactical instincts, Lenin introduced to the twentieth century the practice of taking an all-embracing ideology and imposing it on an entire society rapidly and mercilessly; he created a regime that erased politics, erased historical memory, erased opposition. In his short career in power, from 1917 until his death in 1924, Lenin created a model not merely for his successor, Stalin, but for Mao, for Hitler, for Pol Pot.

And while in this way Lenin may be the central actor who begins the twentieth century, he is the least knowable of characters. As a boy growing up in Simbirsk, Lenin distinguished himself in Latin and Greek. The signal event of his youth—the event that radi-

contrast, Stalin did not know that the Netherlands and Holland were the same country, and no one in the Kremlin inner circle was brave enough to set him straight.)

Before he became the general of the revolution, Lenin was its pedant, the journalist-scholar who married Marxist theory to an incisive analysis of insurrectionist tactics. His theories of what society ought to be and how that ideal must be achieved were the products of thousands of hours spent reading.

“The incomprehensibility of Lenin is precisely this all-consuming intellectuality—the fact that from his calculations, from his neat pen, flowed seas of blood, whereas by nature this was not an evil person,” writes Andrei Sinyavsky, one of the key dissidents of the 1960s. “On the contrary, Vladimir Ilyich was a rather kind person whose cruelty was stipulated by science and incontrovertible historical laws. As were his love of power and his political intolerance.”

For all his learning, Lenin began the Bolshevik tradition of waging war on intellectual dissidents—of exiling, imprisoning, and executing thinkers and artists who dared oppose the regime. He was a “man of letters” of a particular sort. In the years before and after the October 1917 coup, Lenin was the avatar of a group of radical intellectuals who sought a revolution that did not merely attempt to redress the economic balances under czarism. Instead, Lenin made a perverse reading of the Enlightenment view of man as modeling clay and sought to create a new model of human nature and behavior through social engineering of the most radical kind.

“Bolshevism was the most audacious attempt in history to subject the entire life of a country to a master plan,” writes Richard Pipes at the end of his two-volume history of the revolution. “It sought to sweep aside as useless rubbish the wisdom that mankind had accumulated over millennia. In that sense, it was a unique effort to apply science to human affairs: and it was pursued with the zeal characteristic of the breed of intellectuals who regard resistance to their ideas as proof that they are sound.”

It is, perhaps, impossible to calculate just how many tens of millions of murders “flowed” from Leninism. Certainly Stalin differed from Lenin in the length of his time as dictator—some twenty-five years to Lenin’s six—and he also had the advantage of greater technology. As a result, Stalin’s murderous statistics are superior to Lenin’s. And yet Lenin contributed so very much.

In some scholarly circles in the West, Stalin was seen as an “aberration,” a tyrant who perverted Lenin’s intentions at the end of Lenin’s life. But as more and more evidence of Lenin’s cruelty emerged from the archives, that notion of the “good Lenin” and the “bad Stalin” became an academic joke. Very few of Stalin’s policies were without roots in Leninism: it was Lenin who built the first camps; Lenin who set off artificial famine as a political weapon; Lenin who disbanded the last vestige of democratic gov-

## BRIEF BIOGRAPHY

**BORN** April 22, 1870

**1903** Forms the Marxist Bolshevik Party in Brussels

**1917** Leads Russia into revolution and is elected head of the Russian Soviet Republic

**1918** Civil war between “Whites” and “Reds” breaks out

**1920** Defeats the “Whites”

**1923** Warns against Stalin as successor

**DIED** 1924, after a series of strokes

ernment, the Constituent Assembly, and devised the Communist Party as the apex of a totalitarian structure; Lenin who first waged war on the intelligentsia and on religious believers, wiping out any traces of civil liberty and a free press.

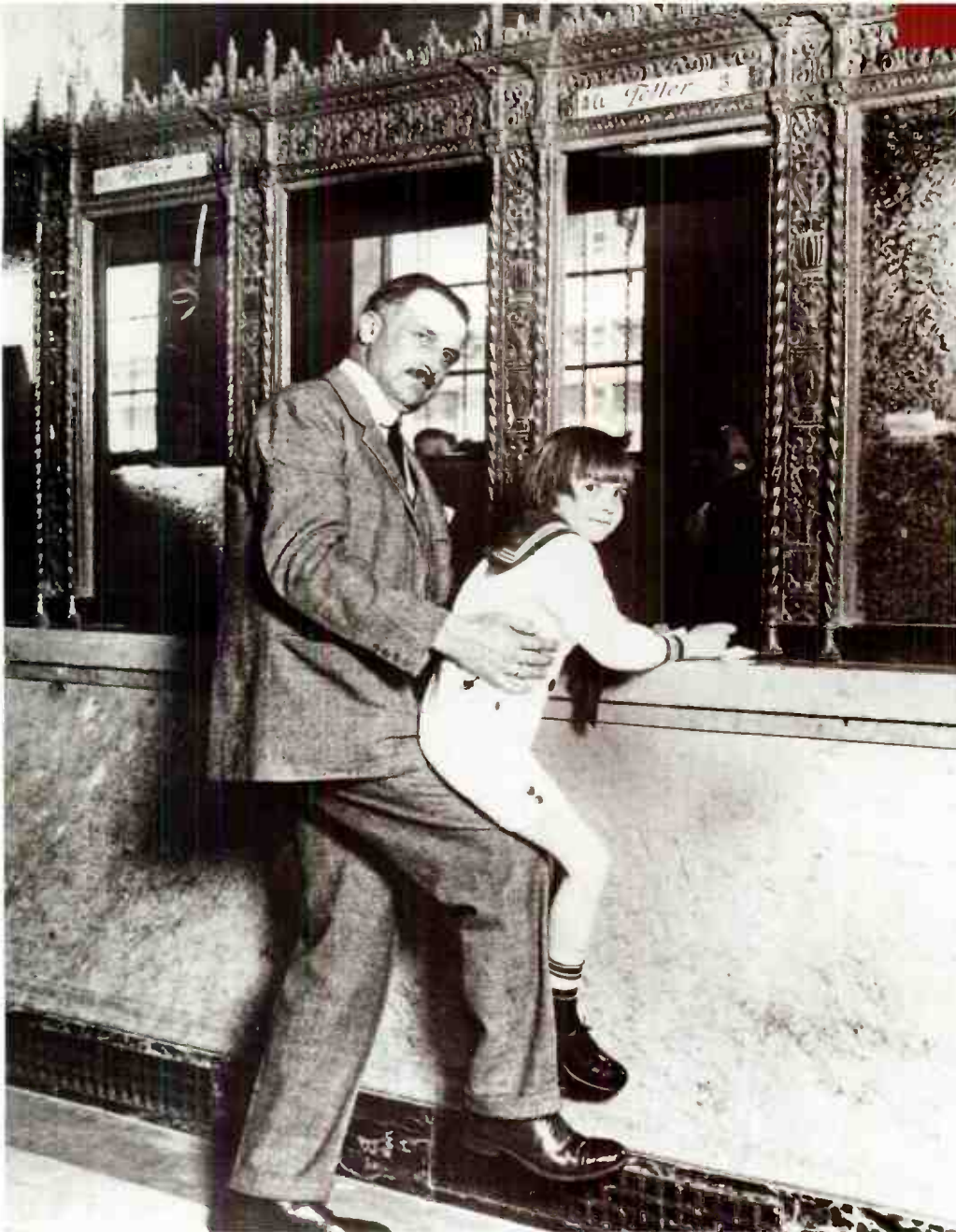
Since the Soviet archives became public, we have been able to read the extent of Lenin's cruelty, the depths of its vehemence. Here he is in 1918, in a letter instructing Bolshevik leaders to attack peasant leaders who did not accept the revolution: "Comrades! . . . Hang (hang without fail, so that people will see) no fewer than one hundred known kulaks, rich men, bloodsuckers. . . . Do it in such a way that . . . for hundreds of versts around, the people will see, tremble, know, shout: 'They are strangling and will strangle to death the bloodsucker kulaks.' . . . Yours, Lenin."

Among those artists and writers who survived the revolution and its aftermath, many wrote paeans to Lenin's intelligence that sound like nothing so much as religious songs of praise. The poet Mayakovsky would write, "Then over the world loomed/Lenin of the enormous head." And later, the prose writer Yuri Olesha would say, "Now I live in an explained world. I understand the causes. I am filled with a feeling of enormous gratitude, expressible only in music, when I think of those who died to make the world explained."

By the Brezhnev era, Lenin's dream state had devolved into a corrupt and failing dictatorship. Only the Lenin cult persisted. The ubiquitous Lenin was a symbol of the repressive society itself. Joseph Brodsky, the great Russian poet of the late twentieth century, began to hate Lenin at about the time he was in the first grade, "not so much because of his political philosophy or practice . . . but because of the omnipresent images which plagued almost every textbook, every class wall, postage stamps, money, and what not, depicting the man at various ages and stages of his life. . . . This face in some ways haunts every Russian and suggests some sort of standard for human appearance because it is utterly lacking in character . . . coming to ignore those pictures was my first lesson in switching off, my first attempt at estrangement."

When Mikhail Gorbachev instituted his policy of glasnost in the late 1980s, the Communist Party tried to practice a policy of regulated criticism. The goal was to "de-Stalinize" the Soviet Union, to resume Khrushchev's liberalization in the late 1950s. But eventually, glasnost led to the image of Lenin, not least with the publication of Vassily Grossman's *Forever Flowing*, a novel that dared compare Lenin's cruelty to Hitler's. While he was in office, Gorbachev always called himself a "confirmed Leninist"; it was only years later when he too—the last General Secretary of the Communist Party—admitted, "I can only say that cruelty was the main problem with Lenin."

After the collapse of the coup in August 1991, the people of Leningrad voted to call their city St. Petersburg once more. When Brodsky, who had been exiled from the city in 1964, was asked about the news, he smiled and said, "Better to have named it for a saint than a devil."



# A. P. Giannini

LIKE A LOT OF FOLKS in the San Francisco area, Amadeo Peter Giannini was thrown from his bed in the wee hours of April 18, 1906, when the Great Quake shook parts of the city to rubble. He hurriedly dressed and hitched a team of horses to a borrowed produce wagon and headed into town—to the Bank of Italy, which he had founded two years earlier.

by *Daniel Kadlec*

Sifting through the ruins, he discreetly loaded \$2 million in gold, coins, and securities onto the wagon bed, covered the bank's resources with a layer of vegetables, and headed home.

In the days after the disaster, the man known as A.P. broke ranks with his fellow bankers, many of whom wanted area banks to remain shut to sort out the damage. Giannini quickly set up shop on the docks near San Francisco's North Beach. With a wooden plank straddling two barrels for a desk, he began to extend credit "on a face and a signature" to small businesses and individuals in need of money to rebuild their lives. His actions spurred the city's redevelopment.

#### BRIEF BIOGRAPHY

- BORN** May 6, 1870, in San Jose, California
- 1904** Founds the Bank of Italy to serve the working classes
- 1906** Rescues the bank's money after the Great Quake
- 1928** Buys the Bank of America and consolidates vast bank properties
- 1932** Ends retirement to win back control
- 1945** Bank of America is largest bank in the country
- DIED** June 3, 1949, in San Mateo, California

That would have been legacy enough for most people. But Giannini's mark extends far beyond San Francisco, where his dogged determination and unusual focus on "the little people" helped build what was at his death the largest bank in the country, Bank of America, with assets of \$5 billion. (In 1998, it was number two, with assets of \$572 billion, behind Citigroup's \$751 billion.)

Most bank customers today take for granted the things Giannini pioneered, including home mortgages, auto loans, and other installment credit. Heck, most of us take banks for granted. But they didn't exist, at least not for working stiffs, until Giannini came along.

A.P. was also the architect of what has become nationwide banking in the 1990s—although parochial interests prevented him from realizing it in his lifetime. His great vision was that a bank doing business in all parts of a state or the nation would be less vulnerable to any one region's difficulties. It would therefore be strong

enough to lend to troubled communities when they were most in need.

That same model is applied today in international banking. And his vision has been playing out on a national scale for the past twenty years. Fittingly, the first bank in the U.S. to have branches coast to coast is that same Bank of America, which accomplished the feat just this year through its \$48 billion merger with NationsBank of Charlotte, North Carolina.

A. P. Giannini was born in San Jose, California, in 1870, the son of immigrants from Genoa, Italy. His father, a farmer, died in a fight over a dollar when A.P. was seven. His mother later married Lorenzo Scatena, a teamster who went into the produce business. Young A.P. left school at fourteen to assist him, and by nineteen he was a partner in a thriving enterprise, built largely on his reputation for integrity. At thirty-one he announced that he would sell his half-interest to his employees and retire, which he did. But then fate intervened, and his real career began.

At thirty-two, A.P. was asked to join the board of the Columbus Savings & Loan Society, a modest bank in North Beach, the Italian section of town. Giannini soon found

himself at odds with the other directors, who had little interest in extending loans to hardworking immigrants. In those days banks existed mainly to serve businessmen and the wealthy. Giannini tried to convince the board that it would be immensely profitable to lend to the working class, which he knew to be creditworthy.

He was soundly rebuffed. So in 1904 he raised \$150,000 from his stepfather and ten friends and opened the Bank of Italy—in a converted saloon directly across the street from the Columbus S&L. He kept the bartender on as an assistant teller. There he began to exploit his guiding principle: that there was money to be made lending to the little guy. He promoted deposits and loans by ringing doorbells and buttonholing people on the street, painstakingly explaining what a bank does. Traditional bankers were aghast. It was considered unethical to solicit banking business.

Giannini also made a career out of lending to out-of-favor industries. He helped the California wine industry get started, then bankrolled Hollywood at a time when the movie industry was anything but proven. In 1923 he created a motion picture loan division and helped Mary Pickford, Charlie Chaplin, Douglas Fairbanks, and D. W. Griffith start United Artists. When Walt Disney ran \$2 million over budget on *Snow White*, Giannini stepped in with a loan.

In 1919 he had organized Bancitaly Corp. as a launching pad for statewide expansion. That was succeeded in 1928 by TransAmerica Corp., a holding company with wide interests in financial services, including some overseas banks. That same year he bought Bank of America in New York, one of the city's oldest lending institutions.

Giannini retired again in 1930 and moved to Europe, convinced that his successor would carry on in his spirit. But during the Great Depression, TransAmerica management switched focus. Feeling betrayed, Giannini returned to retake control. He had always encouraged employees and depositors to become shareholders of the bank. To win a 1932 proxy fight, he knocked on doors again, getting all those working-class shareholders to give him their votes. He then consolidated TransAmerica's California bank holdings under the Bank of America name, which would survive when regulators forced TransAmerica to break up in the 1950s, just a few years after A.P.'s death.

When Giannini died at age seventy-nine, his estate was worth less than \$500,000. It was purely by choice. He could have been a billionaire but disdained great wealth, believing it would make him lose touch with the people he wanted to serve. For years he accepted virtually no pay, and upon being granted a surprise \$1.5 million bonus one year promptly gave it all to the University of California. "Money itch is a bad thing," he once said. "I never had that trouble."



Long after he predicted it, Giannini's creation became the first truly national bank.

# Winston Churchill



THE POLITICAL HISTORY OF THE twentieth century can be written as the biographies of six men: Lenin, Stalin, Hitler, Mao Zedong, Franklin Roosevelt, and Winston Churchill. The first four were totalitarians who made or used revolutions to create monstrous dictatorships. Roosevelt and Churchill differed from them in being democrats. And Churchill

*by John Keegan*

differed from Roosevelt—while both were war leaders, Churchill was uniquely stirred by the challenge of war and found his fulfillment in leading the democracies to victory.

Churchill came of a military dynasty. His ancestor John Churchill had been created first Duke of Marlborough in 1702 for his victories against Louis XIV early in the War of the Spanish Succession. Churchill was born in 1874 in Blenheim Palace, the house built by the nation for Marlborough. As a young man of undistinguished academic accomplishment—he was admitted to Sandhurst after two failed attempts—he entered the army as a cavalry officer. He took enthusiastically to soldiering (and perhaps even more enthusiastically to regimental polo playing) and between 1895 and 1898 managed to see three campaigns: Spain's struggle in Cuba in 1895, the North-West Frontier campaign in India in 1897, and the Sudan campaign of 1898, where he took part in what is often described as the British army's last cavalry charge, at Omdurman. Even at twenty-four, Churchill was steely: "I never felt the slightest nervousness," he wrote to his mother. "[I] felt as cool as I do now."

In Cuba he was present as a war correspondent, and in India and the Sudan he was present both as a war correspondent and as a serving officer. Thus he revealed two other aspects of his character: a literary bent and an interest in public affairs.

He was to write all his life. His *Life of Marlborough* is one of the great English biographies, and *The History of the Second World War* helped win him a Nobel Prize for literature. Writing, however, never fully engaged his energies. Politics consumed him. His father, Lord Randolph Churchill, was a brilliant political failure. Early in life, Winston determined to succeed where his father had failed. His motives were twofold. His father had despised him. Writing in August 1893 to Winston's grandmother, the dowager Duchess of Marlborough, he said the boy lacked "cleverness, knowledge, and any capacity for settled work. He has a great talent for show-off, exaggeration, and make-believe." His disapproval surely stung, but Churchill reacted by venerating his father's memory. Winston fought to restore his father's honor in Parliament (where it had been dented by the Conservative Party). Thirty years after Lord Randolph's death, Winston wrote, "All my dreams of comradeship were ended. There remained for me only to pursue his aims and vindicate his memory."

Churchill entered Parliament in 1901 at age twenty-six. In 1904 he left the Conservative Party to join the Liberals, in part out of calculation: the Liberals were the coming party, and in its ranks he soon achieved high office. He became Home Secretary in 1910 and First Lord of the Admiralty in 1911. Thus it was as political head of the Royal Navy at the outbreak of the First World War in 1914 that he stepped onto the world stage.



The former polo player and cavalry officer in 1932.



A passionate believer in the navy's historic strategic role, he immediately committed the Royal Naval Division to an intervention in the Flanders campaign in 1914. Frustrated by the stalemate in Belgium and France that followed, he initiated the Allies' only major effort to outflank the Germans on the Western Front by sending the navy, and later a large force of the army, to the Mediterranean. At Gallipoli in 1915, this Anglo-French force struggled to break the defenses that blocked access to the Black Sea. It was a heroic failure that forced Churchill's resignation and led to his political eclipse.

It was effectively to last nearly twenty-five years. Despite his readmission to office in 1917, after a spell commanding an infantry battalion on the Western Front, he failed to reestablish the reputation as a future national statesman he had won before the war. Dispirited, he chose the issue of the Liberal Party's support for the first government formed by the Labour Party in 1924 to rejoin the Conservatives, after a spell when he had been out of Parliament altogether. The Conservative Prime Minister appointed Churchill Chancellor of the Exchequer, but when he returned the country to the gold standard, it proved financially disastrous, and he further weakened his

political position by opposing measures to grant India limited self-government. He resigned office in 1931 and entered what appeared to be a terminal political decline.

Churchill was truly a romantic, but also truly a democrat. He had returned to the gold standard, for instance, because he cherished, for romantic reasons, Britain's status as a great financial power. He had opposed limited self-government for India because he cherished, for equally romantic reasons, Britain's imperial history. It was to prove more important that as a democrat, he was disgusted by the rise of totalitarian systems in Europe. In 1935 he warned the House of Commons of the importance not only of "self-preservation but also of the human and the world cause of the preservation of free governments and of Western civilization against the ever advancing sources of authority and despotism." His anti-Bolshevik policies had failed. By espousing anti-Nazi policies in his wilderness years between 1933 and 1939, he ensured that when the moment of final confrontation between Britain and Hitler came in 1940, he stood out as the one man in whom the nation could place its trust. He had decried the prewar appeasement policies of the Conservative leaders Baldwin and Chamberlain. When Chamberlain lost the confidence of Parliament, Churchill was installed in the premiership.

His was a bleak inheritance. Following the total defeat of France, Britain truly, in his words, "stood alone." It had no substantial allies and, for much of 1940, lay under



Touring bombed-out Bristol in the dark days of 1941.

threat of German invasion and under constant German air attack. He nevertheless refused Hitler's offers of peace, organized a successful air defense that led to the victory of the Battle of Britain, and meanwhile sent most of what remained of the British army, after its escape from the humiliation of Dunkirk, to the Middle East to oppose Hitler's Italian ally, Mussolini.

This was one of the boldest strategic decisions in history. Convinced that Hitler could not invade Britain while the Royal Navy and its protecting Royal Air Force remained intact, he dispatched the army to a remote theater of war to open a second front against the Nazi alliance. Its victories against Mussolini during 1940–41 both humiliated and infuriated Hitler, while its intervention in Greece, to oppose Hitler's invasion of the Balkans, disrupted the Nazi dictator's plans to conclude German conquests in Europe by defeating Russia.

Churchill's tendency to conduct strategy by impulse infuriated his advisers. His chief of staff, Alan Brooke, complained that every day Churchill had ten ideas, only one of which was good—and he did not know which one. Yet Churchill the romantic showed acute realism in his reaction to Russia's predicament. He reviled communism. Required to accept a communist ally in a struggle against a Nazi enemy, he did so not only willingly but generously. He sent a large proportion of Britain's war production to Russia by Arctic convoys, even at a time when the convoys from America to Britain, which alone spared the country starvation, suffered devastating U-boat attacks.

From the outset of his premiership, Churchill, half American by birth, had rested his hope of ultimate victory in U.S. intervention. He had established a personal relationship with President Roosevelt that he hoped would flower into a war-winning alliance. Roosevelt's reluctance to commit the U.S. beyond an association "short of war" did not dent his optimism. He always hoped events would work his way. The decision by Japan, Hitler's ally, to attack the American Pacific fleet at Pearl Harbor on December 7, 1941, justified his hopes. That evening he confided to himself, "So we had won after all."

America's entry into the Second World War marked the high point of Churchill's

Smiling with daughter, Mary, in 1943.





With his wife,  
Clementine,  
in 1940

statesmanship. Britain, demographically, industrially, and financially, had entered the war weaker than either of its eventual allies, the Soviet Union and the U.S. Defeats in 1940 had weakened it further, as had the liquidation of its international investments to fund its early war efforts. During 1942, the prestige Britain had won as Hitler's only enemy allowed Churchill to sustain parity of leadership in the anti-Nazi alliance with Roosevelt and Stalin.

Churchill understandably exulted in the success of the D-Day invasion when it came in 1944. By then it was the Russo-American rather than the Anglo-American nexus, however, that dominated the alliance, as he ruefully recognized at the last Big Three conference in February 1945. Shortly afterward he suffered the domestic humiliation of losing the general election and with it the premiership. He was to return to power in 1951 and remain until April 1955, when ill health and visibly failing powers caused him to resign.

It would have been kinder to his reputation had he not returned. He was not an effective peacetime Prime Minister. His name had been made, and he stood unchallengeable, as the greatest of all Britain's war leaders. It was not only his own country, though, that owed him a debt. So too did the world of free men and women to whom he had made a constant and inclusive appeal in his magnificent speeches from embattled Britain in 1940 and 1941. Churchill did not merely hate tyranny, he despised it. The contempt he breathed for dictators—renewed in his Iron Curtain speech at Fulton, Missouri, at the outset of the Cold War—strengthened the West's faith in the moral superiority of democracy and the inevitability of its triumph.

#### BRIEF BIOGRAPHY

**BORN** November 30, 1874, in Oxfordshire, England

**1901** Enters House of Commons

**1908** Marries Clementine Hozier

**1911–15, 1939–40** Serves as First Lord of the Admiralty

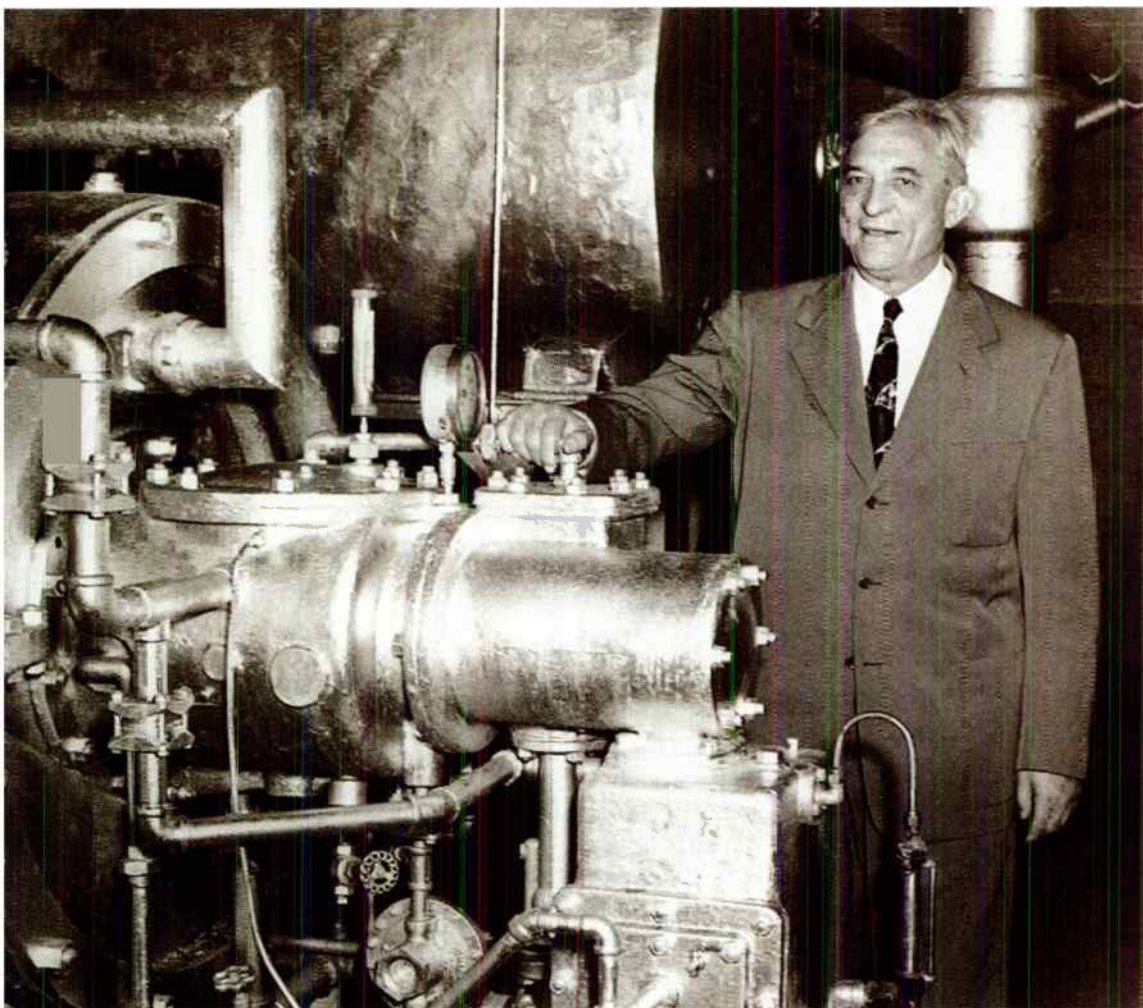
**1940–45, 1951–55** Prime Minister of Great Britain

**1953** Knighted; wins Nobel Prize for literature

**1964** Retires from House of Commons

**DIED** 1965 in London

# Willis Carrier



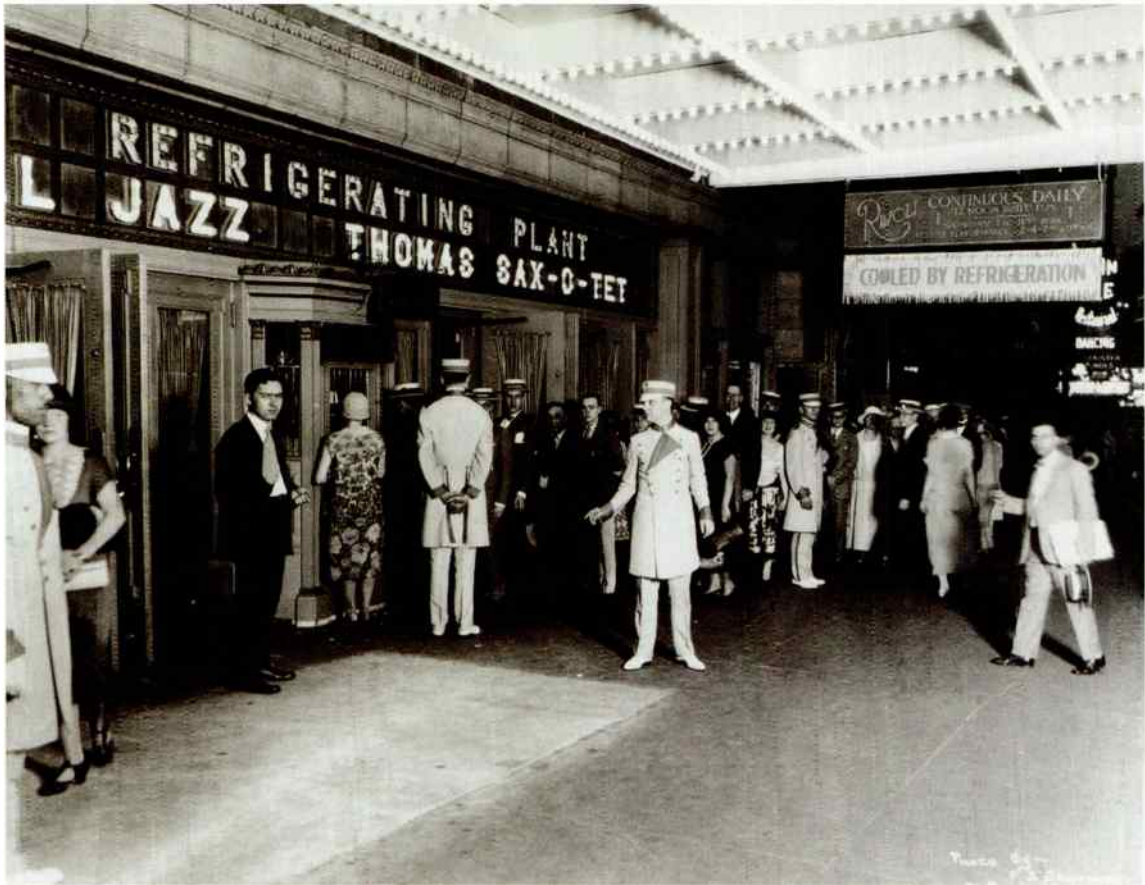
“WOULD YOU LIKE TO WRITE ABOUT WILLIS H. CARRIER?”

“And who the hell might he be?”

“Man who invented air conditioning.”

“A lifelong hero of mine!”

*by Molly Ivins*



Movie theaters warmed to air conditioning to attract business.

And what a splendid fellow he was too, in addition to being such a benefactor to mankind (unless you want to hold all the Yankees who have moved to the South against him). A perfectly Horatio Alger kind of guy was Willis Carrier, struggling against odds, persisting, overcoming. Slapped down by the Great Depression, he fought back again to build an enormous concern that to this good day is the world's leading maker of air conditioning, heating, and ventilation systems.

And think of the difference he's made. As anyone who has ever suffered through a brutal summer can tell you, if it weren't for Carrier's having made human beings more comfortable, the rates of drunkenness, divorce, brutality, and murder would be Lord knows how much higher. Productivity rates would plunge 40 percent over the world; the deep-sea fishing industry would be deep-sixed; Michelangelo's frescoes in the Sistine Chapel would deteriorate; rare books and manuscripts would fall apart; deep mining for gold, silver, and other metals would be impossible; the world's largest telescope wouldn't work; many of our children wouldn't be able to learn; and in Silicon Valley, the computer industry would crash.

The major imponderable in the life of Willis Carrier is whether he was actually a genius, which depends, of course, on the definition. Engineers will tell you that theirs is a craft more of persistence than inspiration. Yet Carrier was without question the leading engineer of his day on the conditioning of air (more than eighty patents). Carrier was also an exceptionally nice man, according to all reports, modest and sometimes droll,

and a farsighted manager—he devoutly believed in teamwork and mentoring decades before the management consultants discovered it. One of his other management precepts, born of his own experience, is that time spent staring into space while thinking is not time wasted.

Carrier was the offspring of an old New England family—in fact, his many times great-grandmother, who was known for her “keen sense of justice and a sharp tongue,” was hanged as a witch by the Puritans in Salem. The son of a farmer and a “birthright Quaker” mother, Carrier was the only child in a houseful of adults, including his grandparents and great-aunt. He seems to have been a born tinkerer and figurer-out of problems. Unfortunately, he was seriously handicapped by lack of wherewithal. He worked his way through high school, taught for three years, and finally won a four-year scholarship to Cornell University.

I picked up some of these nuggets from a wonderfully dated biography by Margaret Ingels (*Father of Air Conditioning*; 1952). The introduction to this respectful book was written by a Chicago banker, Cloud Wampler, who helped bail out Carrier’s firm during the Depression and later became its CEO. Wampler wrote, “The stage was set for my unforgettable first meeting with ‘The Chief.’ I had already been told that Dr. Carrier was a genius and that his talents lay in the field of science and invention rather than in operation and finance. All the same I wasn’t prepared for what happened . . . right off the bat Dr. Carrier made it clear he had a dim view of bankers. . . . I remember so well the ring in his voice when he said to me that day: ‘We will not do less research and development work’; ‘We will not discharge the people we have trained’; and ‘We will all work for nothing if we have to.’”

The Father of Air Conditioning’s first job was with a heating outfit, the Buffalo Forge Co. In appropriate young-genius fashion, his research had soon saved the company \$40,000 a year, and they put him in charge of a new department of experimental engineering. At Buffalo Forge he met Irvine Lyle, a gifted salesman and ultimately his partner in Carrier Corp. We’d all know the name Buffalo Forge today if the company hadn’t decided in 1914 to kill off its engineering department. Disillusioned, Carrier, Lyle, and five other young engineers left a year later to start their own operations.

Air conditioning did not begin life as a cooling system for homes and offices. Nor did it begin life as a system. Carrier’s first customer, in 1902, was a business with a production problem: a frustrated printer in Brooklyn whose color reproductions kept messing up because changes in humidity and temperature made his paper expand and contract, causing a lot of ugly color runs.

Carrier could solve this problem by controlling humidity. But in 1906, a cotton mill in South Carolina gave him a new challenge—heat. “When I saw 5,000 spindles

#### BRIEF BIOGRAPHY

**BORN** November 26, 1876, in Angola, New York

**1901** Goes to work in the drafting department of Buffalo Forge Co.

**1906** U.S. patent issued for “Apparatus for Treating Air”

**1915** Forms the Carrier Engineering Corp.

**1922** First centrifugal refrigerating machine unveiled in Newark, New Jersey

**1939** Invents a system for air-conditioning skyscrapers

**DIED** 1950 at age seventy-three in New York City

spinning so fast and getting so hot that they'd cause a bad burn when touched several minutes after shutdown. I realized our humidifier was too small for the job."

One industrial challenge after another led Carrier to make refinement after refinement in his systems. In the early days of Carrier Corp., one of its testing grounds was wet macaroni. The company had guaranteed a pasta maker it could fix a moisture problem. Suddenly there were ten thousand pounds of macaroni on the floor, in millions of bits, none of it drying worth a damn. The Chief was called in. The Chief arrived. Long trip, clean up at the hotel, dinner, back to the macaroni factory. All night long, the Chief paced, the Chief thought, the Chief would suddenly leap up and march off down the corridor. By dawn the Chief had a plan: he started with a forty-eight-hour drying time and continued to shorten it until it reached the minimum at which macaroni dried satisfactorily. "We ruined a lot of macaroni," reported one of his associates.

For the first two decades of air conditioning, the device was used to cool machines, not people. Eventually, deluxe hotels and theaters called in Carrier. Three Texas theaters, I am pleased to report, were the first to be air-conditioned (the claims of Grauman's Metropolitan in Los Angeles in this regard are to be ignored). The hot air generated by Congress was cooled by Carrier in 1928-29—and needs it again today. But it was not until after World War II that air conditioning lost its luxury status and became something any fool would install, either to appeal to customers or to increase the efficiency of employees.

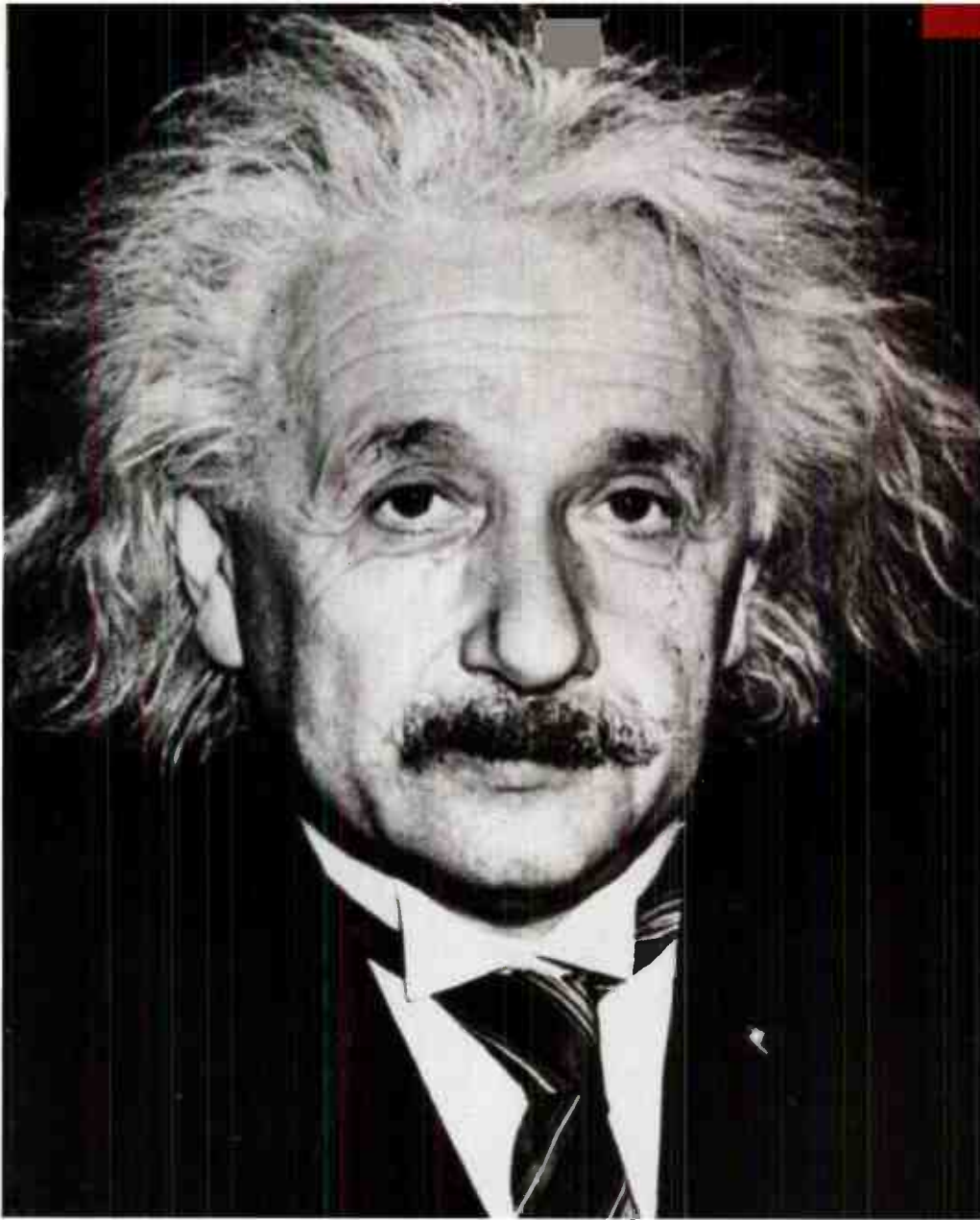
Willis Carrier, who read and sought out knowledge until his death at seventy-three, married three times (twice a widower) and adopted two children, neither of whom survive. In classic American businessman fashion, he was a Presbyterian, a Republican, and a golfer.

Alas, there is a downside to this tale. Scientists now believe the chlorofluorocarbons (CFCs) used in refrigeration systems are largely responsible for blowing a hole in the ozone, and that will cause potentially zillions of cases of skin cancer, cataracts, and suppressed immune systems. That's quite a big Oops! for our exemplary Horatio Alger figure.

The First Rule of Holes is: When You are IN one, Stop Digging; and that is what Carrier's namesake has done. In 1994 the company, now part of giant United Technologies, produced the first chlorine-free, non-ozone-depleting residential air conditioning system. It has since announced the production of two generations of chlorine-free cooling units, well before the Montreal Accords or the still unratified Kyoto Accords have come into play. Much in the fashion of its founder, the company is trying to fix all this without a grand scheme, but simply by doing the next right thing.

On the whole, the premise that technology got us into this mess and technology will surely get us out seems to be a dubious proposition. But if you had your druthers, wouldn't you really want to see the biologists backed up by engineers? Rachel Carson backed by Will Carrier: the Chief really did know how to get things done.

# Albert Einstein



THE NAME ECHOES THROUGH THE LANGUAGE: It doesn't take an Einstein. A poor man's Einstein. He's no Einstein. In this busy century, dominated like no other by science—and exalting, among the human virtues, braininess, IQ, the ideal of pure intelligence—he stands alone as our emblem of intellectual power. We talk as though humanity could be divided into two groups: Albert Einstein and everybody else.

*by James Gleick*



He discovered, just by thinking about it, the essential structure of the cosmos. The scientific touchstones of our age—the Bomb, space travel, electronics—all bear his fingerprints.

We may as well join him in 1905, when he was a patent office clerk in Bern, Switzerland—not the revered white-haloed icon of a thousand photographs, but a confident twenty-six-year-old with wavy black hair and droll, wide eyes. That year, in his spare time, he produced three world-shattering papers for a single volume (now priceless) of the premier journal *Annalen der Physik*. They were “blazing rockets which in the dark of the night suddenly cast a brief but powerful illumination over an immense unknown region,” as the physicist Louis de Broglie said.

One offered the startling view that light comes as much in particles as in waves—setting the stage for generations of deep tension between granularity and smoothness in physicists’ view of energy and matter. Another discovered, imaginatively, the microscopic motion of molecules in a liquid—making it possible to calculate their exact size and incidentally proving their very reality (many scientists, as the century began, still doubted that atoms existed). And the third—well, as Einstein said in a letter to a friend, it “modifies the theory of space and time.” Ah, yes. Relativity.

The time had come. The Newtonian world view was fraying at the edges. The nineteenth century had pressed its understanding of space and time to the very limit. Everyone believed in the ether, that mysterious background substance of the whole universe through which light waves supposedly traveled, but where was the experimental evidence for it? Nowhere, as Einstein realized. He found it more productive to think in terms of utterly abstract frames of reference—because these could move along with a moving observer. Meanwhile, a few imaginative people were already speaking of time in terms of a fourth dimension—H. G. Wells, for example, in his time-obsessed science fiction. Humanity was standing on a brink, ready to see something new.

It was Einstein who saw it. Space and time were not apples and oranges, he realized, but mates—joined, homologous, inseparable. “Henceforth space by itself and time by itself are doomed to fade away into mere shadows,” said Hermann Minkowski, a teacher of Einstein’s and one of relativity’s first champions, “and only a kind of union of the two will preserve an independent reality.” Well, we all know that now. “Space-time,” we knowingly call it. Likewise energy and matter: two faces of one creature.  $E=mc^2$ , as Einstein memorably announced.

All this was shocking and revolutionary and yet strangely attractive, to the public as well as to scientists. The speed of light; the shifting perspective of the observer—it was heady fare. A solar eclipse in 1919 gave English astronomer Arthur Eddington the opportunity to prove a key prediction of relativity: that starlight would swerve measurably as it passed through the heavy gravity of the sun, a dimple in the fabric of the universe. Light has mass. Newspapers and popular magazines went wild. More than a hun-





He was an enthusiastic but never brilliant amateur musician.

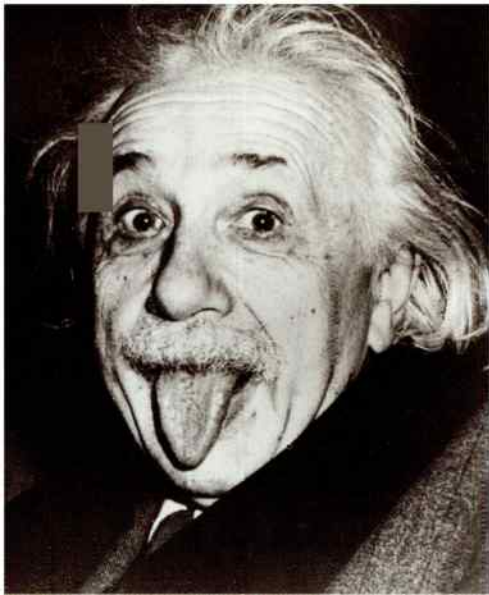
dred books on relativity appeared within a year. Einstein claimed to be the **only** person in his circle not trying to win a \$5,000 *Scientific American* prize for the best three-thousand-word summary (“I don’t believe I could do it”).

The very name relativity fueled the fervor, for accidental and wholly unscientific reasons. In this new age, recovering from a horrible war, looking everywhere for originality and novelty and modernity, people could see that absolutism was no good. Everything had to be looked at relative to everything else. Everything—for humanity’s field of vision was expanding rapidly outward, to planets, stars, galaxies.

Einstein had conjured the whole business, it seemed. He did not invent the “thought experiment,” but he raised it to high art: imagine twins, wearing identical watches; one stays home, while the other rides in a spaceship near the speed of light . . . Little wonder that from 1919, Einstein was—and remains today—the world’s most famous scientist.

In his native Germany he became a target for hatred. As a Jew, a liberal, a humanist, an internationalist, he attracted the enmity of nationalists and anti-Semites, abetted by a few jealous German physicists—an all too vigorous faction that Einstein called, while it was still possible to find this amusing, “the Antirelativity Theory Company Ltd.” His was now a powerful voice, widely heard, always attended to, especially after he moved to the U.S. He used it to promote Zionism, pacifism, and, in his secret 1939 letter to Franklin D. Roosevelt, the construction of a uranium bomb.

Meanwhile, like any demigod, he accreted bits of legend: that he flunked math in school (not true). That he opened a book and found an uncashed \$1,500 check he had left as a bookmark (maybe—he was absentminded about everyday affairs). That he was careless about socks, collars, slippers . . . that he couldn’t work out the correct change



The man who proved that time is relative turns seventy-two.

for the bus . . . that he couldn't even remember his address: 112 Mercer Street in Princeton, New Jersey, where he finally settled, conferring an aura of scientific brilliance on the town, the university, and the Institute for Advanced Study.

He died there in 1955. He had never accepted the strangest paradoxes of quantum mechanics. He found "intolerable," he said, the idea that subatomic particles would not obey the laws of cause and effect, or that the act of observing one particle could instantly determine the nature of another halfway across the universe. He had never achieved what he considered a complete, unified field theory. Indeed, for some years he had watched the burgeoning of physics, its establishment as the most powerful and expensive branch of the sciences, from a slight remove. He had lived, he said, "in that solitude which is painful in youth but delicious in the years of maturity."

And after the rest of Einstein had been cremated, his brain remained, soaking for decades in a jar of formaldehyde belonging to Dr. Thomas Harvey, the Princeton Hospital pathologist. No one had bothered to dissect the brain of Freud, Stravinsky, or Joyce, but in the 1980s, bits of Einsteinian gray matter were making the rounds of certain neurobiologists, who thus learned . . . absolutely nothing. It was just a brain—the brain that dreamed a plastic fourth dimension, that banished the ether, that released the pins binding us to absolute space and time, that refused to believe God played dice, that finally declared itself "satisfied with the mystery of life's eternity and with a knowledge, a sense, of the marvelous structure of existence."

In embracing Einstein, our century took leave of a prior universe and an erstwhile God. The new versions were not so rigid and deterministic as the old Newtonian world. Einstein's God was no clock-maker, but he was the embodiment of reason in nature—"subtle but malicious he is not." This God did not control our actions or even sit in judgment on them. ("Einstein, stop telling God what to do," Niels Bohr finally retorted.) This God seemed rather kindly and absentminded, as a matter of fact. Physics was freer, and we too are freer, in the Einstein universe. Which is where we live.

#### BRIEF BIOGRAPHY

**BORN** March 14, 1879, in Ulm, Germany

**1902** Begins work at Swiss patent office

**1905** Publishes three seminal papers on theoretical physics, including the special theory of relativity

**1916** Proposes general theory of relativity; is proved correct three years later

**1922** Wins Nobel Prize in Physics

**1933** Emigrates to Princeton, New Jersey

**1939** Urges F.D.R. to develop atom bomb

**DIED** April 18, 1955, in his sleep



# Margaret Sanger

“THE MOVEMENT SHE STARTED WILL grow to be, a hundred years from now, the most influential of all time,” predicted futurist and historian H. G. Wells in 1931. “When the history of our civilization is written, it will be a biological history, and Margaret Sanger will be its heroine.”

*by Gloria Steinem*



Volunteers selling *The Birth Control Review*, 1925.

Though this prophecy of nearly seventy years ago credited one woman with the power that actually came from a wide and deep movement of women, no one person deserves it more. Now that reproductive freedom is becoming accepted and conservative groups are fighting to maintain control over women's bodies as the means of reproduction, Sanger's revolution may be even more controversial than during her fifty-year career of national and international battles. Her experience can teach us many lessons.

She taught us, first, to look at the world as if women mattered. Born into an Irish working-class family,

Margaret witnessed her mother's slow death, worn out after eighteen pregnancies and eleven live births. While working as a practical nurse and midwife in the poorest neighborhoods of New York City in the years before World War I, she saw women deprived of their health, sexuality, and ability to care for children already born. Contraceptive information was so suppressed by clergy-influenced, physician-accepted laws that it was a criminal offense to send it through the mail. Yet the educated had access to such information and could use subterfuge to buy "French" products, which were really condoms and other barrier methods, and "feminine hygiene" products, which were really spermicides.

It was this injustice that inspired Sanger to defy church and state. In a series of articles called "What Every Girl Should Know," then in her own newspaper, *The Woman Rebel*, and finally through neighborhood clinics that dispensed woman-controlled forms of birth control (a phrase she coined), Sanger put information and power into the hands of women.

While in Europe for a year to avoid severe criminal penalties, partly due to her political radicalism, partly for violating postal obscenity laws, she learned more about contraception, the politics of sexuality, and the commonality of women's experience. Her case was dismissed after her return to the States. Sanger continued to push legal and social boundaries by initiating sex counseling, founding the American Birth Control League (which became, in 1942, the Planned Parenthood Federation of America), and organizing the first international population conference. Eventually her work would extend as far as Japan and India, where organizations she helped start still flourish.

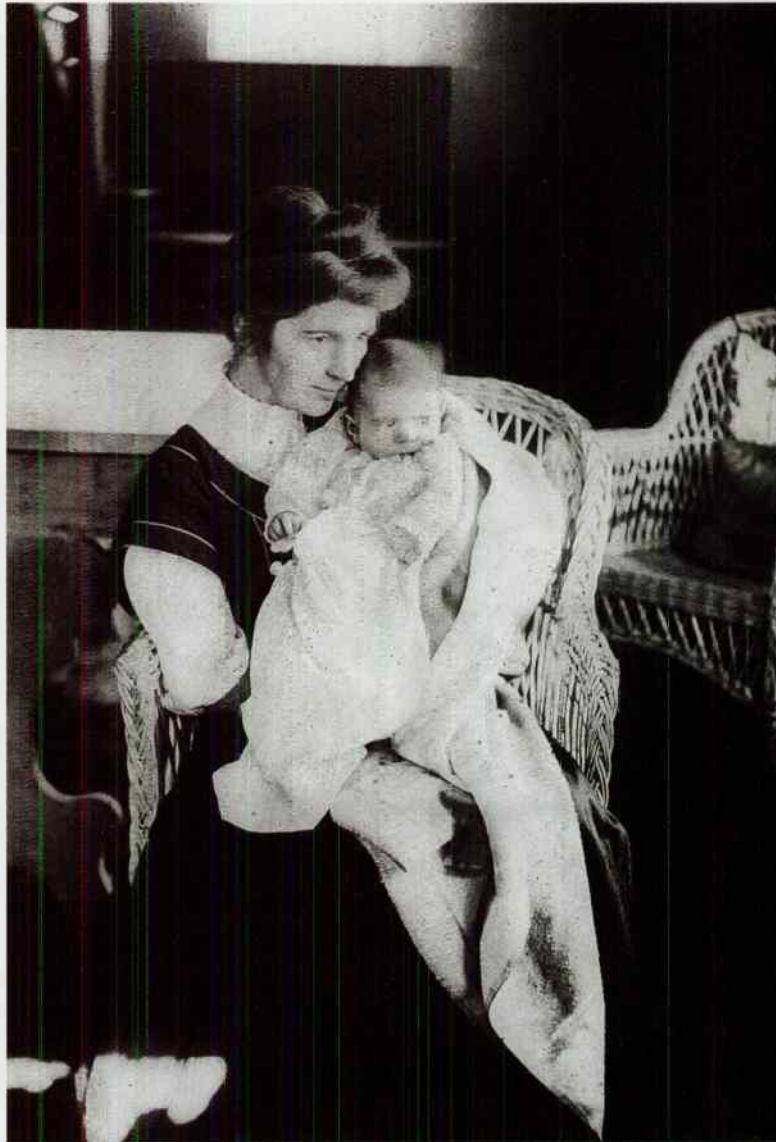
Sanger was past eighty when she saw the first marketing of a contraceptive pill, which she had helped develop. But legal change was slow. It took until 1965, a year before her death, for the Supreme Court to strike down a Connecticut law that prohibited the use of contraception, even by married couples. Extended to unmarried couples only in 1972, this constitutionally guaranteed right to privacy would become as important to women's equality as the vote. In 1973 the right to privacy was extended to the

abortion decision of a woman and her physician, thus making abortion a safe and legal alternative—unlike the \$5 illegal butcheries of Sanger's day.

One can imagine Sanger's response to the current anti-choice lobby and congressional leadership that opposes abortion, sex education in schools, and federally funded contraceptive programs that would make abortion less necessary; that supports ownership of young women's bodies through parental-consent laws; that limits poor women's choices by denying Medicaid funding; and that holds hostage the entire U.S. billion-dollar debt to the United Nations in the hope of attaching an anti-abortion rider. As in her day, the question seems to be less about what gets decided than who has the power to make the decision.

One can also imagine her response to pro-life rhetoric being used to justify an average of one clinic bombing or arson per month—sometimes the same clinics Sanger helped found—and the murder of six clinic staff members, the attempted murder of fifteen others, and assault and battery against 104 more. In each case, the justification is that potential fetal life is more important than a living woman's health or freedom.

What are mistakes in our era that parallel those of Sanger's? There is still an effort to distort her goal of giving women control over their bodies by attributing such quotes to Sanger as "More children from the fit, less from the unfit—that is the chief issue of birth control." Sanger didn't say those words; in fact, she condemned them as a eugenicist argument for "cradle competition." To her, poor mental development was largely the result of poverty, overpopulation, and the lack of attention to children. She correctly foresaw racism as the nation's major challenge, conducted surveys that countered stereotypes regarding the black community and birth control, and established clinics in the rural South with the help of such African-American leaders as W. E. B. Du Bois and Mary McLeod Bethune.



Sanger with her second son, Grant, in 1908.

Nonetheless, expediency caused Sanger to distance herself from her radical past; for instance, she used soft phrases such as “family planning” instead of her original, more pointed argument that the poor were being manipulated into producing an endless supply of cheap labor. She also adopted the mainstream eugenics language of the day, partly as a tactic, since many eugenicists opposed birth control on the grounds that the educated would use it more. Though her own work was directed toward voluntary birth control and

#### BRIEF BIOGRAPHY

**BORN** September 14, 1879, in  
Corning, New York

**1914** Launches *The Woman  
Rebel*, a feminist monthly that  
advocates birth control; is  
indicted for inciting violence  
and promoting obscenity

**1916** Opens the U.S.’s first  
family planning clinic, in  
Brooklyn, New York; is later  
jailed for thirty days

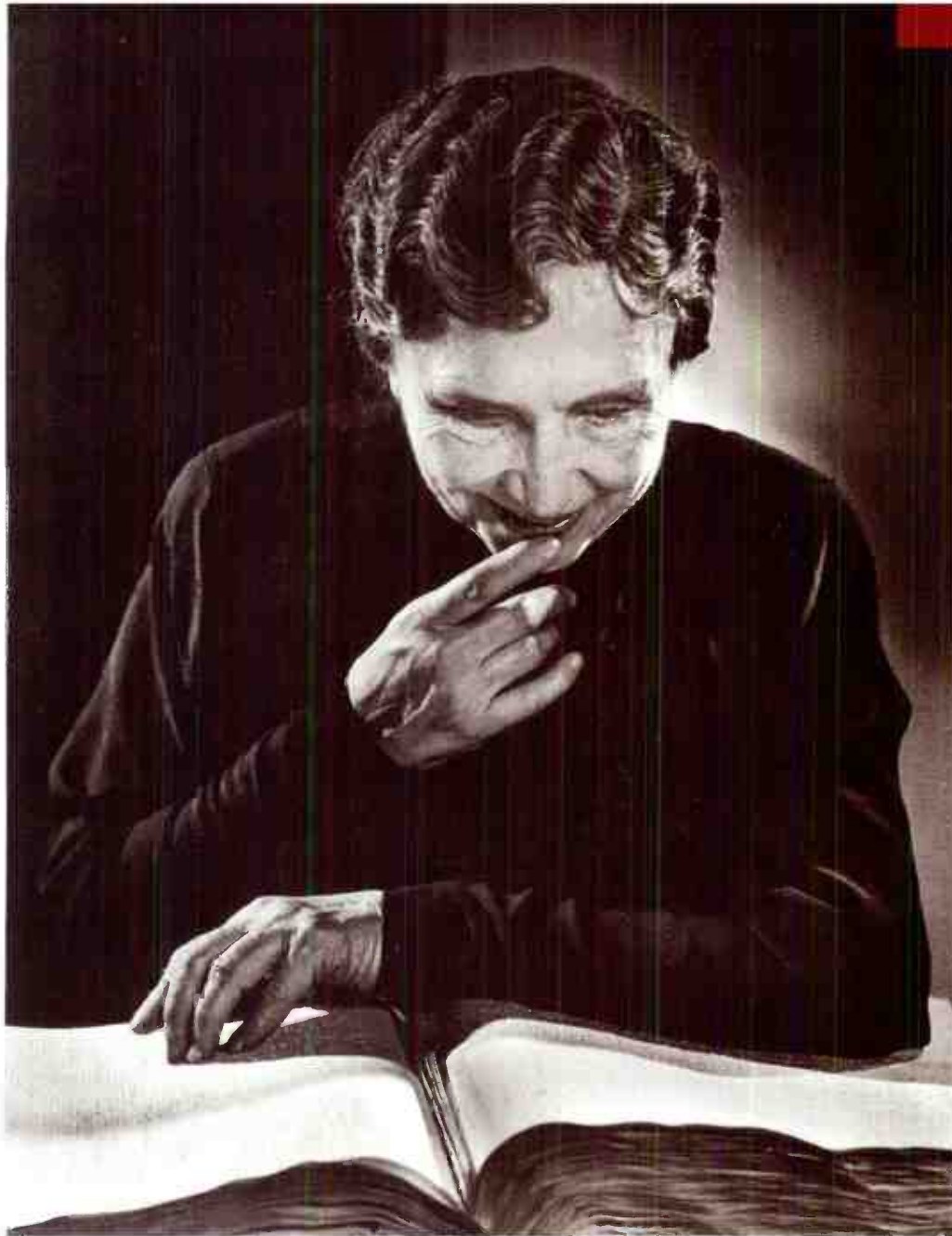
**1921** Founds the American Birth  
Control League, the precursor  
to the Planned Parenthood  
Federation

**DIED** September 6, 1966, in  
Tucson, Arizona

public health programs, her use of eugenics language probably helped justify sterilization abuse. Her misjudgments should cause us to wonder what parallel errors we are making now and to question any tactics that fail to embody the ends we hope to achieve.

Sanger led by example. Her brave and joyous life included fulfilling work, three children, two husbands, many lovers, and an international network of friends and colleagues. She was charismatic and sometimes quixotic, but she never abandoned her focus on women’s freedom and its larger implications for social justice (an inspiration that continues through Ellen Chesler’s excellent biography, *Woman of Valor: Margaret Sanger and the Birth Control Movement in America*). Indeed, she lived as if she and everyone else had the right to control her or his own life. By word and deed, she pioneered the most radical, humane, and transforming political movement of the century.

# Helen Keller



HELEN KELLER WAS LESS THAN TWO YEARS OLD when she came down with a fever. It struck dramatically and left her unconscious. The fever went just as suddenly. But she was blinded and, very soon after, deaf. As she grew up, she managed to learn to do tiny errands, but she also realized that she was missing something.

*by Diane Schuur with David Jackson*





With Patty Duke, who played her in *The Miracle Worker*.

“Sometimes,” she later wrote, “I stood between two persons who were conversing and touched their lips. I could not understand, and was vexed. I moved my lips and gesticulated frantically without result. This made me so angry at times that I kicked and screamed until I was exhausted.” She was a wild child.

I can understand her rage. I was born two months prematurely and was placed in an incubator. The practice at the time was to pump a large amount of oxygen into the incubator, something doctors have since learned to be extremely cautious about. But as a result, I lost my sight. I was sent to a state school for the blind, but I flunked first grade because Braille just didn’t make any sense to me. Words were a weird concept. I remember being hit and slapped. And you act all that in. All rage is anger that is

acted in, bottled in for so long that it just pops out. Helen had it harder. She was both blind and deaf. But, oh, the transformation that came over her when she discovered that words were related to things!

It’s like the lyrics of that song: “On a clear day, rise and look around you, and you’ll see who you are.”

I can say the word see. I can speak the language of the sighted. That’s part of the first great achievement of Helen Keller. She proved how language could liberate the blind and the deaf. She wrote, “Literature is my utopia. Here I am not disenfranchised.” But how she struggled to master language. In her book *Midstream*, she wrote about how she was frustrated by the alphabet, by the language of the deaf, even by the speed with which her teacher spelled things out for her on her palm. She was impatient and hungry for words, and her teacher’s scribbling on her hand would never be as fast, she thought, as the people who could read the words with their eyes. I remember how books got me going after I finally grasped Braille. Being in that school was like being in an orphanage. But words—and in my case, music—changed that isolation.

With language, Keller, who could not hear and could not see, proved she could communicate in the world of sight and sound—and was able to speak to it and live in it. I am a beneficiary of her work. Because of her example, the world has given way a little.

#### BRIEF BIOGRAPHY

**BORN** June 27, 1880, in Tuscumbia, Alabama

**1882** At nineteen months old, has a high fever and becomes deaf and blind

**1887** Anne Sullivan becomes Keller’s tutor

**1903** *The Story of My Life* is published

**1919** Begins four-year period appearing with Sullivan in vaudeville shows

**1936** Sullivan dies

**1959** *The Miracle Worker* airs on television; it is later adapted for the stage and film

**DIED** June 1, 1968, in Westport, Connecticut

In my case, I was able to go from the state school for the blind to regular public school from the age of eleven until my senior year in high school. And then I decided on my own to go back into the school for the blind. Now I sing jazz.

As miraculous as learning language may seem, that achievement of Keller's belongs to the nineteenth century. It was also a co-production with her patient and persevering teacher, Anne Sullivan. Helen Keller's greater achievement came after Sullivan, her companion and protector, died in 1936. Keller would live thirty-two more years and in that time would prove that the disabled can be independent. I hate the word handicapped. Keller would too. We are people with inconveniences. We're not charity cases. She was once asked how disabled veterans of World War II should be treated and said that they do "not want to be treated as heroes. They want to be able to live naturally and to be treated as human beings."

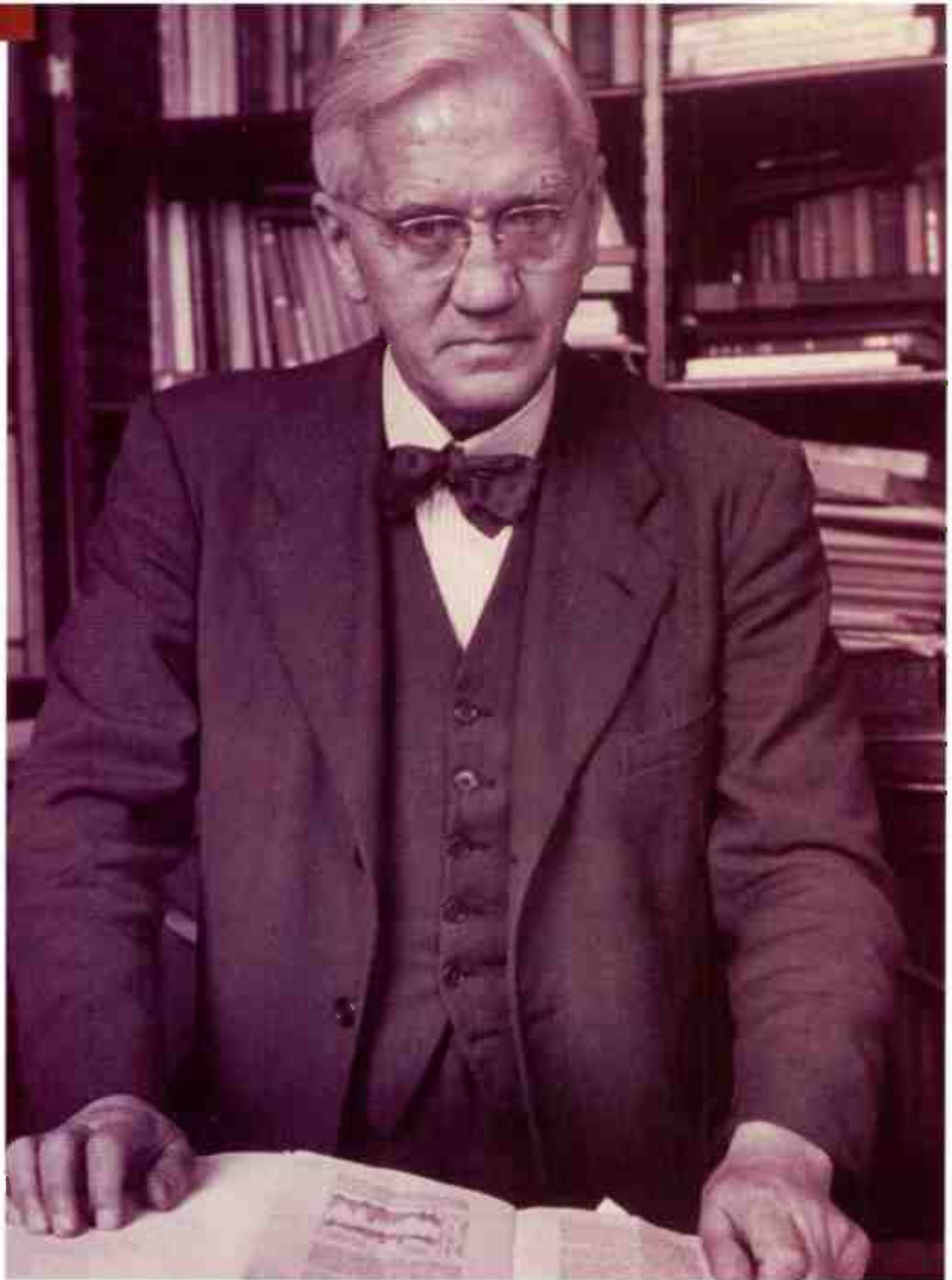
Those people whose only experience of her is *The Miracle Worker* will be surprised to discover her many dimensions. "My work for the blind," she wrote, "has never occupied a center in my personality. My sympathies are with all who struggle for justice." She was a tireless activist for racial and sexual equality. She once said, "I think God made woman foolish so that she might be a suitable companion to man." She had such left-leaning opinions that the FBI under J. Edgar Hoover kept a file on her. And who were her choices for the most important people of the century? Thomas Edison, Charlie Chaplin, and Lenin. Furthermore, she did not think appearing on the vaudeville circuit, showing off her skills, was beneath her, even as her friends were shocked that she would venture onto the vulgar stage. She was complex. Her main message was and is, "We're like everybody else. We're here to be able to live a life as full as any sighted person's. And it's okay to be ourselves."

That means we have the freedom to be as extraordinary as the sighted. Keller loved an audience and wrote that she adored "the warm tide of human life pulsing round and round me." That's why the stage appealed to her, why she learned to speak and to deliver speeches. And to feel the vibrations of music, of the radio, of the movement of lips. You must understand that even more than sighted people, we need to be touched. When you look at a person, eye to eye, I imagine it's like touching them. We don't have that convenience. But when I perform, I get that experience from a crowd. Helen Keller must have as well. She was our first star. And I am very grateful to her.



With her hand, Keller demonstrates how she can "hear" Sullivan speak.

# Alexander Fleming



THE IMPROBABLE CHAIN OF EVENTS THAT LED Alexander Fleming to discover penicillin in 1928 is the stuff of which scientific myths are made. Fleming, a young Scottish research scientist with a profitable side practice treating the syphilis infections of prominent London artists, was pursuing his pet

*by Dr. David Ho*

theory—that his own nasal mucus had antibacterial effects—when he left a culture plate smeared with *Staphylococcus* bacteria on his lab bench while he went on a two-week holiday.

When he returned, he noticed a clear halo surrounding the yellow-green growth of a mold that had accidentally contaminated the plate. Unknown to him, a spore of a rare variant called *Penicillium notatum* had drifted in from a mycology lab one floor below. Luck would have it that Fleming had decided not to store his culture in a warm incubator, and that London was then hit by a cold spell, giving the mold a chance to grow. Later, as the temperature rose, the *Staphylococcus* bacteria grew like a lawn, covering the entire plate—except for the area surrounding the moldy contaminant. Seeing that halo was Fleming’s “Eureka” moment, an instant of great personal insight and deductive reasoning. He correctly deduced that the mold must have released a substance that inhibited the growth of the bacteria.

It was a discovery that would change the course of history. The active ingredient in that mold, which Fleming named penicillin, turned out to be an infection-fighting agent of enormous potency. When it was finally recognized for what it was—the most efficacious life-saving drug in the world—penicillin would alter forever the treatment of bacterial infections. By the middle of the century, Fleming’s discovery had spawned a huge pharmaceutical industry, churning out synthetic penicillins that would conquer some of mankind’s most ancient scourges, including syphilis and gangrene.

Fleming was born to a Scottish sheep-farming family in 1881. He excelled in school and entered St. Mary’s Hospital in London to study medicine. He was a short man, usually clad in a bow tie, who even in his celebrity never mastered the conventions of polite society. Fleming probably would have remained a quiet bacteriologist had serendipity not come calling that fateful September in 1928.

In fact, Fleming was not even the first to describe the antibacterial properties of *Penicillium*. John Tyndall had done so in 1875 and, likewise, D. A. Gratia in 1925. However, unlike his predecessors, Fleming recognized the importance of his findings. He would later say, “My only merit is that I did not neglect the observation and that I pursued the subject as a bacteriologist.” Although he went on to perform additional experiments, he never conducted the one that would have been key: injecting penicillin into infected mice. Fleming’s initial work was reported in 1929 in the *British Journal of Experimental Pathology*, but it would remain in relative obscurity for a decade.

By 1932, Fleming had abandoned his work on penicillin. He would have no fur-



Fleming in his lab, holding the mold that made him famous.

ther role in the subsequent development of this or any other antibiotic, aside from happily providing other researchers with samples of his mold. It is said that he lacked both the chemical expertise to purify penicillin and the conviction that drugs could cure serious infections. However, he did safeguard his unusual strain of *Penicillium notatum* for posterity. The baton of antibiotic development was passed to others.

In 1939 a specimen of Fleming's mold made its way into the hands of a team of scientists at Oxford University led by Howard Florey, an Australian-born physiologist. This team had technical talent, especially in a chemist named Ernst Boris Chain, who had fled Nazi Germany. Armed with funding from the Rockefeller Foundation, these

scientists made it their objective to identify and isolate substances from molds that could kill bacteria. The mission was inspired by the earlier work of Gerhard Domagk, who in 1935 showed that the injection of a simple compound, prontosil, cured systemic streptococcal infections. This breakthrough demonstrated that invading bacteria could be killed with a drug and led to a fevered search in the late 1930s for similar compounds. Fleming's *Penicillium notatum* became the convenient starting point for Florey's team at Oxford.

In a scientific tour de force, Florey, Chain, and their colleagues rapidly purified penicillin in sufficient quantity to perform the experiment that Fleming could not: successfully treating mice that had been given lethal doses of bacteria. Within a year, their results were published in a seminal paper in *The Lancet*. As the world took notice, they swiftly demonstrated that injections of penicillin caused miraculous recoveries in patients with a variety of infections.

The Oxford team did not stop there. Rushing to meet the needs of World War II, they helped the government set up a network of "minifactories" for penicillin production. Florey also played a crucial role in galvanizing the large-scale production of penicillin by U.S. pharmaceutical companies in the early 1940s. By D-Day there was enough penicillin on hand to treat every soldier who needed it. By the end of World War II, it had saved millions of lives.

Pneumonia, syphilis, gonorrhea, diphtheria, scarlet fever, and many wound and childbirth infections that once killed indiscriminately suddenly became treatable. As deaths caused by bacterial infections plummeted, a grateful world needed a hero. Fleming alone became such an object of public adulation, probably for two reasons. First, Florey shunned the press, while Fleming seemed to revel in the publicity. Second, and perhaps more important, it was easier for the admiring public to comprehend the deductive insight of a single individual than the technical feats of a team of scientists.

Awards and accolades came to Fleming in rapid succession, including a knight-

#### BRIEF BIOGRAPHY

**BORN** August 6, 1881, in Ayrshire, Scotland

**1901** Enters medical school at St. Mary's Hospital in London

**1928** Identifies penicillin

**1929** Publishes first report on penicillin's antibacterial properties

**1939** Provides penicillin indirectly to Howard Florey and Ernst Chain

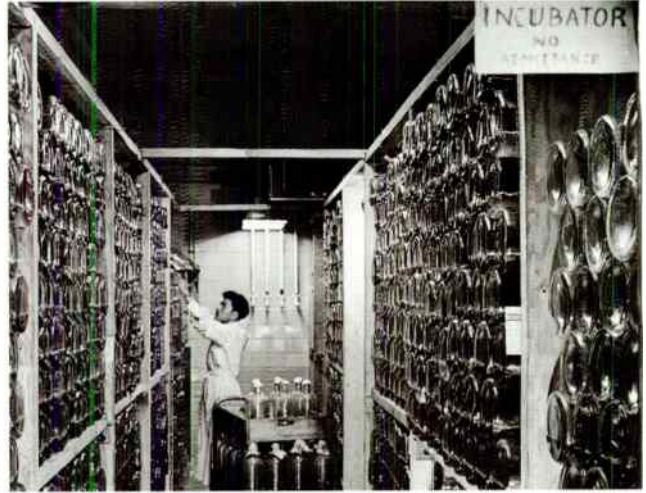
**1944** Knighted by King George VI

**1945** Shares Nobel Prize for Medicine with Florey and Chain

**DIED** March 11, 1955, of a heart attack in London

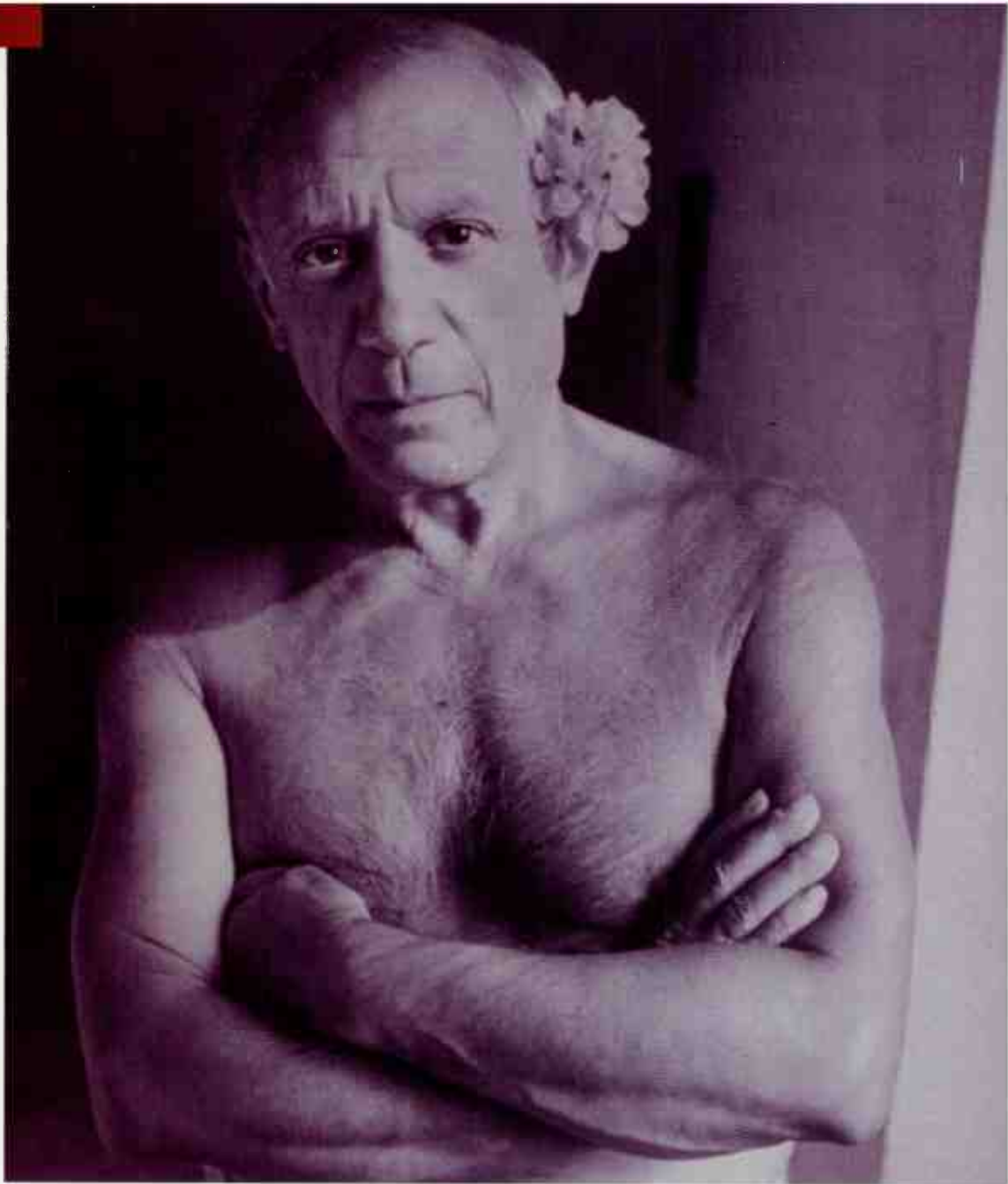
hood (with Florey) in 1944 and the Nobel Prize for Medicine (with Florey and Chain) in 1945. By this time, even Fleming was aware that penicillin had an Achilles' heel. He wrote in 1946 that "the administration of too small doses . . . leads to the production of resistant strains of bacteria." It's a problem that plagues us to this day.

When he died of a heart attack in 1955, he was mourned by the world and buried as a national hero in the crypt of St. Paul's Cathedral in London. Although Fleming's scientific work in and of itself may not have reached greatness, his singular contribution changed the practice of medicine. He deserves our utmost recognition. At the same time, we must bear in mind that the "Fleming Myth," as he called it, embodies the accomplishments of many giants of antibiotic development. Fleming is but a chosen representative for the likes of Florey, Chain, Domagk, Selman Waksman, and René Dubos, many of whom remain, sadly, virtual unknowns. Their achievements have made the world a better, healthier place. In commemorating Fleming, we commemorate them all.



By the 1940s, penicillin was being mass-produced in labs like this one in New Jersey.

# Pablo Picasso



TO SAY THAT PABLO PICASSO DOMINATED Western art in the twentieth century is, by now, the merest commonplace. Before his fiftieth birthday, the little Spaniard from Málaga had become the very prototype of the modern artist as public figure. No painter before him had had a mass audience in his own lifetime. The total public for Titian in the sixteenth century

*by Robert Hughes*

or Velázquez in the seventeenth was probably no more than a few thousand people—though that included most of the crowned heads, nobility, and intelligentsia of Europe. Picasso's audience—meaning people who had heard of him and seen his work, at least in reproduction—was in the tens, possibly hundreds, of millions. He and his work were the subjects of unending analysis, gossip, dislike, adoration, and rumor.

He was a superstitious, sarcastic man, sometimes rotten to his children, often beastly to his women. He had contempt for women artists. His famous remark about women being “goddesses or doormats” has rendered him odious to feminists, but women tended to walk into both roles open-eyed and eagerly, for his charm was legendary. Whole cultural industries derived from his much mythologized virility. He was the Minotaur in a canvas-and-paper labyrinth of his own construction.

He was also politically lucky. Though to Nazis his work was the epitome of “degenerate art,” his fame protected him during the German occupation of Paris, where he lived; and after the war, when artists and writers were thought disgraced by the slightest affiliation with Nazism or fascism, Picasso gave enthusiastic endorsement to Joseph Stalin, a mass murderer on a scale far beyond Hitler's, and scarcely received a word of criticism for it, even in Cold War America.

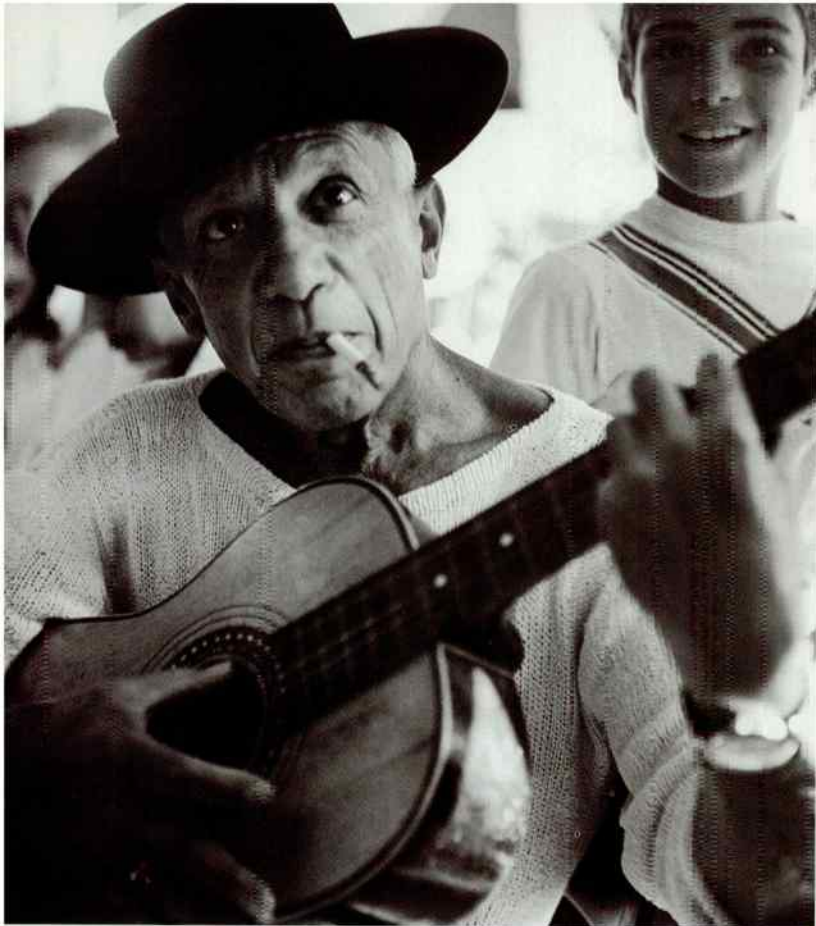
No painter or sculptor, not even Michelangelo, had been as famous as this in his own lifetime. And it is quite possible that none ever will be again, now that the mandate to set forth social meaning, to articulate myth, and generate widely memorable images has been so largely transferred from painting and sculpture to other media: photography, movies, television. Though Marcel Duchamp, that cunning old fox of conceptual irony, has certainly had more influence on nominally vanguard art over the past thirty years than Picasso, the Spaniard was the last great beneficiary of the belief that the language of painting and sculpture really mattered to people other than their devotees. And he was the first artist to enjoy the obsessive attention of mass media. He stood at the intersection of these two worlds. If that had not been so, his restless changes of style, his constant pushing of the envelope, would not have created such controversy—and thus such celebrity.

In today's art world, a place without living culture heroes, you can't even imagine such a protean monster arising. His output was vast. This is not a virtue in itself—only



Art, Picasso believed, gains no value by revealing the inner being of its author.





Long before pop art, Picasso latched on to the magnetism of mass culture and common vernaculars.

effect on the early work of American Abstract Expressionist painters Arshile Gorky, Jackson Pollock, and Willem de Kooning, among others.

Much of the story of modern sculpture is bound up with welding and assembling images from sheet metal, rather than modeling in clay, casting in bronze or carving in wood; and this tradition of the open constructed form rather than solid mass arose from one small guitar that Picasso snipped and joined out of tin in 1912. If collage—the gluing of previously unrelated things and images on a flat surface—became a basic mode of modern art, that too was due to Picasso's Cubist collaboration with Braque. He was never a member of the Surrealist group, but in the 1920s and 1930s he produced some of the scariest distortions of the human body and the most violently irrational, erotic images of Eros and Thanatos ever committed to canvas. He was not a realist painter/reporter, still less anyone's official muralist, and yet *Guernica* remains the most powerful political image in modern art, rivaled only by some of the Mexican work of Diego Rivera.

Picasso was regarded as a boy genius, but if he had died before 1906, his twenty-fifth year, his mark on twentieth-century art would have been slight. The so-called Blue and Rose periods, with their wistful etiolated figures of beggars and circus folk, are not, despite their great popularity, much more than pendants to late-nineteenth-century Symbolism. It was the experience of modernity that created his modernism, and that

a few paintings by Vermeer survive, and fewer still by the brothers Van Eyck, but they are as firmly lodged in history as Picasso ever was or will be. Still, Picasso's oeuvre filled the world, and he left permanent marks on every discipline he entered. His work expanded fractally, one image breeding new clusters of others, right up to his death.

Moreover, he was the artist with whom virtually every other artist had to reckon, and there was scarcely a twentieth-century movement that he didn't inspire, contribute to, or—in the case of Cubism, which, in one of art history's great collaborations, he co-invented with Georges Braque—beget. The exception, since Picasso never painted an abstract picture in his life, was abstract art; but even there his handprints lay everywhere—one obvious example being his

happened in Paris. There, mass production and reproduction had come to the forefront of ordinary life: newspapers, printed labels, the overlay of posters on walls—the dizzily intense public life of signs, simultaneous, high-speed, and layered. This was the cityscape of Cubism.

Picasso was not a philosopher or a mathematician (there is no “geometry” in Cubism), but the work he and Braque did between 1911 and 1918 was intuitively bound to the perceptions of thinkers like Einstein and Alfred North Whitehead: that reality is not figure and void, it is all relationships, a twinkling field of interdependent events. Long before any Pop artists were born, Picasso latched on to the magnetism of mass culture and how high art could refresh itself through common vernaculars. Cubism was hard to read, willfully ambiguous, and yet demotic too. It remains the most influential art dialect of the early twentieth century. As if to distance himself from his imitators, Picasso then went to the opposite extreme of embracing the classical past, with his paintings of huge drooping women dreaming Mediterranean dreams in homage to Corot and Ingres.

His “classical” mode, which he would revert to for decades to come, can also be seen as a gesture of independence. After his collaboration with Braque ended with his comment that “Braque is my wife”—words that were as disparaging to women as to Braque—Picasso remained a loner for the rest of his career. But a loner with a court and maîtresses en titre. He didn’t even form a friendship with Matisse until both artists were old. His close relationships tended to be with poets and writers.

Though the public saw him as the archetypal modernist, he was disconnected from much modern art. Some of the greatest modern painters—Kandinsky, for instance, or Mondrian—saw their work as an instrument of evolution and human development. But Picasso had no more of a Utopian streak than did his Spanish idol, Goya. The idea that art evolved, or had any kind of historical mission, struck him as ridiculous. “All I have ever made,” he once said, “was made for the present and in the hope that it will always remain in the present. When I have found something to express, I have done it without thinking of the past or the future.” Interestingly, he also stood against the Expressionist belief that the work of art gains value by disclosing the truth, the inner being, of its author. “How can anyone enter into my dreams, my instincts, my desires, my thoughts . . . and above all grasp from them what I have been about—perhaps against my own will?” he exclaimed.

To make art was to achieve a tyrannous freedom from self-explanation. The artist’s work was mediumistic (“Painting is stronger than me, it makes me do what it wants”), solipsistic even. To Picasso, the idea that painting did itself through him meant that it wasn’t subject to cultural etiquette. None of the other fathers of Modernism felt it so strongly—not Matisse, not Mondrian, certainly not Braque.

In his work, everything is staked on sensation and desire. His aim was not to argue coherence but to go for the strongest level of feeling. He conveyed it with tremendous

plastic force, making you feel the weight of forms and the tension of their relationships mainly by drawing and tonal structure. He was never a great colorist, like Matisse or Pierre Bonnard. But through metaphor, he crammed layers of meaning together to produce flashes of revelation. In the process, he reversed one of the currents of modern art. Modernism had rejected storytelling: what mattered was formal relationships. But Picasso brought it back in a disguised form, as a psychic narrative, told through metaphors, puns, and equivalences.

The most powerful element in the story—at least after Cubism—was sex. The female nude was his obsessive subject. Everything in his pictorial universe, especially

#### BRIEF BIOGRAPHY

**BORN** October 25, 1881, in Málaga, Spain

**1904** Settles in Paris

**1910** Joins with Georges Braque to formulate Cubism

**1937** *Guernica* commemorates the Basque town bombed in the Spanish Civil War

**1962** Receives second Lenin Peace Prize from the Soviet Union

**DIED** April 8, 1973, in France

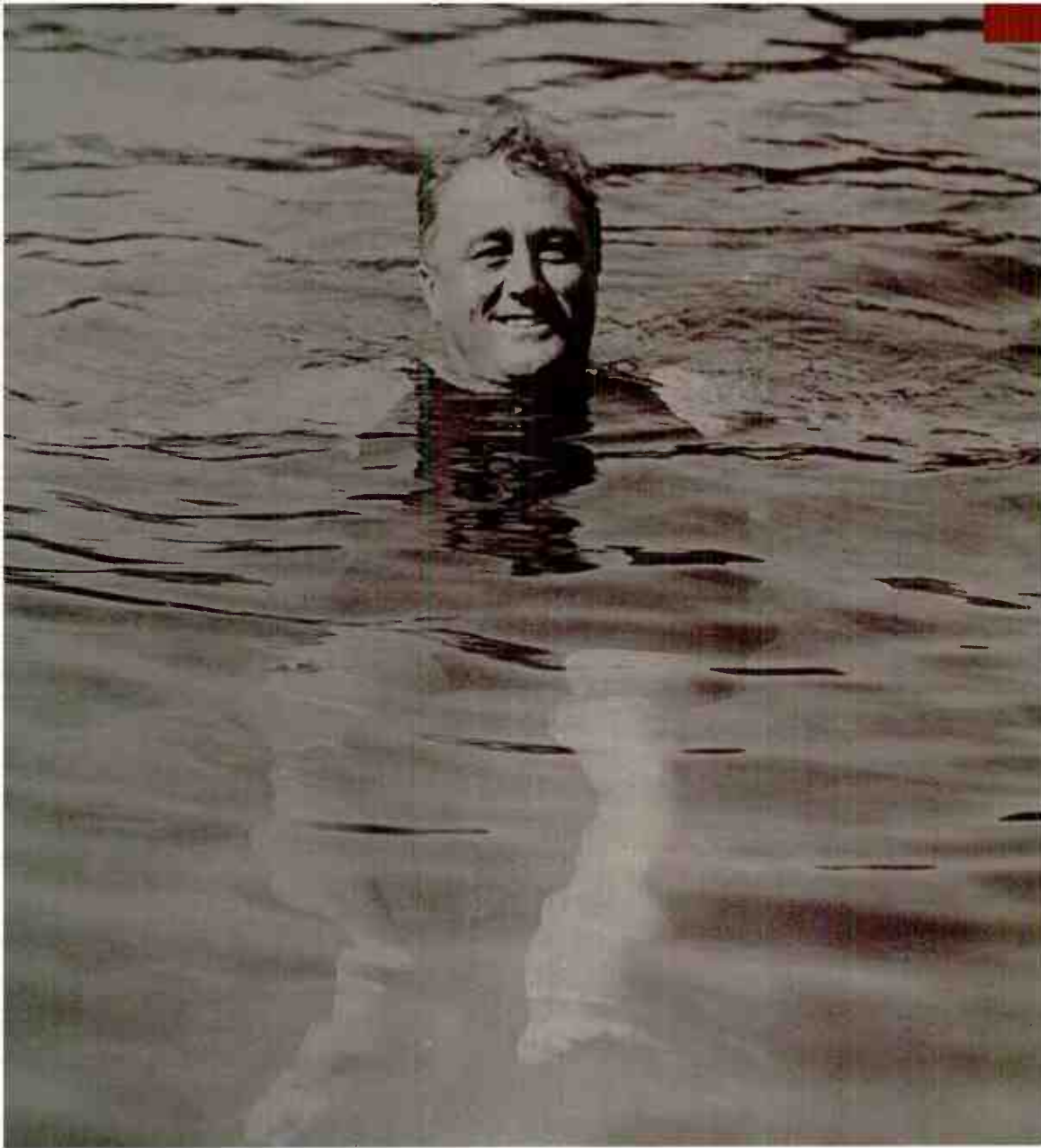
**1980** Exhibit that fills New York City's Museum of Modern Art draws one million

after 1920, seemed related to the naked bodies of women. Picasso imposed on them a load of feeling, ranging from dreamy eroticism (as in some of his paintings of his mistress Marie-Thérèse Walter in the 1930s) to a sardonic but frenzied hostility, that no Western artist had made them carry before. He did this through metamorphosis, recomposing the body as the shape of his fantasies of possession and of his sexual terrors. Now the hidden and comparatively decorous puns of Cubism (the sound holes of a mandolin, for instance, becoming the mask of Pierrot) came out of their closet. “To displace,” as Picasso described the process, “to put eyes between the legs, or sex organs on the face. To contradict. Nature does many things the way I do, but she hides them! My painting is a series of cock-and-bull stories.”

There seems little doubt that the greatest of Picasso's work came in the thirty years between *Les Femmes d'Alger* (1907) and *Guernica* (1937). But of course he didn't decline into triviality.

Consistently through the war years and the 1950s, and even now and then in the 1960s and 1970s, he would produce paintings and prints of considerable power. Sometimes they would be folded into series of variations on the old masters and nineteenth-century painters he needed to measure himself against, such as Velázquez and Goya, or Poussin, Delacroix, Manet, and Courbet. In his last years particularly, his production took on a manic and obsessive quality, as though the creative act (however repetitious) could forestall death. Which it could not. His death left the public with a nostalgia for genius that no talent today, in the field of painting, can satisfy.

# Franklin Delano Roosevelt



“PERHAPS NO FORM OF GOVERNMENT,” SAID LORD BRYCE, “needs great leaders as much as democracy.” For democracy is not self-executing. It takes leadership to bring democracy to life. Great democratic leaders are visionaries. They have an instinct for their nation’s future, a course to steer, a port to seek. Through their capacity for persuasion, they win the consent of their people and call forth democracy’s inner resources.

by *Arthur Schlesinger Jr.*



Second swearing-in as  
governor of  
New York, 1931.

Democracy has been around for a bit, but the twentieth century has been the crucial century of its trial, testing, and triumph. At the century's start, democracy was thought to be spreading irresistibly across the world. Then the Great War, the war of 1914–18, showed that democracy could not assure peace. Postwar disillusion activated democracy's two deadly foes: fascism and communism. Soon the Great Depression in the 1930s showed that democracy could not assure prosperity either, and the totalitarian creeds gathered momentum.

The Second World War found democracy fighting for its life. By 1941 there were only a dozen or so democratic states left on earth. But great leadership emerged in time to rally the democratic cause. Future historians, looking back at this most bloody of centuries, will very likely regard the thirty-second President of the United States, Franklin Delano Roosevelt, as the leader most responsible for mobilizing democratic energies and faith first against economic collapse and then against military terror.

F.D.R. was the best loved and most hated American President of the twentieth century. He was loved because, though patrician by birth, upbringing, and style, he believed in and fought for plain people—for the “forgotten man” (and woman), for the “third of the nation, ill-housed, ill-clad, ill-nourished.” He was loved because he radiated personal charm, joy in his work, optimism for the future. Even Charles de Gaulle, who well knew Roosevelt's disdain for him, succumbed to the “glittering personality,” as he put it, of “that artist, that seducer.” “Meeting him,” said Winston Churchill, “was like uncorking a bottle of champagne.”

But he was hated too—hated because he called for change, and the changes he proposed reduced the power, status, income, and self-esteem of those who profited most from the old order. Hatred is happily more fleeting than love. The men who sat in their clubs denouncing “that man in the White House,” that “traitor to his class,” have died off. Their children and grandchildren mostly find the New Deal reforms familiar, benign, and beneficial.

When pollster John Zogby recently asked people to rate the century's Presidents, F.D.R. led the pack, even though only septuagenarians and their elders can remember him in the White House. Historians and political scientists are unanimous in placing F.D.R. with Washington and Lincoln as our three greatest Presidents.

Even Republicans have come to applaud this most successful of Democrats. Ronald Reagan voted four times for F.D.R. Newt Gingrich calls F.D.R. the greatest President of the century. Bob Dole praises F.D.R. as an “energetic and inspiring leader during the dark days of the Depression; a tough, single-minded Commander-in-Chief during World War II; and a statesman.”

F.D.R. was not a perfect man. In the service of his objectives, he could be, and often was, devious, guileful, manipulative, evasive, dissembling, underhanded, even ruthless. But he had great strengths. He relished power and organized, or disorganized, his administration so that conflict among his subordinates would ensure that the big decisions would come to him. A politician to his fingertips, he rejoiced in party combat. "I'm an old campaigner, and I love a good fight," he would say, and "Judge me by the enemies I have made." An optimist who fought his own brave way back from polio, he brought confidence and hope to a scared and stricken nation.

