1

1931

If you lived in Ohio in 1931, you had plenty to worry about. The prosperity of the 1920s had given way to a depression that was grinding down the working people in small towns like Fostoria.[1] The stock market in New York had collapsed in the fall of 1929. Two years later, in the spring of 1931, when business was still in deep trouble, I was born on West Culbertson Street near the railroad tracks.[2]

The tracks that cut through the town were important because Fostoria's rail connections to Toledo and Cleveland on the north and

[1] In 1931, the working people I mention were almost all white. The population of Fostoria was slightly less than 13,000, and only 347 were identified as African American. That same year, nine African Americans were arrested in Alabama and charged with raping two young white women. Even though the two women had been working previously as prostitutes and the evidence was conflicting, all of the Scottsboro Boys were quickly convicted and all but one (who was thirteen years old) sentenced to death. The National Guard had to be called out to prevent a lynching before the trial. For the case and its outcome, see Dan T. Carter, *Scottsboro: A Tragedy of the American South* (Baton Rouge, Louisiana, 1969) and James R. Acker, *Scottsboro and Its Legacy* (Westport, Connecticut, 2008). It is unlikely that my father, Lou Galambos, had any sympathy for the Scottsboro Boys. At that time, he had a big black German police dog that he named "N. . . . . "

[2] See the *Bulletin of the Department of Industrial Relations, Columbus, Ohio, Division of Labor Statistics, 1930–1937*; total employment in the state had fallen more than 17% since April of 1930. Unless otherwise indicated, all of the data included in the text and the notes in this book are drawn from the Cambridge University Press's remarkable five-volume collection of the *Historical Statistics of the United States: Earliest Times to the Present* (New York, 2006). The general editors are Richard Sutch and Susan B. Carter, and the additional editors-in-chief include Scott Sigmund Gartner, Michael R. Haines, Alan L. Olmstead, and Gavin Wright. Anthony Angiletta and Frank Smith are consulting editors on the entire project, and the developmental editor who guided the manuscripts to publication is Madeleine Adams.

Cincinnati to the south had helped make it a small manufacturing center. For a time, it appeared that the town would become a center for automobile production. But neither the Allen nor the Seneca motor companies could compete with Ford's inexpensive Model Ts. Both of the local firms went out of business.

This was a familiar story in towns like Fostoria, once a local center for buggy and wagon manufacturing. Companies came and went. Buildings were recycled. People had to find new jobs or move on. Fostoria was like the hundreds of other small communities sprinkled around the Midwest, all of which were distressed in the early 1930s by a different and more threatening kind of economic change. The depression was grinding all of the businesses and jobs in a way that only grandparents who had been alive in the 1890s had experienced.

It was hard to understand *what* was happening in the 1930s and even harder to understand *why* it was happening. Why were the businesses cutting back on their workforces? Farmers had been suffering from low prices for some years, but in the cities and towns, the 1920s had been prosperous years. Now, however, there were more and more people unemployed.[3] The stores in Fostoria were selling less. As savings began to dwindle and the number of homeless hoboes coming through on the railroads increased, the private charities that were the only source of relief were beginning to run out of money and supplies.

The local newspaper reported on the state and national leaders who were trying to explain why the prosperity of the 1920s had suddenly evaporated. Some said that the problems had all started overseas. That's what President Herbert Hoover said. He'd been very popular in Ohio in 1928, when the state gave him almost 65 percent of its votes and turned its back on the Democrat, a New York politician named Al, who was incidentally a Catholic. Hoover, whose father had been born in Ohio, was more reliable. Hoover was a Quaker who had met a payroll. He

[3] The *Fostoria Daily Review* was following the unemployment situation in the city and the state. That fall, there was consideration of a proposal to sell poor relief bonds (October 3, November 11 and 25), and the estimate was that about a million persons would need relief aid that winter in Ohio. As the paper reported, financier Bernard Baruch thought the nation had "disrupted the continuity of pessimism," and President Hoover agreed (November 12). But cold weather was coming, Fostoria's operating fund was short $50,000, and there was skepticism as New Year's day approached about rosy predictions that an upsurge was right around the corner (November 25; December 16 and 31). The editor suggested that God, provoked by the "money-glutted years" of the 1920s, was now handing out punishment to those who had not built their society on "the rock of brotherhood" (November 17 and 25)."

had been a very successful mining engineer, and his public service during World War I and in the Republican administrations of the 1920s had given him a rock-solid national reputation. In 1928, he seemed to be the sort of man who could understand what the people in Fostoria wanted.

