

# THE NEW YORKER

A CRITIC AT LARGE

## NOT SO FAST

*Scientific management started as a way to work. How did it become a way of life?*

by Jill Lepore

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Efficiency experts like Frank Gilbreth sought to revolutionize the workplace. His wife, Lillian, brought the revolution home.

Ordering people around, which used to be just a way to get things done, was elevated to a science in October of 1910, when Louis Brandeis, a fifty-three-year-old lawyer from Boston, held a meeting at an apartment in New York with a bunch of experts who, at Brandeis's urging, decided to call what they were experts at "scientific management." Everyone there—including Frank and Lillian Gilbreth, best known today as the parents in "Cheaper by the Dozen"—had contracted "Tayloritis": they were enthralled by an industrial engineer from Philadelphia named Frederick Winslow Taylor, who had been ordering people around, scientifically, for years. Speedy Taylor, as he was called, had invented a new way to make money. He would get himself hired by some business; spend a while watching people work, stopwatch and slide rule in hand; write a report telling them how to do their work faster; and then submit an astronomical bill for his services. He is the "Father of Scientific Management" (it says so on his tombstone), and, by any rational calculation, the grandfather of management consulting.

Whether he was also a shameless fraud is a matter of some debate, but not, it must be said, much: it's difficult to stage a debate when the preponderance of evidence falls to one side. In "The Management Myth: Why the Experts Keep Getting It Wrong" (Norton; \$27.95), Matthew Stewart points out what Taylor's enemies and even some of his colleagues pointed out, nearly a century ago: Taylor fudged his data, lied to his clients, and inflated the record of his success. As it happens, Stewart did the same things during his seven years as a management consultant; fudging, lying,

and inflating, he says, are the profession's stock-in-trade. Stewart had just finished a D.Phil. at Oxford in philosophy when he took a job rigging spreadsheets to tell companies whose business he barely understood how to trim costs, and he feels sullied by it. This gives his acerbic account an edgy urgency, but you begin to wonder, given how he felt about it, why he stuck with it for so long (the money, the money). Anyway, now he's blowing the whistle, telling entertaining and slightly shocking stories, like the one about how his boss taught his twenty-something trainees—Stewart reports that one in six graduating seniors at elite colleges is recruited to work in management-consulting firms—how to conduct a “two-handed regression”: “When a scatter plot failed to show the significant correlation between two variables that we all knew was there, he would place a pair of meaty hands over the offending clouds of data points and thereby reveal the straight line hiding from conventional mathematics.” Management consulting isn't a science, Stewart says; it's a party trick.

Some party. Modern-day management consulting may be precisely nine-tenths shtick and one-tenth Excel, but that doesn't explain the appeal of scientific management for Louis Brandeis, who wasn't easily duped. Brandeis, born in Kentucky in 1856, was just twenty when he finished Harvard Law School, with the highest grades anyone there had ever received; Charles Eliot, the university's president, had to waive a minimum-age requirement to allow him to graduate. He swiftly earned a reputation as a hardheaded and public-minded reformer, the “people's attorney.” The man who wrote “The Curse of Bigness” earnestly believed—and plainly, to some degree, he was right—that scientific management would improve the lot of the little guy by raising wages, reducing the cost of goods, and elevating the standard of living. “Of all the social and economic movements with which I have been connected,” Brandeis wrote, “none seems to me to be equal to this in its importance and hopefulness.” Scientific management would bring justice to an unjust world. “Efficiency is the hope of democracy,” he avowed.

Brandeis gathered Taylor's disciples—Taylor, busy man, sent his regrets—at that 1910 meeting because he was in the process of arguing, in hearings before the Interstate Commerce Committee, that railroad companies shouldn't be allowed to raise their freight rates. He had read at least one of Taylor's books, “Shop Management” (1903), and he thought that the railroads, rather than raising rates, should cut costs by Taylorizing: hire a man like Taylor, have him review their operations, and teach them to do everything more efficiently. Taylor often called what he did “task management.” The Gilbreths dubbed their system the “one best way.” Brandeis wanted, for the whole shebang, one best name. At that October meeting, someone suggested calling it, simply, “efficiency,” the watchword of the day, but in the end the vote was unanimous in favor of “scientific management,” which does have a nice ring to it, just like “home economics.”