He was a realist in means but an idealist in ends. Above all, F.D.R. stood for humanity against ideology. The twentieth was the most ideological of centuries. Adolf Hitler and Joseph Stalin systematically sacrificed millions to false and terrible dogmas. Even within the democracies, ideologues believed that the Great Depression imposed an either/or choice: if you abandon laissez-faire, you are condemned to total statism. "Partial regimentation cannot be made to work," said Herbert Hoover, "and still maintain live democratic institutions."

Against the worship of abstractions, F.D.R. wanted to find practical ways to help decent men and women struggling day by day to make a happier world for themselves and their children. His technique was, as he said, "bold, persistent experimentation. . . . Take a method and try it. If it fails, admit it frankly and try another. But above all, try something." Except for the part about admitting failure frankly, that was the practice of his administration.

When he came to office in 1933, laissez-faire had undermined the temples of capitalism, thrown a quarter of the labor force out of work, cut the gross national product almost in half, and provoked mutterings of revolution. No one knew why things had gone wrong or how to set them right. Only communists were happy, seeing in the Great Depression decisive proof of Karl Marx's prophecy that capitalism would be destroyed by its own contradictions.

Then F.D.R. appeared, a magnificent, serene, exhilarating personality, buoyantly



Winning friends on the campaign trail in 1932.

embodying new ideas, new courage, new confidence in America's ability to regain control over its future. His New Deal swiftly introduced measures for social protection, regulation, and control. Laissez-faire ideologues and Roosevelt haters cried that he was putting the country on the road to communism, the only alternative permitted by the either/or creed. But Roosevelt understood that Social Security, unemployment compensation, public works, securities regulation, rural electrification, farm price supports, reciprocal-trade agreements, minimum wages and maximum hours, guarantees of collective bargaining, and all the rest were saving capitalism from itself.

"The test of our progress," he said in his second Inaugural, "is not whether we add more to the abundance of those who have much, it is whether we provide enough for those who have too little." The job situation improved in the 1930s, aided by the Works Progress Administration, the famous WPA, with which government as employer of last resort built schools, post offices, airfields, parks, bridges, tunnels, and sewage systems; protected the environment; and fostered the arts. By the 1940 election, the anti-capitalist vote, almost a million in 1932, had dwindled to 150,000.

The New Deal never quite solved the problem of unemployment. Though F.D.R. was portrayed as a profligate spender, his largest peacetime deficit was a feeble \$3.6 billion in 1936—far less, even when corrected for inflation, than deficits routinely produced fifty years later by Reagan. It took World War II and the Defense Department to create deficits large enough to wipe out unemployment, proving the case for a compensatory fiscal policy.

Before F.D.R., the U.S. had had a depression every twenty years or so. The built-in economic stabilizers of the New Deal, vociferously denounced by business leaders at the time, have preserved the country against major depressions for more than a half-century. F.D.R.'s signal domestic achievement was to rescue capitalism from the capitalists.

"We are fighting," he said in 1936, "to save a great and precious form of government for ourselves and for the world." F.D.R.'s brilliant (and sometimes not so brilliant) improvisations restored America's faith in democratic institutions. Elsewhere on the planet, democracy was under assault. Hitler was on the march in Europe. Japan had invaded China and dreamed of a Greater East Asia Co-Prosperty Sphere under Japanese domination.

F.D.R.'s education in foreign affairs had been at the hands of two Presidents he greatly admired. Theodore Roosevelt, his kinsman (a fifth cousin), taught him national-interest, balance-of-power geopolitics. Woodrow Wilson, whom he served as Assistant Secretary of the Navy, gave him the vision of a world beyond balances of power, an inter-

## BRIEF BIOGRAPHY

**BORN** January 30, 1882, in Hyde Park, New York

**1913** Named Assistant Secretary of the Navy

**1921** Contracts polio

**1928–32** Serves as Governor of New York

**1932–36** Elected President; begins enacting New Deal legislation

**1936–40** Reelected to office; continues New Deal

**1940–44** Elected to an unprecedented third term; U.S. enters World War II

**DIED** April 12, 1945, two months after attending Yalta Conference

national order founded on the collective maintenance of the peace. F.D.R.'s internationalism used T.R.'s realism as the heart of Wilson's idealism.

But Americans, disenchanted with their participation in the Great War, had turned their backs on the world and reverted to isolationism. Rigid neutrality acts denied the President authority to discriminate between aggressor states and their victims and thereby prevented the U.S. from throwing its weight against aggression.

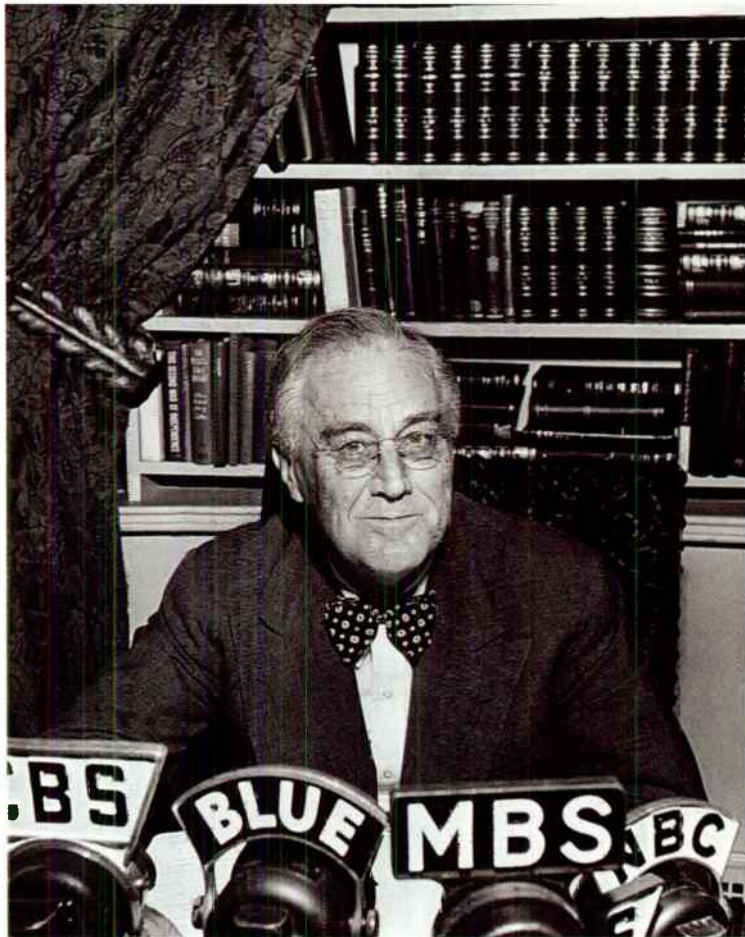
To awaken his country from its isolationist slumber, Roosevelt began a long, urgent, eloquent campaign of popular education, warning that unchecked aggression abroad would ultimately endanger the U.S. itself. "Let no one imagine that America will escape, that America may expect mercy," he said. The debate in 1940–41 between isolationists and interventionists was the most passionate political argument of my lifetime. It came to an abrupt end when Japanese bombs fell on Pearl Harbor.

As war leader, F.D.R. picked an extraordinary team of generals and admirals. In partnership with Churchill, he presided over the vital strategic decisions. And also, in the footsteps of Wilson, he was determined that victory should produce a framework for lasting world peace.

He saw the war as bringing about historic changes—the rise of Russia and China, for example, and the end of Western colonialism. He tried to persuade the British to give India its independence and tried to stop the French from repossessing Indochina. In the Four Freedoms and, with Churchill, in the Atlantic Charter, he proclaimed war aims in words that continue to express the world's aspirations today.

Remembering America's reversion to isolationism after World War I, he set out to involve the U.S. in postwar structures while the war was still on and the country still in an internationalist frame of mind. "Anybody who thinks that isolationism is dead in this country is crazy," he said privately. "As soon as this war is over, it may well be stronger than ever."

In a series of conferences in 1944, he committed the country to international mechanisms in a variety of fields—finance and trade, relief and reconstruction, food and agriculture, civil aviation. Most of all, he saw the United Nations, in the words of the



F.D.R.'s 1944 Fireside Chats reassured a worried nation.



diplomat Charles E. Bohlen, as “the only device that could keep the U.S. from slipping back into isolationism.” He arranged for the U.N.’s founding conference to take place in San Francisco before the war was over (though it turned out to be after his own death in April 1945 at the age of sixty-three).

The great riddle for the peace was the Soviet Union. Perhaps Roosevelt, as some argue, should have conditioned aid to Russia during the war on pledges of postwar good behavior. But the fate of the second front in the west depended on the Red Army’s holding down Nazi divisions in the east, and neither Roosevelt nor Churchill wanted to delay Stalin’s military offensives—or to drive him to make a separate peace with Hitler.

With the war approaching its end, the two democratic leaders met Stalin at Yalta. Some say that this meeting brought about the division of Europe. In fact, far from endorsing Soviet control of Eastern Europe, Roosevelt and Churchill secured from Stalin pledges of “the earliest possible establishment through free elections of governments responsive to the will of the people.” Stalin had to break the Yalta agreements to achieve his ends—which

would seem to prove the agreements were more in the Western than the Soviet interest. In fact, Eastern Europe today is what the Yalta Declarations mandated in 1945.

Take a look at our present world. It is manifestly not Adolf Hitler’s world. His Thousand-Year Reich turned out to have a brief and bloody run of a dozen years. It is manifestly not Joseph Stalin’s world. That ghastly world self-destructed before our eyes. Nor is it Winston Churchill’s world. Empire and its glories have long since vanished into history.

The world we live in today is Franklin Roosevelt’s world. Of the figures who for good or evil dominated the planet sixty years ago, he would be least surprised by the shape of things at the millennium. And confident as he was of the power and vitality of democracy, he would welcome the challenges posed by the century to come.

Franklin Delano Roosevelt, said Isaiah Berlin, was one of the few statesmen in any century “who seemed to have no fear at all of the future.”



The country mourned  
in 1945.

# James Joyce



JAMES JOYCE ONCE TOLD A FRIEND, "One of the things I could never get accustomed to in my youth was the difference I found between life and literature." All serious young readers notice this difference. Joyce dedicated his career to erasing it and in the process revolutionized twentieth-century fiction.

*by Paul Gray*

The life he would put into his literature was chiefly his own. Born near Dublin in 1882, James Augustine Aloysius was the eldest of the ten surviving children of John and Mary Jane Joyce. His father was irascible, witty, hard drinking, and ruinously improvident; his mother, a devout Roman Catholic, helplessly watched her husband and family slide into near poverty and hoped for a happier life in the hereafter. James's entire education came at the hands of the Jesuits, who did a better job with him than they may have intended. By the time the young Joyce graduated from University College, Dublin, in 1902, he decided he had learned enough to reject his religion and all his obligations to family, homeland, and the British who ruled there. Literature would be his vocation and his bid for immortality.



At age 6½, the eldest of ten Joyce children sports a sailor suit.

He fled Ireland into self-imposed exile late in 1904, taking with him Nora Barnacle, a young woman from Galway who was working as a hotel chambermaid in Dublin when Joyce met her earlier that year. (On hearing that his son had run off with a girl named Barnacle, John Joyce remarked, playing on her last name, "She'll never leave him." And, proving puns can be prophetic, she never did.)

Joyce departed Dublin with nearly all the narratives he would ever write already stored in his memory. What remained for him to do was transform this cache into an art that could measure up to his own expectations.

As he and Nora and then their two children moved among and around European cities—Pola, Trieste, Zurich, Rome, Paris—Joyce found clerical and teaching jobs that provided subsistence to his family and his writing. His first published book of fiction, *Dubliners* (1914), contained fifteen stories short on conventional plots but long on evocative atmosphere and language. *A Portrait of the Artist as a Young Man* (1916) provided a remarkably objective and linguistically complex account of Stephen Dedalus, i.e., James Joyce, from his birth to his decision to leave Dublin in pursuit of his art.

*Portrait* did not sell well enough to relieve Joyce's chronic financial worries, but his work by then had attracted the attention of a number of influential avant-gardists, most notably the expatriate American poet Ezra Pound, who believed a new century demanded new art, poetry, fiction, music—everything. Such supporters rallied to promote Joyce and his experimental writings, and he did not disappoint them.

He began *Ulysses* in 1914; portions of it in progress appeared in the *Egoist* in England and the *Little Review* in the U.S., until the Post Office, on grounds of alleged obscenity, confiscated three issues containing Joyce's excerpts and fined the editors \$100. The censorship flap only heightened curiosity about Joyce's forthcoming book. Even before *Ulysses* was published, critics were comparing Joyce's breakthroughs to those of Einstein and Freud.

Joyce received the first copy of *Ulysses*, with its blue binding and white lettering, on his fortieth birthday, in 1922. It was his most exhaustive attempt yet to collapse the distinction between literature and life.

First of all, Joyce tossed out most of the narrative techniques found in nineteenth-century fiction. *Ulysses* has no discernible plot, no series of obstacles that a hero or heroine must surmount on the way to a happy ending. The book offers no all-knowing narrator, à la Dickens or Tolstoy, to guide the reader—describe the characters and settings, provide background information, summarize events, and explain, from time to time, the story's moral significance.

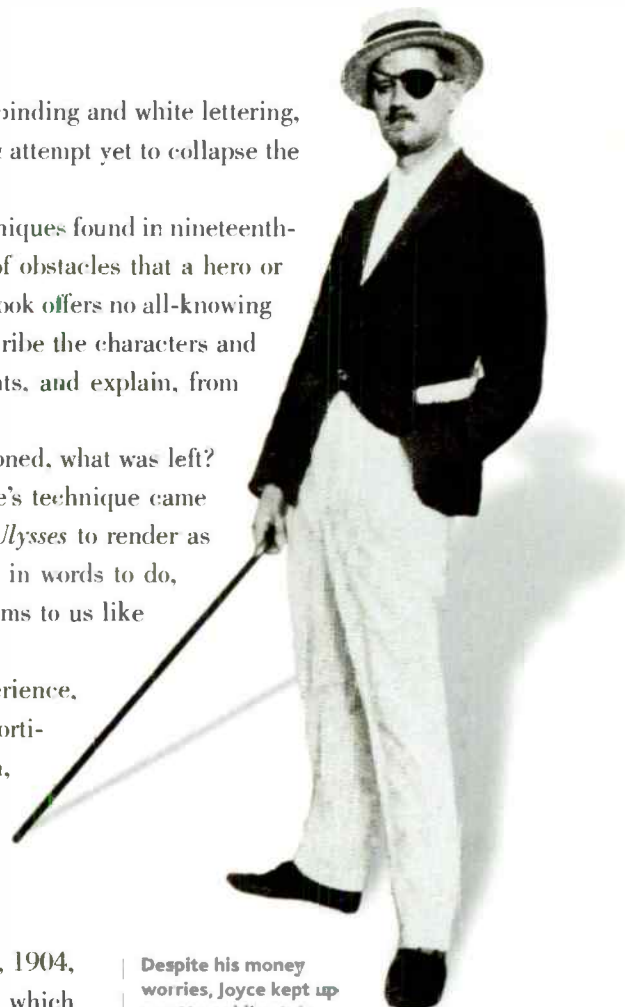
With so many traditional methods of narrative abandoned, what was left? Perhaps the clearest and most concise description of Joyce's technique came from the critic Edmund Wilson: "Joyce has attempted in *Ulysses* to render as exhaustively, as precisely, and as directly as it is possible in words to do, what our participation in life is like—or rather, what it seems to us like as from moment to moment we live."

A first reading of *Ulysses* can thus be a baffling experience, although no book more generously rewards patience and fortitude. Stephen Dedalus reappears, still stuck in Dublin, dreaming of escape. Then we meet Leopold Bloom, or rather we meet his thoughts as he prepares breakfast for his wife, Molly. (We experience her thoughts as she drifts off to sleep at the end of the book.)

*Ulysses* is the account of one day in Dublin—June 16, 1904, Joyce's private tribute to Nora, since that was the date on which they first went out together. The book follows the movements of not only Stephen and Bloom but also hundreds of other Dubliners as they walk the streets, meet and talk, then talk some more in restaurants and pubs. All this activity seems random, a record of urban happenstance.

But nothing in *Ulysses* is truly random. Beneath the surface realism of the novel, its apparently artless transcription of life's flow, lurks a complicated plan. Friends who were in on the secret of *Ulysses* urged Joyce to share it, to make things easier for his readers. He resisted at first: "I've put in so many enigmas and puzzles that it will keep the professors busy for centuries arguing over what I meant, and that's the only way of ensuring one's immortality."

Joyce later relented, and so the world learned that *Ulysses* was, among many other things, a modern retelling of Homer's *Odyssey*, with Bloom as the wandering hero, Stephen as Telemachus, and Molly as a Penelope decidedly less faithful than the original. T. S. Eliot, who recognized the novel's underpinnings, wrote that Joyce's use of classical myth as a method of ordering modern experience had "the importance of a scientific discovery."



Despite his money worries, Joyce kept up a natty public style.



Joyce in the 1920s with Sylvia Beach, whose Paris bookstore, Shakespeare & Co., was the first publisher of *Ulysses*.

Ulysses made Joyce famous, although not always in a manner to his liking. When a fan approached him and asked, “May I kiss the hand that wrote *Ulysses*?” Joyce said, “No, it did lots of other things too.” But more important, *Ulysses* became a source book for twentieth-century literature. It expanded the domain of permissible subjects in fiction, following Bloom not only into his secret erotic fantasies but his outdoor privy as well.

Its multiple narrative voices and extravagant wordplay made *Ulysses* a virtual thesaurus of styles for writers wrestling with the problem of rendering contemporary life. Aspects of Joyce’s accomplishment in *Ulysses* can be seen in the works of William Faulkner, Albert Camus, Samuel Beckett, Saul Bellow, Gabriel García Márquez, and Toni Morrison, all of whom, unlike Joyce, won the Nobel Prize for Literature.

But the only author who tried to surpass the encyclopedic scope of *Ulysses* was Joyce himself. He spent seventeen years working on *Finnegans Wake*, a book intended to portray Dublin’s sleeping life as thoroughly as *Ulysses* had explored the wide-awake city. This task, Joyce decided, required the invention of a new language that would mime the experience of dreaming. As excerpts from the new work, crammed with multilingual puns and Jabberwocky-like sentences, began appearing in print, even Joyce’s champions expressed doubts. To Pound’s complaint about obscurity, Joyce replied, “The action of my new work takes place at night. It’s natural things should not be so clear at night, isn’t it now?”

Today, only dedicated Joyceans regularly attend the *Wake*. A century from now, his readers may catch up with him.

#### BRIEF BIOGRAPHY

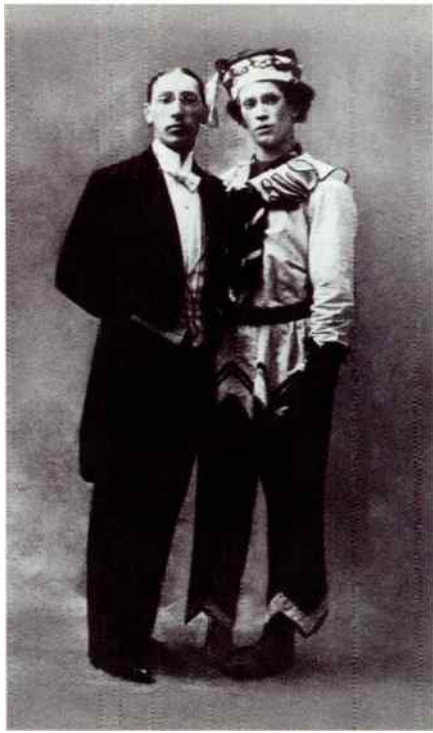
- BORN** February 2, 1882, in a Dublin suburb
- 1904** Falls in love with Nora Barnacle, flees with her to the Continent
- 1914** *Dubliners* published
- 1916** *A Portrait of the Artist as a Young Man*
- 1919** The U.S. Post Office seizes magazines carrying portions of *Ulysses* on grounds of obscenity
- 1922** *Ulysses* published on fortieth birthday
- 1939** Seventeen years in the writing, *Finnegans Wake* appears
- DIED** January 13, 1941, in Zurich



# Igor Stravinsky

PARIS' THÉÂTRE DES CHAMPS-ÉLYSÉES, ON MAY 29, 1913, was the setting of the most notorious event in the musical history of this century—the world premiere of *The Rite of Spring*. Trouble began with the playing of the first notes, in the ultra-high register of the bassoon, as the renowned composer Camille Saint-Saëns conspicuously walked out, complaining loudly of

*by Philip Glass*



Through Diaghilev, he met Nijinsky, right, who danced *Petrushka* in Russia.

the misuse of the instrument. Soon other protests became so loud that the dancers could barely hear their cues. Fights broke out in the audience. Thus Modernism arrived in music, its calling card delivered by the thirty-year-old Russian composer Igor Stravinsky.

Born in 1882 in Oranienbaum, Russia, a city southwest of St. Petersburg, Stravinsky was rooted in the nationalistic school that drew inspiration from Russia's beautifully expressive folk music. His father was an opera singer who performed in Kiev and St. Petersburg, but his greatest musical influence was his teacher, Nikolay Rimsky-Korsakov. The colorful, fantastic orchestration that Stravinsky brought to his folk song-inspired melodies was clearly derived from Rimsky-Korsakov. But the primitive, offbeat rhythmic drive he added was entirely his own. The result was a music never before heard in a theater or concert hall.

In 1910, Serge Diaghilev, then director of the world-famous Ballets Russes, invited Stravinsky to compose works for his company's upcoming season at the Paris Opera. *The Firebird*, the first to appear, was a sensation. *Petrushka* and *The Rite of Spring* quickly followed. Soon Stravinsky's audaciously innovative works confirmed his status as the leading composer of the day, a position he hardly relinquished until his death nearly sixty years later.

After leaving Russia, Stravinsky lived for a while in Switzerland and then moved to Paris. In 1939 he fled the war in Europe for the U.S., settling in Hollywood. In 1969 he moved to New York City. (The story goes that when asked why he made such a move at his advanced age, he replied, "To mutate faster.") Over the years, Stravinsky experimented with virtually every technique of twentieth-century music: tonal, polytonal, and twelve-tone serialism. He reinvented and personalized each form while adapting the melodic styles of earlier eras to the new times. In the end, his own musical voice always prevailed.

In 1947 Stravinsky befriended Robert Craft, a twenty-three-year-old conductor who was to become his chronicler, interpreter, and, oddly, his mentor in some ways. It was Craft who persuaded Stravinsky to take a more sympathetic view of Arnold Schoenberg's twelve-tone school, which led to Stravinsky's last great stylistic development.

#### BRIEF BIOGRAPHY

- BORN** June 17, 1882, in Oranienbaum, Russia
- 1907** Becomes Rimsky-Korsakov's student
- 1910** Produces ballet *The Firebird* with Diaghilev
- 1913** Premiere of ballet *The Rite of Spring* causes a riot in Paris
- 1939** Settles in Hollywood
- 1951** Composes opera *The Rake's Progress* using a libretto by W. H. Auden and Chester Kallman
- 1957** Creates his final ballet masterpiece, *Agon*, with Balanchine
- DIED** April 6, 1971; buried in Venice near Diaghilev

In his long career, there was scarcely a musical form that Stravinsky did not turn his hand to. He regularly produced symphonies, concertos, oratorios, and an almost bewildering variety of choral works. For me, however, Stravinsky was at his most sublime when he wrote for the theater. There were operas, including *The Rake's Progress*, composed for a libretto by W. H. Auden and Chester Kallman and one of a handful of twentieth-century operas that have found a secure place in the repertory. The ballets also continued; the last of his masterpieces, *Agon* (composed for another Russian choreographer, George Balanchine), came in 1957.

I heard him conduct only once, during a program in his honor in 1959 at New York City's Town Hall. What an event that was! Stravinsky led a performance of *Les Noces*, a vocal/theater work accompanied by four pianos—played by Samuel Barber, Aaron Copland, Lukas Foss, and Roger Sessions. Each brought his own charisma to the event, but all seemed to be in awe of Stravinsky—as if he appeared before them with one foot on earth and the other planted firmly on Olympus.

He was electrifying for me too. He conducted with an energy and vividness that completely conveyed his every musical intention. Seeing him at that moment, embodying his work in demeanor and gestures, is one of my most treasured musical memories. Here was Stravinsky, a musical revolutionary whose own evolution never stopped. There is not a composer who lived during his time or is alive today who was not touched, and sometimes transformed, by his work.



Stravinsky with Balanchine, top left, and dancers Frederick Franklin, Maria Tallchief, and Alexandra Danilova.



# Robert Goddard



ROBERT GODDARD WAS NOT A HAPPY MAN WHEN he read his copy of the New York Times on January 13, 1920. For some time, he had feared he might be in for a pasting in the press, but when he picked up the paper that day, he was stunned.

*by Jeffrey Kluger*

Not long before, Goddard, a physics professor at Clark University in Worcester, Massachusetts, had published an arid little paper on an outrageous topic, rocket travel. Unlike most of his colleagues, Goddard believed rocketry was a viable technology, and his paper, primly titled “A Method of Reaching Extreme Altitudes,” was designed to prove it. For the lay reader, there wasn’t much in the writing to excite interest, but at the end, the buttoned-up professor unbuttoned a bit. If you used his technology to build a rocket big enough, he argued, and if you primed it with fuel that was powerful enough, you just might be able to reach the moon with it.

Goddard meant his moon musings to be innocent enough, but when the *Times* saw them, it pounced. As anyone knew, the paper explained with an editorial eye roll, space travel was impossible, since without atmosphere to push against, a rocket could not move so much as an inch. Professor Goddard, it was clear, lacked “the knowledge ladled out daily in high schools.”

Goddard seethed. It wasn’t just that the editors got the science all wrong. It wasn’t just that they didn’t care for his work. It was that they had made him out a fool. Say what you will about a scientist’s research, but take care when you defame the scientist. On that day, Goddard—who would ultimately be hailed as the father of modern rocketry—sank into a quarter-century sulk from which he never fully emerged. And from that sulk came some of the most incandescent achievements of his age.

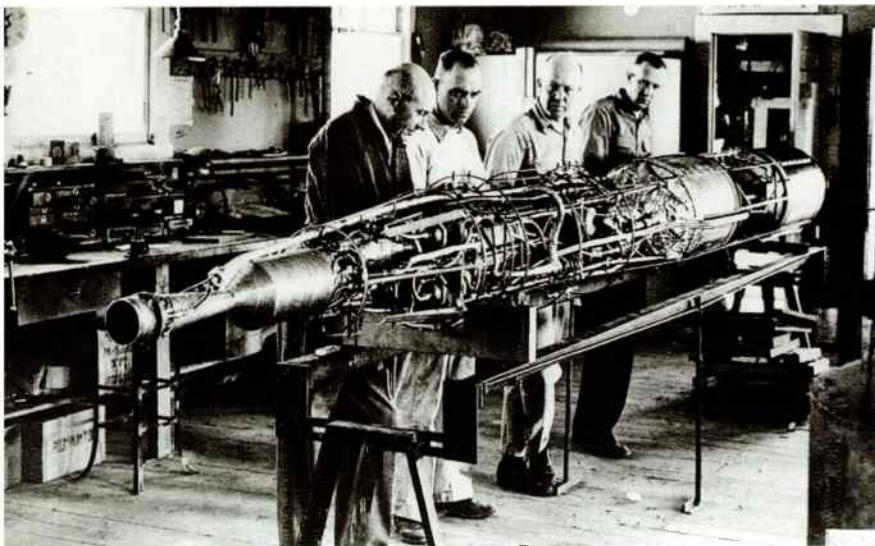
Born in 1882, Goddard was a rocket man before he was a man at all. From childhood, he had an instinctive feel for all things pyrotechnic; he was intrigued by the infernal powders that fuel firecrackers and sticks of TNT. Figure out how to manage that chemical violence, he knew, and you could do some ripping-good flying.

As a student and professor at Worcester Polytechnic Institute and later at Clark, Goddard tried to figure out just how. Fooling around with the arithmetic of propulsion, he calculated the energy-to-weight ratio of various fuels. Fooling around with airtight chambers, he found that a rocket could indeed fly in a vacuum, thanks to Newton’s laws of action and reaction. Fooling around with basic chemistry, he learned, most important, that if he hoped to launch a missile very far, he could never do it with the poor black powder that had long been the stuff of rocketry. Instead, he would need something with real propulsive oomph—a liquid like kerosene or liquid hydrogen, mixed with liquid oxygen to allow combustion to take place in the airless environment of space. Fill a missile with that kind of fuel, and you could retire black powder for good.

For nearly twenty years, Goddard’s theories were just theories. When he’d build a rocket and carry it out to a field, it never flew anywhere at all. When he’d return to Clark,



Goddard, left, and his brother-in-law salvage a smashed rocket in 1927.



Goddard, left, made great advances in New Mexico in the 1930s.

instant the rocket did nothing at all, then suddenly it leaped from the ground and screamed into the sky at sixty miles per hour. Climbing to an altitude of forty-one feet, it arced over, plummeted earthward, and slammed into a frozen cabbage patch 184 feet away. The entire flight lasted just two and a half seconds—but that was two and a half seconds longer than any liquid-fueled rocket had ever managed to fly before.

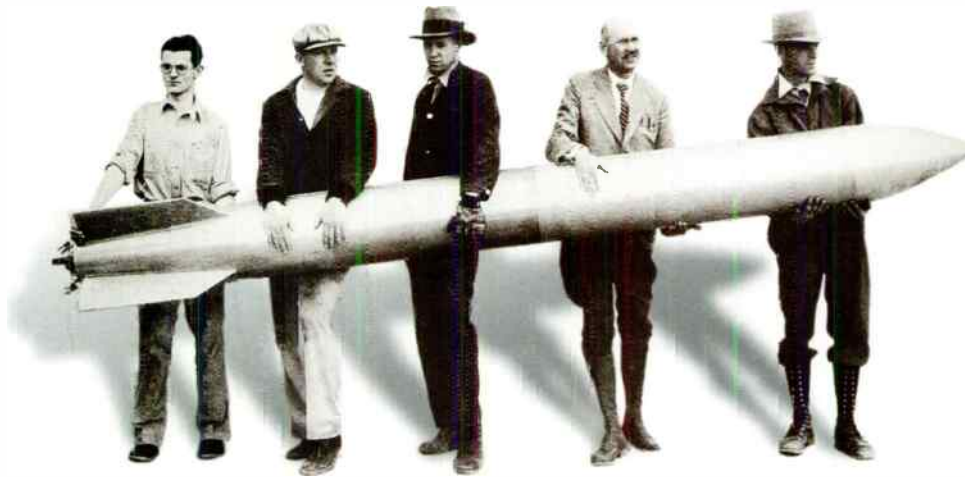
Goddard was thrilled with his triumph but resolved to say little about it. If people thought him daft when he was merely designing rockets, who knew what they'd say when the things actually started to fly? When word nonetheless leaked out about the launch and inquiries poured into Clark, Goddard answered each with a pinched, "Work is in progress; there is nothing to report." When he finished each new round of research, he'd file it under a deliberately misleading title—"Formulae for Silvering Mirrors," for example—lest it fall into the wrong hands.

But rockets are hard to hide, and as Goddard's Nells grew steadily bigger, the town of Worcester caught on. In 1929, an eleven-foot missile caused such a stir the police were called. Where there are police there is inevitably the press, and next day the local paper ran the horse-laughing headline: Moon Rocket Misses Target by 238,799½ Miles. For Goddard, the East Coast was clearly becoming a cramped place to be. In 1930, with the promise of a \$100,000 grant from financier Harry Guggenheim, Goddard and his wife, Esther, headed west to Roswell, New Mexico, where the land was vast and the launch weather good, and where the locals, they were told, minded their business.

In the open, roasted stretches of the Western scrub, the fiercely private Goddard thrived. Over the next nine years, his Nells grew from twelve feet to sixteen feet to eighteen feet, and their altitude climbed from 2,000 feet to 7,500 feet to 9,000 feet. He built a rocket that exceeded the speed of sound and another with fin-stabilized steering, and

fizzled missile in hand, he'd be greeted by a colleague asking, as was his habit, "Well, Robert, how goes your moongoing rocket?" When he steeled himself to publish his work, the *Times* made him wish he hadn't.

Finally, all that changed. On March 16, 1926, Goddard finished building a spindly, ten-foot rocket he dubbed Nell, loaded it into an open car, and trundled it out to his aunt Effie's nearby farm. He set up the missile in a field, then summoned an assistant, who lit its fuse with a blowtorch attached to a long stick. For an



he filed dozens of patents for everything from gyroscopic guidance systems to multistage rockets.

By the late 1930s, however, Goddard grew troubled. He had noticed long before that of all the countries that showed an interest in rocketry, Germany showed the most. Now and then, German engineers would contact Goddard with a technical question or two, and he would casually respond. But in 1939 the Germans suddenly fell silent. With a growing concern over what might be afoot in the Reich, Goddard paid a call on army officials in Washington and brought along some films of his various Nells. He let the generals watch a few of the launches in silence, then turned to them. "We could slant it a little," he said simply, "and do some damage." The officers smiled benignly at the missile man, thanked him for his time, and sent him on his way. The missile man, however, apparently knew what he was talking about. Five years later, the first of Germany's murderous V-2 rockets blasted off for London. By 1945, more than 1,100 of them had rained down on the ruined city.

Rebuffed by the army, Goddard spent World War II on sabbatical from rocketry, designing experimental airplane engines for the navy. When the war ended, he quickly returned to his preferred work. As his first order of business, he hoped to get his hands on a captured V-2. From what he had heard, the missiles sounded disturbingly like his more peaceable Nells. Goddard's trusting exchanges with German scientists had given Berlin at least a glimpse into what he was designing. What's more, by 1945 he had filed more than two hundred patents, all of which were available for inspection. When a captured German scientist was asked about the origin of the V-2, he was said to have

By 1932, Goddard, second from right, was building rockets fitted with gyroscopes. Three years later he went supersonic.

responded, "Why don't you ask your own Dr. Goddard? He knows better than any of us." When some V-2s finally made their way to the U.S. and Goddard had a chance to autopsy one, he instantly recognized his own handiwork. "Isn't this your rocket?" an assistant asked as they poked around its innards. "It seems to be," Goddard replied flatly.

Goddard accepted paternity of his bastard V-2, and that, as it turned out, was the last rocket he fathered while alive. In 1945 he was found to have throat cancer, and before the year was out, he was dead. His technological spawn, however, did not stop.

American scientists worked alongside émigré German scientists to incorporate Goddard's innovations into the V-2, turning the killer missile into the Redstone, which put the first Americans into space. The Redstone led directly to the Saturn moon rockets, and indirectly to virtually every other rocket the U.S. has ever flown.

Though Goddard never saw a bit of it, credit would be given him, and—more important to a man who so disdained the press—amends would be made. After Apollo 11 lifted off en route to humanity's first moon landing, the *New York Times* took a bemused backward glance at a tart little editorial it had published forty-nine years before. "Further investigation and experimentation," said the paper in 1969, "have confirmed the findings of Isaac Newton in the seventeenth century, and it is now definitely established that a rocket can function in a vacuum as well as in an atmosphere. The *Times* regrets the error." The grim Professor Goddard might not have appreciated the humor, but he would almost certainly have accepted the apology.

#### BRIEF BIOGRAPHY

**BORN** October 5, 1882, in Worcester, Massachusetts

**1908** Begins studying physics at Clark University

**1915** Proves that rocket engines can produce thrust in a vacuum

**1926** Launches the first liquid-fueled rocket to an altitude of forty-one feet

**1930** Begins working in Roswell, New Mexico; develops supersonic and multistage rockets and fin-guided steering

**DIED** 1945 at age sixty-two, holding 214 patents



# John Maynard Keynes

HE HARDLY SEEMED CUT OUT TO BE A WORKING man's revolutionary. A Cambridge University don with a flair for making money, a graduate of England's exclusive Eton prep school,

by *Robert B. Reich*

a collector of modern art, the darling of Virginia Woolf and her intellectually avant-garde Bloomsbury Group, the chairman of a life insurance company, later a director of the Bank of England, married to a ballerina, John Maynard Keynes—tall, charming, and self-confident—nonetheless transformed the dismal science into a revolutionary engine of social progress.

Before Keynes, economists were gloomy naysayers. “Nothing can be done,” “Don’t interfere,” “It will never work,” they intoned with Eeyore-like pessimism. But Keynes was an unswerving optimist. Of *course* we can lick unemployment! There’s no *reason* to put up with recessions and depressions! The “economic problem is not—if we look into the future—the *permanent problem of the human race*,” he wrote (liberally using italics for emphasis).

#### BRIEF BIOGRAPHY

**BORN** June 5, 1883, in Cambridge, England

**1915** Accepts position in the British Treasury

**1919** Representative at Paris Peace Conference

**1919** Returns to Cambridge to teach; *The Economic Consequences of the Peace* is published

**1936** *The General Theory of Employment, Interest and Money* appears

**1942** Named Baron Keynes of Tilton

**1944** Delegate at Bretton Woods Conference

**DIED** April 21, 1946, in Fittlehampton, England

Born in Cambridge, England, in 1883, the year Karl Marx died, Keynes probably saved capitalism from itself and surely kept latter-day Marxists at bay.

His father, John Neville Keynes, was a noted Cambridge economist. His mother, Florence Ada Keynes, became mayor of Cambridge. Young John was a brilliant student but didn’t immediately aspire to either academic or public life. He wanted to run a railroad. “It is so easy . . . and fascinating to master the principles of these things,” he told a friend, with his usual modesty. But no railway came along, and Keynes ended up taking the civil service exam. His lowest mark was in economics. “I evidently *knew* more about economics than my examiners,” he later explained.

Keynes was posted to the India Office, but the civil service proved deadly dull, and he soon left. He lectured at Cambridge, edited an influential journal, socialized with his Bloomsbury friends, surrounded himself with artists and writers and led an altogether dilettantish life until Archduke Francis Ferdinand of Austria was assassinated in Sarajevo and Europe was plunged into World

War I. Keynes was called to Britain’s Treasury to work on overseas finances, where he quickly shone. Even his artistic tastes came in handy. He figured a way to balance the French accounts by having Britain’s National Gallery buy paintings by Manet, Corot, and Delacroix at bargain prices.

His first brush with fame came soon after the war, when he was selected to be a delegate to the Paris Peace Conference of 1918–19. The young Keynes held his tongue as Woodrow Wilson, David Lloyd George, and Georges Clemenceau imposed vindictive war reparations on Germany. But he let out a roar when he returned to England, immediately writing a short book, *The Economic Consequences of the Peace*.

The Germans, he wrote acerbically, could not possibly pay what the victors were demanding. Calling Wilson a “blind, deaf Don Quixote” and Clemenceau a xenophobe

with “one illusion—France, and one disillusion—mankind” (and only at the last moment scratching the purple prose he had reserved for Lloyd George: “this goat-footed bard, this half-human visitor to our age from the hag-ridden magic and enchanted woods of Celtic antiquity”), an outraged Keynes prophesied that the reparations would keep Germany impoverished and ultimately threaten all Europe.

His little book sold 84,000 copies, caused a huge stir, and made Keynes an instant celebrity. But its real import was to be felt decades later, after the end of World War II. Instead of repeating the mistake made almost three decades before, the U.S. and Britain bore in mind Keynes’s earlier admonition. The surest pathway to a lasting peace, they then understood, was to help the vanquished rebuild. Public investing on a grand scale would create trading partners that could turn around and buy the victors’ exports, and also build solid middle-class democracies in Germany, Italy, and Japan.

Yet Keynes’s largest influence came from a convoluted, badly organized, and in places nearly incomprehensible tome published in 1936, during the depths of the Great Depression. It was called *The General Theory of Employment, Interest and Money*.

Keynes’s basic idea was simple. In order to keep people fully employed, governments have to run deficits when the economy is slowing. That’s because the private sector won’t invest enough. As their markets become saturated, businesses reduce their investments, setting in motion a dangerous cycle: less investment, fewer jobs, less consumption, and even less reason for business to invest. The economy may reach perfect balance, but at a cost of high unemployment and social misery. Better for governments to avoid the pain in the first place by taking up the slack.

The notion that government deficits are good has an odd ring these days. For most of the past two decades, America’s biggest worry has been inflation brought on by excessive demand. Inflation soared into double digits in the 1970s, budget deficits ballooned in the 1980s, and now a Democratic President congratulates himself for a budget surplus that he wants to use to pay down the debt. But some sixty years ago, when one out of four adults couldn’t find work, the problem was lack of demand.



Keynes, second from left, hits the airwaves in 1946 to promote the postwar economy.





Keynes, center, at the Bretton Woods conference.

Even then, Keynes had a hard sell. Most economists of the era rejected his idea and favored balanced budgets. Most politicians didn't understand his idea to begin with. "Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist," Keynes wrote. In the 1932 presidential election, Franklin D. Roosevelt had blasted Herbert Hoover for running a deficit, and dutifully promised he would balance the budget if elected. Keynes's visit to the White House two years later to urge F.D.R. to do more deficit spending wasn't exactly a blazing success. "He left a whole rigmarole of figures," a bewildered F.D.R. complained to Labor Secretary Frances Perkins. "He must be a mathematician rather than a political economist." Keynes was equally underwhelmed, telling Perkins that he had "supposed the President was more literate, economically speaking."

As the Depression wore on, Roosevelt tried public works, farm subsidies, and other devices to restart the economy, but he never completely gave up trying to balance the budget. In 1938 the Depression deepened. Reluctantly, F.D.R. embraced the only new idea he hadn't yet tried, that of the bewildering British "mathematician." As the President explained in a fireside chat, "We suffer primarily from a failure of consumer demand because of a lack of buying power." It was therefore up to the government to "create an economic upturn" by making "additions to the purchasing power of the nation."

Yet not until the U.S. entered World War II did F.D.R. try Keynes's idea on a scale necessary to pull the nation out of the doldrums—and Roosevelt, of course, had little choice. The big surprise was just how productive America could be when given the chance. Between 1939 and 1944 (the peak of wartime production), the nation's output almost doubled, and unemployment plummeted—from more than 17 percent to just over 1 percent.

Never before had an economic theory been so dramatically tested. Even granted the special circumstances of war mobilization, it seemed to work exactly as Keynes predicted. The grand experiment even won over many Republicans. America's Employment Act of 1946—the year Keynes died—codified the new wisdom, making it "the continuing policy and responsibility of the Federal Government . . . to promote maximum employment, production, and purchasing power."

And so the federal government did, for the next quarter-century. As the U.S. econ-

omy boomed, the government became the nation's economic manager and the President its Manager-in-Chief. It became accepted wisdom that government could "fine-tune" the economy, pushing the twin accelerators of fiscal and monetary policy in order to avoid slowdowns, and applying the brakes when necessary to avoid overheating. In 1964 Lyndon Johnson cut taxes to expand purchasing power and boost employment. "We are all Keynesians now," Richard Nixon famously proclaimed. Americans still take for granted that Washington has responsibility for steering the economy clear of the shoals, although it's now Federal Reserve Chairman Alan Greenspan rather than the President who carries most of the responsibility.

Keynes had no patience with economic theorists who assumed that everything would work out in the long run. "This long run is a misleading guide to current affairs," he wrote early in his career. "In the long run we are all dead."

Were Keynes alive today he would surely admire the vigor of the U.S. economy, but he would also notice that some 40 percent of the global economy is in recession and much of the rest is slowing down: Japan, flat on its back; Southeast Asia, far poorer than it was just two years ago; Brazil, teetering; Germany, burdened by double-digit unemployment and an economic slowdown; and declining prices worldwide for oil and raw materials.

In light of all this, Keynes would be mystified that the International Monetary Fund is requiring troubled Third World nations to raise taxes and slash spending, that "euro" membership demands budget austerity, and that a U.S. President wants to hold on to budget surpluses. You can bet Keynes wouldn't be silent. Dapper and distinguished as he was, he'd enter the fray with both fists and a mighty roar.

# Coco Chanel



COCO CHANEL WASN'T JUST AHEAD OF HER TIME. She was ahead of herself. If one looks at the work of contemporary fashion designers as different from one another as Tom Ford, Helmut Lang, Miuccia Prada, Jil Sander, and Donatella Versace, one sees that many of their strategies

*by Ingrid Sischy*

The ways, seventy-five years ago, she mixed up the vocabulary of male and female clothes and created fashion that offered the wearer a feeling of hidden luxury rather than ostentation are just two examples of how her taste and sense of style overlap with today's fashion.

Chanel would not have defined herself as a feminist—in fact, she consistently spoke of femininity rather than of feminism—yet her work is unquestionably part of the liberation of women. She threw out a life jacket, as it were, to women not once but twice, during two distinct periods decades apart: the 1920s and the 1950s. She not only appropriated styles, fabrics, and articles of clothing that were worn by men but also, beginning with how she dressed herself, appropriated sports clothes as part of the language of fashion. One can see how her style evolved out of necessity and defiance. She couldn't afford the fashionable clothes of the period—so she rejected them and made her own, using, say, the sports jackets and ties that were everyday male attire around the racetrack, where she was climbing her first social ladders.

It's not by accident that she became associated with the modern movement that included Diaghilev, Picasso, Stravinsky, and Cocteau. Like these artistic protagonists, she was determined to break the old formulas and invent a way of expressing herself. Cocteau once said of her that “she has, by a kind of miracle, worked in fashion according to rules that would seem to have value only for painters, musicians, poets.”

By the late 1960s, Chanel had become part of what she once rebelled against and hated—the Establishment. But if one looks at documentary footage of her from that period, one can still feel the spit and vinegar of the fiery peasant woman who began her fashion revolution against society by aiming at the head, with hats. Her boyish “flapper” creations were in stark contrast to the Belle Epoque millinery that was in vogue at the time, and about which she asked, “How can a brain function under those things?” Something that Chanel can never be accused of is not using her brain. Her sharp mind is apparent in everything she did, from her savvy use of logos to her deep understanding of the power of personality and packaging, even the importance of being copied. And she was always quotable: “Fashion is not simply a matter of clothes. Fashion is in the air, borne upon the wind. One intuits it. It is in the sky and on the road.”

It is fitting, somehow, that Chanel was often photographed holding a cigarette or standing in front of her famous Art Deco wall of mirrors. Fashion tends to involve a good dose of smoke and mirrors, so it should come as no surprise that Gabrielle Chanel's ver-



In 1936, wearing a signature gown and hat of her own design.



Chanel, left, was soignée even at the beach, here in Venice.

a playboy who would finance her move to Paris and the opening of her first hat business. That arrangement gave way to a bigger and better deal when she moved on to his friend, Arthur (“Boy”) Capel, who is said to have been the love of her life and who backed her expansion from hats to clothes and from Paris to the coastal resorts of Deauville and Biarritz. One of her first successes was the loose-fitting sweater, which she belted and teamed with a skirt. These early victories were similar to the clothes she had been making for herself—women’s clothes made out of Everyman materials such as jersey, usually associated with men’s undergarments.

Throughout the 1920s, Chanel’s social, sexual, and professional progress continued, and her eminence grew to the status of legend. By the early 1930s she’d been courted by Hollywood, gone, and come back. She had almost married one of the richest men in Europe, the Duke of Westminster; when she didn’t, her explanation was, “There have been several Duchesses of Westminster. There is only one Chanel.” In fact, there were many Coco Chanel, just as her work had many phases and many styles, including Gypsy skirts, over-the-top fake jewelry, and glittering

sion of her life involved a multitude of lies, inventions, cover-ups, and revisions. But as Prada said to me: “She was really a genius. It’s hard to pin down exactly why, but it has something to do with her wanting to be different and wanting to be independent.”

Certainly her life was unpredictable. Even her death—in 1971, at the age of eighty-seven in her private quarters at the Ritz Hotel—was a plush ending that probably would not have been predicted for Chanel by the nuns in the Aubazine orphanage, where she spent time as a ward of the state after her mother died and her father ran off. No doubt the sisters at the convent in Moulins, who took her in when she was seventeen, raised their eyebrows when the young woman left the seamstress job they had helped her get to try for a career as a cabaret singer. This stint as a performer—she was apparently charming but no Piaf—led her to take up with the local swells and become the backup mistress of Etienne Balsan,

#### BRIEF BIOGRAPHY

- BORN** August 19, 1883, in French village of Saumur
- 1909** Opens first shop, a millinery, in Paris
- 1910** Moves to Rue Cambon, where the House of Chanel remains
- 1923** Debuts Chanel No. 5
- 1939** Closes her fashion house when France declares war on Germany
- 1945** Exiled to Switzerland for her love affair with a Nazi officer
- 1954** Launches successful comeback
- DIED** January 10, 1971, in Paris

evening wear—made of crystal and jet beads laid over black and white georgette crepe—not just the plainer jersey suits and “little black dresses” that made her famous. But probably the single element that most ensured Chanel’s being remembered, even when it would have been easier to write her off, is not a piece of clothing but a form of liquid gold—Chanel No. 5, in its Art Deco bottle, which was launched in 1923. It was the first perfume to bear a designer’s name.

One could say perfume helped keep Chanel’s name pretty throughout the period when her reputation got ugly: World War II. This is when her anti-Semitism, homophobia (even though she herself dabbled in bisexuality), and other base inclinations emerged. She responded to the war by shutting down her fashion business and hooking up with Hans Gunther von Dincklage, a Nazi officer whose favors included permission to reside in her beloved Ritz Hotel. Years later, in 1954, when she decided to make a comeback, her name still had “disgraced” attached to it.

Depending on the source, Chanel’s return to the fashion world has been variously attributed to falling perfume sales, disgust at what she was seeing in the fashion of the day, or simple boredom. All these explanations seem plausible, and so does Karl Lagerfeld’s theory of why, this time around, the Chanel suit met such phenomenal success. Lagerfeld—who designs Chanel today and who has turned the company into an even bigger, more tuned-in business than it was before—points out, “By the 1950s she had the benefit of distance, and so could truly distill the Chanel look. Time and culture had caught up with her.”

In Europe, her return to fashion was deemed an utter flop at first, but Americans couldn’t buy her suits fast enough. Yet again Chanel had put herself into the yolk of the zeitgeist. By the time Katharine Hepburn played her on Broadway in 1969, Chanel had achieved first-name recognition and was simply Coco.



Chanel, left, three years after her stunning 1954 comeback.

# Eleanor Roosevelt



WHEN ELEANOR ROOSEVELT JOURNEYED TO NEW YORK CITY a week after her husband's funeral in April 1945, a cluster of reporters were waiting at the door of her Washington Square apartment. "The story is over," she said simply, assuming that her words and opinions would no longer be of interest once her husband was dead and she was no

*by Doris Kearns Goodwin*

longer First Lady. She could not have been more mistaken. As the years have passed, Eleanor Roosevelt's influence and stature have continued to grow. Today she remains a powerful inspiration to leaders in both the civil rights and women's movements.

Eleanor shattered the ceremonial mold in which the role of the First Lady had traditionally been fashioned, and reshaped it around her own skills and her deep commitment to social reform. She gave a voice to people who did not have access to power. She was the first woman to speak in front of a national convention, to write a syndicated column, to earn money as a lecturer, to be a radio commentator, and to hold regular press conferences.

The path to this unique position of power had not been easy. The only daughter of an alcoholic father and a beautiful but aloof mother who was openly disappointed by Eleanor's lack of a pretty face, Eleanor was plagued by insecurity and shyness. An early marriage to her handsome fifth cousin once removed, Franklin Roosevelt, increased her insecurity and took away her one source of confidence: her work in a New York City settlement house. "For ten years, I was always just getting over having a baby or about to have another one," she later lamented, "so my occupations were considerably restricted."

But thirteen years after her marriage, and after bearing six children, Eleanor resumed the search for her identity. The voyage began with a shock: the discovery in 1918 of love letters revealing that Franklin was involved with Lucy Mercer. "The bottom dropped out of my own particular world," she later said. "I faced myself, my surroundings, my world, honestly for the first time." There was talk of divorce, but when Franklin promised never to see Lucy again, the marriage continued. For Eleanor a new path had opened, a possibility of standing apart from Franklin. No longer would she define herself solely in terms of his wants and needs. A new relationship was forged, on terms wholly different from the old.

She turned her energies to a variety of reformist organizations, joining a circle of post-suffrage feminists dedicated to the abolition of child labor, the establishment of a minimum wage, and the passage of legislation to protect workers. In the process she discovered that she had talents—for public speaking, for organizing, for articulating social problems. She formed an extraordinary constellation of lifelong female friends, who helped to assuage an enduring sense of loneliness. When Franklin was paralyzed by polio in 1921, her political activism became an even more vital force. She became Franklin's "eyes and ears," traveling the country gathering the grassroots knowledge he needed to understand the people he governed.

They made an exceptional team. She was more earnest, less devious, less patient, less fun, more uncompromisingly moral; he possessed the more trustworthy political tal-

#### BRIEF BIOGRAPHY

**BORN** October 11, 1884, in New York City

**1905** Marries distant cousin Franklin Delano Roosevelt

**1918** Discovers F.D.R.'s affair with Lucy Mercer

**1932** F.D.R., crippled by polio since 1921, is elected President; Eleanor becomes his eyes and ears

**1948** Helps secure passage of the U.N.'s Universal Declaration of Human Rights

**DIED** November 7, 1962, in New York City





Honoring the boys  
back from the war  
in June 1942.

administration of various New Deal projects. From that point on, African-Americans' share in the New Deal work projects expanded, and Eleanor's independent legacy began to grow.

She understood, for instance, the importance of symbolism in fighting discrimination. In 1938, while attending the Southern Conference for Human Welfare in Birmingham, Alabama, she refused to abide by a segregation ordinance that required her to sit in the white section of the auditorium, apart from her black friends. The following year, she publicly resigned from the Daughters of the American Revolution after it barred the black singer Marian Anderson from its auditorium.

During World War II, Eleanor remained an uncompromising voice on civil rights, insisting that America could not fight racism abroad while tolerating it at home. Progress was slow, but her continuing intervention led to broadened opportunities for blacks in the factories and shipyards at home and in the armed forces overseas.

Eleanor's positions on civil rights were far in advance of her time: ten years before the Supreme Court rejected the "separate but equal" doctrine, Eleanor argued that equal facilities were not enough: "The basic fact of segregation, which warps and twists the lives of our Negro population, [is] itself discriminatory."

ent, the more finely tuned sense of timing, the better feel for the citizenry, the smarter understanding of how to get things done. But they were linked by indissoluble bonds. Together they mobilized the American people to effect enduring changes in the political and social landscape of the nation.

Nowhere was Eleanor's influence greater than in civil rights. In her travels around the country, she developed a sophisticated understanding of race relations. When she first began inspecting New Deal programs in the South, she was stunned to find that blacks were being systematically discriminated against at every turn. Citing statistics to back up her story, she would interrupt her husband at any time, barging into his cocktail hour when he wanted only to relax, cross-examining him at dinner, handing him memos to read late at night. But her confrontational style compelled him to sign a series of executive orders barring discrimination in the

There were other warps and twists that caught her eye. Long before the contemporary women's movement provided ideological arguments for women's rights, Eleanor instinctively challenged institutions that failed to provide equal opportunity for women. As First Lady, she held more than three hundred press conferences that she cleverly restricted to women journalists, knowing that news organizations all over the country would be forced to hire their first female reporter in order to have access to the First Lady.

Through her speeches and her columns, she provided a powerful voice in the campaign to recruit women workers to the factories during the war. "If I were of debutante age, I would go into a factory, where I could learn a skill and be useful," Eleanor told young women, cautioning them against marrying too hastily before they had a chance to

expand their horizons. She was instrumental in securing the first government funds ever allotted for the building of child care centers. And when women workers were unceremoniously fired as the war came to an end, she fought to stem the tide. She argued on principle that everyone who wanted to work had a right to be productive, and she railed against the closing of the child care centers as a shortsighted response to a fundamental social need. What the women workers needed, she said, was the courage to ask for their rights with a loud voice.

For her own part, she never let the intense criticism that she encountered silence her. "If I . . . worried about mudslinging, I would have been dead long ago." Yet she insisted that she was not a feminist. She did not believe, she maintained, that "women should be judged, when it comes to appointing them or electing them, purely because they are women." She wanted to see the country "get away from considering a man or woman from the point of view of religion, color, or sex." But the story of her life—her insistence on her right to an identity of her own apart from her husband and her family, her constant struggle against depression and insecurity, her ability to turn her vulnerabilities into strengths—provides an enduring example of a feminist who transcended the dictates of her times to become one of the century's most powerful and effective advocates for social justice.



En route to a picnic in 1948.

# LOUIS B. MAYER



DAN QUAYLE WOULD HAVE LOVED LOUIS B. MAYER, a man for whom the words family values had real meaning. Motherhood, the Stars-and-Stripes, and God were equal parts of a lifelong strategy that would establish Metro-Goldwyn-Mayer as the industry's dominant film factory, from the silent era through the talkies revolution. While the other early moguls were

*by Budd Schulberg*

simply trying to make the best movies they could, young Mayer was an ideologue intent on using the power of the new medium to exert what he considered the proper moral influence on the American public.

Mayer went west in 1918, just after the first wave of Hollywood pioneers. He had been on the move since his threadbare family left its Cossack-ridden Ukrainian village in the late 1880s and a few years later settled in St. John, New Brunswick. There his father, Jacob Mayer, struggled as a junkman. Little Louie, half starved, battled anti-Semitic bullies and helped his father—whom he despised as much as he adored his mother. Escaping St. John in his late teens, he moved on to Boston, where he discovered the nickelodeon, the embryo of the moving picture business. Quick to seize his opportunities in the young business of film distribution, Mayer earned a breakthrough \$500,000 by putting up \$50,000 for a lopsided 90 percent of the New England ticket sales on the first movie blockbuster, *The Birth of a Nation*. Now ready to produce his own pictures, he inveigled a popular actress, Anita Stewart, into breaking her contract with Vitagraph, and in 1918–19 starred her in a series of teary films at the modest studio leased from the Selig Zoo in downtown Los Angeles, where my father, B. P. Schulberg, joined him in the now vanished Mayer-Schulberg Studio in 1920.

A major step up for Mayer was entertainment tycoon Marcus Loew's reaching out to him as commanding officer of a new company merging Metro and Goldwyn, with Mayer soon adding his big M to the mix. He raised the contract system to a state of the art, using it to rule over a stable of stars who were legally bound to the company for years. In L.B.'s studio, with frail, dedicated lieutenant Irving Thalberg at his side, L.B. worked hard to project himself as a father figure to his extended family of stars, directors, and producers.

He was the master manipulator, and it was generally acknowledged that of all the great actors on the lot—the Barrymores, Spencer Tracy, Lon Chaney, Garbo—L.B. was number one. When Robert Taylor tried to hit him up for a raise, L.B. advised the young man to work hard, respect his elders, and in due time he'd get everything he deserved. L.B. hugged him, cried a little, and walked him to the door. Asked, "Did you get your raise?" the now tearful Taylor is said to have answered, "No, but I found a father."

There were ways to get to him. When ingenue Ann Rutherford asked for a supplement to her modest salary in the highly profitable Andy Hardy series, L.B. began his familiar ploy. Then Rutherford took out her little bank book, showed him her meager savings, and said she had promised her mother a house. Mother was the magic word. L.B. embraced her, but chastely; down his cheeks came the obligatory tears; and Rutherford left with her raise.

Mayer was building a roster of household names that almost lived up to MGM's slogan, "More stars than there are in heaven": Judy Garland, Clark Gable, Joan Crawford, Elizabeth Taylor, Katharine Hepburn, Lana Turner, the Marx Brothers, Ava Gardner, and, of course, Garbo, L.B.'s personal discovery.

He kept them in line with hand holding and falling to his knees in tears, but if that failed, he'd reverse field, as he did with Gable. When Gable was getting \$1,000 a week and wanted \$5,000, L.B. blackmailed him by threatening to reveal to Gable's wife, Rhea, his affair with Crawford. Both knew Gable was worth \$12,000, but he settled for \$2,000. The indentured servitude had its benefits, though, for the kind of power that L.B. wielded on the studio lot extended to local politics. When a drunken Gable hit and killed a pedestrian near Hollywood Boulevard, L.B. sent Gable into hiding and then conspired with the local DA to have a minor executive take the rap in return for staying on the payroll for life at a higher salary. A pliant press hushed the story.

While L.B.'s moral code was complicated, his zeal was not. When his biggest star at the time, Jack Gilbert, used the word whore in reference to his co-star Mae Murray, and then—gasp—about his own mother, the president of MGM rushed from around his desk and knocked down his million-dollar meal ticket.

#### BRIEF BIOGRAPHY

**BORN** July 4, 1885, in Minsk, Russia

**1907** Buys and rebuilds a movie theater near Boston

**1917–18** Starts Louis B. Mayer Pictures; first release: *Virtuous Wives*

**1924** With Marcus Loew, forms Metro-Goldwyn-Mayer; Goldwyn backs out

**1925** Signs Greta Garbo

**1932** Rift with production chief Irving Thalberg divides studio

**1948** Relinquishes control of MGM; retires in 1951

**DIED** October 29, 1957, in Los Angeles

Having learned not to say ain't or use double negatives or drop his Gs, a more polished L.B. found a new role model in Herbert Hoover. He worked so effectively for Hoover that he dared hope he might be the new President's choice as ambassador to England. An ambassadorship to Turkey was dangled, but Mayer chose to oversee his studio's triumphant transition from silence to sound: "Garbo Talks!" The Mayers did claim the privilege of being Hoover's first guests at the White House. From then on L.B. felt free to phone the President, and frequently did, to make suggestions for running the government.

Meanwhile he was cashing in on his conviction that morality sold. With films like the Andy Hardy series, featuring teenage star Mickey Rooney, sage father Judge Hardy (Lewis Stone), and charming mother (Fay Holden), Mayer was defining American society according to his fantasies. He took his responsibility for American values so seriously that when Rooney, a precocious womanizer and partygoer, got out of hand, L.B. was overheard screaming at him,

"You're Andy Hardy! You're the United States! You're Stars-and-Stripes! You're a symbol! Behave yourself!"

But as praise and profits soared, a conflict was building between Mayer and his brilliant production chief, Thalberg. An intense perfectionist who never lost his school-boy looks, Thalberg oversaw MGM's record-breaking hits: *The Big Parade*, *Ben-Hur*, *Grand Hotel*, and *Mutiny on the Bounty*. Thalberg was increasingly resistant to playing Andy to Mayer's Judge Hardy. By 1936, Mayer was the highest-salaried executive in America, breaking the million-dollar barrier. Thalberg felt entitled to an equal share. For his part, L.B. had begun to resent the prevailing opinion that Thalberg was the genius behind MGM's achievements, and Mayer the engineer who kept the plant humming.



By the mid-1930s, MGM was divided between Mayer loyalists and “Thalberg people.” and by the time the strong-willed, weak-hearted Thalberg collapsed and went to Europe for treatment, he and his former mentor were no longer speaking to each other. When Thalberg returned, Mayer offered a production deal in place of his old job. An angry Thalberg threatened to leave MGM. It was at this impasse that he died at age thirty-seven. L.B. cried, sent a spectacular spray of gardenias to the funeral, and, soon after, remarked to my mother, “God saw fit to take Irving away.”

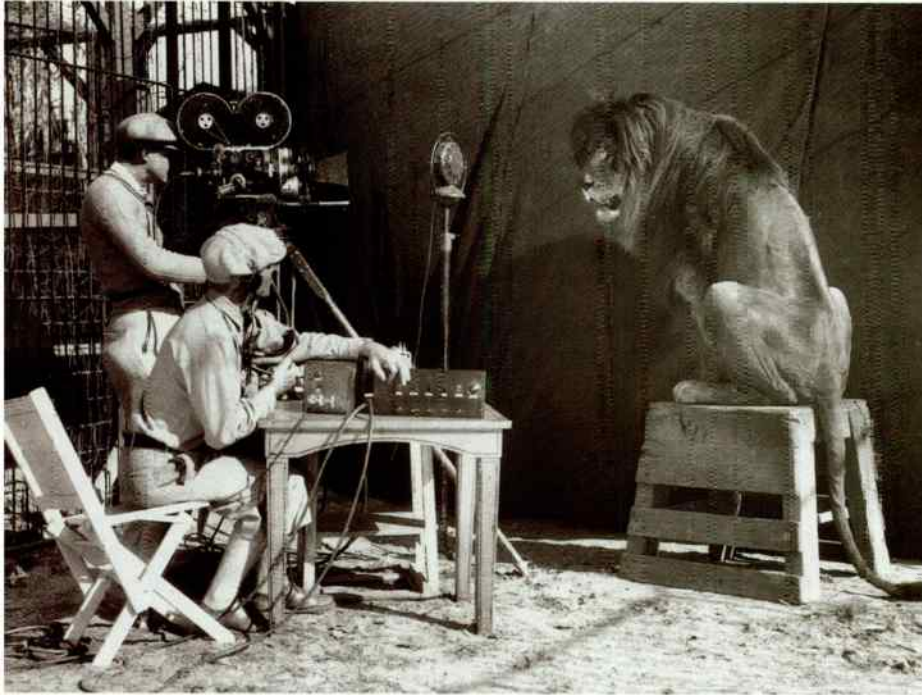
God wasn't L.B.'s co-pilot; he was his senior partner, reaching out to remove those who dared get in L.B.'s way. For almost fifteen years, L.B. would continue to reign at MGM. With a host of prize-winning and profitable films, MGM's decline as Film Factory Number One was almost imperceptible. But in the postwar years, the Mayer formula of sentimental family fare and glossy romantic productions was wearing thin.

Mayer (front row, center) had stars galore at MGM and used both fatherly persuasion and blackmail to keep them in line.

The golden years of the moguls were coming to an end too. The government forced the industry to divest its lucrative theater chains, and top stars and directors were demanding the profit participation that Mayer & Co. had always denied them. Mayer was forced to accept writer-producer Dore Schary in Thalberg's old job, and at first it

seemed once again that Mayer had found the son he had always wanted. But the liberal Schary found L.B. an overbearing and stultifying influence. A bitter showdown prompted Loew's successor, Nick Schenck, to make a choice. To Mayer's shock, Schenck picked Schary.

After twenty-seven years of arbitrary power, L.B. was out. Even his vaunted patriotism had now become shrill. He identified with right-wing fanatic Senator Joe McCarthy and opposed General Eisenhower as too moderate at the 1952 GOP convention. When Mayer died in 1957, the apostle of family values left a contentious, meanspirited will



As Mayer's MGM began making talkies, the studio's trademark lion was recorded for sound.

disinheriting family members, including his daughter Edith, because of her husband's liberal politics. No happy ending there. No movie star hero to set everything right at the rosy fade-out.

Had L.B. been making his own movie, it would have been different. He knew how to turn American life into pipe dreams. But give the devil his due: this self-inflated, ruthless, and cloyingly sentimental monarch presided over the most successful of all the Hollywood dream factories. Leaving a legacy of classic, inimitable films that defined America's aspirations, if not its realities.



# Charles Edward Merrill

IN 1940, THE YEAR CHARLES EDWARD MERRILL founded the firm we now know as Merrill Lynch & Co., he was fifty-four years old and had already lived an extraordinarily productive and visible life. A poor boy from the backwaters of Florida, Merrill

*by Joseph Nocera*





Merrill preached the gospel of stocks at county fairs and shopping centers.

to speak out against speculation. By February 1929, Merrill was so sure the end was near that he liquidated his firm's stock portfolio, an act that made him famous in October, when the Crash finally came.

Merrill made the gossip pages as regularly as the financial pages. By 1940, he had been married three times, had had countless affairs (“recharging my batteries” was his euphemism for philandering), and had sired three children, the youngest of whom, James Merrill, became one of America’s finest poets. A short, self-absorbed, prideful, flamboyant fellow—“Good Time Charlie Merrill,” his friends called him—he had the unconscious expectation that Great Men always have: that he should be at the center of any orbit he entered. And so he was. As his son once wrote, “Whatever he decided to serve, the victim was meant to choke it down and be grateful.”

Merrill can't be dismissed as a moneybags who made a lucky guess on the Crash. He truly deserves to be remembered for what he did during that second career of his, the one that began when he was deep into middle age. In founding Merrill Lynch—his partner and sidekick, Edmund C. (“Eddie”) Lynch, was a soda fountain equipment salesman—Merrill created an important and enduring institution. But more than that, he started the country down an important and enduring path.

Merrill, you see, was the first person to openly advocate that the stock market should not just be a plaything for Wall Street insiders but should also be an avenue for the broad mass of Americans. Decades before founding Merrill Lynch, he coined the phrase “Bringing Wall Street to Main Street.” For the last seventeen years of his life,

was forced to leave college by lack of funds. But he schemed his way to Wall Street and made himself wealthy by the time he was thirty-one.

He was the first investment banker to realize that chain stores would one day dominate retailing, and he got rich by underwriting (and often controlling) such future powerhouses as S.S. Kresge (now Kmart) and Safeway Stores. He set up one of America’s first wire houses—brokerage firms with branch offices in different cities connected to the main office by Teletype.

He was also the first big-name Wall Streeter to predict the Great Crash of 1929. Indeed, in the months leading up to the Crash, Merrill pleaded (to no avail) with President Calvin Coolidge to

that's what he tried to achieve with his new firm, which became a laboratory for his grand experiment. Today when we conjure up the names of the great American financiers, we tend to think of people like J. P. Morgan and Warren Buffett and even Michael Milken. But none of them had the effect on American life that Charlie Merrill had. In fact, they're not even close.

Can there be any doubt that the democratization of the markets is the single most profound financial trend of the past half-century? The statistics certainly bear this out: by some measures, half of America's households now invest, compared with only 16 percent in 1945, and mutual funds alone hold more of America's financial assets than banks do. Indeed, a strong argument can be made that the small investor, far more than the professional trader, is the true foundation upon which the modern bull market has been built.

Look at how fixated we've become with the daily ups and downs of the Dow—how our hearts race when the market is up and how we sag when the market does. Or look at how we've turned mutual fund managers like Peter Lynch into celebrities. Most of all, look at the extraordinary extent to which we now rely on stocks to fund our retirement, send our kids to college, and allow us to lead the kind of comfortable lives we view as middle-class. We believe in the market today with something approaching religious faith.

Which, it turns out, is a pretty fair description of how Merrill always viewed the market. Its ability to create wealth broadly was to him an undeniable proposition. And while this is now a more or less universal truth, it was not always so. During the first part of this century, after all, the Street was largely a rigged game. Insiders manipulated the market from behind the curtains, behavior that, while unseemly, was legal then. Small investors were scorned—or fleeced. Yet Merrill was untouched by the cynicism that pervaded Wall Street. Like so many American visionaries, he was marked by naive and exaggerated optimism that was unshakable, even in the face of the darker reality he saw all around him.

Did the events of the Roaring Twenties and the Great Depression change Merrill's views? Quite the contrary. The Crash proved that people should have listened to him instead of to those charlatans who encouraged investors to borrow so heavily and to speculate so wildly. And if Americans had soured on the market by the end of the 1930s—and how could they not as the Dow Jones average lost 60 percent of its value and people came to see how rotten the game had been—Merrill eventually came to the conclusion that someone would have to rekindle the country's faith in the market. He turned to the only man he thought capable of the task: himself.

In retrospect, Merrill Lynch was really Charlie Merrill's bully pulpit, the platform from which he could preach the virtues of the stock market and show the country that the small investor could get a fair shake on Wall Street. "Demystification had been the key to [my father's] great success," James Merrill later wrote in his memoir. "No more

mumbo-jumbo from Harvard men in paneled rooms; let the stock market's workings henceforth be intelligible even to the small investor." To that end, the firm published an endless stream of reports, magazines, pamphlets—11 million pieces in 1955 alone—with titles like *How to Invest*. Under Merrill the firm gave seminars across the country, with child care provided so that both husband and wife could attend. It set up tents in county fairs. It ran a brokerage on wheels. Once, it even gave away stock in a contest sponsored by Wheaties.

#### BRIEF BIOGRAPHY

**BORN** October 19, 1885, in Green Grove Springs, Florida

**1914** Earns his first fortune financing future powerhouses S.S. Kresge (Kmart) and Safeway

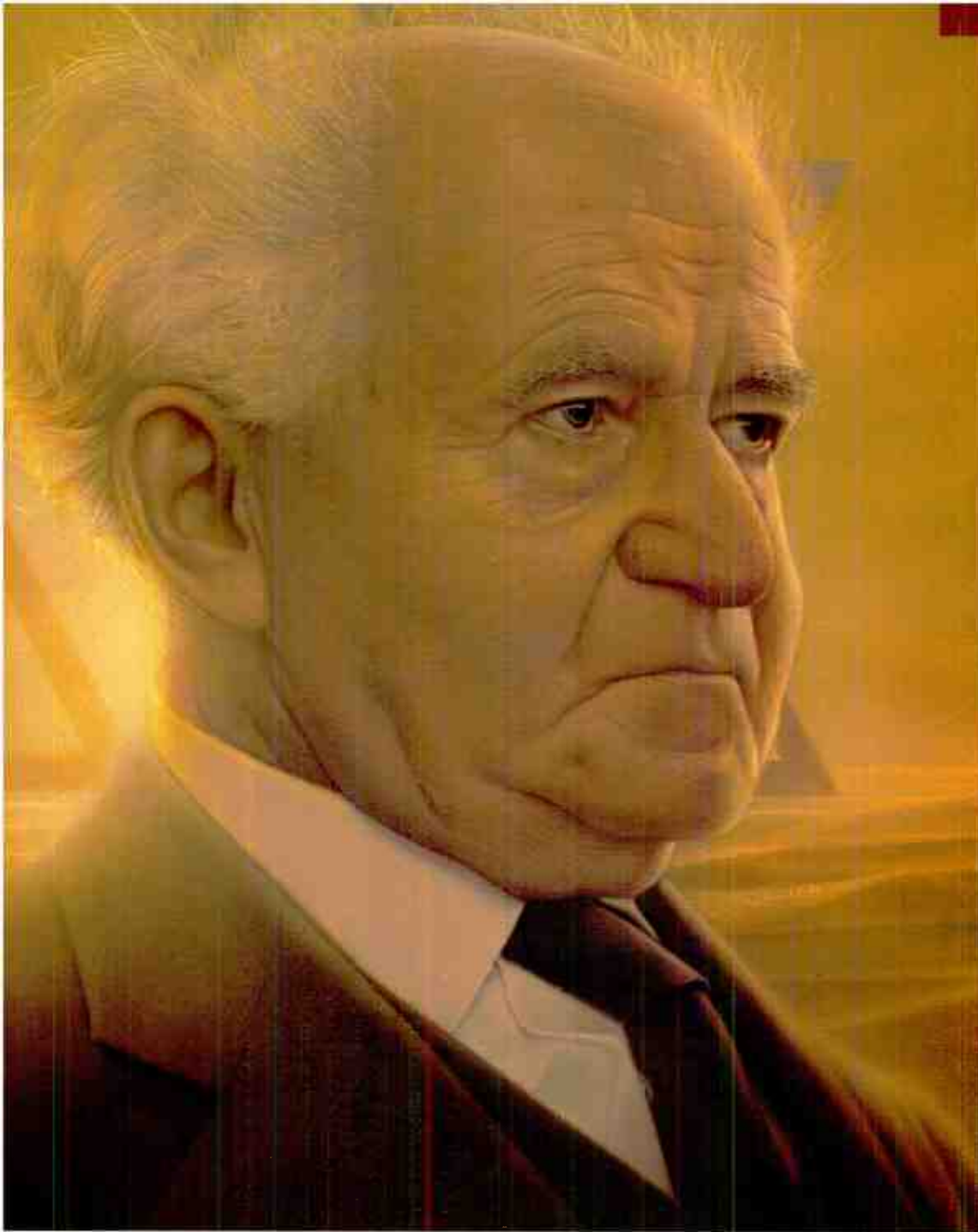
**1928** Worried by speculation, tells clients to sell portfolios months before the Crash

**1940** Founds firm now known as Merrill Lynch & Co., vowing to bring "Wall Street to Main Street"

**DIED** 1956; at his death, his firm boasts 115 offices

By Merrill's death, in 1956, the firm had some 400,000 clients and had become the largest brokerage in the country. But Merrill died a sorely disappointed man. Wall Street had not rushed to follow his example, as he had hoped, and the majority of the country, still scarred by the memory of the Depression, was not ready to plunge back into stocks. He was simply too far ahead of his time.

There are many other people—mutual fund pioneer Ned Johnson at Fidelity Investments and discount broker Charles Schwab, to name two—who over the course of the next forty years helped push Wall Street and Main Street closer together. Yet for all their innovations, they remain at bottom Merrill's heirs. Their modern investing mantra is the same basic message he preached so many years ago—that people should invest for the long haul; that they should have a clear understanding of the companies they are buying; that despite the hair-raising ups and downs, stocks have historically outperformed every other form of investment. Today the stock market no longer belongs to insiders. It belongs to all of us. We all now partake in its gains, just as we share in its losses—and who among us would argue that it should be any other way? Good Time Charlie Merrill's lonely voice has become America's common wisdom.



# David Ben-Gurion

EVER SINCE HE WAS A FRAIL CHILD with a disproportionately big head, David Ben-Gurion was always clear about his next move, about the Jewish people's destination, about the link between his steps and the deliverance of the Jews in their biblical homeland.

by *Amos Oz*



The prime minister makes a military point.

Ben-Gurion ached to be an intellectual; during the most dramatic years of his leadership, he gulped philosophy books, commented on the Bible, flirted with Buddhism, even taught himself ancient Greek in order to read Plato in the original; he had a relentless curiosity about the natural sciences (but no taste for fiction or the fine arts). He would quote Spinoza as if throwing rocks at a rival. Verbal battle, not dialogue, was his habitual mode of communication. Rather than a philosopher, he was a walking exclamation mark, a tight, craggy man with a halo of silvery hair and a jawbone that projected awesome willpower and a volcanic temper.

He came from the depressed depths of small-town Polish-Jewish life, which he left behind in 1906. Inspired by a Hebrew-Zionist upbringing, shocked by anti-Semitic pogroms in Eastern Europe, he went to Turkish Palestine “to build it and be rebuilt by it,” as was the motto of those days. He became a pioneer, a farmhand, active with early Zionist-socialist groups. At age nineteen he was what he would remain all his life: a secular Jewish nationalist who combined Jewish messianic visions with socialist ideals, a man with fierce ambition for leadership, extraordinary tactical-political skills, and a sarcastic edge rather than a sense of humor.

In 1915 Ben-Gurion, expelled from Palestine for his nationalist and socialist activities, chose to go to New York City, where he hastily taught himself English and plunged head-on into perpetrating the local Zionist-socialist movement. Yet his authoritative, almost despotic character and his enchantment with Lenin’s revolution and leadership style were tempered during his three years in the U.S. by the impact American democracy left on him. Many years later, Ben-Gurion, who was urged by some countrymen to “suspend” democracy more than once, refused to do so.

After World War I he returned to Palestine, now governed by Britain and—after 1920—designated by the League of Nations as a “National Home” for the Jewish people. He rose to prominence in the growing Zionist-socialist movement. The increasing anti-Semitism in Europe during the 1920s and 1930s sent waves of Jewish immigrants into the country. Furious Arab leaders launched a rebellion against the British and a holy war on the Jews. Much earlier than others, Ben-Gurion recognized the depth and rationale of Arab objection to Zionism: he was aware of the tragic nature of a clash between two genuine claims to the same land. His position on this can be described neither as hawkish nor dovish: he saw the creation of an independent homeland for the homeless Jewish people as, first and foremost, a crucial provision for the survival of persecuted Jews.

At the cost of being labeled a traitor (by extremists on the right) and an opportunist (by the dogmatic left), he was ready to go a long way to accommodate the Arabs. Yet he was one of the first to foresee that in order for the Jews to avoid a showdown with the Arabs or to survive such a showdown, they must set up a shadow state and a shadow military force.

Ben-Gurion was the great architect and builder of both. Throughout the tragic years from 1936 to 1947, while millions of Jews were rounded up and murdered by the Germans, denied asylum by almost all nations, and barred by the British from finding a home in Palestine, he subtly orchestrated a complex strategy: he inspired tens of thousands of young Jews from Palestine to join the British army in fighting the Nazis, but at the same time authorized an underground agency to ship Jewish refugees into the country. As the British were intercepting, deporting, and locking away these survivors of the Nazi inferno in barbed wire detention camps, world opinion grew more and more sympathetic to the Zionist prescription for the plight of the Jews. This strategy helped bring about the favorable atmosphere that led to the 1947 U.N. resolution, partitioning Palestine into a Jewish state and an Arab state.

But even before the British left, attacks on Jews were unleashed all over the country. On May 14, 1948, in accordance with the U.N. resolution, Ben-Gurion proclaimed Israel's independence, ignoring last-minute admonitions from Washington and overruling doomsday predictions by some of his closest associates. Within hours, military forces of five Arab nations invaded Israel, joining Palestinian militias in an openly declared attempt to destroy the Jews. It was the worst of several Israeli-Arab wars: 1 percent of the Jewish population died, as well as thousands of Arabs. More than half a million Palestinians lost their homes; some fled, some were driven out by Israeli forces.

Ben-Gurion's iron-will leadership during the fateful one and a half years of that touch-and-go war turned him from “first among equals” in the Zionist leadership into a

#### BRIEF BIOGRAPHY

**BORN** October 16, 1886, in czarist-ruled Poland

**1906** Settles in Palestine

**1918** Returns after three years in U.S., organizes support for a future Jewish nation

**1948** Elected as first Prime Minister of the new state of Israel

**1953** Resigns as Prime Minister

**1956** Back in power, orders invasion of Gaza Strip and Sinai Peninsula

**DIED** December 1, 1973



The founding father,  
with Golda Meir.

modern-day King David. The crux of his leadership was a lifelong, partly successful struggle to transplant a tradition of binding majority rule in a painfully divided Jewish society that for thousands of years had not experienced any form of self-rule, not even a central spiritual authority. In the early years of the state, many Israelis saw him as a combination of Moses, George Washington, Garibaldi, and God Almighty. In admirers as well as vehement opponents, Ben-Gurion's wrathful-father personality evoked strong emotions: awe,

anger, admiration, resentment. When I first met him in 1959, I was mesmerized by his physical intensity: he was a mercurial man, almost violently vivacious. There was a fist-like tightness to his argument: bold, peasant-simple, piercing, seductively warm, and, for one or two gracious moments, revealing his cheerful, childlike curiosity.

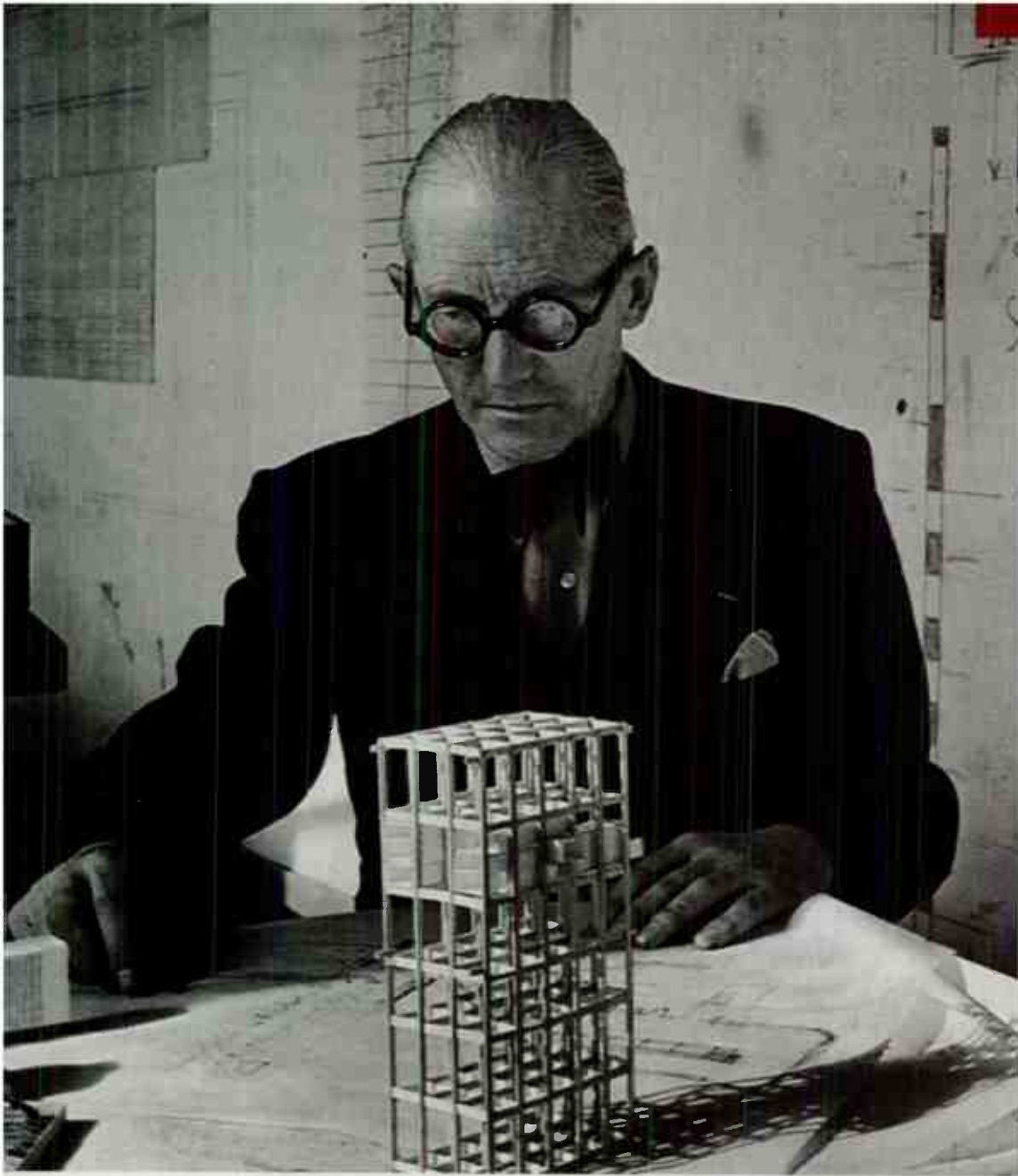
Between 1949 and 1956, Arab states drew Israel into a cycle of guerrilla attacks and retaliatory raids. In 1956 Ben-Gurion, aware of an Egyptian military buildup, escalated the conflict by storming the Sinai Peninsula. The operation was coordinated with a French-British assault on Egypt. To Arabs, this was further proof of Israel as a tool of imperialism. To Israelis, this was Ben-Gurion's way of securing eleven relatively peaceful years.

The swift military victory in the Six Day War of 1967 evoked unruly territorial appetites and an obsession with holy sites. The Old Man, well into his eighties, raised his voice for the last time. Keep Jerusalem undivided, he said, but otherwise we must suppress our yearnings for the newly gained regions; we must relinquish them in return for peace. The October War of 1973 came as a nemesis, a harsh slap of reality, undoing the post-1967 Israeli arrogance and moral callousness. Ben-Gurion died a few weeks after that war, while a wounded, deflated Israel was mourning its heavy losses and entering a long period of soul searching.

Can this identity crisis be traced back to Ben-Gurion and the founding mothers and fathers of Israel? Were they no more than a bunch of lunatics, attempting to perform on a twentieth-century stage a bizarre blend of biblical yearnings, nineteenth-century nationalism, socialism, and Jewish messianism? Did Ben-Gurion devote his life to a fleeting, surreal vision of resurrecting the Jewish people as a modern, democratic nation in their ancient land?

The dream is a reality now—albeit a flawed, disappointing reality. Perhaps it is in the nature of dreams and visions to remain magnificently flawless only for as long as they are unfulfilled. Ben-Gurion always wanted Israel to become a “Light unto the Nations,” an exemplary polity abiding by the highest moral standards. He himself, and his Israel, could hardly live up to such expectations. But he was, to borrow a literary term, a fantastic realist who gave his people an elemental, Old Testament leadership during the most fateful half-century in their history.

# Le Corbusier



LE CORBUSIER LOVED MANHATTAN. He loved its newness, he loved its Cartesian regularity, above all he loved its tall buildings. He had only one reservation, which he revealed on landing in New York City in 1935. The next day, a headline in the *Herald Tribune* informed its readers that the celebrated architect finds American skyscrapers much too small.

by *Witold Rybczynski*



# The Kennedys



THE KENNEDY CLAN. THE PREEMINENT AMERICAN political family of our time, seems to be cast in the stars, the distant stuff of legend. But look down. They march ever more numerous among us. There's a spot on Washington's infamous Beltway where an unsuspecting family might find their children in

*by Hugh Sidey*

school with a couple of Joseph and Rose Kennedy's fifty-four great-grandchildren. That same family could be the neighbors of Eunice Kennedy Shriver, one of the Kennedy clan's five surviving originals (there were nine). It could be served in the Maryland assembly by delegate Mark Shriver, nephew of the martyred John Kennedy (and one of twenty-nine grandchildren of Joe and Rose). And it could fall under the growing political hand of Kathleen Kennedy Townsend, oldest child of the murdered Robert Kennedy, now Maryland's lieutenant governor and touted for higher office.

Members of such a Beltway family would have as good a chance as not to pass Ethel Kennedy, Bobby's widow and still the exuberant duchess of Hickory Hill, while driving to work along the Potomac River parkways. And if in the media or a lobbying business (a reasonable likelihood in that neighborhood), he or she would sooner or later sit down with Massachusetts Senator Ted Kennedy or his son, Rhode Island Congressman Patrick Kennedy, now in the House leadership, to make a little political rain. Naturally, while attending one of those rites of pretentious power, like the Alfalfa Club dinner, our not-so-mythical Beltway denizens would look across a crowded ballroom or two and marvel at the intense stir created by the arrival of Caroline Kennedy Schlossberg or, when he lived, the young Adonis, John Kennedy, the children of Camelot whose mythical allure swells with every surge of tabloid headlines.

The Kennedy clan is embedded in American political culture of the past half-century like no other family. They arrived at that power base through cold calculation and the blunt instrument of their immense wealth but also because of honorable service to the nation, their reckless exuberance and glamour—and family tragedy beyond measure. The founding father of the clan, Joseph Kennedy, came from immigrant stock with all the eccentric genius and anger of his blighted kin, but he was touched by the magic of America. He went to the elitist Boston Latin School; on to Harvard; and then in the Roaring Twenties, with little regard for ethics or even the law, plunged into the worlds of banking and moviemaking. He cashed in before the market crash of 1929. When Franklin Roosevelt called Joe to Washington to clean up the Securities and Exchange Commission, somebody asked F.D.R. why he had tapped such a crook. "Takes one to catch one," replied Roosevelt. Kennedy did a superb job.

When Joe's second son, John F. Kennedy, was ready to make his run for the presidency, the family fortune was estimated to be between \$300 million and \$500 million, one of the world's great private hoards. "I never felt the Great Depression firsthand," Senator Kennedy said as he campaigned in 1960. "I learned about it at Harvard." By



Our House, the White House: John and John Jr. in the Oval Office.



**Power cousins:**  
Patrick, son of Ted,  
and Joe, son of  
Robert.

then, the moneymaking was clearly of secondary importance in the Kennedy ambitions. “None of my children give a damn about business,” Joe said with pride. “The only thing that matters is family. I tell them that when they end this life, if they can count their friends on one hand, they will be lucky. Stick with family.”

There was magic in that moment in history. Old Joe, whose methods and money were more suspect than ever, stayed out of sight while that handsome clan captivated America. Rose and her daughters gave teas and speeches; Bobby ran Jack’s campaign; and Ted gallivanted across the West riding broncos and making ski jumps. And the young senator’s wife, Jackie, shivered in the cold blasts of Wisconsin, wearing her designer sheaths and elbow-length shell gloves, beautiful, hushed, and

unyielding in her honesty about where she came from and who she was.

In power, the Kennedys strode over their failures—the Bay of Pigs, the Berlin Wall—with hardly a sidelong glance. John Kennedy’s popularity grew, resting on eloquent speeches, his ravishing family, and his toughness in national security affairs and against racism as civil rights upheavals seized the nation. “Jack’s the luckiest kid I know,” rasped Old Joe one day in New York City after the dark summer of 1961. “He has learned most of the lessons of being President right at the start.”

But the luck ran out in Dallas at noon on November 22, 1963. Kennedy’s assassination would cut short the promise, would unleash a Niagara of probes and books and movies, and suddenly Camelot would be tarnished with tawdry revelations about John Kennedy’s careless sexual indulgences. But oddly, the legend of the Kennedy clan would soar above it all. There was enough honest devotion to the American ideal; there was enough honor and courage to carry it beyond the failures. The legend had been seared in the Dallas death throes. And then again in Los Angeles as a second brother fell.

#### BRIEF BIOGRAPHY

- 1888** Joseph P. Kennedy born in East Boston
- 1891** Rose Fitzgerald born
- 1914** Joe Kennedy marries Rose Fitzgerald
- 1917** Second son, John F. Kennedy, born
- 1943** J.F.K. heroics save his crew at sea in Pacific war
- 1944** Eldest son, Joe Jr., dies in crash in England
- 1953** Jacqueline Bouvier weds J.F.K.
- 1961** J.F.K. inaugurated
- 1963** J.F.K. assassinated
- 1965** Robert and Edward Kennedy become first brothers to serve together in the Senate in 162 years
- 1968** R.F.K. assassinated; Jackie Kennedy marries Aristotle Onassis
- 1969** Ted Kennedy’s Chappaquiddick crisis; Joe Kennedy dies
- 1994** Jacqueline Kennedy Onassis dies
- 1995** Rose Kennedy dies in Hyannis Port, Massachusetts
- 1999** John Kennedy Jr. and his wife, Carolyn, die in plane crash.



It was passed down as tribal wisdom to many children. It was the Holy Grail for the swelling ranks of the Kennedys themselves.

Brotherly charisma: Jack, Bobby, and Ted in 1960.

The family marched on, but all so human, no media blinders this time. There was Chappaquiddick, the tragedy that disgraced Ted. And there was just plain dysfunction in the families of Old Joe's grandchildren, which had so often been pictured as a healthy, endearing gene pool of American strength and enthusiasm—raucous but right. There were divorcees, bizarre sexual escapades, and tragic accidents, all of them strewn across the tabloids and blared worldwide by the talk show hosts. Even in the waning months of the century came heartbreak beyond measure for the family: the death of John Kennedy Jr., his wife and her sister, killed in the crash of his private plane, which he was piloting on the way to Martha's Vineyard.

But beyond these interludes of grief and scandal is the fact that most of the surviving members of the Kennedy clan live worthy lives, the number of their family and personal debacles far below the national average. Most of the adults have advanced degrees of some sort. Virtually all the clan of proper age has been involved at some point in public service. The great fortune of Joe Kennedy has been divided into trusts, and while it provides the family with ease in education and travel, it does not put any of them in today's ranks of the super-wealthy, the super-indolent, the super-arrogant. The adventure of public service still is the clan's most powerful impulse. "More exciting than anything I've done," said Old Joe a long time ago. The call is heard unto the fourth generation.

# T. S. Eliot



IN 1670 ANDREW ELIOT LEFT EAST COKER in Somerset, England, for Boston. Two hundred and eighteen years later, his direct descendant, Thomas Stearns Eliot—who would become the most celebrated English-language poet of the century—was born in St. Louis, Missouri, to a businessman and a poet,

*by Helen Vendler*

Henry and Charlotte Eliot. Although young Tom was brilliantly educated in English and European literature and in Eastern and Western philosophy and religion, he fled—in his mid-twenties—the career in philosophy awaiting him at Harvard, and moved to England. There he married (disastrously), met the entrepreneurial Ezra Pound, and, while working at Lloyds Bank, brought out *Prufrock and Other Observations*. Five years later, after a nervous breakdown and a stay in a Swiss sanatorium in Lausanne, he published *The Waste Land*. Modern poetry had struck its note.

Not everyone was impressed. Dorothy Wellesley, writing to W. B. Yeats, said petulantly, “But Eliot, that man isn’t modern. He wrings the past dry and pours the juice down the throats of those who are either too busy, or too creative to read as much as he does.” “The juice of the past” isn’t a bad description of the lifeblood of *The Waste Land*; but it was a past so disarranged—with the Buddha next to St. Augustine, and Ovid next to Wagner—that a reader felt thrust into a time machine of disorienting simultaneity. And the poem had an unsettling habit of saying, out of the blue, “Oed’ und leer das Meer,” or something even more peculiar. It ended, in fact, with a cascade of lines in different languages—English, Italian, Latin, French, Sanskrit. Still, readers felt the desperate spiritual quest behind the poem—and were seduced by the unerring musicality of its free-verse lines.

*The Waste Land* was a deeply unoptimistic, un-Christian, and therefore un-American poem, prefaced by the suicidal words of the Cumaean Sibyl, “I want to die.” It is, we could say, the first Euro-poem. In its desolation at the breakup of the Judeo-Christian past, the poem turns for salvation to three Hindu precepts: Give, Sympathize, Control. But on the way to its ritually religious close (“Shantih, shantih, shantih”), it films a succession of loveless or violent or failed sexual unions—among the educated (“My nerves are bad tonight”) and the uneducated (“He, the young man carbuncular, arrives”), and in the poet’s own life (“your heart would have responded/Gaily”). It speaks of an absent God and of a dead father; Eliot’s recently dead father had left capital outright to the other children, but permitted his wayward son only the interest on his portion.

It annoyed Eliot that *The Waste Land* was interpreted as a prophetic statement: he referred to it (somewhat disingenuously) as “just a piece of rhythmical grumbling.” Yet World War I had intervened between the writing of most of the poems included in *Prufrock* and the composition of *The Waste Land*; and in a 1915 letter to Conrad Aiken, Eliot had said, “The War suffocates me.” Whether or not Eliot had written down the



With Alec Guinness, right, who starred in his 1949 play, *The Cocktail Party*.



Elliot's mother, center, and sister visited him for the first time in England in 1921.

Armageddon of the West, he had showed up the lightweight poetry dominating American magazines. Nothing could have been further from either bland escapism or

Imagist stylization than the music-hall syncopation (“O O O O that Shakespeareian Rag”) and the pub vulgarity (“What you get married for if you don’t want children”) of *The Waste Land*. Eliot’s poem went off like a bomb in a genteel drawing room, as he intended it to.