By 1931, however, Hoover's explanations were starting to wear thin. It was not easy for working-class people like those in my family to understand why things happening in Britain or Germany or even stranger parts of the world were causing so much trouble in Ohio. Our family had tried to leave Europe behind. My father, Lou Galambos, was a second-generation Hungarian-American who had been raised in Toledo, Ohio, and then found both a wife and work in Fostoria. Leaving high school in his junior year, he'd become a welder, a job that put him on the shop floor in a foundry. As a welder, he was a bit above the men working with a shovel and a solid cut below the master mechanics and managers. In Fostoria, he'd met a fourth-generation German-American woman, Ruth Himburg, who was working as a secretary in his plant.[4] After a courtship eased by the interurban line between Toledo and Fostoria, they were married in 1927 and had their first child, Margaret, in the fall of 1928.

By the time I was born, Lou Galambos was scratching hard to get ahead. Looking for something better, he decided to try a different industry and a different occupation. His new choice was coal mining, and to move ahead in the machinery side of the business, he experienced an immaculate professionalization. Without returning to high school or seeking any advanced training, he became in one year a "mining engineer," just like President Hoover. At least that's what he told the Ohio Department of Health to put on my birth certificate. In this wonderful country, you could jump from the shop floor to a profession by self-assertion.[5] In the midst of a severe and worsening depression!

Even as a "mining engineer," Lou Galambos couldn't escape the country's economic collapse. He and Ruth had leaped from the frying pan into the fire. Coal mining throughout the Midwest was in sharp decline. Employment in the mines plummeted in the early 1930s, and many of the union members who had embraced mechanization in the 1920s were rewarded by losing their jobs in the 1930s.[6] For Lou Galambos,

[4] When Ruth married Lou Galambos, he nicknamed her "Mazie," but to avoid confusion I have kept her as Ruth throughout this book.

[5] My mother, Ruth, also improved her situation, lopping four years off her age. She was that much older than my father and probably was sensitive about the difference.

[6] James P. Johnson, *The Politics of Soft Coal: The Bituminous Industry from World War I through the New Deal* (Urbana, 1979).

however, mechanization, like professionalization, was the road to success. Americans could afford to buy less coal, but they still needed coal. So he parlayed his mechanical skills into a new enterprise, selling and servicing coal-mining machinery. This required a great deal of moving around and some jumping from company to company, to Air Reduction Sales in Kansas City, then to St. Louis with Joy Mining Machinery. If you were on the make in this or any other business, you had to be prepared to pack up and leave, just as you had left Toledo and your father had left Hungary.

All of this moving and scratching was taking place in a nation that actually didn't have any idea what was causing the Great Depression or what to do about it. Henry Ford, the nation's most popular industrialist, urged Americans to stick with Hoover and accept his explanations of the nation's distress. The country's most distinguished academic experts in economic theory also counseled patience. Eventually, they said, the depression would bottom out. All the nation needed was "confidence" – then recovery would start in a natural, predictable way. The president's campaign managers in 1932 exuded confidence. They said his speeches were "reaching the people as never before . . . " They didn't reach the people in Fostoria, however, where the voters ran out of confidence in 1932 and turned against Hoover in the national election.[7]

It wasn't just Hoover who failed. This was one of the great failures of expertise in the United States. But perhaps I shouldn't be too harsh with the economists who had trouble providing convincing explanations of the depression.[8] The nation's other professionals – whether trained or self-proclaimed – weren't doing much better with some of the country's other major problems: learning, for instance, how to exercise American power in the world or how to build, control, and live in the nation's swelling urban centers.