Scientific management promised to replace rules of thumb with accurate measurements. At the I.C.C., Brandeis began by establishing that the railroads had no real idea why they charged what they did. When he questioned Charles Daly, the vice-president of a New York railroad, Daly said that setting prices came down to judgment and, when Brandeis asked him to explain the basis of that judgment, Daly fell right into his trap. “The basis of my judgment,” he began, “is exactly the same as the basis of a man who knows how to play a good game of golf. It comes from practice, contact and experience”:

MR. BRANDEIS: I want to know, Mr. Daly, just as clearly as you can state it, whether you can give a single reason, based on anything more than your arbitrary judgment, as you have expressed it.

MR. DALY: None whatever.

MR. BRANDEIS: None whatever?

MR. DALY: None whatever.

Brandeis next set about demonstrating that freight rates could be determined, scientifically, by introducing, as evidence, Taylor's work at the Bethlehem Steel Company. Before Taylor went to Bethlehem, a team of seventy-five men loaded ninety-two-pound pigs of iron onto rail cars at a rate of twelve and a half tons per man per day. By timing the workers with a stopwatch, Taylor showed that a “first-class man” could load pig iron at a rate of forty-seven and a half tons per day, if he would only stop loafing. Ironworkers, Taylor thought, were as dumb as dray horses, and ought to be dealt with accordingly. To Taylor, the wealthy son of Philadelphia aristocrats, most of them were also altogether foreign, something he made sure to underscore. He told the story of managing a man he called Schmidt:

“Schmidt, are you a high-priced man?”

“Vell, I don't know vat you mean. . . .”

“You see that car?”

“Yes.”

“Well, if you are a high-priced man, you will load that pig iron on that car tomorrow for \$1.85. Now do wake up and answer my question. Tell me whether you are a high-priced man or not.”

“Vell, did I got \$1.85 for loading dot pig iron on dot car to-morrow?”

“Yes, of course you do. . . .”

“Vell, dot’s all right.”

(“Who is this Schmidt?” journalists asked, “and what ever happened to him?” Taylor hedged.)

Brandeis’s star witness turned out to be Frank Gilbreth, who, with his wife, specialized in motion study. Where Taylor dissected a job into timed tasks, the Gilbreths divided human action into seventeen motions, which they called “therbligs”—it’s an eponymous anagram—in order to determine the one best way to do a piece of work. Where Taylor used a stopwatch, the Gilbreths used a motion-picture camera. On the stand, Gilbreth, a burly former bricklayer and consummate showman, grabbed a stack of law books, pretended they were bricks, and built a wall, explaining how to eliminate wasted motion. The commissioners, mesmerized, craned their necks and leaned over their desks to get a better view. “This has become sort of a substitute for religion for you,” one of them said, awed. Gilbreth could only agree. (In his diary, Gilbreth once wrote about plans to write a book called “The Religion of Scientific Management.”) At one point, Brandeis hushed the room by making an astonishing claim: with scientific management, the railroads could save a million dollars a day. A million dollars a day! Suddenly, those theretofore obscure I.C.C. hearings seized the nation’s attention. Brandeis won the case, and Taylor became a household name. In 1911, Taylor explained his methods—Schmidt and the pig iron, Gilbreth and the bricks—in “The Principles of Scientific Management,” whose argument the business über-guru Peter Drucker once called “the most powerful as well as the most lasting contribution America has made to Western thought since the Federalist Papers.” That’s either very silly or chillingly cynical, but “The Principles of Scientific Management” was the best-selling business book in the first half of the twentieth century. Taylor always said that scientific management would usher in a “mental revolution,” and it has. Modern life is Taylorized life, the Taylor biographer Robert Kanigel observed, a dozen years back. Above your desk, the clock is ticking; on the shop floor, the camera is rolling. Manage your time, waste no motion, multitask: your iPhone comes with a calendar, your car with a memo pad. “Who is Schmidt?” journalists wanted to know, a century ago. Vell, ve are.