How could *The Waste Land*—and the sad poems, almost as peculiar, that followed it (from *The Hollow Men* to *Little Gidding*)—succeed to such an extent that by 1956 the University of Minnesota needed to stage his lecture there in a basketball arena? The astonishing growth of literacy between 1910 and 1940 certainly helps to explain the rise of an audience for Modernist writing. But it was an audience chiefly of fiction readers. Fiction had claimed “real life,” and in 1910 poetry was subsisting, for the most part, on vague appeals to nature and to God. Though from 1897 on, Edwin Arlington Robinson had been writing his grim, intelligent poetry of American failures (“Miniver Cheevy” among them), he was not a popular American poet: Joyce Kilmer and Edgar Guest were the poets who sold.

Lovers of poetry in the pre-Modernist era had been surviving on a thin diet of either Platonic idealism or a post-1890s “decadence,” and it was felt that barbaric and businesslike America could not equal the sophistication of England. Eliot’s vignettes of modern life (some sardonic, some elegiac), and his meditation on consciousness and its aridities, reclaimed for American poetry a terrain of close observation and complex intelligence that had seemed lost. The heartbreak under the poised irony of Eliot’s work



The poet had a happy life with his second wife, Valerie

was not lost on his audience, who suddenly felt that in understanding Eliot, they understood themselves.

The discontinuous and “impersonal” Eliot of course provoked rebellion in some poets. John Berryman wrote, “Let’s have narrative, and at least one dominant personality, and no fragmentation! In short, let us have something spectacularly NOT *The Waste Land*.” But other younger poets disagreed.

Charles Wright, this year’s Pulitzer Prize poet, first read the *Four Quartets* (Eliot’s World War II poem) in the army base library in Verona, Italy. “I loved the music; I loved

the investigation of the past,” he says. “The sound of it was so beautiful to me.” The voice of the *Quartets*—meditative, grave, sorrowful, but also dry, experienced, and harsh—has been important to poets from Wright to John Ashbery, because it allowed the conversational tone of everyday life to enter into the discussion of the deepest subjects.

After Eliot’s unhappy marriage and separation (Vivienne Eliot died in a mental hospital), he was baptized in the Anglican church, and his poetry became more orthodox. Eventually, he could no longer summon the intense concentration of heart, mind, and imagination necessary to produce significant poetry, and he subsided into the versifier of *Old Possum’s Book of Practical Cats*—ironically, the work by which he is now most widely known in the U.S., thanks to its popularization in the musical *Cats*. He was a formidably intelligent critic of literature and culture, though he did not escape—any more than we can ourselves—the limitations and prejudices of his time and his upbringing. He sent the stock of the seventeenth-century poets soaring while arguing against the Romantic notion of “self-expression” in favor of a poetry that was severe and classical.

Eliot died in 1965. He chose to be buried in East Coker with his ancestors, remaining the unrepentant exile whose Americanness—his Protestant New England, his St. Louis, his Mississippi River—can be seen better by hindsight than it could when he was alive.

#### BRIEF BIOGRAPHY

**BORN** September 26, 1888, in St. Louis, Missouri

**1914** Moves to England; meets Ezra Pound

**1917** Publishes *Prufrock and Other Observations*

**1922** Publishes *The Waste Land*

**1927** Is confirmed in the Church of England and becomes a British subject

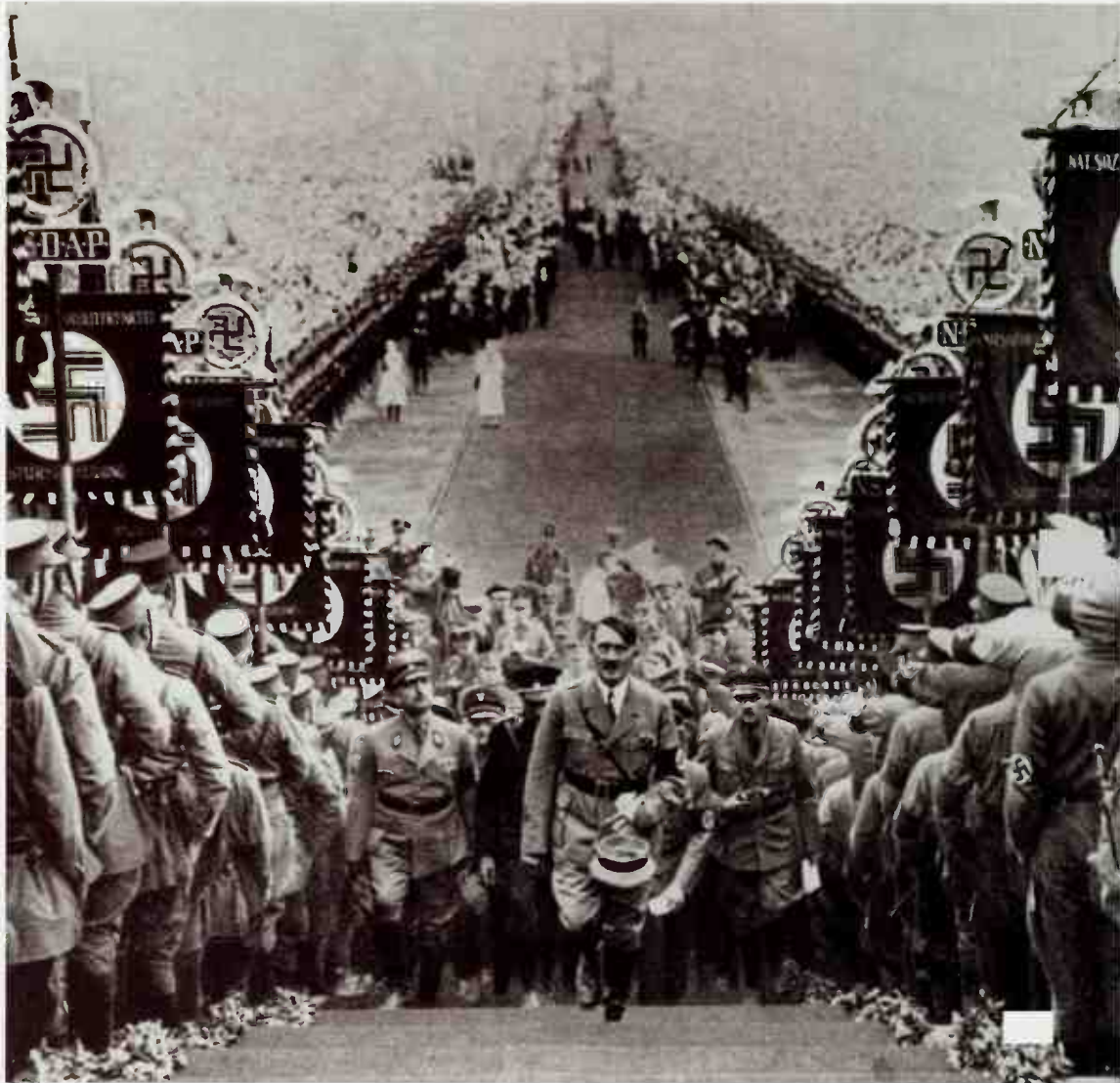
**1948** Awarded the Nobel Prize for Literature and the British Order of Merit

**DIED** January 4, 1965

**1981** *Cats* opens in London



# Adolf Hitler



NOT BEING A PROFESSIONAL HISTORIAN, I take on this essay with fear and trembling. That's because, although defeated, although dead, this man is frightening.

by *Elie Wiesel*

What was the secret of his power over his listeners? His demagogic appeal to immoderation, to excess, and to simplifying hate? They spoke of his intuitive powers and his "luck" (he escaped several attempts on his life).

Adolf Hitler or the incarnation of absolute evil; this is how future generations will remember the all-powerful Führer of the criminal Third Reich. Compared with him, his peers Mussolini and Franco were novices. Under his hypnotic gaze, humanity crossed a threshold from which one could see the abyss.

At the same time that he terrorized his adversaries, he knew how to please, impress, and charm the very interlocutors from whom he wanted support. Diplomats and journalists insist as much on his charm as they do on his temper tantrums. The savior admired by his own as he dragged them into his madness, the Satan and exterminating angel feared and hated by all others, Hitler led his people to a shameful defeat without precedent. That his political and strategic ambitions have created a dividing line in the history of this turbulent and tormented century is undeniable: there is a before and an after. By the breadth of his crimes, which have attained a quasi-ontological dimension, he surpasses all his predecessors: as a result of Hitler, man is defined by what makes him inhuman. With Hitler at the head of a gigantic laboratory, life itself seems to have changed.

How did this Austrian without title or position manage to get himself elected head of a German nation renowned for its civilizing mission? How to explain the success of his cheap demagogy in the heart of a people so proud of having inherited the genius of a Wolfgang von Goethe and an Immanuel Kant?

Was there no resistance to his disastrous projects? There was. But it was too feeble, too weak, and too late to succeed. German society had rallied behind him: the judicial, the educational, the industrial, and the economic establishments gave him their support.

Few politicians of this century have aroused, in their lifetime, such love and so much hate; few have inspired so much historical and psychological research after their death. Even today, works on his enigmatic personality and his cursed career are best-sellers everywhere. Some are good, others are less good, but all seem to respond to an authentic curiosity on the part of a public haunted by memory and the desire to understand.

We think we know everything about the nefarious forces that shaped his destiny: his unhappy childhood, his frustrated adolescence; his artistic disappointments; his wound received on the front during World War I; his taste for spectacle, his constant disdain for social and military aristocracies; his relationship with Eva Braun, who adored him; the cult of the very death he feared; his lack of scruples with regard to his former comrades of the SA, whom he had assassinated in 1934; his endless hatred of Jews,



Born in Austria, Hitler moved to Germany at twenty-four.

whose survival enraged him—each and every phase of his official and private life has found its chroniclers, its biographers.

And yet. There are, in all these givens, elements that escape us. How did this unstable paranoid find it within himself to impose gigantic hope as an immutable ideal that motivated his nation almost until the end? Would he have come to power if Germany were not going through endless economic crises, or if the winners in 1918 had not imposed on it conditions that represented a national humiliation against which the German patriotic fiber could only revolt?

We would be wrong to forget: Hitler came to power in January 1933 by the most legitimate means. His National Socialist Party won a plurality in the parliamentary elections. The aging Field Marshal Paul von Hindenburg allowed him, at age forty-three, to form the new government, marking the end of the Weimar Republic. And the beginning of the Third Reich, which, according to Hitler, would last one thousand years.

From that moment on, events cascaded. The burning of the Reichstag came only a little before the openings of the first concentration camps, established for members of the opposition. Fear descended on the country and squeezed it in a vise. Great writers, musicians, and painters went into exile to France and the U.S. Jews with foresight emigrated toward Palestine. The air of Hitler's Germany was becoming more and more suffocating. Those who preferred to wait, thinking that the Nazi regime would not last, could not last, would regret it later, when it was too late.

The fact is that Hitler was beloved by his people—not the military, at least not in the beginning, but by the average Germans who pledged to him an affection, a tenderness, and a fidelity that bordered on the irrational. It was idolatry on a national scale. One had to see the crowds who acclaimed him. And the women who were attracted to him. And the young who in his presence went into ecstasy. Did they not see the hateful

mask that covered his face? Did they not divine the catastrophe he bore within himself?

Violating the Treaty of Versailles, which limited the German army to 100,000 men, Hitler embarked on a rearmament program of massive scale: fighter planes, tanks, submarines. His goal? It was enough to read *Mein Kampf*, written in prison after the abortive coup of

Storm troopers, with Hitler in the 1920s, loved him.





1923 in Munich, to divine its contours: to become, once again, a global superpower, capable and desirous of reconquering lost territory, and others as well.

Hitler speaking to the Reichstag, 1942.

And the free world let it happen.

His army entered the Rhineland in 1936. A tangible reaction from France and Britain would have led to his fall. But since nothing happened, Hitler played on the “cowardice” of democratic principles. That cowardice was confirmed by the shameful Munich Agreement, by which France and Britain betrayed their alliance with Czechoslovakia and abandoned it like a deadweight. At every turn, Hitler derided his generals and their lack of audacity. In 1939 he stupefied the entire world by reaching a nonaggression pact with Stalin. Though they had never met, the two dictators appeared to get along perfectly; it was said that a sort of empathy existed between them. Poland paid the price of this unnatural “friendship”; cut in two, it ceased to exist as a state.

Hitler also counted on Stalin’s naïveté. In a sense he was right. According to all witnesses, Stalin had total confidence in Hitler. To humor Hitler’s extreme anti-Semitic sensibilities, the Soviet hierarchy withdrew certain Jews, such as Maxim Litvinov, the Soviet Foreign Minister, from the international scene. Stalin’s order to honor the commercial agreements between the two countries was scrupulously executed, at all levels, until the beginning of hostilities: the day of German aggression, one still saw Soviet trains stuffed with raw materials heading toward German factories.

Was Hitler shrewder than Stalin? Certainly he was more tenacious than his French and British adversaries. Winston Churchill was the only man of state who unmasked Hitler immediately and refused to let himself be duped by Hitler’s repeated promises

#### BRIEF BIOGRAPHY

**BORN** April 20, 1889, in Braunau am Inn, Austria

**1919** Helps form the Nazi Party in war-weakened Germany

**1923** Leads an abortive putsch in Munich beer hall

**1924** Starts writing *Mein Kampf* in prison

**1933** Becomes dictator of Germany, prepares the nation for war and a “Final Solution” to the “Jewish problem”

**1939** Invades Poland and starts World War II

**DIED** 1945, a suicide



He married Eva Braun in 1945—in a bomb shelter.

that this time he was making his “last territorial demand.”

And yet. In his own “logic,” Hitler was persuaded for a fairly long time that the German and British people had every reason to get along and divide up spheres of influence throughout the world. He did not understand British obstinacy in its resistance to his racial philosophy and to the practical ends it engendered.

In fact, he wanted to swallow up Russia, Poland, Ukraine, and the Baltic countries to augment *lebensraum*: Germany’s vital space. But then why did he

launch his destructive war against London? Why did he declare war against the U.S.? Solely to please his Japanese ally? Why did he mandate a policy of cruelty in the Soviet territories occupied

by his armies, when certain segments of the population there were ready to greet them with flowers? And finally, why did he invest so much energy in his hatred of Jews? Why did the night trains that took them to their death have priority over the military convoys that were taking badly needed troops to the front? His dark obsession with the “Jewish question” and its “Final Solution” will be long remembered, for it has evocative names that paralyze men’s hearts with terror: Auschwitz, Treblinka, and Belzec.

After Rommel’s defeat in North Africa, after the debacle at Stalingrad, and even when the landings in Normandy were imminent, Hitler and his entourage still had the mind to come up with the Final Solution. In his testament, drafted in an underground bunker just hours before his suicide in Berlin, Hitler returns again to this hatred of the Jewish people that had never left him.

But in the same testament, he settles his score with the German people. He wants them to be sacked, destroyed, reduced to misery and shame for having failed him by denying him his glory. The former corporal become commander-in-chief of all his armies and convinced of his strategic and political genius was not prepared to recognize his own responsibility for the defeat of his Reich.

His kingdom collapsed after twelve years in a war that remains the most atrocious, the most brutal, and the deadliest in history. But which, by the same token, allowed several large figures to emerge. Their names have become legendary: Eisenhower, De Gaulle, Montgomery, Zhukov, Patton . . .

But when later we evoke the twentieth century, among the first names that will surge to mind will be that of a fanatic with a mustache who thought to reign by selling the soul of his people to the thousand demons of hate and of death.

# Ludwig Wittgenstein



IF YOU WOULD LIKE TO WATCH PHILOSOPHERS SQUIRM—and who wouldn't?—pose this tough question: Suppose you may either a) solve a major philosophical problem so conclusively that there is nothing left to say (thanks to you, part of the field closes down forever, and you get a footnote in history); or b) write a book of such tantalizing perplexity and

| *by Daniel Dennett*

controversy that it stays on the required reading list for centuries to come. Which would you choose? Many philosophers will reluctantly admit that they would go for option b). If they had to choose, they would rather be read than right. The Austrian philosopher Ludwig Wittgenstein tried brilliantly to go for a) and ended up with b).

The revolution in mathematical logic early in the twentieth century opened up a delicious prospect: a rigorous science of meanings. Just as the atomic theory in physics had begun to break matter down into its constituent parts and show how they fit together to produce all the effects in nature, logic held out the promise of accounting for all meaningful texts and utterances—from philosophy and geometrical proofs to history and legislation—by breaking them into their logical atoms and showing how those parts fit together (in an ideal language) to compose all the meanings there could be.

As a young engineering student in England, Wittgenstein saw the hope of the new mathematical logic, and rushed to Cambridge to become the protégé of Bertrand Russell, whose monumental *Principia Mathematica* (1913), written with Alfred North Whitehead, was an attempt to reduce all mathematics to logic. Wittgenstein's first book,

published in England in 1922, the even more grandly titled *Tractatus Logico-philosophicus*, went even further, and was thought by him, and by some of his admirers, to have brought philosophy to an end, its key problems definitively solved once and for all. Some “philosophical” propositions could be readily expressed and evaluated within his system, and those that couldn't—among them, metaphysical riddles that had bedeviled philosophers for centuries—were nonsense.

Wittgenstein returned to Austria to become a schoolteacher. But the worm of doubt soon gnawed, and he returned to England in 1929 to declare dramatically that he had got it all wrong the first time. The “later Wittgenstein” spent the next eighteen years agonizing in front of a small Cambridge seminar of devoted and transfixed students, who posed curious questions that he then answered—or pointedly did not answer—with wonderfully austere

if often enigmatic aphorisms. An obsessive perfectionist, Wittgenstein worked and reworked his notes and left his second masterpiece, *Philosophical Investigations*, for posthumous publication in 1953. Both books will be required reading as far into the future as any philosopher could claim to see.

The family into which Wittgenstein was born in 1889 was one of the wealthiest in Vienna, and young Ludwig grew up in a hothouse atmosphere of high culture and privilege. Brahms and Mahler were frequent visitors to the palatial family home, and Ludwig's brother Paul, a concert pianist who lost an arm in World War I, commissioned works for the left hand by Richard Strauss, Ravel, and Prokofiev. It was during the war

#### BRIEF BIOGRAPHY

**BORN** April 26, 1889, in Vienna

**1912** Moves to Cambridge to study with Bertrand Russell

**1918** Completes the *Tractatus* during active service in World War I

**1920** Works first as a schoolteacher, then as a gardener

**1929** Returns to Cambridge as a lecturer and begins work on *Philosophical Investigations*

**DIED** 1951 in Cambridge

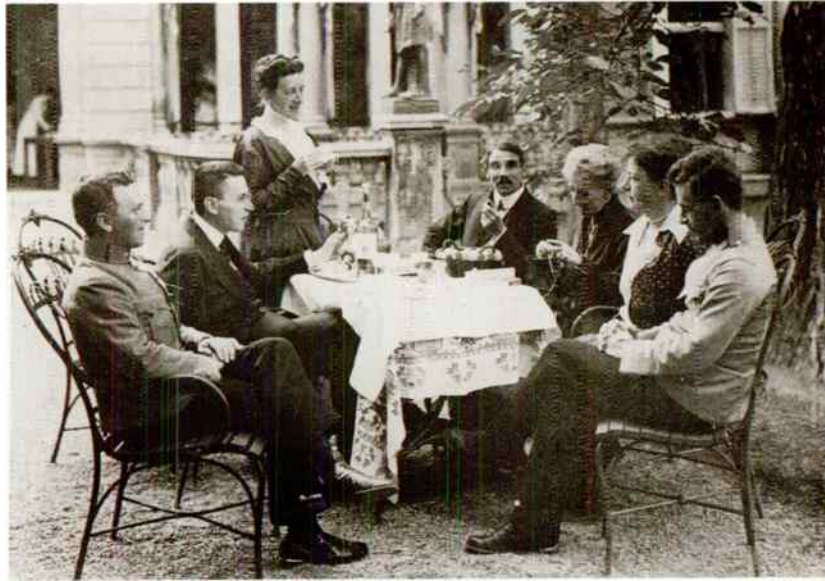
that Ludwig, a volunteer in the Austrian artillery, completed the *Tractatus* shortly before he was captured and taken prisoner. Always an ascetic, he gave away his inheritance, relying on the generosity of his Cambridge champions, Russell and John Maynard Keynes, to secure academic employment for him, living frugally and in later life being cared for by his disciples.

You know from the moment you open the *Tractatus* that it is something special. Each left-hand page is in German, facing its English translation on the right, and the sentences are numbered, using a hierarchical system that tells you this is a formal proof. The book begins straightforwardly enough: “1. The world is everything that is the case.” (In German, it makes a memorable rhyming couplet: Die Welt ist alles, was der Fall ist.) And it ends with an ending to end all endings: “7. Whereof one cannot speak, thereof one must be silent.”

In between, there is some tough sledding. Wittgenstein draws a distinction between what can be said, using words, and what can only be shown, and this raises the inevitable question: Does the *Tractatus*, as a text, say things that can't be said? Maybe. The next-to-last proposition is a famous shocker: “6.54. My propositions are elucidatory in this way: he who understands me finally recognizes them as senseless, when he has climbed out through them, on them, over them. (He must so to speak throw away the ladder, after he has climbed up on it.) He must surmount these propositions; then he sees the world rightly.”

Did this mean that the wonderful dream of logical atomism—a science of meanings—was hopeless? Or that there was much less to be said than one might have thought? Or what?

When Wittgenstein returned to philosophy in 1929, it was with the message that the rigorous methods of pure logic could get no grip on the problems of philosophy: “We have got onto slippery ice where there is no friction and so in a certain sense the conditions are ideal, but also, just because of that, we are unable to walk. We want to walk: so we need friction. Back to the rough ground!” Where before he had favored explicit logical rules, now he spoke of language games, governed by tacit mutual understanding, and he proposed to replace the sharp boundaries of set theory with what he called fam-



While on leave from the army in 1918, Wittgenstein, right, visited his family, one of the wealthiest in Vienna.



ily resemblances. “Philosophy is a battle against the bewitchment of our intelligence by means of language,” he declared, and language bewitches us by enticing us to concoct “theories” to solve philosophical problems that arise only “when language goes on holiday.”

Wittgenstein set out in particular to subvert the seductive theories about mind and consciousness that philosophers since Descartes had puzzled and battled over. Again and again in *Philosophical Investigations*, he catches his interlocutors in the act of being suckered by their overconfident intuitions about what their words mean—what their words must mean, they think—when they talk about what’s going on in their own minds. As he says, “The decisive moment in the conjuring trick has been made, and it was the very one that we thought quite innocent.” (Today’s neuroscientists fall into these same

traps with stunning regularity, now that they have begun trying to think seriously about consciousness. Unfortunately, Wittgenstein’s work has not been appreciated by many scientists.) But didn’t his own antidote to such theories constitute a theory of the mind? That is just one of many quandaries and paradoxes he has left behind for posterity.

In 1939, Wittgenstein’s Cambridge seminar on the foundations of mathematics included a brilliant young mathematician, Alan Turing, who was giving his own course that term on the same topic. Turing too had been excited by the promise of mathematical logic and, like Wittgenstein, had come to see that it had limitations. But in the course of Turing’s formal proof that the dream of turning all mathematics into logic was

strictly impossible, he had invented a purely conceptual device—now known as a Universal Turing Machine—that provided the logical basis for the digital computer. And whereas Wittgenstein’s dream of a universal ideal language for expressing all meanings had been shattered, Turing’s device actually achieved a somewhat different sort of universality: it could compute all computable mathematical functions.

Happily, in those days before tape recorders, some of Wittgenstein’s disciples took verbatim notes, so we can catch a rare glimpse of two great minds addressing a central problem from opposite points of view: the problem of contradiction in a formal system. For Turing, the problem is a practical one: if you design a bridge using a system that contains a contradiction, “the bridge may fall down.” For Wittgenstein, the problem was about the social context in which human beings can be said to “follow the rules” of a mathematical system. What Turing saw, and Wittgenstein did not, was the importance of the fact that a computer doesn’t need to understand rules to follow them. Who “won”? Turing comes off as somewhat flatfooted and naive, but he left us the computer, while Wittgenstein left us . . . Wittgenstein.



Portrait of the  
thinker at  
twenty-one.

Some will say that in the longer run, Wittgenstein's legacy will prove to be the more valuable. Perhaps it will. Wittgenstein, like any other charismatic thinker, continues to attract fanatics who devote their life to disagreeing with one another (and, presumably, with my brief summary) about the ultimate meaning of his words. These disciples cling myopically to their Wittgenstein, not realizing that there are many great Wittgensteins to choose from. My hero is the one who showed us new ways of being suspicious of our own convictions when confronting the mysteries of the mind. The fact remains that one's first exposure to either the *Tractatus* or *Philosophical Investigations* is a liberating and exhilarating experience. Here is a model of thinking so intense, so pure, so self-critical that even its mistakes are gifts.

# Charlie Chaplin



EVERY FEW WEEKS, OUTSIDE THE MOVIE THEATER in virtually any American town in the late 1910s, stood the life-size cardboard figure of a small tramp—outfitted in tattered, baggy pants, a cutaway coat and vest, impossibly large, worn-out shoes, and a battered derby hat—bearing the inscription “I am here today.” An advertisement for a Charlie Chaplin film

*by Ann Douglas*

was a promise of happiness, of that precious, almost shocking moment when art delivers what life cannot, when experience and delight become synonymous, and our investments yield the fabulous, unmerited bonanza we never get past expecting.

Eighty years later, Chaplin is still here. In a 1995 worldwide survey of film critics, Chaplin was voted the greatest actor in movie history. He was the first, and to date the last, person to control every aspect of the filmmaking process—founding his own studio, United Artists, with Douglas Fairbanks, Mary Pickford, and D. W. Griffith, and producing, casting, directing, writing, scoring, and editing the movies he starred in. In the first decades of the twentieth century, when weekly moviegoing was a national habit, Chaplin more or less invented global recognizability and helped turn an industry into an art. In 1916, his third year in films, his salary of \$10,000 a week made him the highest paid actor—possibly the highest paid person—in the world. By 1920, “Chaplinitis,” accompanied by a flood of Chaplin dances, songs, dolls, comic books, and cocktails, was rampant. Filmmaker Mack Sennett thought him “just the greatest artist who ever lived.” Other early admirers included George Bernard Shaw, Marcel Proust, and Sigmund Freud. In 1923 Hart Crane, who wrote a poem about Chaplin, said his pantomime “represents the futile gesture of the poet today.” Later, in the 1950s, Chaplin was one of the icons of the Beat Generation. Jack Kerouac went on the road because he too wanted to be a hobo. From 1981 to 1987, IBM used the Tramp as the logo to advertise its venture into personal computers.

Born in London in 1889, Chaplin spent his childhood in shabby furnished rooms, state poorhouses, and an orphanage. He was never sure who his real father was; his mother’s husband, Charles Chaplin, a singer, deserted the family early and died of alcoholism in 1901. His mother, Hannah, a small-time actress, was in and out of mental hospitals. Though he pursued learning passionately in later years, young Charlie left school at ten to work as a mime and roustabout on the British vaudeville circuit. The poverty of his early years inspired the Tramp’s trademark costume, a creative travesty of formal dinner dress suggesting the authoritative adult reimagined by a clear-eyed child, the guilty class reinvented in the image of the innocent one. His “little fellow” was the expression of a wildly sentimental, deeply felt allegiance to rags over riches by the star of the century’s most conspicuous Horatio Alger scenario.

From the start, his extraordinary athleticism, expressive grace, impeccable timing, endless inventiveness, and genius for hard work set Chaplin apart. In 1910 he made his first trip to America, with Fred Karno’s Speechless Comedians. In 1913 he joined Sennett’s Keystone Studios in New York City. Although his first film, *Making a Living*





Charlie enjoys a sylvan idyll, complete with nymphs in the 1919 film *Sunnyside*.

(1914), brought him nationwide praise, he was unhappy with the slapstick speed, cop chases, and bathing beauty escapades that were Sennett's specialty. The advent of movies in the late 1890s had brought full visibility to the human personality, to the corporeal self that print, the dominant medium before film, could only describe and abstract. In a Sennett comedy, speechlessness raised itself to a racket, but Chaplin instinctively understood that visibility needs leisure as well as silence to work its most intimate magic.

The actor, not the camera, did the acting in his films. Never a formal innovator, Chaplin found his persona and plot early and never totally abandoned them. For thirteen years, he resisted talking pictures, launched with *The Jazz Singer* in 1927. Even then, the talkies he made, among them the masterpieces *The Great Dictator* (1940), *Monsieur Verdoux* (1947), and *Limelight* (1952), were daringly far-flung variations on his greatest silent films, *The Kid* (1921), *The Gold Rush* (1925), *The Circus* (1928), and *City Lights* (1931).

The terrifyingly comic Adenoid Hynkel (a takeoff on Hitler), whom Chaplin played in *The Great Dictator*, or M. Verdoux, the sardonic mass murderer of middle-aged women, may seem drastic departures from the "little fellow," but the Tramp is always ambivalent and many-sided. Funniest when he is most afraid, mincing and smirking as

he attempts to placate those immune to pacification, constantly susceptible to reprogramming by nearby bodies or machines, skidding around a corner or sliding seamlessly from a pat to a shove while desire and doubt chase each other across his face, the Tramp is never unselfconscious, never free of calculation, never anything but a hard-pressed if often divinely lighthearted member of an endangered species, entitled to any means of defense he can devise. Faced with a frequently malign universe, he can never quite bring himself to choose between his pleasure in the improvisatory shifts of strategic retreat and his impulse to love some creature palpably weaker and more threatened than himself.

When a character in *Monsieur Verdoux* remarks that if the unborn knew of the approach of life, they would dread it as much as the living do death, Chaplin was simply spelling out what we've known all along. The Tramp, it seemed, was mute not by necessity but by choice. He'd tried to protect us from his thoughts, but if the times insisted that he tell what he saw as well as what he was, he could only reveal that the innocent chaos of comedy depends on a mania for control, that the cruelest of ironies attend the most heart-felt invocations of pathos. Speech is the language of hatred as silence is that of love.

On Chaplin's first night in New York in September 1910, he walked around the theater district, dazzled by its lights and movement. "This is it!" he told himself. "This is where I belong!" Yet he never became a U.S. citizen. An internationalist by temperament and fame, he considered patriotism "the greatest insanity that the world has ever suffered." As the Depression gave way to World War II and the Cold War, the increasingly politicized message of his films, his expressed sympathies with pacifists, communists, and Soviet supporters, became suspect. It didn't help that Chaplin, a bafflingly complex and private man, had a weakness for young girls. His first two wives were sixteen when he married them; his last, Oona O'Neill, daughter of Eugene O'Neill, was eighteen. In 1943 he was the defendant in a public, protracted paternity suit. Denouncing his "leering, sneering attitude" toward the U.S. and his "unsavory" morals, various public officials, citizen groups, and gossip columnists led a boycott of his pictures.

J. Edgar Hoover's FBI put together a dossier on Chaplin that reached almost two thousand pages. Wrongly identifying him as "Israel Thonstein," a Jew passing for a gentile, the FBI found no evidence that he had ever belonged to the Communist Party or engaged in treasonous activity. In 1952, however, two days after Chaplin sailed for England to promote *Limelight*, Attorney General James McGranery revoked his reentry permit. Loathing the witch hunts and "moral pomposity" of the Cold War U.S., and

#### BRIEF BIOGRAPHY

**BORN** April 16, 1889, in London

**1913** Accepts job with Mack Sennett's Keystone Studios

**1915** The Tramp debuts

**1919** Forms United Artists with Mary Pickford, Douglas Fairbanks, and D. W. Griffith

**1940** First talkie: *The Great Dictator*

**1952** Denied reentry into U.S.; settles in Switzerland

**1972** Returns to U.S. to accept a special Oscar

**1975** Knighted by Queen Elizabeth II

**DIED** December 25, 1977



Buster Keaton joins Chaplin's music-hall reprise in *Limelight*.

believing he had “lost the affections” of the American public, Chaplin settled with Oona and their family in Switzerland (where he died in 1977).

With the advent of the 1960s and the Vietnam War, Chaplin's American fortunes turned. He orchestrated a festival of his films in New York in 1963. Amid the loudest and longest ovation in its history, he accepted a special Oscar from the Academy of Motion Picture Arts and Sciences in 1972. There were dissenters. Governor Ronald Reagan, for one, believed the government did the right thing in 1952. During the 1972 visit, Chaplin, at eighty-three, said he'd long ago given up radical politics, a welcome remark in a nation where popular favor has often been synonymous with depoliticization. But the ravishing charm and brilliance of his films are inseparable from his convictions.

At the end of *City Lights*, when the heroine at last sees the man who has delivered her from blindness, we watch her romantic dreams die. “You?” she asks, incredulous. “Yes,” the Tramp nods, his face, caught in extreme close-up, a map of pride, shame, and devotion. It's the oldest story in show business—the last shall yet be, if not first, at least recognized, and perhaps even loved.

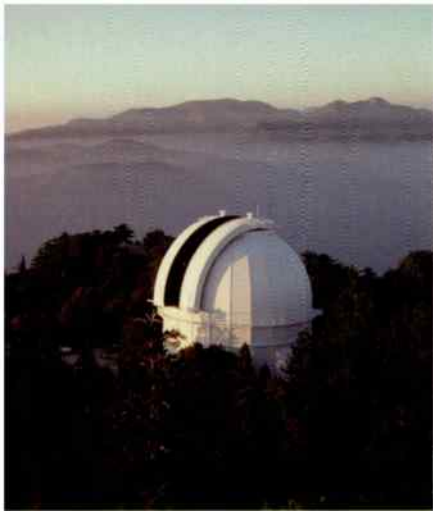


# Edwin Hubble

**DURING THE PAST ONE HUNDRED YEARS,** astronomers have discovered quasars, pulsars, black holes, and planets orbiting distant suns. But all these pale next to the discoveries Edwin Hubble made in a few remarkable years in the 1920s. At the time, most of his colleagues believed the Milky Way galaxy, a swirling collection of stars a few hundred

*by Michael D. Lemonick*





Hubble navigated the heavens from his perch at Mount Wilson.

thousand light-years across, made up the entire cosmos. But peering deep into space from the chilly summit of Mount Wilson, in Southern California, Hubble realized that the Milky Way is just one of millions of galaxies that dot an incomparably larger setting.

Hubble went on to trump even that achievement by showing that this galaxy-studded cosmos is expanding—inflating majestically like an unimaginably gigantic balloon—a finding that prompted Albert Einstein to acknowledge and retract what he called “the greatest blunder of my life.” Hubble did nothing less, in short, than invent the idea of the universe and then provide the first evidence for the Big Bang theory, which describes the birth and evolution of the universe. He discovered the cosmos, and in doing so founded the science of cosmology.

Hubble’s astronomical triumphs earned him worldwide scientific honors and made him the toast of Hollywood during the 1930s and 1940s—the confidant of Aldous Huxley and a friend to Charlie Chaplin, Helen Hayes, and William Randolph Hearst. Yet nobody (except perhaps Hubble) could have imagined such a future when the twenty-three-year-old Oxford graduate began his first job, in New Albany, Indiana, in 1913.

Hubble majored in science as an undergraduate at the University of Chicago. A tall, powerfully built young man, he excelled at basketball and boxing (fight promoters reportedly tried to talk him into turning pro), and his combination of academic and athletic prowess earned him a Rhodes scholarship to Oxford. In England, Hubble kept up his muscular pursuits: he fought, ran track, and played on one of the first baseball teams ever organized in the British Isles.

His official academic focus shifted, thanks to a promise made to his dying father that he would study law rather than science (he also took up literature and Spanish). On his return to America, he took a position as a high school Spanish teacher. Though he was popular with students—especially, according to Hubble biographer Gale Christianson, with the girls, who were evidently charmed by his affected British diction and “Oxford mannerisms”—Hubble longed to return to science.

After a year, he signed on as a graduate student at Yerkes Observatory in Wisconsin and embarked on the work that would one day make him famous: studying faint, hazy blobs of light called nebulae (from the Latin word for cloud) that are visible through even a modest telescope.

Hubble’s skills as an astronomer were impressive enough to earn him an offer from the prestigious Mount Wilson Observatory. World War I kept him from accepting right away, but in 1919 the newly discharged Major Hubble—as he invariably introduced himself—arrived at observatory headquarters, still in uniform but ready to start observing with the just completed one-hundred-inch Hooker Telescope, the most powerful on earth.

Up on the mountain, Hubble encountered his greatest scientific rival, Harlow Shapley, who had already made his reputation by measuring the size of the Milky Way. Using bright stars called Cepheid variables as standardized light sources, he had gauged the galaxy as being an astounding 300,000 light-years across—ten times as big as anyone had thought. Yet Shapley claimed that the Milky Way was the whole cosmic ball of wax. The luminous nebulae were, he insisted, just what they looked like: clouds of glowing gas that were relatively nearby.

Hubble wasn't so sure. And in 1924, three years after Shapley departed to take over the Harvard Observatory, Hubble found proof to the contrary. Spotting a Cepheid variable star in the Andromeda nebula, Hubble used Shapley's technique to show that the nebula was nearly a million light-years away, far beyond the bounds of the Milky Way. It's now known to be the full-fledged galaxy closest to our own in a universe that contains tens of billions of galaxies. "I do not know," Shapley wrote Hubble in a letter quoted by biographer Christianson, "whether I am sorry or glad to see this break in the nebular problem. Perhaps both." (Hubble was not entirely magnanimous in victory. To the end he insisted on using the term nebulae instead of Shapley's preferred galaxies.)

Hubble's scientific reputation was made almost overnight by his discovery that the universe is vast and the Milky Way insignificant. But he had already moved on to a new problem. For years, astronomers had noted that light from the nebulae was redder than it should be. The most likely cause of this so-called red shifting was motion away from the observer. (The same sort of thing happens with sound: a police car's siren seems to drop in pitch abruptly as the car races past a listener.)

Hubble and his assistant, Milton Humason, began measuring the distances to these receding nebulae and found what is now known as Hubble's Law: the further away a galaxy is from earth, the faster it's racing away. Could it be that the universe as a whole is rapidly expanding? That conclusion was extraordinary, almost mind-blowing, yet seemed inescapable.

When Einstein heard of Hubble's discovery, he was elated. More than a decade earlier, his new general theory of relativity had told him that the universe must either be expanding or contracting, yet astronomers had told him it was doing neither. Against his better judgment, Einstein had uglified up his elegant equations with an extra factor



The M100 Galaxy, fifty-six million light-years away, as seen by the Hubble space telescope.

he called the cosmological term—a sort of antigravity force that kept the universe from collapsing in on itself.

But suddenly, the cosmological term was unnecessary. Einstein's instincts had been right, after all. His great blunder had been to doubt himself, and in 1931, during a visit to Caltech, the great and grateful physicist traveled to the top of Mount Wilson to see the telescope and thank Hubble personally for delivering him from folly.

With the greatest scientific superstar of the age paying him homage, Hubble became a popular superstar in his own right. His 1936 book on his discoveries, *The Realm of the Nebulae*, cemented his public reputation. Tourists and Hollywood luminaries alike would drive up the mountain to marvel at the observatory where Hubble had discovered the universe, and he and his wife, Grace, were embraced by the elite of California society.

Hubble's last great contribution to astronomy was a central role in the design and construction of the Hale Telescope on Palomar Mountain. Four times as powerful as the Hooker, the Hale would be the largest telescope on earth for four decades. It would have been even longer, but its completion was interrupted by World War II. So was Hubble's career. The ex-major signed on as head of ballistics at Aberdeen Proving Ground in Maryland. (At one point the eminent astronomer spent an afternoon test-firing bazookas, at great personal risk, to pinpoint a design flaw.)

Hubble finally got his hands on the Hale when it went into service in 1949. It was too late; he had suffered a major heart attack, and he never fully regained the stamina it took to spend all night in a freezing-cold observatory. No imaginable discovery, however, could have added to his reputation.

The only recognition that eluded him was a Nobel Prize—and not for lack of effort on his part. He tried everything. In the late 1940s he even hired a publicity agent to promote his cause. Alas, there was no prize for astronomy, and by the time the Nobel committee decided astronomy could be viewed as a branch of physics, it was too late. Insiders say Hubble was on the verge of winning when he died, in 1953.

Hubble would have been consoled by the fact that his name adorns the Hubble Space Telescope, which probes the cosmos to depths he could not have imagined but would have fully appreciated. Whatever marvels the Hubble Telescope reveals, they're all played out on the stage Edwin Hubble first glimpsed from a lonely mountaintop in California.

## BRIEF BIOGRAPHY

**BORN** November 1889 in Marshfield, Missouri

**1910** Enters Oxford as a Rhodes scholar

**1919** Joins the staff of the prestigious Mount Wilson Observatory after serving in World War I

**1924** Proves that the universe extends far beyond the edges of the Milky Way galaxy

**1925** Creates the first useful scheme for classifying galaxies

**1929** Proves that the universe is expanding

**1936** Publishes *The Realm of the Nebulae*, a huge popular success

**1943** Becomes temporary head of army ballistics research

**DIED** September 28, 1953



# HO CHI MINH

AN EMACIATED, GOATEED FIGURE IN A THREADBARE bush jacket and frayed rubber sandals, Ho Chi Minh cultivated the image of a humble, benign “Uncle Ho.” But he was a seasoned revolutionary and passionate nationalist obsessed by a single goal: independence for his country. Sharing his fervor, his tattered guerrillas vaulted daunting obstacles

*by Stanley Karnow*



A lively dancer  
in 1959.

to crush France's desperate attempt to retrieve its empire in Indochina; later, built into a largely conventional army, they frustrated the massive U.S. effort to prevent Ho's communist followers from controlling Vietnam. For Americans, it was the longest war—and the first defeat—in their history, and it drastically changed the way they perceived their role in the world.

To Western eyes, it seemed inconceivable that Ho would make the tremendous sacrifices he did. But in 1946, as war with the French loomed, he cautioned them, "You can kill ten of my men for every one I kill of yours, yet even at those odds, you will lose and I will win." The French, convinced of their superiority, ignored his warning and suffered grievously as a result. Senior American officers similarly nurtured the illusion that their sophisticated weapons would inevitably break enemy morale. But, as Ho's brilliant commander, General Vo Nguyen Giap, told me in Hanoi in 1990, his principal concern had been victory. When I asked him how long he would have resisted the U.S. onslaught, he thundered, "Twenty years, maybe a hundred years—as long as it took to win, regardless of cost." The human toll was horrendous. An estimated three million North and South Vietnamese soldiers and civilians died.

The youngest of three children, Ho was born Nguyen Sinh Cung in 1890 in a village in central Vietnam. The area was indirectly ruled by the French through a puppet emperor. Its impoverished peasants, traditional dissidents, opposed France's presence; and Ho's father, a functionary at the imperial court, manifested his sympathy for them by quitting his position and becoming an itinerant teacher. Inheriting his father's rebellious bent, Ho participated in a series of tax revolts, acquiring a reputation as a troublemaker. But he was familiar with the lofty French principles of *liberté, égalité, fraternité* and yearned to see them in practice in France. In 1911 he sailed for Marseilles as a galley boy aboard a passenger liner. His record of dissent had already earned him a file in the French police dossiers. It was scarcely flattering: "Appearance awkward . . . mouth half-open."

In Paris, Ho worked as a photo retoucher. The city's fancy restaurants were beyond his means, but he indulged in one luxury—American cigarettes, preferably Camels or Lucky Strikes. Occasionally he would drop into a music hall to listen to Maurice Chevalier, whose charming songs he would never forget.

In 1919, Woodrow Wilson arrived in France to sign the treaty ending World War I, and Ho, supposing that the President's doctrine of self-determination applied to Asia, donned a cutaway coat and tried to present Wilson with a lengthy list of French abuses in Vietnam. Rebuffed, Ho joined the newly created French Communist Party. "It was patriotism, not communism, that inspired me," he later explained.

Soon Ho was roaming the earth as a covert agent for Moscow. Disguised as a Chinese journalist or a Buddhist monk, he would surface in Canton, Rangoon, or

Calcutta—then vanish to nurse his tuberculosis and other chronic diseases. As befitted a professional conspirator, he employed a baffling assortment of aliases. Again and again, he was reported dead, only to pop up in a new place. In 1929 he assembled a few militants in Hong Kong and formed the Indochinese Communist Party. He portrayed himself as a celibate, a pose calculated to epitomize his moral fiber, but he had at least two wives or perhaps concubines. One was a Chinese woman; the other was Giap's sister-in-law, who was guillotined by the French.

In 1940, Japan's legions swept into Indochina and French officials in Vietnam, loyal to the pro-German Vichy administration in France, collaborated with them. Nationalists in the region greeted the Japanese as liberators, but to Ho they were no better than the French. Slipping across the Chinese frontier into Vietnam—his first return home in three decades—he urged his disciples to fight both the Japanese and the French. There, in a remote camp, he founded the Viet Minh, an acronym for the Vietnam Independence League, from which he derived his nom de guerre, Ho Chi Minh—roughly “Bringer of Light.”

What he brought was a spirit of rebellion—against first the French and later the Americans. As Ho's war escalated in the mid-1960s, it became clear to Lyndon Johnson that Vietnam would imperil his presidency. In 1965, Johnson tried a diplomatic approach. Accustomed to dispensing patronage to recalcitrant congressmen, he was confident that the tactic would work. “Old Ho can't turn me down,” L.B.J. said. But Ho did. Any settlement, he realized, would mean accepting a permanent partition and forfeiting his dream to unify Vietnam under his flag.

#### BRIEF BIOGRAPHY

- BORN** 1890 in Hoang Tru in rural Vietnam
- 1911** Sails to France to study and work
- 1941** Forms the Vietnam Independence League, or Viet Minh
- 1954** Defeats the French at Dien Bien Phu; Vietnam is divided, and Ho becomes first President of North Vietnam
- 1959** Begins armed revolt against South Vietnam
- 1967** Tells L.B.J., “We will never negotiate”
- DIED** 1969, of a heart attack in Hanoi



Ho, in 1966:  
a magnetic leader.

There was no flexibility in Ho's beliefs, no bending of his will. Even as the war increasingly destroyed the country, he remained committed to Vietnam's independence. And millions of Vietnamese fought and died to attain the same goal.

Ho died on September 2, 1969, at the age of seventy-nine, some six years before his battalions surged into Saigon. Aspiring to bask in the reflected glory of his posthumous triumph, his heirs put his embalmed body on display in a hideous granite mausoleum copied from Lenin's tomb in Moscow. They violated his final wishes. In his will he specified that his ashes be buried in urns on three hilltops in Vietnam, saying, “Not only is cremation good from the point of view of hygiene, but it also saves farmland.”

# David Sarnoff



WHEN DICK SOLOMON, THE ALIEN HIGH COMMANDER in *3rd Rock from the Sun*, declares, “God bless television,” he is merely reflecting the feeling of most earthlings: that television is the most influential medium of the twentieth century.

*by Marcy Carsey and Tom Werner*

While some people critique its content, no one debates television's power. It is the window through which we see reality, as well as the window that permits us to escape from it. This season the average American family will watch the box more than fifty hours a week.

So it is nearly impossible to imagine that it was less than sixty years ago, in 1939, when David Sarnoff told a crowd of curious viewers, "Now we add sight to sound." Sarnoff went on to say, "It is with a feeling of humbleness that I come to this moment of announcing the birth in this country of a new art so important in its implications that it is bound to affect all society. It is an art which shines like a torch of hope in the troubled world. It is a creative force which we must learn to utilize for the benefit of all mankind. This miracle of engineering skill which one day will bring the world to the home also brings a new American industry to serve man's material welfare. . . . [Television] will become an important factor in American economic life."

And how. On that fateful day in 1939, with America recovering from its greatest depression and war rumbling in the distance, Sarnoff gave the world a look into a new life. Not only was he instrumental in creating both radio and television as we know them, he was also nearly clairvoyant in seeing how each medium would develop. He regarded black-and-white TV as only a transitional phase to color and even predicted the invention of the VCR. His stubborn pursuit of technology turned his employer, Radio Corporation of America, into a powerhouse in less than a decade.

Sarnoff was born in Uzlian, Russia, in 1891 (the year the electron was christened; he often bragged they were born the same year) and traveled steerage to New York nine years later with his family. Knowing no English, he helped support his family by selling newspapers and with other small jobs. At fifteen he bought a telegraph key, learned Morse code, and, after being hired as an office boy for the Marconi Wireless Telegraph Co. of America, became a junior operator in 1908.

Then, like so many people in the communications business, he was at the right place at the right time. On April 14, 1912, Sarnoff was working at the Marconi station atop Wanamaker's department store when he picked up a message relayed from ships at sea: "S.S. *Titanic* ran into iceberg, sinking fast." For the next seventy-two hours, the story goes, he remained at his post, giving the world the first authentic news of the disaster. Did someone say CNN?



Sarnoff gives television its sign-on at the 1939 World's Fair.



Sarnoff's technical ability propelled him quickly through the ranks at Marconi, and in 1915 he submitted an idea for a "radio music box" at a time when radio was mainly used in shipping and by amateur wireless enthusiasts. He believed his device would make radio a "household utility" like the piano or phonograph. "The idea is to bring music into the house by wireless," he wrote in a memo. It was regarded as commercial folly. But he would soon have another opportunity to find backing for his idea. After the Great War, in 1919, RCA was formed by General Electric to absorb Marconi's U.S. assets (including him).

Sarnoff had it all figured out: for RCA to sell radios, it had to have programming—music, news, sports. On July 2, 1921, he arranged the broadcast of the Jack Dempsey–Georges Carpentier prizefight (great ratings in the male demos), which was a watershed event. Within three years the radio music box, now called the Radiola (price: a hefty \$75), was a success, with sales of \$83.5 million.

Sarnoff's career took off. His next epiphany: the fastest path to profits would be to create national broadcasts by stringing together hundreds of stations. In other words, a network. In 1926, as general manager of RCA, he formed the National Broadcasting Co. as a subsidiary.

Sarnoff next saw the potential of the iconoscope, a proto-television patented by Vladimir Zworykin in 1923. Within five years Sarnoff had set up a special NBC station called B2XBS to experiment with what came to be known as television. In 1941 NBC started commercial telecasting from station WNBT in New York City, but once again progress was delayed by war. Sarnoff served as communications consultant for General Dwight D. Eisenhower, who later named him a brigadier general. The title stuck. And in the halls of 30 Rockefeller Plaza, Sarnoff became known as "the General."

After the war television was unleashed. As a shrewd businessman who mixed as easily with scientists as with corporate leaders, Sarnoff fought for patents and the right to advance the technology of the medium. Called ruthless by his rivals, he once said, "Competition brings out the best in products and the worst in men." And when others would complain that his focus was more on technology than on programming, he said, "Basically, we're the delivery boys."

His strong-willed management style gave him the label of not always being "talent-friendly," although he was close to great musicians like Arturo Toscanini. Sarnoff managed to survive a major raid orchestrated by CBS boss William S. Paley, who lured several major NBC stars. But if Sarnoff lost a battle, you could always bet on his winning the war. Under his leadership NBC had the first videotape telecast and the first made-for-television movie.

Sarnoff retired as RCA chairman in 1970 and died a year later. RCA became a conglomerate, diversifying broadly—and unsuccessfully—before being taken over in 1986 by GE, the outfit that started RCA and was forced to divest it in 1932.

From our earliest days as network executives and, before that, as students of the medium and charter members of the first generation of TV viewers, we have lived and worked in his giant shadow. Having established our own production company, we are humbled by the success of a man who started with nothing and by force of will ignited a revolution that has had an unparalleled effect on our society.

When we first teamed up at ABC in the mid-1970s, broadcast television was still a heady and vibrant place. We were thrilled when we heard someone mention a show we had helped get on—*Soap*, maybe, or *Barney Miller* or *Taxi*. We learned from our favorite bosses, Fred Silverman and Michael Eisner, that a good programmer respects the audience, takes risks, has showman-like instincts and lives to bring the best and brightest talent to the people.

The broadcast industry has changed since then, and is undergoing the same kind of technological revolution that occurred when Sarnoff introduced television. Still there are programmers and producers with great passion for the medium, and we count ourselves among them. But now these broadcasters have had to embrace other media as well—cable and the Internet—to avoid being crushed by the furious pace of technology.

For that same reason we've teamed up with our longtime partner, Caryn Mandabach, as well as Geraldine Laybourne and Oprah Winfrey, in a venture called Oxygen, in which we are fusing a new cable channel with an Internet base to program for women.

The heady feeling is back with another technology revolution. But the basic truth Sarnoff articulated—television is a beneficial, creative force—still holds despite the tumult of vertical integration, ratings wars, new-media breakthroughs, and Internet companies with zooming stock prices. Certainly, the General would have caught the new wave, if not led it, and embraced television's transformation by the digital age. His channel was always dialed to the future.

#### BRIEF BIOGRAPHY

**BORN** February 27, 1891, in Uzlian, Russia

**1900** Immigrates to U.S.

**1915** Proposes a "radio music box" to receive broadcasts

**1921** Appointed RCA general manager; creates the first sports broadcast

**1926** Creates NBC, the first radio network

**1930** Named RCA president

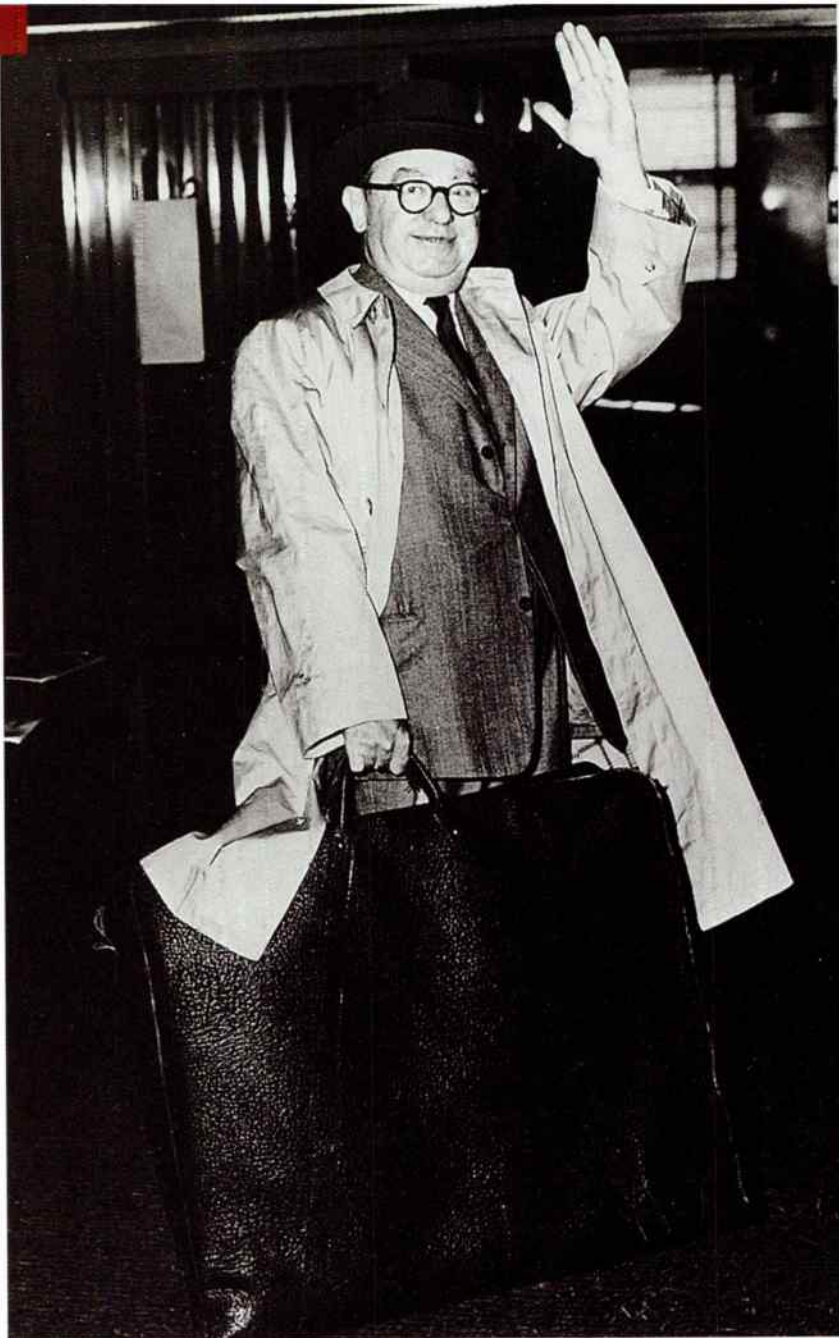
**1939** Introduces TV broadcasting to the U.S.

**1947** Named CEO of RCA

**1970** Retires from RCA

**DIED** 1971 in New York City

# Leo Burnett



HE WAS NOT THE ADMAN'S ADMAN. He wasn't a hipster like William Bernbach, who tapped into youthcult with the "Think Small" campaign for Volkswagen. He wasn't an elegant rationalist like David Ogilvy, whose ads famously advised the rich that a Rolls-Royce was the sensible car to buy. He didn't even work on Madison Avenue, but in Chicago's Loop instead.

*by Stuart Ewen*

But Leo Burnett, the jowly genius of the heartland subconscious, is the man most responsible for the blizzard of visual imagery that assaults us today.

In a career that spanned nearly six decades, his aptitude for inventing evocative, easily recognizable corporate identities spawned the Jolly Green Giant, the Marlboro Man, the Pillsbury Doughboy, and Tony the Tiger, among other familiar icons of commerce. By the late 1950s Burnett had emerged as a prime mover in advertising's creative revolution, which grew in the glow of television's rise as America's consummate commercial medium. By 1960 Burnett's roster of clients had grown exponentially; at the time of his death the agency's billings exceeded \$400 million annually. By 1997 that figure approached \$6 billion.

Burnett's creativity was in stark contrast to that of some of his contemporaries, who built advertising companies around research and marketing expertise. Burnett forged his reputation around the idea that "share of market" could only be built on "share of mind," the capacity to stimulate consumers' basic desires and beliefs. To achieve this goal, Burnett moved beyond standard industry practice. Early ad schemes were based primarily on a foundation of carefully worded argument focused on the purported qualities of the product being sold. Images were mere decoration for the argument.

The industry was already changing when Burnett joined the Homer McGee agency in Indianapolis in 1919, after a brief stint as a newspaperman. Product claims were giving way to elaborate narratives—imaginary stories of consumers whose purchase had been rewarded with popularity, success, romance.

Burnett moved the image to center stage. Visual eloquence, he was convinced, was far more persuasive, more poignant, than labored narratives, verbose logic, or empty promises. Visuals appealed to the "basic emotions and primitive instincts" of consumers. Advertising does its best work, he argued in 1956, by impression, and he spent much of his career encouraging his staff to identify those symbols, those visual archetypes, that would leave consumers with a "brand picture engraved on their consciousness."

Burnett did not originate this conceit. In his classic 1922 study *Public Opinion*, journalist Walter Lippmann maintained that pictures are "the surest way of conveying an idea. A leader or an interest that can make itself master of current symbols is master of the current situation."

Burnett was exactly that. Creativity, he advised, called for an intuitive ability to identify the inherent drama that resided within a product through the conscious use of "earthy vernacular" imagery. To explain his concept of inherent drama, Burnett repeatedly cited a 1945 print campaign for the American Meat Institute. After careful consideration, he related, "we convinced ourselves that the image of meat should be a vir-

#### BRIEF BIOGRAPHY

- BORN** October 21, 1891, in St. Johns, Michigan
- 1919** Goes to work for Indianapolis ad agency Homer McGee
- 1935** Founds his own agency in Chicago
- 1951** Tony the Tiger endorses Frosted Flakes
- 1955** The Marlboro Man first smokes filters
- 1965** The Pillsbury Doughboy bounces to life
- 1968** Keebler elves bake busily and Morris the cat finds a food he will eat
- DIED** 1971 at age seventy-nine in Lake Zurich, Illinois

ile one, best expressed in red meat.” At the time it was highly unusual, even distasteful, to portray uncooked meat in advertisements. Enthusiastically breaking the code, Burnett produced full-page ads depicting thick chops of raw red meat against a bright red background. “Red against red was a trick,” he explained, “but it was a natural thing

to do. It just intensified the red concept and the virility and everything else we were trying to express. This was inherent drama in its purest form.”

Reviewing his agency’s work, one is struck by Burnett’s penchant for employing a range of masculine archetypes. Some were designed to appeal to female consumers. With the Jolly Green Giant, he resurrected a pagan harvest god to monumentalize “the bounty of the good earth”—and to sell peas. Years later, with the creation of the Doughboy, Burnett employed a cuddly endomorph to symbolize the friendly bounce of Pillsbury home-baking products. Aiming at male audiences in the 1950s, a time when filter cigarettes were viewed as effeminate, Burnett introduced a tough and silent tattooed cowboy on horseback, “the most masculine type

of man,” he explained, to transform the image of Marlboro cigarettes—for better or worse, one of the most enduring advertising icons ever devised.

Like many other persuasion professionals of his generation—most notably Edward Bernays, the patriarch of public relations—Burnett was obsessed with finding visual triggers that could effectively circumvent consumers’ critical thought. Though an advertising message might be rejected consciously, he maintained that it was accepted subliminally. Through the “thought force” of symbols, he said, “we absorb it through our pores, without knowing we do so. By osmosis.”

With the arrival of television in the late 1940s—an electronic salesroom going into nearly every American home—Burnett believed merchandisers had found the Holy Grail. “Television,” he asserted, “is the strongest drug we’ve ever had to dish out.” It marked the moment when graphic representation arrived as the lingua franca of commerce.

Evaluating Leo Burnett’s contribution nearly thirty years after his death, one is of two minds. There is something both old-fashioned and timeless in the slightly homoerotic repertoire of corporate images he fathered. Born during the springtime of American consumer culture, when sales pitches were infused with an unfettered sense



Burnett, center, leads a creative meeting for new client Kellogg in 1949.

of optimism, a booming-voiced tiger like Tony and a benevolent Green Giant today come across as quaint throwbacks to the time when sugared breakfast cereals could still claim to provide an ideal start to the perfect day, and when mushy canned peas nestled alongside a piece of fat-marbled beef represented a healthy diet. Though Burnett's corporate talismans endure, they occupy a world where consumers are increasingly caustic about the products that they purchase. The effort by marketers to capitalize on the cynical mind-set of an MTV generation has overwhelmed the quest for universal human archetypes. Jadedness and sarcasm are becoming the dominant argot of advertising.

On the other hand, the central principles that guided Burnett's practice remain prescient. His celebration of nonlinear advertising strategies, characterized by visual entreaties to the optical unconscious, continues to inform the strategies of adcult. In advertising copy, the conspicuous triumph of typography over text, of catch phrase over explanation, reflect Burnett's admonition that—to the public mind—visual form is more persuasive than carefully reasoned argument.

Burnett's thinking has come to define much of our mental environment beyond advertising. He saw advertising as the "fun" side of business, but the historical repercussions of his wisdom can be disquieting. Amid the present-day flood of images—each designed to rally emotions for a social, political, or commercial goal—the notion of an informed public, once a cherished cornerstone of democracy, may be passing into oblivion.

# MAO ZEDONG



MAO ZEDONG LOVED TO SWIM. In his youth, he advocated swimming as a way of strengthening the bodies of Chinese citizens, and one of his earliest poems celebrated the joys of beating a wake through the waves. As a young man, he and his close friends would often swim in local streams before they debated together the myriad challenges that faced

*by Jonathan D. Spence*

their nation. But especially after 1955, when he was in his early sixties and at the height of his political power as leader of the Chinese People's Republic, swimming became a central part of his life. He swam so often in the large pool constructed for the top party leaders in their closely guarded compound that the others eventually left him as the pool's sole user. He swam in the often stormy ocean off the north China coast, when the Communist Party leadership gathered there for its annual conferences. And, despite the pleadings of his security guards and his physician, he swam in the heavily polluted rivers of south China, drifting miles downstream with the current, head back, stomach in the air, hands and legs barely moving, unfazed by the globs of human waste gliding gently past. "Maybe you're afraid of sinking," he would chide his companions if they began to panic in the water. "Don't think about it. If you don't think about it, you won't sink. If you do, you will."

Mao was a genius at not sinking. His enemies were legion: militarists, who resented his journalistic barbs at their incompetence; party rivals, who found him too zealous a supporter of the united front with the Kuomintang nationalists; landlords, who hated his pro-peasant rhetoric and activism; Chiang Kai-shek, who attacked his rural strongholds with relentless tenacity; the Japanese, who tried to smash his northern base; the U.S., after the Chinese entered the Korean War; the Soviet Union, when he attacked Khrushchev's anti-Stalinist policies. Mao was equally unsinkable in the turmoil—much of which he personally instigated—that marked the last twenty years of his rule in China.

Mao was born in 1893, into a China that appeared to be falling apart. The fading Qin dynasty could not contain the spiraling social and economic unrest, and had mortgaged China's revenues and many of its natural resources to the apparently insatiable foreign powers. It was, Mao later told his biographer Edgar Snow, a time when "the dismemberment of China" seemed imminent, and only heroic actions by China's youth could save the day.

Mao's earliest surviving essay, written when he was nineteen, was on one of China's most celebrated early exponents of cynicism and realpolitik, the fearsome fourth century B.C. administrator Shang Yang. Mao took Shang Yang's experiences as emblematic of China's crisis. Shang Yang had instituted a set of ruthlessly enforced laws,



Buoyant in the Yangtze.





The Chairman played host to Nixon and Kissinger at a historic tête-à-tête in 1972.

Yang's policies but to the perception of those policies: "At the beginning of anything out of the ordinary, the mass of the people always dislike it."

After the communist victory over Chiang Kai-shek in 1949, and the establishment of the People's Republic of China, Mao's position was immeasurably strengthened. Despite all that the Chinese people had endured, it seems not to have been too hard for Mao to persuade them of the visionary force and practical need for the Great Leap Forward of the late 1950s. In Mao's mind, the intensive marshaling of China's energies would draw manual and mental labor together into a final harmonious synthesis and throw a bridge across the chasm of China's poverty to the promised socialist paradise on the other side.

In February 1957, Mao drew his thoughts on China together in the form of a rambling speech, "The Correct Handling of Contradictions Among the People." Mao's notes for the speech reveal the curious mixture of jocularity and cruelty, of utopian visions and blinkered perceptions, that lay at the heart of his character. Mao admitted that 15 percent or more of the Chinese people were hungry and that some critics felt a "disgust" with Marxism. He spoke too of the hundreds of thousands who had died in the revolution so far, but firmly rebutted figures—quoted in Hong Kong newspapers—that 20 million had perished. "How could we possibly kill 20 million people?" he asked.

It is now established that at least that number died in China during the famine that followed the Great Leap between 1959 and 1961. In the Cultural Revolution that followed only five years later, Mao used the army and the student population against his opponents. Once again millions suffered or perished as Mao combined the ruthlessness of Shang Yang with the absolute confidence of the long-distance swimmer.

Rejecting his former party allies, and anyone who could be accused of espousing the values of an older and more gracious Chinese civilization, Mao drew his sustenance from the chanting crowds of Red Guards. The irony here was that from his youthful

designed "to punish the wicked and rebellious, in order to preserve the rights of the people." That the people continued to fear Shang Yang was proof to Mao they were "stupid." Mao attributed this fear and distrust not to Shang

#### BRIEF BIOGRAPHY

- BORN** December 26, 1893, in Hunan province
- 1921** Attends first congress of Chinese Communist Party
- 1934** Sets out on Long March
- 1949** Proclaims the People's Republic of China and becomes its first leader
- 1958** Launches the Great Leap Forward
- 1966** Begins the Cultural Revolution
- 1972** Meets Nixon in Beijing
- DIED** 1976 of a heart attack

readings, Mao knew the story of how Shang Yang late in life tried to woo a moral administrator to his service. But the official turned down Shang Yang's blandishments, with the words that "one thousand persons going 'Yes, yes!' are not worth one man with a bold 'No!'"

Mao died in 1976, and with the years those adulatory cries of "Yes, yes!" have gradually faded. Leaders Mao trained, like Deng Xiaoping, were able to reverse Mao's policies even as they claimed to revere them. They gave back to the Chinese people the opportunities to express their entrepreneurial skills, leading to astonishing rates of growth and a complete transformation of the face of Chinese cities.

Are these changes, these moves toward a new flexibility, somehow Mao's legacy? Despite the agony he caused, Mao was both a visionary and a realist. He learned as a youth not only how Shang Yang brought harsh laws to the Chinese people, even when they saw no need for them, but also how Shang Yang's rigors helped lay the foundation in 221 B.C. of the fearsome centralizing state of Qin. Mao knew too that the Qin rulers had been both hated and feared and that their dynasty was soon toppled, despite its monopoly of force and efficient use of terror. But in his final years, Mao seems to have welcomed the association of his own name with these distant Qin precursors. The Qin, after all, had established a united state from a universe in chaos. They represented, like Mao, not the best that China had to offer, but something ruthless yet canny, with the power briefly to impose a single will on the scattered emotions of the errant multitude. It is on that grimly structured foundation that Mao's successors have been able to build, even as they struggle, with obvious nervousness, to contain the social pressures that their own more open policies are generating. Surely Mao's simple words reverberate in their ears: as long as you are not afraid, you won't sink.



All smiles with wife Jiang Qing.

# Martha Graham



THE FIRST THING YOU NOTICED WAS THE FACE. a dead-white mask of anguish with black holes for eyes, a curt slash of red for a mouth, and cheekbones as high as the sky. Even if Martha Graham had done nothing else worth mentioning in her ninety-six years, she might be remembered for that face.

But she also made dances to go with it—harsh, angular

| *by Terry Teachout*

fantasies spun out of the strange proportions of her short-legged body and the pain and loneliness of her secret heart. If Graham ever gave birth, one critic quipped, it would be to a cube; instead, she became the mother of American dance.

Graham was far from the first dancer to rip off her toe shoes and break with the rigid conventions of nineteenth-century ballet. America in the 1910s and 1920s was full of young women (modern dance in the beginning was very much a women's movement) with similar notions. But it was her homegrown technique—the fierce pelvic contractions, the rugged “floor work” that startled those who took for granted that real dancers soared through the air—that caught on, becoming the cornerstone of postwar modern dance. Merce Cunningham, Paul Taylor, Twyla Tharp, Mark Morris—all are Graham's children and grandchildren. (Taylor and Cunningham even danced in her company, though they later repudiated her high-strung style.) Her methods are routinely taught today in studios the world over, but you need not have studied them or even have seen any of her dances to be influenced by them. They are part of the air every contemporary dancer breathes.

Born in 1894 in Allegheny, Pennsylvania, Graham moved with her family to California when she was fourteen. Three years later, she attended a Los Angeles recital by the dance pioneer Ruth St. Denis. It was the first dance performance of any kind that Graham had ever seen, and it overwhelmed her; in 1916 she joined Denishawn, the school and performing troupe that St. Denis co-led with her husband, Ted Shawn. At twenty-two, dangerously late for an aspiring dancer, Graham had found her destiny.

After seven years with Denishawn, Graham moved to New York City and struck out on her own, giving solo recitals and eventually launching her own company, in 1929. To raise funds, she danced at the opening of Radio City Music Hall, modeled furs, and later gave classes in which she taught such actors as Bette Davis and Gregory Peck how to move. (Richard Boone claimed that to die onscreen, he simply did a one-count Graham fall.) But nothing could deflect her from what she believed to be



She was happiest when performing, as here in 1932.

#### BRIEF BIOGRAPHY

- BORN** May 11, 1894, in Allegheny, Pennsylvania
- 1916** Joins the Denishawn dance troupe
- 1929** Launches her own company in New York City
- 1935** Establishes school of modern dance at Bennington College
- 1944** Choreographs *Appalachian Spring*
- 1968** Gives last stage performance, at age seventy-four
- 1976** Receives the Presidential Medal of Freedom
- DIED** April 1, 1991, in New York City

her sacred mission: to “chart the graph of the heart” through movement. “That driving force of God that plunges through me is what I live for,” she wrote, and believed every word of it. Others believed too, partly because of the hurricane-strength force of her personality—the Graham company would always bear an unsettling resemblance to a religious cult, with the choreographer as high priestess—but mainly because she delivered the goods.

Graham came decisively into her own in the 1940s, turning out in rapid succession the decade-long series of angst-ridden dance dramas—enacted on symbol-strewn

sets designed by the sculptor Isamu Noguchi and accompanied by scores commissioned from such noted composers as Aaron Copland and Samuel Barber—on which her reputation now chiefly rests. *Cave of the Heart* (1946), one of her many modern recastings of ancient Greek myth, contains a horrific solo in which the hate-crazed Medea gobbles her own entrails—perhaps Graham’s most sensational coup de théâtre and one recalled with nightmarish clarity by all who saw her bring it off.

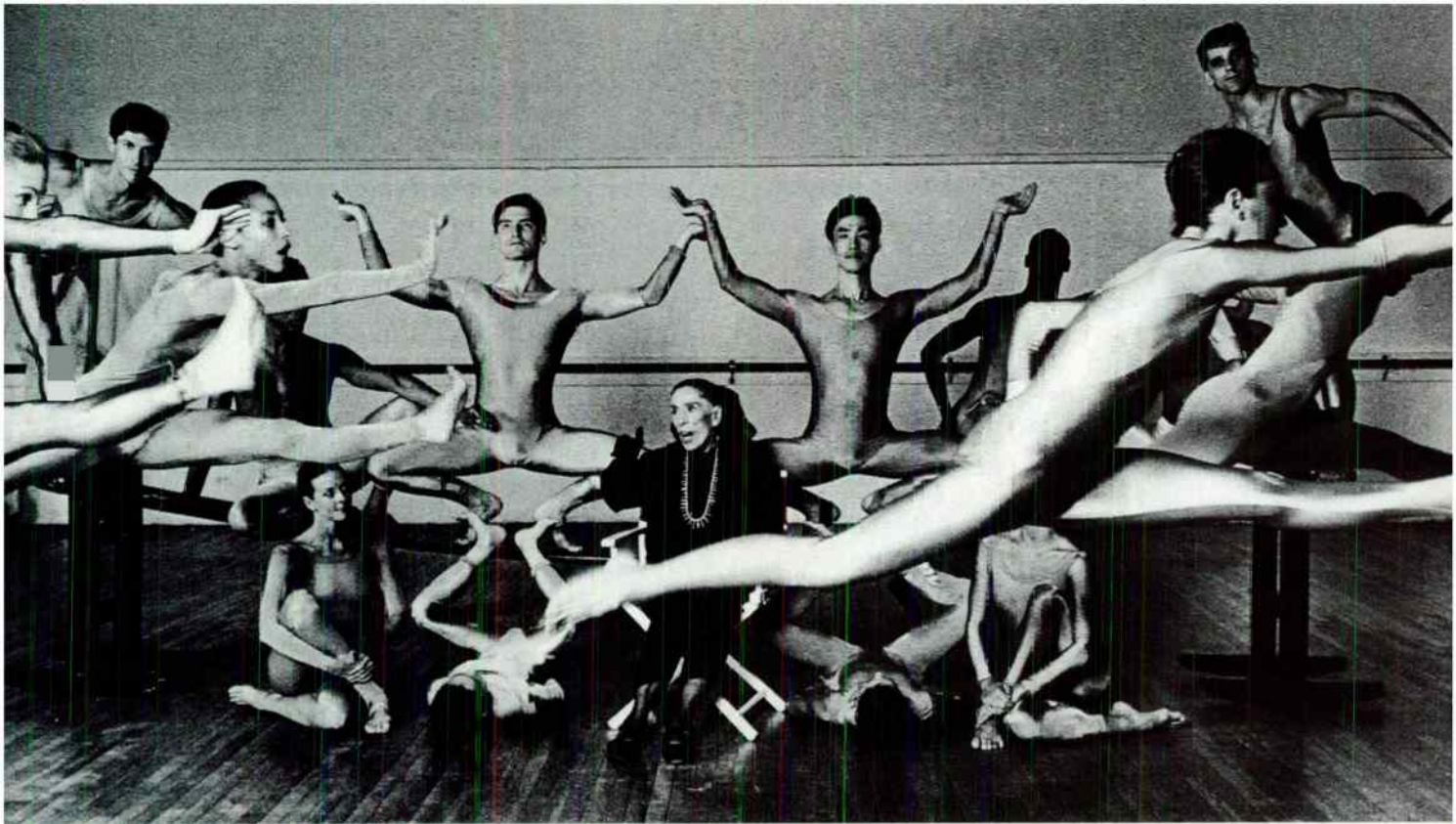
“How do you want to be remembered, as a dancer or a choreographer?” Graham was asked by choreographer Antony Tudor. “As a dancer, of course,” she replied. “I pity you,” Tudor said. His words proved prophetic. In her prime a performer of eye-scorching power, Graham insisted on dancing until 1968, long after her onstage appearances had degenerated into grisly self-caricature. Her unwillingness to let younger soloists take over led her to replace her signature pieces with new dances in which she substituted calculated effects for convincing movement. Adoring critics

pretended nothing was wrong, but in fact she produced virtually no work of lasting interest from 1950 to her death forty-one years later.

Her wishes notwithstanding, it is not likely that Graham will be remembered as a dancer, at least not very clearly: films of her performances are scarce and mostly primitive. Much of her choreography has failed to wear well, especially by comparison with the work of George Balanchine, the unrivaled master of neoclassical ballet, and Taylor and Cunningham, her apostate alumni. No more than half a dozen of her dances, most notably *Cave of the Heart* and *Appalachian Spring* (1944), her radiant re-creation of a pioneer wedding, seem likely to stand the test of time. The rest are overwrought period pieces whose humorless, lapel-clutching intensity is less palatable now that their maker is no longer around to bring them to life.



From the start, as here in 1920, she was inspired by ancient ritual and myths.



Yet a theatrical legacy cannot always be measured by such seemingly objective yardsticks. Though there is no film of Nijinsky dancing, no one questions his place of honor in the history of twentieth-century ballet. Even if her beleaguered company should someday close its doors and her dances cease to be performed, Graham will doubtless be remembered in much the same way, for the shadow she cast was fully as long. Did she invent modern dance? No, but she came to embody it, arrogantly and spectacularly—and, it appears, permanently. “When the legend becomes fact,” said the newspaper editor in John Ford’s *The Man Who Shot Liberty Valance*, “print the legend.” The legend of Martha Graham long ago became fact, just as her utterly personal technique has become part of the common vocabulary of dancers everywhere. “The center of the stage is where I am,” she once said. It still is.

Her acolytes revered her as a high priestess of dance right into the 1990s.

# Rodgers and Hammerstein



IT WAS 8:30 A.M., MAY 19, 1961. I REMEMBER THE TIME and date vividly. I was thirteen. School was Westminster. Elvis was king. Number one on the British charts was Floyd Cramer's "On the Rebound."

*by Andrew Lloyd Webber*

There was an uproar as I entered the common room, where we boys were supplied with the daily newspapers.

“Have you read your heroes’ reviews, Lloyd?”

“Look, the *Times* says the show is treacly.”

“Webster, look at this one.”

That one said something to the effect that “if you are a diabetic who craves sweet things, take along some extra insulin, and you will not fail to thrill to *The Sound of Music*.”

If nothing else, I had learned my first lesson in creative theater advertising, for “You will not fail to thrill to *The Sound of Music*” was the main quote outside London’s Palace Theatre for many years to come. When the sign finally came down, Richard Rodgers and Oscar Hammerstein’s last collaboration had become the longest-running American musical in London theater history.

Few remember in what disregard, particularly in 1960s Britain, the musical genre was held by young people. Opinion makers insisted that the most heinous example of the sentimental musical was the show rightly considered today to be a Rodgers and Hammerstein masterpiece, *Carousel*.

My first encounter with Rodgers and Hammerstein was via my father. He was then director of composition at the Royal College of Music. On my tenth birthday, he interrupted my endless replays of “Jailhouse Rock” and insisted on playing something for me. Onto the battered 78 rpm record player was plonked Ezio Pinza singing “Some Enchanted Evening.” Then Dad played the song on the piano. Right then, Rodgers and Hammerstein joined Elvis Presley and the Everly Brothers as heroes.

I know why. Great melody has always deeply affected me, and Rodgers is possibly the twentieth century’s greatest tune writer. This is not to deny Hammerstein’s enormous contribution. The simplicity of his lyrics is truly deceptive. Take “People Will Say We’re in Love.” Thousands of songs, even well-known songs, make the few rhymes for “love” sound contrived. “Don’t start collecting things—/Give me my rose and my glove./Sweetheart, they’re suspecting things—/People will say we’re in love!” does no such thing.

Rodgers and Hammerstein did not, of course, collaborate until they were well along in their careers. Rodgers was born on June 28, 1902, on New York’s Long Island to a doctor and his wife. He took to music at an early age. The teenage Rodgers spent his allowance going to Saturday matinees of musicals. Thus he grew to idolize Jerome Kern.

#### BRIEF BIOGRAPHY

- 1895** Oscar Hammerstein II born
- 1902** Richard Rodgers born
- 1943** *Oklahoma!* opens on March 31
- 1945** Write *State Fair*, their only original movie
- 1946** Produce Irving Berlin’s *Annie Get Your Gun*
- 1949** *South Pacific* opens
- 1957** Broadcast of their only TV musical, *Cinderella*
- 1960** Opening of *The Sound of Music*, their last show; Hammerstein dies on August 23 at age sixty-five
- 1962** Rodgers writes his own lyrics for *No Strings*
- 1979** Rodgers dies on December 30, at age seventy-seven





Their pairing on *Oklahoma!* met skepticism, so its huge success was a surprise.

By the time he went to Columbia University in the fall of 1919, he had already met his first collaborator, Lorenz Hart. That summer they had sold a song to producer Lew Fields for a show called *A Lonely Romeo*. (Extraordinarily, some of Rodgers's songs, to his own lyrics, appeared on Broadway even earlier, when he was sixteen.)

But it wasn't until 1925 that Rodgers and Hart had a major hit. They wrote the songs for a lighthearted revue called *The Garrick Gaieties*. Its "Manhattan" was an overnight success, and the legendary partnership was flying at last. Such songs as "The Lady Is a Tramp," "Dancing on the Ceiling," "My Heart Stood Still," and "Blue Moon" etched the duo a permanent place in theater history.

Rodgers was always keen on breaking new ground. Many believe *Pal Joey* (1940), the story of the emcee of a sleazy nightclub, to be a landmark musical. With its unscrupulous leading character and biting realistic view of life, the show moved the musical comedy format into more serious territory. But even as Rodgers and Hart were taking the musical to new levels, their partnership was becoming increasingly strained. Hart was a serious drinker, and by the time of his last collaboration with Rodgers, *By*

*Jupiter* in 1942, he was virtually an alcoholic. Rodgers was desperate. No one was more forthcoming with help than his old friend Oscar Hammerstein II.

Hammerstein was born in New York City on July 12, 1895. His father, William, was a theatrical manager; his grandfather Oscar I, a legendary impresario who took on the Metropolitan Opera by building his own opera house. The young Oscar was stagestruck from childhood, and by the time he attended Columbia University, he was performing and writing amateur routines. It was after the Saturday matinee of a college varsity revue that he first met Rodgers, whose older brother brought him to the show. Years later, remembering this meeting, Hammerstein wrote, "Behind the sometimes too serious face of an extraordinarily talented composer . . . I see a dark-eyed little boy."

Like Rodgers, Hammerstein was keen to push the boundaries of the musical, which was only slightly more sophisticated than a vaudeville revue. In the program of his 1924 Broadway show *Rose-Marie*, for instance, he and the other authors wrote that the musical numbers were too integral to the book to list separately. Three years later, with Jerome Kern, he had his biggest success with *Show Boat*, the musical he adapted from Edna Ferber's novel of the same name with the express intention of weaving songs seamlessly into a narrative about addictive gambling, alcoholism, and miscegenation. Years later, Hammerstein dealt with racial issues again in *South Pacific*.

By the time Rodgers and Hammerstein were discussing the Hart crisis, the forty-six-year-old Hammerstein was considered something of a has-been. He had a string of flops to his name. Famously, after the successful debut of *Oklahoma!* he took an advertisement in *Variety* listing all his recent catastrophes with the punch line: "I've done it before and I can do it again!"

The announcement that Rodgers and Hammerstein were to collaborate on *Oklahoma!*—the Theatre Guild production based on Lynn Riggs's novel *Green Grow the Lilacs*—was initially greeted with skepticism. The financial backing for *Away We Go!* (as the show was then called) proved very difficult to raise. MGM, which owned the dra-



Their seventeen-year partnership lasted until Hammerstein died of cancer in 1960.



Rodgers, left, and Hammerstein with Julie Andrews, who starred in the movie version of *The Sound of Music*.

matic rights, refused to make a \$69,000 investment for half the profits. The word on the tryout in New Haven, Connecticut, was awful. One of Walter Winchell's informants wired the columnist: "No girls, no legs, no jokes, no chance."

But on March 31, 1943, *Oklahoma!* opened in triumph on Broadway. A show that began with a lone woman churning butter onstage to the strains of an offstage voice singing "Oh, What a Beautiful

Mornin'" captivated its first-night audience. This revolutionary, naturalistic musical also changed the mainstream of the genre forever.

Rodgers and Hammerstein wrote nine musicals together. Five are legendary hits: *Oklahoma!*, *Carousel*, *South Pacific*, *The King and I*, and *The Sound of Music*. (*Flower Drum Song* was a success, but not in the same league as the golden five.) They wrote one film musical, *State Fair*, and the

TV special *Cinderella*, starring Julie Andrews. They were also hugely canny producers. Irving Berlin's *Annie Get Your Gun* was but one of the works they produced that was not their own. Their flops—*Allegro*, *Me and Juliet*, and *Pipe Dream*—were probably a result, as much as anything, of their trying too consciously to be innovative.

What sets the great Rodgers and Hammerstein musicals apart for me is their directness and their awareness of the importance of construction in musical theater. Years ago, I played through the piano score of *South Pacific*. It is staggering how skillfully reprises are used as scene-change music that sets up a following number or underlines a previous point. It could only be the product of a hugely close relationship in which each partner sensed organically where the other, and the show, was going.

After Hammerstein's death from cancer in 1960, Rodgers valiantly plowed on. He worked with Stephen Sondheim on a musical, *Do I Hear a Waltz?* An attempt at a collaboration with Alan Jay Lerner, lyricist of *My Fair Lady*, came to nothing. I can vouch for Alan's never having had the almost puritanical discipline that Rodgers found so satisfactory in Hammerstein. Sadly too, with one or two exceptions, the post-Hammerstein melodies paled against Rodgers's former output. Who can say why? Perhaps it was simply the lack of the right partner to provide inspiration and bring out the best in him. Musical partnerships are, after all, like marriages—built on a chemistry that is intangible, perhaps not even definable. Nearly forty years later, the partnership of Rodgers and Hammerstein has not yet been equaled. It probably never will be.

# BILL W.



SECOND LIEUTENANT BILL WILSON DIDN'T THINK TWICE when the first butler he had ever seen offered him a drink. The twenty-two-year-old soldier didn't think about how alcohol had destroyed his family. He didn't think about the Yankee temperance movement of his childhood or his loving fiancée, Lois Burnham, or his emerging talent for leadership. He didn't

by *Susan Cheever*

think about anything at all. "I had found the elixir of life," he wrote. Wilson's last drink, seventeen years later, when alcohol had destroyed his health and his career, precipitated an epiphany that would change his life and the lives of millions of other alcoholics. Incarcerated for the fourth time at Manhattan's Towns Hospital in 1934, Wilson had a spiritual awakening—a flash of white light, a liberating awareness of God—that led to the founding of Alcoholics Anonymous and Wilson's revolutionary twelve-step program, the successful remedy for alcoholism. The twelve steps have also generated successful programs for eating disorders, gambling, narcotics, debting, sex addiction, and people affected by others' addictions. Aldous Huxley called him "the greatest social architect of our century."

Wilson in 1948. |



William Griffith Wilson grew up in a quarry town in Vermont. When he was ten, his hard-drinking father headed for Canada, and his mother moved to Boston, leaving the sickly child with her parents. As a soldier, and then as a businessman, Wilson drank to alleviate his depressions and to celebrate his Wall Street success. Married in 1918, he and Lois toured the country on a motorcycle and appeared to be a prosperous, promising young couple. By 1933, however, they were living on charity in her parents' house on Clinton Street in Brooklyn. Wilson had become an unemployable drunk who disdained religion and even panhandled for cash.

Inspired by a friend who had stopped drinking, Wilson went to meetings of the Oxford Group, an evangelical society founded in Britain by Pennsylvanian Frank Buchman. And as Wilson underwent a barbiturate-and-belladonna cure called "purge and puke," which was state-of-the-art alcoholism treatment at the time, his brain spun with phrases from Oxford Group meetings, Carl Jung, and William James's *Varieties of Religious Experience*, which he read in the hospital. Five sober months later, Wilson went to Akron, Ohio, on business. The deal fell through, and he wanted a drink. He stood in the lobby of the Mayflower Hotel, entranced by the sounds of the bar across the hall. Suddenly he became convinced that by helping another alcoholic, he could save himself.

Through a series of desperate telephone calls, he found Dr. Robert Smith, a skeptical drunk whose family persuaded him to give Wilson fifteen minutes. Their meeting lasted for hours. A month later, Dr. Bob had his last drink, and that date, June 10, 1935, is the official birth date of AA, which is based on the idea that only an alcoholic can help another alcoholic. "Because of our kinship in suffering," Bill wrote, "our channels of contact have always been charged with the language of the heart."



The Burnham house on Clinton Street became a haven for drunks. “My name is Bill W., and I’m an alcoholic,” he told assorted houseguests and visitors at meetings. To spread the word, he began writing down his principles for sobriety. Each chapter was read by the Clinton Street group and sent to Smith in Akron for more editing. The book had a dozen provisional titles, among them *The Way Out* and *The Empty Glass*. Edited to four hundred pages, it was finally called *Alcoholics Anonymous*, and this became the group’s name.

At the 1955 AA convention in St. Louis, Missouri, Wilson turned the leadership over to the group’s members.

But the book, although well reviewed, wasn’t selling. Wilson tried unsuccessfully to make a living as a wire-~~rope~~ salesman. AA had about a hundred members, but many were still drinking. Meanwhile, in 1939, the bank foreclosed on the Clinton Street house, and the couple began years of homelessness, living as guests in borrowed rooms and at one point staying in temporary quarters above the AA clubhouse on 24th Street in Manhattan. In 1940 John D. Rockefeller Jr. held an AA dinner and was impressed enough to create a trust to provide Wilson with \$30 a week—but no more. The tycoon felt that money would corrupt the group’s spirit.

Then, in March 1941, the *Saturday Evening Post* published an article on AA, and suddenly thousands of letters and requests poured in. Attendance at meetings doubled and tripled. Wilson had reached his audience. In *Twelve Traditions*, Wilson set down the suggested bylaws of Alcoholics Anonymous. In them, he created an enduring blueprint for an organization with a maximum of individual freedom and no accumulation of power or money. Public anonymity ensured humility. No contributions were required; no member could contribute more than \$1,000.

Today more than two million AA members in 150 countries hold meetings in church basements, hospital conference rooms, and school gyms, following Wilson's informal structure. Members identify themselves as alcoholics and share their stories: there are no rules or entry requirements, and many members use only first names.

Wilson believed the key to sobriety was a change of heart. The suggested twelve steps include an admission of powerlessness, a moral inventory, a restitution for harm done, a call to service, and a surrender to some personal God. In AA, God can be anything from a radiator to a patriarch. Influenced by AA, the American Medical Association has redefined alcoholism as a chronic disease, not a failure of willpower.

As Alcoholics Anonymous grew, Wilson became its principal symbol. He helped create a governing structure for the program, the General Service Board, and turned over his power. "I have become a pupil of the AA movement rather than the teacher," he wrote. A smoker into his seventies, he died of pneumonia and emphysema in Miami, where he went for treatment in 1971. To the end, he clung to the principles and the power of anonymity. He was always Bill W., refusing to take money for counseling and leadership. He turned down many honors, including a degree from Yale. And he declined *Time* magazine's offer to put him on the cover—even with his back turned.

#### BRIEF BIOGRAPHY

- BORN** November 26 1895 in East Dorset, Vermont
- 1918** Marries Lois Burnham; in 1951 she founds Al-Anon for families of alcoholics
- 1933** First of four hospitalizations for alcoholism
- 1934** Takes his last drink
- 1935** Persuades Dr. Robert Smith to stay sober with him; this is the first AA meeting
- 1938** Forms the Alcoholics Foundation
- 1939** Publishes the book *Alcoholics Anonymous*, which includes the twelve steps
- 1953** Publishes *Twelve Steps and Twelve Traditions*, outlining a structure for AA
- DIED** January 24, 1971, in Miami



# Jean Piaget

JEAN PIAGET, THE PIONEERING SWISS PHILOSOPHER and psychologist, spent much of his professional life listening to children, watching children, and poring over reports of researchers around the world who were doing the same. He found, to put it most succinctly, that children don't think like grown-ups. After thousands of interactions with young

*by Seymour Papert*



people often barely old enough to talk. Piaget began to suspect that behind their cute and seemingly illogical utterances were thought processes that had their own kind of order and their own special logic. Einstein called it a discovery “so simple that only a genius could have thought of it.”

Piaget’s insight opened a new window into the inner workings of the mind. By the end of a wide-ranging and remarkably prolific research career that spanned nearly seventy-five years—from his first scientific publication at age ten to work still in progress when he died at eighty-four—Piaget had developed several new fields of science: developmental psychology, cognitive theory, and what came to be called genetic epistemology. Although not an educational reformer, he championed a way of thinking about children that provided the foundation for today’s education-reform movements. It was a shift comparable to the displacement of stories of “noble savages” and “cannibals” by modern anthropology. One might say that Piaget was the first to take children’s thinking seriously.

Others who shared this respect for children—John Dewey in the U.S., Maria Montessori in Italy, and Paulo Freire in Brazil—fought harder for immediate change in the schools, but Piaget’s influence on education is deeper and more pervasive. He has been revered by generations of teachers inspired by the belief that children are not empty vessels to be filled with knowledge (as traditional pedagogical theory had it) but active builders of knowledge—little scientists who are constantly creating and testing their own theories of the world. And though he may not be as famous as Sigmund Freud or even B. F. Skinner, his contribution to psychology may be longer lasting. As computers and the Internet give children greater autonomy to explore ever larger digital worlds, the ideas he pioneered become ever more relevant.

Piaget grew up near Lake Neuchâtel in a quiet region of French Switzerland known for its wines and watches. His father was a professor of medieval studies and his mother a strict Calvinist. He was a child prodigy who soon became interested in the scientific study of nature. When, at age ten, his observations led to questions that could be answered only by access to the university library, Piaget wrote and published a short note on the sighting of an albino sparrow in the hope that this would influence the librarian to stop treating him like a child. It worked. Piaget was launched on a path that would lead to his doctorate in zoology and a lifelong conviction that the way to understand anything is to understand how it evolves.

After World War I, Piaget became interested in psychoanalysis. He moved to Zurich, where he attended Carl Jung’s lectures, and then to Paris to study logic and abnormal psychology. Working with Théodore Simon in Alfred Binet’s child psychology lab, he noticed that Parisian children of the same age made similar errors on true-false intelligence tests. Fascinated by their reasoning processes, he began to suspect that the key to human knowledge might be discovered by observing how the child’s mind develops.

Back in Switzerland, the young scientist began watching children play, scrupulously recording their words and actions as their minds raced to find reasons for why things are the way they are. In one of his most famous experiments, Piaget asked children, "What makes the wind?" A typical Piaget dialogue:

Piaget: What makes the wind?

Julia: The trees.

P: How do you know?

J: I saw them waving their arms.

P: How does that make the wind?

J (waving her hand in front of his face): Like this. Only they are bigger. And there are lots of trees.

P: What makes the wind on the ocean?

J: It blows there from the land. No. It's the waves . . .

Piaget recognized that five-year-old Julia's beliefs, while not correct by any adult criterion, are not "incorrect" either. They are entirely sensible and coherent within the framework of the child's way of knowing. Classifying them as "true" or "false" misses the point and shows a lack of respect for the child. What Piaget was after was a theory that could find in the wind dialogue coherence, ingenuity, and the practice of a kind of explanatory principle (in this case by referring to body actions) that stands young children in very good stead when they don't know enough or have enough skill to handle the kind of explanation that grown-ups prefer.

Piaget was not an educator and never enunciated rules about how to intervene in such situations. But his work strongly suggests that the automatic reaction of putting the child right may well be abusive. Practicing the art of making theories may be more valuable for children than achieving meteorological orthodoxy; and if their theories are always greeted by "Nice try, but this is how it really is . . ." they might give up after a while on making theories. As Piaget put it, "Children have real understanding only of that which they invent themselves, and each time that we try to teach them something too quickly, we keep them from reinventing it themselves."

Disciples of Piaget have a tolerance for—indeed a fascination with—children's primitive laws of physics: that things disappear when they are out of sight; that the moon and the sun follow you around; that big things float and small things sink. Einstein was



Piaget's subjects included his own three children.



A lifetime of listening to children helped him unravel their thought processes.

gist. His real interest was epistemology—the theory of knowledge—which, like physics, was considered a branch of philosophy until Piaget came along and made it a science.

Piaget explored a kind of epistemological relativism in which multiple ways of knowing are acknowledged and examined nonjudgmentally, yet with a philosopher's analytic rigor. Since Piaget, the territory has been widely colonized by those who write about women's ways of knowing, Afrocentric ways of knowing, even the computer's ways of knowing. Indeed, artificial intelligence and the information-processing model of the mind owe more to Piaget than its proponents may realize.

The core of Piaget is his belief that looking carefully at how knowledge develops in children will elucidate the nature of knowledge in general. Whether this has in fact led to deeper understanding remains, like everything about Piaget, controversial. In the past decade Piaget has been vigorously challenged by the current fashion of viewing knowledge as an intrinsic property of the brain. Ingenious experiments have demonstrated that newborn infants already have some of the knowledge that Piaget believed children constructed. But for those, like me, who still see Piaget as the giant in the field of cognitive theory, the difference between what the baby brings and what the adult has is so immense that the new discoveries do not significantly reduce the gap but only increase the mystery.

especially intrigued by Piaget's finding that seven-year-olds insist that going faster can take more time—perhaps because Einstein's own theories of relativity ran so contrary to common sense.

Although every teacher in training memorizes Piaget's four stages of childhood development (sensorimotor, preoperational, concrete operational, formal operational), the better part of Piaget's work is less well known, perhaps because schools of education regard it as "too deep" for teachers. Piaget never thought of himself as a child psychologist.