To get a better perspective on their successes and failures, we need to look back to a previous generation, back to the 1890s. That was an era when most of America's modern professions got organized, laying institutional foundations for expertise, which are, for the most part, still

[7] *Los Angeles Times*, October 20, 1932, 2. *Fostoria Daily Review*, November 9, 1932, courtesy of Leonard Skonecki and Penny Justice. The vote was close: Franklin D. Roosevelt got 2,877 votes; Hoover, 2,680; and Norman Thomas, the Socialist candidate, 126.

[8] One of the economists was the distinguished Yale professor Irving Fisher. His confident prediction that stocks had reached a high and permanent level in 1929 was noted in the *Wall Street Journal*, on June 29, 2007, as a warning to "today's market titans."

with us today. That was also a decade when Americans suffered through a deep depression, tried to define their new role in world affairs, started to get serious about reforming their political institutions, worried about how best to encourage innovation and growth in business and agriculture, and grappled awkwardly with the problems of urban life.

2

Life, Death, and Learning in the Cities

In the 1890s, it wasn't easy to figure out how to improve conditions for all of those Americans squeezing into the nation's rapidly growing cities.[1] The census classified Fostoria, Ohio, as an urban community, but it was just a small town and it wasn't really growing between 1890 and 1930. In Ohio, Cincinnati was the largest city in 1890 and it was half again as large four decades later. Toledo and the state capital of Columbus more than doubled their populations in the same years, and the state's metropolis, Cleveland, had swollen to 900,000.[2]

Among the cities of the Midwest, Cleveland's growth was impressive, but Chicago was clearly the leader and the region's major transportation hub. It had shot past Philadelphia by 1930 and was the only American city other than New York with a population of more than three million. Chicago's almost unbelievable expansion and its diverse population inspired poets and historians, sociologists and novelists for many years. They've given us superb portraits of the city's spirit, accomplishments, and growing pains.

The sources of growth are easy to understand. Like the other large American cities (except one), Chicago was favored with good water

[1] The student interested in further exploring American urbanization might want to sample some of the chapters in Eric H. Monkkonen, *The Development of U.S. Cities & Towns, 1780–1980* (Berkeley, 1988) or Raymond A. Mohl, ed., *The Making of Urban America* (2nd edition, Lanham, 2006).

[2] Naomi R. Lamoreaux, Margaret Levenstein, and Kenneth L. Sokoloff, "Financing Invention during the Second Industrial Revolution: Cleveland, Ohio, 1870–1920," in Naomi R. Lamoreaux and Kenneth L. Sokoloff, eds., *Financing Innovation in the United States, 1870 to the Present* (Cambridge, 2007), 39–84.

transportation.[3] The Great Lakes traffic spurred the grain trade, and the railroads helped the city attract the livestock business from the western plains. When the city's meat-packers introduced refrigeration and opened up a new national market for dressed meat, Chicago spurted ahead of cities like Cincinnati in this important industry.[4] Opportunity and entrepreneurship were a potent combination for Chicago and other American cities, east and west.

Rapid expansion created many problems but also lots of ways to get ahead in life. That's the reason Lazlo Galambos, a Hungarian, ended up in Toledo, Ohio, on the western end of Lake Erie. He came to America in the midst of an astonishing flow of people from eastern and southern Europe. Lazlo began his American adventure working in the green gardens around Toledo, a city that already had a large Hungarian population.[5] At work he met and then married young Hazel, the daughter of two Hungarian immigrants, and worked his way up from picking onions to working metal as a molder in a local plant. Having mastered a skilled occupation, he was able to get better jobs and eventually became a foreman. He still didn't know much English, but step by step, he was playing his bit part in the American drama of progress. His three sons (the second was Lou, whom you met in the previous chapter) all played their parts by following Lazlo into metalworking in the industries of northern Ohio.