**I**n 1908, Edwin Gay, a Harvard economics professor, visited Taylor in Philadelphia. Gay had been frustrated in his efforts to start a business school at Harvard: “I am constantly being told by businessmen that we cannot teach business.” After meeting Taylor, Gay declared, “I am convinced that there is a scientific method involved in and underlying the art of business.” If scientific laws, deducible from observation, govern the management of business, then business, as an academic discipline, was a much easier sell. Harvard Business School opened later that year, with Gay as its dean. Taylor went to Cambridge and delivered a series of lectures, which he repeated every year until his death.

Taylor is the mortar, and the Gilbreths the bricks, of every American business school. But it was Brandeis who brought Taylor national and international acclaim. He could not, for all that, have saved the railroads a million dollars a day—the number was, as a canny reporter noted, the “merest moonshine”—because, despite the parade of experts and algorithms, the figure was based on little more than a ballpark estimate that the railroads were about five per cent inefficient. That’s the way Taylorism usually worked. How did Taylor arrive at forty-seven and a half tons for Bethlehem Steel? He chose twelve “large, powerful Hungarians,” observed them for an hour, and calculated that, at the rate they were working, they were loading twenty-four tons of pig iron per man per day. Then he handpicked ten men and dared them to load sixteen and a half tons as fast as they could. They managed to do it in fourteen minutes; this yields a rate of seventy-one tons per man per ten-hour day. Taylor inexplicably rounded up the number to seventy-five. To get to forty-seven and a half, he reduced seventy-five by about forty per cent, claiming that this represented a work-to-rest ratio of the “law of heavy laboring.” Workers who protested the new standards were fired. Only one—the best approximation of an actual Schmidt was a man named Henry Noll—loaded anything close to forty-seven and a half tons in a single day, a rate that was, in any case, not sustainable. After providing two years of consulting services, Taylor billed the company a hundred thousand dollars (which works out to something like two and a half million dollars today), and then he was fired.

Brandeis, like many Progressives, believed Taylor, and believed *in* him. What shocked him was that the unions didn’t. Brandeis had long been a labor hero. Convinced that lawyers, by taking the side of capital, had “allowed

themselves to become adjuncts of great corporations,” he had campaigned for an eight-hour day and deftly arbitrated labor disputes, including the New York garment workers’ strike of 1910. But, early in 1911, while delivering a speech called “Organized Labor and Efficiency” before the Boston Central Labor Union, he was heckled. “You can call it scientific management if you want to,” a woman shouted, “but I call it scientific driving.”

Brandeis, ever hopeful, pressed on. The following year, he wrote the foreword for Frank Gilbreth’s “Primer of Scientific Management,” attempting to explain, once again, why the unions should embrace it. “Under Scientific Management men are led, not driven,” he insisted. By then, Taylor had come under the scrutiny of Congress, which formed the House Committee to Investigate Taylor and Other Systems of Shop Management. In the last months of 1911, the committee took testimony from sixty witnesses—workers and experts alike—and, in January, 1912, called Taylor. Facing the committee chairman, William Bauchop Wilson, a Democrat from Pennsylvania who had gone down into the coal pits at the age of nine and joined the union at eleven, Taylor didn’t offer up Schmidt and the pig iron—he had trotted out that story too many times, and people were getting suspicious—but he did tell another of his favorite yarns, the one about the science of shovelling. “The ordinary pig-iron handler” is not suited to shovelling coal, Taylor said. “He is too stupid.” But a first-class man, who could lift a shovelful weighing twenty-one and a half pounds, could move a pile of coal lickety-split. “You have told us the effect on the pile,” an exasperated committee member said, but “what about the effect on the man?” Wilson wanted to know what happened to workers who weren’t “first-class men”:

THE CHAIRMAN: Scientific management has no place for such men?

MR. TAYLOR: Scientific management has no place for a bird that can sing and won’t sing. . . .

THE CHAIRMAN: We are not . . . dealing with horses nor singing birds, but we are dealing with men who are a part of society and for whose benefit society is organized.