#### BRIEF BIOGRAPHY

**BORN** August 9, 1896, in Switzerland

**1907** Publishes first paper at age ten

**1918** Obtains doctorate in zoology, studies psychoanalysis

**1920** Studies children's intelligence in Paris

**1923** First of nearly sixty scholarly books published

**1929** Appointed director, International Bureau of Education

**1955** Establishes Center for Genetic Epistemology

**DIED** 1980 in Geneva



# Lucky Luciano

HE WAS BORN AND DIED IN ITALY. YET THE INFLUENCE on America of a grubby street urchin named Salvatore Lucania ranged from the lights of Broadway to every level of law enforcement, from national politics to the world economy. First, he reinvented himself as Charles (“Lucky”) Luciano. Then he reinvented the Mafia.

*by Edna Buchanan*

His story was Horatio Alger with a gun, an ice pick, and a dark vision of Big Business. He was nine when the family emigrated from Sicily, where his father had labored in the sulfur pits, to New York City. He took to the streets early, was arrested almost at once for shoplifting, later for delivering drugs. Luciano was a tough teenage hoodlum on the Lower East Side when his gang targeted a skinny Jewish kid whose bold defiance won their respect. The encounter led to a merger of Jewish and Italian gangs and a lifelong friendship. When Luciano rebuilt the mob, Meyer Lansky was the archi-

tect. A ruthless natural ability enabled them to rise through the ranks of their chosen profession. Sometimes they simply eliminated the ranks. When they downsized colleagues, it was permanent.

Taking advantage of Prohibition in 1920, Luciano and Lansky supplied booze to Manhattan speak-easies. While others used small boats to offload mother ships, their contacts enabled them to dock ships in New York harbor.

An upwardly mobile member of New York's largest Mafia family, run by Giuseppe ("Joe the Boss") Masseria, Luciano grew impatient at the Castellammarese war in the late

1920s, a long and bloody power struggle between Masseria and Salvatore Maranzano. Lucky offered to eliminate his boss and end the violence, which he saw as disruptive to business. At an Italian restaurant, Joe the Boss ate lead. Lucky assumed control of the dead man's lottery business, while Maranzano seized his bootlegging turf.

Lucky's vision of replacing traditional Sicilian strong-arm methods with a corporate structure, a board of directors, and systematic infiltration of legitimate enterprise failed to impress Maranzano. An ancient-history aficionado and would-be Julius Caesar, Maranzano aspired to be boss of all bosses. Most of all, he wanted to avoid Caesar's fatal miscalculation. He found Lucky too ambitious, too enterprising, too dangerous.

And Maranzano was too late. He was killed by police impersonators, hit men provided by Lansky and mutual friend Benjamin ("Bugsy") Siegel. More rubouts followed, in a well-orchestrated cutback of old-time Sicilian gangsters. Yet Luciano's management style would be far different from that of his Chicago counterpart Al Capone, who spent more time killing than doing business.



John Gotti, presenting himself like a CEO, followed in the footsteps of Luciano.

The FBI describes Luciano's ascendancy as the watershed event in the history of organized crime. After his hostile takeover, Luciano organized organized crime. He modernized the Mafia, shaping it into a smoothly run national crime syndicate focused on the bottom line. The



Despite his busy criminal career, Luciano was jailed by the Feds only as a pimp in 1936.

syndicate was operated by two dozen family bosses who controlled bootlegging, numbers, narcotics, prostitution, the waterfront, the unions, food marts, bakeries, and the garment trade, their influence and tentacles ever expanding, infiltrating, and corrupting legitimate business, politics, and law enforcement.

Luciano also led the trend in gangster chic. He lived large, in a suite at the Waldorf-Astoria. Expensive and elegant suits, silk shirts, handmade shoes, cashmere topcoats, and fedoras enhanced his executive image. There was always a beautiful woman, a showgirl, or a nightclub singer on his arm. Sinatra and actor George Raft were pals.

The good life ended in 1935. Thomas E. Dewey was appointed New York City special prosecutor to crack down on the rackets. He targeted Luciano, calling him "the czar of organized crime in this city," and charged him with multiple counts of compulsory prostitution. The trial was sensational. Tabloids went wild. Lucky vehemently denied being a pimp. "It's a bum rap," he said, a lament echoed down the years to modern Miami, where a few aging mobsters remember the man. "Nobody had anything bad to say about Charlie," one of them told me. "He's the one who put it all together. A gentleman. He'd give a girl a hundred dollars just for smiling at him. That pimp charge was a frame just to get him off the streets." Convicted on sixty-two counts in June 1936, Luciano got thirty to fifty years in prison. It took Hitler to win Lucky his freedom. After Pearl Harbor, German U-boats off the U.S. coast were sinking merchant ships regularly. U.S. intelligence suspected they were aided by spies or Nazi sympathizers. Then the *Normandie*, a French liner being retrofitted into a troop ship, sank in the Hudson River, sparking fears of sabotage.

Stymied intelligence agents turned to the underworld for help. Lansky, known in the 1930s for breaking heads at pro-Nazi meetings, acted as liaison and was allowed to visit Luciano. Lucky put the word out to cooperate, and formerly mute dockworkers, fishermen, and hoodlums became the eyes and ears of naval intelligence. Soon eight German spies, who had landed by U-boat, were arrested, and explosives, maps and blueprints for sabotage were seized.

When the invasion of Italy was planned, the Allies needed intelligence for the landing at Sicily. Lucky for them, again. On VE day in 1945, Luciano's lawyer petitioned for clemency, citing his war efforts.

Eventually, a deal was reached that included deportation—Luciano had never become a citizen—and he was sent to Italy in February 1946. He surfaced months later in sunny, pre-Castro Cuba. Lansky, Sinatra, and other pals paid visits—so many, in fact, that the press took note, and in February 1947 the U.S. Bureau of Narcotics learned of Luciano's reappearance in the Americas. U.S. authorities claimed that he planned to headquarter a worldwide drug-smuggling operation in Cuba. Lucky was again packed off to Italy.

He died there, in homesick exile, on January 26, 1962. Unlike so many of his predecessors and colleagues, he expired of natural causes, a coronary—an occupational hazard common to hard-driving executives. Or maybe he was just lucky. Italian and U.S. officials quickly announced they had been about to arrest him in a \$150 million heroin ring. The fatal attack came at an airport, where he had gone to meet a Hollywood producer.

Lucky Luciano excited the American imagination, always captivated by bad guys. A reporter who tracked him down in the twilight of his life asked if he would do it all again. "I'd do it legal," Lucky replied. "I learned too late that you need just as good a brain to make a crooked million as an honest million. These days you apply for a license to steal from the public. If I had my time again, I'd make sure I got that license first."

#### BRIEF BIOGRAPHY

- BORN** November 11, 1897, in Sicily
- 1906** Immigrates to the slums of New York City
- 1911** Drops out of school in fifth grade
- 1929** Survives rubout attempt on Staten Island
- 1931** Becomes crime CEO after masterminding murders of two big bosses
- 1936** Jailed on charges of running a prostitution ring
- 1946** Wins prison release for wartime assistance, and is deported to Italy
- DIED** January 26, 1962, in the Naples, Italy, airport



# Juan Trippe

BY BUSINESS SCHOOL STANDARDS, JUAN TRIPPE was not a model chief executive. He didn't delegate well. He made big deals without telling his top managers. He almost single-handedly built a world airline, Pan American, but often acted as if he owned the world. He also had a vision that would change it, at least as regards airline travel. While his Pan Am does not survive today, his vision does.

*by Richard Branson*



He graduated from Yale in 1921 and worked briefly on Wall Street but got thoroughly bored. Planes fascinated him, though. Trippe was convinced that the future of travel was in the air. With an inheritance, Trippe began a business with Long Island Airways in New York, a taxi service for the well-heeled. When that failed, he raised money from some wealthy Yale pals and joined Colonial Air Transport, which won the first U.S. airmail contract, between New York City and Boston. That same crowd liked to play in the Caribbean (excellent choice), where he created Pan American Airways Inc. from a merger of three groups. Trippe began service with a flight from Key West, Florida, to Havana, Cuba, on October 28, 1927.

What characterized Trippe thereafter was an uncanny ability to pace his airline's growth with the range of the airliner as it slowly evolved: first crawling from island to island across the Caribbean and into Mexico, then extending to Central and South America.

Finally, it was Trippe's backing of the flying boat, the first Pan Am Flying Clippers, that pioneered global routes: across the Pacific and, in the late 1930s, across the Atlantic. By the end of World War II, Trippe had in place a route system that was truly global.

Before anyone else, he believed in airline travel as something to be enjoyed by ordinary

mortals, not just a globe-trotting elite. In 1945 other airlines didn't think or act that way. Trippe decided to introduce a "tourist class" fare from New York to London. He cut the round-trip fare more than half, to \$275 (\$1,684 in today's dollars, which makes current pricing a bargain, right?). This went over like a lead balloon in the industry, where air fares were fixed by a cartel, the International Air Transport Association; it didn't want to hear about the tourist class. Incredibly, Britain closed its airports to Pan Am flights that had tourist seats. Pan Am was forced to switch to remote Shannon, Ireland. The industry's aversion to competition and making travel affordable was to have a long life, as Sir Freddie Laker would discover in the 1970s and Virgin Atlantic nearly a decade later.

Trippe managed to find one route where the cartel could not thwart him: New York to San Juan, Puerto Rico. Pan Am's one-way fare was \$75, and the flights were packed. Finally, in 1952, Trippe's relentless attacks on the IATA forced all airlines to accept the inevitability of tourist class. But by then his vision had taken off for its next destination.

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Flying the oceans was still mostly for the rich and famous. For millions of others, it was just a dream or a once-in-a-lifetime binge. Trippe saw that the jets being intro-



Trippe winging it at a 1920 meet. His zest for airline combat would be Pan Am's undoing.

duced by Boeing and Douglas could mark the end of that, and he ordered plenty of them. In October 1958, a Pan Am Boeing 707 left New York for its first scheduled flight to Paris.

The jet age had begun, and the transformation was dramatic. The 707 flew almost twice as fast, at 605 miles per hour, as the propeller-driven Stratocruiser it had replaced. The 707 carried about twice as many people. And for the first time, it flew mostly “over” the weather: typically at 32,000 feet, much higher than the Stratocruiser, a civilian version of the B-29 bomber. But those were not the numbers that intrigued Trippe. While he brilliantly exploited the glamour of his first jet-set passengers—celebrities and VIPs—he was calculating the new jet-age math of what we call in our business “bums on seats”—the seat-mile cost.

The first 707s were flying with five-abreast seating, two on one side of the aisle, three on the other. Trippe switched to six abreast and cut fares, and the Pan Am jet clippers made flying “the pond” far more accessible. By 1965 the company was predicting that 35 million people would be flying international routes and that there would be a 200 percent increase by 1980.

The relentless Trippe had the big idea: he reasoned that mass air travel could come to the international routes only with a larger airplane—a much larger airplane. Trippe put the notion to his old friend Bill Allen, the boss of Boeing, saying he wanted a jet two and a half times the size of the 707. It was a staggering request, given the development cost of the 707. And Trippe didn’t stop with size. Pan Am was operating the 707 with a seat-mile cost, at best, of 6.6 cents. Trippe set for Boeing the goal of reducing that 30 percent.

“If you build it,” said Trippe, “I’ll buy it.”

“If you buy it,” said Allen, “I’ll build it.”

My kind of guys.

Trippe said he would buy twenty-five airplanes. The price: \$450 million, in those days big money. It wasn’t yet called the jumbo (the Brits, I’m happy to say, came up with that one).

Pan Am under Trippe always rode shotgun with any new airplane it ordered. Trippe hired Charles Lindbergh to ride his airplanes incognito, and Lindbergh’s ideas helped shape the cabin of the first jets. He also served as a pathfinder, exploring possi-



A stewardess serves snacks aboard a Pan Am 707 in 1958, its first year in operation.

ble commercial air routes across the Atlantic and over the polar regions of Asia. Pan Am engineers crawled all over Boeing as the company conceived the outline for the new jet, the 747.

By pure chance, it was Trippe himself who gave the jumbo its signature bulge. In a rare lapse of vision, Trippe thought the 747 would be superseded by a big supersonic jet, as cheap to run as a subsonic jet. Some hope. He therefore decreed that on the 747, pilots should sit above the flight deck so the nose could be opened up and take cargo. The 747's ultimate fate, he thought, would be as a flying Mack truck. Boeing showed him a wooden mock-up of the 747's flight deck, in the hump above the nose. He foraged around and came upon the space behind the flight deck, the rest of the hump. "What is this for?" he asked. "A crew rest area," said a Boeing engineer. "Rest area?" barked Trippe. "This is going to be reserved for passengers."

And so as co-creator of the 747, Trippe gave us the world's traveling machine. I launched Virgin Atlantic in June 1984 with 747s at the point when the jumbo jet was really shrinking the world and air travel was truly democratized, as Trippe intended.

Sadly, the 747 also sank Pan Am. Trippe bought too many 747s in the early 1970s. A world oil crisis hit airline travel hard, and his business never recovered. Boeing itself almost went belly-up because of the cost of launching the 747.

Trippe had been a continuous innovator, but the sad irony is that he failed to reinvent his company for the leaner, far more competitive age he had done so much to shape: the age of travel for Everyman. A decade after his death, his airline, substantially dismembered, finally expired in 1991.

Throughout his career, Juan Trippe had been driven by the great American instinct for seeing a market before it happened—and then making it happen. In a real sense, he fathered the international airline business. To do so, he took on the entire airline industry, and risked his company to see his vision through. You've just got to admire a guy like that.

#### BRIEF BIOGRAPHY

**BORN** June 27, 1899, in Sea Bright, New Jersey

**1927** Starts Pan Am with first international mail contract, between Florida and Cuba

**1935** "China Clipper" service begins to Asia

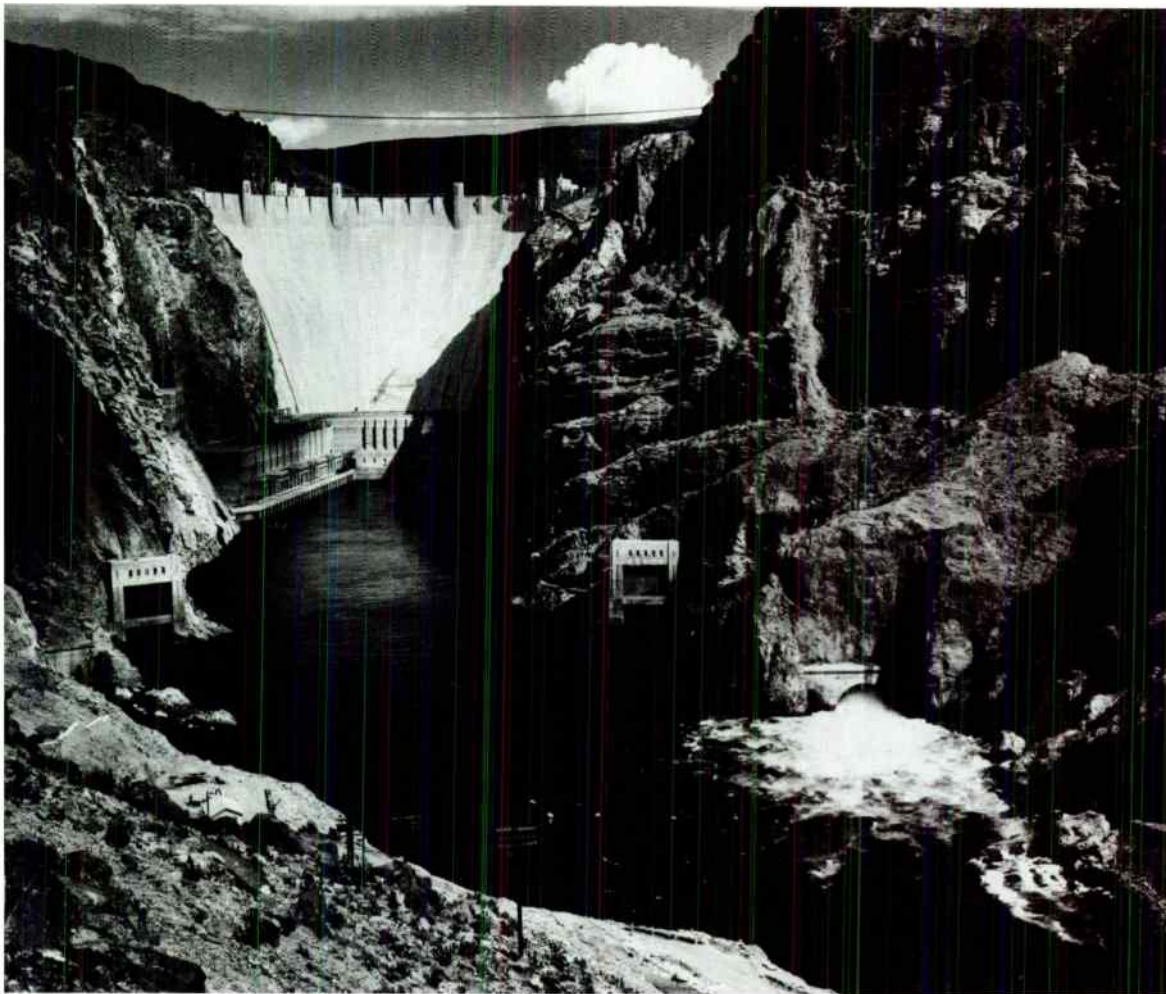
**1952** Tourist-class fares across the Atlantic become widely available

**1958** Launches Boeing 707 jet service between New York and Paris

**1968** Resigns as head of Pan Am

**DIED** April 3, 1981, in New York City

# Stephen Bechtel



IN THE EARLY DAYS OF WORLD WAR II, GERMAN U-BOATS were sending Allied merchant ships to the bottom twice as fast as shipyards could build them. The U.S. Maritime Commission, desperately seeking an outfit to build sixty cargo ships for its allies, sent word to the Bechtel construction company that it would be welcome to bid on half the job.

*by George J. Church*

Stephen Bechtel, head of the family firm, had no experience in shipbuilding. But he insisted on getting the order for all sixty. “Size can work to your advantage if you think big,” he said. “You just recognize it and move the decimal point over.”

Thinking big was Steve Bechtel’s forte. He learned to appreciate scale as the primary manager in the building of Hoover Dam in the early 1930s, then the largest public works project in U.S. history. The wartime shipyards Bechtel organized would build 560 vessels—up to twenty ships a month—between 1941 and 1945, an astounding output even in an era of production miracles.

Bechtel was, and remained throughout his nearly seventy-year career, a visionary whose imagination was fired by grandiose projects—the more seemingly impossible the better. His motto, endlessly repeated, was “We’ll build anything for anybody, no matter what the location, type, or size.” He and his company built pipelines and power plants in the forbidding reaches of the Canadian Rockies, across the Arabian desert, and through South American jungles, as well as in daunting



The trans-Arabian pipeline: a path to power for Bechtel

places like downtown Boston, where the Central Artery project unfolds today. His portfolio even includes an entire city (Jubail, Saudi Arabia).

Bechtel built in 140 countries and on six continents. It has been said, hyperbolically perhaps, that Bechtel engineers changed the physical contours of the planet more than any other humans.

Bechtel grew up on rugged construction sites where his father, Warren, who started the company, punched rail lines and highways through the California wilderness. To the end of his long life—he died in 1989, six months short of his eighty-ninth birthday—Steve Bechtel enjoyed prowling around job sites, but he neither looked nor sounded like a construction boss. In his prime, in the 1950s, he was trim, well tailored, and relatively soft-voiced, with the ingratiating manner of a salesman.

He was always peering over the horizon. In the 1920s he foresaw an energy boom and took the company into pipeline construction. Later he helped pioneer the now common “turnkey” construction contract, under which Bechtel would design a project, build it, and turn it over to the owner by a set date, for a fixed fee. In 1959 he helped produce a study for a tunnel under the English Channel, a project finally realized three decades later.

Bechtel got on the map in a place that was almost off it: Black Canyon, Nevada. With the Depression raging in 1931, Bechtel’s father helped organize a consortium called Six Companies to tackle the massive engineering job that became known as

Hoover Dam. The consortium bid \$49 million and made a profit. In the course of five years workers excavated 3.7 million cubic yards of rock and poured 4.4 million cubic yards of concrete; the main arch of the dam towers seventy stories high. Steve was first in charge of transportation, engineering, and administration. When his father died suddenly in 1933, he became chief executive of the whole project, which transformed the economy of much of the West, as well as transforming the company.

After Hoover, Bechtel was convinced he and his outfit had no limits, and he set out to prove it. While the dam was still going up, he began building the 8.2-mile San Francisco–Oakland Bay Bridge. During World War II, Bechtel, in addition to its shipyards, built bases and ran plants that modified bombers and rebuilt jeeps. At the same time Steve built a top secret 1,600-mile pipeline through the Canadian wilderness to Alaska, under primitive conditions. The pace left him so fatigued that in 1946 he briefly retired. But he would not be on the shelf long.

Returning to active management, Bechtel spent six months every year roaming the world, hobnobbing with Kings, Presidents, and foreign business magnates, fishing for projects. Around 1947 he landed a whopper: construction of what was then the world's

longest oil pipeline (1,068 miles), across Saudi Arabia. That was an early step in the building of a powerful economy as well as a fruitful relationship with Saudi kings. According to legend, on one trip to the kingdom Bechtel noticed the flames of natural gas being burned off at wellheads as he flew over. Surely, he thought, the wasted energy could be put to some use. In 1973 he presented a plan to King Faisal, an old acquaintance: use the gas to power factories in a new city that Bechtel would build on the site of a tiny fishing village at Jubail. The city, still under construction, houses a steel mill and factories that make chemicals, plastics, and fertilizer. The town is now home to seventy thousand and growing.



Bechtel's big thoughts resulted in the world's biggest engineering projects.

#### BRIEF BIOGRAPHY

**BORN** September 24, 1900, in Aurora, Indiana

**1917–18** Served with the Army Engineers in France

**1929** Persuades his father, Warren, to go into the pipeline business

**1933** Takes over Hoover Dam project following father's death

**1947** Builds Trans-Arabian pipeline

**1951** Builds first nuclear plant to produce electricity

**DIED** March 14, 1989, in Oakland, California



Founder W. A. Bechtel, left, with sons Steve, Ken, and Warren Jr. in Oregon in 1924.

The company Bechtel built is not universally loved. One partner in the wartime shipyards was John McCone, a steel executive who later became CIA director. He came early in a long line of men who filled high offices alternately in Bechtel and the federal government (most notable: George Shultz and Caspar Weinberger).

That led to charges of undue influence—by whom on whom was never quite clear. The company's penchant for secrecy didn't help its reputation either. In 1976 the Justice Department charged that Bechtel had gone too far to please Arab clients by blacklisting potential subcontractors who dealt with Israel. Bechtel signed a consent decree promising not to join any Arab boycott of Israel.

None of that has prevented the company, now headed by Riley Bechtel, a grandson of Steve's, from flourishing mightily. When Steve Sr. took over, Bechtel had revenues of less than \$20 million; a quarter-century later, when he officially retired, sales were \$463 million. In 1997 the company, still family-controlled, had revenues of \$11.3 billion; its projects ranged from a transit system in Athens to a semiconductor plant in China. These and others were fruits of Steve Bechtel's forward thinking—decades before the term global economy became a cliché.

# Louis Armstrong



POPS. SWEET PAPA DIP. SATCHMO. HE HAD PERFECT PITCH and perfect rhythm. His improvised melodies and singing could be as lofty as a moon flight or as low-down as the blood drops of a street thug dying in the gutter. Like most of the great innovators in jazz, he was a small man. But the extent of his influence across jazz, across American music, and around

*by Stanley Crouch*





Enjoying the good times with the third of his three wives, dancer Lucille Wilson, whom he married in 1942.

the world has such continuing stature that he is one of the few who can easily be mentioned with Stravinsky, Picasso, and Joyce. His life was the embodiment of one who moves from rags to riches, from anonymity to internationally imitated innovator. Louis Daniel Armstrong supplied revolutionary language that took on such pervasiveness that it became commonplace, like the light bulb, the airplane, the telephone.

That is why Armstrong remains a deep force in our American expression. Not only do we hear him in those trumpet players who represent the present renaissance

in jazz—Wynton Marsalis, Wallace Roney, Terence Blanchard, Roy Hargrove, Nicholas Payton—we can also detect his influence in certain rhythms that sweep from country-and-western music all the way over to the chanted doggerel of rap.

For many years it was thought that Armstrong was born in New Orleans on July 4, 1900, a perfect day for the man who wrote the musical Declaration of Independence for Americans of this century. But the estimable writer Gary Giddins discovered the birth certificate that proves Armstrong was born August 4, 1901. He grew up at the bottom, hustling and hustling, trying to bring something home to eat, sometimes searching garbage cans for food that might still be suitable for supper. The spirit of Armstrong's world, however, was not dominated by the deprivation of poverty and the dangers of wild living.

What struck him most, as his memoir, *Satchmo: My Life in New Orleans*, attests, was the ceremonial vigor of the people. Ranging from almost European pale to jet black, the Negroes of New Orleans had many social clubs, parades, and picnics. With rags, blues, snippets from opera, church music, and whatever else, a wide breadth of rhythm and tune was created to accompany or stimulate every kind of human involvement. Before becoming an instrumentalist, Armstrong the child was either dancing for pennies or singing for his supper with a strolling quartet of other kids who wandered New Orleans freshening up the subtropical evening with some sweetly harmonized notes.

He had some knucklehead in his soul too. While a genial fountain of joy, Armstrong was a street boy, and he had a dirty mouth. It was his shooting off a pistol on New Year's Eve that got him thrown into the Colored Waifs' Home, an institution bent on refining ruffians. It was there that young Louis first put his lips to the mouthpiece of a cornet. Like any American boy, no matter his point of social origin, he had his dreams. At night he used to lie in bed, hearing the masterly Freddie Keppard out in the streets



blowing that golden horn, and hope that he too would someday have command of a clarion sound.

The sound developed very quickly, and he was soon known around New Orleans as formidable. The places he played and the people he knew were sweet and innocent at one end of the spectrum and rough at the other. He played picnics for young Negro girls, Mississippi riverboats on which the white people had never seen Negroes in tuxedos before, and dives where the customers cut and shot one another. One time he witnessed two women fighting to the death with knives. Out of those experiences, everything from pomp to humor to erotic charisma to grief to majesty to the profoundly gruesome and monumentally spiritual worked its way into his tone. He became a beacon of American feeling.

From 1920 on, he was hell on two feet if somebody was in the mood to challenge him. Musicians then were wont to have "cutting sessions"—battles of imagination and stamina. Fairly soon, young Armstrong was left alone. He also did a little pimping but got out of the game when one of his girls stabbed him. With a trout sandwich among his

Armstrong, center, found his distinctive style while he played in King Oliver's band.



Envy: Satch and the band tune up en route to Africa in 1956.

effects, Armstrong took a train to Chicago in 1922, where he joined his mentor Joe Oliver, and the revolution took place in full form. King Oliver and his Creole Jazz Band, featuring the dark young powerhouse with the large mouth, brought out the people and all the musicians, black and white, who wanted to know how it was truly done. The most impressive white musician of his time, Bix Beiderbecke, jumped up and went glassy-eyed the first time he heard Armstrong.

When he was called to New York City in 1924 by the big-time bandleader Fletcher Henderson, Armstrong looked exactly like what he was, a young man who was not to be fooled around with and might slap the taste out of your mouth if you went too far. His improvisations set the city on its head. The stiff rhythms of the time were slashed away by his combination of the percussive and the soaring. He soon returned to Chicago, perfected what he was doing and made one record after another that reordered American music, such as “Potato Head Blues” and “I’m a Ding Dong Daddy.” Needing more space for his improvised line, Armstrong rejected the contrapuntal New Orleans front line of

clarinet, trumpet, and trombone in favor of the single, featured horn, which soon became the convention. His combination of virtuosity, strength, and passion was unprecedented. No one in Western music—

not even Bach—has ever set the innovative pace on an instrument, then stood up to sing and converted the vocalists. Pops. Sweet Papa Dip. Satchmo.

The melodic and rhythmic vistas Armstrong opened up solved the mind-body problem as the world witnessed how the brain and the muscles could work in perfect coordination on the aesthetic spot. Apollo and Dionysus met in the sweating container of a genius from New Orleans whose sensitivity and passion were epic in completely new terms. In his radical reinterpretations, Armstrong bent and twisted popular songs with his horn and his voice until they were shorn of sentimentality and elevated to serious art. He brought the change agent of swing to the world, the most revolutionary rhythm of his century. He learned how to dress and became a fashion plate. His slang was the lingua franca. Oh, he was something.

Louis Armstrong was so much, in fact, that the big bands sounded like him, their featured improvisers took direction from him, and every school of jazz since has had to address how he interpreted the basics of the idiom—swing, blues, ballads, and Afro-Hispanic rhythms. While every jazz instrumentalist owes him an enormous debt, singers

as different as Bing Crosby, Billie Holiday, Ella Fitzgerald, Sarah Vaughan, Frank Sinatra, Elvis Presley, and Marvin Gaye have Armstrong in common as well. His freedom, his wit, his discipline, his bawdiness, his majesty, and his irrepressible willingness to do battle with deep sorrow and the wages of death give his music a perpetual position in the wave of the future that is the station of all great art.

Armstrong traveled the world constantly. One example of his charming brashness revealed itself when he concertized before the King of England in 1932 and introduced a number by saying, "This one's for you, Rex: 'I'll Be Glad When You're Dead, You Rascal You.'" He had a great love for children, was always willing to help out fellow musicians, and passed out laxatives to royalty and heads of state. However well he was received in Europe, the large public celebrations with which West Africans welcomed him during a tour in the late 1950s were far more appropriate for this sequoia of twentieth-century music.

#### BRIEF BIOGRAPHY

**BORN** August 4, 1901, in New Orleans

**1915** Gets first cornet at the Colored Waifs' Home

**1922** Joins Joe ("King") Oliver's band in Chicago

**1925** Begins Hot Five and Hot Seven recordings

**1932** Visits Europe; plays for the King of England

**1956** Shines in MGM musical *High Society*

**1956** Hailed by crowds during African tour

**1964** His recording of "Hello, Dolly!" hits number one

**DIED** July 6, 1971, in New York City

He usually accepted human life as it came, and he shaped it his way. But he didn't accept everything. By the middle 1950s, Armstrong had been dismissed by younger Negro musicians as some sort of minstrel figure, an embarrassment, too jovial and hot in a time when cool disdain was the new order. He was, they said, holding Negroes back because he smiled too much and wasn't demanding a certain level of respect from white folks. But when Armstrong called out President Eisenhower for not standing behind those black children as school integration began in Little Rock, Arkansas, forty years ago, there was not a peep heard from anyone else in the jazz world. His heroism remained singular. Such is the way of the truly great: they do what they do in conjunction or all by themselves. They get the job done. Louis Daniel Armstrong was that kind.

# Enrico Fermi



IF THE NINETEENTH CENTURY WAS THE CENTURY of chemistry, the twentieth was the century of physics. The burgeoning science supported such transforming applications as medical imaging, nuclear reactors, atom and hydrogen bombs, radio and television, transistors, computers, and lasers. Physical knowledge increased so rapidly after 1900 that theory

*by Richard Rhodes*

and experiment soon divided into separate specialties. Enrico Fermi, a supremely self-assured Italian-American born in Rome in 1901, was the last great physicist to bridge the gap. His theory of beta decay introduced the last of the four basic forces known in nature (gravity, electromagnetism and, operating within the nucleus of the atom, the strong force and Fermi's "weak force"). He also co-invented and designed the first man-made nuclear reactor, starting it up in a historic secret experiment at the University of Chicago on December 2, 1942. In the famous code that an administrator used to report the success of the experiment by open phone to Washington, Fermi was "the Italian navigator" who had "landed in the new world."

He had personally landed in the new world four years earlier, with a newly minted Nobel Prize gold medal in his pocket, pre-eminent among a distillation of outstanding scientists who immigrated to the U.S. in the 1930s to escape anti-Semitic persecution in Hitler's Germany and Mussolini's Italy—in Fermi's case, of his Jewish wife, Laura.

A dark, compact man with mischievous gray-blue eyes, Fermi was the son of a civil servant, an administrator with the Italian national railroad. He discovered physics at fourteen, when he was left bereft by the death of his cherished older brother, Giulio, during minor throat surgery. Einstein characterized his own commitment to science as a flight from the I and the we to the it. Physics may have offered Enrico more consolatory certitudes than religion. Browsing through the bookstalls in Rome's Campo dei Fiori, the grieving boy found two antique volumes of elementary physics, carried them home and read them through, sometimes correcting the mathematics. Later, he told his older sister, Maria, that he had not even noticed they were written in Latin.

He progressed so quickly, guided by an engineer who was a family friend, that his competition essay for university admission was judged worthy of a doctoral examination. By 1920 he was teaching his teachers at the University of Pisa; he worked out his first theory of permanent value to physics while still an undergraduate. His only setback was a period of postdoctoral study in Germany in 1923 among such talents as Wolfgang Pauli and Werner Heisenberg, when his gifts went unrecognized. He disliked pretension, preferring simplicity and concreteness, and the philosophic German style may have repelled him. "Not a philosopher," the American theorist J. Robert Oppenheimer later sketched him. "Passion for clarity. He was simply unable to let things be foggy. Since they always are, this kept him pretty active." He won appointment as professor of theoretical physics at the University of Rome at twenty-five and quickly assembled a small group of first-class young talents for his self-appointed task of reviving Italian physics. Judging him infallible, they nicknamed him "the Pope."

#### BRIEF BIOGRAPHY

- BORN** September 29, 1901, Rome
- 1926** Develops Fermi-Dirac statistics
- 1932** Writes key paper on beta decay
- 1934** Discovers slow neutrons
- 1938** Awarded Nobel Prize for Physics
- 1939** Escapes Europe and moves to the U.S.
- 1942** Achieves man-made nuclear chain reaction
- 1949** Argues against development of the H-bomb
- DIED** 1954 in Chicago



Fermi, front left, reunites with Manhattan Project scientists at the University of Chicago sixteen months after Hiroshima and Nagasaki.

The Pope and his team almost found nuclear fission in 1934 in the course of experiments in which, looking for radioactive transformations, they systematically bombarded one element after another with the newly discovered neutron. They missed by the thickness of the sheet of foil in which they wrapped their uranium sample; the foil blocked the fission fragments that their instruments would otherwise have recorded. It was a blessing in disguise. If fission had come to light in the mid-1930s, while the democracies still slept, Nazi Germany would have won a long lead toward building an atom bomb. In compensation, Fermi made the most important discovery of his life, that slowing neutrons by passing them through a light-element “moderator” such as paraffin increased their effectiveness, a finding that would allow releasing nuclear energy in a reactor.

If Hitler had not hounded Jewish scientists out of Europe, the Anglo-American atom bomb program sparked by the discovery of fission late in 1938 would have found itself shorthanded. Most Allied physicists had already been put to work developing radar and the proximity fuse, inventions of more immediate value. Fermi and his fellow émigrés—Hungarians Leo Szilard. Eugene Wigner. John von Neumann, and Edward Teller, German Hans Bethe—formed the heart of the bomb squad. In 1939, still officially enemy aliens, Fermi and Szilard co-invented the nuclear reactor at Columbia University, sketching out a three-dimensional lattice of uranium slugs dropped into holes in black, greasy blocks of graphite moderator, with sliding neutron-absorbing cadmium control rods to regulate the chain reaction. Fermi, still mastering English, dubbed this elegantly simple machine a “pile.”

The work moved to the University of Chicago when the Manhattan Project consolidated its operations there, culminating in the assembly of the first full-scale pile, CP-1, on a doubles squash court under the stands of the university football field in late 1942. Built up in layers inside wooden framing, it took the shape of a doorknob the size of a two-car garage—a flattened graphite ellipsoid twenty-five feet wide and twenty feet high, weighing nearly one hundred tons. December 2 dawned to below-zero cold. That morning the State Department announced that two million Jews had perished in Europe and five million more were in danger; American boys and Japanese were dying at

Guadalcanal. It was cold inside the squash court, and the crowd of scientists who assembled on the balcony kept on their overcoats.

Fermi proceeded imperturbably through the experiment, confident of the estimates he had charted with his pocket slide rule. At 11:30 A.M., as was his custom, he stopped for lunch. The pile went critical in mid-afternoon with the full withdrawal of the control rods, and Fermi allowed himself a grin. He had proved the science of a chain reaction in uranium; from then on, building a bomb was mere engineering. He shut the pile down after twenty-eight minutes of operation. Wigner had thought to buy a celebratory fiasco of Chianti, which supplied a toast. "For some time we had known that we were about to unlock a giant," Wigner would write. "Still, we could not escape an eerie feeling when we knew we had actually done it."

From that first small pile grew production reactors that bred plutonium for the first atom bombs. Moving to Los Alamos in 1944, Fermi was on hand in the New Mexican desert for the first test of the brutal new weapon in July 1945. He estimated its explosive yield with a characteristically simple experiment, dropping scraps of paper in the predawn stillness and again when the blast wind arrived and comparing their displacement.

Fermi died prematurely of stomach cancer in Chicago in 1954. He had argued against U.S. development of the hydrogen bomb when that project was debated in 1949, calling it "a weapon which in practical effect is almost one of genocide." His counsel went unheeded, and the U.S.-Soviet arms race that ensued put the world at mortal risk. But the discovery of how to release nuclear energy, in which he played so crucial a part, had long-term beneficial results: the development of an essentially unlimited new source of energy and the forestalling, perhaps permanently, of world-scale war.



# Walt Disney



HE CREATED MICKEY MOUSE AND PRODUCED THE FIRST full-length animated movie. He invented the theme park and originated the modern multimedia corporation. For better or worse, his innovations have shaped our world and the way we experience it. But the most significant thing Walt Disney made was a good name for himself.

*by Richard Schickel*

It was, of course, long ago converted into a brand name, constantly fussed over, ferociously defended, first by Disney, latterly by his corporate heirs and assigns. Serving as a beacon for parents seeking clean, decent entertainment for their children, the Disney logo—a stylized version of the founder's signature—more generally promises us that anything appearing beneath it will not veer too far from the safe, sound, and above all cheerful American mainstream, which it defines as much as serves.

That logo also now identifies an institution whose \$23 billion in annual revenues make it one of the world's largest media companies. It purveys many products that would have been unimaginable to its founder, a few of which (the odd TV show, the occasional R movie) might even have been anathema to him. Not that one sees him pondering long over such trifles, as his company fulfills the great commercial destiny this complex and darkly driven man always dreamed for it.

The notion of Walt Disney as a less than cheerful soul will ring disturbingly in the minds of older Americans taught by years of relentless publicity to think of Disney as “a quiet, pleasant man you might not look twice at on the street,” to quote an old corporate promotional piece—a man whose modest mission was simply “to bring happiness to the millions.” Going along with the gag, he implied that the task was easy for him because he always whistled while he worked: “I don't have depressed moods. I'm happy, just very, very happy.”

Sure. You bet. It sounded plausible, for if anyone seemed entitled to late-in-life contentment it was Walt Disney. Did not his success validate the most basic of American dreams? Had he not built the better mouse and had the world not beaten a path to his door, just as that cherished myth promised? Did he not deploy his fame and fortune in exemplary fashion, playing the kindly, story-spinning, magic-making uncle to the world? No entrepreneurial triumph of its day has ever been less resented or feared by the public. Henry Ford should have been so lucky. Bill Gates should get so lucky.

The truth about Disney, who was described by an observant writer as “a tall, somber man who appeared to be under the lash of some private demon,” is slightly less benign and a lot more interesting. Uncle Walt actually didn't have an avuncular bone in his body. Though he could manage a sort of gruff amiability with strangers, his was, in



The theme park was Disney's masterwork. No detail escaped his attention.



If Disney kept close tabs on his creations, he had a reason: his first cartoon character was stolen from him.

artist in Kansas City, Missouri. There he discovered animation, a new field, wide open to an ambitious young man determined to escape his father's sorry fate.

Animation was as well a form that placed a premium on technical problem solving, which was absorbing but not emotionally demanding. Best of all, an animated cartoon constituted a little world all its own—something that, unlike life, a man could utterly control. “If he didn’t like an actor, he could just tear him up,” an envious Alfred Hitchcock would later remark.

Reduced to living in his studio and eating cold beans out of a can, Disney endured the hard times any worthwhile success story demands. It was not until he moved to Los Angeles and partnered with his shrewd and kindly older brother, Roy, who took care of business for him, that he began to prosper modestly. Even so, his first commercially viable creation, Oswald the Rabbit, was stolen from him. That, naturally, reinforced his impulse to control. It also opened the way for the mouse that soared. Cocky, and in his earliest incarnations sometimes cruelly mischievous but always an inventive problem-solver, Mickey would become a symbol of the unconquerably chipper American spirit in the depths of the Depression.

Mickey owed a lot of his initial success, however, to Disney’s technological acuity. For Disney was the first to add a music and effects track to a cartoon, and that, coupled with anarchically inventive animation, wowed audiences, especially in the early days of sound, when live-action films were hobbled to immobile microphones.

fact, a withdrawn, suspicious, and, above all, controlling nature. And with good—or anyway explicable—reason.

For he was born to a poverty even more dire emotionally than it was economically. His father, Elias, was one of those feckless figures who wandered the heartland at the turn of the century seeking success in many occupations but always finding sour failure. He spared his children affection, but never the rod. They all fled him at the earliest possible moment.

Before leaving home at sixteen to join the Red Cross Ambulance Corps during World War I, Walt, the youngest son, had discovered he could escape dad’s—and life’s—meanness in art classes. In the service he kept drawing, and when he was mustered out, he set up shop as a commercial

Artistically, the 1930s were Disney's best years. He embraced Technicolor as readily as he had sound, and, though he was a poor animator, he proved to be a first-class gag man and story editor, a sometimes collegial, sometimes bullying, but always hands-on boss, driving his growing team of youthfully enthusiastic artists to ever greater sophistication of technique and expression. When Disney risked everything on his first feature, *Snow White and the Seven Dwarfs*, it turned out to be no risk at all, so breathlessly was his work embraced. Even the intellectual and artistic communities saw in it a kind of populist authenticity—naive and sentimental, courageous and life-affirming.

But they misread Disney. In his dark and brilliant *Pinocchio* and the hugely ambitious *Fantasia*, he would stretch technique to the limits. But the latter film, rich as it was in unforgettable animation, is also full of banalities. It exposed the fact that, as film historian David Thomson says, "his prettiness had no core or heart."

Artistically he strove for realism; intellectually, for a bland celebration of tradition. There had been an Edenic moment in his childhood when the Disneys settled on a farm outside little Marceline, Missouri, and he used his work to celebrate the uncomplicated sweetness of the small-town life and values he had only briefly tasted.

His insistence on the upbeat also possibly served as an anodyne for the bitterness he felt when an ugly 1941 labor dispute ended his dream of managing his studio on a communitarian basis with himself as its benign patriarch.

Commercially, this worked out beautifully for him. Most people prefer their entertainments to embrace the comfortably cute rather than the disturbingly acute—especially when they're bringing the kids. Movie critics started ignoring him, and social critics began hectoring him, because his work ground off the rough, emotionally instructive edges of the folk- and fairy-tale tradition on which it largely drew, robbing it of "the pulse of life under the skin of events," as one critic put it.

Disney didn't give a mouse's tail about all that. As far as he was concerned, the whole vexing issue of content was solved, and though he enjoyed being a hero to the culturally conservative, he was free to focus on what had always mattered most to him, which was not old pieties but new technologies.

Predictably, he became the first Hollywood mogul to embrace television. The show with him as host for over a decade became not just a profit center for his company but also a promotional engine for all its works. These included chuckleheaded live-action comedies, nature documentaries that relentlessly anthropomorphized their subjects, and, of course, Disneyland, which attracted his compulsive attention in the 1950s and 1960s.



The Disney studio staff of 1926 included child actress Margie Gay, who played a live Alice in *Cartoonland*.



Disney didn't sing, but he called the tune. With Nelson Eddy on the set of *Make Mine Music*.

Disneyland was another bet-the-farm risk, and Disney threw himself obsessively into the park's design, which anticipated many of the best features of modern urban planning, and into the "imagining" by which the simulacrum of exotic, even dangerous creatures, places, fantasies could be unthreateningly reproduced.

These attractions were better than any movie in his eyes—three dimensional and without narrative problems. They were, indeed, better than life, for they offered false but momentarily thrilling experiences in a sterile, totally controlled environment from which dirt, rudeness, mischance (and anything approaching authentic emotion) had been totally eliminated. All his other enterprises had to be delivered into the possibly uncomprehending world. When

Disneyland opened in 1955, that changed: he now had his own small world, which people had to experience on his terms.

Before he was felled by cancer at sixty-five, it is possible to imagine that he was happy. He had at last devised a machine with which he could endlessly tinker. The little boy, envious of the placid small-town life from which he was shut out, had become mayor—no, absolute dictator—of a land where he could impose his ideals on everyone. The restless, hungry young entrepreneur had achieved undreamed of wealth, power, and honor. Asked late in life what he was proudest of, he did not mention smiling children or the promulgation of family values. "The whole damn thing," he snapped, "the fact that I was able to build an organization and hold it." These were not the sentiments of anyone's uncle—except perhaps Scrooge McDuck. And their consequences—many of them unintended and often enough unexplored—persist, subtly but surely affecting the ways we all live, think, and dream.

#### BRIEF BIOGRAPHY

**BORN** December 5, 1901, in Chicago

**1923** Opens cartoon studio in Hollywood

**1928** Launches Mickey Mouse, an instant sensation, in the first talking cartoon

**1932** Wins first of a record thirty-two personal Oscars

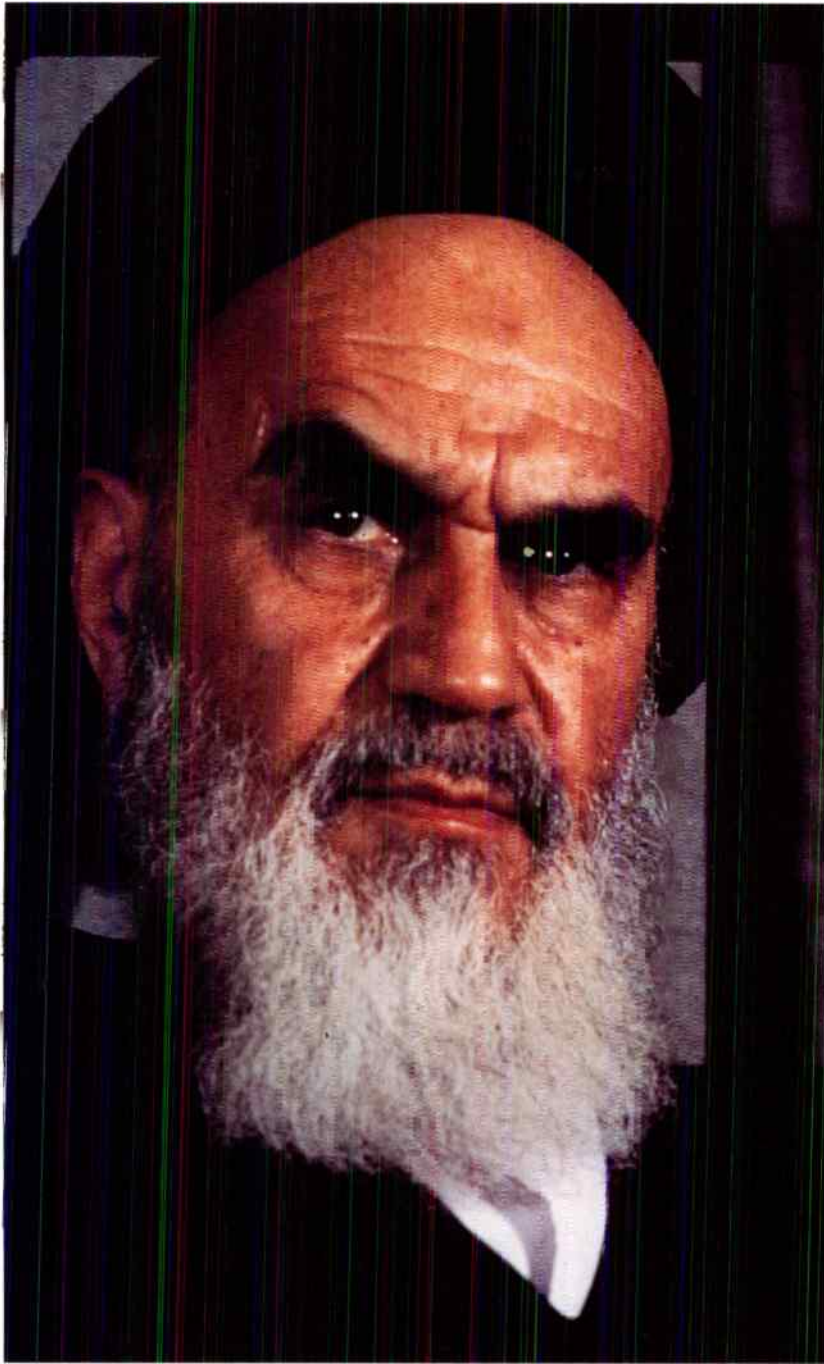
**1937** Premieres *Snow White*, first full-length animated film

**1955** Opens Disneyland

**1964** Conceives EPCOT, which opens in Orlando, Florida, in 1982

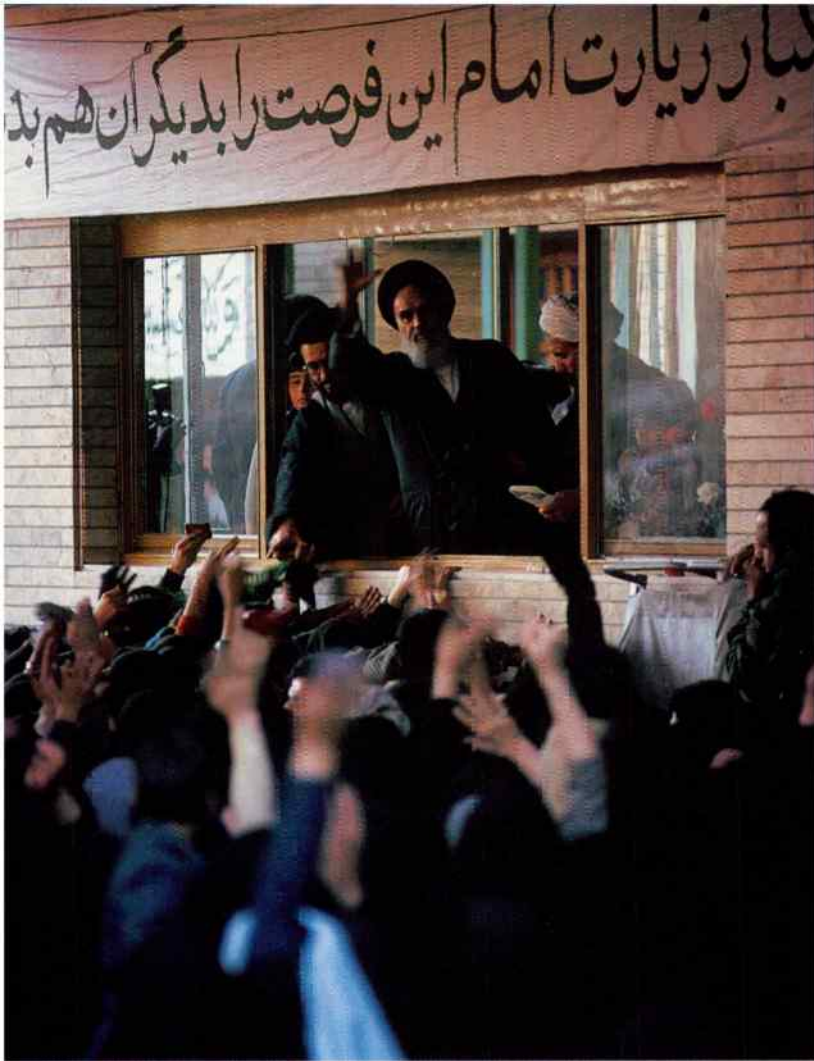
**DIED** 1966 in Los Angeles

# Ayatullah Ruhollah Khomeini



TO WESTERNERS, HIS HOODED EYES AND SEVERE DEMEANOR, his unkempt gray beard, and his black turban and robes conveyed an avenger's wrath. The image is the man.

*by Milton Viorst*



Khomeini greets his followers after his triumphant return to Tehran in 1979.

the West at its own game of building strong secular states. Khomeini's strategy was to reject Western ways, keeping Iran close to its Islamic roots.

Some ask, focusing on this strategy, whether Khomeini was riding a popular wave in global affairs. In the late twentieth century, Muslims were not alone in organizing to restore religious belief to government. Christians in America, Jews in Israel, even Hindus in India were promoting the same end. As a revolutionary, Khomeini sought to bring down not just the Shah's Western-oriented state but also the secular *weltanschauung* that stood behind it. Did Khomeini's triumph augur an intellectual shift of global magnitude?

While historians ponder this question, it is enough to say that Khomeini presided brilliantly over the overthrow of a wounded regime. He was merciless and cunning. His well-advertised piety complemented a prodigious skill in grasping and shaping Iran's complex politics. Most important, he knew how to exploit the feelings of nationalist resentment that characterized his time.

Ruhollah Khomeini—his given name means “inspired of God”—was born to a

family of Shi'ite scholars in a village near Tehran in 1902. Shi'ism, a minority sect in Islam, is Iran's official religion. Like his father, he moved from theological studies to a career as an Islamic jurist. Throughout his life, he was acclaimed for the depth of his religious learning.

As a young seminary teacher, Khomeini was no activist. From the 1920s to the 1940s, he watched passively as Reza Shah, a monarch who took Ataturk as his model, promoted secularization and narrowed clerical powers. Similarly, Khomeini was detached from the great crisis of the 1950s in which Reza Shah's son Mohammed Reza Pahlavi turned to America to save himself from demonstrators on Tehran's streets who were clamoring for democratic reform.

Khomeini was then the disciple of Iran's preeminent cleric, Ayatullah Mohammed Boroujerdi, a defender of the tradition of clerical deference to established power. But in 1962, after Boroujerdi's death, Khomeini revealed his long-hidden wrath and acquired a substantial following as a sharp-tongued antagonist of the Shah.

Khomeini was clearly at home with populist demagoguery. He taunted the Shah for his ties with Israel, warning that the Jews were seeking to take over Iran. He denounced as non-Islamic a bill to grant the vote to women. He called a proposal to permit American servicemen based in Iran to be tried in U.S. military courts "a document for Iran's enslavement." In 1964 he was banished by the Shah to Turkey, then was permitted to relocate in the Shi'ite holy city of An Najaf in Iraq. But the Shah erred in thinking Khomeini would be forgotten. In An Najaf, he received Iranians of every station and sent home tape cassettes of sermons to be peddled in the bazaars. In exile, Khomeini became the acknowledged leader of the opposition.

In An Najaf, Khomeini also shaped a revolutionary doctrine. Shi'ism, historically, demanded of the state only that it keep itself open to clerical guidance. Though relations between clergy and state were often tense, they were rarely belligerent. Khomeini, condemning the Shah's servility to America and his secularism, deviated from accepted tenets to attack the regime's legitimacy, calling for a clerical state, which had no Islamic precedent.

In late 1978 huge street demonstrations calling for the Shah's abdication ignited the government's implosion. Students, the middle class, bazaar merchants, workers, the army—the pillars of society—successively abandoned the regime. The Shah had nowhere to turn for help but to Washington. Yet the more he did, the more isolated he became. In January 1979 he fled to the West. Two weeks later, Khomeini returned home in triumph.

Popularly acclaimed as leader, Khomeini set out to confirm his authority and lay



A woman grieves at the Ayatullah's 1989 funeral.



the groundwork for a clerical state. With revolutionary fervor riding high, armed vigilante bands and kangaroo courts made bloody work of the Shah's last partisans. Khomeini canceled an experiment with parliamentarism and ordered an Assembly of Experts to draft an Islamic constitution. Overriding reservations from the Shi'ite hierarchy, the delegates designed a state that Khomeini would command and the clergy would run, enforcing religious law. In November, Khomeini partisans, with anti-American passions still rising, seized the U.S. embassy and held fifty-two hostages.

Over the remaining decade of his life, Khomeini consolidated his rule. Proving himself as ruthless as the Shah had been, he had thousands killed while stamping out a rebellion of the secular left. He stacked the state bureaucracies with faithful clerics and drenched the schools and the media with his personal doctrines. After purging the military and security services, he rebuilt them to ensure their loyalty to the clerical state.

Khomeini also launched a campaign to "export"—the term was his—the revolution to surrounding Muslim countries. His provocations of Iraq in 1980 helped start a war that lasted eight years, at the cost of a million lives, and that ended only after America intervened to sink several Iranian warships in the Persian Gulf. Iranians asked whether God had revoked his blessing of the revolution. Khomeini described the defeat as "more deadly than taking poison."

To rally his demoralized supporters, he issued the celebrated fatwa condemning to death the writer Salman Rushdie for heresies contained in his novel *The Satanic Verses*. Though born a Muslim, Rushdie was not a Shi'ite; a British subject, he had no ties to Iran. The fatwa, an audacious claim of authority over Muslims everywhere, was the revolution's ultimate export. Khomeini died a few months later. But the fatwa lived on, a source of bitterness—as he intended it to be—between Iran and the West.

Beside the fatwa, what is Khomeini's legacy? The revolution, no longer at risk, still revels in having repeatedly, with impunity, defied the American Satan. The Islamic state was proof to the faithful—as the Soviet Union was to generations of communists—that the Western system need not be a universal model.

Yet Khomeini rejected a parallel between his doctrines and the fundamentalism propounded by other Muslim dissidents. He never described himself as fundamentalist. He often said that Islam is not for fourteen centuries ago in Arabia but for all time.

Since Khomeini's death, the popular appeal of an Islamic state—and of fundamentalism—has surely dimmed. Thinkers still debate and warriors kill, but no country seems prepared to emulate Iran. Perhaps revolutions happen only under majestic leaders, and no one like Khomeini has since appeared.

## BRIEF BIOGRAPHY

**BORN** 1902 in Khomein, Iran

**1964–78** Is exiled to Iraq for criticizing the Shah and sparking riots; evicted by Saddam Hussein, he moves to a Paris suburb

**1979** Returns to Tehran, is acclaimed as leader of Iran's revolution

**1979–81** His followers hold fifty-two Americans captive in the U.S. embassy in Tehran

**1989** In February, he demands the death of Salman Rushdie

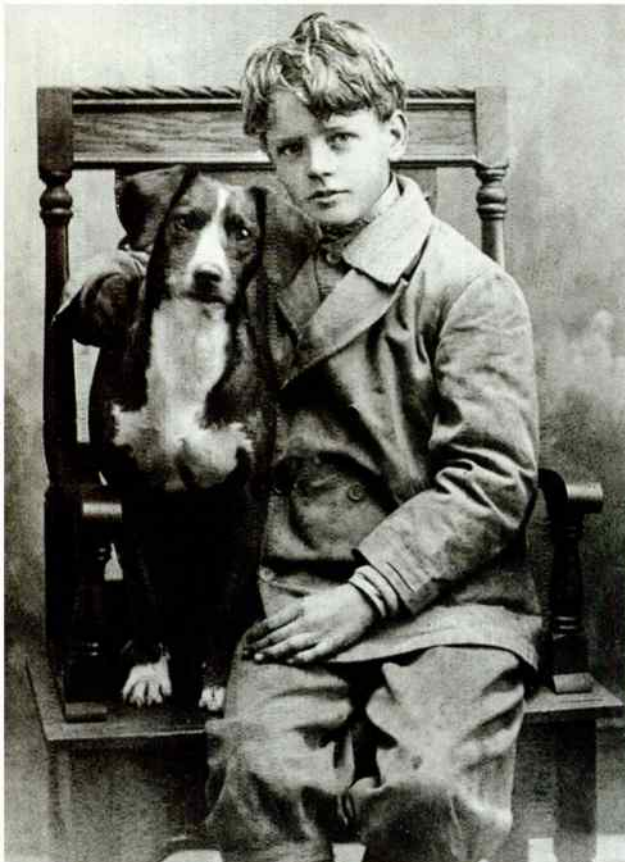
**DIED** June 1989 in Tehran



# Charles Lindbergh

I WAS THE YOUNGEST OF FOUR BROTHERS AND TWO SISTERS and grew up during the second half of my father's life, when the early years of triumph, tragedy, and controversy were over. I felt no personal familiarity with the famous 1927 flight, and if I asked my father about that accomplishment, he would say only, "Read my book!"

*by Reeve Lindbergh*



Lindbergh, age 11, with his dog, Dingo.

He wrote this passage on the flight: “Now I’ve burned the last bridge behind me. All through the storm and darkest night, my instincts were anchored to the continent of North America, as though an invisible cord still tied me to its coasts. In an emergency—if the ice-filled clouds had merged, if oil pressure had begun to drop, if a cylinder had started missing—I would have turned back toward America and home. Now, my anchor is in Europe: on a continent I’ve never seen. . . . Now, I’ll never think of turning back.”

Sometimes, though, I wonder whether he would have turned back if he’d known the life he was headed for.

My father Charles Lindbergh became an American hero when he was twenty-five years old. After he made the first nonstop solo flight from New York to Paris in 1927, in a tiny silver monoplane called *Spirit of St. Louis*, his very existence took on the quality of myth. Overwhelming, overnight celebrity followed him home from Paris to the U.S. and around the nation on his tour promoting aviation. Fame followed him on his goodwill tour to Mexico late in 1927, where he met the

U.S. ambassador’s daughter Anne Morrow, who married him in 1929. They traveled all over the world as pioneer aviator-explorers, mapping air routes for the fledgling airline industry. Together they navigated by the stars and

watched the great surfaces of the earth revealed beneath their wings: desert and forest and jungle and tundra, wild rivers and wide-open oceans. Land, sea, and air: all of it seemed to be endless; all of it seemed to be theirs.

On the ground, my parents were dogged by the media, and they believed the excesses of the press were responsible for the kidnapping and death of their first son, Charles, in 1932. They withdrew to Europe to protect the children born after the tragedy, and returned to the U.S. just before World War II. My father then joined the isolationist America First movement, becoming a leader in the effort to keep the U.S. from entering what was seen by many Americans as a European war.

At odds with President Roosevelt and the interventionists, my father was branded a traitor, a Copperhead, and even a Nazi. When he traveled to

#### BRIEF BIOGRAPHY

- BORN** February 4, 1902, in Detroit
- 1923** First solo flight
- 1926** Hired as airmail pilot
- 1927** Flies *Spirit of St. Louis* alone across the Atlantic
- 1932** His son Charles is kidnapped and found dead
- 1935** Bruno Hauptmann is convicted of the murder
- 1941** Resigns Air Corps commission, then is denied reinstatement after U.S. enters World War II
- 1954** Memoir of famous flight wins Pulitzer Prize
- DIED** August 26, 1974, in Maui, Hawaii



Germany to review German airpower at the request of the American military attaché in Berlin, he was given a medal by his Nazi hosts and later ignored public appeals to repudiate and return it. (He had in fact sent it to a museum, as he did other awards he received throughout his life.) Finally, and disastrously, my father made a speech in Des Moines, Iowa, in 1941, identifying as the three groups unwisely advocating U.S. entry into the war “the British, the Roosevelt administration, and the Jews.”

After his historic flight to Paris, 150,000 greet Lindbergh on a London stop.

I was virtually unaware of my father’s prewar isolationism until I went to college and was shocked to learn that he was considered anti-Semitic. I had never thought of him this way. He never spoke with hatred or resentment against any groups or individuals, and in social discourse he was unfailingly courteous, compassionate, and fair. In the 1941 speech, however, I could read a chilling distinction in his mind between Jews and other Americans. This was something I did not recognize in the father I knew, something I had been taught to condemn under the heading “discrimination,” something from another time.

The U.S. entered the war, and one hero’s tarnished reputation did not mean much in the context of the unspeakable horror of the Holocaust or the wartime destruction visited upon the world. My father released a statement saying “Now [war] has come and we must meet it as united Americans.” He was denied an army commission, but found work as an adviser to Henry Ford, building warplanes at Willow Run, and a civilian consultant to fighter pilots in the Pacific. By 1945, the year I was born, my parents were trying to leave the past behind them, and they bought a house in Connecticut to raise their



Anne Morrow  
Lindbergh, with her  
ill-fated son Charles Jr.

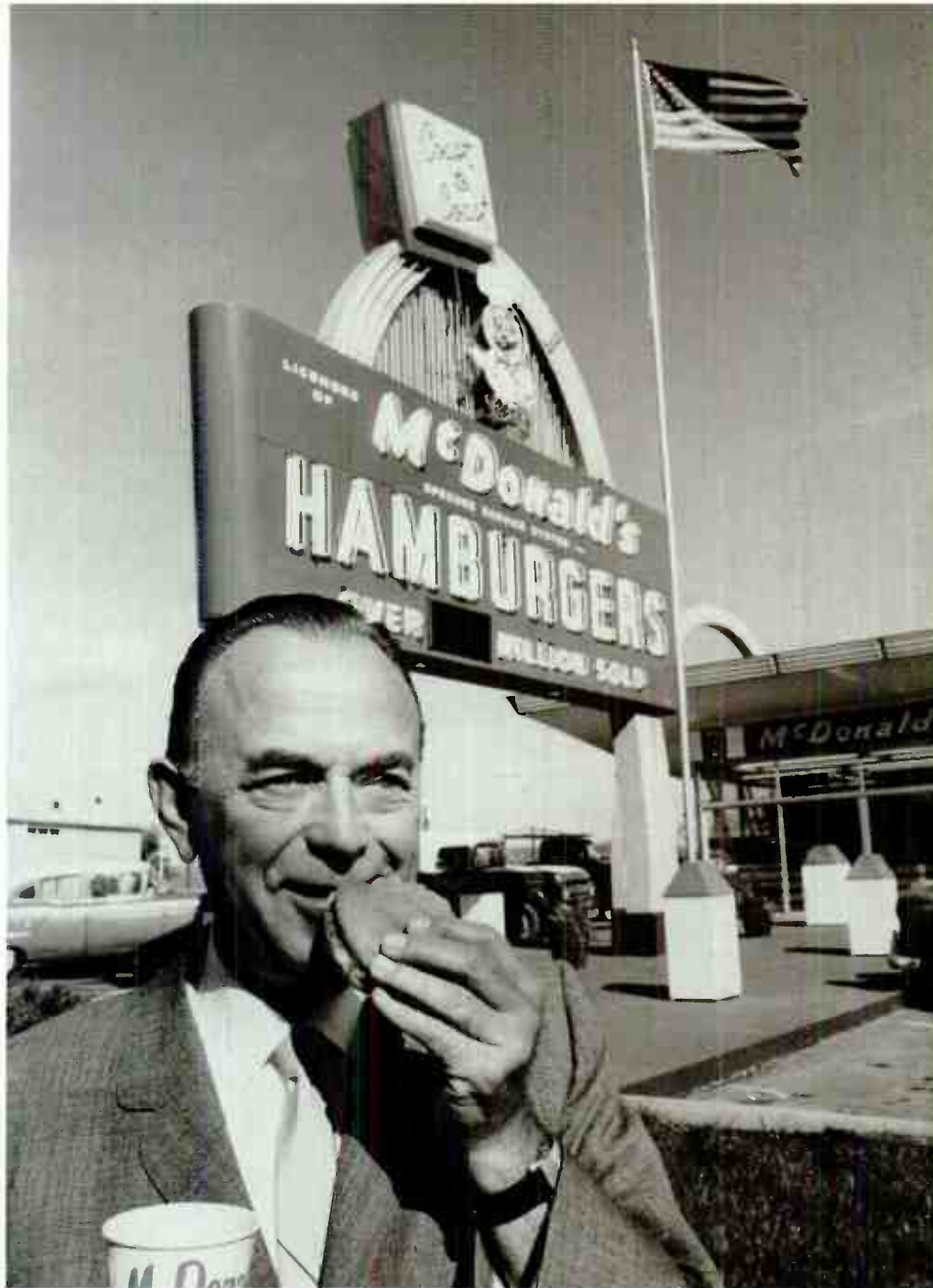
family in peace and privacy. I never knew my brother Charles, but I felt the effect of his loss in the studied privacy and anonymity of our Connecticut suburb, with its shaded streets and unmarked mailboxes.

I am touched by the enormity of my father's accomplishment in its effect upon both those who witnessed it and those whom it inspired. People still tell me exactly where they were standing when they heard the news of his landing in Paris. Generations of pilots still talk of his influence upon their careers. I am moved again by people

who remember the kidnapping and death of my brother, recalling their own fears as children or their compassion for my parents' loss. I have talked to prewar isolationists too, who defend my father's political position as an honorable one, even while feeling the distress I have felt about some of his speeches and writings.

He almost never talked to me about the past, because he lived so intensely in the present, never turning back. He did talk a great deal about newer concerns, chief among them the urgent need for balance between technological advancement and environmental preservation. When I knew him best, late in his life, he was flying around the world again, as he had done in the early days, but this time on behalf of endangered species, wild places, and vanishing tribal peoples. He believed the aviation technology he loved was partly responsible for the devastation of modern warfare and the degradation of the natural environment. "If I had to choose," he said, "I would rather have birds than airplanes," and he worked to promote an ethic in which birds and planes could continue to coexist.

My father was born with this century, grew up with it, and experienced both its adventures and its excesses as few other human beings have done. He came of age with his country and his era and reflected both in many ways—not all of them, perhaps, entirely heroic. Yet my father, through intense public and private struggle, acquired over time a kind of reflective wisdom that took him far beyond his early fame. His journey through this century may have made him a greater hero in his quiet final years than he was in the tumultuous, triumphant days of 1927.



# Ray Kroc

AMONG THE ARMY OF BURGER FLIPPERS AT WORK across America in the 1960s was a French chef putting his training to use at Howard Johnson's on Queens Boulevard in New York City. I worked for HoJo's from the summer of 1960 to the spring of 1970, doing my American apprenticeship, learning about mass production and marketing. The company had

*by Jacques Pépin*



Clean lines, a core value for Kroc, right, sold billions of burgers.

been started in 1925 in Massachusetts by Howard Deering Johnson, and by the mid-1960s its sales exceeded that of Burger King, Kentucky Fried Chicken, and McDonald's combined. There would be more than one thousand Howard Johnson restaurants and five hundred motor lodges. Yet after Johnson's death in 1972, the company lost its *raison d'être*. The restaurants became obsolete; the food quality deteriorated. You underestimate the clientele at your peril. The late restaurateur Joe Baum used to say, "There is no victory over a customer."

As the Howard Johnson Co. went to pieces, Ray Kroc's obsession with Quality, Service, Cleanliness, and Value—the unwavering mission of McDonald's—was gathering momentum. Kroc was adroit and perceptive in identifying popular trends. He sensed that America was a nation of people who ate out, as opposed to the Old World tradition of eating at home. Yet he also knew that people here wanted something different. Instead of a structured, ritualistic restaurant with codes and routine, he gave them a simple, casual, and identifiable restaurant with friendly service, low prices, no waiting, and no reservations. The system eulogized the sandwich—no tableware to wash. One goes to McDonald's to eat, not to dine.

Kroc gave people what they wanted or, maybe, what he wanted. As he said, "The definition of salesmanship is the gentle art of letting the customer have it your way." He would remain the ultimate salesman, serving as a chairman of McDonald's Corp., the largest restaurant company in the world, from 1968 until his death in 1984.

In 1917, Ray Kroc was a brash fifteen-year-old who lied about his age to join the Red Cross as an ambulance driver. Sent to Connecticut for training, he never left for Europe because the war ended. So the teen had to find work, which he did, first as a piano player and then, in 1922, as a salesman for the Lily Tulip Cup Co.

Although he sold paper cups by day and played the piano for a radio station at night, Kroc's ears were better tuned to the rhythms of commerce. In the course of selling paper cups he encountered Earl Prince, who had invented a five-spindle multi-mixer and was buying Lily cups by the truckload. Fascinated by the speed and efficiency of the

#### BRIEF BIOGRAPHY

**BORN** October 5, 1902, in Oak Park, Illinois

**1922** Begins work as a salesman for Lily Tulip Cup Co.; moonlights as a piano player

**1955** Opens his first McDonald's unit in Des Plaines, Illinois

**1961** Buys out the McDonald brothers for \$2.7 million

**1968** The company opens its one thousandth restaurant

**1971** McDonald's opens in Europe and Australia

**DIED** January 14, 1984, in San Diego

machine, Kroc obtained exclusive marketing rights from Prince. Indefatigable, for the next seventeen years he crisscrossed the country peddling the mixer.

On his travels he picked up the beat of a remarkable restaurant in San Bernardino, California, owned by two brothers, Dick and Mac McDonald, who had ordered eight mixers and had them churning away all day. Kroc saw the restaurant in 1954 and was entranced by the effectiveness of the operation. It was a hamburger restaurant, though not of the drive-in variety popular at the time. People had to get out of their cars to be served. The brothers had produced a very limited menu, concentrating on just a few items: hamburgers, cheeseburgers, french fries, soft drinks, and milk shakes, all at the lowest possible prices.

Kroc, ever the instigator, started thinking about building McDonald's stores all over the U.S.—each of them equipped with eight multimixers whirring away, spinning off a steady stream of cash. The following day he pitched the idea of opening several restaurants to the brothers. They asked, "Who could we get to open them for us?" Kroc was ready: "Well, what about me?"

The would-be Great War veteran would grow rich serving the children of World War II vets. His confidence in what he had seen was unshakable. As he noted later, "I was fifty-two years old. I had diabetes and incipient arthritis. I had lost my gall bladder and most of my thyroid gland in earlier campaigns, but I was convinced that the best was ahead of me." He was even more convinced than the McDonalds and eventually cajoled them into selling out to him in 1961 for a paltry \$2.7 million.

He was now free to run the business his own way, but he never changed the fundamental format that had been devised by the brothers. Kroc added his own wrinkles, certainly. He was a demon for cleanliness. From the overall appearance, to the parking lot, to the kitchen floor, to the uniforms, cleanliness was foremost and essential. "If you have time to lean, you have time to clean," was one of his favorite axioms. He was dead-on, of course. The first impression you get from a restaurant, through the eyes and nose, is often what determines whether you'll go back.

By 1963 more than one billion hamburgers had been sold, a statistic that was displayed on a neon sign in front of each restaurant. That same year, the five hundredth McDonald's restaurant opened and the famous clown, Ronald McDonald, made his debut. He soon became known to children throughout the country, and kids were criti-



His system went round the globe: a McDonald's in Beijing.





Kroc discovered  
McDonald's while  
selling mixers.

to turn against the company, especially after Kroc died in 1984. People looked at uniformity as boring, insipid, and controlling, the Golden Arches as a symbol of junk food pollution. Franchisees began to feel increasingly alienated from top management, especially in its aggressive expansion policies.

Ironically, no adjustments are needed outside the U.S. With restaurants in more than 114 countries, McDonald's still represents Americana. When I return to France, my niece's children, who are wild about what they call "Macdo," clamor to go there. It has a somewhat snobbish appeal for the young, who are enamored of the American lifestyle.

Still, it's likely Ray Kroc would have moved on to something else if he had found a better idea. Even after McDonald's was well established, Kroc still tried, often with dismal results, to move forward with upscale hamburger restaurants, German-tavern restaurants, pie shops, and even theme parks, like Disneyland. He always had a keen sense of the power of novelty and a strong belief in himself and his vision.

Like many of America's great entrepreneurs, Kroc was not a creator—convenience food already existed in many forms, from Howard Johnson's to White Castle—but he had the cunning ability to grasp a concept with all its complexities and implement it in the best possible way. And that's as American as a cheeseburger.

# The Leakey Family



LOUIS LEAKEY'S ENTHUSIASM FOR AFRICA and the search for earliest man were infectious. Speaking before a packed lecture hall in his staccato-like voice, punctuated by rapid inhales, he cast a spell, making each listener believe he was speaking only to him or her. His following

*by Donald C. Johanson*



Louis and Mary show off the skull and upper jaw of *Zinjanthropus*, which they nicknamed "Dear Boy."

in America was cultlike. Consumed with devotion and swept up in his charisma, many developed a desire to follow somehow in his footsteps, to please him.

No wonder Leakey became the patriarch of a family that dominated anthropology as no family has dominated a scientific field before or since. Not only did Louis, his wife, Mary, and their second son, Richard, make the key discoveries that shaped our understanding of human origins, but they also inspired a generation of researchers (myself included) to pick up where they left off.

I recall with great fondness my first visit to Nairobi in 1970 when Louis ceremoniously led me to the room housing the crown jewels of human evolution. Every fossil took on a mythical cast as he waxed eloquent about how it revealed some magic moment of our origins. Here he was, the grand master, sharing his passion, knowledge, and intuition with a new disciple. He was often like that: generous, open, supportive, always trying to win new converts to his way of working, his way of interpreting the past.

Born in Kenya of English missionaries, Louis was initiated by tribal elders into the native Kikuyu society. As a young man he was adventurous, impulsive, driven, ruggedly handsome, and romantically African. Fresh out of Cambridge, Louis set out to prove Darwin's theory that Africa was humankind's homeland—and to discover evidence for his own belief that true man, *Homo*, had a very ancient origin.

In 1933, when Louis met and fell in love with twenty-year-old Mary Nicol, he already had a family, but in flagrant disregard of the social norms of the time, he divorced. The synergy of Louis and Mary's union was obvious from the outset. In contrast to Louis's charming, gregarious, outgoing nature, Mary was shy, reserved, socially uncomfortable, and, in her own words, not very fond of other people. Mary preferred to carefully evaluate scientific evidence before reaching any conclusions; Louis, on the other hand, was often impulsive and cavalier in his proclamations. Rigorous in her approach, intensely focused, and remarkably diligent, Mary quickly set new standards in the study of African prehistory, culminating in her stunning monographs on the archaeology of Olduvai Gorge.

It was Mary's 1959 discovery of the *Zinjanthropus* cranium at Olduvai that captured worldwide attention and made the Leakeys a household name. Building on this find, Louis and Mary attracted a multidisciplinary team of specialists to work at Olduvai and launched the modern science of paleoanthropology, the study of human origins.

It was then, after decades of the Leakeys working in isolation and operating on shoestring budgets, that the National Geographic Society agreed to support and promote

the “Leakey legacy.” Louis was, for Geographic, everything it could have wished for in an African adventurer. He was the self-proclaimed white African.

Following the success of *Zinjanthropus*, Louis began spending less and less time at Olduvai, which became Mary’s domain. For most of the next twenty-five years she worked and lived there with her staff, her dogs, and selected visitors. Until his death in 1972, Louis visited occasionally but spent most of his time traveling around the world, lecturing and raising funds to support an ever expanding list of research projects. Most notable were the field studies he launched of the living great apes: Jane Goodall’s chimps, Dian Fossey’s gorillas, and Biruté Galdikas’s orangs.

In 1978 Mary made what may have been her greatest find. Her team was reexploring a site in Tanzania called Laetoli—forty years after Louis had incorrectly assumed that the absence of tools there implied that hominid fossils would not be found—when they discovered a trail of remarkably clear ancient hominid footprints impressed and preserved in volcanic ash. It was a stunning glimpse of the world 3.6 million years ago. If only Louis had lived to see it.

A detailed scientific study of the Laetoli hominid fossils confirmed that they belonged to a new hominid species, best represented by the 3.2 million-year-old Lucy skeleton I had discovered four years earlier at Hadar, Ethiopia. When I presented these findings in May 1978 at a Nobel symposium in Sweden, Mary had already agreed to be one of the co-authors on the scientific paper defining the new species, *Australopithecus afarensis*. A few months later, however, when the paper was being printed, she cabled me demanding removal of her name. I respected her wishes and had the title page redone. Like Louis, she did not believe *Australopithecus* was our ancestor; if her finds at Laetoli were our ancestors, they had to be *Homo*.

It was a blustery, wintry afternoon in 1970 at the University of Chicago when I first met Louis and Mary’s son Richard. He had just completed a preliminary presentation on his new finds from Lake Turkana (then Lake Rudolf). I told him I would be in Nairobi the next summer and wanted to see his exciting hominid fossils. A year younger than I, he had chosen, after becoming disenchanted with the safari business, to follow in his parents’ footsteps. It appeared that he too possessed the “Leakey luck” and was well on the way to stardom in paleoanthropology.

Our first meeting in Nairobi was cordial, and Richard dazzled me with remarkable specimens; a friendship was simmering. Beginning preparations for my research in Ethiopia’s Afar region, I was a frequent visitor to Nairobi, and Richard offered suggestions and appeared supportive of my efforts. But our conversation always had a dimension of competition, and even though we offered each other advice, in retrospect it was as if we were looking for chinks in each other’s armor.

Both of us were strong in character and ultimately, almost inevitably, this led to our estrangement in 1981. We were the Young Turks of anthropology in those days,

## BRIEF BIOGRAPHY

- 1903** Louis Leakey born August 7
- 1913** Mary Douglas Nicol born February 6
- 1933** Louis and Mary meet in England; they will marry in 1936
- 1944** Richard is born in Kenya
- 1959** Mary finds *Zinjanthropus*
- 1964** Louis unveils *Homo habilis*, "handy man," who made stone tools
- 1972** Richard finds 1.8 million-year-old skull at Koobi Fora; Louis dies in London on October 3, at sixty-nine
- 1978** Mary's Laetoli footprint trail
- 1984** Richard's team finds "Turkana Boy"; Mary retires
- 1985** Richard's team discovers "Black Skull" at Lake Turkana
- 1989** Richard abandons fossil hunting for wildlife conservation
- 1996** Mary dies in Nairobi, December 9, at eighty-three

staunchly defending our interpretations of human evolution. Perhaps now, with the mellowing of age, it is time to break the silence.

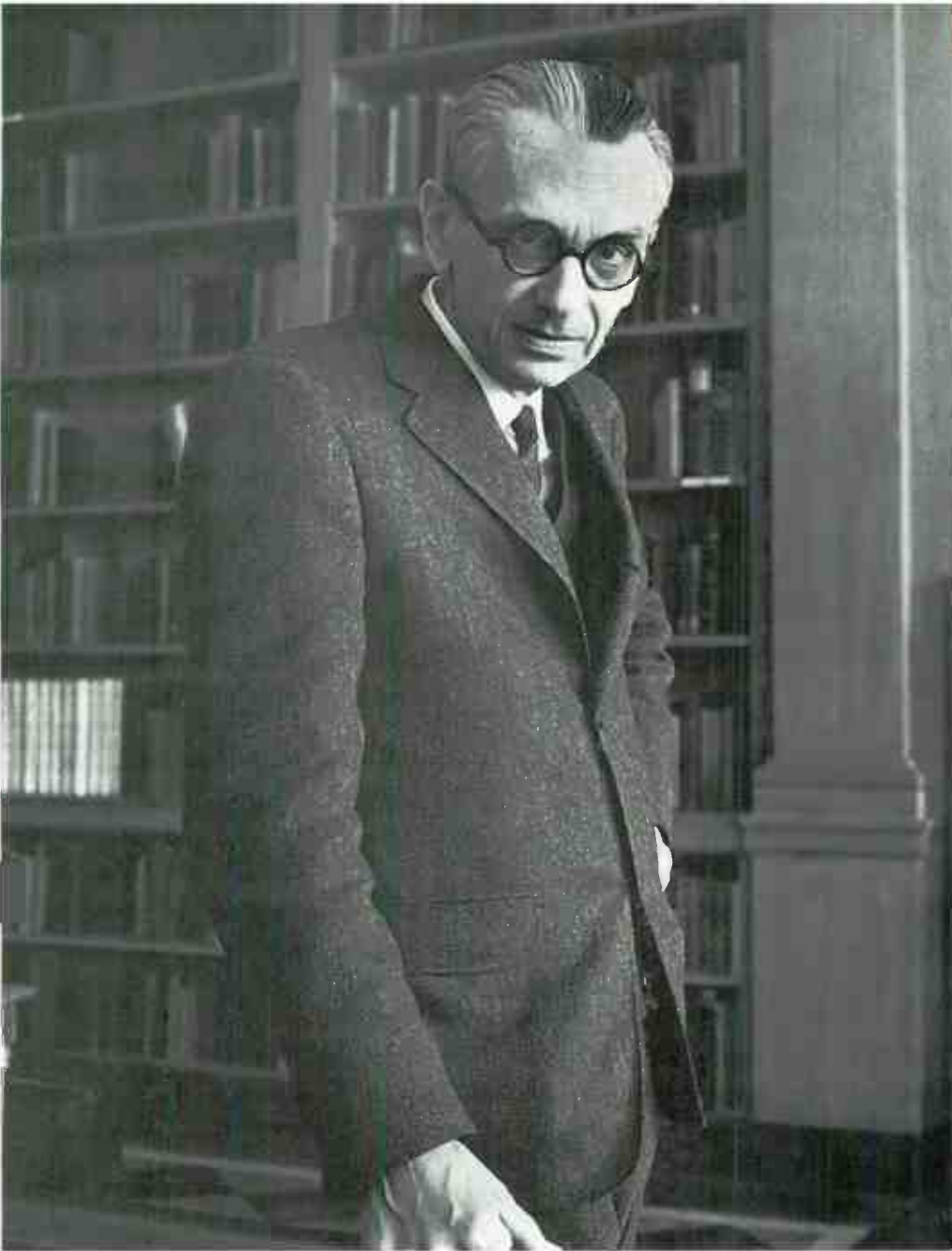
Much like his father, Richard has strong opinions and is often hasty to make pronouncements about his discoveries. This was especially true when he presented, in 1972, a *Homo* skull that he believed was 2.9 million years old. Adhering to his father's belief in very early *Homo*, this find, older than all *Australopithecus* fossils then known, was a welcome and stunning endorsement of Louis's views. Louis and Richard had been feuding over museum matters, and this discovery brought them together again in a final meeting shortly before Louis died. He spent his last days comforted by the knowledge that he had been proved correct. Since then, however, the skull has been correctly dated to 1.8 million years; despite Louis's and Richard's objections, most anthropologists today believe *Australopithecus* is indeed one of our ancestors.

Richard, meanwhile, continued his rise to prominence. Fossil finds such as the astonishingly complete 1.6 million-year-old skeleton of an African *Homo erectus* (*Homo ergaster* to some) and the "Black Skull" have added immeasurably to our knowledge of human origins. His career benefited from best-selling books, a television series on human evolution, and popular lecture tours.

Paleoanthropology has not been his only passion, however. He will probably be best remembered in Africa for founding an opposition political party in Kenya in 1995, after which he suffered public humiliation, including being beaten with leather whips. But Richard has proved astonishingly resilient. Even after a life-saving kidney transplant in 1979 (a gift from his estranged brother Philip) and the partial loss of both legs in a 1993 plane crash, he continues to exude confidence.

In 1989 President Daniel arap Moi appointed Richard head of what is now the Kenya Wildlife Service. Richard raised hundreds of millions of dollars and revamped Kenya's approach to wildlife conservation, heavily arming anti-poaching units and instituting a controversial edict permitting the shooting of poachers on sight. He resigned in 1994 amid politically motivated accusations of corruption, racism, and mismanagement—only to be reinstated by Moi four and a half years later.

Nevertheless, the Leakeys will forever be synonymous with paleoanthropology and even today show all signs of being alive, well, and contributing productively to the field. Richard's wife, Meave, a trained zoologist, and their eldest daughter, Louise, are currently leading teams to northern Kenya, where hominids in excess of four million years old are being found. The stage is set for the first family of anthropology to continue well into the next century.



# Kurt Gödel

KURT GÖDEL WAS BORN IN 1906 IN BRUNN, then part of the Austro-Hungarian Empire and now part of the Czech Republic, to a father who owned a textile factory and had a fondness for logic and reason and a mother who believed in starting her son's education early. By age ten, Gödel was studying math, religion, and several languages.

*by Douglas Hofstadter*

By twenty-five he had produced what many consider the most important result of twentieth-century mathematics: his famous “incompleteness theorem.” Gödel’s astonishing and disorienting discovery, published in 1931, proved that nearly a century of effort by the world’s greatest mathematicians was doomed to failure.

To appreciate Gödel’s theorem, it is crucial to understand how mathematics was perceived at the time. After many centuries of being a typically sloppy human mish-mash in which vague intuitions and precise logic coexisted on equal terms, mathematics at the end of the nineteenth century was finally being shaped up. So-called formal systems were devised (the prime example being Bertrand Russell and Alfred North Whitehead’s *Principia Mathematica*) in which theorems, following strict rules of inference, sprout from axioms like limbs from a tree. This process of theorem sprouting had to start somewhere, and that is where the axioms came in: they were the primordial seeds, the Ur-theorems from which all others sprang.

The beauty of this mechanistic vision of mathematics was that it eliminated all need for thought or judgment. As long as the axioms were true statements and as long as the rules of inference were truth preserving, mathematics could not be derailed; falsehoods simply could never creep in. Truth was an automatic hereditary property of theoremhood.

The set of symbols in which statements in formal systems were written generally included, for the sake of clarity, standard numerals, plus signs, parentheses, and so forth, but they were not a necessary feature; statements could equally well be built out of icons representing plums, bananas, apples, and oranges, or any utterly arbitrary set of chicken scratches, as long as a given chicken scratch always turned up in the proper places and only in such proper places. Mathematical statements in such systems were, it then became apparent, merely precisely structured patterns made up of arbitrary symbols.

Soon it dawned on a few insightful souls, Gödel foremost among them, that this way of looking at things opened up a brand-new branch of mathematics—namely, metamathematics. The familiar methods of mathematical analysis could be brought to bear on the very pattern-sprouting processes that formed the essence of formal systems—of which mathematics itself was supposed to be the primary example. Thus mathematics twists back on itself, like a self-eating snake.

Bizarre consequences, Gödel showed, come from focusing the lens of mathematics on mathematics itself. One way to make this concrete is to imagine that on some far planet (Mars, let’s say) all the symbols used to write math books happen—by some amazing coincidence—to look like our numerals 0 through 9. Thus when Martians discuss in their textbooks a certain famous discovery that we on earth attribute to Euclid and that we would express as follows: “There are infinitely many prime numbers,” what they write down turns out to look like this:

“8445329844508787863070005766619463864545067111.”

To us it looks like one big forty-six-digit number. To Martians, however, it is not a number at all but a statement; indeed, to them it declares the infinitude of primes as transparently as that set of thirty-four letters constituting six words a few lines back does to you and me.

Now imagine that we wanted to talk about the general nature of all theorems of mathematics. If we look in the Martians' textbooks, all such theorems will look to our eyes like mere numbers. And so we might develop an elaborate theory about which numbers could turn up in Martian textbooks and which numbers would never turn up there. Of course we would not really be talking about numbers, but rather about strings of symbols that to us look like numbers. And yet, might it not be easier for us to forget about what these strings of symbols mean to the Martians and just look at them as plain old numerals?

By such a simple shift of perspective, Gödel wrought deep magic. The Gödelian trick is to imagine studying what might be called "Martian-producible numbers" (those numbers that are in fact theorems in the Martian textbooks), and to ask questions such as, "Is or is not the number 8030974 Martian-producible (M.P., for short)?" This question means, Will the statement "8030974" ever turn up in a Martian textbook?

Gödel, in thinking very carefully about this rather surreal scenario, soon realized that the property of being M.P. was not all that different from such familiar notions as "prime number," "odd number," and so forth. Thus earthbound number theorists could, with their standard tools, tackle such questions as, "Which numbers are M.P. numbers, and which are not?" for example, or "Are there infinitely many non-M.P. numbers?" Advanced math textbooks—on earth, and in principle on Mars as well—might have whole chapters about M.P. numbers.

And thus, in one of the keenest insights in the history of mathematics, Gödel devised a remarkable statement that said simply, "X is not an M.P. number" where X is the exact number we read when the statement "X is not an M.P. number" is translated into Martian math notation. Think about this for a little while until you get it. Translated into Martian notation, the statement "X is not an M.P. number" will look to us like just some huge string of digits—a very big numeral. But that string of Martian writing is our numeral for the number X (about which the statement itself talks). Talk about twisty: this is really twisty! But twists were Gödel's specialty—twists in the fabric of space-time, twists in reasoning, twists of all sorts.

By thinking of theorems as patterns of symbols, Gödel discovered that it is possible for a statement in a formal system not only to talk about itself, but also to deny its own theoremhood. The consequences of this unexpected tangle lurking inside mathe-

#### BRIEF BIOGRAPHY

**BORN** April 28, 1906, in Brunn, Moravia, Austria

**1916** At ten, studies math and languages

**1924** Enters University of Vienna to study physics and philosophy

**1930** Receives doctorate in mathematics

**1931** Publishes "incompleteness theorem"

**1939** Flees Europe and finds refuge in the U.S. at the Institute for Advanced Study, where he works with Einstein

**DIED** 1978 in Princeton at seventy-two



matics were rich, mind-boggling, and—rather oddly—very sad for the Martians. Why sad? Because the Martians—like Russell and Whitehead—had hoped with all their hearts that their formal system would capture all true statements of mathematics. If Gödel's statement is true, it is not a theorem in their textbooks and will never, ever show up—because it says it won't! If it did show up in their textbooks, then what it says about itself would be wrong, and who—even on Mars—wants math textbooks that preach falsehoods as if they were true?

The upshot of all this is that the cherished goal of formalization is revealed as chimerical. All formal systems—at least ones that are powerful enough to be of interest—turn out to be incomplete because they are able to express statements that say of themselves that they are unprovable. And that, in a nutshell, is what is meant when it is said that Gödel in 1931 demonstrated the “incompleteness of mathematics.” It's not really math itself that is incomplete, but any formal system that attempts to capture all the truths of mathematics in its finite set of axioms and rules. To you that may not come as a shock, but to mathematicians in the 1930s, it upended their entire worldview, and math has never been the same since.

Gödel's 1931 article did something else: it invented the theory of recursive functions, which today is the basis of a powerful theory of computing. Indeed, at the heart of Gödel's article lies what can be seen as an elaborate computer program for producing M.P. numbers, and this “program” is written in a formalism that strongly resembles the programming language Lisp, which wasn't invented until nearly thirty years later.

Gödel the man was every bit as eccentric as his theories. He and his wife, Adele, a dancer, fled the Nazis in 1939 and settled at the Institute for Advanced Study in Princeton, where he worked with Einstein. In his later years Gödel grew paranoid about the spread of germs, and he became notorious for compulsively cleaning his eating utensils and wearing ski masks with eyeholes wherever he went. He died at age seventy-two in a Princeton hospital, essentially because he refused to eat. Much as formal systems, thanks to their very power, are doomed to incompleteness, so living beings, thanks to their complexity, are doomed to perish, each in its own unique manner.



# Philo Farnsworth

FOR THOSE INCLINED TO THINK OF OUR FADING CENTURY as an era of the common man, let it be noted that the inventor of one of the century's greatest machines was a man called Phil. Even more, he was actually born in a log cabin, rode to high school on horseback, and, without benefit of a university degree (indeed, at age fourteen), conceived the idea of

*by Neil Postman*

electronic television—the moment of inspiration coming, according to legend, while he was tilling a potato field back and forth with a horse-drawn harrow and realized that an electron beam could scan images the same way, line by line, just as you read a book. To cap it off, he spent much of his adult life in a struggle with one of America's largest and most powerful corporations. Our kind of guy.

I refer, of course, to Philo Taylor Farnsworth. The “of course” is meant as a joke, since almost no one outside the industry has ever heard of him. But we ought not to let the century expire without attempting to make amends.

#### BRIEF BIOGRAPHY

**BORN** August 19, 1906, in Indian Creek, Utah

**1921** Has idea for how to create images using electrons

**1927** Transmits first electronic image

**1934** Stages first demonstration of his TV system

**1935** U.S. Patent Office awards “priority of invention”

**1939** After seven years of litigation, RCA agrees to pay him royalties

**1947** Patents begin to expire; he is hospitalized for depression

**DIED** March 11, 1971, in Holladay, Utah

Farnsworth was born in 1906 near Beaver City, Utah, a community settled by his grandfather (in 1856) under instructions from Brigham Young himself. When Farnsworth was twelve, his family moved to a ranch in Rigby, Idaho, which was four miles from the nearest high school, thus necessitating his daily horseback rides. Because he was intrigued with the electron and electricity, he persuaded his chemistry teacher, Justin Tolman, to give him special instruction and to allow him to audit a senior course. You could read about great scientists from now until the twenty-second century and not find another instance where one of them celebrates a high school teacher. But Farnsworth did, crediting Tolman with providing inspiration and essential knowledge.

Tolman returned the compliment. Many years later, testifying at a patent interference case, Tolman said Farnsworth's explanation of the theory of relativity was the clearest and most concise he had ever heard. Remember, this would have been in 1921, and Farnsworth would have been all of fifteen. And Tolman was not the only one who recognized the young student's genius. With only two years of high school behind him, and buttressed by an intense autodidacticism, Farnsworth gained admission to Brigham Young University.

The death of his father forced him to leave at the end of his second year, but, as it turned out, at no great intellectual cost. There were, at the time, no more than a handful of men on the planet who could have understood Farnsworth's ideas for building an electronic-television system, and it's unlikely that any of them were at Brigham Young. One such man was Vladimir Zworykin, who had emigrated to the U.S. from Russia with a Ph.D. in electrical engineering. He went to work for Westinghouse with a dream of building an all-electronic television system. But he wasn't able to do so. Farnsworth was. But not at once.