Some Midwestern urbanites were doing much better than Lazlo and his sons. The most successful ones were building great fortunes and wonderful houses on the healthy side of their cities. Yes, there was a healthy side to cities like Toledo and Chicago, a side where the wives of the Hungarian, Greek, Italian, and Polish Americans might work but couldn't afford to live. The suburbs provided homes for the growing middle class, including middle-class professionals. Most foreign-born immigrants and

[3] The exception is Atlanta, Georgia. There are two rivers near Atlanta: the Chattahoochee supplies water to Atlanta; and the Flint River rises near the city. But Atlanta's growth was linked to the railroad, not water transportation.

[4] Mary Yeager Kujovich, "The Refrigerator Car and the Growth of the American Dressed Beef Industry," *Business History Review*, 44 (1970), 460–82. See also the same author's "The Dynamics of Oligopoly in the Meat Packing Industry: An Historical Analysis" (Ph.D. dissertation, Johns Hopkins University, 1973). Her research provided the basis for the account in Alfred D. Chandler, Jr., *The Visible Hand: The Managerial Revolution in American Business* (Cambridge, 1977), 299–302.

[5] Thomas E. Barden and John Ahern, eds., *Hungarian American Toledo: Life and Times in Toledo's Birmingham Neighborhood* (Toledo, 2002). In addition to the right kinds of jobs and the right kinds of foods in Toledo, there were Catholic churches that were also the right kind.

African Americans were crowded into the poorer sections of the cities, around the factories. Not all of those factories were in the central business districts. But wherever they were, they attracted people like Lazlo, who got as close to work as possible. The immigrants created clusters where disease as well as crime was a problem.[6]

Staying Alive in Urban America

This was not an urban myth, although public health problems developed a mythological aspect when they were associated with the immigrants themselves rather than the conditions in which they were forced to live. Poor sewage systems bred disease in urban America, as they do from time to time in the developing world today. Poor water supplies created similar problems, as did the crowded living and working quarters that spread infections. Despite advances in handling sewage and water supplies, infection continued to be a major concern of public health authorities in all of America's largest cities, including Chicago.[7]

The reality was expressed in the bland figures collected on sickness and death. If you still lived in the countryside, say, in central or southern Illinois, rather than Chicago, you could tack a few extra years on your expected life span. If you lived in the city, you would be likely to beat the averages if you had one of those nice houses on the north side. In the crowded sections where immigrant laborers worked for hourly wages, where health care was at best spotty, where garbage pickup was sporadic, you were more likely to have tuberculosis, diphtheria, influenza, or pneumonia, none of which could be treated effectively before the 1890s.[8] It was not at all bland to have any one of those diseases.

The first of these urban killers to respond to modern medical science in America was diphtheria, and the progress in treating this disease of the

[6] Richard Harris and Robert Lewis, "The Geography of North American Cities and Suburbs, 1900–1950: A New Synthesis," *Journal of Urban History*, 27, 3 (March 2001): 262–92. The concepts they were revising were laid out in books such as Harlan Paul Douglass, *The Suburban Trend* (New York, a 1970 reprint of a 1925 publication), 36–37. Douglass's perspective was wonderfully optimistic: "[T]he suburbs, in spite of their limitations, are the most promising aspect of urban civilization. . . . They reflect the unspoiled and youthful aspect of urban civilization, . . . where, if at all, happiness and worthy living may be achieved, as well as material well-being."

[7] Alan M. Kraut, *Silent Travelers: Germs, Genes, and the "Immigrant Menace"* (Baltimore, 1994), 122, 143, 175, 187, 206, 210. In a 1911 report, Kraut notes, 67.3% of the public school pupils in Chicago had foreign-born fathers (226).