Taylor knew that he had performed badly. Asked to proof the transcript of his testimony, he ordered a lackey to steal Wilson’s copy of “The Principles of Scientific Management.” Taylor had the idea that he could lift passages from his book and dump them into his testimony—replacing what he had actually said, under oath—but then he worried that the switch would be too risky if Wilson had the chance to compare the transcript with the book. He didn’t get away with it. Speedy Taylor had met his match. The next year, the President appointed William Bauchop Wilson the Secretary of Labor. But, by then, Taylorism had permeated the culture. So had therbligs: *Life* published a cartoon about the fifteen unnecessary motions of a kiss.

About half of “The Management Myth” is an exposé of management consulting (the emperor has no clothes); the rest is Stewart’s exploration of his erstwhile profession’s checkered past (the emperor never did), although the kind of business book people have been buying for, oh, the past half century is instruction (you, too, can be an emperor!). Tom Peters’s “In Search of Excellence: Lessons from America’s Best-Run Companies” is in its gazillionth printing. Still, if the economy takes another turn for the worse there’s surely money to be made selling books that decry the making of money. Frederick Winslow Taylor makes a great villain, but Stewart needs him to be ridiculous, which makes it difficult to appreciate Brandeis’s argument: there was waste, there were inefficiencies, and Taylorizing did improve the standard of living, at least as measured by consumption. Whatever has happened since, Ford Motor Company did once pay its workers well, build good cars fast, and sell them cheap to people who, suddenly, could afford them.

Much of Stewart’s account is devoted to following the anti-Taylor and neo-Taylor theories that have determined the curriculum at business schools in the course of the past century. He pays special attention to human-factors science and follows through several chapters the work of Harvard Business School’s Michael Porter, whose early books “Competitive Strategy” (1980) and “Competitive Advantage” (1985) launched a field known as strategic management. (I should perhaps mention that, in the late eighties, Porter was my boss. His phone rang off the hook, and I, a temporary secretary, had the job of answering it.) To Stewart, strategic management is scientific management, without the stopwatch. And, along with much else taught in business schools, and everything that goes on in management-consulting firms, “it contributes to a misunderstanding about the sources of our prosperity.”

Business schools have been indicted before. Earning an M.B.A. has been found to have little correlation with later business success. Business isn’t a science, critics say; it’s a set of skills, best learned on the job. Some business schools, accused of teaching nothing so much as greed, now offer ethics courses. Stewart argues that this whole conversation, about people, production, wealth, and virtue, is a conversation about ethics, and is better had within a liberal-arts

curriculum. His howl of frustration, after all those years spent living in hotels, peddling nonsense, and profiting by it, is loud and angry. It's also only half the story.

Scientific management didn't just change businesses and business schools. Speeding up production meant that workers came home knackered. Some Bethlehem ironworkers were so wrecked after a Taylor-size day's work that they couldn't get out of bed the next morning. In 1914, Henry Ford announced a five-dollar, eight-hour workday—generous terms, at the start—but, after that, salaries froze even as the speed of production increased, and, meanwhile, Ford kept reducing his workforce. Edmund Wilson, in “American Jitters,” later quoted a Ford worker saying, “Ye're worked like a slave all day and when ye get out ye're too tired to do anything.” Brandeis hoped that this autoworker might spend his evening at a lecture or a political rally, but, more likely, he went home and collapsed on the couch while his wife, who, quite possibly, had put in eight hours at Ford, too, made dinner and got the children ready for bed—efficiently! For lots of people, particularly the growing number of working women, speeding up at work, which you might think would mean slowing down at home, enjoying that promised land of leisure, meant just the opposite: home got sped up, too. No one knew that better than Frank Gilbreth's wife, who had a lot to say on the subject of exhaustion, and who understood, better than Taylor and Brandeis did, that scientific management isn't the kind of thing you can leave at the office.