He didn't do it until he was twenty-one. By then, he had found investors, a few assistants, and a loving wife (“Pem”) who assisted him in his research. He moved to San Francisco and set up a laboratory in an empty loft. On September 7, 1927, Farnsworth painted a square of glass black and scratched a straight line on the center. In another

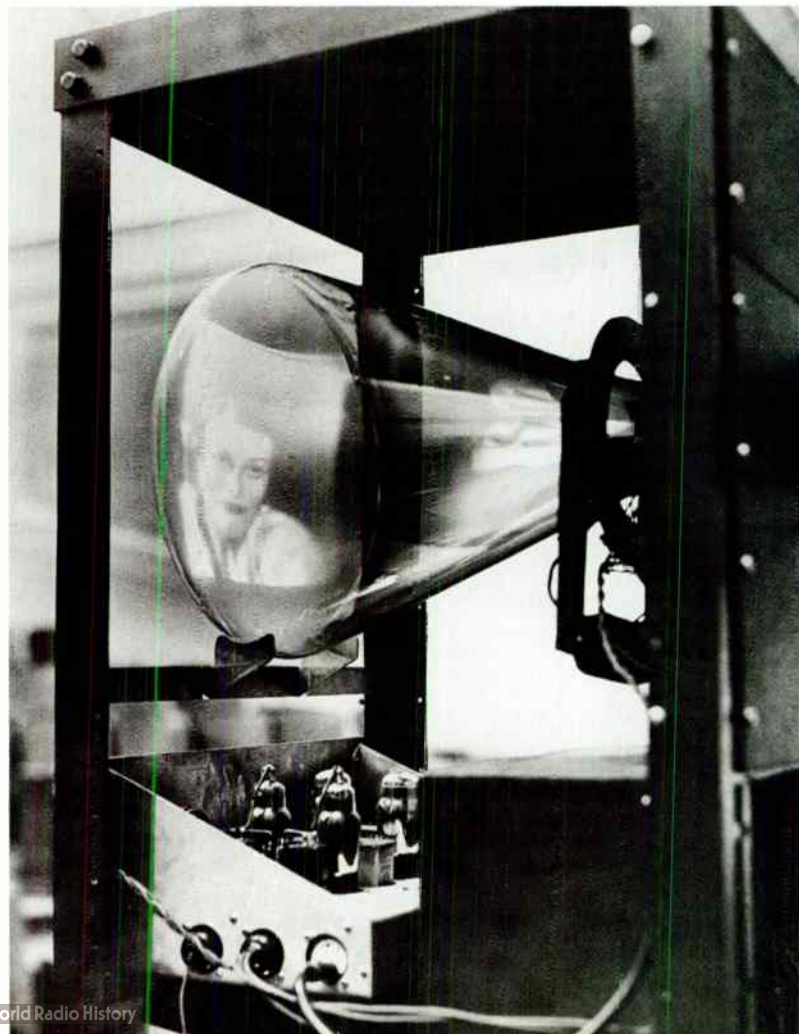
room, Pem's brother, Cliff Gardner, dropped the slide between the Image Dissector (the camera tube that Farnsworth had invented earlier that year) and a hot, bright, carbon arc lamp. Farnsworth, Pem, and one of the investors, George Everson, watched the receiver. They saw the straight-line image and then, as Cliff turned the slide 90 degrees, they saw it move—which is to say they saw the first all-electronic television picture ever transmitted.

History should take note of Farnsworth's reaction. After all, we learn in school that Samuel Morse's first telegraph message was "What hath God wrought?" Edison spoke into his phonograph, "Mary had a little lamb." And Don Ameche—I mean, Alexander Graham Bell—shouted for assistance: "Mr. Watson, come here, I need you!" What did Farnsworth exclaim? "There you are," said Phil, "electronic television." Later that evening, he wrote in his laboratory journal: "The received line picture was evident this time." Not very catchy for a climactic scene in a movie. Perhaps we could use the telegram George Everson sent to another investor: "The damned thing works!"

At this point in the story, things turn ugly. Physics, engineering, and scientific inspiration begin to recede in importance as lawyers take center stage. As it happens, Zworykin had made a patent application in 1923, and by 1933 had developed a camera tube he called an iconoscope. It also happens that Zworykin was by then connected with the Radio Corporation of America, whose chief, David Sarnoff, had no intention of paying royalties to Farnsworth for the right to manufacture television sets. "RCA doesn't pay royalties," he is alleged to have said, "we collect them."

And so there ensued a legal battle over who invented television. RCA's lawyers contended that Zworykin's 1923 patent had priority over any of Farnsworth's patents, including the one for his Image Dissector. RCA's case was not strong, since it could produce no evidence that in 1923 Zworykin had produced an operable television transmitter. Moreover, Farnsworth's old teacher, Tolman, not only testified that Farnsworth had conceived the idea when he was a high school student, but also produced the origi-

Farnsworth transmitted a picture of Joan Crawford to show off his TV system during its 1934 public debut.



nal sketch of an electronic tube that Farnsworth had drawn for him at that time. The sketch was almost an exact replica of an Image Dissector.

In 1934 the U.S. Patent Office rendered its decision, awarding priority of invention to Farnsworth. RCA appealed and lost, but litigation about various matters continued for many years until Sarnoff finally agreed to pay Farnsworth royalties.

But he didn't have to for very long. During World War II, the government suspended sales of TV sets, and by the war's end, Farnsworth's key patents were close to expiring. When they did, RCA was quick to take charge of the production and sales of TV sets, and in a vigorous public relations campaign, promoted both Zworykin and Sarnoff as the fathers of television. Farnsworth withdrew to a house in Maine, suffering from depression, which was made worse by excessive drinking. He had a nervous breakdown, spent time in hospitals, and had to submit to shock therapy. And in 1947, as if he were being punished for having invented television, his house in Maine burned to the ground.

One wishes it could be said that this was the final indignity Farnsworth had to suffer, but it was not. Ten years later, he appeared as a mystery guest on the television program *What's My Line?* Farnsworth was referred to as Dr. X and the panel had the task of discovering what he had done to merit his appearance on the show. One of the panelists asked Dr. X if he had invented some kind of a machine that might be painful when used. Farnsworth answered, "Yes. Sometimes it's most painful."

He was just being characteristically polite. His attitude toward the uses that had been made of his invention was more ferocious. His son Kent was once asked what that attitude was. He said, "I suppose you could say that he felt he had created kind of a monster, a way for people to waste a lot of their lives." He added, "Throughout my childhood his reaction to television was 'There's nothing on it worthwhile, and we're not going to watch it in this household, and I don't want it in your intellectual diet.'"

So we may end Farnsworth's story by saying that he was not only the inventor of television but also one of its earliest and most perceptive critics.

# William Levitt



SO LONG AS YOU DON'T COUNT SEX AND VIOLENCE, there's no human impulse older than the urge to find a nice, affordable house, something outside of town but not too far. In *Crabgrass Frontier*, the essential history of suburbanization. Kenneth T. Jackson quotes a letter to the King of Persia, inscribed on a clay tablet and dated 539 B.C., that describes the

by *Richard Lacayo*



With Uncle Sam providing cheap loans, buyers snapped up the houses quickly.

'burbs in *The Canterbury Tales*. All the same, it wasn't until the later twentieth century that suburbia was imagined as the ideal human habitation, an arrangement of houses and lives so fundamental, it was taken for granted that the Flintstones lived there.

Suburbia required cars, highways, and government-guaranteed mortgages. It also required William Levitt, who first applied a full panoply of assembly line techniques to housing construction. That insight enabled him, and the many builders who copied him, to put up houses fast and cheap. Levitt's houses were so cheap (but still reasonably sturdy) that bus drivers, music teachers, and boilermakers could afford them. And the first place he offered them was Levittown, New York, a town that is as much an achievement of its cultural moment as Venice or Jerusalem.

That moment came right after World War II. When the servicemen and -women headed home, there wasn't much home for them to come to. Wartime shortages of everything had crippled the housing industry. Returning veterans, their libidos fully charged with the ambitions that would create the baby boom, found themselves doubled up with parents and in-laws. To publicize their search for an apartment, one New York City couple camped out for two days in a department store window.

In those years, the American housing industry was not so much an industry as a loose affiliation of local builders, any one of whom completed an average of four houses a year. What Levitt had in mind was thirty to forty a day. Before the war, Levitt and his brother, Alfred, had built a few houses on land their father owned in Manhasset, New York. And in 1941 the Levitts won a government contract to provide 2,350 housing units for defense workers in Norfolk, Virginia. Once the fighting ended, they brought the lessons of that experience to one thousand acres of potato farms on New York's Long Island twenty-five miles east of Manhattan. On July 1, 1947, Levitt, then forty, broke ground on the first of what would be seventeen thousand homes.

He could build fast because he had broken down the construction process into twenty-seven operations, then mustered specialized teams to repeat each operation at each building site. Twenty acres were set aside as an assembly point, where cement was

pleasures of the Ur-suburb. (Literally. It was in Ur.) "Our property . . . is so close to Babylon that we enjoy all the advantages of the city, and yet when we come home we are away from all the noise and dust."

Ur shriveled. But the inclination to get out of town survived. Ancient Rome had its surrounding settlements. Chaucer mentions the

mixed and lumber cut. Trucks would deliver parts and material to homesites placed at sixty-foot intervals. Then the carpenters, tilers, painters, and roofers arrived, each in his turn. There was a team for white paint, another for red. One worker's sole daily task was to bolt washing machines to floors.

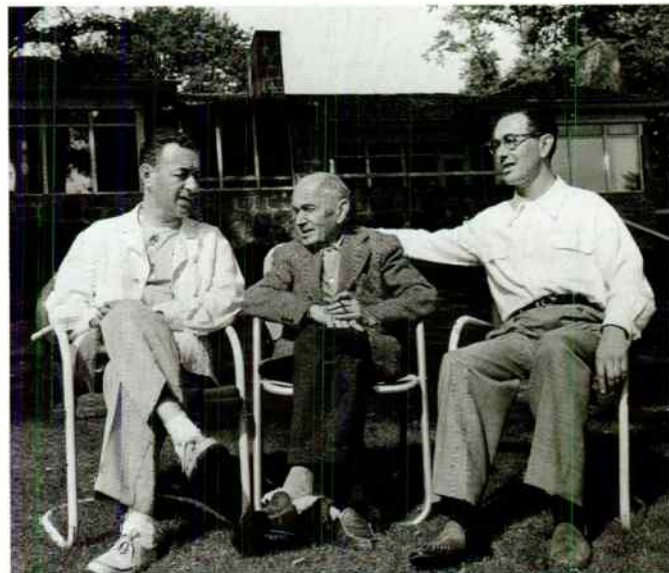
Levitt liked to compare himself to General Motors. "We channel labor and materials to a stationary outdoor assembly line instead of bringing them together inside a factory." To keep down lumber costs, the Levitts bought their own forests and built a sawmill in Oregon. They purchased appliances direct from the manufacturer, cutting out the distributor's markup. They even made their own nails. Levitt's methods kept costs so low that in the first years the houses, which typically sat on a seventh-of-an-acre lot, could sell for just \$7,990, a price that still allowed the Levitts a profit of about \$1,000. (They sell today for about \$155,000.)

Yet however much it may have been a triumph of free enterprise, Levittown depended on massive government assistance. The Federal Housing Administration guaranteed the loans that banks made to builders. Then the Veterans Administration gave buyers low-interest mortgages to purchase those houses.

Thus the risk to the lenders was small, and so were the houses: 750 square feet, two bedrooms, living room, and kitchen, with an unfinished second floor and no garage. All the same, compared with the cramped arrangements of the cities, even a place that size seemed sumptuous and full of potential. Levitt understood this well enough to see himself as more than a builder. He was a prime facilitator of the American Dream in its Cold War formulation. "No man who owns his own house and lot can be a communist," he once said. "He has too much to do."

The Levitt men were a typical family. They loved each other. They were also a cocoon of misfits who drove each other crazy. Father Abe was a onetime Brooklyn lawyer and would-be philosopher. Bill recalled that Abe liked to give the impression that he knew the distance in light-years to every star. Abe eventually became Levittown's unofficial landscape theorist. He could face a reporter with a fistful of dahlia and tell him, with a straight face: "Every man has a right to flowers!" Brother Alfred designed the houses and grumbled about how credit always went to Bill, the idea man, organizer, and salesman.

On Saturdays, in a lordly mood that can only be imagined by anyone who has not built his own town, Levitt would drive his black Cadillac convertible around the streets of his town, checking out what the citizens were doing across the abundant stage he had



Bill sold; brother Al, right, designed; father Abe opined.



constructed for them, his ears attuned to local gossip, his eyes to lawn maintenance. (In the early years, householders who didn't mow their grass would find Levitt gardeners dispatched to do it and a bill for the job in their mailbox.) He was the consummate marketing guy, unmoved by books, paintings, or music. His first wife once complained that she had dragged him to see *Death of a Salesman* but couldn't get him to identify with the title character.

In the larger culture, Levitt's achievement was contested ground. Levittown entered twentieth-century folklore as the place where democratic equality edged into an unnerving conformity. By stamping whole townships onto old farmland, Levitt brought the machine into the garden in a very literal way. Unlike the automobile or the radio, the home was an ancient possession, a thing too intimate to be mass-produced without offending notions of Yankee individuality that were already under intense pressure from modernity. And as Levittown matured, suburbia itself began to look like humanity at room temperature, a place where the true countryside was denatured, while the true civilization of the cities collapsed into strip malls and dinner theater.

Within that context, Levittown became the anti-Williamsburg: not a re-creation of some idealized past but a living glimpse of the tacky-tacky future. The social critic Lewis Mumford called it "a low-grade uniform environment from which escape is impossible." Levittown was also tainted at birth by the offhand racism of mid-century America. Though Levittown is racially mixed today, for years Levitt's sales contracts barred resale to African-Americans. He once offered to build a separate development for blacks but refused to integrate his white Levitt developments. "We can solve a housing problem, or we can try to solve a racial problem," he once said. "But we can't combine the two." In 1963 his all-white policies led to civil rights demonstrations at another Levitt subdivision, in Bowie, Maryland.

Building modest homes made Levitt rich. In 1968, after his company had built more than 140,000 houses around the world, Levitt & Sons was sold to ITT Corp. for \$92 million in stock, most of which went to him. That fortune bought, among other things, a 237-foot yacht, *La Belle Simone*, named for his third wife, and a thirty-room mansion in Mill Neck, New York. But the deal barred him from the domestic construction business for ten years. Within four years, the ITT stock, which he had been using as collateral to build subdivisions in places like Iran, Venezuela, and Nigeria, lost 90 percent of its value. When those foreign projects foundered, he was left with millions of dollars in debt.

Long before his death in 1994, Bill Levitt fully understood that it was Levittown, a working stiff's utopia, that had been his great and intricate achievement. Levittown

#### BRIEF BIOGRAPHY

**BORN** February 11, 1907, in Brooklyn, New York

**1924** Enters NYU, staying until his junior year

**1927** Takes a job in his father's law firm

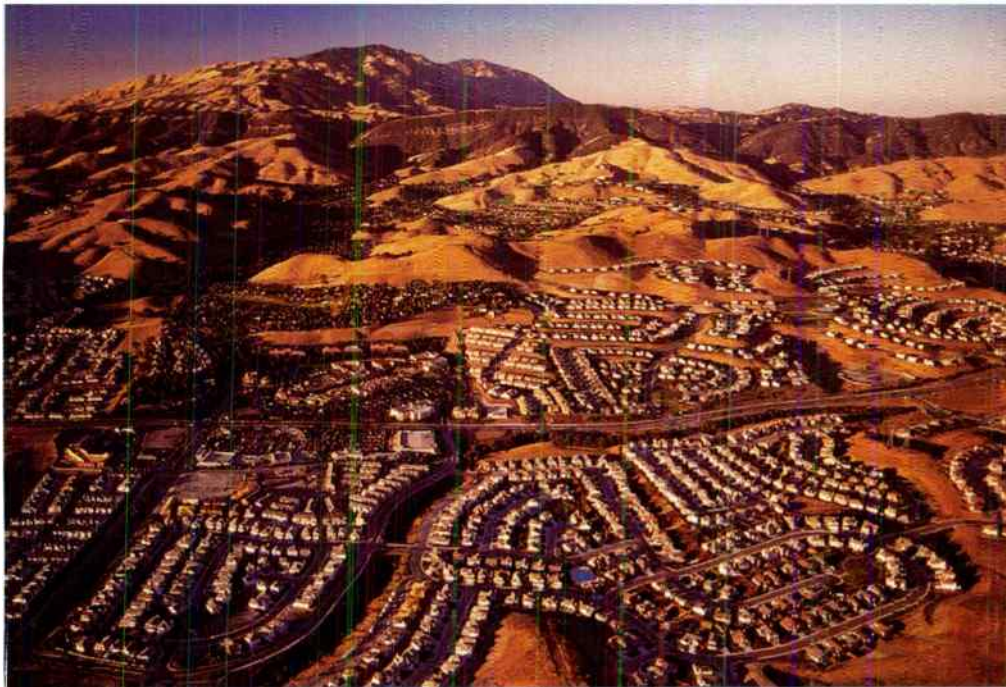
**1929** Levitt & Sons starts work on its first house

**1941** With brother Alfred, builds housing for defense workers in Norfolk, Virginia

**1947** Starts transforming farmland on New York's Long Island into Levittown

**1968** Sells his company to ITT for \$92 million

**DIED** January 28, 1994, in Manhasset, New York



isn't a visionary product of high design. No major architect went near the place. It was what you get when a canny businessman sees a massive public appetite and applies capital and logistics in a timely fashion.

Levitt helped create an affordable suburban lifestyle that is both blessed and cursed by conformity.

Unlike the workers' housing that Le Corbusier designed near Bordeaux in France, where individual touches by the mere inhabitants offend the architect's conception, Levitt homes were made to be customized. The avid householders of Levittown got busy, adding porches, dormers, and new wings, the outcroppings of anybody's headlong life. The line on their town used to be that Levitt houses were indistinguishable from one another, and the people would be too. But the place is now, as a town is supposed to be, a work in progress, a setting that can be held to the light at any angle.

And William Levitt, a man who just about never read a novel, turned out to be the author of an entire world.

# Rachel Carson



SHE WAS ALWAYS A WRITER, AND SHE ALWAYS KNEW THAT. Like Faulkner, Fitzgerald, e. e. cummings, Millay, and E. B. White, ten-year-old Rachel Louise Carson, born in 1907 in the Allegheny Valley town of Springdale, Pennsylvania, was first published in the *St. Nicholas* literary magazine for children. A reader and loner and devotee of birds, and

*by Peter Matthiessen*

indeed all nature, the slim, shy girl of plain face and dark curly hair continued writing throughout adolescence, chose an English major at Pennsylvania College for Women, and continued to submit poetry to periodicals. Not until junior year, when a biology course reawakened the “sense of wonder” with which she had always encountered the natural world, did she switch her major to zoology, not yet aware that her literary and scientific passions might be complementary.

Graduating magna cum laude in 1929, Carson won her master’s degree in zoology at Johns Hopkins, but increasing family responsibilities caused her to abandon her quest for a doctorate. For a few years she would teach zoology at the University of Maryland, continuing her studies in the summer at the Marine Biological Laboratories in Woods Hole, Massachusetts. It was there, in her early twenties, that she first saw—and became enchanted with—the enormous mysteries of the sea.

In 1935 “Ray” Carson, as some friends knew her, took part-time work writing science radio scripts for the old Bureau of Fisheries, a job that led, in 1936, to a full-time appointment as a junior aquatic biologist. To eke out her small income, she contributed feature articles to the *Baltimore Sun*, most of them related to marine zoology. Though her poetry was never to be published, a strong lyrical prose was already evolving, and one of her pieces for a government publication seemed to the editor so elegant and unusual that he urged her to submit it to the *Atlantic Monthly*.

“Undersea,” the young writer’s first publication in a national magazine (September 1937), was seminal in theme and tone to all her later writing. Together with an evocative *Sun* feature, “Chesapeake Eels Seek the Sargasso Sea” (“From every river and stream along the whole Atlantic Coast, eels are hurrying to the . . .”), it was the starting point for her first book.

*Under the Sea-Wind* (1941), Carson’s favorite among her books, would pass almost unnoticed. Meanwhile, her editorial duties in what would become the Fish and Wildlife Service had increased. In 1946 she was promoted to information specialist, and in 1949 became chief editor of publications.

In their first meeting, the naturalist Louis Halle found Carson “quiet, diffident, neat, proper, and without affectation.” Nothing written about her since seems to dispute



Carson’s work as a marine biologist prompted her first magazine article, which led to her landmark book.

this. But for all her modesty and restraint, she was not prim. She had a mischievous streak, a tart tongue, and confidence in her own literary worth.

A decade after her first book, her agent circulated a second work in progress that proposed to explore the origins and geological aspects of the sea. The material was rejected by fifteen magazines, including the *Saturday Evening Post* and *National Geographic*. Eventually the work came into the hands of Edith Oliver at *The New Yorker*, who recommended it to William Shawn, who recognized its exceptional quality at once. Much of it was serialized as "A Profile of the Sea," and in July 1951 the entire manuscript was published as *The Sea Around Us*. It won the John Burroughs Medal, then the National Book Award, and within the year sold more than 200,000 copies in hardcover.

Success permitted Carson to retire from the Fish and Wildlife Service in 1952 to write full time. That summer she bought land and built a cottage on the Sheepscot River near West Southport on the coast of Maine, where she and her mother had visited since 1946.

Her new celebrity also gave her the opportunity to speak out on concerns she felt strongly about. As early as 1945, Carson and her close colleague Clarence Cottam had become alarmed by government abuse of new chemical pesticides such as DDT, in particular the "predator" and "pest" control programs, which were broadcasting poisons with little regard for the welfare of other creatures. That same year, she offered an article to *Reader's Digest* on insecticide experiments going on at Patuxent, Maryland, not far from her home in Silver Spring, to determine the effects of DDT on all life in affected areas. Apparently the *Digest* was not interested. Carson went back to her government job and her sea trilogy, and not until after the third volume had been completed did she return to this earlier preoccupation.

Meanwhile, the insecticide barrage had been augmented by dieldrin, parathion, heptachlor, malathion, and other fearful compounds many times stronger than DDT, all of which the government planned to distribute through the Department of Agriculture for public use and commercial manufacture. "The more I learned about the use of pesticides, the more appalled I became," Carson recalled. "I realized that here was the material for a book. What I discovered was that everything which meant most to me as a naturalist was being threatened, and that nothing I could do would be more important."

With her fame and eloquence and reputation for precision, Carson could count on the support of leading scientists and conservation organizations,

#### BRIEF BIOGRAPHY

**BORN** May 27, 1907, in Springdale, Pennsylvania

**1928** Graduates from Pennsylvania College for Women

**1929** Spends first summer in Woods Hole

**1932** Receives MA from Johns Hopkins University

**1936** Takes a job with the U.S. Bureau of Fisheries

**1951** Publishes *The Sea Around Us*

**1962** *Silent Spring* stirs national controversy

**DIED** April 14, 1964, in Silver Spring, Maryland

and was well positioned to command a hearing. Even so, the *Digest* and other magazines had little interest in this gloomy subject. Then, in 1957, there was a startling wildlife mortality in the wake of a mosquito-control campaign near Duxbury, Massachusetts, followed by a pointless spraying of a DDT/fuel-oil mix over eastern Long Island for eradication of the gypsy moth. Next, an all-out war in the Southern states against the fire ant did such widespread harm to other creatures that its beneficiaries cried for mercy; and after that a great furor arose across the country over the spraying of cranberry plants with aminotriazole, which led to an Agriculture Department ban against all cranberry marketing just in time for Thanksgiving 1959.

Though others had been warning of pesticide dangers, it was Carson who struck upon the metaphor that would draw all these dire warnings to a point. "There was once a town in the heart of America where all life seemed to live in harmony with its surroundings. . . . Then a strange blight crept over the area and everything began to change. . . . There was a strange stillness. . . . The few birds seen anywhere were moribund; they trembled violently and could not fly. It was a spring without voices. On the mornings that had once throbbed with the dawn chorus of scores of bird voices there was now no sound; only silence lay over the fields and woods and marsh."

*Silent Spring*, serialized in *The New Yorker* in June 1962, gored corporate oxen all over the country. Even before publication, Carson was violently assailed by threats of lawsuits and derision, including suggestions that this meticulous scientist was a "hysterical woman" unqualified to write such a book. A huge counterattack was organized and led by Monsanto, Velsicol, American Cyanamid—indeed, the whole chemical industry—duly supported by the Agriculture Department as well as the more cautious in the media. (*Time*'s reviewer deplored Carson's "oversimplifications and downright errors. . . . Many of the scary generalizations—and there are lots of them—are patently unsound.")



Fewer pesticides meant stronger eggs—and new hope—for the Bald Eagle.



She focused attention on the effects of DDT on birds.

Carson was not a born crusader but an intelligent and dedicated woman who rose heroically to the occasion. She was rightly confident about her facts as well as her ability to present them. Secure in the approval of her peers, she remained remarkably serene in the face of her accusers. Perhaps the imminence of her own mortality had helped her find this precious balance and perspective. In most photographs, the pensive face appears a little sad, but this was true long before she knew that she had cancer. She was fifty-six when she died in April 1964.

“The beauty of the living world I was trying to save,” she wrote in a letter to a friend in 1962, “has always been uppermost in my mind—that, and anger at the senseless, brutish things that were being done. I have felt bound by a solemn obligation to do what I could—if I didn’t at least try I could never be happy again in nature. But now I can believe that I have at least helped a little. It would be unrealistic to believe one book could bring a complete change.”

True, the damage being done by poison chemicals today is far worse than it was when she wrote the book. Yet one shudders to imagine how much more impoverished our habitat would be had *Silent Spring* not sounded the alarm. Well crafted, fearless, and succinct, it remains her most celebrated book, although her wonderful essays on the sea may be remembered longer. Even if she had not inspired a generation of activists, Carson would prevail as one of the greatest nature writers in American letters.

# Walter Reuther



"MEN WITH QUEASY STOMACHS HAD NO PLACE one afternoon last week on the overpass at the No. 4 gate of Henry Ford's great River Rouge plant." So began *Time's* account of the Battle of the Overpass, the confrontation that made May 26, 1937, a red-letter day in labor history and brought to national attention a young United Auto Workers official named Walter P. Reuther.

by *Irving Bluestone*





Ford's goons bloodied Reuther, left, and Richard Frankensteen, but the photos helped turn public opinion the UAW's way.

battered victims were published across the U.S., a huge PR victory that would slowly but surely lead, several years later, to UAW organization at the plant.

The pictures, ironically, capture the wrong image of Walter Reuther. While he arrived on the national scene as a scuffler with blood on his face, he would evolve into one of labor's most dynamic and innovative leaders, as well as a humanitarian whose impact ranged well beyond his field. His achievements were guided by his oft expressed philosophy of human endeavor: "There is no greater calling than to serve your fellow men. There is no greater contribution than to help the weak. There is no greater satisfaction than to have done it well." Reuther believed it wholeheartedly and, as they say, walked the talk.

He was nurtured to a devoted commitment to unionism. His father, a brewery wagon driver and union leader in Wheeling, West Virginia, had the family regularly discuss the role of unions, as well as social and economic issues. Like thousands of others who lived in poor regions such as West Virginia, Walter and two of his brothers, Roy and Victor, migrated to the Detroit area to find jobs in the auto industry. Not surprisingly, they became actively involved in the budding United Automobile, Aircraft, and Agricultural Implement Workers Union.

Reuther was twenty-nine in 1936, when he became president of Local 174. It was a tumultuous period in labor history, when the UAW literally fought for survival. Reuther became one of the union's generals, directing a series of sit-down strikes and other guerrilla tactics to try to organize auto plants. He soon gained national prominence and even entry into President Roosevelt's White House. He and his wife, May, also became great friends of Eleanor Roosevelt. It's not difficult to see

#### BRIEF BIOGRAPHY

**BORN** September 1, 1907, in Wheeling, West Virginia

**1936** Leads first major auto strike in Detroit

**1941–45** Acts as informal government adviser during World War II

**1946** Elected president of United Auto Workers

**1948–55** Secures key benefits, including pensions and health care

**1955** Helps engineer merger of AFL and CIO

**DIED** May 9, 1970, in plane crash in Pellston, Michigan

why he was welcome. In 1940, a year before Pearl Harbor, he proposed converting available capacity in auto plants to military production. Echoing FDR's "Arsenal of Democracy" stance, he urged that the industry turn out "five hundred planes a day." His plan was harshly criticized by the corporations, which were unwilling to give up any part of their profitable business. When the Japanese attacked Pearl Harbor, the rapid conversion to military production validated Reuther's vision.

At the 1946 UAW convention, Reuther emerged as president in a closely fought race, on a platform against Soviet communist "outside interference" and for a new, more socially conscious approach to collective bargaining. He pledged to work for "a labor movement whose philosophy demands that it fight for the welfare of the public at large. . . . We won the war. The task now is to win the peace." Two years later, a would-be assassin, for reasons still unknown, fired shots through Reuther's kitchen window, shattering his right arm.

During the postwar boom, Reuther campaigned for wage increases, winning a major victory in a 1948 settlement with General Motors that established the concept of an annual wage increase (annual improvement factor) tied to a quarterly cost of living allowance. The AIF-COLA formula has, over the years, been a pillar of progress in enhancing workers' living standards and ensuring protection of the purchasing power of the earned dollar against the impact of inflation.

After his breakthroughs on wages, Reuther pressed for improved benefits. He had a penchant for slogans, and they often became rallying cries for the union's programs. "Too Old to Work—Too Young to Die" was one, used to negotiate pension plans. "Thirty and Out" was aimed at a contract clause permitting retirement after thirty years of service, regardless of age. "We Live by the Year—We Should Be Paid by the Year" was behind the demand for a guaranteed annual wage. The ultimate bargaining victory was the Supplementary Unemployment Benefit, which now mandates a 95 percent replacement of wages in the event of layoffs.

Reuther kept pressing for new and better benefits, and over time, the union won the things that employees today take for granted. Year by year, workers gained, among others, comprehensive health care programs, tuition refund programs, life insurance, profit sharing, severance pay, prepaid legal service plans, bereavement pay, jury duty pay—



In the walkout worthy of Reuther, the UAW shut down GM for seven weeks in 1998.

plus improvements in vacations, holidays, and rest time. The negotiation of decent working, health, and safety conditions, coupled with a sound grievance procedure, added immeasurably to the personal sense of dignity and self-respect of the worker.

Reuther's activism couldn't be contained by the collective bargaining arena. One of many social problems that spurred him to action was the despoiling of the Great Lakes, particularly Lake Erie, a dying body of water that has been substantially revived by the cleanup effort he supported. At home, he helped mobilize volunteers to restore Paint Creek, a stream running through his community. He became actively involved in developing low-cost housing units in Detroit's inner city, including the Martin Luther King Jr. complex in downtown Detroit.

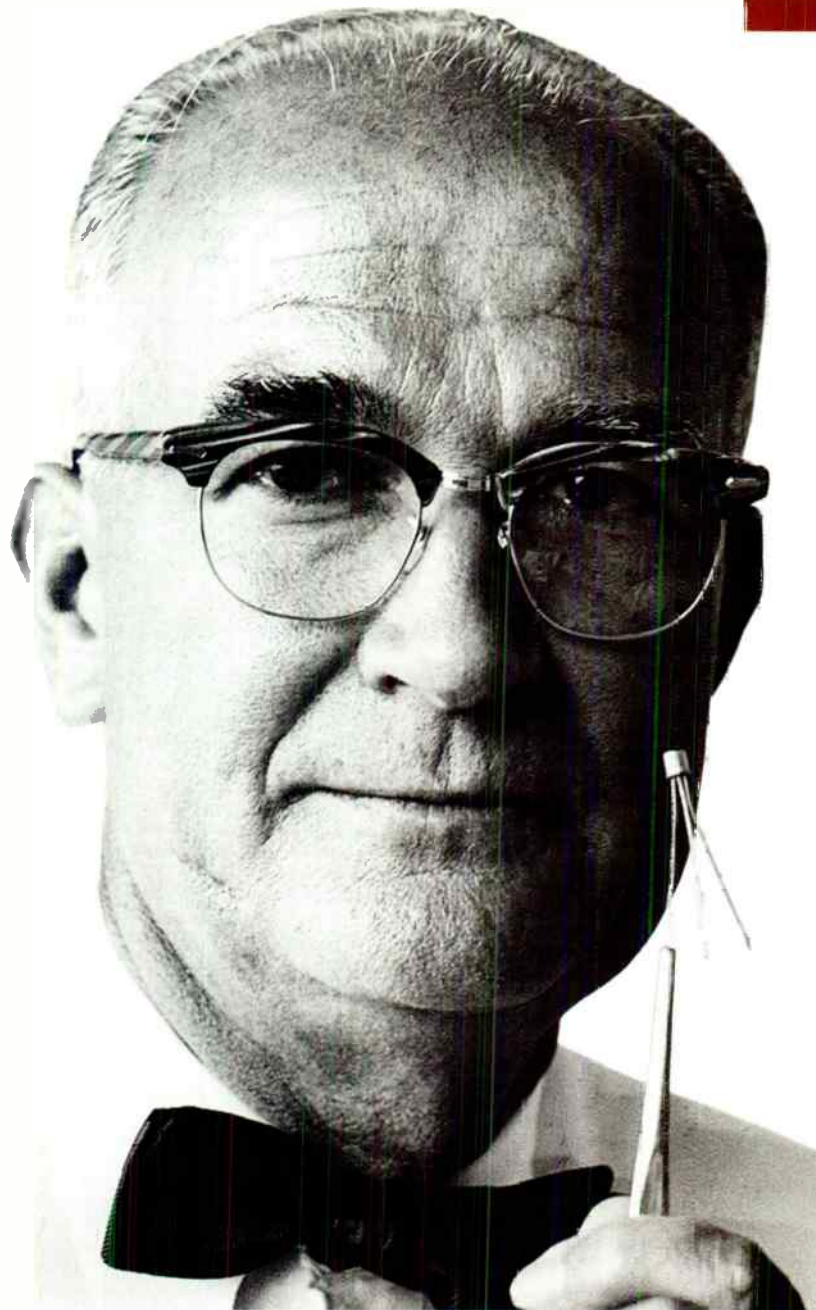
Long before medical costs became a national issue, Reuther was advocating universal health care. He organized the Committee of One Hundred to put the issue on the national agenda and set the stage for congressional action. At the same time, he helped establish one of the early HMOs, an association that eventually became the Health Alliance Plan, a major health care provider in the metropolitan Detroit area. Whether testifying before Congress or elsewhere, Reuther threw his weight behind the public issues of the day. He called for a Citizens Crusade Against Poverty, federal aid to housing and education, the peaceful use of atomic energy, and a national minimum wage.

Trade unions have a mixed record in civil rights—but not Reuther, who from early on was an ardent advocate. He organized the Citizens Committee for Equal Opportunity and worked closely with Martin Luther King Jr. Reuther was one of the few non-African-Americans invited to speak at the March on Washington in 1963. A favorite anecdote concerned his introduction to the crowd. Standing close to the podium were two elderly women. As he was introduced, one of the women was overheard asking her friend, "Who is Walter Reuther?" The response: "Walter Reuther? He's the white Martin Luther King."

In 1955, as president of the Congress of Industrial Organizations, Reuther negotiated a historic merger with the American Federation of Labor, headed by George Meany. Reuther then headed up the AFL-CIO's Industrial Union Department, but thirteen years later, sharp differences over policy and programs led to the UAW's withdrawal from the organization—it would stay out until reaffiliating in 1981.

For Reuther, unionism was not confined simply to improving life at the workplace. He viewed the role of the union as a social movement aimed at uplifting the community within the guarantees of democratic values. After his untimely death, with May, in a plane crash in 1970, waves of downsizing devastated cities and created problems for labor that still exist today. You can just imagine him wading into the fight against wanton job destruction, done for the sake of propping up corporate balance sheets.

One of his favorite slogans was "Progress with the Community—Not at the Expense of the Community." What is unmistakably clear is that Reuther, in his lifetime, fulfilled his own philosophy of human endeavor.



# William Shockley

THE TRANSISTOR WAS BORN JUST BEFORE CHRISTMAS 1947 when John Bardeen and Walter Brattain, two scientists working for William Shockley at Bell Telephone Laboratories in Murray Hill, New Jersey, observed that when electrical signals were applied to contacts on a crystal of germanium, the output power was larger than the input. Shockley was not present at that

*by Gordon Moore*

first observation. And though he fathered the discovery in the same way Einstein fathered the atom bomb, by advancing the idea and pointing the way, he felt left out of the momentous occasion.

Shockley, a very competitive and sometimes infuriating man, was determined to make his imprint on the discovery. He searched for an explanation of the effect from what was then known of the quantum physics of semiconductors. In a remarkable series of insights made over a few short weeks, he greatly extended the understanding of semiconductor materials and developed the underlying theory of another, much more robust

#### BRIEF BIOGRAPHY

**BORN** February 13, 1910, in London

**1936** Earns doctorate from MIT and is hired by Bell Laboratories

**1942** Directs U.S. Navy submarine research

**1945** Returns to Bell Labs

**1947** Invents transistor with John Bardeen and Walter Brattain

**1955** Quits Bell Labs

**1956** Founds company; is awarded Nobel Prize with Bardeen and Brattain

**1963** Appointed professor at Stanford; begins research on intelligence

**DIED** August 12, 1989, in San Francisco

amplifying device—a kind of sandwich made of a crystal with varying impurities added, which came to be known as the junction transistor. By 1951 Shockley's co-workers made his semiconductor sandwich and demonstrated that it behaved much as his theory had predicted.

For the next couple of decades advances in transistor technology drove the industry, as several companies jumped on the idea and set out to develop commercially viable versions of the device. New ways to create Shockley's sandwich were invented, and transistors in a vast variety of sizes and shapes flooded the market. Shockley's invention had created a new industry, one that underlies all of modern electronics, from supercomputers to talking greeting cards. Today the world produces about as many transistors as it does printed characters in all the newspapers, books, magazines, and computer and electronic-copier pages combined.

William Bradford Shockley was born in London, where his father, a mining engineer, and mother, a mineral surveyor, were on a business assignment. Home-schooled in Palo Alto, California, before attending Palo Alto Military Academy and Hollywood High School, he found his interest in physics sparked by a neighbor who taught the subject at Stanford University. Shockley earned a bachelor's degree from Caltech, and a Ph.D. at MIT for a dissertation titled "Calculations of Wave Functions for Electrons in Sodium Chloride Crystals."

At Bell Labs, Shockley recognized early on that the solution to one of the technological nightmares of the day—the cost and unreliability of the vacuum tubes used as valves to control the flow of electrons in radios and telephone relay systems—lay in solid-state physics. Vacuum tubes were hot, bulky, fragile, and short-lived. Crystals, particularly crystals that can conduct a bit of electricity, could do the job faster, more reliably, and with one million times less power—if only someone could get them to func-

tion as electronic valves. Shockley and his team figured out how to accomplish this trick.

Understanding of the significance of the invention of what came to be called the transistor (for transfer resistance) spread quite rapidly. In 1956 Shockley, Bardeen, and Brattain shared a Nobel Prize in Physics—an unusual awarding of the Nobel for the invention of a useful article.

Not content with his lot at Bell Labs, Shockley set out to capitalize on his invention. In doing so, he played a key role in the industrial development of the region at the base of the San Francisco Peninsula. It was Shockley who brought the silicon to Silicon Valley.

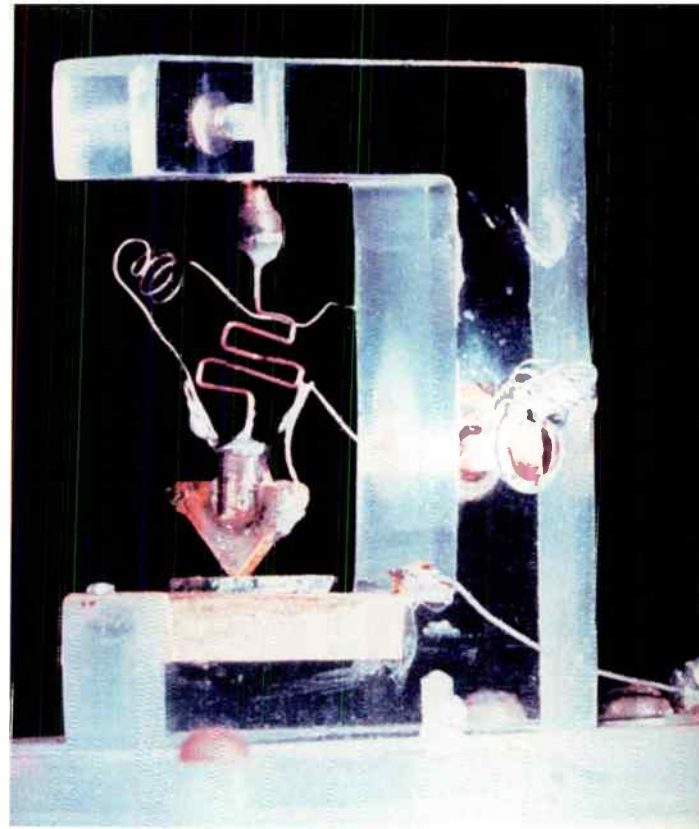
In February 1956, with financing from Beckman Instruments Inc., he founded Shockley Semiconductor Laboratory with the goal of developing and producing a silicon transistor. He chose to establish this start-up near Palo Alto, where he had grown up and where his mother still lived. He set up operations in a storefront—little more than a Quonset hut—and hired a group of young scientists (I was one of them) to develop the necessary technology. By the spring of 1956 he had a small staff in place and was beginning to undertake research and development.

Until this time, nearly all transistors had utilized germanium because it was easier to prepare in pure form. Silicon offered advantages, at least in theory, mainly because devices made from it could operate at higher temperatures. Also, silicon is a very common chemical element, whereas germanium is relatively rare. Silicon, however, melts at a much higher temperature, making its purification and processing more difficult.

Shockley's group set to work to learn about the materials and processes that would be required. Only a couple of the scientists had any previous experience with semiconductors, so it was an intense learning time for most of us.

Working for Shockley proved to be a particular challenge. He extended his competitive nature even to his working relationships with the young physicists he supervised. Beyond that, he developed traits that we came to view as paranoid. He suspected that members of his staff were purposely trying to undermine the project and prohibited them from access to some of the work. He viewed several trivial events as malicious and assigned blame. He felt it necessary to check new results with his previous colleagues at Bell Labs, and he generally made it difficult for us to work together.

In what was probably the final straw, he decided the entire laboratory staff should undergo polygraph tests to determine who was responsible for a minor injury experi-



The transistor in 1947 was a crude, clumsy thing.



The original transistor team: Bardeen, Shockley, and Brattain.

ened by one of the office workers. While the group was making real progress in developing the technology needed to produce silicon transistors, Shockley's management style proved an increasing burden.

The group was in danger of breaking up. In fact, a few of the first recruits had already abandoned the lab for other jobs. To try to stabilize the organization, several of us went over Shockley's head, directly to Arnold Beckman, who had financed the start-up, suggesting that Shockley be removed from direct management of the lab and function only as a technical consultant.

We grossly overestimated our power. Shockley survived our insurrection, and when it failed, we felt we had to look elsewhere for jobs. In the process of searching, we became convinced that our best course was to set up our own company to complete Shockley's original goal—which he had abandoned by this time in favor of another semiconductor device he had also invented—to make a commercial silicon transistor.

This new company, financed by Fairchild Camera & Instrument Corp., became the mother organization for several dozen new companies in Silicon Valley. Nearly all the scores of companies that are or have been active in semiconductor technology can trace the technical lineage of their founders back through Fairchild to the Shockley Semiconductor Laboratory. Unintentionally, Shockley contributed to one of the most spectacular and successful industry expansions in history.

#### EDITOR'S NOTE:

*In 1963 Shockley left the electronics industry and accepted an appointment at Stanford. There he became interested in the origins of human intelligence. Although he had no formal training in genetics or psychology, he began to formulate a theory of what he called dysgenics. Using data from the U.S. Army's crude pre-induction IQ tests, he concluded that African-Americans were inherently less intelligent than Caucasians—an analysis that stirred wide controversy among laymen and experts in the field alike.*

*Nonetheless, Shockley pursued his inflammatory ideas in a series of articles and speeches. Regularly interrupted by boos and catcalls, he argued that remedial educational programs were a waste of time. He suggested that individuals with IQs below 100 be paid to undergo voluntary sterilization. He donated openly and repeatedly to a so-called Nobel sperm bank designed to pass on the genes of geniuses. He filed a \$1.25 million libel suit against the Atlanta Constitution, which had compared his ideas to Nazi genetic experiments; the jury awarded him \$1 in damages. He ran for the U.S. Senate on the dysgenics platform and came in eighth.*

*Sadly, when he died at seventy-nine of cancer, he regarded his work in genetics as more important than any role he played in creating the \$130 billion semiconductor industry.*



# Estée Lauder



LEONARD LAUDER, CHIEF EXECUTIVE OF THE COMPANY his mother founded, says she always thought she “was growing a nice little business.” And that it is. A little business that controls 45 percent of the cosmetics market in U.S.

by *Grace Mirabella*

department stores. A little business that sells in 118 countries and in fiscal 1998 grew to be \$3.6 billion big in sales. The Lauder family's shares are worth more than \$6 billion.

But early on, there wasn't a burgeoning business, there weren't houses in New York, Palm Beach, or the south of France. It is said that at one point there was one person to answer the telephones who changed her voice to become the shipping or billing department as needed.

You more or less know the Estée Lauder story because it's a chapter from the book of American business folklore. In short, Josephine Esther Mentzer, daughter of immigrants, lived above her father's hardware store in Corona, a section of Queens in New York City. She started her enterprise by selling skin creams concocted by her uncle, a chemist, in beauty shops, beach clubs, and resorts.

No doubt the potions were good—Estée Lauder was a quality fanatic—but the saleslady was better. Much better. And she simply outworked everyone else in the cosmetics industry. She stalked the bosses of New York City department stores until she got some counter space at Saks Fifth Avenue in 1948. And once in that space, she utilized a personal selling approach that proved as potent as the promise of her skin regimens and perfumes.

"Ambition." Ask Leonard for one defining word about his mother, and that's his choice. Even after forty years in business, Estée Lauder would attend every launch of a new cosmetics counter or shop, traveling to such places as Moscow and other East European cities. On Saturdays she might go to her grandson's Origins store in Manhattan's hip SoHo district and say, "Let me teach you how to sell." Only declining health has halted those visits during the past few years.

Did Lauder ever stop selling in her prime? She would give her famous friends and acquaintances small samples of her products for their handbags; she wanted her brand in the hands of people who were known for having "the best." Early in my career at *Vogue* she invited me to lunch. Before the meal was finished, she made sure to give me three chicken recipes to help me interest the man I hoped to marry. (And did.)

She personified the mantra of "think globally, act locally." You can't get any more local than Estée Lauder turning up at Saks on a Saturday, showing the sales staff how to give customers personal attention and a free gift. The latter promotion, by the way, proved to be a work of utter genius. Now an army of young women and men, exquisitely turned out and properly trained, do the same in every department store that's worthy of the brands.

The global enterprise of the Estée Lauder Cos. is centered on the fortieth floor of the General Motors Building in Manhattan. Here the realm of very Big Business meets



One of Lauder's nine labels in Manhattan's Bloomingdale's.



Joseph Lauder probably didn't dream that one day he would help his wife build a dynasty.

the world of Estée Lauder—intensely refined, every woman's dream office. It has been the office of a businesswoman and mother, where work and family mingled seamlessly for decades in a major corporation—the Holy Grail of many working women today (her grandchildren are in key positions). Carol Phillips, who founded the Clinique line for the company, describes Lauder's management style as highly creative. She conducted business in subtly elegant comfort. "Her conference room was like a dining room, and everything was perfect. In the office were all the pleasant things that go with running a household."

And what households. Estée Lauder loved to "entertain," as giving large dinner parties was once called. She enjoyed "beautiful people"—celebrities, the rich and famous—and could invite them to dine with her at a table that could seat thirty without extensions. The food and the wines, lovely. She didn't miss a thing. She learned as she grew up. She watched; she enjoyed her world.

A word that must be added to the definition of Lauder: focus. She kept her eye on the world around her and on all women wherever they might be. She "liked to think about beauty and was determined to give women the opportunity to feel beautiful," says Leonard.

Beautiful didn't necessarily mean fashionable. Having edited two leading women's magazines over the past twenty-five years, I am hard pressed to think of a trend that Lauder started. The company never made any effort to be the makeup choice in the fashion shows. What you had with Estée Lauder was the quality of her view, of her demand for an ultrafeminine portrayal of the product. Every woman in every ad was the essence of femininity. Is that the kind of women we are talking about now? I'm not sure, but women know who Lauder is. Hers is a product with a focus—it's not MTV.

You will recognize the brand names, and what they stand for, as you would a friend's name: Estée Lauder, Prescriptives, Clinique, Origins, and Aramis. The company has even bought hot new lines such as M.A.C., Bobbi Brown Essentials, and Tommy Hilfiger fragrances. Lauder's company may not be able to set trends, but it is never going to be left behind by them. The boss—and her son after her—would never allow it. Says the company's vice chairman Jeanette Wagner: "No matter how she aged in years, she was still the youngest thinker in the room."

#### BRIEF BIOGRAPHY

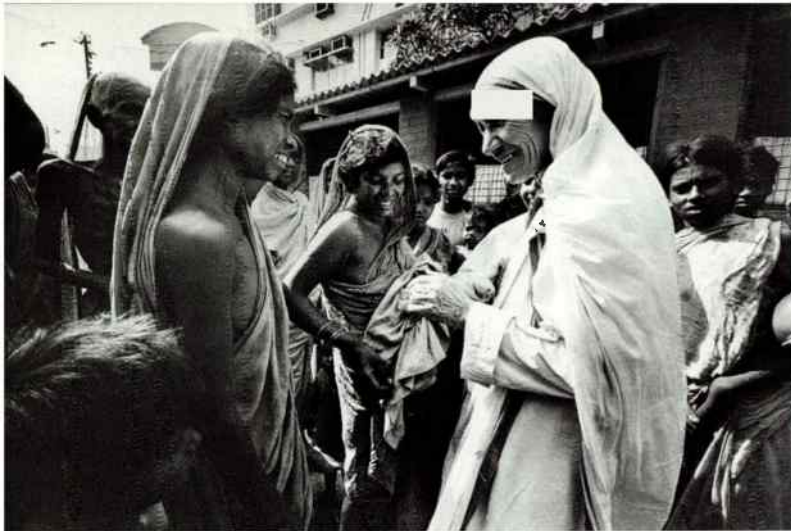
- BORN** July 1, around 1910, in New York City
- 1930** Marries Joseph Lauter (name later changed to Lauder)
- 1944** Opens first office in New York
- 1953** Launches her first scent, Youth Dew
- 1957** Prices Re-Nutriv cream at \$115 per pound
- 1968** Introduces Clinique, allergy-tested cosmetics
- 1979** Prescriptives brand skin care products debut
- 1982** Son Leonard succeeds her as CEO



# Mother Teresa

THE BENGALI CHAUVINIST IN ME GOT A THRILL: “This is Peter Jennings, tonight live from Calcutta.” For the first and only time in my life, the great city I was born and raised in hit the big time. Bengalis love to celebrate their language, their culture, their politics, their fierce attachment to a city that has been famously “dying” for more than a century.

*by Bharati Mukherjee*



An antiabortionist, she urged women to let her care for their unwanted babies.

They resent with equal ferocity the reflex stereotyping that labels any civic dysfunction anywhere in the world “another Calcutta.” And why were the American media in Calcutta? For the funeral of an eighty-seven-year-old Albanian immigrant by the name of Agnes Gonxha Bojaxhiu.

In this era of “ethnic cleansing,” identity politics, and dislocation of communities, it is heartening that one of the most margin-

alized people in recent history—a minority Albanian inside Slavic Macedonia, a minority Roman Catholic among Muslims and Orthodox Christians—should find a home, citizenship, and acceptance in an Indian city of countless non-Christians. She blurred the line between insider and outsider that so many today are trying to deepen.

Bojaxhiu was born of Roman Catholic Albanian parents in 1910 in Shkup (now Skopje), a town that straddled the ethnic, linguistic, religious, and geological fault line in the then Turkish province, later Yugoslav republic, now absurdly unnameable independent state of FYROM (the Former Yugoslav Republic of Macedonia). When she was seven, her father was murdered. Bojaxhiu chose emigration over political activism and at the age of eighteen entered the Sisters of Loreto’s convent in Ireland as a novice. The Sisters of Loreto, a teaching order, sent her to Bengal in 1929. She spoke broken English and had yet to take her first vows.

I first saw Mother Teresa in the summer of 1951, when I started school at Loreto House in Calcutta. The school was run by the Sisters of Loreto according to directives sent from its principal convent in Ireland. During the British Raj, Loreto House had admitted very few Indians. By the time I became a student there, the majority of students were Hindu Bengalis, the daughters of Calcutta’s elite families, but the majority of teachers continued to be Irish-born nuns. Mother Teresa was no longer affiliated with the Sisters of Loreto, but she came around to our campus every now and then. She had left teaching at another of the Sisters’ schools three years before in order to, as she put it, “follow Christ into the slums.” The break, as far as we schoolgirls could tell, had not been totally amicable, at least not on the part of the Loreto nuns.

The picture of Mother Teresa that I remember from my childhood is of a short, sari-wearing woman scurrying down a red gravel path between manicured lawns. She would have in tow one or two slower-footed, sari-clad young Indian nuns. We thought her a freak. Probably we’d picked up on unvoiced opinions of our Loreto nuns. We weren’t quite sure what an Albanian was except that she wasn’t as fully European as our Irish nuns. Or perhaps she seemed odd to us because we had never encountered a nun who wore a sari. There was only one Anglo-Indian nun in our school, and she wore the



customary habit. The government had made anti-missionary noises but hadn't yet cracked down on missionaries' visa applications.

The 6 A.M. mass, Mother Teresa said, was the spiritual food that sustained her.

In the early 1950s, we non-Christian students at Loreto House were suspicious of Mother Teresa's motives in helping street children and orphans. Was she rescuing these children to convert them? Her anti-abortion campaigns among homeless women were as easy for us to ignore as were the anti-abortion lectures our nuns delivered twice weekly. The government had made even very young women aware of the consequences of population explosion.

But the project of Mother Teresa's that confused us most was her care of the terminally ill destitute who came to the Kalighat Temple to die near a holy place. She wasn't interested in prolonging their life. What she railed against was the squalor and loneliness of their last hours. Her apparent dread of mortality and her obsession with dignified dying were at odds with Hindu concepts of reincarnation and death as a hoped-for release from *maya*, the illusory reality of worldly existence.

It wasn't until she had set up a leprosarium outside Calcutta on land provided by the government that I began to see her as an idealist rather than an eccentric. Lepers were a common sight all over India and in every part of Calcutta, but extending help beyond dropping a coin or two into their rag-wrapped stumps was not. As a child I was

convinced even touching a spot a leper had rubbed against would lead to infection. The ultimate terror the city held had nothing to do with violence. It was fear of the Other, the poor, the dying—or to evoke a word with biblical authority—the pestilential. And so I could no longer be cynical about her motives. She wasn't just another Christian proselytizer. Her care of lepers changed the mind of many Calcuttans. Young physicians, one of them the uncle of a classmate, began to sign up as volunteers. It all made Mother Teresa seem less remote. The very people whom she had deserted when she broke with the Loreto nuns were now seeking her out.

I left Calcutta as a teenager and did not return to live there for any length of time until 1973. The Calcutta I went back to was vociferously in love with Mother Teresa. The women I had been close to in Loreto House, women who in the 1970s had become socialite wives and volunteer social workers, were devoted to Mother Teresa and her projects, especially the leprosarium. Years later, I learned that the volunteer Mother Teresa came to rely on was a Loreto House graduate.

It is the fate of moral crusaders to be vulnerable to charges of hypocrisy or have the arbitrary selectiveness of their campaigns held against them. Mother Teresa's detractors have accused her of overemphasizing Calcuttans' destitution and of coercing conversion from the defenseless. In the context of lost causes, Mother Teresa took on battles she knew she could win. Taken together, it seems to me, the criticisms of her work do not undermine or topple her overall achievement. The real test might be, Did she inspire followers, skeptics, and even opponents to larger acts of kindness or greater visions of possibility? If the church demands hard evidence of a miracle for sainthood, the transformation of many hearts might make the strongest case.

#### BRIEF BIOGRAPHY

**BORN** August 27, 1910, in Shkup, Ottoman Empire

**1928** Joins Irish convent

**1929** Sent to novitiate in Darjeeling, India

**1931** Begins teaching at a Calcutta girls' school

**1946** Receives "call" to live and work among the poor

**1950** The Pope officially sanctions her order, the Missionaries of Charity

**1963** Awarded India's Padmashri, for services to the people of India

**1979** Wins Nobel Peace Prize

**DIED** September 5, 1997, in Calcutta



# Ronald Reagan

CLARE BOOTHE LUCE FAMOUSLY SAID THAT EACH President is remembered for a sentence: “He freed the slaves”; “He made the Louisiana Purchase.” You have to figure out your sentence, she used to tell John Kennedy, who would nod thoughtfully and then grouse when she left. Ronald Reagan knew, going in, the sentence he wanted, and he got it.

*by Peggy Noonan*





Reagan enjoys a queenly quip at the 1983 royal visit.

He guided the American victory in the Cold War. Under his leadership, a conflict that had absorbed a half-century of Western blood and treasure was ended—and the good guys finally won.

It is good to think of how he did it, because the gifts he brought to resolving the conflict reflected very much who he was as a man. He began with a commonsense conviction that the Soviets were not a people to be contained but a system to be defeated. This put him at odds with the long-held view of the foreign policy elites in the 1960s, 1970s, and 1980s, but Reagan had an old-fashioned sense that

Americans could do any good thing if God blessed the effort. Removing expansionary communism from the world stage was a right and good thing, and why would God not smile upon it?

He was a historical romantic, his biographer Edmund Morris says, and that's about right. He was one tough romantic, though.

When Reagan first entered politics, in 1964, Khrushchev had already promised to bury the U.S.. Sputnik had been launched, and missiles placed in Cuba. It seemed reasonable to think the Soviets might someday overtake the West. By the time Reagan made a serious run for the presidency, in 1976, it was easy to think the Soviets might conquer America militarily.

But Reagan said no. When he became President, he did what he had promised for a decade to do: he said we were going to rearm, and we built up the U.S. military. He boosted defense spending to make it clear to the Soviets and the world—and to America—that the U.S. did not intend to lose.

As President, he kept pressure on the Soviets at a time when they were beginning to fail internally. He pushed for SDI, the strategic defense missile system that was rightly understood by the Soviets as both a financial challenge and an intimidating expression of the power of U.S. scientific innovation.

There are those who say it was all a bluff, that such a system could never have been and will never be successfully developed. Put that aside for a moment, and consider a more relevant fact: if it was a bluff, the Soviets didn't know it. And more to the point, Reagan as President had the credibility with the Soviets to make a serious threat. (And a particularly Reaganesque threat it was: he said not only would we build SDI, but we would also share it with them.)

Reagan's actions toward the Soviets were matched by his constant rhetorical pounding of communism. He kept it up, for eight years, from "the evil empire" to "Mr. Gorbachev, tear down this wall," a constant attempt to use words to educate and inspire.

Margaret Thatcher said it best: he took words and sent them out to fight for us. He never stopped trying to persuade, to win the world over, to help it think about the nature

of democracy and the nature of communism, and to consider which system it was that threatened the world's peace.

In doing all this—in insisting that, as the sign he kept on his desk in the Oval Office said, it *can* be done—he kept up the morale of the anti-communist West. And not only Americans. When Natan Sharansky was freed after nine years in the Gulag, he went to the White House and asked Reagan never to stop his hard-line speeches. Sharansky said news of those speeches was passed from prisoner to prisoner in the forced-labor camps.

After eight years of Reagan and his constant efforts, the Soviet Union collapsed. And Kremlin chieftains who had once promised to bury us were now asking for inclusion in NATO. That this is now a commonplace—ho-hum, the Berlin Wall fell—is proof of how quickly we absorb the astounding. An elderly woman I know was at lunch at a great resort one day before World War I began. Suddenly

from the sky, one of those new flying machines, an aeroplane, which no one there had ever seen, zoomed in to land on the smooth, rolling lawn. Everyone ran out to look at this marvel and touch it. What, she was asked seventy years later, did you do after that? “We went inside and finished lunch.”

That's what the world did after the Wall came down, and is doing now. We went inside and finished lunch. But it is good to remember: a marvel had visited, had come down and landed on the lawn, even though such things are impossible. And it's good to remember that though many people built and funded and sacrificed for the “plane,” Ronald Reagan was its pilot.

Domestically, he was no less a smasher of the status quo, a leader for serious and “impossible” change. FDR, the great President of Reagan's young manhood and from whom he learned the sound and tone and tense of the presidency, convinced the country in the 1930s that only the bounty and power of the federal establishment could fully heal a wounded country. Reagan convinced (or reminded) the country that the bounty came from us, the people, that the power was absorbed from us, the people, and that we the people would benefit from a good portion of their return. Reagan had a libertarian conviction, which is really an old American conviction, that power is best and most just-



In 1984, Reagan accepts the GOP nomination for a second term.

ly wielded from the individual to the community to the state and then the federal government—and not from the federal government on down. He thought, as Jefferson said, that that government governs best that governs least. He wanted to shrink the bloated monster; he wanted to cut very seriously the amount of money the monster took from the citizenry each year in taxes.

He was not afraid to speak on school prayer and abortion, though his aides warned him it hurt him in the polls. He cared about the polls but refused to let them silence him. Abortion is wrong, he said, because it both kills and coarsens.

In doing all this, in taking the actions he took at home and abroad, in using words and conviction and character to fight, he produced the biggest, most successful, and most meaningful presidency since Franklin Roosevelt's. In fact, when you look at the great Presidents of this century, I think it comes down to two Roosevelts and a Reagan. Reagan kept Teddy's picture in his Cabinet Room, in part because he loved T.R.'s brio in tackling the big questions.

The result of Reagan's presidency? I asked him a few years after he left office what he thought his legacy was, how he would sum it up. It wasn't a very Reagan question:

he didn't think much about his personal place in history, he thought about what was right and then tried to do it. But he told me he thought his eight years could be summed up this way: "He tried to expand the frontiers of human freedom in a world at peace with itself."

He came from nowhere, not from Hyannis or Greenwich but from nowhere. He was born above a store in Tampico, Illinois, born in fact sixteen years before Lucky Lindy landed in Paris. It is easy to romanticize the Midwest Reagan came from, but he didn't. "There was nothing in those towns," he told me when I asked, years ago, why he left. He wanted more, and got it, in Hollywood and beyond. But he was not just a lucky and blessed young man, a bright fellow smiled on by the gods. He had grit.

He showed one kind of grit by becoming a conservative in Hollywood in the 1950s and 1960s. Just when everyone else was going left, particularly everyone in Hollywood who could enhance his career, he was going right. But he held to his position. It is easier to have convictions when they are shared by everyone around you; it is easier to hold to those convictions when you are surrounded by like-minded people. He almost never was.

He could take it in the face and keep on walking. Reaganites like to point to his 1976 run for the presidency, when he came within an inch of unseating Jerry Ford. When Reagan lost, he gave a valiant speech to his followers in which he spoke of the cause and signaled that he'd be back.

#### BRIEF BIOGRAPHY

**BORN** February 6, 1911, in Tampico, Illinois

**1947** Elected president of the Screen Actors Guild

**1948** Divorced from Jane Wyman

**1952** Marries Nancy Davis

**1962** Changes from Democratic to Republican Party

**1966** Elected California's Governor (reelected 1970)

**1980** Elected President of the United States

**1981** Shot in attempted assassination

**1984** Reelected President



But I like to remember this: Reagan played Vegas. In 1954, when demand for his acting services was slowing, Reagan exceeded a variety act to make money and keep his name in the air. He didn't like doing it. But it was what he had to do, so he did it. The point is he knew what it was to be through, to have people not answer your calls. When I thought about this time in his life once, I thought, All the great ones have known failure, but only the greatest of the great use it. He always used his. It deepened him and sharpened him.

What was it that made him great? You can argue that great moments call forth great leaders, that the 1920s brought forth a Harding, but the dramatic and demanding 1930s and 1980s summoned an F.D.R. and a Reagan. In Reagan's case, there was also something else. It was that he didn't become President to reach some egocentric sense of personal destiny; he didn't need the presidency, and he didn't go for it because of some strange vanity, some weird desire to be loved or a need of power to fill the empty spaces within. He didn't want the presidency in order to be a big man. He wanted the presidency so that he could do big things.

Always close, the Reagans relax in 1987 on a White House movie date.

I think as we look back we will see him as the last gentleman of American politics. He was as courtly and well mannered as Bill Clinton and Newt Gingrich are not. He was a person of dignity and weight, warmth and wit. The English say a gentleman is one who never insults another by accident, but Reagan took it a step further: he wouldn't insult another on purpose.

For all that, there was of course his famous detachment. I never understood it, and neither, from what I've seen, did anyone else. It is true that when you worked for him, whether for two years or twenty, he didn't care that much about your feelings. His saving grace—and it is a big one, a key one to his nature—is that he didn't care much about his feelings either. The cause was all, the effort to make the world calmer and the country freer was all.

Reagan's achievements were adult achievements, but when I think of him now I think of the reaction he got from the young. It was as if some mutual sweetness were sensed on both sides.

The man who ran speechwriting in the Reagan White House was Bently Elliott, and Ben's secretary was a woman in her early twenties named Donna. She adored Reagan. When he came back from long trips, when his helicopter landed on the White House lawn, the sound and whirr of the engine and blades would make our offices shake. We'd all stop and listen. Donna would call out, spoofing the mother in a 1950s sitcom, "Daddy's home!" But you know, that's how I think a lot of people felt when Reagan was in the White House: Daddy's home. A wise and brave and responsible man is running things. And that's a good way to feel.

Another memory. Ben Elliott went with Reagan on his trip to China in 1984. Reagan spoke everywhere, as the ruling gerontocracy watched and weighed. The elders did not notice that the young of China were falling in love with the American President (that love was expressed in part in Beijing's great square during the democracy movement of 1989). One day as Reagan spoke about the history of America and the nature of democracy, a young Chinese student, standing in the back and listening to the translation, turned to the American visitor, Ben Elliott. He didn't know much English, but he turned to Ben, pointed toward Reagan and said, eyes shining, "He is great Yankeeman."

One great Yankeeman is exactly what he was, and is.

# Lucille Ball



IT HAPPENED SOMEWHERE BETWEEN THE CLUNKY premiere episode (“Lucy Thinks Ricky Is Trying to Murder Her”) and her first classic routine, the Vitameatavegamin commercial, in which Lucy gets steadily soused as she keeps downing spoonfuls of the alcohol-laced potion she’s trying to hawk on TV. (Watch the spasm that jolts her face when she gets her

*by Richard Zoglin*



With her elastic face and flair for disguise, Ball was a great clown but never lost sight of her character.

Today *I Love Lucy*, with its farcical plots, broad physical humor, and unliberated picture of marriage, is sometimes dismissed as a relic. Yet the show has the timeless perfection of a crystal goblet. For all its comic hyperbole, Lucy explored universal themes: the tensions of married life, the clash between career and home, the meaning of loyalty and friendship. The series also reflected most of the decade's important social trends. The Ricardos made their contribution to the baby boom in January 1953—TV's Little Ricky was born on the same day that Ball gave birth, by caesarean, to her second child, Desi Jr. (A daughter, Lucie, had been born in 1951.) They traveled to California just as the nation was turning west, in a hilarious series of shows that epitomized our conception of—and obsession with—Hollywood glamour. And when the nation began moving to the suburbs, so too, in their last season, did the Ricardos.

Ball was a lithe and inventive physical comedian, and her famous slapstick bits—trying to keep up with a candy assembly line, stomping grapes in an Italian wine vat—were justly celebrated. But she was far more than a clown. Her mobile face could register a whole dictionary of emotions; her comic timing was unmatched; her devotion to the truth of her character never flagged. She was a tireless perfectionist. For one scene in which she needed to pop a paper bag, she spent three hours testing bags to make sure she got the right size and sound.

Most of all, *I Love Lucy* was grounded in emotional honesty. Though the couple had a tempestuous marriage off-screen (Desi was an unrepentant philanderer), the Ricardos' kisses showed the spark of real attraction. In the episode where Lucy finds out she is pregnant, she can't break the news to

#### BRIEF BIOGRAPHY

- BORN** August 6, 1911, in Jamestown, New York
- 1933** Moves to Hollywood
- 1937** Stars in *Stage Door* with Katharine Hepburn
- 1940** Marries Desi Arnaz
- 1951** *I Love Lucy* premieres on CBS
- 1953** The birth of Little Ricky becomes a national media event
- 1960** Divorces Arnaz
- 1962** Buys Arnaz's share of Desilu Productions and becomes first woman to head a major studio
- DIED** April 26, 1989, in Los Angeles

Ricky because he is too busy. Finally, she takes a table at his nightclub show and passes him an anonymous note asking that he sing a song, "We're Having a Baby," to the father-to-be. As Ricky roams the room looking for the happy couple, he spies Lucy and moves on. Then he does a heartrending double take, glides to his knees and asks, voice cracking, whether it's true. Finishing the scene together onstage, the couple are overcome by the real emotion of their own impending baby. Director William Asher, dismayed by the unrehearsed tears, even shot a second, more upbeat take. Luckily he used the first one; it's the most touching moment in sitcom history.

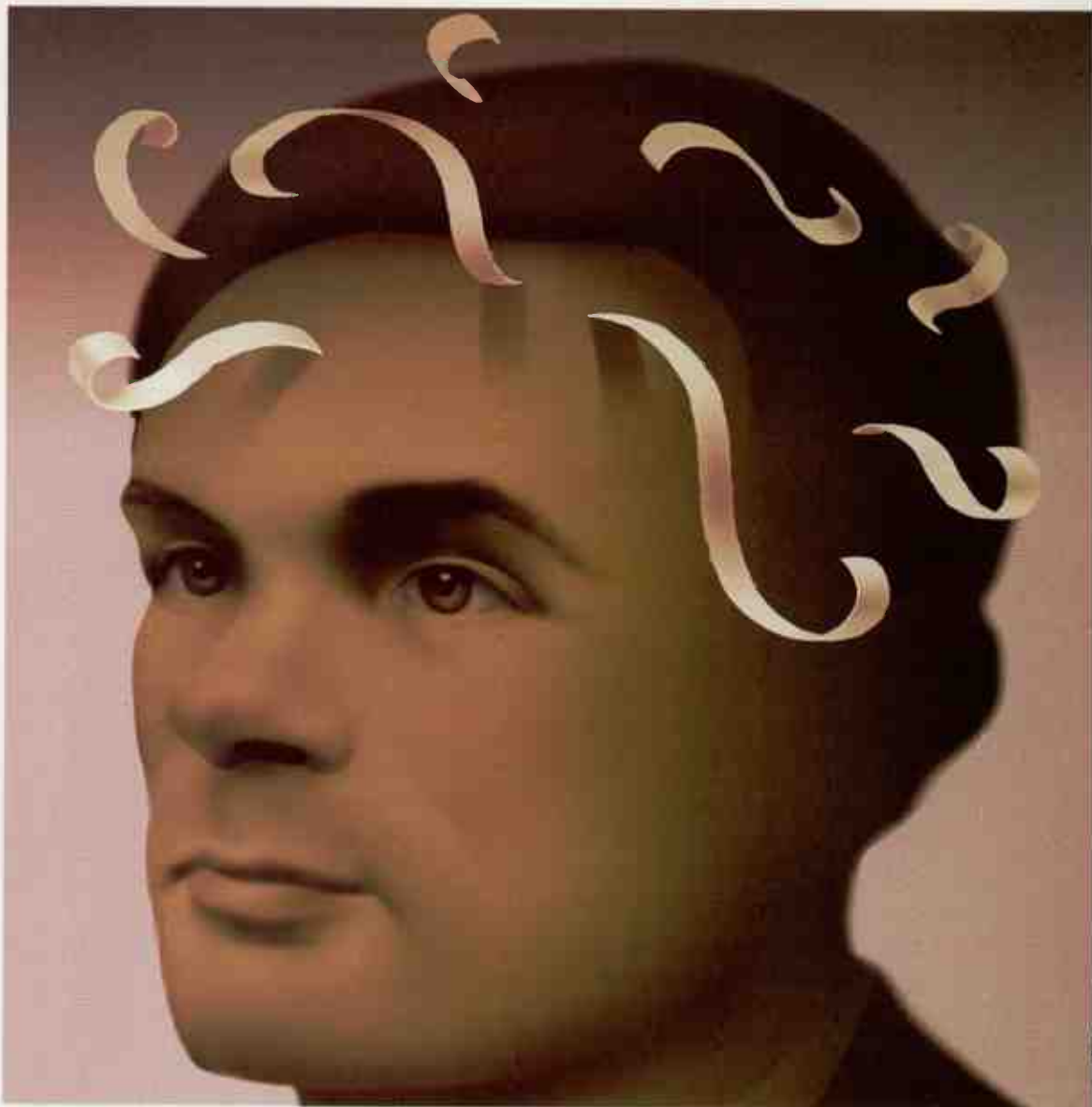


Playing to the camera, age two.

Tired of the grind of a weekly series, Lucy and Desi ended *I Love Lucy* in 1957, when it was still number one. For three more years, they did hour-long specials, then broke up the act for good when they divorced in 1960. Ball returned to TV with two other popular (if less satisfying) TV series, *The Lucy Show* and *Here's Lucy*; made a few more movies (starring in *Mame* in 1974); and attempted a final comeback in the 1986 ABC sitcom *Life with Lucy*, which lasted an ignominious eight weeks. But *I Love Lucy* lives on in reruns around the world, an endless loop of laughter and a reminder of the woman who helped make TV a habit, and an art.



# Alan Turing



IF ALL ALAN TURING HAD DONE WAS ANSWER. in the negative, a vexing question in the arcane realm of mathematical logic, few nonspecialists today would have any reason to remember him. But the method Turing used to show that certain propositions in a closed logical system cannot be proved within that system—a corollary to the proof that made Kurt Gödel famous—

*by Paul Gray*

had enormous consequences in the world at large. For what this eccentric young Cambridge don did was to dream up an imaginary machine—a fairly simple typewriter-like contraption capable somehow of scanning, or reading, instructions encoded on a tape of theoretically infinite length. As the scanner moved from one square of the tape to the next—responding to the sequential commands and modifying its mechanical response if so ordered—the output of such a process, Turing demonstrated, could replicate logical human thought.

The device in this inspired mind experiment quickly acquired a name: the Turing machine. And so did another of Turing's insights. Since the instructions on the tape governed the behavior of the machine, by changing those instructions, one could induce the machine to perform the functions of all such machines. In other words, depending on the tape it scanned, the same machine could calculate numbers or play chess or do anything else of a comparable nature. Hence his device acquired a new and even grander name: the Universal Turing Machine.

Does this concept—a fairly rudimentary assemblage of hardware performing prodigious and multifaceted tasks according to the dictates of the instructions fed to it—sound familiar? It certainly didn't in 1937, when Turing's seminal paper, "On Computable Numbers, with an Application to the *Entscheidungsproblem*," appeared in *Proceedings of the London Mathematical Society*. Turing's thoughts were recognized by the few readers capable of understanding them as theoretically interesting, even provocative. But no one recognized that Turing's machine provided a blueprint for what would eventually become the electronic digital computer.

So many ideas and technological advances converged to create the modern computer that it is foolhardy to give one person the credit for inventing it. But the fact remains that everyone who taps at a keyboard, opening a spreadsheet or a word processing program, is working on an incarnation of a Turing machine.

Turing's 1937 paper changed the direction of his life and embroiled a shy and vulnerable man ever more directly in the affairs of the world outside, ultimately with tragic consequences.

Alan Mathison Turing was born in London in 1912, the second of his parents' two sons. His father was a member of the British civil service in India, an environment that



Turing was enlisted to crack Hitler's secret "Enigma" code.

his mother considered unsuitable for her boys. So John and Alan Turing spent their childhood in foster households in England, separated from their parents except for occasional visits back home. Alan's loneliness during this period may have inspired his life-long interest in the operations of the human mind, how it can create a world when the world it is given proves barren or unsatisfactory.

At thirteen he enrolled at the Sherbourne School in Dorset and there showed a flair for mathematics, even if his papers were criticized for being "dirty," i.e., messy. Turing recognized his homosexuality while at Sherbourne and fell in love, albeit undeclared, with another boy at the school, who suddenly died of bovine tuberculosis. This loss shattered Turing's religious faith and led him into atheism and the conviction that all phenomena must have materialistic explanations. There was no soul in the machine nor any mind behind a brain. But how, then, did thought and consciousness arise?

After twice failing to win a fellowship at the University of Cambridge's Trinity College, a lodestar at the time for mathematicians from around the world, Turing received a fellowship from King's College, Cambridge. King's, under the guidance of such luminaries as John Maynard Keynes and E. M. Forster, provided a remarkably free and tolerant environment for Turing, who thrived there even though he was not considered quite elegant enough to be initiated into King's inner circles. When he completed his degree requirements, Turing was invited to remain at King's as a tutor. And there he might happily have stayed, pottering about with problems in mathematical logic, had not his invention of the Turing machine and World War II intervened.

Turing, on the basis of his published work, was recruited to serve in the Government Code and Cypher School, located in a Victorian mansion called Bletchley Park in Buckinghamshire. The task of all those so assembled—mathematicians, chess champions, Egyptologists, whoever might have something to contribute about the possible permutations of formal systems—was to break the Enigma codes used by the Nazis in communications between headquarters and troops. Because of secrecy restrictions, Turing's role in this enterprise was not acknowledged until long after his death. And like the invention of the computer, the work done by the Bletchley Park crew was very much a team effort. But it is now known that Turing played a crucial role in designing a primitive, computer-like machine that could decipher at high speed Nazi codes to U-boats in the North Atlantic.

After the war, Turing returned to Cambridge, hoping to pick up the quiet academic life he had intended. But the newly created mathematics division of the British National Physical Laboratory offered him the opportunity to create an actual Turing machine, the ACE or Automatic Computing Engine, and Turing accepted. What he discovered, unfor-

### BRIEF BIOGRAPHY

**BORN** June 23, 1912, in London

**1931–35** Studies mathematical logic at Cambridge

**1937** Landmark paper introduces the imaginary Turing machine

**1939–45** Secret work with team breaking the Nazis' Enigma codes

**1950** Paper in journal *Mind* predicts the advent of artificial intelligence

**1952** Convicted of "gross indecency" for homosexual acts

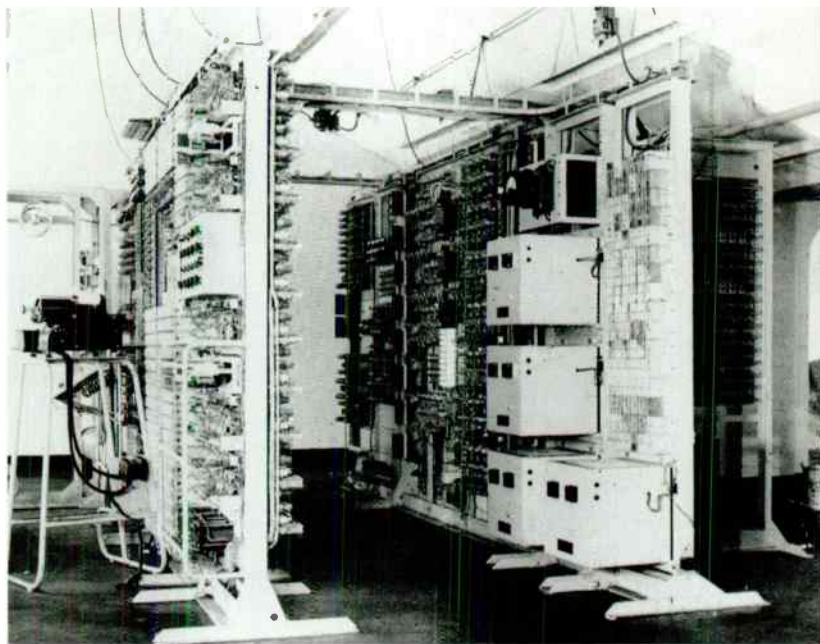
**DIED** June 7, 1954, a suicide, age forty-one

unately, was that the emergency spirit that had short-circuited so many problems at Bletchley Park during the war had dissipated. Bureaucracy, red tape, and interminable delays once again were the order of the day. Finding most of his suggestions dismissed, ignored, or overruled, Turing eventually left the National Physical Laboratory for another stay at Cambridge and then accepted an offer from the University of Manchester, where another computer was being constructed along the lines he had suggested back in 1937.

Since his original paper, Turing had considerably broadened his thoughts on thinking machines. He now proposed the idea that a machine could learn from and thus modify its own instructions. In a famous 1950 article in the British philosophical journal *Mind*, Turing proposed what he called an "imitation test," later called the "Turing test." Imagine an interrogator in a closed room hooked up in some manner with two subjects, one human and the other a computer. If the questioner cannot determine by the responses to queries posed to them which is the human and which the computer, then the computer can be said to be "thinking" as well as the human.

Turing remains a hero to proponents of artificial intelligence in part because of his blithe assumption of a rosy future: "One day ladies will take their computers for walks in the park and tell each other, 'My little computer said such a funny thing this morning!'"

Unfortunately, reality caught up with Turing well before his vision would, if ever, be realized. In Manchester, he told police investigating a robbery at his house that he was having "an affair" with a man who was probably known to the burglar. Always frank about his sexual orientation, Turing this time got himself into real trouble. Homosexual relations were still a felony in Britain, and Turing was tried and convicted of "gross indecency" in 1952. He was spared prison but subjected to injections of female hormones intended to dampen his lust. "I'm growing breasts!" Turing told a friend. On June 7, 1954, he committed suicide by eating an apple laced with cyanide. He was forty-one.



His colossus crunched numbers for Britain in World War II.

# Rosa Parks



*How she sat there, the time right inside a place so wrong it was ready.*

*—From “Rosa,” in On the Bus with Rosa Parks by Rita Dove*

WE KNOW THE STORY. ONE DECEMBER EVENING, a woman left work and boarded a bus for home. She was tired; her feet ached. But this was Montgomery, Alabama, in 1955, and as the bus became crowded, the woman, a black woman, was ordered to give

*by Rita Dove*

up her seat to a white passenger. When she remained seated, that simple decision eventually led to the disintegration of institutionalized segregation in the South, ushering in a new era of the civil rights movement.

This, anyway, was the story I had heard from the time I was curious enough to eavesdrop on adult conversations. I was three years old when a white bus driver warned Rosa Parks. “Well, I’m going to have you arrested,” and she replied, “You may go on and do so.” As a child, I didn’t understand how doing nothing had caused so much activity, but I recognized the template: David slaying the giant Goliath, or the boy who saved his village by sticking his finger in the dike. And perhaps it is precisely the lure of fairy-tale retribution that colors the lens we look back through. Parks was forty-two years old when she refused to give up her seat. She has insisted that her feet were not aching; she was, by her own testimony, no more tired than usual. And she did not plan her fateful act: “I did not get on the bus to get arrested,” she has said. “I got on the bus to go home.”

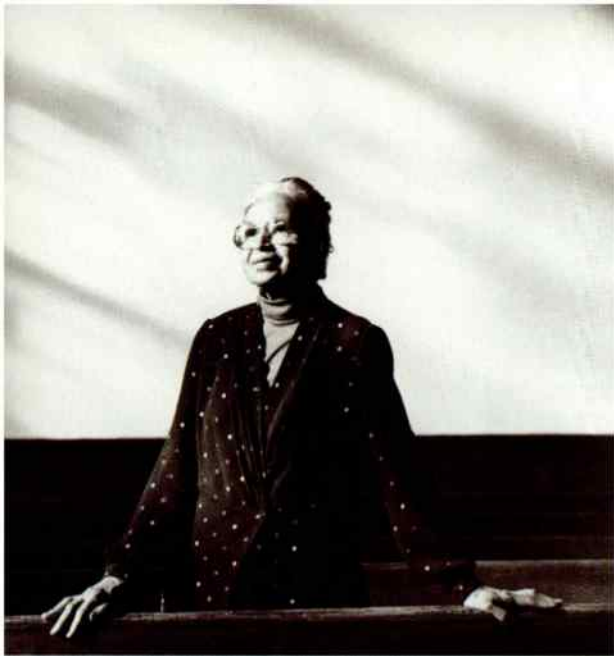
Montgomery’s segregation laws were complex: blacks were required to pay their fare to the driver, then get off and reboard through the back door. Sometimes the bus would drive off before the paid-up customers made it to the back entrance. If the white section was full and another white customer entered, blacks were required to give up their seats and move further to the back: a black person was not even allowed to sit across the aisle from whites. These humiliations were compounded by the fact that two thirds of the bus riders in Montgomery were black.

Parks was not the first to be detained for this offense. Eight months earlier, Claudette Colvin, fifteen, refused to give up her seat and was arrested. Black activists met with this girl to determine if she would make a good test case—as secretary of the local NAACP, Parks attended the meeting—but it was decided that a more “upstanding” candidate was necessary to withstand the scrutiny of the courts and the press. And then in October, a young woman named Mary Louise Smith was arrested; NAACP leaders rejected her too as their vehicle, looking for someone more able to withstand media scrutiny. Smith paid the fine and was released.

Six weeks later, the time was ripe. The facts, rubbed shiny for retelling, are these: On December 1, 1955, Mrs. Rosa Parks, seamstress for the Montgomery Fair depart-



Parks said she merely wanted to “go home,” but her arrest dramatically humanized the struggle to dismantle Jim Crow.



To this day, Parks remains a symbol of dignity in the face of brute authority.

ment store, boarded the Cleveland Avenue bus. She took a seat in the fifth row—the first row of the “Colored Section.” The driver was the same one who had put her off a bus twelve years earlier for refusing to get off and reboard through the back door. (“He was still mean-looking,” she has said.) Did that make her stubborn? Or had her work in the NAACP sharpened her sensibilities so that she knew what to do—or more precisely, what not to do: don’t frown, don’t struggle, don’t shout, don’t pay the fine?

At the news of the arrest, local civil rights leader E. D. Nixon exclaimed, “My God, look what segregation has put in my hands!” Parks was not only above moral reproach (securely married, reasonably employed) but possessed a quiet fortitude as well as political savvy—in short, she was the ideal

plaintiff for a test case.

She was arrested on a Thursday; bail was posted by Clifford Durr, the white lawyer whose wife had employed Parks as a seamstress. That evening, after talking it over with her mother and husband, Rosa Parks agreed to challenge the constitutionality of Montgomery’s segregation laws. During a midnight meeting of the Women’s Political Council, 35,000 handbills were mimeographed for distribution to all black schools the next morning. The message was simple:

“We are . . . asking every Negro to stay off the buses Monday in protest of the arrest and trial. . . . You can afford to stay out of school for one day. If you work, take a cab, or walk. But please, children and grown-ups, don’t ride the bus at all on Monday. Please stay off the buses Monday.”

Monday came. Rain threatened, yet the black population of Montgomery stayed off the buses, either walking or catching one of the black cabs stopping at every municipal bus stop for 10 cents per customer—standard bus fare. Meanwhile, Parks was scheduled to appear in court. As she made her way through the throngs at the courthouse, a demure figure in a long-sleeved black dress with white collar and cuffs, a trim black velvet hat, gray coat, and white gloves, a girl in the crowd caught sight of her and cried out, “Oh, she’s so sweet. They’ve messed with the wrong one now!”

Yes, indeed. The trial lasted thirty minutes, with the expected conviction and penalty. That after-

#### BRIEF BIOGRAPHY

- BORN** Rosa Louise McCauley, February 4, 1913, in Tuskegee, Alabama
- 1955** On December 1 in Montgomery, Alabama, she refuses to go to the back of the bus and is arrested, igniting bus boycott led by Martin Luther King Jr.
- 1956** Boycott ends on December 21, after U.S. Supreme Court rules bus segregation is unconstitutional
- 1957** Moves to Michigan to escape harassment
- 1996** Receives Presidential Medal of Freedom
- 1999** Receives Congressional Gold Medal

noon, the Montgomery Improvement Association was formed. So as not to ruffle any local activists' feathers, the members elected as their president a relative newcomer to Montgomery, the young minister of Dexter Avenue Baptist Church: the Reverend Martin Luther King Jr. That evening, addressing a crowd gathered at the Holt Street Baptist Church, King declared in that sonorous, ringing voice millions the world over would soon thrill to: "There comes a time that people get tired." When he was finished, Parks stood up so the audience could see her. She did not speak; there was no need to. Here I am, her silence said, among you.

And she has been with us ever since—a persistent symbol of human dignity in the face of brutal authority. The famous UPI photo (actually taken more than a year later, on December 21, 1956, the day Montgomery's public transportation system was legally integrated) is a study of calm strength. She is looking out the bus window, her hands resting in the folds of her checked dress, while a white man sits, unperturbed, in the row behind her. That clear profile, the neat cloche and eyeglasses and sensible coat—she could have been my mother, anybody's favorite aunt.

History is often portrayed as a string of arias in a grand opera, all baritone intrigues and tenor heroics. Some of the most tumultuous events, however, have been provoked by serendipity—the assassination of an inconsequential archduke spawned World War I, a kicked-over lantern may have sparked the Great Chicago Fire. One cannot help wondering what role Martin Luther King Jr. would have played in the civil rights movement if the opportunity had not presented itself that first evening of the boycott—if Rosa Parks had chosen a row further back from the outset, or if she had missed the bus altogether.

At the end of this millennium (and a particularly noisy century), it is the modesty of Rosa Parks's example that sustains us. It is no less than the belief in the power of the individual, that cornerstone of the American Dream, that she inspires, along with the hope that all of us—even the least of us—could be that brave, that serenely human, when crunch time comes.



Despite her demure image, Parks was a committed activist who helped King coordinate the 1966 Bus Boycott.



# Hillary and Tenzing



ON MAY 29, 1953, EDMUND HILLARY OF NEW ZEALAND and Tenzing Norgay of Nepal became the first human beings to conquer Mount Everest—Chomolungma, to its people—at 29,028 feet the highest place on earth. By any rational standards, this was no big deal. Aircraft had long before flown over the summit, and within a few decades literally hundreds of

by *Jan Morris*

other people from many nations would climb Everest too. And what is particularly remarkable, anyway, about getting to the top of a mountain?

Geography was not furthered by the achievement, scientific progress was scarcely hastened, and nothing new was discovered. Yet the names of Hillary and Tenzing went instantly into all languages as the names of heroes, partly because they really were men of heroic mold but chiefly because they represented so compellingly the spirit of their time. The world of the early 1950s was still a little punch-



Hillary, left, and Tenzing on their historic climb.

drunk from World War II, which had ended less than a decade before. Everything was changing. Great old powers were falling, virile new ones were rising, and the huge, poor mass of Asia and Africa was stirring into self-awareness. Hillary and Tenzing went to the Himalayas under the auspices of the British Empire, then recognizably in terminal decline. The expedition was the British Everest Expedition, 1953, and it was led by Colonel John Hunt, the truest of true English gentlemen. It was proper to the historical moment that one of the two climbers immortalized by the event came from a remote former colony of the Crown and the other from a nation that had long served as a buffer state of the imperial Raj.

I am sure they felt no zeitgeist in them when they labored up the last snow slope to the summit. They were both very straightforward men. Tenzing was a professional mountaineer from the Sherpa community of the Everest foothills. After several expeditions to the mountain, he certainly wanted to get to the top for vocational reasons, but he also planned to deposit in the highest of all snows some offerings to the divinities that had long made Chomolungma sacred to his people. Hillary was by profession a beekeeper, and he would have been less than human if he had not occasionally thought, buckling his crampons, that reaching the summit would make him famous.

They were not, though, heroes of the old epic kind, dedicated to colossal purposes, tight of jaw and stiff of upper lip. That was George Mallory, who said most famously in 1924 that he was climbing Mount Everest "because it is there." But if he ever reached the summit, he never lived to tell the tale. Hillary and Tenzing were two cheerful and courageous fellows doing what they liked doing, and did, best, and they made an oddly assorted pair. Hillary was tall, lanky, big-boned, and long-faced, and he moved with an incongruous grace, rather like a giraffe. He habitually wore on his head a home-made cap with a cotton flap behind, as seen in old movies of the French Foreign Legion. Tenzing was by comparison a Himalayan fashion model: small, neat, rather delicate,



The expedition reached the top free of frostbite or death.

of their adventure that Hillary's first words when he returned from the summit, to his fellow New Zealander George Lowe, were, "Well, George, we've knocked the bastard off!"

The real point of mountain climbing, as of most hard sports, is that it voluntarily tests the human spirit against the fiercest odds, not that it achieves anything more substantial—or even wins the contest, for that matter. For the most part, its heroism is of a subjective kind. It was the fate of Hillary and Tenzing, though, to become very public heroes indeed, and it was a measure of the men that over the years they truly grew into the condition. Perhaps they thought that just being the first to climb a hill was hardly qualification for immortality; perhaps they instinctively realized destiny had another place for them. For they both became, in the course of time, representatives not merely of their particular nations but of half of humanity. Astronauts might justly claim that they were envoys of all humanity; Hillary and Tenzing, in a less spectacular kind, came to stand for the small nations of the world, the young ones, the tucked-away and the up-and-coming.

Both, of course, were showered with worldly honors, and accepted them with aplomb. Both became the most celebrated citizens of their respective coun-

brown as a berry, with the confident movements of a cat. Hillary grinned; Tenzing smiled. Hillary guffawed; Tenzing chuckled. Neither of them seemed particularly perturbed by anything; on the other hand, neither went in for unnecessary bravado.

As it happened, their enterprise involved no great sacrifice. Nobody was killed, maimed, or even frostbitten during the British Everest Expedition of 1953. They were not in the least aggressive, except in a technical sense. They were considerate members of a team, and it was true to the temper-

#### BRIEF BIOGRAPHY

**BORN** Tenzing, May 1914, in Solo Khumbu, Nepal; Hillary, July 20, 1919, in Auckland, New Zealand

**1935** Charles Warren makes an unsuccessful assault on Everest—and the acquaintance of Tenzing, his Sherpa porter; Warren later introduces Tenzing to Hillary

**1953** Hillary and Tenzing are the first to reach the summit of Mount Everest

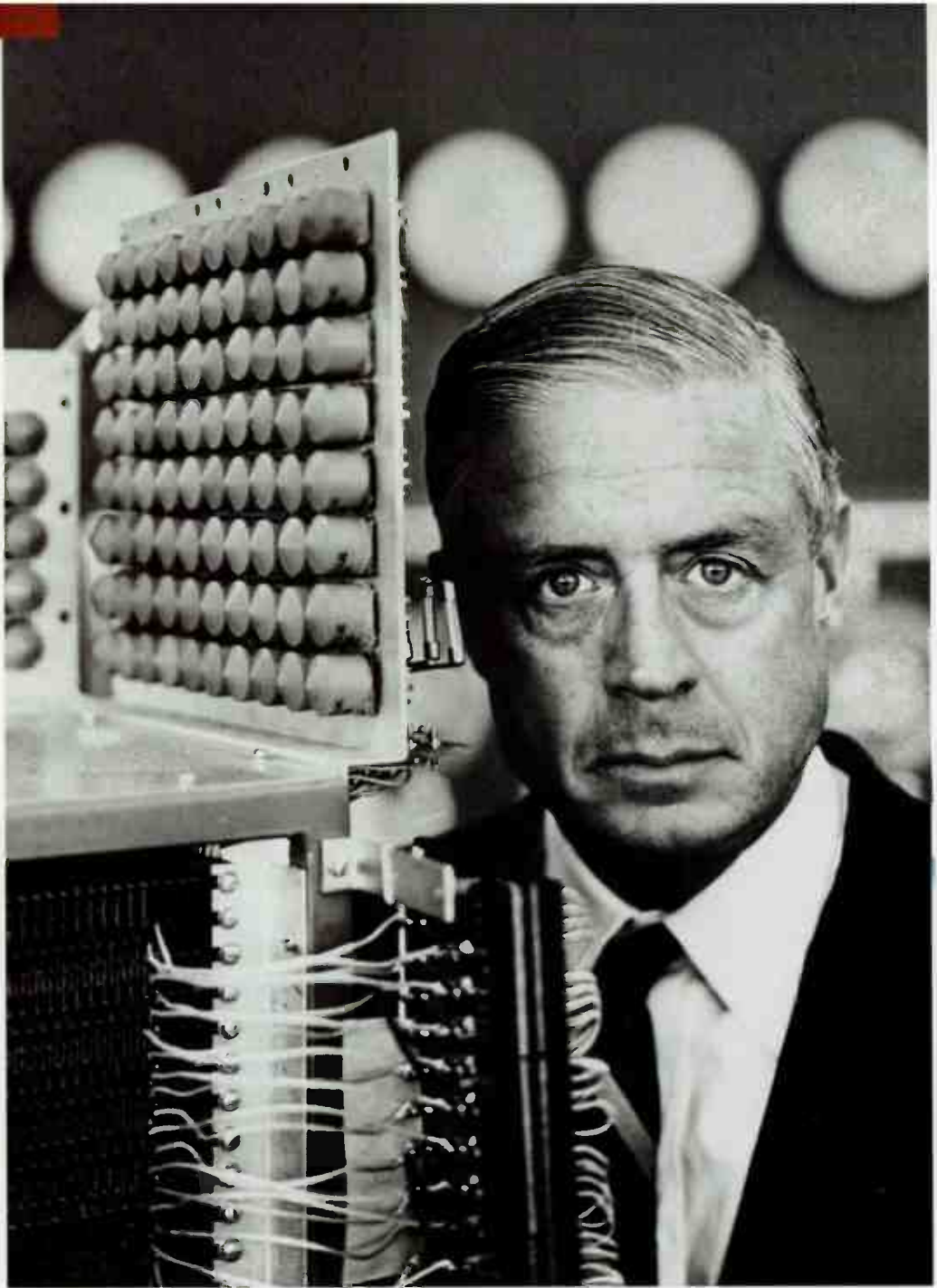
**1954** Tenzing becomes head of the Institute of Mountaineering in Darjeeling, India

**DIED** Tenzing, on May 9, 1986, in Darjeeling

tries and went around the world on their behalf. But both devoted much of their lives to the happiness of an archetypically unprivileged segment of mankind: the Sherpas, Tenzing's people, true natives of the Everest region. Tenzing, who died in 1986, became their charismatic champion and a living-model of their potential. Grand old Ed Hillary, who is still robustly with us, has spent years in their country supervising the building of airfields, schools, and hospitals and making the Sherpas' existence better known to the world. Thus the two of them rose above celebrity to stand up for the unluckier third of humanity, who generally cannot spare the time or energy, let alone the money, to mess around in mountains.

I liked these men very much when I first met them on the mountain nearly a half-century ago, but I came to admire them far more in the years that followed. I thought their brand of heroism—the heroism of example, the heroism of debts repaid and causes sustained—far more inspiring than the gung ho kind. Did it really mean much to the human race when Everest was conquered for the first time? Only because there became attached to the memory of the exploit, in the years that followed, a reputation for decency, kindness, and stylish simplicity. Hillary and Tenzing fixed it when they knocked the bastard off.