[8] Jane Addams had a memorable fight with municipal authority over garbage pickup.

young deserves our attention. In this case, the new medical ideas about diphtheria all came from the advanced laboratories of Europe – Germany and France, in particular. There, a new understanding of disease-causing germs was emerging. When the leading medical researchers pointed to the successes of scientific medicine, one of the therapies they described was a serum treatment effective against diphtheria. In America, private firms had drawn on advanced academic knowledge and personnel to produce the serum. They drew blood (hence serum) from horses that had been infected with the deadly germs.[9] The antibodies against the disease could be filtered out and injected into humans to give them immunity to the disease.[10]

In a few cases, public institutions produced the serum, but for the most part, this was left in the hands of companies like Mulford in Philadelphia. Mulford and other firms also produced and distributed the smallpox vaccines that were being widely used in America during these years. These early experiences led to a distinctive American blend of public, private, and nonprofit institutions that would play a central role in health care for the entire twentieth century. The successes in treating diphtheria also laid a foundation for the type of research and development that would later produce a safe, effective vaccine against the disease.[11]

While many traditional physicians were unwilling to accept the new theory that germs caused disease, the leading eastern medical schools in America responded rather quickly and positively.[12] The leaders reorganized their programs and launched a major reform movement in medical education. This is an impressive example of creativity in what was a life-or-death matter for many Americans, especially for those living in cities.

One of the leaders of reform was a professor of pathology and dean of the medical school at Johns Hopkins University in Baltimore. Given that I teach at Hopkins, you might be a bit suspicious of what I tell you about the school. But it's hard not to applaud the career of Dr. William H. Welch.

[9] This therapy was produced along the same lines as the serum for hog cholera mentioned in Chapter 3.

[10] Using the serum, doctors were able to cut the death rate from diphtheria in half. Louis Galambos (with Jane Eliot Sewell), *Networks of Innovation: Vaccine Development at Merck, Sharp & Dohme, and Mulford, 1895–1995* (New York, 1995), 4–20.

[11] Rob Roy MacGregor, "Corynebacterium Diphtheriae," in Gerald L. Mandell, R. Gordon Douglas, Jr., and John E. Bennett, eds., *Principles and Practice of Infectious Diseases* (New York, 1990), 1574–81.

[12] On the resistance to vaccination, see Michael Willrich, "The Mild Type," a paper presented at Johns Hopkins University, March 19, 2007.

He was raised in a family in which doctoring was the unanimous choice of a profession. His father, four of his uncles, his grandfather and great grandfather were all physicians. But at Yale University, where practical occupations in general and the sciences in particular were low on the status hierarchy, Welch turned toward classical studies for a career. He decided to make ancient Greek his life's work. Unable to get a decent job after graduation, he scraped along by teaching school for a year while he pondered his future. Not surprisingly, he then opted for the family profession and returned to Yale.

Back in New Haven, he was something of a contrarian. He launched his medical training by studying chemistry in the Sheffield Scientific School, an institution designed in part to keep modernity from infecting Yale's traditional curriculum. His decision to study chemistry would be considered normal today, but in 1872, it was an unusual choice. He was, in effect, lining up with those medical researchers who were developing new scientific concepts of disease. From there, he went to New York to study at the College of Physicians and Surgeons.[13]

Having an interest in pathology (the subdiscipline focused on disease), he headed to Germany to learn more about the latest developments in medical science. His educational tour took him to Strasbourg, Leipzig, and Breslau, and he returned to the United States with even more appreciation for laboratory research and a scientific approach to medicine. As he discovered, however, life on the profession's leading edge could be stressful. He spent years working in a tiny, ill-equipped laboratory at the Bellevue Hospital Medical College.

When Johns Hopkins hired him (1884), he at last had an opportunity to develop a modern laboratory of pathology. In his next visit to Germany, Welch was able to spend part of his time working with Robert Koch, one of the scientists whose research securely established the germ theory of disease. Returning to Baltimore, Welch taught at Johns Hopkins and pushed forward his own research.[14] He started his lectures before Hopkins even had a medical school. After getting together enough money to launch medical instruction, the school formally opened its program in 1893. Right from the start, the school adopted the highest entrance standards in the country.[15] Hopkins provided full-time positions to its teachers so

[13] The College of Physicians and Surgeons later became affiliated with Columbia College (which became Columbia University in 1896).

[14] On Welch's research, see Simon Flexner and James Thomas Flexner, *William Henry Welch and the Heroic Age of American Medicine* (New York, 1941), 194–98.

[15] Ibid., 58. When Welch entered medical school, the only entrance requirements were the ability to read and write.