Lillian Gilbreth was pregnant with her fifth child when she attended that meeting with Brandeis in New York, in October of 1910. Taylor taught efficiency; Brandeis championed it; Gilbreth lived it. Born in Oakland in 1878, she graduated from the University of California in 1900 and married Frank Gilbreth four years later. They agreed to have twelve children, six boys and six girls, and to raise them by the most scientific methods, as Jane Lancaster relates in a 2004 biography, “Making Time.” In an era of rapidly shrinking family size, the Gilbreths' household, a laboratory of efficiency, would show the world what economies of scale were all about. Between 1905 and 1922, Lillian gave birth thirteen times, at fifteen-month intervals; one child died, at the age of five, of diphtheria. She breast-fed every baby. The wonderful zaniness of the Gilbreths' family life was recorded by two of their children in “Cheaper by the Dozen,” published in 1948. The Gilbreths held weekly Family Council meetings. Once, one of the boys made a motion to get a puppy. Seconded, and opened for discussion: “He could eat scraps of food,” another of the boys piped up. “He would save us waste and would save motions for the garbage man.” Called to a vote: ten in favor, one abstention (Lillian), and one opposed (Frank). They named the dog Mr. Chairman. In 1950, the book was made into a film starring Myrna Loy as Boss, which is what Frank called his wife. Lillian disliked and was embarrassed by both the book and the film, not least because they ignore the fact that, during those years, she ran a business, became the first pioneer of scientific management to earn a doctorate, and wrote many books.

Admittedly, it's hard to see past all those pregnancies. In 1906, after the San Francisco earthquake, William Randolph Hearst offered a hundred dollars to anyone who had a baby in his emergency hospital. Frank, who was in the city courting building contracts, wrote to his wife, ribbing her, “I think there is a chance for you if you hurry.” He named their summer place the Shoe, after the woman with too many children, who lived in one, and didn't know what to do. Once, when he told a colleague, “Lillie always feels better when she is pregnant,” the other guy shot back, “How the hell can she tell?”

Frank considered postpartum bed rest to be wasted time (“Dear Boss,” he wrote, “MOTION IS MONEY”), so Lillian used the weeks after childbirth to edit her husband's books, most of which she also co-wrote, or, as several scholars believe, wrote entirely, even when her name didn't appear on the title page. (Lillian's prose is distinctively “gabby,” as Frank put it.) In 1911, she edited “Motion Study,” after giving birth to Frank, Jr., and it was likely Lillian, not her husband, who wrote “The Primer of Scientific Management.” The following year, the Gilbreths moved to Rhode Island so that Lillian could enroll in a Ph.D. program at Brown, where she studied psychology, something that she thought was missing from Taylorism. In Providence, the Gilbreths lived so close to campus, Frank joked, that Lillian “could go to class and if a child fell out of the window, catch him before he landed on the ground.”

Meanwhile, Taylorized workers kept complaining about being bone-tired. In 1911, molders at an arsenal in Watertown, Massachusetts, refused to work under the eye of a timekeeper. Pouring a mold and making a gun carriage usually took fifty-three minutes; Taylor's timekeeper told the molders to do it in twenty-four. During an investigation into the ensuing strike, it came out that Taylor had told his timekeeper not to bother too much with the stopwatch—better simply to make “a rough guess.” In a petition to their boss, the molders wrote, “This we believe to be the limit of our endurance. It is humiliating to us, who have always tried to give the Government the best that was in us. This

method is un-American.”

Taylor, plagued by controversy, grew ill. He sometimes sent Frank Gilbreth to deliver lectures in his place. Increasingly, though, the Gilbreths had misgivings about Taylorism. In 1913, when Frank was substituting for Taylor in Chicago, Lillian went along, with a three-month-old nursling. Onstage, Frank was challenged by Emma Goldman. He was pointing to a chart illustrating the hierarchical relationship between the foreman and the worker. “There is nothing in scientific management for the workman,” Goldman shouted. “The only scheme is to have the workman support the loafers on top of him.” Lillian leaned over and whispered something to Frank, who cheerfully turned the chart upside down. That was just a stunt, of course, but Lillian had an argument to make, which she put forward in “The Psychology of Management,” published in 1914: “The emphasis in successful management lies on the *man*, not on the *work*.” And maybe even on the women and children, too.