# Thomas Watson Jr.



AS THE ELDEST SON OF THE PRESIDENT of International Business Machines, Thomas Watson Jr. grew up tortured by self-doubt. He suffered bouts of depression and once burst into tears over the thought that his formidable father wanted him to

*by John Greenwald*

join IBM and eventually run what was already a significant company. "I can't do it," he wailed to his mother. "I can't go to work for IBM."

Yet twenty-six years later, Watson not only succeeded his father but also would eventually surpass him. IBM is now synonymous with computers, even though the company did not invent the device that would change our life, nor had it shipped a single computer before Tom Jr. took over.

But he boldly took IBM—and the world—into the computer age, and in the process developed a company whose awesome sales and service savvy and dark-suited culture stood for everything good and bad about corporate America. No wonder the Justice Department sought (unsuccessfully) to break it up.

Under Tom Jr., Big Blue put its logo on 70 percent of the world's computers and so thoroughly dominated the industry that even rivals like Univac—which built the first large commercial computer—were dismissed as merely part of "the Bunch."

And while newcomers such as Compaq and Microsoft brought the company to its knees in the 1980s, the colossus that Watson inherited and reinvented in the 1950s and 1960s stands strong again today, the sixth largest U.S. company.

Not a bad legacy for someone who spent his youth "convinced that I had something missing" inside. A perpetually failing student, "Terrible Tommy" Watson vented his frustration by pulling pranks and tangling with authority. He needed six years and three schools to get through high school, and managed to graduate from Brown University only through the forbearance of a sympathetic dean. The young playboy rated the pleasures of drinking and dancing far above those of learning.

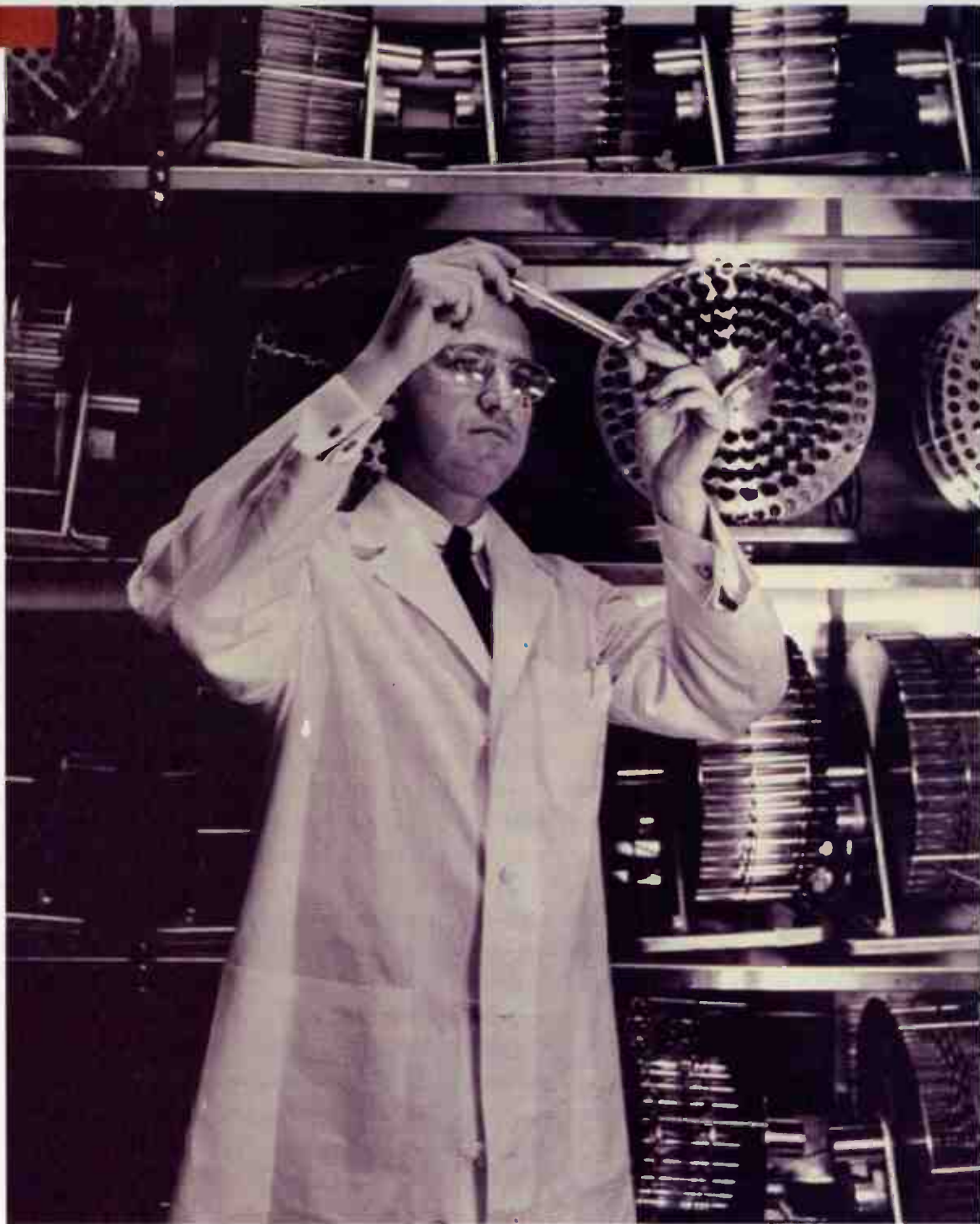
Watson enrolled in IBM sales school after college and hated that as well. He devoted more time to indulging his passions for flying airplanes by day and partying by night than to calling on clients. Even so, Watson filled his entire sales quota for 1940 on the first day of that year—but only because the company had thrown the boss's son a big account to make him look good.

World War II liberated Tom Watson Jr. from his demons. His success in promoting the use of flight simulators earned him a job as aide and pilot for Major General Follett Bradley, the Army Air Forces' inspector general. Watson flew throughout Asia, Africa, and the Pacific, displaying steel nerves and shrewd foresight and planning



Watson's legacy: an IBM computer beat chess champ Garry Kasparov

# Jonas Salk



HOW MANY CASES MAKE AN EPIDEMIC? Survivors of the great polio plagues of the 1940s and 1950s will never believe that in the U.S. the average toll in those years was “only” one victim out of every five thousand people. Was that

*by Wilfrid Sheed*

really all it took to scare the nation out of its wits, sending families scurrying in all directions—to the mountains, to the desert, to Europe—in vain hope of sanctuary.

Perhaps polio's other name, infantile paralysis, had something to do with it. Images of babies in wheelchairs and tots on crutches tend to skew one's perception. And just in case anyone wasn't scared enough, the National Foundation for Infantile Paralysis hammered the nightmare home with photos that seemed to show up everywhere of sad-looking children in leg braces. "Please give to the March of Dimes." Oh yes, indeed, five times at the same movie—or so it sometimes felt.

It was inevitable that whoever was first to allay such fears would become a national hero. "The Man Who Saved the Children" should be good for a statue in every town in the world. And since the odds of a microbiologist becoming even a little bit famous are a lot worse than five thousand to one, it was perhaps inevitable that this hero's achievements would immediately be disputed. In a scientific field so heavily manned, findings routinely crisscross and even minor discoveries can leave a trail of claims and counterclaims, not to mention envy and acrimony, that are truly incurable.

Thus a monument to the conquest of polio faithful to the facts would consist of not one man in a white lab coat but two of them glaring at each other. Both Drs. Jonas Salk and Albert Sabin could and did make convincing cases for themselves and pretty good ones against each other too. But since the public usually prefers one hero to two, and since Salk did get there first, he got the monument.

Between occasional shouts of "Eureka!" even the heroes of science tend to have quiet careers. But Salk's career stands out in at least two respects: the sheer speed with which he outraced all the other tortoises in the field and the honors he did not receive for doing so. How could the Man Who Saved the Children be denied a Nobel Prize? Or summarily be turned down for membership in the National Academy of Sciences? What was it about Salk that so annoyed his fellow scientists?

That he was fast, there was no doubt. And hungry too. After taking brilliant advantage of the amazing public education available to New Yorkers in the first half of this century, this son of Orthodox Polish-Jewish immigrants whizzed through his medical training to fetch up at the University of Michigan an enviable fellowship to study virology under the distinguished Dr. Thomas Francis—who, incidentally, would remain in Salk's corner for life, politics or no politics.

Salk's major patron at Michigan, however, proved to be no one man but the whole U.S. Army, which needed a flu vaccine at once to help win World War II and was happy to complete Salk's education in speed under pressure. After that, it was a snap for him



Mothers—if not their children—were thrilled with the shots.



to set up his own peacetime lab at the University of Pittsburgh and equip it to the gills for the Great Crusade—the one that every immunologist in the world then had his eye on—against the Great White Whale itself, poliomyelitis.

Fortunately, Salk had somehow found time to do basic research on the virus and write a few theoretical papers, and it was these that caught the eye of Basil O'Connor, the zealous head of the Infantile Paralysis Foundation, who decided to play a hunch and shove some dimes in Salk's direction with instructions to get going.

With that, the seeds of resentment, deep and abiding, were sown. By then, dozens of worthy researchers had been toiling far longer than Salk in the fields of polio and

would have given their microscopes for such funding and freedom. Who was this hired gun who appeared from nowhere with a bankroll the size of a special prosecutor's, plus free use of all the backbreaking work that had gone before?

In fact, the key piece of research, available to all, was completed a few years earlier by the one undisputed hero of this story, Harvard's John Enders. It was his team that figured out how to grow polio in test tubes—suddenly giving vaccine hunters everywhere enough virus to work with.

Now the goal was truly in sight, and who got there first was largely a matter of speed—Salk's forte—and luck. "Salk was strictly a kitchen chemist," Sabin used to gripe. "He never had an original idea in his life." But imaginative people perennially underrate efficient ones, and at the time, the kitchen chemist—who prepared his vaccine by marinating the virus in formalin—was just what the doctor ordered.

Salk and Sabin came from the two competing schools of vaccine research. Sabin, like Louis Pasteur, believed the way to produce immunity was to create a mild infection with a "live" but crippled virus, and he concocted his competing vaccine accordingly. Salk, from his flu-fighting days, knew the immune system could be triggered without infection, using deactivated, or "killed," viruses. And, as it turned out, his quick-and-dirty killed viruses were better suited to a crash program than Sabin's carefully attenuated live ones. By 1954, Salk and Francis were ready to launch the largest medical experiment yet carried out in the U.S., vaccinating more than one million kids ages six to nine, some with the vaccine, some with a placebo. The children weren't told which they were getting.

The vaccine worked. But the world of science has a protocol for releasing such findings: first publish them in a medical journal, and then spread the credit as widely as possible. Salk took part in a press conference and went on radio but gave credit to nobody, including himself—of course, he was going to get the credit anyway. And that was the mistake that would haunt him.

## BRIEF BIOGRAPHY

**BORN** October 28, 1914, in East Harlem, New York

**1939** Graduates from New York University College of Medicine

**1942** Begins work on first commercial flu vaccine

**1949** Starts polio research with funding from the March of Dimes

**1955** Announces success of his polio vaccine; mass immunization begins

**1960** Founds Salk Institute for Biological Studies in La Jolla, California

**DIED** 1995 at eighty



The man and his medicine in 1955.

Radio was right; vanity was wrong. This was not some breakthrough in carbuncle research but hot news that couldn't wait one more minute. Within the brotherhood of researchers, however, Salk had sinned unforgivably by not saluting either Enders or, more seriously, his colleagues at the Pittsburgh lab. Everything he did after that was taken as showboating—when he opened the Salk Institute, a superlab in La Jolla, California, for the world's scientists to retreat to and bask in, and even when not long before his death in 1995, he started a search for an AIDS vaccine, to a flourish of trumpets and welcome new funding.

Just as some politicians are at their best when running for office, so Salk came into his own as a spokesman for vaccination. Although it is generally accepted in the field that the real man on the monument should be Enders (who in 1954 shared the only Nobel Prize given for polio research), it seems unlikely that either he or the pugnacious Sabin would have performed half so patiently as Salk the ceremonial chores expected of monuments or would have sat so politely through so many interviews and spread the gospel of disease prevention quite so far and wide and indefatigably.

And one last thing. Like the millions of American veterans who have never ceased thanking Harry Truman for dropping the Bomb and ending World War II, the folks who got their polio shot between the first Salk vaccine and the Sabin model have never had any quarrel with Salk's high place in history. (The two vaccines are now given in alternating booster shots.) There are times when even genius has to give way to the old Yankee virtues of know-how and can do. And if in this instance these happened to be embodied in the son of a couple of Polish-Jewish immigrants . . . well, a lot of that kind of thing happens in America.

# Frank Sinatra



FRANK SINATRA HAS RECEIVED FAR TOO MANY tributes already.

Even before his death in 1998 there was the eightieth-birthday hoopla of two and a half years before, followed by the flock of recently published books circling, vulture-like, in clear anticipation of his passing. At this point any recounting of his accomplishments—his unassailable greatness as a

*by Bruce Handy*

singer, his somewhat more assailable greatness as an actor, his impeccable taste as a curator of the great American songbook, his ancillary talents as both philanthropist and thug, his status as a totem of mid-century masculinity—inevitably takes on a dutiful, ritualistic air. So what better way to breathe a little life into the process than with an insult?

“George Steinbrenner with a voice” was the epithet coined by a colleague of mine—born in the baby boom’s dead center, it should be noted—who objects to the bad-hair Republican bluster of Sinatra’s later years, his belting out of all those anthems of middle-aged self-assertion. He did it his way. He can make it anywhere. He picks himself up and gets back in the race—that’s life, or Sinatra’s blowhard version of it anyway. It is the artfully projected worldview of a casino entertainer, a glorified greeter, whose job it was to make old guys with bum tickers and second wives feel good about themselves.

On one hand, my colleague’s view of Sinatra as scourge of baby boomers—the anti-Judy Collins, if you will—is a crude caricature of a complex artist, as reductive as any neo-swinger’s fetishistic prattling about the man’s way with a pocket handkerchief. On the other hand, it is a caricature I too used to believe in.

Should anyone even care what people like my colleague and I think of Sinatra? My own higher notions about music were incubated while listening to Jethro Tull albums (whoa—a flute!). Sinatra’s body of work, meanwhile, stretches back to the 1930s and is nothing less than “the final statement on pre-rock pop,” as Will Friedwald, the invaluable Sinatra scholar, recently wrote of the *Songs for Swingin’ Lovers!* album, released in 1956 and generally considered Sinatra’s finest LP. “Something radically different just had to come next.” Friedwald continues, “because nothing in the realm of Tin Pan Alley could top this bravura celebration of grown-up love.” You can’t sum up Sinatra’s achievement more succinctly than that.

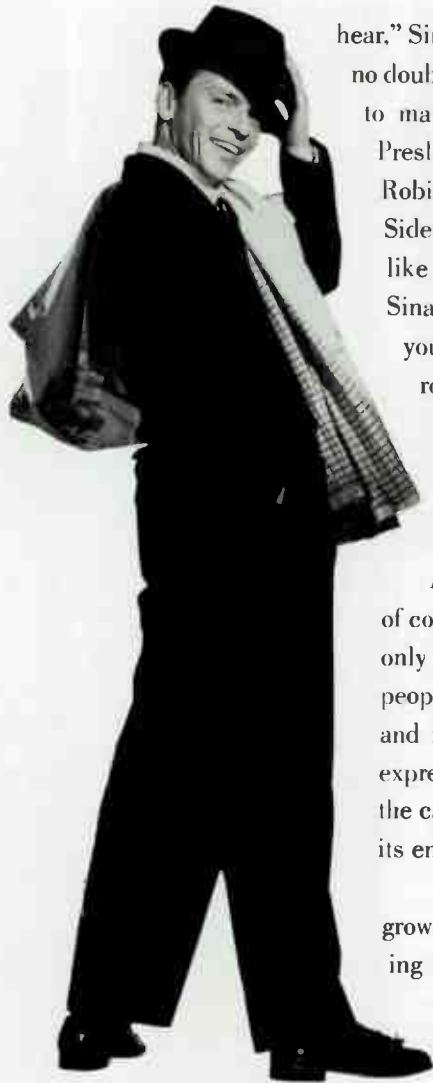
But he had nearly forty years of performing left ahead of him in 1956; more than two thirds of his professional life was spent in the rock era, much of it reacting to rhythms and attitudes he found alien. “The most brutal, ugly, degenerate, vicious form of expression it has been my displeasure to



“The Leader,” in 1961 with Rat Packers Dean Martin and Sammy Davis Jr., turned partying into mass entertainment.

#### BRIEF BIOGRAPHY

- BORN** December 12, 1915, in Hoboken, New Jersey
- 1935** Wins radio talent show
- 1940** Joins Tommy Dorsey band
- 1944** Solo concerts at New York’s Paramount cause bobby-soxers to riot
- 1954** Wins Oscar for *From Here to Eternity*
- 1960** Makes first Rat Pack movie, *Ocean’s Eleven*
- 1985** Gets Presidential Medal of Freedom
- DIED** May 14, 1998, in Los Angeles



At his musical peak on his 1950s albums for Capitol, Sinatra embodied swingin'.

hear," Sinatra wrote of rock 'n' roll at the time of Elvis Presley's preeminence, no doubt hoping to turn back the Mongols. It didn't quite work, and in efforts to maintain his commercial viability, Sinatra would eventually record Presley's hit "Love Me Tender" as well as works by Paul Simon ("Mrs. Robinson"), George Harrison ("Something"), and Joni Mitchell ("Both Sides Now"). The results were often awkward—this is the Sinatra people like me used to make fun of. But listen with more knowing ears: when Sinatra sings "You stick around, Jack, it might show" on "Something," you get the feeling not that he's hoking it up Vegas-style so much as he's rooting around for rhythmic complexity in a beautiful if simple song; he's a muscle car idling on a leafy suburban cul-de-sac.

Sinatra—this is both his gift and, on occasion, his downfall—is always Sinatra. Beyond his technical prowess as a jazz-influenced pop singer, building on the innovations of Louis Armstrong, Bing Crosby, and Billie Holiday, there is the sheer force of conviction, feeling, the weight of personal history in his voice. In this, only Holiday is his rival—perhaps even his better. Both exemplify what people in my generation like to flatter ourselves is unique to rock 'n' roll and its offshoots: the immediacy, the idiosyncrasy, the genuineness of expression. Sinatra is the century's musical equivoise, the pivot between the carefully crafted pop of its beginning and the looser, fiercer sounds of its end.

These are not original observations; people who had the fortune to grow up with Sinatra already knew. I first caught on when, while listening to a Sinatra greatest-hits album I had bought for a girlfriend as an ironic courtship gesture—I was young, it was the 1980s—the song "Strangers in the Night" caught my ear. It's an admittedly queer place to start amid the glories of the Sinatra canon, a chintzy little hit from 1966 with a dopey pop-rock arrangement; the singer himself gives it the brush-off with his famous dooby-dobby-doo coda during the fade-out. But not everyone can start with "What Is This Thing Called Love?," and even here Sinatra manages to invest the ticky-tacky lyrics—"Strangers in the night/Exchanging glances/Wondering in the night/What were the chances"—with a palpable yearning that transcends, maybe even exalts its surroundings. I was hooked.

This, really, is my point: masterpieces—like *Songs for Swingin' Lovers!*—are easy to love. They are what we remember artists for, but they aren't always as illuminating, or as cherishable, as the failures and throwaways. More often than not, even Sinatra's crud speaks his virtues. You can't ask much more of a performer than that.



On February 28, 1953, Francis Crick walked into the Eagle pub in Cambridge, England, and, as James Watson later recalled, announced that “we had found the secret of life.” Actually, they had. That morning, Watson and Crick had figured out the structure of deoxyribonucleic acid, DNA. And that structure

*by Robert Wright*

# Watson and Crick



Crick, left, and Watson, third from right, at the 1962 Nobel Prize ceremony. Next to Crick is Maurice Wilkins, whose lab provided a crucial X-ray image of DNA.

—a “double helix” that can “unzip” to make copies of itself—confirmed suspicions that DNA carries life’s hereditary information.

Not until decades later, in the age of genetic engineering, would the Promethean power unleashed that day become vivid. But from the beginning, the Watson and Crick story had traces of hubris. As told in Watson’s classic memoir, *The Double Helix*, it was a tale of

boundless ambition, impatience with authority, and disdain, if not contempt, for received opinion. (“A goodly number of scientists,” Watson explained, “are not only narrow-minded and dull but also just stupid.”) Yet the Watson and Crick story is also one of sublime harmony,

an example, as a colleague put it, of “that marvelous resonance between two minds—that high state in which 1 plus 1 does not equal 2 but more like 10.”

The men were in some ways an odd pair. The British Crick, at thirty-five, still had no Ph.D. The American Watson, twelve years Crick’s junior, had graduated from the University of Chicago at nineteen and nabbed his doctorate at twenty-two. But they shared a certain wanderlust, an indifference to boundaries. Crick had migrated from physics into chemistry and biology, fascinated by the line “between the living and the nonliving.” Watson had studied ornithology, then forsook birds for viruses, and then, doing postdoctoral work in Europe, took another sharp career turn.

At a conference in Naples, Watson saw a vague, ghostly image of a DNA molecule rendered by X-ray crystallography. DNA, he had heard, might be the stuff genes are made of. “A potential key to the secret of life was impossible to push out of my mind,” he later wrote. “It was certainly better to imagine myself becoming famous than maturing into a stifled academic who had never risked a thought.”

This theme of Watson’s book—the hot pursuit of glory, the race against the chemist Linus Pauling for the Nobel Prize that DNA would surely bring—got bad reviews from the (relatively) genteel Crick. He didn’t recall anyone mentioning a Nobel Prize. “My impression was that we were just, you know, mad keen to solve the problem,” he later said. But whatever their aims, Watson and Crick shared an attraction to DNA, and when they wound up in the same University of Cambridge lab, they bonded.

Fatefully, such amity did not prevail at a laboratory over at King’s College, London, where a woman named Rosalind Franklin was creating the world’s best X-ray diffraction pictures of DNA. Maurice Wilkins, a colleague who was also working on DNA, disliked the precociously feminist Franklin, and the feeling was mutual. By Watson’s account, this estrangement led Wilkins to show Watson one of Franklin’s best

pictures yet, which hadn't been published. "The instant I saw the picture my mouth fell open," Watson recalled. The sneak preview "gave several of the vital helical parameters."

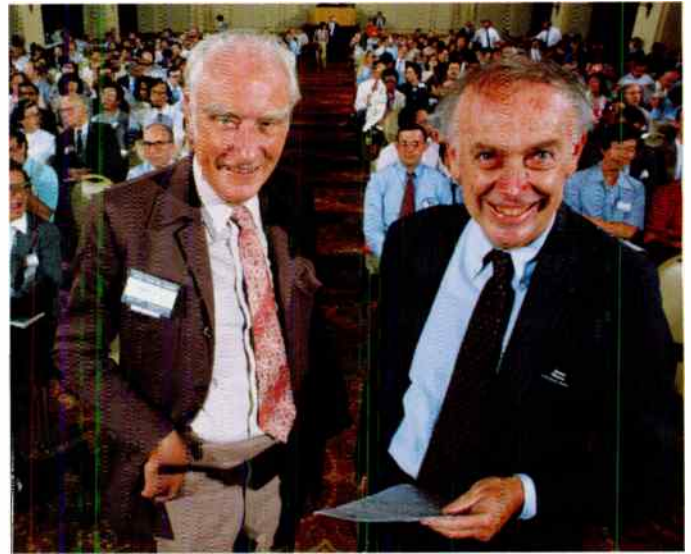
Franklin died of cancer in 1958, at thirty-seven. In 1962 the Nobel Prize, which isn't given posthumously, went to Watson, Crick, and Wilkins. In Crick's view, if Franklin had lived, "it would have been impossible to give the prize to Maurice and not to her" because "she did the key experimental work." And her role didn't end there. Her critique of an early Watson and Crick theory had sent them back to the drawing board, and her notebooks show her working toward the solution until they found it; she had narrowed the structure down to some sort of double helix. But she never employed a key tool—the big 3-D molecular models that Watson and Crick were fiddling with at Cambridge.

It was Watson who fit the final piece into place. He was in the lab, pondering cardboard replicas of the four bases that, we now know, constitute DNA's alphabet: adenine, thymine, guanine, and cytosine, or A, T, G, and C. He realized that "an adenine-thymine pair held together by two hydrogen bonds was identical in shape to a guanine-cytosine pair." These pairs of bases could thus serve as the rungs on the twisting ladder of DNA.

Here—in the "complementarity" between A and T, between C and G—lay the key to replication. In the double helix, a single strand of genetic alphabet—say, CAT—is paired, rung by rung, with its complementary strand, GTA. When the helix unzips, the complementary strand becomes a template; its G, T, and A bases naturally attract bases that amount to a carbon copy of the original strand, CAT. A new double helix has been built.

Watson's famous "Aha!" was but the last in a long chain. It was Crick who had fastened on to a chemist friend's theoretical hunch of a natural attraction between A and T, C and G. He had then championed the complementarity scenario—sometimes against Watson's resistance—as a possible explanation of "Chargaff's rules," the fact that DNA contains like amounts of adenine and thymine and of guanine and cytosine. But it was Watson who had first learned of these rules.

As Horace Freeland Judson observed in *The Eighth Day of Creation*, this sort of synergy is, above all, what Rosalind Franklin lacked. Working in a largely male field in an age when women weren't allowed in the faculty coffee room, she had no one to bond with—no supportive critic whose knowledge matched her gaps, whose gaps her knowledge matched.



Crick, left, and Watson thirty years after their discovery.



Writing up their findings for the journal *Nature*, the famously brash Watson and Crick donned a British reserve. They capped a dry account of DNA's structure with one of the most famous understatements in the history of science: "It has not escaped our notice that the specific pairing we have postulated immediately suggests a possible copying mechanism for the genetic material." They faced the question of byline: Watson and Crick, or Crick and Watson? They flipped a coin.

The double helix—both the book and the molecule—did nothing to slow this century's erosion of innocence. Watson's account, depicting researchers as competitive and spiteful—as human—helped de-deify scientists and bring cynicism to science writing. And DNA, once unveiled, left little room for the ethereal, vitalistic accounts of life that so many people had found comforting. Indeed, Crick, a confirmed agnostic, rather liked deflating vitalism—a mission he pursued with zeal, spearheading decades of work on

how exactly DNA builds things before he moved on to do brain research at the Salk Institute for Biological Studies in La Jolla, California.

Watson drifted from pure science into administration. As director of the molecular biology lab at Cold Spring Harbor, New York, he turned it into a scientific powerhouse. He also served as head of the Human Genome Project, absorbing some fallout from the high-energy ethical debates whose fuse he and Crick had lighted nearly four decades earlier.

As the practical and philosophical issues opened by the double helix continue to unfold, policy, philosophy, and even religion will evolve in response. But one truth seems likely to endure, universal and immutable. It emerges with equal clarity whether you examine the DNA molecule or the way it was revealed. The secret of life is complementarity.

#### BRIEF BIOGRAPHY

**BORN** Crick, on June 8, 1916, in Northampton, England; Watson, on April 6, 1928, in Chicago

**1951** Collaboration begins

**1953** The double helix

**1961** Crick's team finds genetic code for proteins

**1962** Nobel Prize, shared with Maurice Wilkins

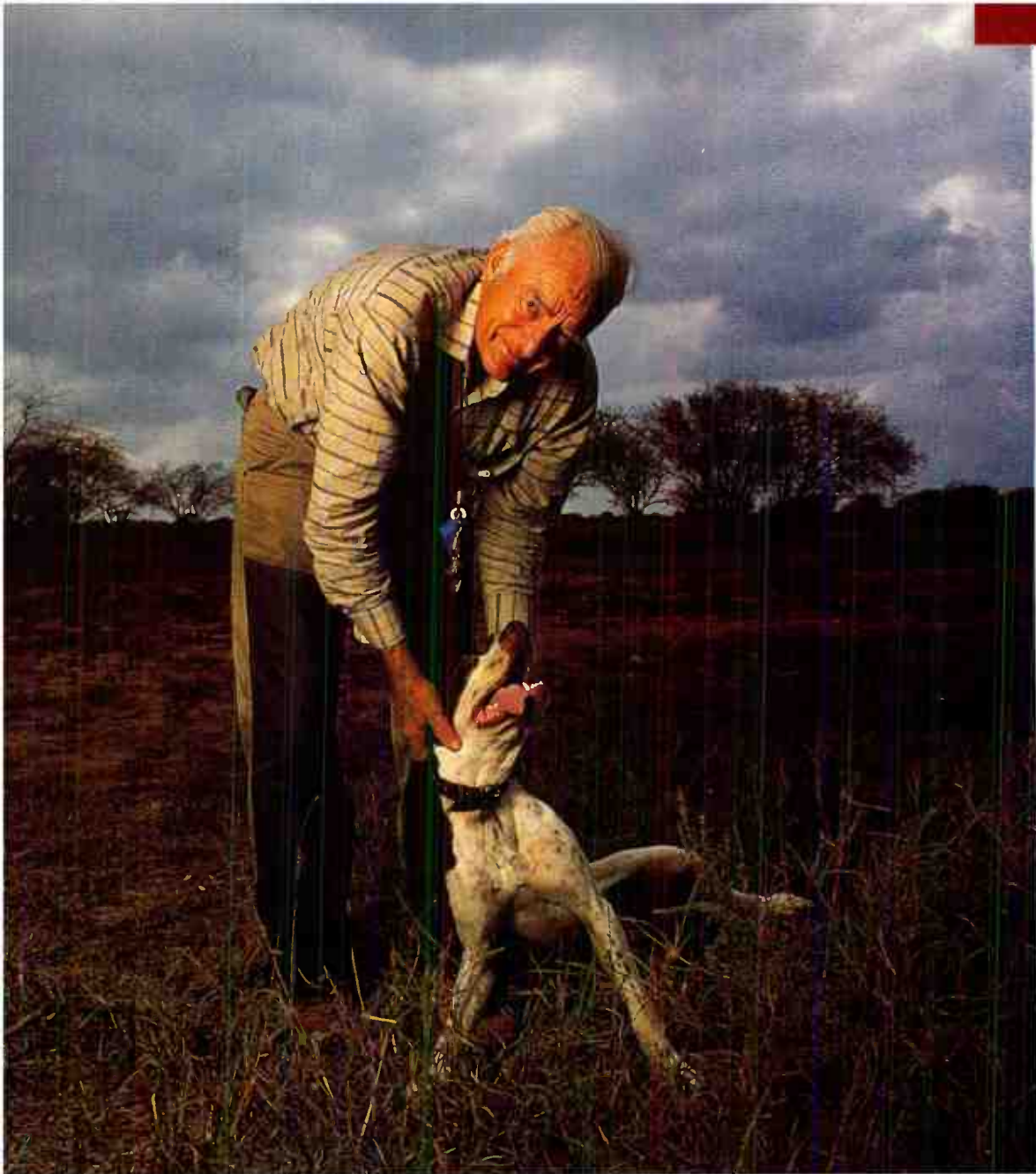
**1968** Watson's *The Double Helix* is published

**1968** Watson is director of Cold Spring Harbor Lab

**1977** Crick begins brain research at Salk Institute

**1988** Watson named head of U.S. Human Genome Project; later resigns

# Sam Walton



NO ONE BETTER PERSONIFIED THE VITALITY OF THE American Dream in the second half of the twentieth century than Sam Walton. A scrappy, sharp-eyed bantam rooster of a boy, Walton grew up in the Depression dust bowl of Oklahoma and Missouri, where he showed early signs of powerful ambition: Eagle Scout at an improbably young age and quarterback of the Missouri

*by John Huey*



A rare picture—a stationary Walton. He was constantly on the move.

state-champion high school football team. He earned money to help his struggling family by throwing newspapers and selling milk from the cow. After graduating from the University of Missouri, he served in the army during World War II. Then, like millions of others, he returned home in 1945 to earn a living and raise a family in an uncertain peacetime economy.

Over the decades that followed, the way America worked and lived changed profoundly, and Walton found himself at the center of much of that change. He possessed a gift for anticipating where things were headed, and he probably understood the implications of the social and demographic currents that were sweeping the country—especially outside its cities—better than anyone else in business. That acumen hastened his rise from humble proprietor of a variety store in the little Delta cotton town of Newport, Arkansas, to largest retailer in the world and richest man in America.

When Walton died in 1992, with a family net worth approaching \$25 billion, he left behind a broad and important legacy in American business as well as a corporate monument. Wal-Mart Stores was the number three company in the 1999 Fortune 500, with annual revenues of close to \$140 billion, ranking behind only General Motors and Ford.

At the risk of oversimplifying a rather complex business phenomenon, it can be said that the easiest way to grasp the essence of what Sam Walton meant to America is to read his ad slogan emblazoned on all those Wal-Mart trucks you see barreling down highways around the country: we sell for less, always. Walton did not invent discount retailing, just as Henry Ford didn't invent the automobile. But just as Ford and his cars revolutionized America and its industrial model, Walton's extraordinary pursuit of discounting revolutionized the country and its service economy. Walton didn't merely alter the way much of America shopped; he changed the philosophy of much of American business, instigating the shift of power from manufacturer to consumer that has become prevalent in industry after industry.

Though it's hard to believe today, discount retailing was a controversial concept when it began to gain ground in the 1950s at stores such as Ann & Hope, which opened in a reclaimed mill in Cumberland, Rhode Island. Traditional retailers hated it, and so did manufacturers; it threatened their control of the marketplace. Most states had restrictions on the practice.

When the business began to emerge in the early 1960s, Walton was a fairly rich merchant in his forties, operating some fifteen variety stores spread mostly around Arkansas, Missouri, and Oklahoma. They were traditional small-town stores with relatively high price markups.

Walton was an active student of retailing—all family vacations included store visits—so by the time a barber named Herb Gibson from Berryville, Arkansas, began opening discount stores outside towns where Sam ran variety stores, Walton saw what was coming. On July 2, 1962, at the age of forty-four, he opened his first Wal-Mart store, in Rogers, Arkansas. That same year, S.S. Kresge launched Kmart, F.W. Woolworth started Woolco, and Dayton Hudson began its Target chain. Discounting had hit America in a big way. At that time, Walton was too far off the beaten path to attract the attention of competitors or suppliers, much less Wall Street.

Once committed to discounting, Walton began a crusade that lasted the rest of his life: to drive costs out of the merchandising system wherever they lay—in the stores, in the manufacturers' profit margins, and with the middleman—all in the service of driving prices down, down, down.

Using that formula, which cut his margins to the bone, it was imperative that Wal-Mart grow sales at a relentless pace. It did, of course, and Walton hit the road to open stores wherever he saw opportunity. He would buzz towns in his low-flying airplane studying the lay of the land. When he had triangulated the proper intersection, between a few small towns, he would touch down, buy a piece of farmland at that intersection and order up another Wal-Mart store, which his troops could roll out like a rug.

As the chain began to take off, Walton made major adjustments to manage the growth—again always seeming to see ahead. As early as 1966, when he had twenty stores, he attended an IBM school in upstate New York. His goal: to hire the smartest guy in the class to come down to Bentonville, Arkansas, and computerize his operations. He realized that he could not grow at the pace he desired without computerizing merchandise controls. He was right, of course, and Wal-Mart went on to become the icon of just-in-time inventory control and sophisticated logistics—the ultimate user of information as a competitive advantage. Today Wal-Mart's computer database is second only to the Pentagon's in capacity, and though he is rarely remembered that way, Walton may have been the first true information-age CEO.

To his great delight, Walton spent much of his career largely unnoticed by the public or the press. In fact, hardly anyone had ever heard of him when, in 1985, *Forbes*



A bottom-up manager and master motivator, the founder is widely copied.

magazine determined that his 39 percent ownership of Wal-Mart's stock made him the richest man in America. After that, the first wave of attention focused on Walton as populist retailer: his preference for pickup trucks over limos and for the company of bird dogs over that of investment bankers. His extraordinary charisma had motivated hundreds of thousands of employees to believe in what Wal-Mart could accomplish, and many of them had ridden the company's stock to wealth. It was the American Dream.

#### BRIEF BIOGRAPHY

**BORN** March 29, 1918 in Kingfisher, Oklahoma

**1945** Gets franchise for Ben Franklin store in Newport, Arkansas

**1962** Opens his first Wal-Mart discount store in Rogers, Arkansas, after Ben Franklin spurns his plans for discounting

**1985** The value of his Wal-Mart stock makes him the wealthiest American

**1991** Wal-Mart passes Sears to become the country's biggest retailer

**DIED** April 5, 1992, in Little Rock

As Wal-Mart's influence grew, however, and passed that of competitors Kmart and Sears, Walton began to be villainized by some, especially beleaguered small-town merchants. They rallied a nostalgic national press, which—from its perch in Manhattan—waxed eloquent on the lost graces of small-town America, blaming that loss squarely on Sam Walton.

Walton viewed all these arguments as utter foolishness. He had been a small-town merchant. And he had seen the future. He had chosen to eat rather than be eaten. And anyway, he believed that small-town merchants could compete—if they would make major changes to adapt. As it turned out, of course, the consumer voted heavily with Walton. He gave America what it really wanted—low prices every day.

There is no argument offered here that Sam Walton didn't clutter the landscape of the American countryside or that he didn't force a lot of people to change the way they made a living. But he merely hastened such changes. The forces of progress he represented were inevitable. His empowering management techniques were copied by businesses far beyond his own industry; his harnessing of information technology to cut costs quickly traveled upstream to all kinds of companies; and his pioneering retailing concepts paved the way for a new breed of "category killer" retailer—the Home Depots, Barnes & Nobles, and Blockbusters of the world. This wave of low-overhead, low-inventory selling continues to accelerate. The Internet, in fact, is its latest iteration. One can only wonder what a young cyber-Sam would set out to accomplish if he were just getting started.

# Nelson Mandela



IN A RECENT TELEVISION BROADCAST BBC COMMENTATOR Brian Walden argued that Nelson Mandela, “perhaps the most generally admired figure of our age, falls short of the giants of the past.” Mandela himself argues that “I was not a messiah,

*by André Brink*

but an ordinary man who had become a leader because of extraordinary circumstances.” Clearly, a changing world demands redefinition of old concepts.

In the revolution led by Mandela to transform a model of racial division and oppression into an open democracy, he demonstrated that he didn’t flinch from taking

up arms, but his real qualities came to the fore after his time as an activist—during his twenty-seven years in prison and in the eight years since his release, when he had to negotiate the challenge of turning a myth into a man.

Rolihlahla Mandela was born deep in the black homeland of Transkei on July 18, 1918. His first name could be interpreted, prophetically, as “troublemaker.” The Nelson was added later, by a primary school teacher with delusions of imperial splendor. Mandela’s boyhood was peaceful enough, spent on cattle herding and other rural pursuits, until the death of his father landed him in the care of a powerful relative, the acting regent of the Thembu people. But it was only after he left the missionary College of Fort Hare, where he had become involved in student protests against the

white colonial rule of the institution, that he set out on the long walk toward personal and national liberation.

Having run away from his guardian to avoid an arranged marriage, he joined a law firm in Johannesburg as an apprentice. Years of daily exposure to the inhumanities of apartheid, where being black reduced one to the status of a nonperson, kindled in him a kind of absurd courage to change the world. It meant that instead of the easy life in a rural setting he’d been brought up for, or even a modest measure of success as a lawyer, his only future certainties would be sacrifice and suffering, with little hope of success in a country in which centuries of colonial rule had concentrated all political and military power, all access to education, and most of the wealth in the hands of the white minority. The classic conditions for a successful revolution were almost wholly absent: the great mass of have-nots had been humbled into docile collusion, the geographic expanse of the country hampered communication and mobility, and the prospects of a race war were not only unrealistic but also horrendous.

In these circumstances Mandela opted for nonviolence as a strategy. He joined the Youth League of the African National Congress and became involved in programs of passive resistance against the laws that forced blacks to carry passes and kept them in a position of permanent servility.



Just released:  
Nelson and Winnie  
in 1990.

Exasperated, the government mounted a massive treason trial against its main opponents, Mandela among them. It dragged on for five years, until 1961, ending in the acquittal of all 156 accused. But by that time the country had been convulsed by the massacre of peaceful black demonstrators at Sharpeville in March 1960, and the government was intent on crushing all opposition. Most liberation movements, including the ANC, were banned. Earning a reputation as the Black Pimpernel, Mandela went underground for more than a year and traveled abroad to enlist support for the ANC.

Soon after his return, he was arrested and sentenced to imprisonment on Robben Island for five years; within months practically all the leaders of the ANC were arrested. Mandela was hauled from prison to face with them an almost certain death sentence. His statement from the dock was destined to smolder in the homes and servant quarters, the shacks and shebeens and huts and hovels of the oppressed, and to burn in the conscience of the world: "During my lifetime I have dedicated myself to the struggle of the African people. I have fought against white domination, and I have fought against black domination. I have cherished the ideal of a democratic and free society in which all persons live together in harmony and with equal opportunities. It is an ideal which I hope to live for and to achieve. But, if needs be, it is an ideal for which I am prepared to die."

Without any attempt to find a legal way out, Mandela assumed his full responsibility. This conferred a new status of moral dignity on his leadership, which became evident from the moment he was returned to Robben Island. Even on his first arrival, two years before, he had set an example by refusing to obey an order to jog from the harbor, where the ferry docked, to the prison gates. The warden in charge warned him bluntly that unless he started obeying, he might quite simply be killed and that no one on the mainland would ever be the wiser.

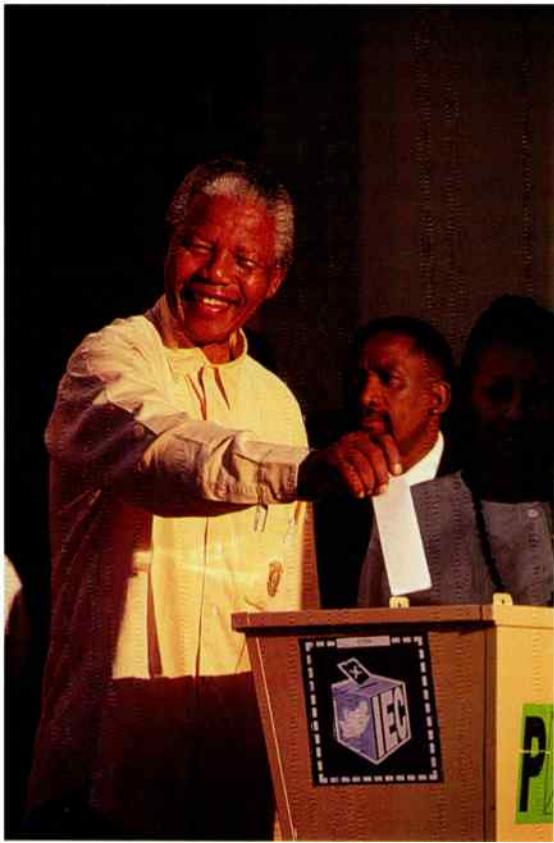
Whereupon Mandela quietly retorted, "If you so much as lay a hand on me, I will take you to the highest court in the land, and when I finish with you, you will be as poor as a church mouse." Amazingly, the warden backed off. "Any man or institution that tries to rob me of my dignity will lose," Mandela later wrote in notes smuggled out by friends.

His major response to the indignities of the prison was a creative denial of victimhood, expressed most remarkably by a system of self-education, which earned the prison the appellation of "Island University." As the prisoners left their cells in the morning to toil in the extremes of summer and winter, buffeted by the merciless southeaster or broiled by the African sun (whose glare in the limestone quarry permanently impaired Mandela's vision), each team was assigned an instructor—in history, economics,



He enjoyed the "science" of boxing.





Historic 1994 vote:  
First democratic  
elections.

politics, philosophy, whatever. Previously barren recreation hours were filled with cultural activities, and Mandela recalls with pride his acting in the role of Creon in Sophocles' *Antigone*.

After more than two decades in prison, confident that on some crucial issues a leader must make decisions on his own, Mandela decided on a new approach. And after painstaking preliminaries, the most famous prisoner in the world was escorted, in the greatest secrecy, to the State President's office to start negotiating not only his own release but also the nation's transition from apartheid to democracy. On February 2, 1990, President F. W. de Klerk lifted the ban on the ANC and announced Mandela's imminent release.

Then began the real test. Every inch of the way, Mandela had to win the support of his own followers. More difficult still was the process of allaying white fears. But the patience, the wisdom, the visionary quality Mandela brought to his struggle, and above all the moral integrity with which he set about to unify a divided people, resulted in the country's first democratic elections and his selection as President.

The road since then has not been easy. Tormented by the scandals that pursued his wife, Winnie, from whom he finally parted; plagued by corruption among his followers; dogged by worries about delivering on programs of job creation and housing in a country devastated by white greed, he has become a sadder, wiser man.

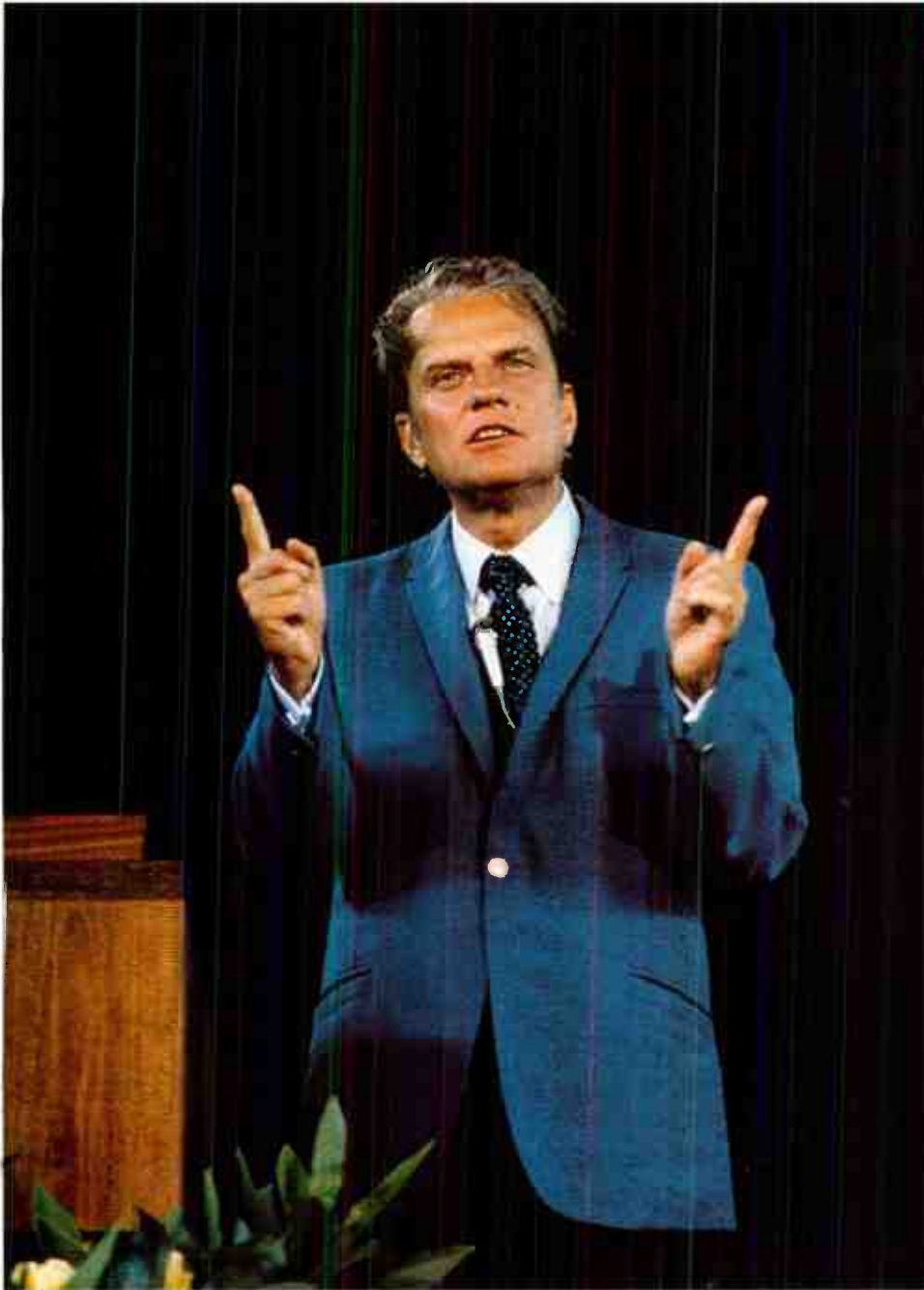
In the process he has undeniably made mistakes, based on a stubborn belief in himself. Yet his stature and integrity remain such that these failings tend to enhance rather than diminish his humanity. Camus once said one man's chains imply that we are all enslaved; Mandela proves through his own example that faith, hope, and charity are qualities attainable by humanity as a whole. Through his willingness to walk the road of sacrifice, he has reaffirmed our common potential to move toward a new age.

And he is not deluded by the adulation of the world. Asked to comment on the BBC's unflattering verdict on his performance as a leader, Mandela said with a smile, "It helps to make you human."

#### BRIEF BIOGRAPHY

- BORN** July 18, 1918, in the Transkei
- 1944** Joins the anti-apartheid African National Congress
- 1956–61** Tried for treason and acquitted
- 1962–90** Imprisoned because he advocated sabotage
- 1991** Becomes, one year after his release, president of the ANC
- 1993** Shares the Nobel Peace Prize with F. W. de Klerk for dismantling apartheid
- 1994** Elected South Africa's President

# Billy Graham



WILLIAM FRANKLIN GRAHAM JR., KNOWN TO ALL THE WORLD AS

Billy, is now eighty years old, and has been our leading religious revivalist for almost exactly fifty years, ever since his eight-week triumph in Los Angeles in the autumn of 1949. Indeed, for at least forty years, Graham has been the Pope of Protestant America (if Protestant is still the right word). Graham's

*by Harold Bloom*

finest moment may have been when he appeared at President Bush's side. Bible in hand, as we commenced our war against Iraq in 1991. The great revivalist's presence symbolized that the Gulf crusade was, if not Christian, at least biblical. Bush was not unique among our Presidents in displaying Graham. Eisenhower and Kennedy began the tradition of consulting the evangelist, but Johnson, Nixon, and Ford intensified the fashion that concluded with Bush's naming him "America's pastor." President Clinton has increasingly preferred the Reverend Jesse Jackson, but the aura of apostle still hovers around Billy Graham. Harry Truman unkindly proclaimed Graham a "counterfeit," a mere publicity monger, but while I still remain a Truman Democrat, I think our last really good President oversimplified the Graham phenomenon.

No one has accused Graham of intellectualism, profound spirituality, or social compassion, but he is free of any association with the Christian right of Pat Robertson, Ralph Reed, and all the other advocates of a God whose prime concerns are abolishing the graduated income tax and a woman's right to choose abortion (which Graham also opposes). And there have been no scandals, financial or sexual, to darken Graham's mission. His sincerity, transparent and convincing, cannot be denied. He is an icon essential to a country in which, for two centuries now, religion has been not the opiate but the poetry of the people. In the U.S., 96 percent of us believe in God, 90 percent pray, and 90 percent believe God loves them, according to Gallup polls. Graham is totally representative of American religious universalism. You don't run for office among us by proclaiming your skepticism or by deprecating Billy Graham.

Presidents from  
Eisenhower to  
Nixon to Clinton  
have relied on  
Graham's counsel.

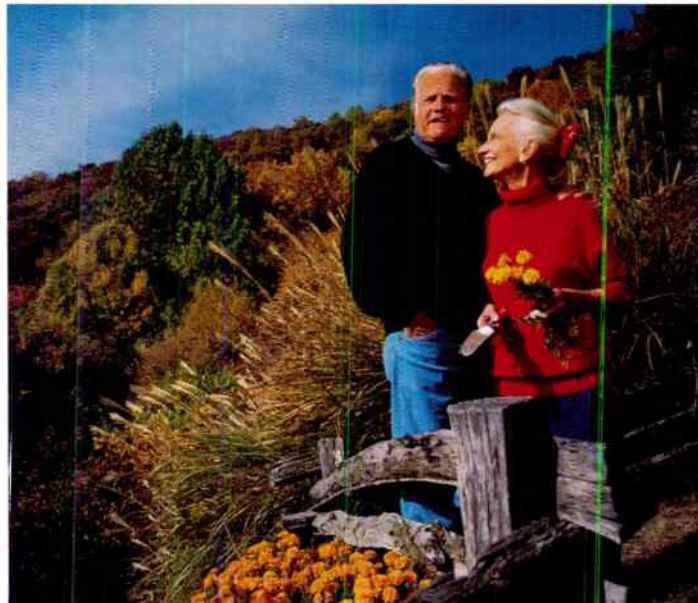


Still, one can ask how so theatrical a preacher became central to the U.S. of the past half-century. Always an authentic revivalist, Graham has evaded both doctrine and denomination. He sounds not at all like a Fundamentalist, even though he affirms the fundamentals—the literal truth of the Bible: the virgin birth, atoning death, and the bodily resurrection of Christ; the Second Coming; salvation purely through grace by faith and not works. Graham's most important book, *Peace with God* (1953), is light-years away from C. S. Lewis's *Mere Christianity*, which is revered by Fundamentalists. Everything that is harsh in Lewis is softened by Graham, whose essential optimism is inconsistent with his apocalyptic expectations. But you cannot read *Peace with God* and expect consistency; soft-edged Fundamentalism, Graham's stance, will not sustain scrutiny.

Graham's coherence and significance depend upon the history of modern evangelical revivalism in the U.S. That history began with Charles Grandison Finney, who created a new American form of religious revival, a highly organized, popular spectacle. (He later gave up his career as an evangelist to become president of Oberlin College in 1851.) The tradition was carried on by Dwight Lyman Moody, William Ashley Sunday, and Graham, the disciple of Moody rather than of Billy Sunday. Moody, in Finney's wake, invented Graham's methods and organizing principles: advance men, advertising, aggressive publicity campaigns, and a staff of specialists (prayer leaders, singers, counselors, ushers). Graham perfected Moody's transformation of revivalism into mass popular entertainment, superbly executed in the New York City crusade of 1957, with triumphant performances at Yankee Stadium and Madison Square Garden.

Politics could have been the destructive element for Graham, since he started his rise in the age of Eisenhower and for a time was a fervent red hunter, an admirer of Senator Joe McCarthy and an overall basher of the left, as here in a radio broadcast of 1953: "While nobody likes a watchdog, and for that reason many investigation committees are unpopular, I thank God for men who, in the face of public denouncement and ridicule, go loyally on in their work of exposing the pinks, the lavenders, and the reds who have sought refuge beneath the wings of the American eagle and from that vantage point try in every subtle, undercover way to bring comfort, aid, and help to the greatest enemy we have ever known—communism."

That is now a period piece, but I think it is important to keep it on the record. Graham, a slow but sure learner, moved with the spirit of the age, and in the 1980s he became a preacher of world peace, urging reconciliation with Russia and China, where his wife, Ruth, the daughter of missionaries, was born. Angry Fundamentalists turned



Graham, who suffers from Parkinson's disease, with his wife, Ruth, in 1993.

against him, a move that became an anti-Graham passion when he rejected the program of the Christian right: "I don't think Jesus or the Apostles took sides in the political arenas of their day." The break between Graham and the Christian right became absolute when he denounced the violence of the anti-abortion group Operation Rescue. "The tactics," Graham declared, "ought to be prayer and discussion."

Though Graham has never, to my knowledge, spoken out on behalf of the poor, it seems legitimate to conclude that his almost exclusive emphasis upon soul saving is his passionate center, even his authentic obsession. And there, whatever his inadequacies

#### BRIEF BIOGRAPHY

**BORN** November 7, 1918, near Charlotte, North Carolina

**1934** Attends revival meeting, decides to commit life to Christ

**1949** William Randolph Hearst orders positive stories on Graham's crusades in his papers

**1950** Establishes the Billy Graham Evangelistic Association, launches *The Hour of Decision* radio show

**1954** First overseas crusade, in Britain

**1957** More than two million people attend sixteen-week crusade at Madison Square Garden in New York City

**1957** First televised crusade

**1969** Gives prayer at Nixon Inauguration

**1996** Receives Congressional Gold Medal

of intellect or of spiritual discernment, Graham has ministered to a particular American need: the public testimony of faith. He is the recognized leader of what continues to call itself American evangelical Protestantism, and his life and activities have sustained the self-respect of that vast entity. If there is an indigenous American religion—and I think there is, quite distinct from European Protestantism—then Graham remains its prime emblem.

Evangelicals constitute about 40 percent of Americans, and the same number believe God speaks to them directly. Such a belief yearns for a purer and more primitive church than anyone is likely to see, and something in Graham retains the nostalgia for that purity. In old age and in poor health, he is anything but a triumphalist. There is no replacement for him, though he has hopes for his son Franklin. More than a third of our nation continues to believe in salvation only through a regeneration founded upon personal conversion to the Gospel, and Graham epitomizes that belief. A great showman, something of a charismatic, Graham exploited his gifts as an offering to America's particular way with the spirit. Some might have wished for more, but Graham honestly recognized his limitations, and his career nears its close with poignancy and a sense of achievement.



# Jackie Robinson

I WAS FOURTEEN YEARS OLD WHEN I FIRST SAW Jackie Robinson. It was the spring of 1948, the year after Jackie changed my life by breaking baseball's color line. His team, the Brooklyn Dodgers, made a stop in my hometown of Mobile, Alabama, while barnstorming its way north to start the season, and while he was there, Jackie spoke to a big crowd

*by Henry Aaron*



of black folks over on Davis Avenue. I think he talked about segregation, but I didn't hear a word that came out of his mouth. Jackie Robinson was such a hero to me that I couldn't do anything but gawk at him.

They say certain people are bigger than life, but Jackie Robinson is the only man I've known who truly was. In 1947 life in America—at least my America, and Jackie's—was segregation. It was two worlds that were afraid of each other. There were separate schools for blacks and whites, separate restaurants, separate hotels, separate drinking fountains, and separate baseball leagues. Life was unkind to black people who tried to bring those worlds together. It could be hateful. But Jackie Robinson. God bless him, was bigger than all of that.

Jackie Robinson had to be bigger than life. He had to be bigger than the Brooklyn teammates who got up a petition to keep him off the ball club, bigger than the pitchers who threw at him or the base runners who dug their spikes into his shin, bigger than the bench jockeys who hollered for him to carry their bags and shine their shoes, bigger than the so-called fans who mocked him with mops on their heads and wrote him death threats.

When Branch Rickey first met with Jackie about joining the Dodgers, he told him that for three years he would have to turn the other cheek and silently suffer all the vile things that would come his way. Believe me, it wasn't Jackie's nature to do that. He was a fighter, the proudest and most competitive person I've ever seen. This was a man who, as a lieutenant in the army, risked a court-martial by refusing to sit in the back of a military bus. But when Rickey read to him from *The Life of Christ*, Jackie understood the wisdom and the necessity of forbearance.

To this day, I don't know how he withstood the things he did without lashing back. I've been through a lot in my time, and I consider myself to be a patient man, but I know I couldn't have done what Jackie did. I don't think anybody else could have done it. Somehow, though, Jackie had the strength to suppress his instincts, to sacrifice his pride for his people's. It was an incredible act of selflessness that brought the races closer together than ever before and shaped the dreams of an entire generation.

Before Jackie Robinson broke the color line, I wasn't permitted even to think about being a profes-

#### BRIEF BIOGRAPHY

**BORN** January 31, 1919, in Cairo, Georgia

**1939** Enrolls at UCLA; stars in football and track

**1942** Enlists in the U.S. Army

**1945** Signs with Kansas City Monarchs of Negro Leagues; later, signs with Brooklyn Dodgers farm team in Montreal

**1947** Begins playing for the Dodgers

**1949** Wins National League's Most Valuable Player award

**1956** Plays final season

**1962** Inducted into Hall of Fame

**DIED** October 24, 1972, in Stamford, Connecticut



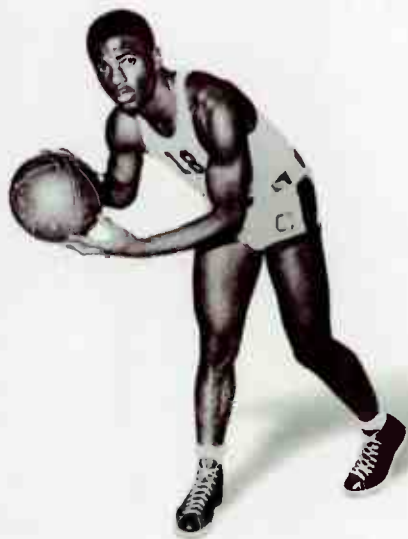
sional baseball player. I once mentioned something to my father about it, and he said, “Ain’t no colored ballplayers.” There were the Negro Leagues, of course, where the Dodgers discovered Jackie, but my mother, like most, would rather her son be a schoolteacher than a Negro Leaguer. All that changed when Jackie put on No. 42 and started stealing bases in a Brooklyn uniform.

Robinson steals home against the Cubs in 1947.

Jackie’s character was much more important than his batting average, but it certainly helped that he was a great ballplayer, a .311 career hitter whose trademark was rattling pitchers and fielders with his daring base running. He wasn’t the best Negro League talent at the time he was chosen, and baseball wasn’t really his best sport—he had been a football and track star at UCLA—but he played the game with a ferocious creativity that gave the country a good idea of what it had been missing all those years. With Jackie in the infield, the Dodgers won six National League pennants.

I believe every black person in America had a piece of those pennants. There’s never been another ballplayer who touched people as Jackie did. The only comparable athlete, in my experience, was Joe Louis. The difference was that Louis competed against white men; Jackie competed with them as well. He was taking us over segregation’s threshold into a new land whose scenery made every black person stop and stare in reverence. We were all with Jackie. We slid into every base that he swiped, ducked at every fastball that hurtled toward his head. The circulation of the *Pittsburgh Courier*, the leading black newspaper, increased by 100,000 when it began reporting on him regularly. All over the country, black preachers would call together their congregations just





Robinson was the first athlete in the history of UCLA to win letters in four sports.

to pray for Jackie and urge them to demonstrate the same forbearance that he did.

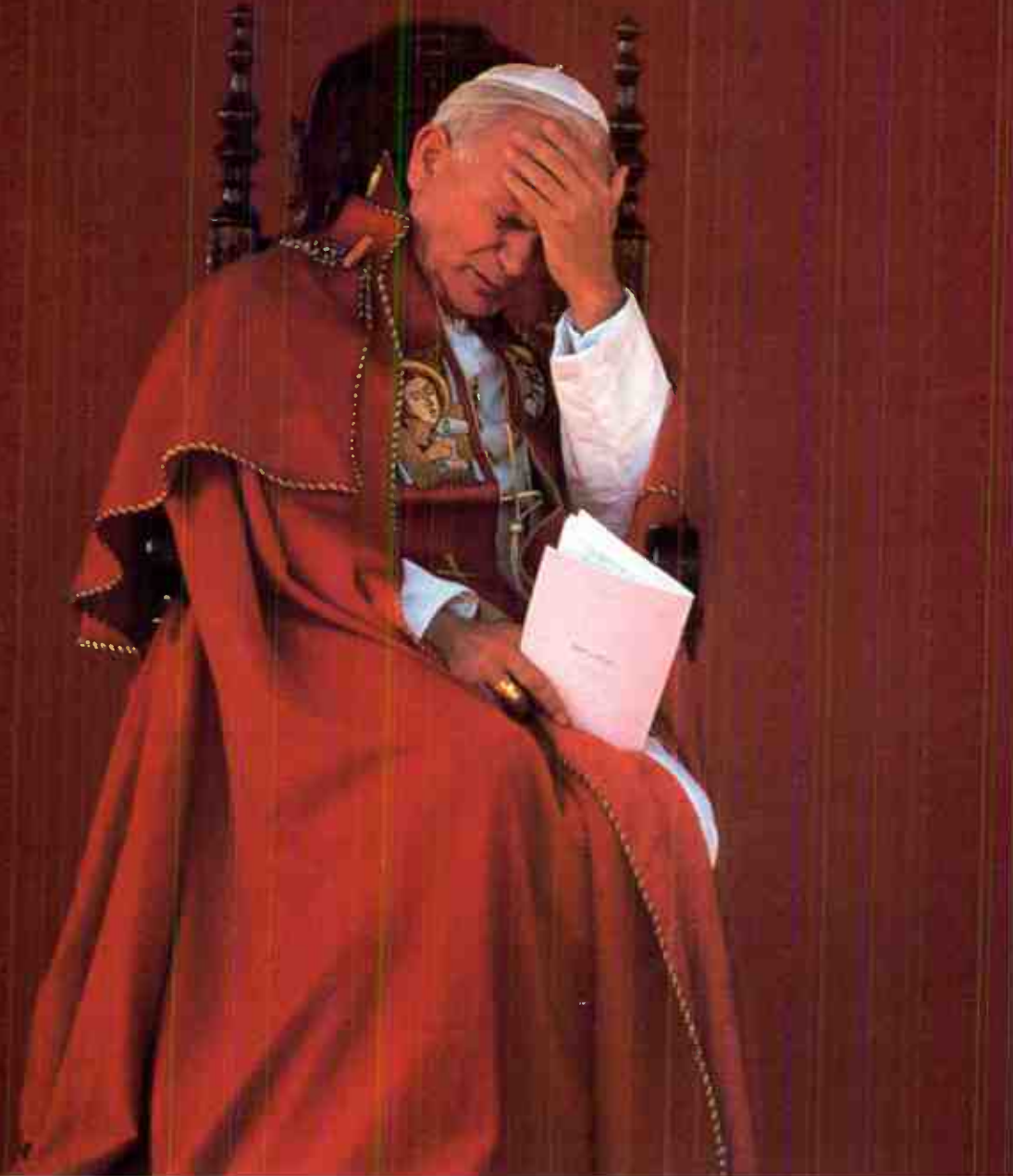
Later in his career, when the “Great Experiment” had proved to be successful and other black players had joined him, Jackie allowed his instincts to take over in issues of race. He began striking back and speaking out. And when Jackie Robinson spoke, every black player got the message. He made it clear to us that we weren’t playing just for ourselves or for our teams; we were playing for our people. I don’t think it’s a coincidence that the black players of the late 1950s and 1960s—me, Roy Campanella, Monte Irvin, Willie Mays, Ernie Banks, Frank Robinson, Bob Gibson, and others—dominated the National League. If we played as if we were on a mission, it was because Jackie Robinson had sent us out on one.

Even after he retired in 1956 and was elected to the Hall of Fame in 1962, Jackie continued to chop along the path that was still a long way from being cleared. He campaigned for baseball to hire a black third-base coach, then a black manager. In 1969 he refused an invitation to play in an old-timers’ game at Yankee Stadium to protest the lack of progress along those lines.

One of the great players from my generation, Frank Robinson (who was related to Jackie only in spirit), finally became the first black manager, in 1975. Jackie was gone by then. His last public appearance was at the 1972 World Series, where he showed up with white hair, carrying a cane and going blind from diabetes. He died nine days later.

Most of the black players from Jackie’s day were at the funeral, but I was appalled by how few of the younger players showed up to pay him tribute. At the time, I was forty-one home runs short of Babe Ruth’s career record, and when Jackie died, I really felt that it was up to me to keep his dream alive. I was inspired to dedicate my home run record to the same great cause to which Jackie dedicated his life. I’m still inspired by Jackie Robinson. Hardly a day goes by that I don’t think of him.

# Pope John Paul II



IN NOVEMBER 1989 WORD WENT OUT THAT MIKHAIL GORBACHEV, First Secretary of the Communist Party of the Soviet Union, would stop in Rome en route to a summit meeting with President George Bush. In Rome he would have an audience with Pope John Paul II.

*by William F. Buckley Jr.*



Wojtyła freshens  
up outdoors in  
Poland.

This was glasnost, two hundred proof. The head of the communist world had bumped into the answer to Stalin's question: How many divisions has the Pope? And the Pope was engaging in spiritual geopolitics at summit level: he wanted human rights for the faithful in Russia. Karol Wojtyła's training was extensive, dating back to discreet studies for the priesthood under Nazi occupation in Poland. After that, parish work and academic studies under communist rule, leading in 1963 to the episcopacy in Cracow. Pity poor Gorbachev. Seventy-two years of formal national commitment to atheism, backed by the Gulag, and now, 1989, a street poll revealed that 40 percent of Soviet citizens believed in God.

The Berlin Wall had come down a few weeks before, and no one doubted any longer that the great Soviet enterprise was headed for collapse. But for a while, Secretary Gorbachev would be treated as you and I would be treated if we had disposed of forty thousand nuclear missiles. And anyway, Gorbachev was a polemical swinger right to the end. The ideological imagination was hardly dead. The following Sunday, no doubt expressing the new Soviet line, chief press spokesman for the Kremlin Gennadi Gerasimov appeared with Mike Wallace on *60 Minutes*. It's true, he said, that communism is evolving, but so is Christianity. Christian values and communist values—"especially early Christian values"—are the same.

That was a subtle and learned line, and it is used in many contexts to fondle the difficulties John Paul II has frequently expressed about capitalism. In his long travails, Karol Wojtyła has spoken critically about Western economic arrangements, and it was this theme that caught the opportunistic eye of Gerasimov. Didn't communism, like early Christianity, seek to eliminate poverty? Was not the communist ideal an expression of Christian concern for the communal ownership of property?

In Mexico, five months later, the Pope was speaking in Pancho Villa country and sounding very much like Pancho Villa. He wanted it made clear, he said, that in celebrating the collapse of communism, he had not meant to say capitalism had triumphed. The Pope told the great crowd that he had criticized communism not for its economic shortcomings but rather because it "violated or jeopardized the dignity of the person." That was the same papal language used in Canada in 1984, and one hears traces of it today, most recently in Havana when the Pope met with Fidel Castro.

But then in 1991 *Centesimus annus* came in, a 25,000-word encyclical on the one hundredth anniversary of Leo XIII's *Rerum novarum*, the momentous condemnation of liberalism and materialism. Materialism meant then what it means today. By liberalism, Pope Leo had in mind contemporary movements that sought, in the name of "modernism," to free human beings from traditional attachments to church and family. In the centennial encyclical, Pope John Paul reiterated his frequent admonitions. The worker or manager who reports to duty at the shop every morning inflamed by the desire to make a better widget and sell more of it is one thing; quite another if he or she goes

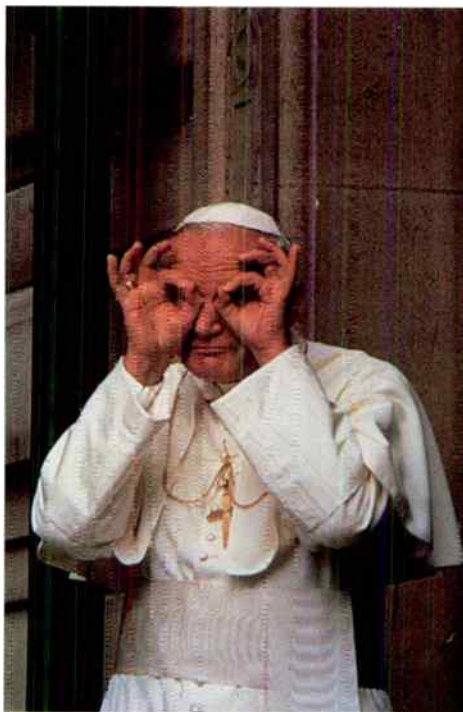
home listlessly unconcerned with human life and human attachments having to do with respect for the elderly, a love for one's family, the capacity to take joy from Christian perspectives. Papal prose is turgid, but here the Pope did say in almost as many words that socialism was an extravagant historical failure.

If, then, all one need do in evaluating capitalism is admonish against greed and abusive economic-political arrangements, the exorcism is quickly over, and Gerasimov is left as speechless as Gorbachev quickly became after losing his handle on the nuclear football.

John Paul II is by every measurement as cosmopolitan in experience and steeped in erudition as anyone who comes to mind. He speaks eight languages fluently, he is the author of scholarly books and dissertations and has traveled in virtually every country in the world. One supposes that, notwithstanding, he is not by personal experience familiar with the kind of thing one can pick up to read in urban kiosks or turn to view on late-night television. But you'd still deduce that Pope John would not be surprised by anything he read or saw: he has been exposed at very close quarters to the ingenuity of God's creatures, no less creative in depravity than in goodness.

What does surprise is the near virginal conviction of this sophisticated Pole that Providence has kept a watchful eye on him. His recovery in 1981 from an assassin's bullet the Pope would probably not term miraculous only because fastidious Catholic theology frowns on the use of that word, except when the theological department of weights and measures has been there with all its paraphernalia of skepticism and given an okay. Still, he is known to believe that the good Lord had a hand in his survival, and he is said to believe that he is fated to be Pope right up through January 1, 2000, formally escorting the church into its third millennium. If this should prove so, if he is alive at that time, there are probably a few medical observers who will be willing to use the word miraculous.

In any case, people will ask, what is it that Pope John Paul II uniquely brings to the millennium? Almost all who have experienced him at close quarters understand the special luminosity he radiates when surrounded live by a million people. But the great



The Pope keeps his eyes on the world, 1980.

historical backdrop of his splendor fades. He was the student and manual laborer from Wadowice in Poland who became the first non-Italian Pope in 450 years. His was the dominant spiritual presence in the final round of the great revolutionary challenge that began soon after the turn of the century and sought no less than to alter Western assumptions about human life. But that role is not really what the critics want to dwell upon.

#### BRIEF BIOGRAPHY

- BORN** May 18, 1920, in Wadowice, Poland
- 1946** Ordained as priest
- 1956** Named professor of ethics at Lublin University
- 1958** Becomes auxiliary bishop of Cracow
- 1963** Appointed archbishop
- 1967** Named to the College of Cardinals
- 1978** Elected Pope
- 1979** Makes papal visit to his homeland
- 1981** Wounded by assassin
- 1998** Meets Castro and celebrates Mass in Cuba

What's on their mind is the stands Pope John Paul has taken on—women. On their right to take holy orders, to abort a fetus, to frustrate insemination by artificial means. And they want to talk about the overexercise of papal authority, about the discipline he has exercised over dissident theologians.

The Reverend Richard P. McBrien is one of the most widely known U.S. theologians, a professor at Notre Dame and the author of numerous books. The most recent of these is *Lives of the Popes*. At the end of the book, he undertakes a ranking. There is, first, "Outstanding Popes," followed by "Good or Above Average Popes." John Paul II makes neither of these categories. Father McBrien rates him as less than great because he did not flesh out Vatican II. But he rates him as "Historically Important," as Gorbachev would confirm.

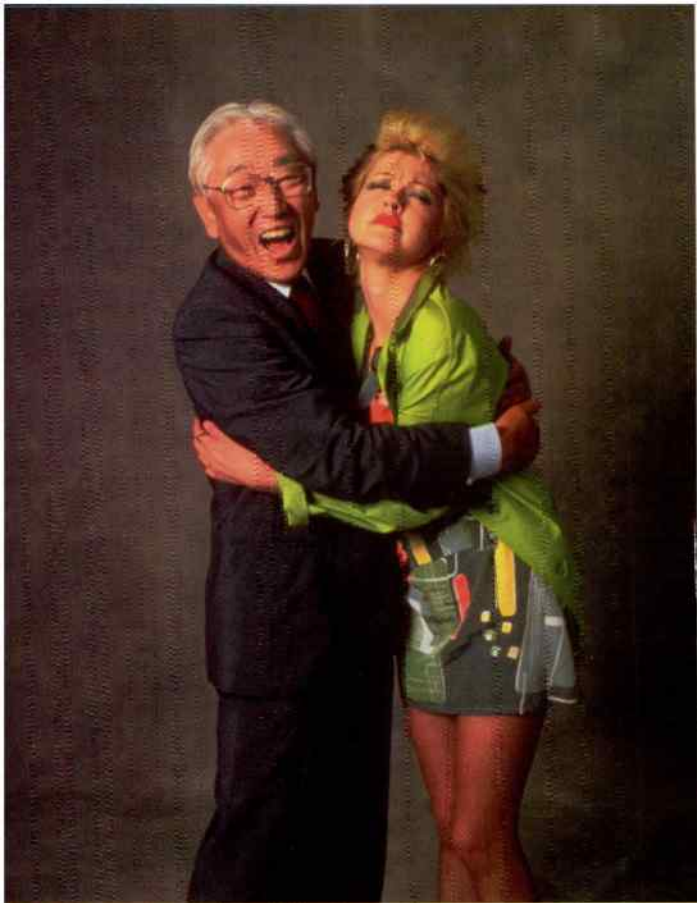
That he is at least that is not questionable, even if one anticipates a millennium of wrangling about women's rights at the altar, the distribution of hierarchical power, and allocutory nuance. But there are many thousands who will live well into the next century with photographic memories of John Paul II. The late-teenage boys and girls who gathered in great numbers to see him in Denver in 1993 will, many of them, be alive when John Paul II is dead in fifty years, and their recall will be sensual. I saw him in January 1998, with the usual million people, including Fidel Castro. There was some trepidation about the Pope's health at the Sunday Mass. The Pope was cautiously introduced by Havana's Jaime Cardinal Ortega. We heard then the voice of the Pope. Not very expressive, but the Spanish he spoke was well turned and clearly enunciated. In a matter of seconds he communicated his special, penetrating, transcendent warmth. Close-up we could see the ravages of his apparent affliction (Parkinson's), his age (seventy-seven) and his gun wound (1981). The cumulative result of it all is a stoop and the listless expression on his face—the hangdog look. But then intermittently the great light within flashes, and one sees the most radiant face on the public scene, a presence so commanding as to have arrested a generation of humankind, who wonder gratefully whether the Lord Himself had a hand in shaping the special charisma of this servant of the servants of God.

# AKIO MORITA



IN LATE 1993, AKIO MORITA—MR. SONY—FELL TO THE GROUND during a game of tennis. The co-founder and chairman of the board had suffered a stroke. He has since been in a wheelchair. This is particularly sad, as Morita had never been able to sit still and relax. At seventy-two, he was playing tennis at 7:00 A.M. each Tuesday. I know this well because I would

*by Kenichi Ohmae*



Morita embraces people in general, including Sony artist Cyndi Lauper.

practice on the court next to him. My tennis, however, was very different from his. I played with an instructor, and if I was tired, I would just take a break. Not him. He challenged everybody, including young athletes.

This was in keeping with a man who created one of the first global corporations. He saw long before his contemporaries that a shrinking world could present enormous opportunities for a company that could think beyond its own borders, both physically and psychologically. And he pursued that strategy with his relentless brand of energy in every market, particularly the U.S. It is notable that in 1998, according to a Harris survey, Sony was rated the number one brand name by American consumers, ahead of Coca-Cola and General Electric.

The best way to describe Morita's extraordinary drive is to scan his schedule for the two-month period immediately preceding his stroke. He took trips from his home base in Tokyo to New Jersey, Washington, Chicago, San Francisco, Los Angeles, San Antonio,

Dallas, Britain, Barcelona, and Paris. During that time he met with Queen Elizabeth II, General Electric chief Jack Welch, future French President Jacques Chirac, Isaac Stern, and many other politicians, bureaucrats, and business associates. He attended two concerts and a movie; took four trips within Japan; appeared at eight receptions; played nine rounds of golf; was guest of honor at a wedding ceremony; and went to work as usual for seventeen days at Sony headquarters. Morita's schedule had been decided on more than a year in advance. Whenever there was a small opening, Morita would immediately and strategically fill it by arranging a meeting with someone he wanted to become acquainted with or catch up with. Unlike so many executives who remove themselves from the rest of the corporate pyramid, he was always in the middle of the action.

Morita had been groomed since the third grade to become the successor of a fourteen-generation family business: a prominent sake-brewing company in Nagoya. In true entrepreneurial spirit, however, he traded this life of comfort and privilege for the uncertainties of a start-up, called Tokyo Telecommunications Engineering, Inc., in the rubble of postwar Japan.

From the outset, Morita's marketing concept was brand-name identification and brand responsibility: that the name would instantly communicate high product quality. This is a marketing concept widely used by companies today. But at that time most companies in Japan were producing under somebody else's brand name. Pentax, for example, was making products for Honeywell, Ricoh for Savin, and Sanyo for Sears.

Complementing Morita's unusual focus on brand identity were the talents of his co-founder, Masaru Ibuka, the engineering and product-design force behind Sony's inventions. The combination worked well. The two sought to provide the best available technology and quality to the consumer. One of Sony's first products was a transistor radio, produced in 1955. While the transistor was developed by Bell Labs and produced by Western Electric, it was Sony that first used it for a small pocket radio, in 1957, creating a new market in the bargain.

The radio's success led to more firsts in transistorized products, such as an eight-inch television and a videotape recorder. Sony's technological achievements in product design, production, and marketing helped change the image of "Made in Japan" from a notion of cheap imitations to one associated with superior quality. In Morita's own words, they made Sony the Cadillac of electronics.

The creation of the name Sony highlights Morita's intuition and determination to communicate globally. He wanted a name recognizable everywhere: creative, Roman letters, short and catchy. Morita and Ibuka pored over dictionaries and found the word *sonus*, which in Latin means sound. In addition, the word *sonny* was part of the pop vernacular in America at the time, and they thought it suggested a company made up of young people with abundant energy. The combination of the two formed Sony.

Sony's globalization began in the U.S., where Morita moved his entire family in 1963. In that way he would understand Americans, their market, customs, and regulations, thereby increasing the chance of his company's success. It was a brilliant decision. Not many businessmen in those days possessed such a passionate and determined business vision. In the U.S., Morita settled into a large Fifth Avenue apartment in Manhattan. He built a solid and valuable network by continually socializing and giving parties during the week, a habit he maintained throughout his career.

Morita was a workaholic, but he was also a playaholic. He followed art and music, and was a sports fanatic. In his sixties he took up wind surfing and scuba diving and started skiing to ensure good exercise through the winter. He loved to water-ski and even crafted a water-resistant microphone on a handle, connected by a wire on the ski rope to a speaker on the boat so he could relay instructions to his wife, Yoshiko. He was so proud of this invention. To simply have a good time, he would invent and perfect such a product.

The Walkman is just such an invention. Morita watched as his children and their friends played music from morning until night. He noticed people listening to music in their cars and carrying large stereos to the beach and the park. Sony's engineering department was generally opposed to the concept of a tape player without a recording function (it would be added later), but Morita would not be denied. He insisted on a product that sounded like a high-quality car stereo yet was portable and allowed the user to listen while doing something else—thus the name Walkman.

Sony America considered that bad English and changed it to Soundabout for the U.S., Freestyle for Sweden, and Stowaway for Britain. Morita was leery of using a



different name for each country, and when sales were less than rewarding, he changed the name universally to Sony Walkman. Subsequently, the Walkman was a worldwide hit that is now featured in major dictionaries.

The man who put Sony on the global radar had a nationalist side that was both contradictory and complementary. This you can sense in reading his best-seller, *Made in Japan*, as well as in talking to him. When I would complain about the ambivalence, he'd grin and say, "Ohmae-san, it is the generation gap." A navy veteran, he returned from service to a Japanese economy that had been destroyed by the war, so for a long time he maintained a Japan-first frame of mind. His initial intentions were simply to make a contribution toward rebuilding his country from the ashes of the war.

#### BRIEF BIOGRAPHY

- BORN** January 26, 1921, in Nagoya, Japan
- 1946** Co-founds company with Masaru Ibuka
- 1957** Introduces pocket-size transistor radio
- 1958** Company name changed to Sony
- 1963** Moves family to U.S. to study American market
- 1970** Sony is first Japanese firm on New York Stock Exchange
- 1976** Named chairman and CEO of Sony Corp.
- 1979** Walkman tape player hits the streets
- 1993** Incapacitated by a stroke

But he eventually adopted a more international point of view and, in the 1960s, began to speak of issues, such as encouraging free trade by reducing tariffs and other barriers, that many Japanese businessmen had been reluctant to discuss for decades. He represented, very vocally, the business community of Japan, a country that had during the 1970s become the number two economy in the world and could no longer be ignored by the major economic players. Some controversy resulted when he was listed as co-author of a book in 1989—*The Japan That Can Say No*—that suggested that other countries stop complaining about Japanese imports and get to work improving their own corporations. His real opinions were

somewhat misrepresented by the publisher: he had intended the consensus-oriented Japanese to see that in other countries disagreement and debate were not insulting and that Japanese could argue with their business partners abroad without destroying their friendship.

But as Sony grew internationally, Morita expanded his vision. Now it was "Think globally, act locally"—that is, have a common value system that transcends national objectives; serve international customers, shareholders, and employees, regardless of the origin of the company. I liked his reference to the phrase in a business context so much that I used it in my book *The Borderless World* to describe a company that is in the final stage of globalization.

In 1993, Morita was asked by Gaishi Hiraiwa, then chairman of Keidanren, to be his successor. Keidanren is the most prestigious business association in Japan, and all CEOs in Japan would like to hold an important position in the organization. Until this time, Morita had never really been accepted by the Japanese establishment, as Sony was a relatively small company and didn't come from the traditional strong houses of steel-making, public utilities, and heavy industry. In the Japanese economic circle, becoming chairman of Keidanren is likened to the succession of the Emperor. As it turned out,

the day of Morita's stroke, November 30, 1993, was the day the succession announcement was to have taken place.

This would have been a wonderful thing for Japan in 1993, a time when the country was about to collapse into sustained recession. Morita had already been thinking about reforming Japan, and he organized discussion groups of politicians, businesspeople, and bureaucrats to talk about what would be needed. People say that Japan's current economic situation might have been very different if someone like Morita had been in a position to speak on behalf of the entrepreneurs and the dynamics of business—as opposed to begging the government to rescue industry after industry. I also believe this is the case. The great tragedy is that Japan does not have another like him.

Morita achieved more than most could imagine in one lifetime. If he had been able to read the paper reporting Sony as the number one consumer brand in the U.S., he would have smiled from his beachside mansion in Oahu and said, "Of course! I told you so! After all, Sony was made in the U.S.A.!"

Sony bought CBS Records and Columbia Pictures, landing Morita in entertainment heaven.



# Andrei Sakharov



IN THE FALL OF 1962, WHEN HIS LIFE TOOK ITS FATEFUL TURN,

Andrei Sakharov was not yet known to the world. He was forty-one years old, a decorated Soviet physicist developing atomic weapons of terrifying power deep in the heart of the Soviet Union. The U.S. and the U.S.S.R. were locked in a frenzied contest for nuclear superiority. That September the

*by Fang Lizhi with Romesh Ratnesar*

Sakharov later said, “the atomic issue was a natural path into political issues.” He campaigned for disarmament and turned his attention to the Soviet system, denouncing its stagnancy and intolerance of dissent. So uncompromising was his critique of the regime that it estranged him from his children.

Outside the Soviet Union, even in China, where his writings were predictably banned by the government, Sakharov’s name and struggle were familiar to intellectuals and dissidents forging their own fights against authority. He received the Nobel Peace Prize in 1975, and in 1980 his arrest and exile to the remote city of Gorky (now called Nizhni Novgorod) made him a martyr. His refusal to be silenced even in banishment added to his legend. And then came the rousing finale: his release and hero’s return to Moscow in 1986; his relentless prodding of Mikhail Gorbachev to pursue democratization; and his election to the Congress of People’s Deputies, the Soviet Union’s first democratically chosen body. At the time of his death, a tidal wave of democracy that he had helped create was about to engulf the communist world.

What is Sakharov’s legacy today? With the Cold War ended and the Soviet threat

gone, his exhortations against totalitarianism might seem anachronistic. Yet in China, where political freedom continues to be suppressed and intellectuals face harassment and arrest, his voice is still one of encouragement. For scientists his career remains a model of the moral responsibility that must accompany innovation. And Sakharov might remind the West too that freedom is fragile, that if democratic societies are not protective of their liberties, even they may lose it. On the night of his death, after returning from a tempestuous meeting of the Congress of People’s Deputies, Sakharov told his wife, Yelena Bonner. “Tomorrow there will be a battle!” That battle—at its core, the battle of individuals striving to shape their own destinies—must continue to be fought in the century to come.

#### BRIEF BIOGRAPHY

**BORN** May 21, 1921, in Moscow

**1948** Begins work on H-bomb project

**1953** First Soviet H-bomb detonated

**1957** Writes papers on the dangers of nuclear testing

**1968** Barred from all military research

**1975** Wins Nobel Prize

**1980** Banished to Gorky for denouncing Soviet invasion of Afghanistan

**1986** Exile ended by Gorbachev

**DIED** December 14, 1989, in Moscow



Thousands of Russians paid tribute at Sakharov’s funeral procession in 1989.

# Marlon Brando



“RIDE OUT BOY AND SEND IT SOLID. FROM THE GREASY POLACK you will someday arrive at the gloomy dane.” Tennessee Williams’s heartfelt (if politically incorrect) telegram to Marlon Brando, on the opening night of *A Streetcar Named Desire* more than fifty years ago, got it right and got it wrong. The young actor, in his

**by Richard Schickel**

first starring role, sent it solid all right—sent it immortally. His performance as Stanley Kowalski, later repeated on film, provided one of our age's emblematic images, the defining portrait of mass man—shrewd, vulgar, ignorant, a rapacious threat to all that is gentle and civilized in our culture. He gave us something else too, this virtually unknown twenty-three-year-old actor. For when the curtain came down at the Ethel Barrymore Theater on December 3, 1947, our standards for performance, our expectations of what an actor should offer us in the way of psychological truth and behavioral honesty, were forever changed.



The future here to kids of the 1950s, the sexy brute, the rebel, here at age five.

But Brando, that heartbreakingly beautiful champion of the Stanislavskian revolution in acting, never arrived at Hamlet. Never even came close. He would go on to give us a few great things, and a few near great things, but eventually he would abandon himself, as every tabloid reader knows, to snot and sulks, self-loathing and self-parody. The greatness of few major cultural figures of our century rests on such a spindly foundation. No figure of his influence has so precariously balanced a handful of unforgettable achievements against a brimming barrelful of embarrassments.

And yet the reverence in which he is held by his profession is unshakable. His sometime friend and co-star Jack Nicholson said it simply and best: "He gave us our freedom." By which he meant that Brando's example permitted actors to go beyond characterizations that were merely well made, beautifully spoken, and seemly in demeanor; allowed them to play not just a script's polished text but its rough, conflicting subtext as well.

#### BRIEF BIOGRAPHY

- BORN** April 3, 1924, in Omaha, Nebraska
- 1944** Broadway debut in *Remember Mama*
- 1947** Becomes overnight sensation in *A Streetcar Named Desire*
- 1950** Makes film debut in *The Men*
- 1954** Wins Oscar for *On the Waterfront*
- 1972** Wins Oscar for *The Godfather*; refuses award
- 1990** Son Christian is arrested for murder
- 1995** Daughter Cheyenne commits suicide

Stanley Kowalski, for example, may be a brute. But he's also a funny brute, slyly, sexily testing the gentility and hypocrisies by which his sister-in-law, Blanche DuBois, lives as they contend for the soul of Stella, his wife and her sister. *Streetcar's* director, Elia Kazan, loved this performance because of the way Brando "challenges the whole system of politeness and good nature and good ethics and everything else." It was, of course, this rebelliousness that made Brando a hero to kids growing up in the 1950s—and made him a star.

But there was more to his gift than his sometimes mumbled challenge to convention, both middle class and theatrical. Had to be, or he would have been no more than a momentary phenomenon. Kazan found in the man-boy he made into a star "a

Confronting the heart of madness as Colonel Kurtz in *Apocalypse Now* (1979).

soft, yearning, girlish side . . . and a dissatisfaction that can be dangerous.” There’s “a hell of a lot of turmoil there,” he said. “He’s uncertain about himself and he’s passionate, both at the same time.” The performances that defined Brando’s screen character, and that somehow articulated the postwar generation’s previously inarticulate disgust with American blandness and dishonesty, its struggles to speak its truest feelings, are powered by that rough ambivalence. The rage and self-pity of his grievously wounded paraplegic in *The Men*, the rebel angel of *The Wild One*, above all *On the Waterfront*’s Terry Malloy, the dock wallopier struggling for transcendence—these roles informed our

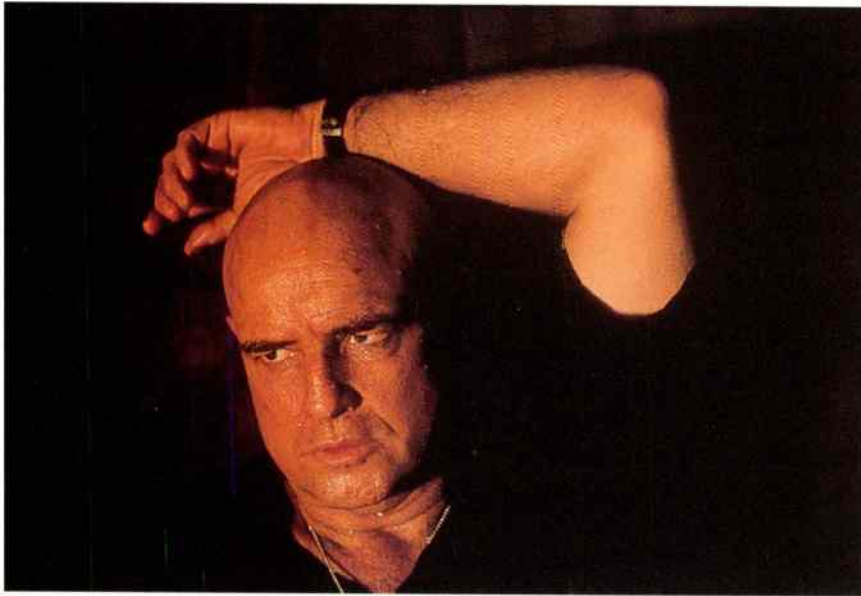
aching hearts at the time, and go on tearing at us when we reencounter them.

All these movies were small, intense, black-and-white, ideally suited to the psychological realism of the Stanislavskian Method, as it came to be known; ideally suited, as well, to Brando’s questing spirit. But in the 1950s, as he reached the height of his powers, Hollywood sank to the nadir of its strength. Competing with TV, it embraced color, wide screen, spectacle—and was looking for bold, uncomplicated heroes to fill its big, empty spaces. Brando looked (and felt) ludicrous in this context.

Worse, his own admirers kept piling pressures on him. An actor and friend named William Redfield spoke for them all when he said, “We . . . believed in him not just as an actor, but as an artistic, spiritual and specifically American leader.” But this was not a role that suited him, for there was nothing in his nature that he could draw on to fill it out. The son of alcoholics—a stern taciturn father; a sweet, culturally aspiring mom—he had drifted to New York City and into acting when he was expelled from the military school that was supposed to shake the flakiness from his soul.

His first and most influential acting teacher, Stella Adler, thought him “the most keenly aware, the most empathetic human being alive,” yet thought his commitment to acting was, at best, “touch and go.” But the work, the community he found among New York’s eager young actors, gave shy, sly Bud Brando two things he never had before—a sense of identity and a sense of direction.

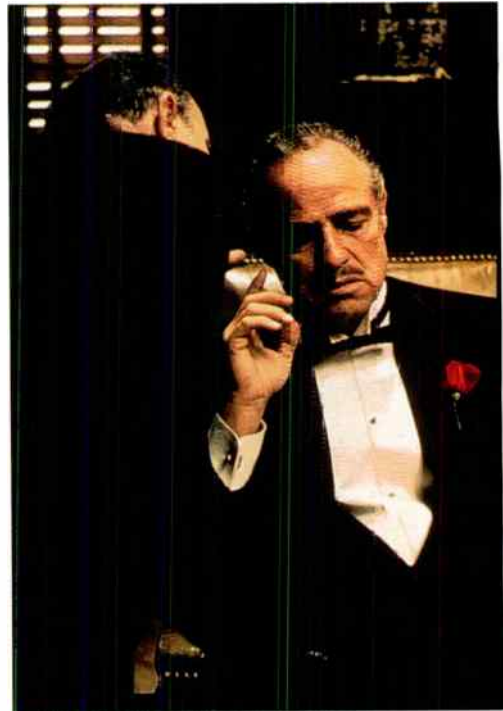
So he had found himself in his work. But he had not been looking for a cause to lead. It was a historical accident that he appeared to those idealistic rebels against theatrical tradition, the Stanislavskians, as the messiah they had sought for decades—the



genius-hunk who could sexily take their case to the starstruck public, help them reform not just acting technique but the whole corrupt Broadway-Hollywood way of doing business.

It was the wrong role for him. He could talk their talk and walk their walk, but he wasn't truly a Method actor; he was much more an observer of others than an explorer of his own depths. And even that was hard for him. "There comes a time in life when you don't want to do it anymore," he once said. "You know a scene is coming where you'll have to yell or cry or scream and . . . it's always bothering you, always eating away at you." Besides, as Kazan said, "it's not a natural thing for a man to be an actor," especially, he thought, in the "trivial" climate of that moment. There was no way Brando was going to add cultural heroism to the rest of his burdens.

By the 1960s, Brando's interviews—and his work—were growing more cynical. Acting, he said, was the expression "of a neurotic impulse," a "self-indulgence." Any pretensions to art he may have harbored were now just "a chilly hope." Far from being a culture's hero, he became its Abominable Snowman, flitting through the shadows of bad movies, becoming a blur on the paparazzi's lenses. Twice he paused in his flight to remind us of the greatness that might have been—with his curiously affecting menace in *The Godfather*, with the ruined grandeur of *Last Tango in Paris*. That was more than a quarter-century ago, but in a way, that was enough. For the passing years have taught us this: refusing to rally a revolution, Marlon Brando still managed to personify it. His shadow now touches every acting class in America, virtually every movie we see, every TV show we tune in. We know too that the faith vested in his example by all the De Niro and Pacinos, and, yes, the Johnny Depps and Leonardo DiCaprios, was not misplaced. Marlon Brando may have resisted his role in history, may even have travestied it, but, in the end, he could not evade it.



He won a second Oscar for Coppola's *The Godfather*.



# Margaret Thatcher



SHE WAS THE CATALYST WHO SET IN MOTION a series of interconnected events that gave a revolutionary twist to the century's last two decades and helped mankind end the millennium on a note of hope and confidence.

The triumph of capitalism, the

*by Paul Johnson*

almost universal acceptance of the market as indispensable to prosperity, the collapse of Soviet imperialism, the downsizing of the state on nearly every continent and in almost every country in the world—Margaret Thatcher played a part in all those transformations, and it is not easy to see how any would have occurred without her.