Gilbreth defended her dissertation in June, 1915. Three months later, she fell down a flight of stairs, went into labor, and gave birth to a stillborn baby. Taylor had died earlier that year. After reading in a fawning biography how much Taylor loved the workers, Frank Gilbreth scrawled in the margin, “But none came to his funeral, nor to his memorial service.” Brandeis was there, though, and delivered a speech that was later printed in *Harper’s* under the title “Efficiency by Consent.” Brandeis’s considered ideas about management were actually far closer to the Gilbreths’ than to Taylor’s. Taylor thought that men were mules. Brandeis advocated industrial democracy: workers must have a voice in how a business is run. The Gilbreths favored putting a suggestion box in the workplace. Taylor took nothing from the Watertown Arsenal strike except that it might be better “not to try to hurry task work too fast.” Brandeis insisted that, if workers were to enjoy sufficient leisure to participate in a democratic society, productivity had to be increased, but he also worried that, without unions, workers would be pushed past the limits of human endurance. That’s why unions, he believed, ought to consent to efficiency. Gilbreth, Inc., made a policy of requiring contracts to be signed by both shop bosses and representatives from organized labor.

The year after Taylor died, Brandeis was nominated to the Supreme Court. It was one of the most controversial nominations in the Court’s history. The reason for the controversy, Brandeis observed, was that he “is considered a radical and is a Jew.” Much of the opposition had to do with his support of unions. One member of the Senate Judiciary Committee said, “The real crime of which this man is guilty is that he has exposed the iniquities of men in high places in our financial system. He has not stood in awe of the majesty of wealth.” The president of Harvard, A. Lawrence Lowell, circulated a petition opposing Brandeis’s nomination, but, when Lowell’s predecessor, Charles Eliot, sent a letter of support, Brandeis’s law partner boasted, “Next to a letter from God, we have got the best.” Brandeis took a seat on the Court in June, 1916.

That year, Lillian Gilbreth checked the galleys of a book called “Fatigue Study” while recovering from the birth of her ninth child. Taylor had studied fatigue, too, but Gilbreth had a different kind of knowledge of what it meant to be at the limits of physical endurance. She also shared Brandeis’s view that profit wasn’t everything. The whole point of efficiency, she said, was to maximize “happiness minutes.” Happiness minutes? For Lillian Gilbreth, scientific management wasn’t just a business practice; it was a habit of mind and a way of life.

In 1918, she was invited to lecture about motion and fatigue at M.I.T. She must have been practicing the presentation at home. One night, the children invited her to play a game of charades. “What do you think the first one was?” she wrote to Frank. “Well, it was ‘Fatigue Survey.’ How is that for breathing it in?” On the day of the lecture, she got five children ready for school, nursed her four-month-old, handed the two toddlers over to the housekeeper, and caught a ten-o’clock train. In Cambridge, she talked for twenty minutes and showed thirty-six slides (reporting to Frank that she tried very hard to talk like a scientist, and “not like a Lady”), but, when asked to stay late, she told her host that she had eight children to get home to. (“That seemed to interest him a lot.”) She made it back to Providence for the 6:30 P.M. nursing.

In 1919, in childbed after delivering baby No. 10, Lillian proofread galleys of “Motion Study for the Handicapped.” (The Gilbreths had worked with soldiers who had lost limbs; aiding the disabled was a long-standing Gilbreth specialty.) Five years later, Frank Gilbreth died, at the age of fifty-five, leaving his wife with eleven children under the age of nineteen. She was determined to send them all to college, but she didn’t have much money. She tried, desperately, to drum up business. She studied the relationship between menstruation and fatigue among factory women, and got hired by Johnson & Johnson to conduct market research on sanitary napkins. But many clients, after discovering that the president of Gilbreth, Inc., was a woman, simply dropped their accounts. Scrambling, she decided

to reinvent herself as an expert in a subject about which she knew next to nothing: housekeeping.

The American Home Economics Association was founded in 1909 (the year before Brandeis coined the term “scientific management”), after some debate over whether the field should be called “home science.” For a while, housekeeping, like business, aspired to be an academic discipline. In that effort, Gilbreth seems an unlikely figure. Her husband had always endorsed a three-man plan of promotion. There’s the guy at the bottom, studying to be the guy in the middle, and the guy in the middle, studying to be the guy at the top. “Don’t waste your time on housework, Boss,” he told his wife. “You’re studying for *my* job.” Lillian, who loved parenting, couldn’t cook or clean or do laundry. About kitchens, one of her sons wrote, “Stoves burned her, ice picks stabbed her, graters skinned her, and paring knives cut her.” Her handyman and, later, housekeeper, an Irishman named Tom Grieves, did all the cooking. Gilbreth knew how to make exactly one meal, which she served on Grieves’s days off: creamed chipped beef. Her children called it D.V.O.T.: Dog’s Vomit on Toast.