Born in 1925, Margaret Hilda Roberts was an enormously industrious girl. The daughter of a Grantham shopkeeper, she studied on scholarship, worked her way to Oxford and took two degrees, in chemistry and law. Her fascination with politics led her into Parliament at age thirty-four, when she argued her way into one of the best Tory seats in the country, Finchley in north London. Her quick mind (and faster mouth) led her up through the Tory ranks, and by age forty-four she got settled into the “statutory woman’s” place in the Cabinet as Education Minister, and that looked like the summit of her career.

But Thatcher was, and is, notoriously lucky. Her case is awesome testimony to the importance of sheer chance in history. In 1975 she challenged Edward Heath for the Tory leadership simply because the candidate of the party’s right wing abandoned the contest at the last minute. Thatcher stepped into the breach. When she went into Heath’s office to tell him her decision, he did not even bother to look up. “You’ll lose,” he said. “Good day to you.”

But as Victor Hugo put it, nothing is so powerful as “an idea whose time has come.” And by the mid-1970s enough Tories were fed up with Heath and “the Ratchet Effect”—the way in which each statist advance was accepted by the Conservatives and then became a platform for a further statist advance.

She chose her issues carefully—and, it emerged, luckily. The legal duels she took on early in her tenure as Prime Minister sounded the themes that made her an enduring leader: open markets, vigorous debate, and loyal alliances. Among her first fights: a struggle against Britain’s out-of-control trade unions, which had destroyed three governments in succession. Thatcher turned the nation’s anti-union feeling into a handsome parliamentary majority and a mandate to restrict union privileges by a series of laws that effectively ended Britain’s trade union problem once and for all. “Who governs Britain?” she famously asked as unions struggled for power. By 1980, everyone knew the answer: Thatcher governs.



Margaret, age four, and sister, Muriel, eight.



The young politician  
near the House of  
Commons.

study how it was done. It was perhaps Britain's biggest contribution to practical economics in the world since J. M. Keynes invented Keynesianism, or even Adam Smith published *The Wealth of Nations*.

But Thatcher became a world figure for more than just her politics. She combined a flamboyant willpower with evident femininity. It attracted universal attention, especially after she led Britain to a spectacular military victory over Argentina in 1982. She understood that politicians had to give military people clear orders about ends, then leave them to get on with the means. Still, she could not bear to lose men, ships, or planes. "That's why we have extra ships and planes," the admirals had to tell her, "to make good the losses." Fidelity, like courage, loyalty, and perseverance, were cardinal virtues to her, which she possessed in the highest degree.

Once the union citadel had been stormed, Thatcher quickly discovered that every area of the economy was open to judicious reform. Even as the rest of Europe toyed with socialism and state ownership, she set about privatizing the nationalized industries, which had been hitherto sacrosanct, no matter how inefficient. It worked. British Airways, an embarrassingly slovenly national carrier that very seldom showed a profit, was privatized and transformed into one of the world's best and most profitable airlines. British Steel, which lost more than a billion pounds in its final years as a state concern, became the largest steel company in Europe.

By the mid-1980s, privatization was a new term in world government, and by the end of the decade more than fifty countries, on almost every continent, had set in motion privatization programs, floating loss-making public companies on the stock markets and in most cases transforming them into successful private enterprise firms. Even left-oriented countries, which scorned the notion of privatization, began to reduce their public sector on the sly. Governments sent administrative and legal teams to Britain to

#### BRIEF BIOGRAPHY

**BORN** October 13, 1925, in Grantham, England

**1979** Elected Britain's first female Prime Minister

**1982** Recaptures the Falkland Islands from Argentina

**1984** Survives terrorist assassination attempt

**1990** Resigns after losing support of the Conservative Party over differences on European Community policy

**1992** Awarded title of Baroness Thatcher of Kesteven and takes seat in the House of Lords

People from all over the world began to look at her methods and achievements closely, and to seek to imitate them.

One of her earliest admirers was Ronald Reagan, who achieved power eighteen months after she did. He too began to reverse the Ratchet Effect in the U.S. by effective deregulation, tax cutting, and opening up wider market opportunities for free enterprise. Reagan liked to listen to Thatcher's various lectures on the virtues of the market or the minimal state. "I'll remember that, Margaret," he said. She listened carefully to his jokes, tried to get the point, and laughed in the right places.

They turned their mutual affection into a potent foreign policy partnership. With Reagan and Thatcher in power, the application of judicious pressure on the Soviet state to encourage it to reform or abolish itself, or to implode, became an admissible policy. Thatcher warmly encouraged Reagan to rearm and thereby bring Russia to the negotiating table. She shared his view that Moscow ruled an "evil empire," and the sooner it was dismantled the better. Together with Reagan she pushed Mikhail Gorbachev to pursue his perestroika policy to its limits and so fatally to undermine the self-confidence of the Soviet elite.

Historians will argue hotly about the precise role played by the various actors who brought about the end of Soviet communism. But it is already clear that Thatcher has an important place in this huge event.

It was the beginning of a new historical epoch. All the forces that had made the twentieth century such a violent disappointment to idealists—totalitarianism, the gigantic state, the crushing of individual choice and initiative—were publicly and spectacularly defeated. Ascendant instead were the values that Thatcher had supported in the face of sometimes spectacular opposition: free markets and free minds. The world enters the twenty-first century and the third millennium a wiser place, owing in no small part to the daughter of a small shopkeeper, who proved that nothing is more effective than willpower allied to a few clear, simple, and workable ideas.



Thatcher drives a British tank on a visit to Germany in 1986.

# Pete Rozelle



WHEN MOST PEOPLE THINK OF PETE ROZELLE, if they think at all of Pete Rozelle, they probably recall a genial fellow with a balding pate and the ready smile of a car salesman who popped up at the end of the Super Bowl. Rozelle was the commissioner of the National Football League, of course, but

*by Michael Lewis*

what did that really mean? The players played, the coaches coached, the owners owned, the fans stomped and hollered, but what the hell does a commissioner do? Commission?

Until his death in 1996, Rozelle was dwarfed in every way by owners, coaches, and players, and it was impossible for the viewer innocent of the inner workings of pro sports to view him as much more than a functionary. The hired help. The guy whose job it was to order the stuffed mushrooms for the party after the game.

Those a bit closer to the game had another opinion of Rozelle: as a shrewd promoter of his sport. He invented the Super Bowl, for example, and sold the rights to the first game to two networks (NBC and CBS), which forced them to compete for viewers. He invented (with ABC Sports chief Rooney Arledge) *Monday Night Football*, which is the second longest running prime-time show on American television, after *60 Minutes*. He exhibited a taste for kitsch and spectacle unrivaled in professional sports. He loved floats and glitter and marching bands. His idea of beauty was a balloon drop. (He did not, however, like the name Super Bowl. It was coined by the son of Kansas City Chiefs owner Lamar Hunt, whose imagination had been captured by the newly invented Super Ball.) It is now commonplace for a regular-season football game to attract ratings that surpass the playoff games in other sports. And the reason for that is Pete Rozelle.

But there is a third view of Rozelle espoused by those who watched him work: he was an iron-willed tycoon who created the business model for all of professional sports. In addition, he figured out a way to make the NFL far more valuable than other sports, including the national pastime, baseball. Rozelle recognized that a sporting event was more than a game—it was a valuable piece of programming. Such media moguls as Ted Turner and Rupert Murdoch have used that strategy to build entire networks. Rozelle, however, did them one better. In the long-winded discussions about the money sloshing around professional sports, the structure of the businesses receives little attention. But the structure, as designed by Rozelle, has been largely responsible for the money. That structure, in a word, was a cartel.

The football league Rozelle inherited in 1960 was a fragmented collection of twelve franchises, each run more or less as a stand-alone business. The squabbling owners faced serious competition from the newly formed American Football League, bankrolled by one of the richest men in America, Lamar Hunt. Rozelle's first trick, one that John D. Rockefeller would have admired, was to put an end to the unprofitable competition. In 1962 he traveled to Washington and persuaded Congress to grant the NFL the first of two exemptions to the Sherman Anti-Trust Act. The exemption enabled Rozelle to fold the two leagues into a single, albeit fragmented, business.

Rozelle's next big move was to weld the owners of the new, expanded league into a cartel. This too required an exemption from the antitrust laws, which Congress granted in 1966. One morning the three major television networks woke up and found not a collection of individual teams competing with one another to sell their broadcast rights, but a single entity with a growing sense of its value.



Rozelle's foresight was one reason advertising fees for the 1998 Super Bowl reached a record \$1.6 million per thirty-second ad.

The result, as we now know, was wonderful new bargaining power. The new revenues went into promoting the game and grabbing an ever greater slice of the entertainment business. "When the networks put up as much money as they did for the rights, they felt they had to promote the game," says NFL spokesman Joe Browne. "And by promoting the game, the game grew." Back in 1960, when the thirty-three-year-old Rozelle accepted the job as NFL commissioner, the combined revenues of the NFL and the franchises were less than \$20 million. The NFL projects combined revenues in 1999 of nearly \$4 billion. Similarly, the Dallas Cowboys and the Minnesota

Vikings were each sold for about \$1 million in Rozelle's rookie year. The newest NFL franchise, in Cleveland, was auctioned for \$530 million in 1998.

In his eulogy of Rozelle in January 1997, Arledge said that a president of a sports division negotiating with Pete Rozelle and the NFL had "about as much clout as the Dalai Lama has dealing with the Chinese army." What he failed to mention was that Rozelle had created the army.

In retrospect, the whole thing looks like an outrageous violation of old-fashioned American free-market principles. But in 1966 virtually no one but Rozelle was thinking of pro sports as a seriously big business. The notion of pro football's "bargaining power" was patently absurd. Having formed his cartel, however, Rozelle managed it in much the same way the Japanese *zaibatsu* manage their cartels—with a view to market share (read: global domination).

He understood, somewhat ironically, that the key to attracting fans was fierce competition on the field, and that the key to fierce competition was every team's having roughly the same amount of money to spend on players. To that end Rozelle persuaded NFL owners—two dozen raving megalomaniacs—to share their television spoils equally. While there still remains a discrepancy between the richest franchise (Dallas) and the poorest (Indianapolis), the difference is a fraction of that in other pro sports.

Probably it helped that unlike so many would-be power brokers, Rozelle did not look like a man who wished to wield power. Of course the gifts required to pull this off aren't the ones normally associated with empire building. They are to a large extent the gifts of a diplomat. Diplomat in this case is another word for a man with a talent for deal-

ing with megalomaniacs. Each year that Rozelle presided over the NFL, another owner published his autobiography explaining how he was the visionary behind the rise of pro football. Each year Rozelle laughed and let him enjoy his press. Rozelle seems to have been the sort of spectral tycoon who took his satisfaction in managing other people without their knowing it.

Looking back, one can see that Rozelle's career was built on his talent for 1) persuading rich men who were unfamiliar with not having everything they wanted to take less than they deserved and 2) preventing full-scale revolt the minute the stakes became high. The subsequent endless pressures on Rozelle are familiar to anyone who has ever built a successful cartel—and cartels by and large fail. A member is more inclined to cheat the group the more successfully the group drives up his price. When Jerry Jones of the Dallas Cowboys cut a side deal with Pepsi to become the official drink of Texas Stadium, thus violating at least the spirit of the lucrative agreement the NFL had cut

with Coca-Cola, he was playing the same game as the renegade Libyan oil industry.

By today's standards, Rozelle was vastly undercompensated, given the wealth he created for the NFL's owners. He was a special case: the business giant who didn't lust for financial fortune and overt personal dominance. But if the measure of business success is the creation of new enterprise, then Rozelle was one of the greats. Once, late in his career, after it was clear what he had accomplished, Rozelle was asked by a reporter if he had an ego. Pete Rozelle replied that if you took all the egos in pro sports—the players', the coaches', the owners'—and averaged them out, his ego was just above the average. It might have been true, but no one ever knew it. That was his genius.

#### BRIEF BIOGRAPHY

**BORN** March 1, 1926, in Los Angeles

**1960** Elected NFL commissioner

**1960–62** Persuades teams to forgo individual TV deals for league-wide contract

**1962–64** NFL broadcast rights triple, to \$14 million

**1967** Presides over first Super Bowl

**1970** Creates *Monday Night Football*

**1987** NFL inks \$2.1 billion TV contract

**DIED** 1996 in Rancho Santa Fe, California



# Marilyn Monroe



HOW MUCH DECONSTRUCTION CAN ONE BLONDE BEAR? Just about everyone has had a go at Marilyn Monroe. There have been more than three hundred biographies, learned essays by Steinem and Kael, countless documentaries, drag queens, tattoos, Warhol silk screens, and porcelain collector's dolls. Marilyn has gone from actress to icon to licensed brand

*by Paul Rudnick*

name; only Elvis and James Dean have rivaled her in market share. At this point, she seems almost beyond comment, like Coca-Cola or Levi's. How did a woman who died a suicide at thirty-six, after starring in only a handful of movies, become such an epic commodity?

Much has been made of Marilyn's desperate personal history, the litany of abusive foster homes and the predatory Hollywood scum that accompanied her wriggle to stardom. Her heavily flashbulbed marriages included bouts with baseball great Joe DiMaggio and literary champ Arthur Miller, and her off-duty trysts involved Sinatra and the rumor of multiple Kennedys. The unauthorized tell-alls burst with miscarriages, abortions, rest cures, and frenzied press conferences announcing her desire to be left alone. Her death has been variously attributed to an accidental overdose, political necessity, and a mob hit. Her yummily lurid bio has provided fodder for everything from a failed Broadway musical to Jackie Susann's trash classics to a fictionalized portrait in Miller's play *After the Fall*. Marilyn's media-drenched image as a tragic dumb blonde has become an American archetype, along with the Marlboro Man and the Harley-straddling Wild One. Yet biographical trauma, even when packed with celebrities, cannot account for Marilyn's enduring stature as a goddess and postage stamp. Jacqueline Onassis will be remembered for her time line, for her participation in events and marriages that mesmerized the planet. Marilyn seems far less factual, more Cinderella or Circe than mortal. There have been other megablondes of varying skills, a pinup parade of Jean Harlow, Carole Lombard, Jayne Mansfield, Mamie Van Doren, and Madonna—but why does Marilyn still seem to have patented the peroxide that they've passed along?

Marilyn may represent some unique alchemy of sex, talent, and Technicolor. She is pure movies. I recently watched her as Lorelei Lee in her musical smash, *Gentlemen Prefer Blondes*. The film is an ideal mating of star and role, as Marilyn deliriously embodies author Anita Loos's seminal, shame-free gold digger. Lorelei's honey-voiced, pixilated charm may be best expressed by her line, regarding one of her sugar daddies, "Sometimes Mr. Esmond finds it very difficult to say no to me." Whenever Lorelei appears onscreen, undulating in second-skin, cleavage-proud knitwear or the sheerest orange chiffon, all heads turn, salivate, and explode. Who but Marilyn could so effortlessly justify such luscious insanity? She is the absolute triumph of political incorrectness. When she swivels aboard a cruise ship in clinging jersey and a floor-length leopard-skin scarf and matching muff, she handily offends feminists, animal rights activists, and good Christians everywhere, and she wins, because shimmering, jewel-encrusted,



Parading for American GIs in Korea in 1954: "You've never heard such cheering," she told DiMaggio.



In the 1950s, an era of oohs, she was the goddess of oomph.

bruised moonbeam, something fragile and funny and imperiled. I don't think audiences ever particularly identify with Marilyn. They may love her or fear for her, but mostly they simply marvel at her existence, at the delicious unlikeliness of such platinum innocence. She's the bad girl and good girl combined: she's sharp and sexy yet incapable of meanness, a dewy Venus rising from the motel sheets, a hopelessly irresistible home wrecker. Monroe longed to be taken seriously as an artist, but her work in more turgid vehicles, like *The Misfits*, was neither original nor very interesting. She needs the tickle of cashmere to enchant for the ages.

Movies have lent the most perishable qualities, such as youth, beauty, and comedy, a millennial shelf life. Until the cameras rolled, stars of the past could only be remembered, not experienced. Had she been born earlier, Marilyn might have existed as only a legendary rumor, a Helen of Troy or Tinker Bell. But thanks to Blockbuster, every generation now has immediate access to the evanes-

heedless movie stardom defeats all common morality. Her wit completes her cosmic victory, particularly in her facial expression of painful, soul-wrenching yearning when gazing upon a diamond tiara, a trinket she initially attempts to wear around her neck. Discovering the item's true function, she burbles, "I always love finding new places to wear diamonds!" Movies can offer a very specific bliss, the gorgeousness of a perfectly lighted fairy tale. Watching Marilyn operate her lips and eyebrows while breathlessly seducing an elderly millionaire is like experiencing the invention of ice cream.

Marilyn wasn't quite an actress, in any repertory manner, and she was reportedly an increasing nightmare to work with, recklessly spoiled and unsure, barely able to complete even the briefest scene between breakdowns. Only in the movies can such impossible behavior, and such peculiar, erratic gifts, create eternal magic—only the camera has the mechanical patience to capture the maddening glory of a celluloid savant like Monroe. At her best, playing warmhearted floozies in *Some Like It Hot* and *Bus Stop*, she's like a slightly

#### BRIEF BIOGRAPHY

- BORN** Norma Jeane Baker on June 1, 1926, in Los Angeles
- 1946** Changes name to Marilyn Monroe
- 1949** Nude calendar shots
- 1950** Launches career with role in *All About Eve*
- 1953** *Gentlemen Prefer Blondes*
- 1954** Weds Joe DiMaggio
- 1956** Marries Arthur Miller
- 1959** *Some Like It Hot*
- DIED** August 5, 1962, a suicide



In 1954, with her second husband, Joe DiMaggio, at New York's Stork Club.

cent perfection of Marilyn bumping and cooing her way through that chorine's anthem, "Diamonds Are a Girl's Best Friend," in *Gentlemen Prefer Blondes*. Only movie stars have the chance to live possibly forever, and maybe that's why they're all so crazy. Madonna remade "Diamonds" in the video of her hit "Material Girl," mimicking Marilyn's hot-pink gown and hot-number choreography, and the sly homage seemed fitting: a blond tribute, a legacy of greedy flirtation. Madonna is too marvelously sane ever to become Marilyn. Madonna's detailed appreciation of fleeting style and the history of sensuality is part of her own arsenal, making her a star and a fan in one. Madonna wisely and affectionately honors the brazen spark in Marilyn, the giddy candy-box allure, and not the easy heartbreak.

Marilyn's tabloid appeal is infinite but ultimately beside the point. Whatever destroyed her—be it Hollywood economics or rabid sexism or her own tormented psyche—pales beside the delight she continues to provide. At her peak, Marilyn was very much like Coca-Cola or Levi's—she was something wonderfully and irrepressibly American.

# Che Guevara



BY THE TIME ERNESTO GUEVARA, KNOWN TO US AS CHE, was murdered in the jungles of Bolivia in October 1967, he was already a legend to my generation, not only in Latin America but also around the world.

*by Ariel Dorfman*

Like so many epics, the story of the obscure Argentine doctor who abandoned his profession and his native land to pursue the emancipation of the poor of the earth began with a voyage. In 1956, along with Fidel Castro and a handful of others, he had crossed the Caribbean in the rickety yacht *Granma* on the mad mission of invading Cuba and overthrowing the dictator Fulgencio Batista. Landing in a hostile swamp, losing most of their contingent, the survivors fought their way to the Sierra Maestra. A bit over two years later, after a guerrilla campaign in which Guevara displayed such outrageous bravery and skill that he was named comandante, the insurgents entered Havana and launched what was to become the first and only victorious socialist revolution in the Americas. The images were thereafter invariably gigantic. Che the titan standing up to the yanquis, the world's dominant power. Che the moral guru proclaiming that a New Man, no ego and all ferocious love for the other, had to be forcibly created out of the ruins of the old one. Che the romantic mysteriously leaving the revolution to continue, sick though he might be with asthma, the struggle against oppression and tyranny.

His execution in Vallegrande at the age of thirty-nine only enhanced Guevara's mythical stature. That Christ-like figure laid out on a bed of death with his uncanny eyes almost about to open; those fearless last words ("Shoot, coward, you're only going to kill a man") that somebody invented or reported; the anonymous burial and the hacked-off hands, as if his killers feared him more after he was dead than when he had been alive: all of it is scalded into the mind and memory of those defiant times. He would resurrect, young people shouted in the late 1960s; I can remember fervently proclaiming it in the streets of Santiago, Chile, while similar vows exploded across Latin America. ¡No lo vamos a olvidar! We won't let him be forgotten.

More than thirty years have passed, and the dead hero has indeed persisted in collective memory, but not exactly in the way the majority of us would have anticipated. Che has become ubiquitous: his figure stares out at us from coffee mugs and posters, jingles at the end of key rings and jewelry, pops up in rock songs and operas and art shows. This apotheosis of his image has been accompanied by a parallel disappearance of the real man, swallowed by the myth. Most of those who idolize the incendiary guerrilla with the star on his beret were born long after his demise and have only the sketchiest knowledge of his goals or his life. Gone is the generous Che who tended wounded enemy sol-



Che's death by execution in 1967 added to his legend.

The epic of his life and mysterious death continues to captivate followers like this one at a 1997 memorial.



diers. gone is the vulnerable warrior who wanted to curtail his love of life lest it make him less effective in combat, and gone also is the darker, more turbulent Che who signed orders to execute prisoners in Cuban jails without a fair trial.

This erasure of complexity is the normal fate of any icon. More paradoxical is that the humanity that worships Che has by and large turned away from just about everything he believed in. The future he predicted has not been kind to his ideals or his ideas. Back in the 1960s, we presumed that his self-immolation would be commemorated by social action, the downtrodden rising against the system and creating—to use Che's own words—two, three, many Vietnams. Thousands of luminous young men, particularly in Latin America, followed his example into the hills and were slaughtered there or tortured to death in sad city cellars, never knowing that their dreams of total liberation, like those of Che, would not come true. If Vietnam is being imitated today, it is primarily as a model for how a society forged in insurrection now seeks to be actively integrated into the global market. Nor has Guevara's uncompromising, unrealistic style of struggle, or his ethical absolutism, prevailed. The major revolutions of the past quarter-century (South Africa, Iran, the Philippines, Nicaragua), not to mention the peaceful transitions to democracy in Latin America, East Asia, and the communist world, have all entailed negotiations with former adversaries, a give-and-take that could not be further from Che's unyielding demand for confrontation to the death. Even someone like Subcomandante Marcos, the spokesman for the Chiapas Maya revolt, whose charisma and moral stance remind us of Che's, does not espouse his hero's economic or military theories.

How to understand, then, Che Guevara's pervasive popularity, especially among the affluent young?

Perhaps in these orphaned times of incessantly shifting identities and alliances, the fantasy of an adventurer who changed countries and crossed borders and broke down limits without once betraying his basic loyalties provides the restless youth of our era with an optimal combination, grounding them in a fierce center of moral gravity while simultaneously appealing to their contemporary nomadic impulse. To those who will never follow in his footsteps, submerged as they are in a world of cynicism, self-interest, and frantic consumption, nothing could be more vicariously gratifying than Che's disdain for material comfort and everyday desires. One might suggest that it is Che's distance, the apparent impossibility of duplicating his life anymore, that makes him so attractive. And is not Che, with his hippie hair and wispy revolutionary beard, the perfect postmodern conduit to the nonconformist, seditious 1960s, that disruptive past confined to gesture and fashion? Is it conceivable that one of the only two Latin Americans to make it onto *Time's* one hundred most important figures of the century can be comfortably transmogrified into a symbol of rebellion precisely because he is no longer dangerous?

I wouldn't be too sure. I suspect that the young of the world grasp that the man whose poster beckons from their walls cannot be that irrelevant, this secular saint ready to die because he could not tolerate a world where los pobres de la tierra, the displaced and dislocated of history, would be eternally relegated to its vast margins.

Even though I have come to be wary of dead heroes and the overwhelming burden their martyrdom imposes on the living, I will allow myself a prophecy. Or maybe it is a warning. More than three billion human beings on this planet right now live on less than \$2 a day. And every day that breaks, forty thousand children—more than one every second!—succumb to diseases linked to chronic hunger. They are there, always there, the terrifying conditions of injustice and inequality that led Che many decades ago to start his journey toward that bullet and that photo awaiting him in Bolivia.

The powerful of the earth should take heed: deep inside that T-shirt where we have tried to trap him, the eyes of Che Guevara are still burning with impatience.

#### BRIEF BIOGRAPHY

**BORN** Ernesto Guevara de la Serna, June 14, 1928, in Rosario, Argentina

**1956** Joins Castro in Mexico and sails with his forces to Cuba

**1958** Leads guerrillas in decisive battle

**1959** Becomes part of new Cuban regime

**1965** Leaves government to lead insurrections in Latin America and Africa

**1966** Attempts guerrilla revolution in Bolivia

**DIED** October 9, 1967, executed after his capture by the Bolivian army



# Martin Luther King Jr.



IT IS A TESTAMENT TO THE GREATNESS of Martin Luther King Jr. that nearly every major city in the U.S. has a street or school named after him. It is a measure of how sorely his achievements are misunderstood that most of them are located in black neighborhoods.

*by Jack E. White*

Three decades after King was gunned down on a motel balcony in Memphis, Tennessee, he is still regarded mainly as the black leader of a movement for black equality. That assessment, while accurate, is far too restrictive. For all King did to free blacks from the yoke of segregation, whites may owe him the greatest debt, for liberating them from the burden of America's centuries-old hypocrisy about race. It is only because of King and the movement

that he led that the U.S. can claim to be the leader of the "free world" without inviting smirks of disdain and disbelief. Had he and the blacks and whites who marched beside him failed, vast regions of the U.S. would have remained morally indistinguishable from South Africa under apartheid, with terrible consequences for America's standing among nations. How could America have convincingly inveighed against the Iron Curtain while an equally oppressive Cotton Curtain remained draped across the South?

Even after the Supreme Court struck down segregation in 1954, what the world now calls human rights offenses were both law and custom in much of America. Before King and his movement, a tired and thoroughly respectable Negro seamstress like Rosa Parks could be thrown into jail and fined simply because she refused to give up her seat on an Alabama bus so a white man could sit down. A six-year-old black girl like Ruby Bridges could be hector and spit on by a white New Orleans mob simply because she wanted to go to the same school as white children. A fourteen-year-old black boy like Emmett Till could be hunted down and murdered by a Mississippi gang simply because he had supposedly made suggestive remarks to a white woman. Even highly educated blacks were routinely denied the right to vote or serve on juries. They could not eat at lunch counters, register in motels, or use whites-only rest rooms; they could not buy or rent a home wherever they chose. In some rural enclaves in the South, they were even compelled to get off the sidewalk and stand in the street if a Caucasian walked by.

The movement that King led swept all that away. Its victory was so complete that even though those outrages took place within the living memory of the baby boomers, they seem like ancient history. And though this revolution was the product of two centuries of agitation by thousands upon thousands of courageous men and women, King was its culmination. It is impossible to think of the movement unfolding as it did without him at its helm. He was, as the cliché has it, the right man at the right time.



In 1965, King marches for voting rights in Alabama.



King, booked in 1958 for trying to attend a trial in Montgomery, Alabama.

To begin with, King was a preacher who spoke in biblical cadences ideally suited to leading a stride toward freedom that found its inspiration in the Old Testament story of the Israelites and the New Testament gospel of Jesus Christ. Being a minister not only put King in touch with the spirit of the black masses but also gave him a base within the black church, then and now the strongest and most independent of black institutions.

Moreover, King was a man of extraordinary physical courage whose belief in non-violence never swerved. From the time he assumed leadership of the Montgomery, Alabama, bus boycott in 1955 to his murder thirteen years later, he faced hundreds of death threats. His home in Montgomery was bombed, with his wife and young children inside. He was hounded by J. Edgar Hoover's FBI, which bugged his telephone and hotel rooms, circulated salacious gossip about him, and even tried to force him into committing suicide after he won the Nobel Peace Prize in 1964. As King told the story, the defining moment of his life came during the early days of the bus boycott. A threatening telephone call at midnight alarmed him: "Nigger, we are tired of you and your mess now. And if you aren't out of this town in three days, we're going to blow your brains out and blow your house." Shaken, King went to the kitchen to pray. "I could hear an inner

#### BRIEF BIOGRAPHY

**BORN** January 15, 1929 in Atlanta

**1957** Founds Southern Christian Leadership Conference advocating nonviolent struggle against racism

**1963** Organizes March on Washington supporting proposed civil rights legislation

**1964** Awarded Nobel Peace Prize

**DIED** Assassinated in 1968 in Memphis, Tennessee

**1983** Birthday declared a national holiday

voice saying to me, 'Martin Luther, stand up for righteousness. Stand up for justice. Stand up for truth. And lo I will be with you, even until the end of the world.'

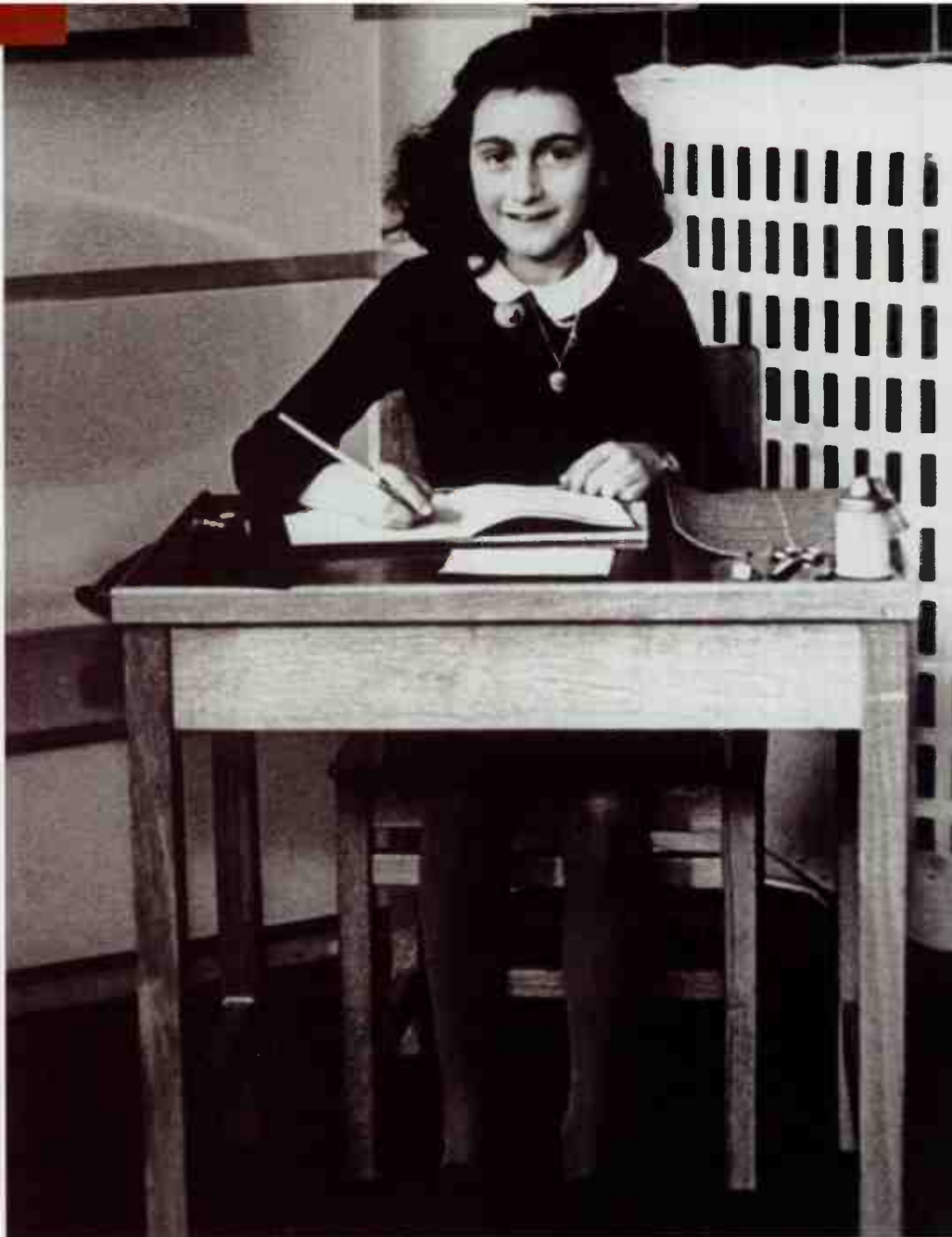
In recent years, however, King's most quoted line—"I have a dream that my four little children will one day live in a nation where they will not be judged by the color of their skin but by the content of their character"—has been put to uses he would never have endorsed. It has become the slogan for opponents of affirmative action like California's Ward Connerly, who insist, incredibly, that had King lived he would have been marching alongside them. Connerly even chose King's birthday last year to announce the creation of his nationwide crusade against "racial preferences."

Such would-be kidnappers of King's legacy have chosen a highly selective interpretation of his message. They have filtered out his radicalism and sense of urgency. That most famous speech was studded with demands. "We have come to our nation's capital to cash a check," King admonished. "When the architects of our Republic wrote the magnificent words of the Constitution and the Declaration of Independence, they were signing a promissory note to which every American was to fall heir," King said. "Instead of honoring this sacred obligation, America has given the Negro people a bad check; a check which has come back marked 'insufficient funds.'" These were not the words of a cardboard saint advocating a Hallmark card-style version of brotherhood. They were the stinging phrases of a prophet, a man demanding justice not just in the hereafter, but in the here and now.



Coretta Scott King mourns her husband's death.

# Anne Frank



ALONG WITH EVERYTHING ELSE SHE CAME TO REPRESENT, Anne Frank symbolized the power of a book. Because of the diary she kept between 1942 and 1944, in the secret upstairs annex of an Amsterdam warehouse where she and her family hid until the Nazis found them, she became the most memorable figure to emerge from World War II—

*by Roger Rosenblatt*

besides Hitler, of course, who also proclaimed his life and his beliefs in a book. In a way, the Holocaust began with one book and ended with another. Yet it was Anne's that finally prevailed—a beneficent and complicated work outlasting a simple and evil one—and that secured to the world's embrace the second most famous child in history.

So stirring has been the effect of the solemn-eyed, cheerful, moody, funny, self-critical, other-critical teenager on those who have read her story that it became a test of ethics to ask a journalist, If you had proof the diary was a fraud, would you expose it? The point was that there are some stories the world so needs to believe that it would be profane to impair their influence. All the same, the Book of Anne has inspired a panoply of responses—plays, movies, documentaries, biographies, a critical edition of the diary—all in the service of understanding or imagining the girl or, in some cases, of putting her down.

“Who Owns Anne Frank?” asked novelist Cynthia Ozick, in an article that holds up the diary as a sacred text and condemns any tamperers. The passions the book ignites suggest that everyone owns Anne Frank, that she has risen above the Holocaust, Judaism, girlhood, and even goodness and become a totemic figure of the modern world—the moral individual mind beset by the machinery of destruction, insisting on the right to live and question and hope for the future of human beings.

As particular as was the Nazi method of answering “the Jewish question,” it also, if incidentally, presented a form of the archetypal modern predicament. When the Nazis invaded Holland, the Frank family, like all Jewish residents, became victims of a systematically constricting universe. First came laws that forbade Jews to enter into business contracts. Then books by Jews were burned. Then there were the so-called Aryan laws, affecting intermarriage. Then Jews were barred from parks, beaches, movies, libraries. By 1942 they had to wear yellow stars stitched to their outer garments. Then phone service was denied them, then bicycles. Trapped at last in their homes, they were “disappeared.”

At which point Otto and Edith Frank, their two daughters, Margot and Anne, and the Van Pels family decided to disappear themselves, and for the two years until they were betrayed, to lead a life reduced to hidden rooms. But Anne had an instrument of freedom in an autograph book she had received for her thirteenth birthday. She wrote in an early entry, “I hope that you will be a great support and comfort to me.” She had no idea how widely that support and comfort would extend, though her awareness of the



Before going into hiding: Anne on the rooftop of her family's home, circa 1940.



Anne, center with hat, and her family head for a wedding.

power in her hands seemed to grow as time passed. One year before her death from typhus in the Bergen-Belsen camp, she wrote, "I want to be useful or give pleasure to people around me who yet don't really know me. I want to go on living even after my death!"

The reason for her immortality was basically literary. She was an extraordinarily good writer, for any age, and the quality of her work seemed a direct result of a ruthlessly honest disposition. Millions were moved by the purified version of her diary originally published by her father, but the recent critical, unexpurgated edition has moved millions more by dismantling her solely as an emblem of innocence. Anne's deep effect on readers comes from her being a normal, if gifted, teenager. She was curious about sex, doubtful about religion, caustic about her parents, irritable especially to herself; she believed she had been fitted with two contradictory souls.

All of this has made her more "useful," in her terms, as a recognizable human being. She was not simply born blessed with generosity; she struggled toward it by way of self-doubt, impatience, rage, ennui—all things that test the value of a mind. Readers enjoy quoting the diary's sweetest line—"I still believe, in spite of everything, that people are still truly good at heart"—but the passage that follows is more revealing: "I simply can't build up my

#### BRIEF BIOGRAPHY

- BORN** June 12, 1929, in Frankfurt, Germany
- 1934** Family moves to Amsterdam
- 1942** Receives diary for thirteenth birthday
- 1942** Anne's sister receives a notice to report to the Nazis, and the family goes into hiding
- 1944** The Franks are captured by the Nazis and sent to Auschwitz
- DIED** March 1945 of typhus in the Bergen-Belsen concentration camp
- 1947** Her father, Otto, has *Anne Frank: The Diary of a Young Girl* published
- 1955** Diary adapted as stage play
- 1995** Sections of diary suppressed by Otto Frank made public

hopes on a foundation consisting of confusion, misery, and death. I see the world gradually being turned into a wilderness; I hear the ever approaching thunder, which will destroy us too; I can feel the sufferings of millions; and yet, if I look up into the heavens, I think that it will all come right, that this cruelty will end, and that peace and tranquillity will return again. . . . I must uphold my ideals, for perhaps the time will come when I shall be able to carry them out."

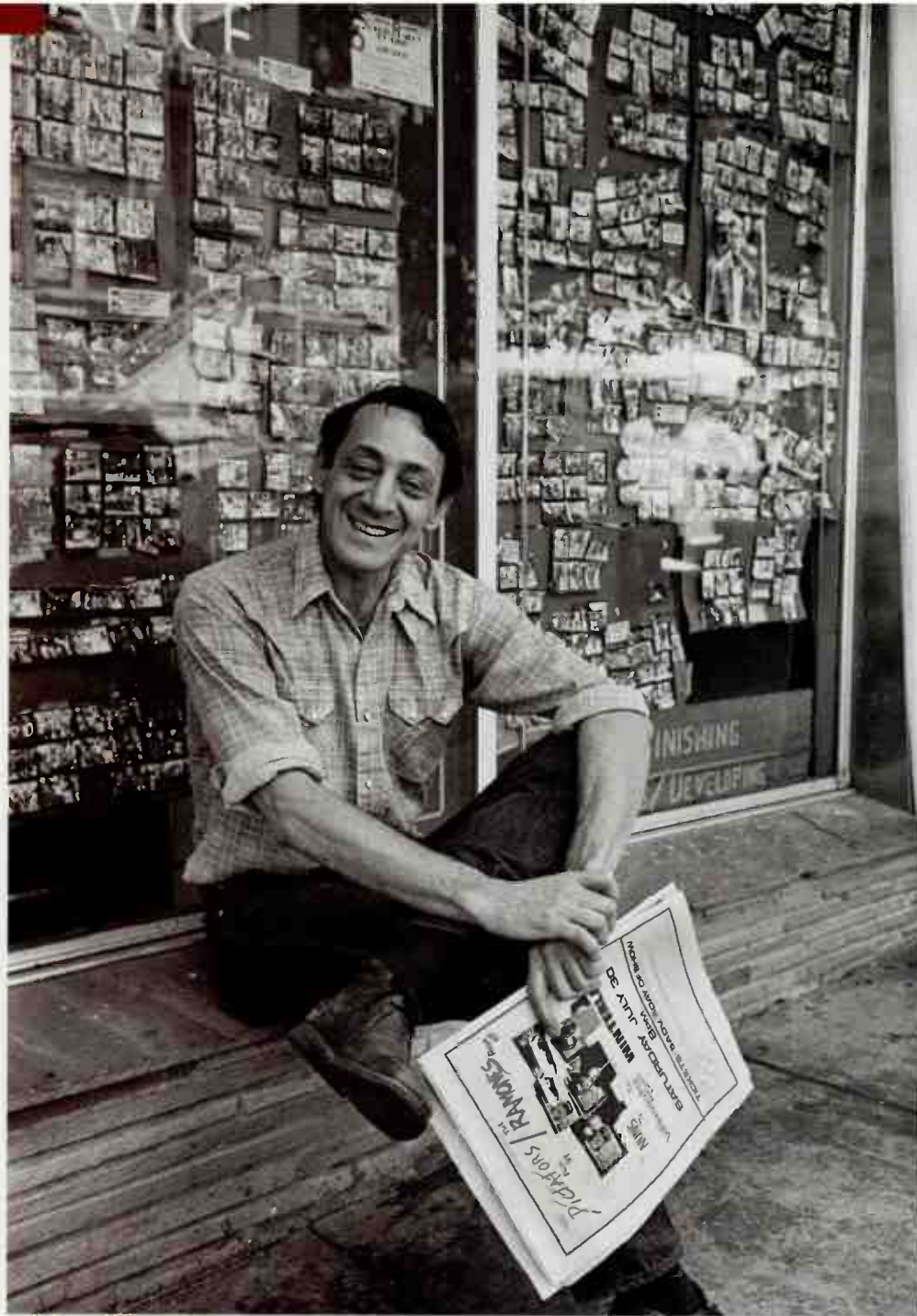
Here is no childish optimism but rather a declaration of principles, a way of dealing practically with a world bent on destroying her. It is the cry of the Jew in the attic, but it is also the cry of the twentieth-century mind, of the refugee forced to wander in deserts of someone else's manufacture, of the invisible man who asserts his visibility. And the telling thing about her statement of "I am" is that it bears no traces of self-indulgence. In a late entry, she wondered, "Is it really good to follow almost entirely my own conscience?" In our time of holy self-expression, the idea that truth lies outside one's own troubles comes close to heresy, yet most people acknowledge its deep validity and admire the girl for it.

Indeed, they love her, which is to say they love the book. In her diary she showed the world not only how fine a person she was, but also how necessary it is to come to terms with one's own moral being, even—perhaps especially—when the context is horror. The diary suggests that the story of oneself is all that we have, and that it is worth a life to get it right.

It was interesting that the Franks' secret annex was concealed by a bookcase that swung away from an opening where steps led up to a hidden door. For a while, Anne was protected by books, and then the Nazis pushed them aside to get at a young girl. First you kill the books; then you kill the children. What they could not know is that she had already escaped.



# Harvey Milk



AFTER HARVEY MILK BECAME THE FIRST OPENLY GAY MAN

elected to any substantial political office in the history of the planet, thousands of astounded people wrote to him. "I thank God," wrote a sixty-eight-year-old lesbian, "I have lived long enough

*by John Cloud*

to see my kind emerge from the shadows and join the human race.” Sputtered another writer: “Maybe, just maybe, some of the more hostile in the district may take some potshots at you—we hope!!!”

There was a time when it was impossible for people—straight or gay—even to imagine a Harvey Milk. The funny thing about Milk is that he didn’t seem to care that he lived in such a time. After he defied the governing class of San Francisco in 1977 to become a member of its board of supervisors, many people—straight and gay—had to adjust to a new reality he embodied: that a gay person could live an honest life and succeed. That laborious adjustment plods on—now forward, now backward—though with every gay character to emerge on TV and with every presidential speech to a gay group, its eventual outcome favoring equality seems clear.

When he began public life, though, Milk was a preposterous figure—an “avowed homosexual,” in the embarrassed language of the time, who was running for office. In the 1970s, many psychiatrists still called homosexuality a mental illness. In one entirely routine case, the Supreme Court refused in 1978 to overturn the prison sentence of a man convicted solely of having sex with another consenting man. A year before, it had let stand the firing of a stellar Tacoma, Washington, teacher who made the mistake of telling the truth when his principal asked if he was homosexual. No real national gay organization existed, and Vice President Walter Mondale haughtily left a 1977 speech after someone asked him when the Carter administration would speak in favor of gay equality. To be young and realize you were gay in the 1970s was to await an adulthood encumbered with dim career prospects, fake wedding rings, and darkened bar windows.

No one person could change all that, and not all the changes are complete. But a few powerful figures gave gay individuals the confidence they needed to stop lying, and none understood how his public role could affect private lives better than Milk. Relentless in pursuit of attention, Milk was often dismissed as a publicity whore. “Never take an elevator in city hall,” he told his last boyfriend in a typical observation. The marble staircase afforded a grander entrance.

But there was method to the megalomania. Milk knew that the root cause of the gay predicament was invisibility. Other gay leaders of the day—obedient folks who toiled quietly for a hostile Democratic Party—thought it more important to work with straight allies who could, it was thought, more effectively push for political rights. Milk suspected emotional trauma was gays’ worst foe—particularly for those in the closet, who probably still constitute a majority of the gay world. That made the election of an



Milk relished the symbolism of connecting with the city’s older voters and union workers.

openly gay person, not a straight ally, symbolically crucial. “You gotta give them hope,” Milk always said.

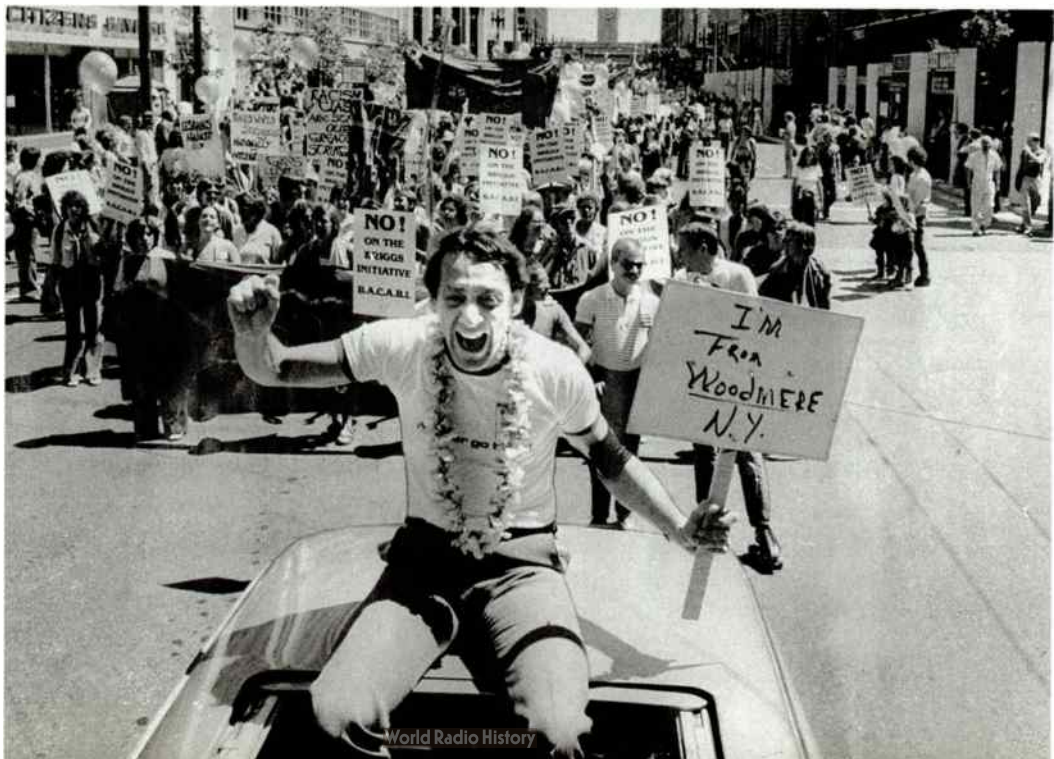
As supervisor, Milk sponsored only two laws—predictably, one barring anti-gay discrimination, and, less so, a law forcing dog owners to clean pets’ messes from sidewalks. He lobbied for the latter with a staged amble through a park that ended with his stepping in it. Editors loved the little item, as Milk knew they would, and he explained the stunt this way: “All over the country, they’re reading about me, and the story doesn’t center on me being gay. It’s just about a gay person who is doing his job.”

Realizing one is gay is usually cause for terror, or at least mortification, but Milk felt too great a sense of entitlement to let either emotion prevail. Born to a successful retail-clothing family on New York’s Long Island, Milk was a popular high school athlete and jokester. According to the biography *The Mayor of Castro Street* by Randy Shilts, Milk had no trouble recognizing his desires; as a boy he would venture to a gay section of Central Park, where in 1947 he was arrested for doffing his shirt (he was seventeen). The experience didn’t radicalize him, though. Milk served in the Korean War and returned to Manhattan to become a Wall Street investment banker.

But banking bored him, and the gay Greenwich Village milieu that he slipped into was full of scruffy radicals, drug-addled theater queens, and goofy twenty-somethings fleeing Midwest bigotry. Milk befriended or had sex with many of them (including Craig Rodwell, who would help lead the 1969 riots outside the Stonewall bar that launched the gay movement). By the early 1970s, Milk had moved to San Francisco, enraptured by its flourishing hippie sensibilities.

The few gays who had scratched their way into the city’s establishment blanched when Milk announced his first run for supervisor in 1973, but Milk had a powerful idea:

Milk in a 1978  
Gay Pride parade.  
He wanted  
people to know  
that gays come  
from every city.



he would reach downward, not upward, for support. He convinced the growing gay masses of “Sodom by the Sea” that they could have a role in city leadership, and they turned out to form “human billboards” for him along major thoroughfares. In doing so, they outed themselves in a way once unthinkable. It was invigorating.

While his first three tries for office failed, they lent Milk the credibility and positive media focus that probably no openly gay person ever had. Not everyone cheered, of course, and death threats multiplied. Milk spoke often of his ineluctable assassination, even recording a will naming acceptable successors to his seat and containing the famous line: “If a bullet should enter my brain, let that bullet destroy every closet door.”

Two bullets actually entered his brain. It was November 27, 1978, in city hall, and Mayor George Moscone was also killed. Fellow supervisor Daniel White, a troubled anti-gay conservative, had left the board, and he became unhinged when Moscone denied his request to return. White admitted the murders within hours.

A jury gave him just five years with parole. Defense lawyers had barred anyone remotely pro-gay from the jury and brought a psychologist to testify that junk food had exacerbated White’s depression. (The so-called Twinkie defense was later banned.) Milk’s words had averted gay riots before, but after the verdict, the city erupted. More than 160 people ended up in the hospital.

Milk’s killing probably awakened as many gay people as his election had. His death inspired many associates—most notably Cleve Jones, who later envisioned the greatest work of American folk art, the AIDS quilt. But while assassination offered Milk something then rare for openly gay men—mainstream empathy—it would have been thrilling to see how far he could have gone as a leader. He had sworn off gay bathhouses when he entered public life, and he may have eluded the virus that killed so many of his contemporaries. He could have guided gay America through the confused start of the AIDS horror. Instead, he remains frozen in time, a symbol of what gays can accomplish and the dangers they face in doing so.

## BRIEF BIOGRAPHY

- BORN** May 22, 1930, in Woodmere, New York
- 1951** Enlists in the navy
- 1964** Campaigns for Barry Goldwater
- 1972** Moves to San Francisco with lover Scott Smith; they open a camera shop in the Castro, the emerging gay enclave
- 1973** Makes first run for city board of supervisors
- 1977** Wins seat, becoming the first openly gay elected official of any large city
- DIED** November 27, 1978, assassinated by conservative former board member Dan White, whose light sentence sparks riots

# Mikhail Gorbachev



IN 1985, WHEN THE FIRST RUMBLINGS OF GORBACHEV'S thunder disturbed the moldy Soviet silence, the holy fools on the street—the people who always gather at flea markets and around churches—predicted that the new Czar would rule seven years. They assured anyone interested in listening that Gorbachev was “foretold in the Bible,” that he was an

by *Tatyana Tolstaya*

apocalyptic figure: he had a mark on his forehead. Everyone had searched for signs in previous leaders as well, but Lenin's speech defect, Stalin's mustache, Brezhnev's eyebrows, and Khrushchev's vast baldness were utterly human manifestations. The unusual birthmark on the new General Secretary's forehead, combined with his inexplicably radical actions, gave him a mystical aura. Writing about Gorbachev—who he was, where he came from, what he was after, and what his personal stake was (there had to be one) became just as intriguing as trying to figure out what Russia's future would be.

After he stepped down from his position as head of state, many people of course stopped thinking about him, and in Russian history, that in itself is extraordinary. How Gorbachev left power and what he has done since are unique episodes in Russian history, but he could have foreseen his own resignation: he prepared the ground and the atmosphere that made that resignation possible. Gorbachev is such an entirely political creature, and yet so charismatic, that it's hard to come to any conclusions about him as a person. Every attempt I know of has failed miserably. The phenomenon of Gorbachev has not yet been explained, and most of what I've read on the subject reminds me of how a biologist, psychologist, lawyer, or statistician might describe an angel.

Gorbachev has been discussed in human terms, the usual investigations have been made, his family tree has been studied, a former girlfriend has been unearthed (so what?), the spotlight has been turned on his wife. His completely ordinary education, colleagues, friends, and past have all been gone over with a fine-tooth comb. By all accounts, Gorbachev shouldn't have been Gorbachev. Then the pundits study the politics of the Soviet Union, evoke the shadow of Ronald Reagan and Star Wars, drag out tables and graphs to show that the Soviet economy was doomed to self-destruct, that it already had, that the country couldn't have gone on that way any longer. But what was Reagan to us, when we had managed to overcome Hitler, all while living in the inhuman conditions of Stalinism? No single approach—and there have been many—can explain Gorbachev. Perhaps the holy fools with their metaphysical scenario were right when they whispered that he was marked and that seven years were given to him to transform Russia in the name of her as yet invisible but inevitable salvation and renaissance.

After the August 1991 coup, Gorbachev was deprived of power, cast out, laughed at, and reproached with all the misfortunes, tragedies, and lesser and greater catastrophes that took place during his rule. Society always reacts more painfully to individual deaths than it does to mass annihilation. The crackdowns in Georgia and Lithuania—the Gorbachev regime's clumsy attempts to preclude the country's collapse—led to the death of several dozen people. Their names are known, their photographs were



Kerchief from  
young pioneer,  
1966.



Gorbachev, highly popular in the West, is regarded with indifference or hostility at home.

Under Gorbachev the system of residence permits did fetter the population; after Gorbachev hundreds upon hundreds of thousands lost their property and the roofs over their heads and set off across the country seeking refuge from people as angry and hungry as they were.

No doubt Gorbachev made mistakes. No doubt his maneuvering between the Scylla of a totalitarian regime and the Charybdis of democratic ideas was far from irreproachable. No doubt he listened to and trusted the wrong people, no doubt his hearing and sight were dulled by the enormous pressure and he made many crude, irreversible mistakes. But maybe not. In a country accustomed to the ruler's answering for everything, even burned stew and spilled milk are held against the Czar and are never forgiven. Similarly, shamanism has always been a trait of the Russian national character: we cough and infect everyone around us, but when we all get sick, we throw stones at the shaman because his spells didn't work.

When Gorbachev was overthrown, for some reason everyone thought it was a good thing. The conservatives were pleased because in their eyes he was the cause of the regime's demise (they were absolutely right). The radicals were happy because in their opinion he was an obstacle to the republics' independence and too cautious in enacting economic reforms (they too were correct). This man with the stain on his forehead attempted simultaneously to contain and transform the country, to destroy and reconstruct, right on the spot. One can be Hercules and clean the Augean stable. One can be Atlas and hold up the heavenly vault. But no one has ever succeeded in combining the two roles. Surgery was demanded of Gorbachev, but angry shouts broke out whenever he reached for the scalpel. He wasn't a Philippine healer who could remove a tumor without blood or incisions.

Strangely enough, no one ever thought Gorbachev particularly honest, fair, or noble. But after he was gone, the country was overwhelmed by a flood of dishonesty, cor-

published in the press, and one feels terribly sorry for them and their families. Yeltsin's carnage in Chechnya, the bloody events in Tajikistan, the establishment of feudal orders in the central Asian republics, and the massive eradication of all human rights throughout the territory of the former Soviet Union are, however, regarded indifferently, as if they were in the order of things, as if they were not a direct consequence of the current regime's irresponsible policies.

Corruption did exist under Gorbachev; after Gorbachev it blossomed with new fervor. Oppressive poverty did exist under Gorbachev; after Gorbachev it reached the level of starvation.

ruption, lies, and outright banditry that no one expected. Those who reproached him for petty indulgences at government expense—for instance, every room of his government dacha had a television set—themselves stole billions; those who were indignant that he sought advice from his wife managed to set up their closest relatives with high-level, well-paid state jobs. All the pygmies of previous years, afraid to squeak in the pre-Gorbachev era, now, with no risk of response, feel justified in insulting him.

The pettiness of the accusations speaks for itself. Gorbachev's Pizza Hut ads provoke particular ridicule, and while the idea is indeed amusing, they pay his rent. The scorn reminds me of how the Russian upper crust once castigated Peter the Great for being unafraid to roll up his sleeves and get his hands dirty. Amazingly, in our huge, multinational country, where the residents of St. Petersburg speak with a different accent from those of Moscow, Gorbachev's southern speech is held against him.

After his resignation, Gorbachev suddenly became very popular in an unexpected quarter: among young people. He became an element of pop culture, a decorative curlicue of the apolitical, singing, dancing, quasi-bohemians. It was fashionable to weave his sayings into songs: in one popular composition Raisa Gorbachev's voice says thoughtfully, "Happiness exists; it can't be otherwise," and Gorbachev answers, "I found it."

In the 1996 election, 1.5 percent of the electorate voted for him. That's about 1.5 million people. I think about those people, I wonder who they are. But I'll never know. The press hysteria before the election was extraordinary. Ordinary people no longer trusted or respected the moribund Yeltsin, but many were afraid of the communists and Gennadi Zyuganov, so the campaign was carried out under the slogan the lesser of two evils or better dead than red. All my friends either voted for Yeltsin, sighing and chanting the sacred phrases, or, overcome by apathy or revulsion, didn't vote at all. I asked everyone, "Why not vote for Gorbachev?" "He doesn't have a chance," was the answer. "I would, but others won't, and Zyuganov will be elected as a result," some said. This, at least, was a pragmatic approach. But it turns out that there were 1.5 million dreamers, people who hadn't forgotten that bright if short period of time when the chains fell one after another, when every day brought greater freedom and hope, when life acquired meaning and prospects, when, it even seemed, people loved one another and felt that a general reconciliation was possible.

#### BRIEF BIOGRAPHY

- BORN** March 2, 1931, in Privolnoye, a village in southern Russia
- 1985** Elected General Secretary of the Communist Party of the Soviet Union
- 1986** Initiates a period of political openness (glasnost) and transformation (perestroika) intended to modernize the U.S.S.R.
- 1990** Awarded Nobel Peace Prize
- 1990–91** President of the Soviet Union until its dismantlement



# Jim Henson



JIM HENSON CAN BE CREDITED WITH MANY accomplishments: he had the most profound influence on children of any entertainer of his time; he adapted the ancient art of puppetry to the most modern of mediums, television, transforming both; he created a TV show that was one of the most popular on earth.

*by James Collins*

But Henson's greatest achievement was broader than any of these. Through his work, he helped sustain the qualities of fancifulness, warmth, and consideration that have been so threatened by our coarse, cynical age.

Born in 1936, Henson grew up in the small town of Leland, Mississippi, where his father worked as an agronomist for the federal government. When Henson was in fifth grade, his father took a job in Washington, and the family moved to a suburb in Maryland. There, in high school, Henson became fascinated by television. "I loved the idea," he once said, "that what you saw was taking place somewhere else at the same time." In the summer of 1954, just before he entered the University of Maryland, he learned that a local station needed someone to perform with puppets on a children's show. Henson wasn't particularly interested in puppets, but he did want to get into TV, so he and a friend made a couple—one was called Pierre the French Rat—and they were hired.

The job didn't last long, but within a few months, Henson was back on TV, puppeteering for another station, the local NBC affiliate. Soon he had his own five-minute program, called *Sam and Friends*. It aired live twice a day, once before the network news with Chet Huntley and David Brinkley and later preceding the *Tonight* show, which at that time starred Steve Allen. Remaining in college, where he studied art and theater design, Henson produced *Sam and Friends* for six years. Assisting him was a fellow student named Jane Nebel, whom he married in 1959.

Puppets have been around for thousands of years, but the proto-Muppets that began to appear on *Sam and Friends* were different. Kermit was there, looking and sounding much as he would later (until his death Henson always animated Kermit and provided his voice). Typical hand puppets have solid heads, but Kermit's face was soft and mobile, and he could move his mouth in synchronization with his speech; he could also gesticulate more facilely than a marionette, with rods moving his arms. For television, Henson realized, it was necessary to invent puppets that had "life and sensitivity." (Henson sometimes said Muppet was a combination of puppet and marionette, but it seems the word came to him and he liked it, and later thought up a derivation.)

Throughout the early 1960s, the Muppets made appearances on the *Today* show and a range of variety programs. Then, in 1969, came *Sesame Street*. Henson was always careful not to take the credit for *Sesame Street*'s achievements. It was not his program, after all—the Children's Television Workshop hired him. In fact, Henson hesitated to join the show, since he did not want to become stuck as a children's entertainer.



Henson and an early Kermit made out of a coat and a Ping-Pong ball.



The human Henson family in Bedford, New York, 1977. From left: Cheryl, Jane, Heather on Dad's shoulders, John, Lisa.

Nonetheless, few would disagree that it was primarily Bert and Ernie, Big Bird, Grover, and the rest who made *Sesame Street* so captivating. Joan Ganz Cooney, who created the show, once remarked that the group involved with it had a collective genius but that Henson was the only individual genius. "He was our era's Charlie Chaplin, Mae West, W. C. Fields, and Marx Brothers," Cooney said, "and indeed he drew from all of them to create a new art form that influenced popular culture around the world."

Since *Sesame Street* has been on the air for thirty years and has been shown in scores of countries, Henson's Muppets have entranced hundreds of millions of children. And the audience for the Muppets has not only been huge; it has also been passionate. In fact, given the number of his fans and the intensity of their devotion, Kermit may possibly be the leading children's character of the century, more significant than even Peter Pan or Winnie-the-Pooh.

But despite the Muppets' success on *Sesame Street* and their demonstrated appeal to adults as well as children, no U.S. network would give Henson a show of his own. It was a British producer, Lew Grade, who finally offered Henson the financing that enabled him to mount *The Muppet Show*. The program ran in syndication from 1976 until 1981, when Henson decided to end it lest its quality begin to decline. At its peak it was watched each week by 235 million viewers around the world. Stars from Steve Martin to Rudolf Nureyev appeared as guest hosts, and the show launched the career of Miss Piggy, the vain, très sophistiquée female who was besotted with Kermit.

The beauty of the Muppets, on both *Sesame Street* and their own show, was that they were cuddly but not too cuddly, and not only cuddly. There are satire and sly wit; Bert and Ernie quarrel; Miss Piggy behaves unbecomingly; Kermit is sometimes exasperated. By adding just enough tartness to a sweet overall spirit, Henson purveyed a kind of innocence that was plausible for the modern imagination. His knowingness allowed us to accept his real gifts: wonder, delight, optimism.

#### BRIEF BIOGRAPHY

**BORN** September 24, 1936, in Greenville, Mississippi

**1954** Gets first TV job as a puppeteer on a local Maryland station

**1955** Creates Kermit, his alter ego

**1959** Marries Jane Nebel

**1969** *Sesame Street* appears on PBS, introducing Bert, Ernie, and Big Bird

**1976** Launches *The Muppet Show*, starring Kermit and Miss Piggy

**DIED** May 16, 1990, suddenly in New York City

Henson was a kind, infinitely patient man. Those who worked for him say he literally never raised his voice. Frank Oz, the puppeteer behind Bert, Miss Piggy, and many others, was Henson's partner for twenty-seven years. "Jim was not perfect," he says. "But I'll tell you something—he was as close to how you're supposed to behave toward other people as anyone I've ever known."

The only complaint of his five children seems to be that because Henson was so busy, he was unable to spend enough time with them. They often accompanied him while he worked, and he once even took his eldest daughter along when he held a meeting with the head of a movie studio. That child, Lisa, is now a powerful producer in Hollywood; Henson's elder son, Brian, runs the Jim Henson Co.; and another daughter, Cheryl, also works there. However gentle, Henson was not a complete naïf. He liked expensive cars—Rolls-Royces, Porsches—and after he and Jane separated in 1986 (they remained close and never divorced), he dated a succession of women.

In the 1970s and 1980s, Henson produced innumerable films and TV shows with and without the Muppets. Some were dark, like his adaptations of folktales and myths in the ingenious TV series *Jim Henson's The Storyteller*. Then in 1990, at age fifty-three, Henson suddenly died after contracting an extremely aggressive form of pneumonia. He remains a powerful presence, though, on account of *Sesame Street* and the Henson Co., whose next venture will be a global family entertainment network called the Kermit Channel. Because the works we encounter as children are so potent, Henson may influence the next century as much as this one, as his viewers grow up carrying his vision within them.



The Hensons work Ernie. Jim animated and voiced both Ernie and Kermit until his death.

# The Beatles



BOOMERS CAN BE TIRESOME WHEN THEY NATTER ON too long about the fun-swollen fabulousness of the 1960s. I mean, I was there: “Flower power”? Patchouli oil? Peter Max posters? Please.

*by Kurt Loder*

But even the mistiest of such geezers is likely to be right about the rock and soul music of that decade: Who could overstate its distinctive exuberance, its heady inventiveness, or the thrill of its sheer abundance? And who could overcelebrate those most emblematic of 1960s pop phenomena, the Beatles? For the Beatles were then, and remain to this day, the world's most astonishing rock 'n' roll band.

I use the adjective advisedly. Unrelenting astonishment is what I clearly recall feeling, as a teenager myself back in the winter of 1964, when "Beatlemania," an obscure hysteria that had erupted in Britain the year before, suddenly jumped the Atlantic and took instant root here. First, in January, came the spine-tingling arrival of "I Want to Hold Your Hand"—a great, convulsive rock 'n' roll record that, to the bafflement of many a teen garage band across the land, actually had more than three chords (five more, to be exact—incredible). Then one week later, "She Loves You" careened onto the charts—wooo! The week after that came the headlong rush of "Please Please Me," and by April, the top five singles in the country were all Beatles records. By year's-end they had logged a head-spinning twenty-nine hits on the U.S. charts. It is hard—no, it is impossible—to imagine any of the gazillion or so carefully marketed little bands of today replicating a quarter of that feat. (Even a contemporary English group such as Oasis, which baldly appropriates the superficialities of the Beatles' style, entirely misses the still-magical heart of their music.)

Ed Sullivan, the poker faced TV variety-show host, having spotted the effervescent mop-tops in mid-mob scene at London's Heathrow Airport the previous October ("Who the hell are the Beatles?" he'd asked excitedly), brought them over to play his show early on, in February 1964, and 70 million people tuned in. A congratulatory telegram from Elvis Presley, the great, lost god of rockabilly, was read at the beginning of the show, in what might have been seen as torch-passing fashion, and Americans—or American youth, at any rate—promptly fell in love. ("I give them a year," said Sullivan's musical director.)

It is a commonplace of pop music commentary to point out that at the time of the Beatles' first appearance on the Sullivan show, the U.S. was a country uniquely in need of some cheering up. The assassination of a young and charismatic President little more than two months earlier had cast a pall on the national mood; and of course there were rumors of war. Certainly the moment was propitious for the four lads from Liverpool.

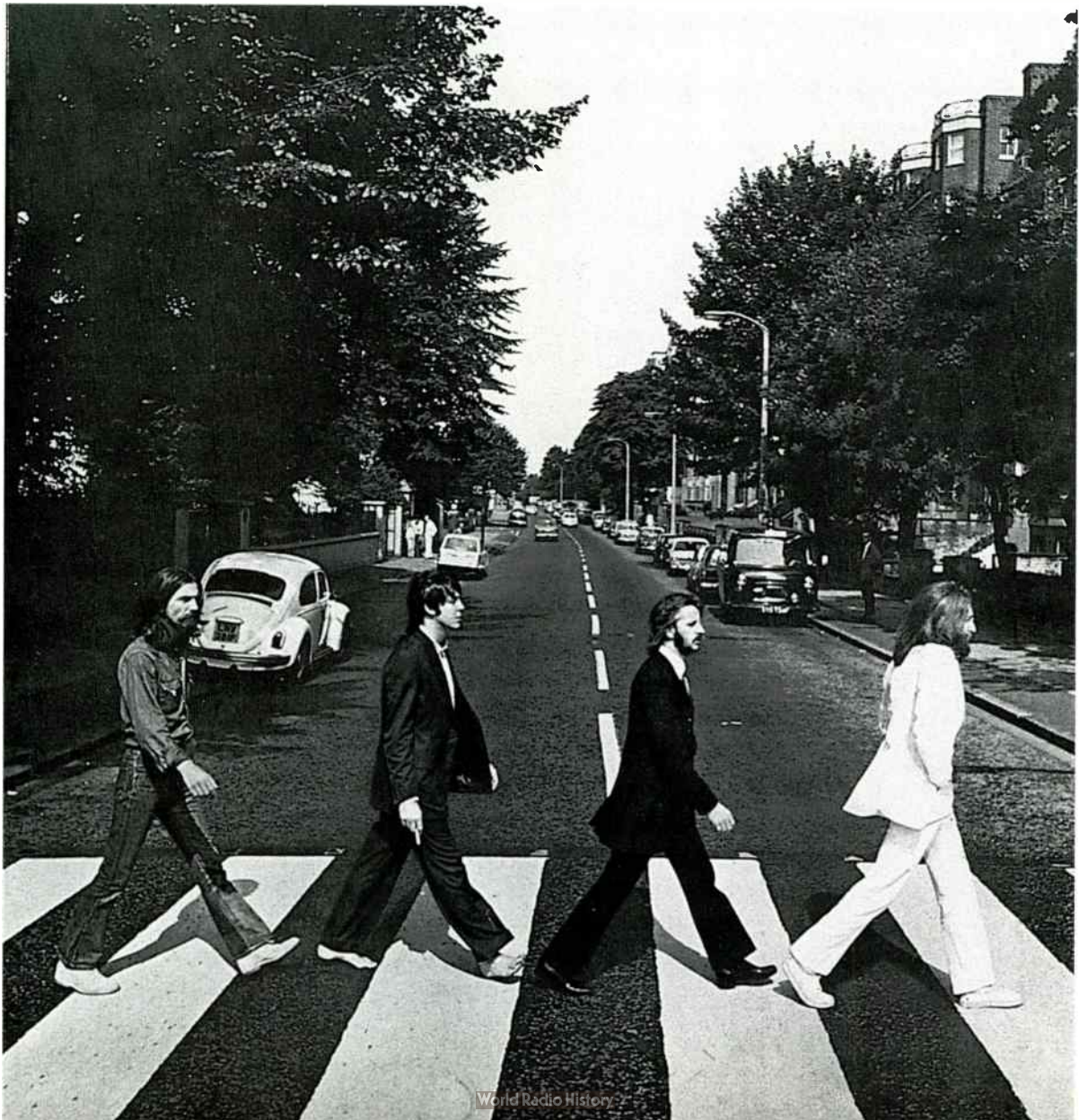


The 1967 *Sgt. Pepper* album, rock's first concept record, took the Beatles' antic style in new directions that allowed their imaginations to roam.

Looking back, though, it seems likely that the Beatles—with their buoyant spirits, their bottomless charm, their unaccustomed and irrepressible wit—could probably have boosted the mirth quotient at a clown convention. Their overflowing gifts for songcraft, harmony, and instrumental excitement, their spiffy suits and nifty haircuts, their bright quips and ready smiles, made them appear almost otherworldly, as if they had just beamed down from some distant and far happier planet.

Actually, of course, they hailed from Liverpool, a semigrim seaport on the northwestern coast of England. John Lennon, born there in 1940, never knew the seagoing father who had deserted his mother; mainly a doting aunt raised the boy. He grew up arty and angry—and musical, it turned out, after his mother bought him the traditional cheap kid guitar (the label inside said guaranteed not to split), and he quickly worked out the chords to the Buddy Holly hit “That’ll Be the Day.”

Soon after the release of their *Abbey Road* album in 1969, the Beatles would split, each going his own way.



Paul McCartney, born in 1942 and destined to become Lennon's songwriting soul mate, seemed a sunnier type: well-mannered, level-headed, all that. But he had weathered trauma of his own, losing his mother to breast cancer in his early teens. McCartney encountered Lennon in the logical way, given the times and the two boys' musical interests: on the skiffle scene.

Skiffle music—a sort of jug-band clatter ideally suited to inexpensive and homemade instruments—was all the rage, and in 1957 Lennon formed a band called the Quarrymen. By the following year, the group had been joined by McCartney and his school friend George Harrison, then just fourteen. In 1960, calling themselves the Silver Beatles, and with drummer Pete Best in tow, they sailed to Germany to play the riotous red-light-district bars of Hamburg, drink Herculean quantities of beer, and gulp down handfuls of illicitly energizing pills to keep them stage-ready seven nights a week.

In 1962 Best was replaced by another Liverpool drummer, basset-eyed Ringo Starr (born Richard Starkey in 1940). After passing an audition that their manager, Brian Epstein, had arranged with EMI's Parlophone label, the group cut its first single, "Love Me Do," a moderate hit. In January 1963 a second single, "Please Please Me," went to number one, and Beatlemania was born.

It is commonly thought that by the time the Beatles arrived in the U.S., rock 'n' roll music, an uproarious sound forged by such pioneers as Chuck Berry, Little Richard, and Elvis Presley, had all but died out, leaving the charts littered with such unconvincing rock-lite commodities as Frankie Avalon, Bobby Rydell, and Chubby Checker. This is not entirely true. Although Presley had been drafted into the army in 1958 (and was never quite the same after he got out), and Buddy Holly had been killed in a plane crash in 1959, and Berry, Little Richard, and Jerry Lee Lewis were all otherwise sidelined, there was no gaping lack of good music around. In 1963—the year before the Beatles broke Stateside—the charts were filled with great records by the Drifters, the Beach Boys, Roy Orbison, Sam Cooke, Motown's Miracles and Martha and the Vandellas, and celebrated Phil Spector jug groups such as the Crystals and the Ronettes.

The Fab Four climbed to the top of the British charts in 1963, then conquered the U.S. a year later.







Like the young Cassius Clay, they used keen wit and puckish behavior to give their artistry its punch.

What set the Beatles apart, amid all those fabled acts, was their dazzling interpersonal chemistry (showcased to irresistible effect in the 1964 feature film *A Hard Day's Night*, which critic Andrew Sarris called “the *Citizen Kane* of jukebox movies”), their novel sound (produced on off-beat—to most Americans—Gretsch, Rickenbacker and Hofner guitars and cranked out through snarly little Vox amplifiers brought over from England), and of course their awesome facility for making ravishing hit records.

By 1965 even the nonfab world had been forced to take notice of this all-conquering cultural force. The Beatles had become such a huge British export that they were given a royal award: the Member of the Order of the British Empire, or MBE. (They took this about as seriously as anyone might have expected, all four of them firing up a joint in a Buckingham Palace washroom before the ceremony, and Ringo commenting on his MBE, “I’ll keep it to dust when I’m old.”)

Having scored a breakthrough with their chart-topping 1965 album *Rubber Soul*—the record whose elegant lyrics and luminous melodies lifted them forever out of the world of simple teen idols and into the realm of art—the Beatles, exhausted, decid-

ed to stop touring. After a final concert in San Francisco in 1966, they would come together again as a group only in recording studios. But there they spun out ever more elaborate masterpieces: the tripped-out psychedelic special *Revolver* in 1966; the breathtaking (at the time) concept epic *Sgt. Pepper's Lonely Hearts Club Band* in 1967; the strangely alienated, every-man-for-himself *White Album* (officially called *The Beatles*) in 1968; and the gorgeous *Abbey Road* in 1969.

For millions of fans worldwide, these albums mapped a path through the puzzling and sometimes scary 1960s. The paths of Lennon and McCartney, however, were diverging drastically. Each took a wife (John married Japanese avant-garde artist Yoko Ono, and Paul wed American rock photographer Linda Eastman) and drifted even further apart, Lennon growing bitter, McCartney adopting the air of the contented family man.

By 1969 Lennon was ready to quit the group. McCartney is said to have talked him out of going public with this desire; but then in April 1970 McCartney himself announced that the group was disbanding. In December he filed suit to have the partnership dissolved and a receiver appointed to handle its affairs. When the other three Beatles dropped their appeal of this action in 1971, the most fabulously successful band of all time (with more than 100 million records sold to date) came to an end.

And so it was over. McCartney began making records with his wife in a new band. Harrison followed his Indo-mystical inclinations as far as he could until fans lost interest. Ringo made occasional records, movies, and television commercials. And Lennon moved to New York City, where he had always wanted to be, and ironically became that most English of figures, the reclusive eccentric. He was shot down in 1980, and the Beatles were nevermore. Except for their music, which is eternal.

#### BRIEF BIOGRAPHY

- 1940** Ringo Starr born July 7; John Lennon born October 9
- 1942** Paul McCartney born June 18
- 1943** George Harrison born February 25
- 1957** Lennon meets McCartney at church picnic near Liverpool
- 1962** With Ringo and George, first recording session as the Beatles
- 1964** Arrive in America; "I Want to Hold Your Hand" tops charts, first of their twenty number-one hits; seen by 70 million on *Ed Sullivan Show*
- 1967** *Sgt. Pepper* album is released
- 1970** Band breaks up amid infighting
- 1980** Lennon is killed, ending reunion hopes

# Pelé



HEROES WALK ALONE, BUT THEY BECOME MYTHS when they ennoble the lives and touch the hearts of all of us. For those who love soccer, Edson Arantes do Nascimento, generally known as Pelé, is a hero.

*by Henry Kissinger*



Performance at a high level in any sport is to exceed the ordinary human scale. But Pelé's performance transcended that of the ordinary star by as much as the star exceeds ordinary performance. He scored an average of a goal in every international game he played—the equivalent of a baseball player hitting a home run in every World Series game over fifteen years. Between 1956 and 1974, Pelé scored a total of 1,220 goals—not unlike hitting an average of seventy home runs every year for a decade and a half.

Pelé's mom reluctantly let him turn pro, saying, "I don't want you sewing boots for a living."

While he played, Brazil won the World Cup, staged quadrennially, three times in twelve years. He scored five goals in a game six times, four goals thirty times, and three goals ninety times. And he did so not aloofly or disdainfully—as do many modern stars—but with an infectious joy that caused even the teams over which he triumphed to share in his pleasure, for it is no disgrace to be defeated by a phenomenon defying emulation.

He was born across the mountains from the great coastal cities of Brazil, in the impoverished town of Três Corações. Nicknamed Dico by his family, he was called Pelé by soccer friends, a word whose origins escape him. Dico shined shoes until he was discovered at the age of eleven by one of the country's premier players, Waldemar de Brito. Four years later, De Brito brought Pelé to São Paulo and declared to the disbelieving directors of the professional team in Santos, "This boy will be the greatest soccer player in the world." He was quickly legend. By the next season, he was the top scorer in his league. As the *Times* of London would later say, "How do you spell Pelé? G-O-D." He has been known to stop war: both sides in Nigeria's civil war called a forty-eight-hour cease-fire in 1967 so Pelé could play an exhibition match in the capital of Lagos.

To understand Pelé's role in soccer, some discussion of the nature of the game is necessary. No team sport evokes the same sort of primal, universal passion as soccer. During the World Cup, the matches of the national football teams impose television



Pelé and his children Kelly Christina, and Edinho in 1975.

schedules on the rhythm of life. Last year I attended a dinner for leading members of the British establishment and distinguished guests from all over the world at the staid Spencer House in London. The hosts had the bad luck to have chosen the night of the match between England and Argentina—always a blood feud, compounded on this occasion by the memory of the Falklands crisis. The impeccable audience (or at least enough of it to influence the hosts) insisted that television sets be set up at strategic locations, during both the reception and the dinner. The match went into overtime and required a penalty shoot-out afterward, so the main speaker did not get to deliver his message until 11:00 P.M. And since England lost, the audience

was not precisely in a mood for anything but mourning.

When France finally won the World Cup, Paris was paralyzed with joy for nearly forty-eight hours, Brazil by dejection for a similar period of time. I was in Brazil in 1962 when the national team won the World Cup in Chile. Everything stopped for two days while Rio celebrated a premature carnival.

There is no comparable phenomenon in the U.S. Our fans do not identify with their teams in such a way partly because American team sports are more cerebral and require a degree of skill that is beyond the reach of the layman. Baseball, for instance, requires a bundle of disparate skills: hitting a ball thrown at ninety mph, catching a ball flying at the speed of a bullet, and throwing long distances with great accuracy. Football requires a different set of skills for each of its eleven positions. The U.S. spectator thus finds himself viewing two discrete events: what is actually taking place on the playing field and the translation of it into detailed and minute statistics. He wants his team to win, but he is also committed to the statistical triumph of the star he admires. The American sports hero is like Joe DiMaggio—a kind of Lone Ranger who walks in solitude beyond the reach of common experience, lifting us beyond ourselves.

Soccer is an altogether different sort of game. All eleven players must possess the same type of skills—especially in modern soccer, where the distinction between offensive and defensive players has dissolved. Being continuous, the game does not lend itself to being broken down into a series of component plays that, as in football or baseball, can be practiced. Baseball and football thrill by the perfection of their repetitions, soccer by the improvisation of solutions to

#### BRIEF BIOGRAPHY

- BORN** October 23, 1940, in Tres Corações, in the Brazilian state of Minas Gerais
- 1956** Begins pro career with Santos Football Club, which wins nine championships between 1958 and 1969
- 1958** In his first World Cup appearance, leads Brazil to victory
- 1970** Plays his final World Cup, a victory for Brazil
- 1974** Signals retirement by picking up the ball twenty minutes into final game and kneeling in midfield
- 1975** In financial trouble, comes out of retirement to play for New York Cosmos
- 1977** Retires from Cosmos
- 1994** Long at odds with the world soccer authority, he is named Brazil's Minister of Sports

ever changing strategic necessities. Soccer requires little equipment, other than a pair of shoes. Everybody believes he can play soccer. And it can be played by any number of players as a pickup game. Thus soccer outside North America is truly a game for the masses, which can identify with its passions, its sudden triumphs, and its inevitable disillusionments. Baseball and football are an exaltation of the human experience; soccer is its incarnation.

Pelé is therefore a different phenomenon from the baseball or football star. Soccer stars are dependent on their teams even while transcending them. To achieve mythic status as a soccer player is especially difficult because the peak performance is generally quite short—only the fewest players perform at the top of their game for more than five years. Incredibly, Pelé performed at the highest level for eighteen years, scoring fifty-two goals in 1973, his seventeenth year. Contemporary soccer superstars never reach even fifty goals a season. For Pelé, who had thrice scored more than one hundred goals a year, it signaled retirement.

The mythic status of Pelé derives as well from the way he incarnated the character of Brazil's national team. Its style affirms that virtue without joy is a contradiction in terms. Its players are the most acrobatic, if not always the most proficient. Brazilian teams play with a contagious exuberance. When those yellow shirts go on the attack—which is most of the time—and their fans cheer to the intoxicating beat of samba bands, soccer becomes a ritual of fluidity and grace. In Pelé's day, the Brazilians epitomized soccer as fantasy.

I saw Pelé at his peak only once, at the final of the World Cup in 1970. Brazil's opponent was Italy, which played its tough defense coupled with sudden thrusts to tie the game 1-1, demoralizing the Brazilians. Italy could very easily have massed its defense even more, until its frantic opponent began making the mistakes that would encompass its ruin. But, led by Pelé, Brazil paid no attention. Attacking as if the Italians were a practice team, the Brazilians ran them into the ground, 4-1.

I saw Pelé a few times afterward, when he was playing for the New York Cosmos. He was no longer as fast, but he was as exuberant as ever. By then, Pelé had become an institution. Most modern fans never saw him play, yet they somehow feel he is part of their lives. He made the transition from superstar to mythic figure.



Pelé worried that he was too light but his team said, "We'll feed you, son."

# Bruce Lee



NOT A GOOD CENTURY FOR THE CHINESE. After dominating much of the past two millenniums in science and philosophy, they've spent the past hundred years being invaded, split apart, and patronizingly lectured by the West. And, let's face it, this communism thing isn't working out either.

*by Joel Stein*

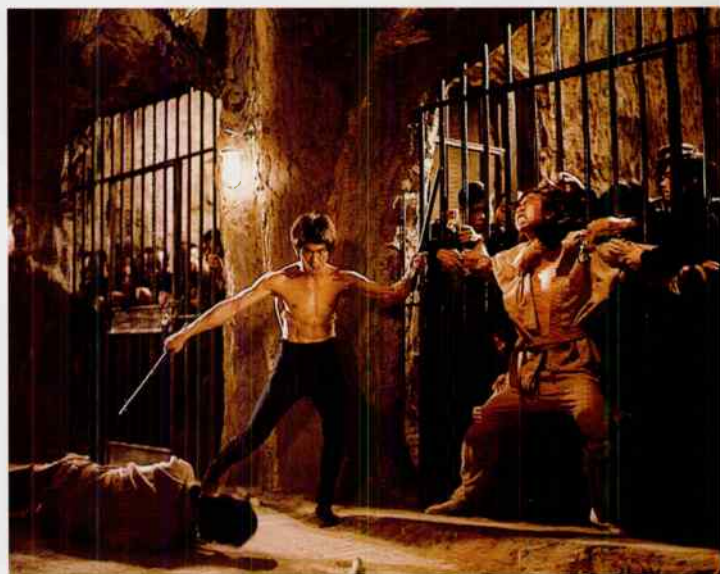
But in 1959 a short, skinny, bespectacled eighteen-year-old kid from Hong Kong traveled to America and declared himself to be John Wayne, James Dean, Charles Atlas, and the guy who kicked your butt in junior high. In an America where the Chinese were still stereotyped as meek house servants and railroad workers, Bruce Lee was all steely sinew, threatening stare, and cocky, pointed finger—a Clark Kent who didn't need to change outfits. He was the redeemer, not only for the Chinese but for all the geeks and dorks and pimpled teenage masses that washed up at the theaters to see his action movies. He was David, with spin-kicks and flying leaps more captivating than any slingshot.

He is the patron saint of the cult of the body: the almost mystical belief that we have the power to overcome adversity if only we submit to the right combinations of exercise, diet, meditation, and weight training: that by force of will, we can sculpt ourselves

into demigods. The century began with a crazy burst of that philosophy. In 1900 the Boxer rebels of China who attacked the Western embassies in Beijing thought that martial arts training made them immune to bullets. It didn't. But a related fanaticism—on this side of sanity—exists today: the belief that the body can be primed for killer perfection and immortal endurance.

Lee never looked like Arnold Schwarzenegger or achieved immortality. He died at thirty-two under a cloud of controversy, in his mistress's home, of a brain edema, which an autopsy said was caused by a strange reaction to a prescription painkiller called Equagesic. At that point, he had starred in only three released movies, one of which was unwatchably bad, the other two of which were watchably bad. Although he was a popular movie

star in Asia, his *New York Times* obit ran only eight sentences, one of which read "Vincent Canby, the film critic of the *New York Times*, said that movies like *Fists of Fury* make 'the worst Italian western look like the most solemn and noble achievements of the early Soviet Cinema.'"



*Enter the Dragon*, released a month after Lee died, fulfilled his dream of making a big-budget Hollywood movie.

#### BRIEF BIOGRAPHY

**BORN** November 27, 1940, in San Francisco

**1941** Returns with family to Hong Kong

**1946** Appears in first of many films as child actor

**1953** Loses a street fight and starts kung fu lessons

**1959** Moves to San Francisco

**1963** First kung fu school

**1966** Portrays Kato in *Green Hornet* TV series

**1971** *Fists of Fury* released

**DIED** July 20, 1973, of brain edema, a month before the premiere of *Enter the Dragon*





Off screen, Lee was one of the best—and most arrogant—martial artists in the world.

What Canby missed is that it's the moments between the plot points that are worth watching. It was the ballet of precision violence that flew off the screen; every combination you can create in *Mortal Kombat* can be found in a Lee movie. And even with all the special effects money that went into *The Matrix*, no one could make violence as beautiful as Lee's. He had a cockiness that passed for charisma. And when he whooped like a crane, jumped in the air, and simultaneously kicked two bad guys into unconsciousness, all while punching out two others mostly offscreen, you knew the real Lee could do that too.

He spent his life turning his small body into a large weapon. Born sickly in a San Francisco hospital (his father, a Hong Kong opera singer, was on tour there), he would be burdened with two stigmas that don't become an action hero: an undescended testicle and a female name, Li Jun Fan, which his mother gave him to ward off the evil spirits out to snatch valuable male children. She even pierced one of his ears, because evil spirits always fall for the pierced-ear trick. Lee quickly became obsessed with martial arts and bodybuilding and not much else. As a child actor back in Hong Kong, Lee appeared in twenty movies and rarely in school. He was part of a small gang that was big enough to cause his mother to ship him to America before his eighteenth birthday so he could claim his dual citizenship and avoid winding up in jail. Boarding at a family friend's Chinese restaurant in Seattle, Lee got a job teaching the Wing Chun style of martial arts that he had learned in Hong Kong. In 1964, at a tournament in Long Beach, California—the first major American demonstration of kung fu—Lee, an unknown, ripped through black belt Dan Inosanto so quickly that Inosanto asked to be his student.

Shortly after, Lee landed his first U.S. show biz role: Kato in *The Green Hornet*, a 1966–67 TV superhero drama from the creators of *Batman*. With this minor celebrity, he attracted students like Steve McQueen, James Coburn, and Kareem Abdul-Jabbar to a martial art he called Jeet Kune Do, “the way of the intercepting fist.” Living in L.A., he became the vanguard on all things 1970s. He was a physical fitness freak: running, lifting weights, and experimenting with isometrics and electrical impulses meant to stimulate his muscles while he slept. He took vitamins, ginseng, royal jelly, steroids, and even liquid steaks. A rebel, he flouted the Boxer-era tradition of not teaching kung fu to Westerners even as he hippily railed against the robotic exercises of other martial arts that prevented self-expressive violence. One of his admonitions: “Research your

own experiences for the truth. Absorb what is useful. . . . Add what is specifically your own. . . . The creating individual . . . is more important than any style or system.” When he died, doctors found traces of marijuana in his body. They could have saved some money on the autopsy and just read those words.

Despite his readiness to embrace American individuality and culture, Lee couldn't get Hollywood to embrace him, so he returned to Hong Kong to make films. In these films, Lee chose to represent the little guy, though he was a very cocky little guy. And so, in his movies, he'd fight for the Chinese against the invading Japanese or the small-town family against the city-living drug dealers. There were, for some reason, usually about a hundred of these enemies, but they mostly died as soon as he punched them in the face. The plots were uniform: Lee makes a vow not to fight; people close to Lee are exploited and killed; Lee kills lots of people in retaliation; Lee turns himself in for punishment.

The films set box office records in Asia, and so Hollywood finally gave him the American action movie he longed to make. But Lee died a month before the release of his first U.S. film, *Enter the Dragon*. The movie would make more than \$200 million, and college kids would pin Lee posters next to Che Guevara's. In the end, Lee could only exist young and in the movies. Briefly, he burst out against greater powers before giving himself over to the authorities. A star turn in a century not good for the Chinese.



Lee's role as the masked Kato in *The Green Hornet* was his first showbiz role.



# Bob Dylan

HE WAS BORN WITH A SNAKE IN BOTH OF HIS FISTS WHILE A hurricane was blowing.

You must know that. Know the fact, or the music, or the truth inside the mythology, spun from roots by his rough magic into cloth of gold, into songs that are the shifting, stormy center of

*by Jay Cocks*

American popular music in the second part of the very century when the music was invented.

Bob Dylan couldn't wait for the music to change. He couldn't be only part of the change. He was the change itself. The snake and the hurricane.

And you do know that. If you've been listening only in passing, you know, among other things, that the answer's blowin' in the wind, the times they are a-changin', everybody must get stoned, they're selling postcards of the hanging, and that to live outside the law you must be honest. Later, listening more closely, you found out that we're goin' all the way till the wheels fall off and burn, that dignity's never been photographed, and that no one plays the blues like Blind Willie McTell.

Those are legends and home truths, passed along in song, that became part of a cultural vocabulary and an ongoing American myth. Hundreds of songs; more than five hundred and counting. Forty-three albums; more than 57 million copies sold. A series of dreams about America as it once and never was. It was folk music, deep within its core, from the mountains and the delta and the blacktop of Highway 61. Rhythm and blues too, and juke-joint rock 'n' roll, and hymns from backwoods churches and gospel shouts from riverside baptisms. He put all that together, and found words to match it.

Before him there was only Bobby Vinton. Well, no, not really. But at the time Dylan first arrived in New York City from the Midwest, rock music had lost its leader—Elvis, in a series of movie musicals. Chuck Berry, Little Richard, Johnny Cash, Carl Perkins, Sam Cooke, Jackie Wilson—all those pioneers Dylan had loved and emulated in high school rock 'n' roll bands—had been superseded by a series of well-scrubbed teen idols who had as much edge as a corsage.

It was a bland-out all across the bandwidth, a kind of musical hangover from the Eisenhower era. Rock 'n' roll had erupted dead in the heart of Ike's easeful America. In the Kennedy years, when the world started to shake and rattle, the music suddenly turned as thick and sweet as a malted. Jazz had the power, but jazz was for grown-ups, and its impact was largely instrumental. Anyone who wanted to listen to a song, and take something away from it that would last a little longer than a good-night kiss, turned on to folk.

So Bob Dylan, a rock 'n' roll American kid who first heard Woody Guthrie while enrolled for a few months at the University of Minnesota, took up folk. Got a ride to New York. Settled in Greenwich Village. Took any gig he could get. Within two years—tops—turned folk inside out.



Dylan and poet Allen Ginsberg pay their respects at Jack Kerouac's grave.



Dylan and Joan Baez were the creative center of the folk scene in 1963.

And then abandoned it. Subsumed it, really, inside the raucous, unyielding, cataclysmic rock 'n' roll that he let loose on an audience that didn't like to be reminded how hidebound it was. What had been music of comment and protest became songs of unprecedented personal testament, delivered with a literal and savage electricity.

Dylan got booed when he showed up with rock musicians behind him, and the booing didn't let up until his great songs like "Desolation Row" and "Like a Rolling Stone" pierced the consciousness of a whole new generation, making everyone realize that rock music could be as direct, as personal, and as vital as a novel or a poem. That

popular music could be expression as well as recreation.

Dylan was suddenly a singer no longer. He was a shaman. A lot of people called him a prophet. In a way, it must have been scarier than being booed. Everything he sang, said, did, or even wore took on a specific gravity that made it harder and harder for him to move. The music became so important to so many people, took on such awesome proportions, that Dylan could respond only with the ultimate sanity: silence.

After a motorcycle accident in 1966, he used the recovery time to retreat and cook up some new music that was mystical and playful, and so deliberately rough-edged that it seemed almost spontaneous. It wasn't, of course, but the music of those years—much of it heard in the song cycle that's known informally as the Basement Tapes—charted a more inward course. It was music that deflected any easy response.

A dizzying number of changes followed—from born-again Christian testifying to deep blues—but Dylan has been consistent only in one thing: he has never stopped making great music, or being cagey about it. And funny, when he feels like it. And hip, without peer or precedent. Accepting a Grammy Award for Lifetime Achievement in 1991, he leaned into the mike and delivered himself of

#### BRIEF BIOGRAPHY

**BORN** May 24, 1941, in Duluth, Minnesota, as Robert Allan Zimmerman

**1961** Moves to New York City's Greenwich Village

**1963** Writes antiwar song, "Blowin' in the Wind"

**1964–66** Releases *The Times They Are a-Changin'* and *Blonde on Blonde*

**1965** Goes electric at Newport Folk Festival

**1989** Inducted into Rock and Roll Hall of Fame

**1998** *Time Out of Mind* wins Grammy for Album of the Year

this reflection: "Well, my daddy, he didn't leave me much, you know he was a very simple man, but what he did tell me was this, he did say, 'Son,' he said, he say, 'you know it's possible to become so defiled in this world that your own father and mother will abandon you, and if that happens, God will always believe in your ability to mend your ways.'" Say amen, somebody. He gave us a great record in 1997. The album, *Time Out of Mind*, was greeted as a masterpiece, his greatest work since *Blood on the Tracks* more than twenty years before. In fact, it was much of a piece with the extraordinary albums he's been making for most of this decade, including *Oh Mercy*, a kind of prelude and companion piece released in 1989, and two subsequent albums of folk music that seem to have been made in some secret, mysterious place where the past never stops.

Dylan had a brush with mortality just before the last album was released, and spent some serious time in the hospital, which brought everyone up short. It was a warning that time was passing, everywhere but in his music. So *Time Out of Mind* brought Dylan safely back home again to the hot center. It was as if everyone suddenly woke up and figured it was Dylan who had been asleep all these years. In fact, as always, he was the only one with his eyes open. To know that, all you had to do—still, and ever—is listen. And ask yourself the same question he flung at us.

How does it feel?



Sharing a song with young civil rights workers in Mississippi in 1963.

# The American GI



AS CHAIRMAN OF THE JOINT CHIEFS OF STAFF, I referred to the men and women of the armed forces as “GIs.” It got me in trouble with some of my colleagues at the time. Several years earlier, the army had officially excised the term as an unfavorable characterization derived from the designation “government issue.” Sailors and marines wanted to be known as

*by Colin Powell*



sailors and marines. Airmen, notwithstanding their origins as a rib of the army, wished to be called simply airmen. Collectively, they were blandly referred to as “service members.”

I persisted in using “GIs” and found I was in good company. Newspapers and television shows used it all the time. The most famous and successful government education program was known as the GI Bill, and it still uses that title for a newer generation of veterans. When you added one of the most common boy’s names to it, you got GI Joe, and the name of the most popular boy’s toy ever, the GI Joe action figure. And let’s not forget GI Jane.