In the nineteen-twenties, she engineered model kitchens—one was called the Kitchen Efficient—and purported to eliminate, for instance, five out of every six steps in the making of coffee cake. To make a lemon-meringue pie, a housewife working in an ordinary kitchen walked two hundred and twenty-four feet; in the Kitchen Efficient, Gilbreth claimed, it could be done in ninety-two. (If you have an island in your kitchen, or a rolling cart, or if you think about a work triangle, you’ve got Lillian Gilbreth to thank.) The increasingly strange study of fatigue went on without her. In 1927, by which time Gilbreth was a chief consultant for American universities’ new departments of home economics, the Harvard Business School opened a Fatigue Laboratory: professors put students on treadmills until they dropped. (Later, a team from the Fatigue Laboratory went to Mississippi, to measure the sweat of sharecroppers living in Benoit—a town of “colorfully dressed, happy, and well-behaved negroes”—against the exertion of mules.)

At around the same time, Gilbreth published “The Home-maker and Her Job.” A housewife should make a study of the science of dishwashing, in order to find the one best way: “In washing dishes, Mary may have the best posture, Mother may move her eyes and head least, Johnny may move his feet least, Sarah may make the best use of her hands.” The trick was to combine the best of everyone’s methods, and then Mary, Mother, Johnny, and Sarah could spend more time doing something other than washing the dishes.

In 1935, Lillian Gilbreth, who did not wash dishes, accepted a professorship at Purdue. Her academic appointment was divided between the university’s School of Home Economics and its School of Management. Home economics and business management have Lillian Gilbreth in common, and a lot more besides. Scientific housekeeping, with its standards of spotlessness and shininess, was founded on no less a fudge than the forty-seven and a half tons of pig iron. Tom Grieves was Gilbreth’s Schmidt. “You know what a Motion Study is, Frankie-boy?” Grieves once asked Frank, Jr. “You study how to get somebody else to make all your motions for you, for Christ sake.” He refused to work in the Kitchen Efficient; he rejected even a refrigerator; he was unwilling to give up the daily, sociable visits of the iceman, who was a good friend of his. Reporters who wanted to profile Gilbreth couldn’t go into her actual kitchen. They had to visit the fake one.

Gilbreth tried to teach people to save time for joy, but not everyone wants to hurry a pie. Sometimes the best part of making a pie is the mess, and rolling the dough too thin so you’ve got some extra for jam tarts, and for playing with. In the Taylorized world, something has been lost and, until it’s found, adding a few case studies to the curriculum at Harvard Business School probably isn’t enough. Neither unions nor businesses have lived up to Brandeis’s optimism. “If the fruits of Scientific Management are directed into the proper channels,” he wrote, “the workingman will get not only a fair share, but a very large share, of the industrial profits arising from improved industry.” Lately, that share has been going to shareholders and C.E.O.s. Home and work, separated since the first stirrings of the Industrial Revolution, have been growing back together again: BlackBerry on the nightstand, toaster in the photocopy room. Efficiency was meant to lead to a shorter workday, but, in the final two decades of the twentieth century, the average American added a hundred and sixty-four hours of work in the course of a year; that’s a whole extra month’s time, but not, typically, a month’s worth of either happiness minutes or civic participation. Eating dinner standing up while nursing a baby, making a phone call to the office, and supervising a third grader’s homework is not, I don’t think, the hope of democracy.

Lillian Gilbreth died, of a stroke, in Scottsdale, Arizona, in 1972, at the age of ninety-three. She was cremated. The *Times* ran an obituary headed “Dr. Gilbreth, Engineer, Mother of Dozen.” She had always believed that the world needed “a new philosophy of work.” She never did manage to write it. ♦

ILLUSTRATION: OWEN SMITH

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