GI is a World War II term that two generations later continues to conjure up the warmest and proudest memories of a noble war that pitted pure good against pure evil—and good triumphed. The victors in that war were the American GIs, the Willies and Joes, the farmer from Iowa and the steelworker from Pittsburgh who stepped off a landing craft into the hell of Omaha Beach. The GI was the wisecracking kid marine from Brooklyn who clawed his way up a deadly hill on a Pacific island. He was a black fighter pilot escorting white bomber pilots over Italy and Germany, proving that skin color had nothing to do with skill or courage. He was a native Japanese-American infantryman released from his own country’s concentration camp to join the fight. She was a nurse relieving the agony of a dying teenager. He was a petty officer standing on the edge of a heaving aircraft carrier with two signal paddles in his hands, helping guide a dive-bomber pilot back onto the deck.

They were America. They reflected our diverse origins. They were the embodiment of the American spirit of courage and dedication. They were truly a “people’s army,” going forth on a crusade to save democracy and freedom, to defeat tyrants, to save oppressed peoples, and to make their families proud of them. They were the Private Ryans, and they stood firm in the thin red line.

After a brutal fire-fight, Marine gunnery sergeant Jeremiah Purdue, center, reaches out for an injured comrade at Hill 484, south of the DMZ, Vietnam, 1966.



For most of those GIs, World War II was the adventure of their lifetime. Nothing they would ever do in the future would match their experiences as the warriors of democracy, saving the world from its own insanity. You can still see them in every Fourth of July color guard, their gait faltering but ever proud.

Their forebears went by other names: doughboys, Yanks, buffalo soldiers, Johnny Reb, Rough Riders. But GI will be forever lodged in the consciousness of our nation to apply to them all. The GI carried the value system of the American people. The GIs were the surest guarantee of America's commitment. For more than two hundred years, they answered the call to fight the nation's battles. They never went forth as mercenaries on the road to conquest. They went forth as reluctant warriors, as citizen soldiers.

They were as gentle in victory as they were vicious in battle. I've had survivors of Nazi concentration camps tell me of the joy they experienced as the GIs liberated them: America had arrived! I've had a wealthy Japanese businessman come into my office and tell me what it was like for him as a child in 1945 to await the arrival of the dreaded American beasts, and instead meet a smiling GI who gave him a Hershey bar. In thanks, the businessman was donating a large sum of money to the USO. After thanking him, I gave him as a souvenir a Hershey bar I had autographed. He took it and began to cry.

The twentieth century can be called many things, but it was most certainly a century of war. The American GIs helped defeat fascism and communism. They came home in triumph from the ferocious battlefields of World Wars I and II. In Korea and Vietnam

Shouldering a rocket launcher, Marine gunner John Wilson crosses a stream south of the DMZ in Vietnam, 1966.

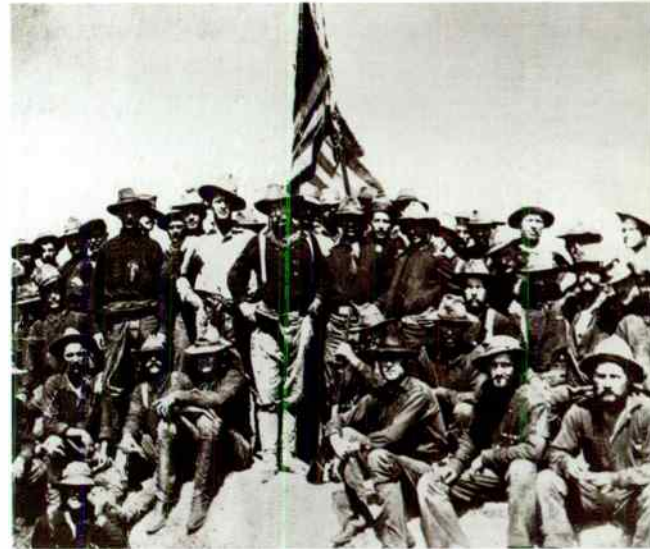


they fought just as bravely as any of their predecessors, but no triumphant receptions awaited them at home. They soldiered on through the twilight struggles of the Cold War and showed what they were capable of in Desert Storm. The American people took them into their hearts again.

In this century hundreds of thousands of GIs died to bring to the beginning of the twenty-first century the victory of democracy as the ascendant political system on the face of the earth. The GIs were willing to travel far away and give their lives, if necessary, to secure the rights and freedoms of others. Only a nation such as ours, based on a firm moral foundation, could make such a request of its citizens. And the GIs wanted nothing more than to get the job done and then return home safely. All they asked for in repayment from those they freed was the opportunity to help them become part of the world of democracy—and just enough land to bury their fallen comrades, beneath simple white crosses and Stars of David.

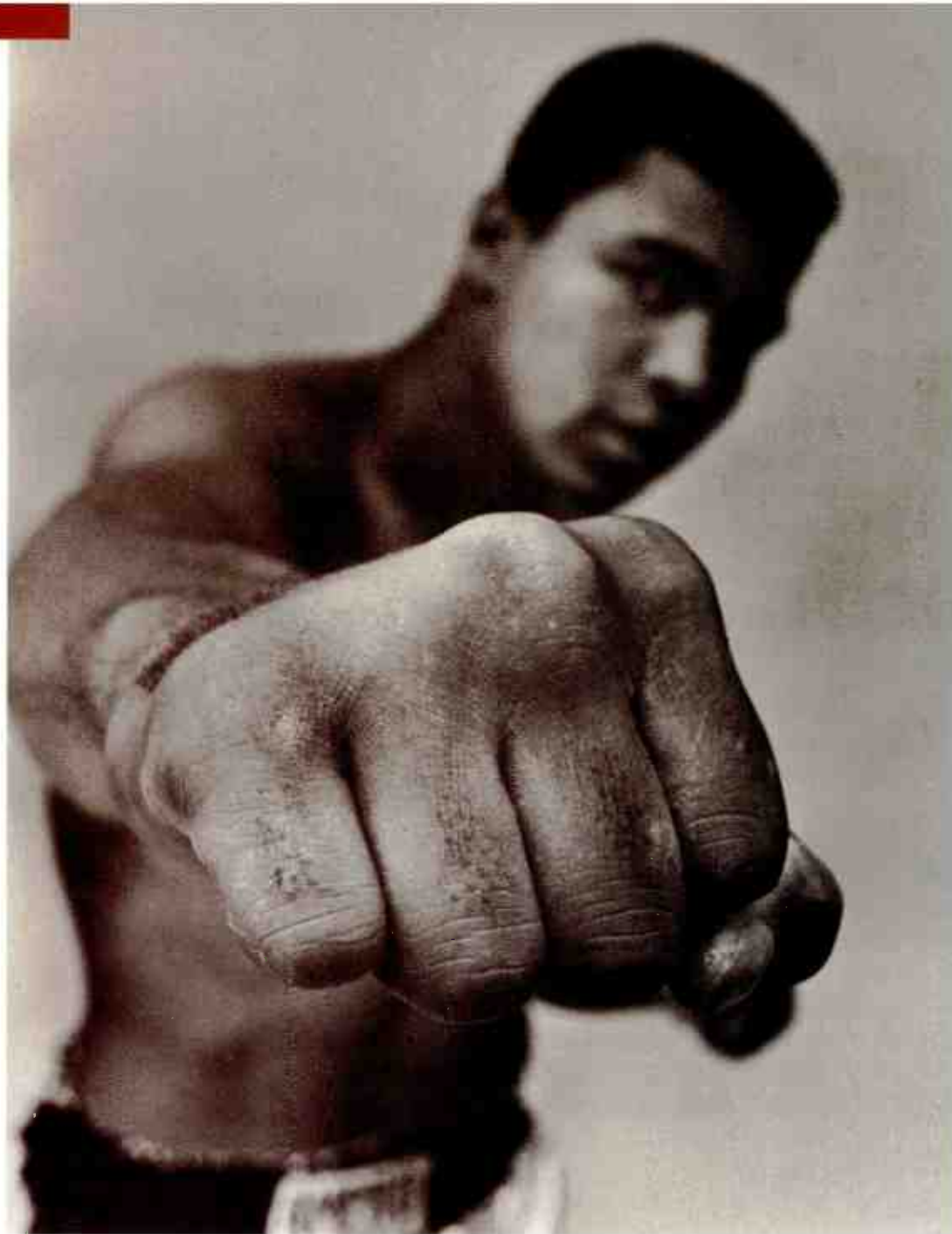
The volunteer GIs of today stand watch in Korea, the Persian Gulf, Europe, and the dangerous terrain of the Balkans. We must never see them as mere hirelings, off in a corner of our society. They are our best, and we owe them our full support and our sincerest thanks.

As this century closes, we look back to identify the great leaders and personalities of the past hundred years. We do so in a world still troubled, but full of promise. That promise was gained by the young men and women of America who fought and died for freedom. Near the top of any listing of the most important people of the twentieth century must stand, in singular honor, the American GI.



Precursors: Teddy Roosevelt and the Rough Riders in 1898.

# Muhammad Ali!



OLIVER WENDELL HOLMES ONCE OBSERVED that every profession is great that is greatly pursued. Boxing in the early 1960s, largely controlled by the mob, was in a moribund state until Muhammad Ali—Cassius Clay, in those days—

*by George Plimpton*

appeared on the scene. "Just when the sweet science appears to lie like a painted ship upon a painted ocean," wrote A. J. Liebling, "a new Hero . . . comes along like a Moran tug to pull it out of the ocean."

Though Ali won the gold medal at the Rome Olympics in 1960, at the time the experts didn't think much of his boxing skills. His head, eyes wide, seemed to float above the action. Rather than slip a punch, the traditional defensive move, it was his habit to sway back, bending at the waist—a tactic that appalled the experts. Lunacy.

Nor did they approve of his personal behavior: the self-promotions ("I am the greatest!"), his affiliation with the Muslims and giving up his "slave name" for Muhammad Ali ("I don't have to be what you want me to be; I'm free to be what I want"), the poetry (his ability to compose rhymes on the run could very well qualify him as the first rapper), or the quips ("If Ali says a mosquito can pull a plow, don't ask how. Hitch him up!"). At the press conferences, the reporters were sullen. Ali would turn on them. "Why ain't you taking notice?" or "Why ain't you laughing?"

It was odd that they weren't. He was an engaging combination of sass and sweetness and naïveté. His girlfriend disclosed that the first time he was kissed, he fainted. Merriment always seemed to be bubbling just below the surface, even when the topics were somber. When reporters asked about his affiliation with Islam, he joked that he was going to have four wives: one to shine his shoes, one to feed him grapes, one to rub oil on his muscles, and one named Peaches. In his boyhood he was ever the prankster and the practical joker. His idea of fun was to frighten his parents—putting a sheet over his head and jumping out at them from a closet, or tying a string to a bedroom curtain and making it move after his parents had gone to bed.

The public as well had a hard time accepting him. His fight for the heavyweight championship in Miami against Sonny Liston was sparsely attended. Indeed, public sentiment was for Liston, a mob-controlled thug, to take care of the lippy upstart. Liston concurred, saying he was going to put his fist so far down his opponent's throat, he was going to have trouble removing it.

Then, of course, three years after Ali defended the championship, there came the public vilification for his refusal to join the army during the Vietnam War—"I ain't got



Surrounded by fans back in Louisville, Kentucky.

## BRIEF BIOGRAPHY

**BORN** Cassius Clay, January 17, 1942, in Louisville, Kentucky

**1960** Wins an Olympic gold medal

**1964** Wins heavyweight title from Sonny Liston; becomes Muhammad Ali

**1974** Defeats George Foreman in the "Rumble in the Jungle" in Zaire

**1975** Defeats Joe Frazier in the "Thrilla in Manila" in the Philippines

**1981** Retires from boxing

**1996** Opens the Olympic Games in Atlanta

no quarrel with them Viet Cong"—one of the more telling remarks of the era. The government prosecuted him for draft dodging, and the boxing commissions took away his license. He was idle for three and a half years at the peak of his career. In 1971 the Supreme Court ruled that the government had acted improperly. But Ali bore the commissions no ill will. There were no lawsuits to get his title back through the courts. No need, he said, to punish them for doing what they thought was right. Quite properly, in his mind, he won back the title in the ring, knocking out George Foreman in the eighth round of their fight in Zaire—the "Rumble in the Jungle."

Ali was asked on a television show what he would have done with his life, given a choice. After an awkward pause—a rare thing, indeed—he admitted he couldn't think of anything other than boxing. That is all he had ever wanted or wished for. He couldn't imagine anything else. He defended boxing as a sport: "You don't have to be hit in boxing. People don't understand that."

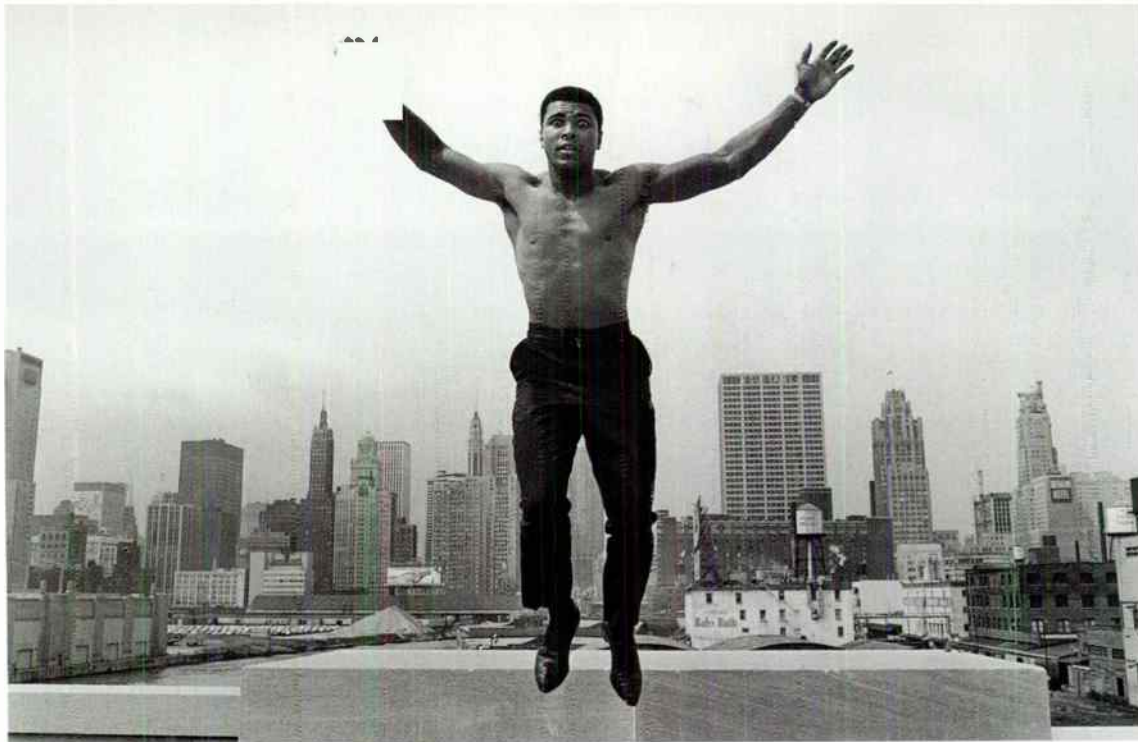
He was wrong. Joe Frazier, speaking of their fight, said he had hit Ali with punches that would have brought down a building. Coaxed into fights by his managers long after he should have retired, and perhaps because he loved the sport too much to leave it, Ali ended up being punished by the likes of Leon Spinks and Larry Holmes, who took little pleasure in what they were doing.

Oscar Wilde once suggested that you kill the thing you love. In Ali's case, it was the reverse: what he loved, in a sense, killed him. The man who was the most loquacious of athletes ("I am the onliest of boxing's poet laureates") now says almost nothing: he moves slowly through the crowds and signs autographs. He has probably signed more autographs than any other athlete ever, living or dead. It is his principal activity at home, working at his desk. He was once denied an autograph by his idol, Sugar Ray Robinson ("Hello, kid, how ya doin'? I ain't got time"), and vowed he would never turn anyone down. The volume of mail is enormous.

The ceremonial leave-taking of great athletes can impart indelible memories, even if one remembers them

Ali earned more than all previous champs combined.





from the scratchy newsreels of time—Babe Ruth with the doffed cap at home plate, Lou Gehrig's voice echoing in the vast hollows of Yankee Stadium. Muhammad Ali's was not exactly a leave-taking, but it may have seemed so to the estimated three billion or so television viewers who saw him open the Atlanta Olympics in 1996. Outfitted in a white gym suit that eerily made him seem to glisten against a dark night sky, he approached the unlit saucer with his flaming torch, his free arm trembling visibly from the effects of Parkinson's.

It was a kind of epiphany that those who watched realized how much they missed him and how much he had contributed to the world of sport. Students of boxing will pore over the trio of Ali-Frazier fights, which rank among the greatest in fistic history, as one might read three acts of a great drama. They would remember the shenanigans, the Ali Shuffle, the Rope-a-Dope, the fact that Ali had brought beauty and grace to the most uncompromising of sports. And they would marvel that through the wonderful excesses of skill and character, he had become the most famous athlete, indeed, the best-known personage in the world.

**Floating, punching, and prophesying, Ali transformed his sport and became the world's most adored athlete.**

# Aretha Franklin



SISTERS AND BROTHERS. the subject of today's sermon is that light of our lives, the Queen of Soul, sister Aretha Franklin. Preach, Reverend!

*by Christopher John Farley*

Now in the Scriptures, Luke 11:33, we are taught, "No one lights a lamp and puts it in a place where it will be hidden." Now, y'all know the Queen got her start singing in the New Bethel Baptist Church in Detroit. People say she left the sacred for the secular, forsook gospel for pop. But, truth is, as her father, the Reverend C. L. Franklin, said, "Truth is, Aretha hasn't ever left the church!"

Never left!

Truth is, songs are her ministry. Her voice is her temple. Truth is, her light is shining!

That's right! That's right!

Can I get a witness?

American music, like America itself, seems too democratic for any title to endure. Ask almost any rapper or alternative rocker if Elvis is the King of Rock, and all you'll get is a sneer. Michael Jackson likes to call himself the King of Pop, but we all know the true king of pop is whoever has the number one album in a given week. All told, there's only one monarch in music whose title has never rung false and still holds up—and that's Aretha Franklin, the Queen of Soul.

Her reign has been long. Born in 1942 in Memphis, Tennessee, she started recording when she was just fourteen. Since then, she has had twenty number one R&B hits and won seventeen Grammys. Her breakthrough album, *I Never Loved a Man the Way I Love You* (1967), was a Top 40 smash. Three decades later, after Motown, after disco, after the Macarena, after innumerable musical trendlets and one-hit wonders, Franklin's newest album, her critically acclaimed *A Rose Is Still a Rose* (1998), is another Top 40 smash. Although her output has sometimes been tagged (unfairly, for the most part) as erratic, she has had a major album in every decade of her career, including *Amazing Grace* (1972) and *Who's Zoomin' Who?* (1985).

Her reign has been storied. She sang at Martin Luther King's funeral and at William Jefferson Clinton's inaugural gala. She has worked with Carole King and Puff Daddy. The Michigan legislature once declared her voice to be one of the state's natural resources.

But this isn't about accolades; this is about soul. This is about that glorious mezzo-soprano, the gospel growls, the throaty howls, the girlish vocal tickles, the swoops, the dives, the blue-sky high notes, the blue-sea low notes. Female vocalists don't get the credit as innovators that male instrumentalists do. They should. Franklin has mastered her instrument as surely as John Coltrane mastered his sax; her vocal technique has been studied and copied by those who came after her, including Chaka Khan in the 1970s and Whitney Houston in the 1980s.



An accomplished pianist, she wrote or co-wrote some of her biggest hits.



And Franklin's influence has only grown in the 1990s. The dominant divas of this decade—Mariah Carey, Mary J. Blige, Toni Braxton—are all, musically speaking, Sunday school students of Aretha's. The Queen still rules: in 1998 Franklin co-starred in a *Divas Live* benefit concert on the cable channel VH-1 with some of the most popular young female singers of the 1990s, including Carey and Celine Dion. The younger stars were blown offstage by the force of Franklin's talent.

Like Ray Charles, Sam Cooke, and Marvin Gaye, Franklin helped bring spiritual passion into pop music. In 1960 she signed with Columbia, which tried to turn her into a singer of jazzy pop. In 1966 she switched to Atlantic, delved into soul, and began to flourish. Unlike many of her performing peers, Franklin took a strong hand in creating her own sound. Her guiding principle with producers, she says, is "if you're here to record me, then let's record me—and not you."

From the moment she sang "Respect"—that still famous call for recognition and appreciation—Franklin helped complete the task begun by Billie Holiday and others, converting American pop from a patriarchal monologue into a coed dialogue. Women

were no longer just going to stand around and sing about broken hearts; they were going to demand respect, and even spell it out for you if there was some part of that word you didn't understand. As Franklin declares on "Do

Right Woman—Do Right Man": "A

woman's . . . not just a plaything/She's flesh and blood just like a man." "Respect" also became a civil rights anthem.

"For black women, Aretha is the voice that made all the unsaid sayable, powerful, and lyrical," the writer Thulani Davis once observed. "She was just more rockin', more earnest, just plain more down front than the divas of jazz. . . . Aretha let her raggedy edges show, which meant she could be trusted with ours."

But to hear Franklin's voice is to hear many voices: she sings not just for black women but for all women. Her pop hit "Sisters Are Doin' It for Themselves" (1985) was a duet, notably, with a white singer, Annie Lennox. Franklin sings not just about the female condition but about the human one. "I Say a Little Prayer" (1968) and "Love Pang" (1998) are existential soul, capturing heartache juxtaposed with workaday life—

Even in the 1990s, she still rules over the younger divas of the decade.



#### BRIEF BIOGRAPHY

**BORN** March 25, 1942, in Memphis, Tennessee

**1944** Moves to Detroit with father, pastor of the New Bethel Baptist Church

**1954** Emerges as singing prodigy in church choir at age twelve

**1960** Signs with Columbia Records, which fails to make her a star

**1966** Switches to Atlantic Records; hits start coming

**1967** "Respect" hits number one; she wins her first Grammy

**1987** First woman inducted into the Rock and Roll Hall of Fame

brushing your teeth, drinking morning coffee. By singing of such things, she exalted the mundane, giving a voice, a powerful one, to everyday folks and events.

Franklin is not simply the Queen of Soul; she holds royalty status in the fields of gospel, blues, rock, and pop as well. She is a sharp, rhythmically fierce pianist. And though she wrote a number of her hits, including the sexually brazen "Dr. Feelgood," she also displayed brilliance in making other people's compositions her own, such as Curtis Mayfield's pop gem "Something He Can Feel." Or listen to her 1971 gospel-charged take on the Simon and Garfunkel classic "Bridge over Troubled Water." That water's a good deal more troubled when Franklin sings the song; even the bridge seems sturdier. She was the first female inductee into the Rock and Roll Hall of Fame.

In person, Franklin is sly and funny, but has melancholy, magic-drained eyes. The twice-divorced diva's life has sometimes had the hard, sad stomp of a blues song: in 1979 her father was shot by burglars, fell into a coma, and died. Producer Jerry Wexler once wrote, "I think of Aretha as Our Lady of Mysterious Sorrows . . . anguish surrounds Aretha as surely as the glory of her musical aura."

As social critic Derrick Bell writes in his book *Gospel Choirs*, one of black music's earliest functions was to get people through hard times. During slavery, spirituals would sometimes be encoded with secret messages, directions on how to get north to freedom. Franklin's cryptic hurt serves a similar function; it draws us in, it commands empathy, and it ultimately points us north. Listen to her voice on the prayerful "Wholy Holy," spiraling away, taking us away. North out of heartbreak, north out of oppression, north toward where we want to go.

Preach, Reverend!

Can I get a witness?



Aretha, second from left, with ex-husband Glynn Turman, right, and family.

# Lech Wałęsa



LECH WAŁESA, THE FLY, FEISTY, MUSTACHIOED ELECTRICIAN from Gdansk, shaped the twentieth century as the leader of the Solidarity movement that led the Poles out of communism. It is one of history's great ironies that the nearest thing we have ever seen to a genuine workers'

*by Timothy Garton Ash*

revolution was directed against a so-called workers' state. Poland was again the ice-breaker for the rest of Central Europe in the "velvet revolutions" of 1989. Walesa's contribution to the end of communism in Europe, and hence the end of the Cold War, stands beside those of his fellow Pole Pope John Paul II, and the Soviet leader Mikhail Gorbachev.

Walesa's life, like those of Gorbachev and the Pope, was shaped by communism. Born to a family of peasant farmers in 1943, he came as a young man to work in the vast shipyards that the communist state was developing on the Baltic coast, as did so many other peasant sons. A devout Roman Catholic, he was shocked by the repression of workers' protests in the 1970s and made contact with small opposition groups. Sacked from his job, he nonetheless climbed over the perimeter wall of the Lenin Shipyard in Gdansk in August 1980, at age thirty-seven, to join the occupation strike. With his electrifying personality, quick wit, and gift of the gab, he was soon leading it. He moved his fellow workers away from mere wage claims and toward a central, daringly political demand: free trade unions.

When the Polish communists made this concession, which was without precedent in the history of the communist world since 1917, the new union was christened Solidarnosc (Solidarity). Soon it had 10 million members, and Walesa was its undisputed leader. For sixteen months they struggled to find a way to coexist with the communist state, under the constant threat of Soviet invasion. Walesa—known to almost everyone simply as Lech—was foxy, unpredictable, often infuriating, but he had a natural genius for politics, a matchless ability for sensing popular moods, and great powers of swaying a crowd. Again and again, he used these powers for moderation. He jokingly described himself as a "fireman," dousing the flames of popular discontent. In the end, martial law was declared. Walesa was interned for eleven months and then released.

Yet Solidarity would not die, and Walesa remained its symbol. He was awarded the Nobel Peace Prize in 1983. With support from the Pope and the U.S., he and his colleagues in the underground leadership of Solidarity kept the flame alight, until the advent of Mikhail Gorbachev in the Kremlin brought new hope. In 1988 there was another occupation strike in the Lenin Shipyard in Gdansk, which Walesa again joined—though this time as the grand old man among younger workers. A few months later, the Polish communists entered into negotiations with Solidarity, at the first Round Table of 1989. Walesa and his col-

#### BRIEF BIOGRAPHY

- BORN** September 29, 1943, in Popowo, Poland
- 1967** Started as electrician at shipyard in Gdansk
- 1980** Becomes leader of Solidarity
- 1981** Arrested in government crackdown
- 1982** Released from internment; martial law eased
- 1983** Awarded Nobel Peace Prize
- 1989** Solidarity legalized
- 1990** Elected President of Poland
- 1995** Defeated in presidential election

leagues secured semifree elections in which Solidarity proceeded to triumph. In August, just nine years after he had climbed over the shipyard wall, Poland got its first non-communist Prime Minister in more than forty years. Where Poland led, the rest of Central Europe soon followed—and the Soviet Union was not far behind.



Wałęsa was a loyal soldier in the 1960s.

The next phase in Wałęsa's political career was more controversial. Angered by the fact that his former intellectual advisers were now running the country in cooperation with the former communists, he declared a "war at the top" of Solidarity. "I don't want to, but I must," he insisted. Fighting a populist campaign against his own former adviser, he was elected Poland's first noncommunist President, a post he held until 1995. Some people liked his stalwart, outspoken style. Others found him too undignified to be the new democracy's head of state. Brilliant as a people's tribune, he stumbled over long formal speeches. You never felt he was quite comfortable in the role. When he stayed with the British Queen at Windsor Castle, he characteristically quipped that the bed was so big, he couldn't find his wife.

Politically, he was also erratic. As Poland was struggling to be accepted into NATO, he suddenly proposed a "NATO bis," a shadowy "second NATO" for those in waiting. Not for the first time, his colleagues put their heads in their hands. His closest adviser was his former chauffeur, with whom he played long games of table tennis. He developed close links with the mil-

itary and security services. His critics accused him of being authoritarian, a "President with an ax." In another historical irony, he was defeated by a former communist, Aleksander Kwasniewski. Wałęsa went back to Gdansk, to his villa, his wife, Danuta, and their eight children. But in his fifties he is still young, and he recently announced the formation of his own political party. Like Gorbachev, he finds it very difficult to accept that he has become a historical figure rather than a politician with serious chances.

Wałęsa is a phenomenon. Still mustachioed but thickset now, he stands for many values that in the West might be thought conservative. Fierce patriotism ("nationalism," say his critics), strong Catholic views, the family. He's a fighter, of course. But he's also mercurial, unpredictable—and a consummate politician.

He is an example of someone who was magnificent in the struggle for freedom but less so in more normal times, when freedom was won and the task was to consolidate a

stable, law-abiding democracy. For all his presidential airs, he still retains something of the old Lech, the working-class wag and chancer that his friends remember from the early days. But no one can deny him his place in history.

Without Walesa, the occupation strike in the Lenin Shipyard might never have taken off. Without him, Solidarity might never have been born. Without him, it might not have survived martial law and come back triumphantly to negotiate the transition from communism to democracy. And without the Polish icebreaking, Eastern Europe might still be frozen in a Soviet sphere of influence, and the world would be a very different place. With all Walesa's personal faults, his legacy is a huge gain in freedom, not just for the Poles. His services were, as an old Polish slogan has it, "for our freedom—and yours."

# Steven Spielberg



STEVEN SPIELBERG'S FIRST FILMS WERE MADE AT A TIME when directors were the most important people in Hollywood, and his more recent ones at a time when marketing controls the industry. That he has remained the most powerful filmmaker in the world during both periods says something for his talent and his flexibility. No one else has put together a more popular body

*by Roger Ebert*

of work, yet within the entertainer there is also an artist capable of *The Color Purple* and *Schindler's List*. When entertainer and artist came fully together, the result was *E.T., the Extra-Terrestrial*, a remarkable fusion of mass appeal and stylistic mastery.

Spielberg's most important contribution to modern movies is his insight that there was an enormous audience to be created if old-style B-movie stories were made with A-level craftsmanship and enhanced with the latest developments in special effects. Consider such titles as *Raiders of the Lost Ark* and the other Indiana Jones movies, *Close Encounters of the Third Kind*, *E.T.*, and *Jurassic Park*. Look also at the films he produced but didn't direct, like the *Back to the Future* series, *Gremlins*, *Who Framed Roger Rabbit*, and *Twister*. The story lines were the stuff of Saturday serials, but the filmmaking was cutting-edge and delivered what films have always promised: they showed us something amazing that we hadn't seen before.

Directors talk about their master images, the images that occur in more than one film because they express something fundamental about the way the filmmakers see things. Spielberg once told me that his master image was the light flooding in through the doorway in *Close Encounters*, suggesting, simultaneously, a brightness and mystery outside. This strong backlighting turns up in many of his other films: the aliens walk out of light in *Close Encounters*, E.T.'s spaceship door is filled with light, and Indy Jones often uses strong beams from powerful flashlights.

In Spielberg, the light source conceals mystery, whereas for many other directors it is darkness that conceals mystery. The difference is that for Spielberg, mystery offers promise instead of threat. That orientation apparently developed when he was growing up in Phoenix, Arizona. One day we sat and talked about his childhood, and he told me of a formative experience.

"My dad took me out to see a meteor shower when I was a little kid," he said, "and it was scary for me because he woke me up in the middle of the night. My heart was beating; I didn't know what he wanted to do. He wouldn't tell me, and he put me in the car and we went off, and I saw all these people lying on blankets, looking up at the sky. And my dad spread out a blanket. We lay down and looked at the sky, and I saw for the first time all these meteors. What scared me was being awakened in the middle of the night and taken somewhere without being told where. But what didn't scare me, but was very soothing, was watching this cosmic meteor shower. And I think from that moment on, I never looked at the sky and thought it was a bad place."

#### BRIEF BIOGRAPHY

**BORN** December 18, 1946, in Cincinnati

**1969** With Amblin', makes professional debut at Atlanta Film Festival

**1974** Directs first feature, *The Sugarland Express*, with Goldie Hawn

**1975** Directs *Jaws*

**1982** Makes *E.T., the Extra-Terrestrial*

**1994** *Schindler's List* wins Oscar for Best Director and Best Picture; forms DreamWorks SKG with David Geffen and Jeffrey Katzenberg

**1999** *Saving Private Ryan* wins Oscar for Best Director



He began making films as a kid and never lost his childlike wonder.



There are two important elements there: the sense of wonder and hope, and the identification with a child's point of view. Spielberg's best characters are like elaborations of the heroes from old *Boy's Life* serials, plucky kids who aren't afraid to get in over their head. Even Oskar Schindler has something of that in his makeup—the boy's delight in pulling off a daring scheme and getting away with it.

Spielberg heroes don't often find themselves in complex emotional entanglements (Celie in *The Color Purple* is an exception). One of his rare failures was *Always*, with its story of a ghost watching his girl fall in love with another man. The typical Spielberg hero is drawn to discovery, and the key shot in many of his films is the revelation of the wonder he has discovered. Remember the spellbinding first glimpse of the living dinosaurs in *Jurassic Park*?

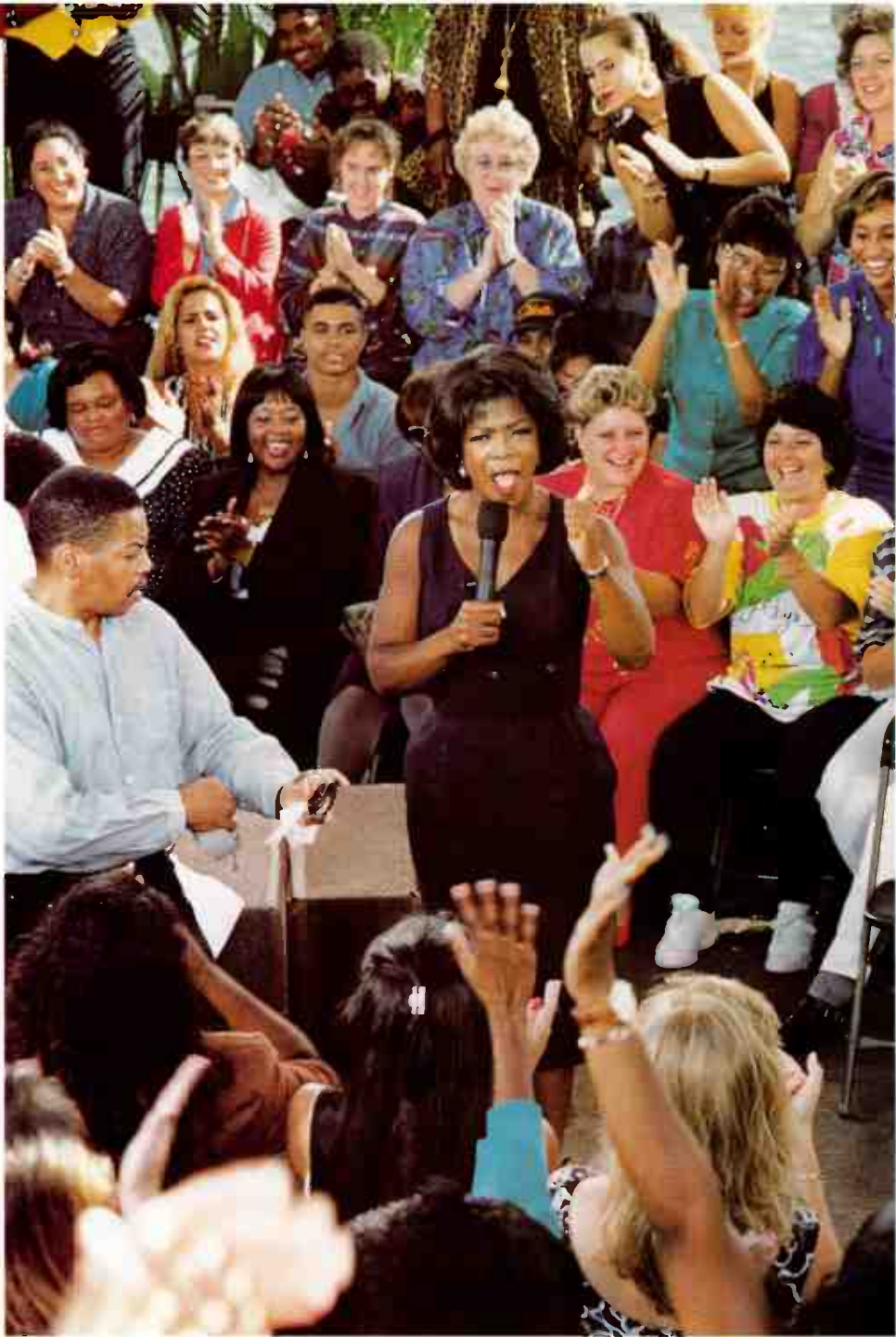
Spielberg's first important theatrical film was *The Sugarland Express*, made in 1974, a time when gifted auteurs like Scorsese, Altman, Coppola, De Palma, and Malick ruled Hollywood. Their god was Orson Welles, who made the masterpiece *Citizen Kane* entirely without studio interference, and they too wanted to make the Great American Movie. But a year later, with *Jaws*, Spielberg changed the course of modern Hollywood history. *Jaws* was a hit of vast proportions, inspiring executives to go for the home run instead of the base hit. And it came out in the summer, a season the major studios had generally ceded to cheaper exploitation films. Within a few years, the *Jaws* model would inspire an industry in which budgets ran wild because the rewards seemed limitless, in which summer action pictures dominated the industry, and in which the hottest young directors wanted to make the Great American Blockbuster.

Spielberg can't be blamed for that seismic shift in the industry. *Jaws* only happened to inaugurate it. If the shark had sunk for good (as it threatened to during the troubled filming), another picture would have ushered in the age of the movie best-sellers—maybe *Star Wars*, in 1977. And no one is more aware than Spielberg of his own weaknesses. When I asked him once to make the case against his films, he grinned and started the list: "They say, 'Oh, he cuts too fast; his edits are too quick; he uses wide-angle lenses; he doesn't photograph women very well; he's tricky; he likes to dig a hole in the ground and put the camera in the hole and shoot up at people; he's too gimmicky; he's more in love with the camera than he is with the story.'"

All true. But you could make a longer list of his strengths, including his direct line to our subconscious. Spielberg has always maintained obsessive quality control, and when his films work, they work on every level that a film can reach. I remember seeing *E.T.* at the Cannes Film Festival, where it played before the most sophisticated filmgoers in the world and reduced them to tears and cheers.

In the history of the last third of twentieth-century cinema, Spielberg is the most influential figure, for better and worse. In his lesser films he relied too much on shallow stories and special effects for their own sake. (Will anyone treasure *The Lost World: Jurassic Park* a century from now?) In his best films he tapped into dreams fashioned by our better natures.

# Oprah Winfrey



THE SUDANESE-BORN SUPERMODEL ALEK WEK stands poised and insouciant as the talk show host, admiring her classic African features, cradles Wek's cheek and says, "What a difference it would have made to my childhood if I had seen

*by Deborah Tannen*

someone who looks like you on television.” The host is Oprah Winfrey, and she has been making that difference for millions of viewers, young and old, black and white, for nearly a dozen years.

Winfrey stands as a beacon, not only in the worlds of media and entertainment but also in the larger realm of public discourse. In her mid-forties, she has a personal fortune estimated at more than half a billion dollars. She owns her own production company, which creates feature films, prime-time TV specials, and home videos. An accomplished actress, she won an Academy Award nomination for her role in *The Color Purple*, and starred in her own film production of Toni Morrison’s *Beloved*.

But it is through her talk show that her influence has been greatest. When Winfrey talks, her viewers—an estimated 14 million daily in the U.S. and millions more in 132 other countries—listen. Any book she chooses for her on-air book club becomes an instant best-seller. When she established the “world’s largest piggy bank,” people all over the country contributed spare change to raise more than \$1 million (matched by Oprah) to send disadvantaged kids to college. When she blurted that hearing about the threat of mad-cow disease “just stopped me cold from eating another burger!,” the perceived threat to the beef industry was enough to trigger a multimillion-dollar lawsuit (which she won).

Born in 1954 to unmarried parents, Winfrey was raised by her grandmother on a farm with no indoor plumbing in Kosciusko, Mississippi. By age three she was reading the Bible and reciting in church. At six she moved to her mother’s home in Milwaukee, Wisconsin; later, to her father’s in Nashville, Tennessee. A lonely child, she found solace in books. When a seventh-grade teacher noticed the young girl reading during lunch, he got her a scholarship to a better school. Winfrey’s talent for public performance and spontaneity in answering questions helped her win beauty contests—and get her first taste of public attention.

Crowned Miss Fire Prevention in Nashville at seventeen, Winfrey visited a local radio station, where she was invited to read copy for a lark—and was hired to read news on the air. Two years later, while a sophomore at Tennessee State University, she was hired as Nashville’s first female and first black TV news anchor. After graduation, she took an anchor position in Baltimore, Maryland, but lacked the detachment to be a



At age four, she was already a veteran public speaker.



Making her film debut in *The Color Purple*.

reporter. She cried when a story was sad, laughed when she misread a word. Instead, she was given an early morning talk show. She had found her medium.

In 1984 she moved on to be the host of *A.M. Chicago*, which became *The Oprah Winfrey Show*. It was syndicated in 1986—when Winfrey was thirty-two—and soon overtook *Donahue* as the nation's top-rated talk show.

Women, especially, listen to Winfrey because they feel as if she's a friend. Although Phil Donahue pioneered the format she uses (mike-holding host moves among an audience whose members question guests), his show was mostly what I call "report-talk," which often typifies men's conversation. The overt focus is on information. Winfrey transformed the format into what I call "rapport-talk," the back-and-forth conversation that is the basis of female friendship, with its emphasis on self-revealing intimacies. She turned the focus from experts to ordinary people talking about personal issues. Girls' and women's friendships are often built on trading secrets. Winfrey's power is that she tells her own, divulging that she once ate a package of hot dog buns drenched in maple syrup, that she had smoked cocaine, even that she had been raped as a child. With Winfrey, the talk show became more immediate, more confessional, more personal. When a guest's story moves her, she cries and spreads her arms for a hug.

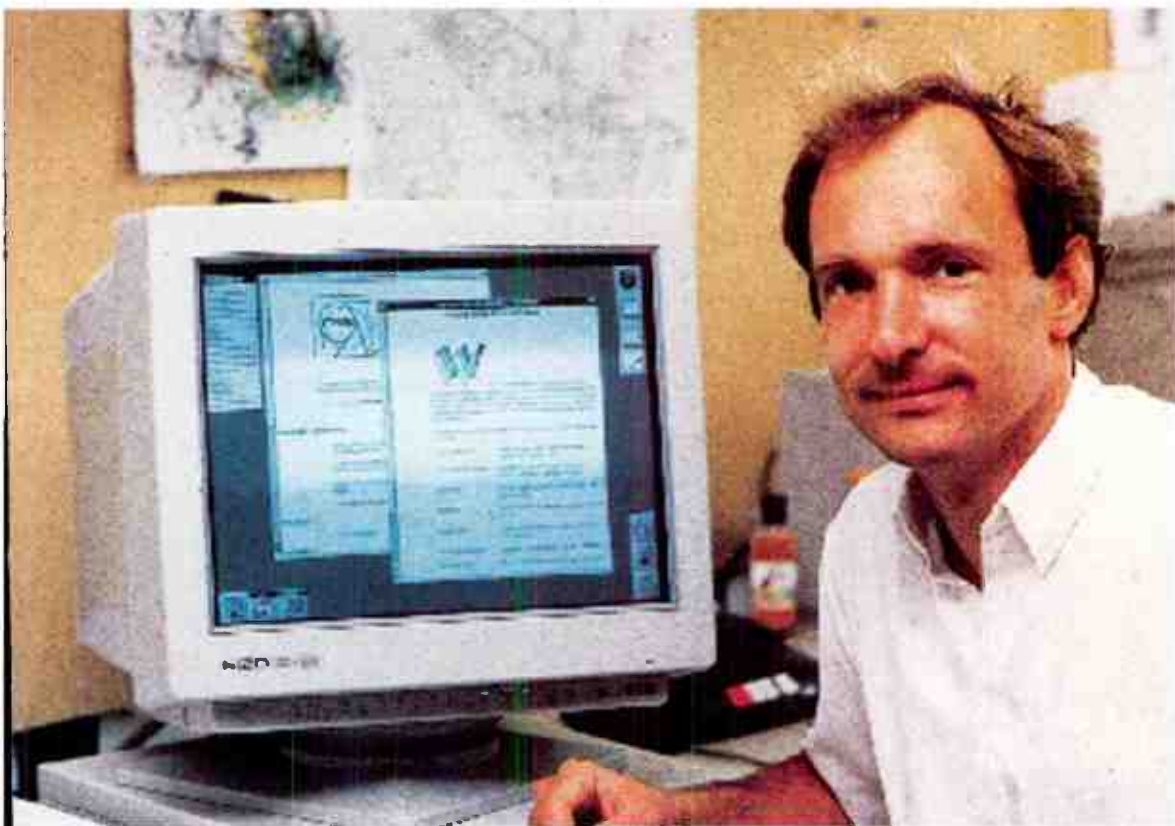
When my book *You Just Don't Understand: Women and Men in Conversation* was published, I was lucky enough to appear on both Donahue and Oprah—and to glimpse the difference between them. Winfrey related my book to her own life: she began by saying she had read the book and "saw myself over and over" in it. She then told one of my examples, adding, "I've done that a thousand times"—and illustrated it by describing herself and Stedman. (Like close friends, viewers know her "steady beau" by first name.)

Winfrey saw television's power to blend public and private; while it links strangers and conveys information over public airwaves, TV is most often viewed in the privacy of our homes. Like a family member, it sits down to meals with us and talks to us in the lonely afternoons. Grasping this paradox, Oprah exhorts viewers to improve their lives and the world. She makes people care because she cares. That is Winfrey's genius, and will be her legacy, as the changes she has wrought in the talk show continue to permeate our culture and shape our lives.

#### BRIEF BIOGRAPHY

- BORN** January 29, 1954, in Kosciusko, Mississippi
- 1971** Competes in Miss Black America pageant
- 1973** First black and first woman hired to anchor TV news in Nashville
- 1977** Starts co-hosting *People Are Talking* morning show in Baltimore
- 1986** *The Oprah Winfrey Show* goes national; Oscar-nominated for *The Color Purple*
- 1996** Launches book club
- 1998** Produces, stars in Toni Morrison's *Beloved*

# Tim Berners-Lee



WANT TO SEE HOW MUCH THE WORLD HAS CHANGED in the past decade? Log on to the Internet, launch a search engine, and type in the word enquire (British spelling, please). You'll get about thirty thousand hits. It turns out you can "enquire" about nearly anything online these days, from used Harley-Davidsons for sale in Sydney, Australia ("Enquire about

*by Joshua Quittner*

touring bikes. Click here!”), to computer-training-by-e-mail courses in India (“Where excellence is not an act but a habit”). Click once to go to a site in Nairobi and enquire about booking shuttle reservations there. Click again, and zip off to Singapore, to a company that specializes in “pet moving.” Enquire about buying industrial-age nuts and bolts from “the Bolt Boys” in South Africa, or teddy bears in upstate New York. Exotic cigar labels! Tantric sex guides! Four-poster beds for dogs!

So what, you say? Everybody knows that with a mouse, a modem, and access to the Internet, these days you can point-and-click anywhere on the planet, unencumbered by time or space or long-distance phone tariffs.

#### BRIEF BIOGRAPHY

**BORN** June 8, 1955, in London

**1976** Graduates from Queen's College, Oxford

**1980** While at CERN, writes Enquire

**1989** Proposes global hypertext project called World Wide Web

**1991** The Web debuts on the Internet

**1993** University of Illinois releases Mosaic browser

**1994** Joins MIT to direct the W3 Consortium

**1999** Nearly 150 million people log on to the Internet each week

Ah, but scroll down the list far enough, hundreds of entries deep, and you'll find this hidden Rosebud of cyberspace: “Enquire Within Upon Everything”—a nifty little computer program written nearly twenty years ago by a lowly software consultant named Tim Berners-Lee. Who knew then that from this modest hack would flow the civilization-altering, millionaire-spawning, information suck-hole known as the World Wide Web?

Unlike so many of the inventions that have moved the world, this one truly was the work of one man. Thomas Edison got credit for the light bulb, but he had dozens of people in his lab working on it. William Shockley may have fathered the transistor, but two of his research scientists actually built it. And if there ever was a thing that was made by committee, the Internet—with its protocols and packet switching—is it. But the World Wide Web is Berners-Lee's alone. He designed it. He loosed it on the world. And he more than anyone else has fought to keep it open, nonproprietary, and free.

It started, of all places, in the Swiss Alps. The year was 1980. Berners-Lee, doing a six-month stint as a software engineer at CERN, the European Laboratory for Particle Physics, in Geneva, was noodling around with a way to organize his far-flung notes. He had always been interested in programs that dealt with information in a “brainlike way” but that could improve upon that occasionally memory-constrained organ. So he devised a piece of software that could, as he put it, keep “track of all the random associations one comes across in real life and brains are supposed to be so good at remembering but sometimes mine wouldn't.” He called it Enquire, short for Enquire Within Upon Everything, a Victorian-era encyclopedia he remembered from childhood.

Building on ideas that were current in software design at the time, Berners-Lee fashioned a kind of “hypertext” notebook. Words in a document could be “linked” to other files on Berners-Lee's computer; he could follow a link by number (there was no mouse to click back then) and automatically pull up its related document. It worked splendidly in its solipsistic, Only-On-My-Computer way.

But what if he wanted to add stuff that resided on someone else's computer? First he would need that person's permission, and then he would have to do the dreary work of adding the new material to a central database. An even better solution would be to open up his document—and his computer—to everyone and allow them to link their stuff to his. He could limit access to his colleagues at CERN, but why stop there? Open it up to scientists everywhere! Let it span the networks! In Berners-Lee's scheme there would be no central manager, no central database, and no scaling problems. The thing could grow like the Internet itself, open-ended and infinite. "One had to be able to jump," he later wrote, "from software documentation to a list of people to a phone book to an organizational chart to whatever."

So he cobbled together a relatively easy-to-learn coding system—HTML (HyperText Mark-up Language)—that has come to be the lingua franca of the Web; it's the way Web-content creators put those little colored, underlined links in their text, add images, and so on. He designed an addressing scheme that gave each Web page a unique location, or URL (universal resource locator). And he hacked a set of rules that permitted these documents to be linked together on computers across the Internet. He called that set of rules HTTP (HyperText Transfer Protocol).

And on the seventh day, Berners-Lee cobbled together the World Wide Web's first (but not the last) browser, which allowed users anywhere to view his creation on their computer screen. In 1991 the World Wide Web debuted, instantly bringing order and clarity to the chaos that was cyberspace. From that moment on, the Web and the Internet grew as one, often at exponential rates. Within five years, the number of Internet users jumped from 600,000 to 40 million. At one point, it was doubling every fifty-three days.

Raised in London in the 1960s, Berners-Lee was the quintessential child of the computer age. His parents met while working on the Ferranti Mark I, the first computer sold commercially. They taught him to think unconventionally; he'd play games over the breakfast table with imaginary numbers (what's the square root of minus 4?). He made pretend computers out of cardboard boxes and five-hole paper tape and fell in love with electronics. Later, at Oxford, he built his own working electronic computer out of spare parts and a TV set. He also studied physics, which he thought would be a lovely compromise between math and electronics. "Physics was fun," he recalls. "And in fact a good preparation for creating a global system."

It's hard to overstate the impact of the global system he created. It's almost Gutenbergian. He took a powerful communications system that only the elite could use and turned it into a mass medium. "If this were a traditional science, Berners-Lee would win a Nobel Prize," Eric Schmidt, CEO of Novell, once told the *New York Times*. "What he's done is that significant."

You'd think he would have at least got rich; he had plenty of opportunities. But at every juncture, Berners-Lee chose the nonprofit road, both for himself and his creation.



Marc Andreessen, who helped write the first popular Web browser, Mosaic—which, unlike the master's browser, put images and text in the same place, like pages in a magazine—went on to co-found Netscape and become one of the Web's first millionaires. Berners-Lee, by contrast, headed off in 1994 to an administrative and academic life at the Massachusetts Institute of Technology. From a sparse office at MIT, he directs the W3 Consortium, the standard-setting body that helps Netscape, Microsoft, and anyone else agree on openly published protocols rather than hold one another back with proprietary technology. The rest of the world may be trying to cash in on the Web's phenomenal growth, but Berners-Lee is content to labor quietly in the background, ensuring that all of us can continue, well into the next century, to Enquire Within Upon Everything.

# Bill Gates



IF WE ARE TALKING CREATIVITY AND IDEAS, BILL GATES is an American unoriginal. He is Microsoft's chief and co-founder, he is the world's richest man, and his career delivers this message: it can be wiser to follow than to lead. Let the innovators hit the beaches and take the losses; if you hold back and follow, you can clean up in peace and quiet.

*by David Gelernter*



Gates's last run-in with the law was minor and not as potentially costly as the antitrust rap he now faces.

Gates is the Bing Crosby of American technology, borrowing a tune here and a tune there and turning them all into great boffo hits—by dint of heroic feats of repackaging and sheer Herculean blandness. Granted he is (to put it delicately) an unusually hard-driving and successful businessman, but the Bill Gates of our imagination is absurdly overblown.

Yet we have also been unfair to him. Few living Americans have been so resented, envied, and vilified, but in certain ways his career is distinguished by decency—and he hasn't gotten much credit for it. Technology confuses us, throws us off the scent. Where Gates is concerned, we have barked up a lot of wrong trees.

A 1968 photo shows Bill as a rapt young teenager, watching his friend Paul Allen type at a computer terminal. Allen became a co-founder of Microsoft. The child Gates has neat hair and an eager, pleasant smile; every last detail says “pat me on the head.” He entered Harvard but dropped out to found Microsoft in 1975. Microsoft's first product was a version of the programming language BASIC for the Altair 8800, arguably the world's first personal computer. BASIC, invented by John Kemeny and Thomas Kurtz in 1964,

was someone else's idea. So was the Altair. Gates merely plugged one into the other, cream-cheesed the waiting bagel, and came up with a giant hit.

By 1980, IBM had decided to build personal computers and needed a PC operating system. (Computers are born naked; they need operating systems to be presentable.) Mammoth, blue-chip IBM employed thousands of capable software builders, and didn't trust a single one of them: IBM hired Microsoft to build its operating system. Microsoft bought Q-DOS from a company called Seattle Computer Products and retailed it for the PC.

The PC was released in August 1981 and was followed into the market by huge flocks of honking, beeping clones. Microsoft's DOS was one of three official PC operating systems but quickly beat out the other two. DOS was clunky and primitive at a time when the well-dressed computer was wearing UNIX from Bell Labs or (if its tastes ran upscale) some variant of the revolutionary window-menu-mouse system that Xerox had pioneered in the 1970s. But despite (or maybe because of) its stodginess, DOS established itself as the school uniform of computing. It was homely, but everyone needed it. Once again, Gates had brokered a marriage between other people's ideas and come up with a hit. DOS was even bigger than BASIC. Gates had it made.

Apple released the Macintosh in January 1984: a tony, sophisticated computer was now available to the masses. Henceforth DOS was not merely homely, it was obsolete. But it continued to rake in money, so what if the critics hated it? In May 1990, Microsoft finally perfected its own version of Apple windows and called it Microsoft Windows 3.0—another huge hit. Now Gates really (I mean really) had it made.

By the early 1990s, electronic mail and the Internet were big. Technologists forecast an Internet-centered view of computing called “mirror worlds.” Technophiles enthused about the “information superhighway.” The World Wide Web emerged in 1994, making browsers necessary, and Netscape was founded that same year. Sun Microsystems developed Java, the Internet programming language. Gates hung back. It wasn’t until 1996 that Microsoft finally, according to Gates himself, “embraced the Internet wholeheartedly.”

Why lead when you can follow? Microsoft’s first browser, Internet Explorer 1.0, was licensed from a company called Spyglass. It was an afterthought, available off the shelf as part of a \$45 CD-ROM crammed with random tidbits, software antipasto, odds and ends you could live without—one of which was Explorer. Today Microsoft is the world’s most powerful supplier of Web browsers, and Gates really has it made. The U.S. Justice Department is suing Microsoft for throwing its weight around illegally, hitting companies like Netscape below the belt. The trial is underway. Whoever wins, Gates will still be the number one man in the industry.

The world pondered Gates and assumed he must be a great thinker. During World War II, cargo cults flourished on New Guinea and Melanesia: people who had never seen an airplane pondered incoming U.S. aircraft and assumed they must be divine. Technology is confusing, and these were reasonable guesses under the circumstances. In 1995 Gates published a book (co-authored with Nathan Myhrvold and Peter Rinearson) called *The Road Ahead*. Peering far into the future, he glimpsed a technology-rich dreamworld where you will be able to “watch *Gone With the Wind*,” he wrote, “with your own face and voice replacing Vivien Leigh’s or Clark Gable’s.” Apparently this is just what the public had been dying to do, for *The Road Ahead* became a runaway best-seller, though it is lustrous with earnest goofiness, like a greased-down haircut.

And yet we tend to overlook (in sizing him up) Gates’s basic decency. He has repeatedly been offered a starring role in the circus freak show of American Celebrity, Julius Caesar being offered the Emperor’s crown by clamorous sycophants. He has turned it down. He does not make a habit of going on TV to pontificate, free-associate, or share his feelings. His wife and young child are largely invisible to the public, which represents a deliberate decision on the part of Mr. and Mrs.

If postwar America of the 1950s and 1960s democratized middle-classness, Gates has democratized filthy-richness—or has at least started to. Get the right job



Gates and Melinda French, here at a Seattle Supersonics game in 1993, got married early the next year.

offer from Microsoft, work hard, get rich; no miracle required. Key Microsoft employees pushed Gates in this direction, but he was willing to go, and the industry followed. The Gates Road to Wealth is still a one-laner, and traffic is limited. But the idea that a successful corporation should enrich not merely its executives and big stockholders but also a fair number of ordinary line employees is (although not unique to Microsoft) potentially revolutionary. Wealth is good. Gates has created lots and has been willing to share.

Today Gates, grown very powerful and great, sits at the center of world technology like an immense frog eyeing insect life on the pond surface, now and then consuming a tasty company with one quick dart of the tongue.

#### BRIEF BIOGRAPHY

**BORN** October 28, 1955, in Seattle, Washington

**1975** Drops out of Harvard to co-found Microsoft with Paul Allen

**1980** Licenses MS-DOS to IBM for its inaugural PC

**1986** Becomes billionaire at thirty-one with company IPO

**1990** Releases Windows 3.0, a hit, user-friendly answer to the Mac OS

**1995–96** Debuts Windows 95 and Internet Explorer browser for the Net age

**1998** Justice Department files antitrust suit against Microsoft

But the Microsoft Windows worldview is dead in the water, and Microsoft has nothing to offer in its place. Windows is a relic of the ancient days when e-mail didn't matter, when the Internet and the Web didn't matter, when most computer users had only a relative handful of files to manage. Big changes are in the works that will demote computers and their operating systems to the status of TV sets. You can walk up to any TV and tune in CBS: you will be able to walk up to any computer and tune in your own files, your electronic life. The questions of the moment are, What will the screen look like? How will the controls work? What exactly will they do? and Who will clean up?

Microsoft? Maybe. On the other hand, being the biggest, toughest frog in the pond doesn't help if you're in the wrong pond. Some people have the idea that Microsoft is fated to dominate technology forever. They had this same idea about IBM, once admired and feared nearly as much as Microsoft is today. They had essentially the same idea about Japan's technology sector back in the 1980s and early 1990s. It isn't quite fair to compare Microsoft to a large country yet. But Japan was on a roll and looked invincible—once. (Or, if you go back to Pearl Harbor, twice.)

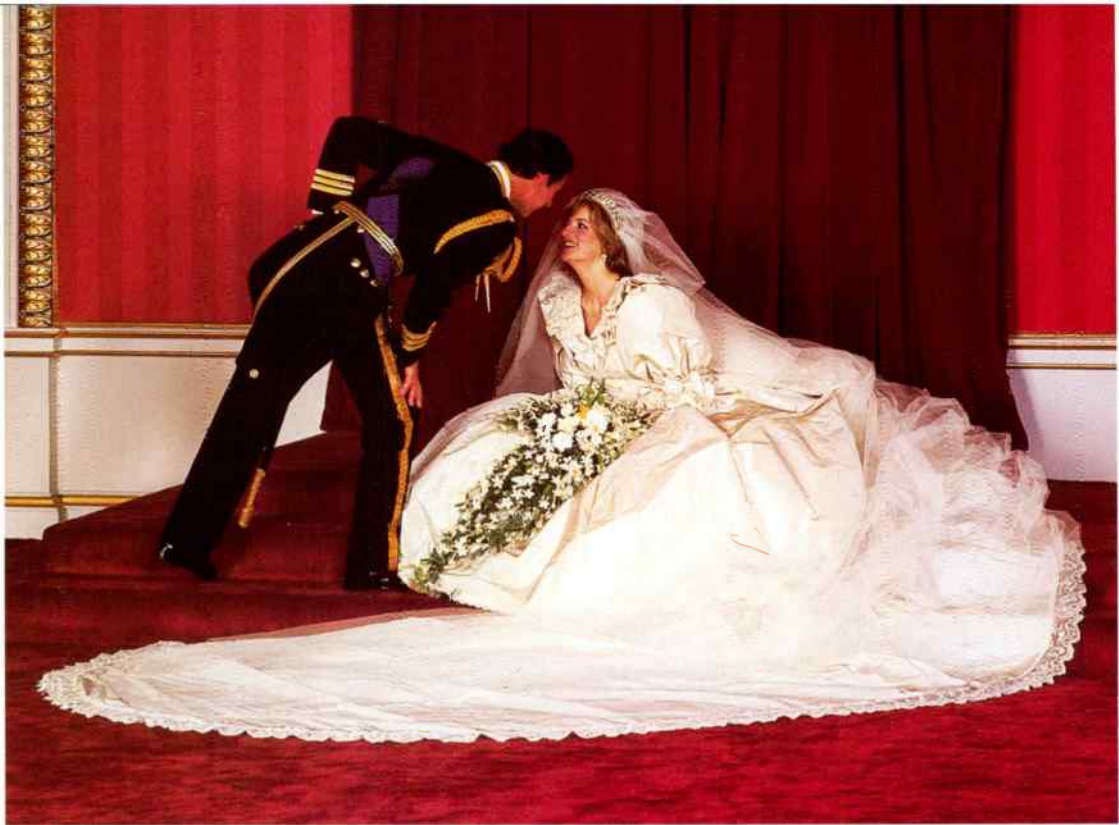
As for Gates himself, he is no visionary; he is a technology groupie with a genius for showing up, for being at the right place at the right time. His secret is revealed in that old photo with Paul Allen. He is a man who likes computers very much. Not their intellectual underpinnings, not the physics or electronics, not the art or philosophy or mathematics of software—just plain computers. He's crazy about them. It seems like an odd passion, but after all, some people are crazy about Pop-Tarts. And Gates will be remembered alongside Pop-Tarts, in the long run, as vintage Americana, a sign of the times. A little on the bland side perhaps, unexciting, not awfully deep, not to everyone's taste, but not all that bad.

# Diana, Princess of Wales



WHAT WAS IT ABOUT DIANA, PRINCESS OF WALES, that brought such huge numbers of people from all walks of life literally to their knees after her death in 1997? What was her special appeal, not just to British subjects but also to people the world over? A late spasm of royalism hardly explains it.

*by Ian Buruma*



Their "wedding of the century" became tabloid melodrama.

even in Britain, for many true British monarchists despised her for cheapening the royal institution by behaving more like a movie star or a pop diva than a princess. To many others, however, that was precisely her attraction.

Diana was beautiful, in a fresh-faced, English, outdoors-girl kind of way. She used her big blue eyes to their fullest advantage, melting the hearts of men and women through an expression of complete vulnerability. Diana's eyes, like those of Marilyn Monroe, contained an appeal directed not to any individual but to the world at large. Please don't hurt me, they seemed to say. She often looked as if she were on the verge of tears, in the manner of folk images of the Virgin Mary. Yet she was one of the richest, most glamorous, and socially powerful women in the world. This combination of vulnerability and power was perhaps her greatest asset.

Diana was a princess, but there are many princesses in Europe, none of whom ever came close to capturing the popular imagination the way she did. Princess Grace of Monaco was perhaps the nearest thing, but then she had really been a movie star, which surely provided the vital luster to her role as figurehead of a country that is little more than a gambling casino on the southern coast of France. The rather louche glamour of Monaco's royal family is nothing compared with the fading but still palpable grandeur of the British monarchy. To those who savor such things, British royals are the first among equals of world royalty, the last symbols of an aristocratic society that has largely disappeared in most places but still hangs on, with much of its Victorian pomp intact, in Britain. Even the Japanese Emperor Hirohito never forgot being overawed by the style of his British royal hosts on his first trip to Europe in the 1920s.

Diana not only married into the British monarchy but was the offspring of a family, the Spencers, that is at least as old as the British royal family and considers itself in some ways to be rather grander. It is not rare in England to hear the Spencers' Englishness compared favorably with the "foreign" (German) background of the Windsors. The famous speech, given by Diana's younger brother, the Earl of Spencer, at her funeral in London, with its barely contained hostility toward his royal in-laws, moved many people at the time but was in fact an exercise of extraordinary hauteur.

So Diana had snob appeal to burn. But that alone would not have secured her popularity. Most of the people who worshipped her, who read every tidbit about her in the gossip press and hung up pictures of her in their rooms, were not social snobs. Like Princess Grace of Monaco, Diana was a celebrity royal. She was a movie star who never actually appeared in a movie; in a sense her whole life was a movie, a serial melodrama acted out in public, with every twist and turn of the plot reported to a world audience. Diana was astute enough to understand the power of television and the voracious British tabloid newspapers. And she consistently tried to use the mass media as a stage for projecting her image—as the wronged spouse, as the radiant society beauty, as the compassionate princess hugging AIDS patients and land mine victims, and as the mourning princess crying at celebrity funerals.

#### BRIEF BIOGRAPHY

- BORN** July 1, 1961, in Sandringham, England
- 1981** Marries Charles
- 1982** Prince William born
- 1984** Prince Harry born
- 1992** Diana and Charles announce their separation
- 1993** Diana reveals her plan to withdraw from public life
- 1995** Diana discusses her marriage on TV
- 1996** The divorce is finalized
- DIED** August 31, 1997, after a car crash in Paris



After midnight dancing at the White House (with John Travolta) in 1985, she went to a D.C. school to get in her laps at the pool.

However, like many celebrities before her, she found out that she couldn't turn the media on and off at will, as though they were a tap. They needed her to feed the public appetite for celebrity gossip, and she needed them for her public performance, but what she hadn't bargained for was that her melodrama ran on without breaks. Everything she said or did was fair copy. After deliberately making her private life public, she soon discovered there was nothing private left.

In a sense, the quasi-religious mystique of royalty came full circle with Diana. Monarchy used to be based on divine right. But just as monarchy used religious trappings to justify its rule, modern





"They are my life," Diana told one friend of her sons William and Harry (in 1989). They were also her duty: an heir and a spare for the Windsors.

show biz celebrity has a way of slipping into a form of popular religion. It is surely not for nothing that an idolized pop singer of recent times so successfully exploited her given name, Madonna. One of the most traditional roles of religious idols is a sacrificial one: we project our sins onto them, and they bear our crosses in public.

Diana was a sacrificial symbol in several ways. First she became the patron saint of victims, the sick, the discriminated against, the homeless. Then, partly through her real suffering at the hands of a rigidly formal family trained to play rigidly formal public roles, and partly through her shrewd manipulation of the press, Diana herself projected a compelling image of victimhood. Women in unhappy marriages identified with her; so did outsiders of one kind or another, ethnic, sexual, or social. Like many religious idols, she was openly abused and ridiculed, in her case by the same press that stoked the public worship of her. And finally she became the ultimate victim of her own fame: pursued by paparazzi, she became a twisted and battered body in a limousine. It was a fittingly tawdry end to what had become an increasingly tawdry melodrama. But it is in the nature of religion that forms change to fit the times. Diana—celebrity, tabloid princess, mater dolorosa of the pop and fashion scene—was, if nothing else, the perfect idol for our times.

# Bart Simpson



HE MUST STAY AFTER SCHOOL, EVERY SINGLE EPISODE of his life, to write a homily on the fourth-grade blackboard (e.g., “The Pledge of Allegiance does not end with ‘Hail, Satan’”). | *by Richard Corliss*

In a family of noisy eaters, he is perhaps the loudest, at least in decibel-to-kilogram ratio. He has a few weaknesses: exposing his buttocks, sassing his father, making prank calls to Moe's Tavern ("Is Oliver there? Oliver Clothesoff?"), and speaking like a Cockney chimney sweep. One of the few trophies on his bedroom shelf is labeled Everybody Gets a Trophy Day.

Bart Simpson is an underachiever—"and proud of it," as a million T-shirts read, back when *The Simpsons* began its run on Fox and he was the first fad of the 1990s. Remember "Eat my shorts"? Recall "Cowabunga" and "Ay, caramba"? His fame skyrocketed in no time; burnout was virtually assured.

#### BRIEF BIOGRAPHY

**BORN** April 19, 1987, in a *Tracey Ullman Show* sketch

**AGE** ten—forever ten

#### UNDERACHIEVEMENTS

Destroyed family Christmas tree; went on trial for killing Principal Skinner; sold his soul for \$5

**ACHIEVEMENTS** Expert ballet dancer; brief fame as TV kid star (and newsman); gave blood to keep Mr. Burns alive; saved Krusty the Clown from jail; sang Gilbert & Sullivan with his would-be assassin

**OUTLOOK** Will never be promoted—we hope

Ah, but this young Springfieldianite has staying power: staying in the fourth grade, to the endless vexation of his teacher and his principal; staying glued to the living room tube to watch his idol, Krusty the Clown; staying for years in the hearts and humors of a fickle, worldwide TV audience. This young scamp—with his paper-bag-shaped head, his body's jagged, modernist silhouette, his brat-propelled skateboard—may be "yellow trash" to the town gentry, but to his mother and everyone else, he's our special little guy.

It's true that a few other cartoon characters might try to claim Bart's place of honor. This century is gaily strewn with them, from Winsor McCay's benign Gertie the Dinosaur (cinema's first animated icon) to Fox's other cartoon glory, *King of the Hill* (whose Bobby Hill, all perfect circles and mute yearning, is the anti-Bart). The Warner menagerie—Bugs, Daffy, Tweety, Wile E. Coyote—energized three decades of Saturday matinees. And when cartoons invaded TV, creatures from Bullwinkle Moose to Tex Avery's Raid

insects kept alive a hallowed comic tradition. Bart fits in snugly here. As he once cogently boasted, "I'm this century's Dennis the Menace."

That Bart is a cartoon character—a sheaf of drawings animated by smart writing and the unique vocal stylings of Nancy Cartwright—makes him both "real" and surreally supple. Cartoon figures can do more things, endure more knocks on the noggin, get away with more cool, naughty stuff than the rest of us who are animated only by a tell-tale heart. The face-offs of Bugs and Daffy in Chuck Jones's cartoons of the 1950s involved many shotgun blasts and rearranged duckbills, but the humor and humiliation, the understanding of failure and resilience were instantly translatable to kids and adults alike. The injuries were fake. The suffering, pal, was genuine.

Suffering and failure are at the core of *The Simpsons*, which was created by newspaper cartoonist Matt Groening as crudely drawn filler material for *The Tracey Ullman Show* in 1987, then went weekly in 1990. A *Honeymooners* with kids, the series features a man in a deadening blue-collar job (Homer, the nuclear plant safety inspector), his epochally exasperated wife (Marge of the mountainous blue hair), and three conflicted

kids. Bart, ten, is clever and cunning but addled in class; Lisa, eight, is a near genius whose intelligence deprives her of friends; year-old Maggie expresses frazzled wisdom beyond her years with the merest suck on her pacifier.

Springfield boasts a teeming gallery of low- and medium-lives—surely the densest, funniest supporting cast since the 1940s farces of Preston Sturges. The church, school, and pub are places of refuge and anxiety. But home, 742 North Evergreen Terrace, is where the show's heart is, where everyone's despair is muted by familial love. Homer (whom the writers hold in a sort of amazed contempt) bumbles into some egregious fix. Marge fusses and copes. Lisa sublimates her rancor by playing her sax. And Bart is . . . Bart.

Lisa, when not condemning Bart and all his works (she once called him "the devil's cabana boy"), tries to explain him. "That little hell-raiser," she recently ranted, "is the spawn of every shrieking commercial, every brain-rotting soda pop, every teacher who cares less about young minds than about cashing their big, fat paychecks. No, Bart is not to blame. You can't create a monster and then whine when he stomps on a few buildings." Nice try, Lisa, but not quite. He's not Bartzilla. The kid knows right from wrong; he just likes wrong better.

His rude streak is indeed stoked by cartoons. After savoring some impossible TV torture that Itchy the mouse has wreaked on Scratchy the cat, Bart says, "Lisa, if I ever stop loving violence, I want you to shoot me." (Lisa: "Will do.") Maybe the Simpson home carries its own germ of carnage. In the episode where evil old Mr. Burns adopts Bart as his heir and whisks him away, sweet Lisa is seen ripping off strips of wallpaper. Confronted by Marge, Lisa explains that she is "just trying to fill the void of random, meaningless destruction that Bart's absence has left in our hearts."

We'll admit this: Bart has a riven soul. He needs to be loved ("Tell me I'm good!" he pleads of his friend Milhouse's mom). But do hold the pathos. The reason for his appeal is that he's so brilliant at being bad; his pranks have a showman's panache. When he drives off in what is touted as Hitler's car, he chortles, "It's Führer-ific!" After impishly filling groundskeeper Willie's shack with creamed corn, he listens to Willie curse, "You did it, Bart Simpson!" and murmurs, with practiced modesty, "The man knows quality work." So do we.

One of Bart's blackboard punishments was to write, "I am not delightfully saucy." But he is, he is—a complex weave of grace, attitude, and personality, deplorable and adorable, a very 1990s slacker who embodies a century of popular culture and is one of the richest characters in it. One thinks of Chekhov, Céline, Lenny Bruce, little boy lost. Anyway, we love the kid and his endlessly terrific show; so here he is in *People of the Century*.

Congratulations, Bart. For once, you've overachieved.

# Unknown Tiananmen Square Rebel



ALMOST NOBODY KNEW HIS NAME. Nobody outside his immediate neighborhood had read his words or heard him speak.

Nobody knows what happened to him even one hour after his moment in the world's living rooms. But the man who stood before a column of tanks near Tiananmen Square—June 5, 1989—may have impressed his image on the global memory more vividly,

*by Pico Iyer*

more intimately than even Sun Yat-sen did. Almost certainly he was seen in his moment of self-transcendence by more people than ever laid eyes on Winston Churchill, Albert Einstein, and James Joyce combined.

The meaning of his moment—it was no more than that—was instantly decipherable in any tongue, to any age: even the billions who cannot read and those who have never heard of Mao Zedong could follow what the “tank man” did. A small, unexceptional figure in slacks and white shirt, carrying what looks to be his shopping, posts himself before an approaching tank, with a line of seventeen more tanks behind it. The tank swerves right; he, to block it, moves left. The tank swerves left; he moves right. Then this anonymous bystander clambers up onto the vehicle of war and says something to its driver, which comes down to us as: “Why are you here? My city is in chaos because of you.” One lone Everyman standing up to machinery, to force, to all the massed weight of the People’s Republic—the largest nation in the world, comprising more than one billion people—while its all-powerful leaders remain, as ever, in hiding somewhere within the bowels of the Great Hall of the People.

Occasionally, unexpectedly, history consents to disguise itself as allegory, and China, which traffics in grand impersonals, has often led the world in mass-producing symbols in block capitals. The man who defied the tank was standing, as it happens, on the Avenue of Eternal Peace, just a minute away from the Gate of Heavenly Peace, which leads into the Forbidden City. Nearby Tiananmen Square—the very heart of the Middle Kingdom, where students had demonstrated in 1919; where Mao had proclaimed a “People’s Republic” in 1949 on behalf of the Chinese people who had “stood up”; and where leaders customarily inspect their People’s Liberation Army troops—is a virtual monument to People Power in the abstract. Its western edge is taken up by the Great Hall of the People. Its eastern side is dominated by the Museum of Chinese Revolution. The Mao Zedong mausoleum swallows up its southern face.

For seven weeks, though, in the late spring of 1989—the modern year of revolutions—the Chinese people took back the square, first a few workers and students and teachers and soldiers, then more and more, until more than one million had assembled there. They set up, in the heart of the ancient nation, their own world within the world, complete with a daily newspaper, a broadcasting tent, even a thirty-foot plaster-covered statue they called the “Goddess of Democracy.” Their “conference hall” was a Kentucky Fried Chicken parlor on the southwest corner of the square, and their spokesmen were three thousand hunger strikers who spilled all over the central Monument to the People’s Heroes. The unofficials even took over, and reversed, the formal symbolism of the government’s ritual pageantry: when Mikhail Gorbachev came to the Great Hall of the People for a grand state banquet during the demonstrations—the first visit by a Soviet leader in thirty years—he had to steal in by the back door.

Then, in the dark early hours of June 4, the government struck back, sending tanks from all directions toward Tiananmen Square and killing hundreds of workers and

students and doctors and children, many later found shot in the back. In the unnatural quiet after the massacre, with the six-lane streets eerily empty and a burned-out bus along the road, it fell to the tank man to serve as the last great defender of the peace, an Unknown Soldier in the struggle for human rights.

As soon as the man had descended from the tank, anxious onlookers pulled him to safety, and the waters of anonymity closed around him once more. Some people said he was called Wang Weilin, was nineteen years old and a student; others said not even that much could be confirmed. Some said he was a factory worker's son, others that he looked like a provincial just arrived in the capital by train. When American newsmen asked Chinese leader Jiang Zemin a year later what had happened to the symbol of Chinese freedom—caught by foreign cameramen and broadcast around the world—he replied, not very ringingly, “I think never killed.”

In fact, the image of the man before the tank simplified—even distorted—as many complex truths as any image does. The students leading the demonstrations were not always peace-loving and notoriously bickered among themselves; many were moved by needs less lofty than pure freedom. At least seven retired generals had written to the *People's Daily* opposing the imposition of martial law, and many of the soldiers sent to put down the demonstrators were surely as young, as confused, and as uncommitted to aggression as many of the students were. As one of the pro-democracy movement's leaders said, the heroes of the tank picture are two: the unknown figure who risked his life by standing in front of the juggernaut and the driver who rose to the moral challenge by refusing to mow down his compatriot.

Ten years after the June 4 incident, moreover, it's unclear how much the agitators for democracy actually achieved. Li Peng, who oversaw the crackdown on them, is still near the top of China's hierarchy. Jiang, who proved his colors by coming down hard on demonstrators in Shanghai, is now the country's President. And on a bright winter morning, Tiananmen Square is still filled, as it was then, with bird-faced kites and peasants from the countryside lining up to have their photos taken amid the monuments to Mao.

Yet for all the qualifications, the man who stood before the tanks reminded us that the conviction of the young can generate a courage that their elders sometimes lack. And, like student rebels everywhere, he stood up against the very Great Man of History theory. In China in particular, a Celestial Empire that has often seemed to be ruled by committee, a “mandate of Heaven” consecrated to the might of the collective, the individual has sometimes been seen as hardly more than a work unit in some impersonal equation. A “small number” were killed, Mao once said of the death of seventy thousand, and in his Great Leap Forward, at least 20 million more were sacrificed to a leader's theories. In that context, the man before the tank seems almost a counter-Mao, daring to act as the common-man hero tirelessly promoted by propaganda and serving as a rebuke—or asterisk, at least—to the leaders and revolutionaries who share these pages.

More than a third of a century ago, before anyone had ever heard of videotapes or the World Wide Web or twenty-four-hour TV news stations, Daniel Boorstin, in his uncannily prescient book *The Image*, described how, as we move deeper into what he called the Graphic Revolution, technology would threaten to diminish us. Ideas, even ideals, would be reduced to the level of images, he argued, and faith itself might be simplified into credulity. "Two centuries ago, when a great man appeared," the historian wrote, "people looked for God's purpose in him; today we look for his press agent."

The hero—so ran Boorstin's prophecy—was being replaced by the celebrity, and where once our leaders seemed grander versions of ourselves, now they just looked like us on a giant screen. Nowadays, as we read about the purported telephone messages of a sitting President and listen to the future King of England whisper to his mistress, the power of technology not just to dehumanize but to demystify seems thirty times stronger than even Boorstin predicted.

But the man with the tank showed us another face, so to speak, of the camera and gave us an instance in which the image did not cut humanity down to size but elevated and affirmed it, serving as an instrument for democracy and justice. Instead of making the lofty trivial, as it so often seems to do, the image made the passing eternal and assisted in the resistance of an airbrushed history written by the winners. Technology, which can so often implement violence or oppression, can also give a nobody a voice and play havoc with power's vertical divisions by making a gesture speak a thousand words. The entire Tiananmen uprising, in fact, was a subversion underwritten by machines, which obey no government and observe no borders: the protesters got around official restrictions by communicating with friends abroad via fax; they followed their own progress—unrecorded on Chinese TV—by watching themselves on foreigners' satellite sets in the Beijing Hotel; and in subsequent years they have used the Internet—and their Western training—to claim and disseminate an economic freedom they could not get politically.

The second half of the century now ending has been shadowed by one overwhelming, ungovernable thought: that the moods, even the whims, of a single individual, post-Oppenheimer, could destroy much of the globe in a moment. Yet the image of the man before the tank stands for the other side of that dark truth: that in a world ever more connected, the actions of a regular individual can light up the whole globe in an instant. And for centuries the walls of the grand palaces and castles of the Old World have been filled with ceremonial and often highly flattering pictures of noblemen and bewigged women looking out toward the posterity they hope to shape.

But nowadays, in the video archives of the memory, playing in eternal rerun, are many new faces, unknown, that remind us how much history is made at the service entrance by people lopped out of the official photographs or working in obscurity to fashion our latest instruments and cures. In a century in which so many tried to impress their monogram on history, often in blood red, the man with the tank—Wang Weilin, or whoever—stands for the forces of the unnamed: the Unknown Soldier of a new Republic of the Image.



## Our Century . . . and the Next One *by Walter Isaacson*

AS CENTURIES GO, THIS HAS BEEN ONE OF the most amazing: inspiring, at times horrifying, always fascinating. Sure, the fifteenth was pretty wild, with the Renaissance and Spanish Inquisition in full flower, Gutenberg building his printing press, Copernicus beginning to contemplate the solar system, and Columbus spreading the culture of Europe to the Americas. And of course there was the first century, which if only for the life and death of Jesus may have had the most impact of any. Socrates and Plato made the fifth century *b.c.* also rather remarkable. But we who live in the twentieth can probably get away with the claim that ours has been one of the top four or five of recorded history.

Let's take stock for a moment. To name just a few random things we did in a hundred years: we split the atom, invented jazz and rock, launched airplanes and landed on the moon, concocted a general theory of relativity, devised the transistor and figured out how to etch millions of them on tiny microchips, discovered penicillin and the structure of DNA, fought down fascism and communism, bombed Guernica and painted the bombing of Guernica, developed cinema and television, built highways and wired the world. Not to mention the peripherals these produced, such as sitcoms and cable channels, 800 numbers and Web sites, shopping malls and leisure time, existentialism and modernism, Oprah and Imus. Initials spread like graffiti: NATO, IBM, ABM, UN, WPA, NBA, NFL, CIA, CNN, PLO, IPO, IRA, IMF, TGIF. And against all odds, we avoided blowing ourselves up.

All this produced some memorable players. Look around. There's Lenin arriving at the Finland Station and Gandhi marching to the sea to make salt. Winston Churchill with his cigar, Louis Armstrong with his horn, Charlie Chaplin with his cane. Rosa Parks staying seated on her bus and a kid standing in front of a tank near Tiananmen Square. Einstein is in his study, and the Beatles are on *The Ed Sullivan Show*.

Rarely does a century dawn so clearly and cleanly. In 1900 Freud published *The Interpretation of Dreams*, ending the Victorian era. Her Majesty, as if on cue, died the following January, after a sixty-three-year reign. Her empire included one quarter of the earth's population, but the Boer War in South Africa was signaling the end of the colonial era. In China, the Boxer Rebellion heralded the awakening of a new giant. In America, cars were replacing horses, 42 percent of workers were in farming (today it's 2 percent), and the average life-span was about fifty (today it's around seventy-five).

The tape recorder was unveiled in 1900 at the Paris Exposition, to which visitors flocked to be scandalized by Rodin's non-Victorian statues, and Kodak introduced the Brownie camera, an apt symbol of a century in which technology would at first seem magical, then become simple, cheap, and personal. The Scholastic Aptitude Test was born that year, permitting a power shift from an aristocracy to a meritocracy. The Wright brothers went to Kitty Hawk to try out their gliders. Lenin, thirty, published his first newspaper calling for revolution in Russia. Churchill, twenty-five, was elected to the House of Commons. J. P. Morgan began working with a young executive named Charles Schwab to buy out Andrew Carnegie and conglomerate U.S. Steel, by far the biggest business in the world. And the German physicist Max Planck made one of the discoveries that would shape the century: that atoms emit radiations of energy in bursts he called quanta.

From these seeds was born a century that can be summed up and labeled in a handful of ways:

## The Century of Freedom

*If you had to pick a two-word summation, it would be: freedom won. It beat back the two totalitarian alternatives that arose to challenge it, fascism and communism. By the 1990s, the ideals developed by centuries of philosophers from Plato to Locke to Mill to Jefferson—individual rights, civil liberties, personal freedoms, and democratic participation in the choice of leaders—finally held sway over more than half the world's population.*

## The Century of Capitalism

*Democracy can exist* without capitalism, and capitalism without democracy, but probably not for very long. Political and economic freedom tend to go together. Early in the century, Theodore Roosevelt laid the foundation for a government-guided free market, one that encouraged individual initiative while protecting people against cartels and the colder faces of capitalism. His cousin Franklin confronted capitalism's greatest challenge, the Great Depression, by following these principles. Half a world away, Lenin laid the groundwork for a command economy, and his successor, Stalin, showed how brutal it could be. They ended up on the ash heap of history. Although capitalism will continue to face challenges, internally and externally, it is now the economic structure for most societies around the world.

## The Electronic Century

*A defining event* actually occurred three years before the century began: the discovery of the electron by British physicist J. J. Thomson. Along with Planck's 1900 theory of quantum physics, this discovery led to the first weapon of mass destruction, which helped hasten the end of the Second World War and became the defining reality of the Cold War. Alan Turing harnessed electronics to devise the first digital computers. Five centuries earlier, Gutenberg's printing press had cut the cost of transmitting information by a factor of a thousand. That paved the way for the Reformation by allowing individuals to have their own Bibles, and for the progress of individual liberties, which became inevitable once information and ideas flowed freely. The transistor and the microchip have cut the cost of transmitting information by a factor of more than a million. The result has been a transition from an industrial age to an information age.

## The Global Century

*Human society over* the millenniums has evolved from villages to city-states to empires to nation-states. In this century, everything became global. Much of the first half was dominated by the death spasms of an international order that for four hundred years was based on the shifting alliances of European nation-states, but this time the resulting wars were world wars. Now not only are military issues global, so are economic and even cultural ones. People everywhere are threatened by weapons anywhere, they produce and consume in a single networked economy, and increasingly they have access to the same movies and music and ideas.

## The Mass-Market Century

*Yet another defining* event of the century came in 1913, when Henry Ford opened his assembly line. Ordinary people could now afford a Model T (choice of color: black). Products were mass-produced and mass-marketed, with all the centralization and conformity that entails. Television sets and toothpaste, magazines and movies, shows and shoes: they were distributed or broadcast, in cookie-cutter form, from central facilities to millions of people. In reaction, a modernist mix of anarchy, existential despair, and rebellion against conformity motivated art, music, literature, fashion, and even behavior for much of the century.

## The Genocidal Century

*Then there was* the dark side. Amid the glories of the century lurked some of history's worst horrors: Stalin's collectivization, Hitler's Holocaust, Mao's Cultural Revolution, Pol Pot's killing fields, Idi Amin's rampages. We try to personalize the blame, as if it were the fault of just a few madmen, but in fact it was whole societies, including advanced ones like Germany, that embraced or tolerated madness. What they had in common was that they sought totalitarian solutions rather than freedom. Theologians have to answer the question of why God allows evil. Rationalists have one almost as difficult: Why doesn't progress make civilizations more civilized?

## The American Century

*That's what* Time's founder Henry Luce called it in a 1941 essay. He was using the phrase to exhort his compatriots to prepare for war, to engage in the struggle for freedom. They did, yet again. And they won. Some countries base their foreign policy on realism or its Prussian-accented cousin, *realpolitik*: a cold and careful calculation of strategic interests. America is unique in that it is equally motivated by idealism. Whether it is the fight against fascism or communism, or even misconceived interventions like Vietnam, America's mission is to further not only its interests but also its values. And that idealist streak is a source of its global influence, even more than its battleships. As became clear when the Iron Curtain collapsed in 1989, America's clout in the world comes not just from its military might but from the power and appeal of its values. Which is why it did, indeed, turn out to be an American Century.

So what will the next century be? The reams of guesses are destined to be digitally retrieved decades hence and read with a smirk. But let's take that risk, peer into the haze, and slap a few labels on the postmillennial period:

In the digital realm, the Next Big Advance will be voice recognition. The rudiments are already here but in primitive form. Ask a computer to “recognize speech,” and it is likely to think you want it to “wreck a nice beach.” But in a decade or so we’ll be able to chat away and machines will soak it all in. Microchips will be truly embedded in our lives when we can talk to them. Not only to our computers; we’ll also be able to chat with our automobile navigation systems, telephone consoles, browsers, thermostats, VCRs, microwaves, and any other devices we want to boss around. That will open the way to the next phase of the digital age: artificial intelligence. By our providing so many thoughts and preferences to our machines each day, they’ll accumulate enough information about how we think so that they’ll be able to mimic our minds and act as our agents. Scary, huh? But potentially quite useful. At least until they decide they don’t need us anymore and start building even smarter machines they can boss around.

The law powering the digital age up until now has been Gordon Moore’s: that microchips will double in power and halve in price every eighteen months or so. Bill Gates rules because early on he acted on the assumption that computing power—the capacity of microprocessors and memory chips—would become nearly free; his company kept churning out more and more lines of complex software to make use of this cheap bounty. The law that will power the next few decades is that bandwidth (the capacity of fiber-optic and other pipelines to carry digital communications) will become nearly free. Along with the recent advances in digital switching and storage technologies, this means a future in which all forms of content—movies, music, shows, books, data, magazines, newspapers, your aunt’s recipes, and home videos—will be instantly available anywhere on demand. Anyone will be able to be a producer of any content; you’ll be able to create a movie or magazine, make it available to the world and charge for it, just like Time Warner!

The result will be a transition from a mass-market world to a personalized one. Instead of centralized factories and studios that distribute or broadcast the same product to millions, technology is already allowing products to be tailored to each user. You can subscribe to news sources that serve up only topics and opinions that fit your fancy. Everything from shoes to steel can be customized to meet individual wishes. What does that mean for the modernist revolt against conformity that dominated art and literature? Postmodernism, with its sense of irony, is more amused by connections and historical hyperlinks.

The digital revolution that burns so brightly today is likely to pale in comparison to the revolution in biotechnology that is just beginning. Physicist Stephen Hawking, speaking at the White House on science in the next millennium, pointed out that for the past ten thousand years there has been no significant change in our human DNA. But over the next hundred years, we will be able and tempted to tinker. No doubt we’ll make some improvements and some mistakes. We’ll encode our dreams and vanities

and hubris. We'll clone ourselves, we'll custom-design our kids. By playing Dr. Frankenstein, we'll have the chance to make miracles or monsters. The challenges will be not scientific but moral. In the political realm, democratic capitalism, having defeated the twin foes of fascism and communism, is likely to face three others. The first is tribalism, as in Bosnia. This is, of course, nothing new. But democracies are often maladroit at dealing with minorities that seek group empowerment. The second challenge will be fundamentalism. Capitalism can be cold, consumption-oriented, and spiritless, alienating those who feel repelled by its modernity and its materialist values. Some will respond by embracing traditional religions or New Age spirituality, but there is also likely to be, especially in the Islamic world, a more fierce religious challenge that rejects individual liberties as well as the materialism that comes with capitalism. Finally, there is the radical environmentalism of the Green movements, which could start seeming less radical and more urgent if the quest for economic growth that is inherent in capitalism continues to threaten the health of the planet. To counter this, humans will have to become the first species to learn how to control its own population growth.

Among the few things certain about the next century is that it will be wired, networked, and global. Because national borders will be unable to block the flow of information and innovation, the societies that thrive will be those that are comfortable with openness and with the free flow of services, goods, and ideas.

By these standards, the U.S. is rather well positioned. Ever since the days of the colonial pamphleteers, we've been comfortable with the cacophony that comes from freedom of information. We're used to being multicultural, and though we're constantly struggling with the consequences, we don't Balkanize because of it. Our disputes, such as those over affirmative action, may be divisive, but we have the political and constitutional means to resolve them peacefully.

But like other nations, the U.S. will have to adapt to a new century. With a global economy that will be increasingly knowledge-based, we will no longer be able to permit unequal educational opportunities. Schools will need to be open to competition and subjected to standards so that we avoid creating a two-tiered society. We also must realize, as both Theodore and Franklin Roosevelt did, that capitalism can be efficient but it can also be cold. America's social fabric is strong when it weaves together rewards for individual initiative and neighborly compassion for all members of the community. The ultimate goal of democracy and freedom, after all, is not to pursue material abundance but to nurture the dignity and values of each individual. That is the fundamental story of this century, and if we're lucky and wise, it will be the story of the next one.

# Contributors

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Michael Lewis is the author of *Liar's Poker* and *Trail Fever*.

Reeve Lindbergh has written a memoir of her family, *Under a Wing*.

Andrew Lloyd Webber's latest show is *Whistle Down the Wind*.

Kurt Loder, a former editor at *Rolling Stone* magazine, is the anchorman for *MTV News*.

Environmentalist Peter Matthiessen's latest novel is *Bone by Bone*.

Grace Mirabella, who was editor-in-chief of *Vogue* magazine for seventeen years, is the founder of *Mirabella* magazine.

Intel co-founder Gordon Moore's rule of thumb, that chip power doubles every eighteen months as prices decline, is now known as Moore's Law.

Edmund Morris, whose biography of Ronald Reagan will be published this fall, won a Pulitzer for his 1980 biography of Theodore Roosevelt.

Jan Morris accompanied the 1953 British Everest Expedition. Her next book will be about Abraham Lincoln.

Bharati Mukherjee's novels include *Jasmine*, *The Holder of the World*, and *Leave It to Me*.

Joseph Nocera is an editor-at-large at *Fortune* and author of *A Piece of the Action*.

Author Peggy Noonan was a special assistant and speechwriter for President Reagan.

Kenichi Ohmae, author of *The Borderless World*, is a management consultant and founder of a satellite TV business channel.

Israeli essayist and author Amos Oz's most recent book is *Panther in the Basement*.

MIT professor Seymour Papert, creator of the Logo computer language, worked with Piaget in Geneva.

Jacques Pépin is a chef, author, and host of the popular PBS television series *Jacques Pépin's Kitchen: Cooking with Claudine*.

George Plimpton is the editor of the *Paris Review* and the author of *Truman Capote*.

Neil Postman is the Paulette Goddard Professor of Media Ecology at New York University.

General Colin Powell, former Chairman of the Joint Chiefs of Staff, is now chairman of America's Promise.

Joshua Quittner, *Time*'s Personal Technology columnist, is the editor of *TimeDigital*.

Robert B. Reich, professor of economic and social policy at Brandeis, was U.S. Secretary of Labor from 1993 to 1997.

David Remnick, editor of *The New Yorker*, is the author of *Lenin's Tomb: The Last Days of the Soviet Empire*, which won the Pulitzer Prize in 1994.

Richard Rhodes is the Pulitzer Prize-winning author of *The Making of the Atomic Bomb*.

The essayist Roger Rosenblatt is editor-at-large of *Time Inc.* He is the author of *Children of War* and *Coming Apart*.

Paul Rudnick, author of *The Most Fabulous Story Ever Told*, writes for stage and screen.

Salman Rushdie, born in Bombay, India, is the author of *The Ground Beneath Her Feet*.

Architect and educator Witold Rybczynski's most recent book is *A Clearing in the Distance*.

Richard Schickel, a *Time* film critic since 1972, wrote *The Disney Version: The Life, Times, Art and Commerce of Walt Disney* and *Brando: A Life in Our Times*.

Pulitzer Prize-winning Arthur Schlesinger Jr. is the author of many books, including *The Age of Roosevelt*. He is currently at work on his memoirs.

Novelist and screenwriter Budd Schulberg is the author of the classic tale of Hollywood, *What Makes Sammy Run?*

Diane Schuur's latest jazz CD is *Music Is My Life* from Atlantic Records.

Novelist and essayist Wilfrid Sheed wrote about his battle with polio in *In Love with Daylight* (1995).

Hugh Sidey, a *Time* contributing editor, has written about the American presidency for more than forty years.

Ingrid Sischy is editor-in-chief of *Interview* and a contributing editor to *Vanity Fair*.

Jonathan D. Spence teaches at Yale and is the author of several acclaimed books on China.

Joel Stein is a writer and a columnist for *Time*, specializing in arts, media, sports, and just about anything else out there.

Gloria Steinem is a co-founder of *Ms.* magazine and author of *Revolution from Within*.

Deborah Tannen, a professor at Georgetown University, is author of *The Argument Culture*.

*Time* contributing writer Terry Teachout covers dance for the *New York Daily News*.

Russian novelist Tatyana Tolstaya's most recent book is *Sleepwalker in the Fog*.

Helen Vendler, who teaches at Harvard, is author of *The Art of Shakespeare's Sonnets*.

Milton Viorst, a Middle East specialist, is the author of *In the Shadow of the Prophet*.

Marina Warner's latest book is *No Go the Bogeyman: Scaring, Lulling and Making Mock*.

*Time* national correspondent Jack E. White has covered civil rights issues for thirty years.

Nobel Peace laureate Elie Wiesel is professor in the humanities at Boston University.

Robert Wright is author of *The Moral Animal: Evolutionary Psychology and Everyday Life*.

*Time* senior writer Richard Zoglin still watches *I Love Lucy* reruns each day at 9:00 A.M.

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