

William R. Everdell

**THE
FIRST
MODERNS**

PROFILES IN
THE ORIGINS OF
TWENTIETH-CENTURY
THOUGHT

THE UNIVERSITY OF CHICAGO PRESS
CHICAGO AND LONDON



In 1896 a Spanish army officer named Valeriano Weyler y Nicolau was Captain-General (governor) of the colony of Cuba, which Columbus had claimed for Spain 400 years before. The newly appointed Weyler was fighting an especially nasty uprising, which Cubans call the Third War of Independence; and in 1896 he decided to implement the vague suggestion of his predecessor, Martinez Campos, to separate the rebels in the province of Pinar del Rios from the civilians who supported them by relocating all the civilians into guarded enclaves. This “reconcentration” had been tried briefly in three Cuban towns during Weyler’s first tour of duty there in 1869. The civilians were to be put in camps, rustic but adequate, and surrounded with barbed wire, an 1874 American invention for controlling cattle. Anyone outside the camps who was not in uniform could be safely shot at as a rebel, so it was all for the civilians’ “own protection.” Weyler called them *campos de reconcentraci6n*.

A concentration camp was not a death camp. Not yet. The death camp had still to be invented. Now that the Holocaust has coopted awe, the knowledge of how the instruments of holocaust were devised is slowly being forgotten. Important though it might be, it has seemed too prosaic, too secular. Writing as a believer means writing a different story, or perhaps not writing at all. The historian can only moralize by default. For us there is nothing to say but what happened, how the little precedents and habits built up, in every part of Western culture, until it became possible for civilians to be stripped of citizenship on the basis of their genetic inheritance, imprisoned wholesale, worked to death, and deliberately exterminated by public authority.

The story of the death camp is not the story of human territoriality or simple brutality, both of which go back too far to get us anywhere. On the other hand it is not simply the story of anti-Semitism, which in

any case has been told well and often. Anti-Semitism, certainly, is at the origin of one genocide; but there have been many. True, the Holocaust was the largest (perhaps even after Cambodia) and the most efficiently organized of all genocides. But it was far from the first, and it has not been the last. When Emily Hobhouse saw the first British concentration camps in 1901, the comparison that occurred to her was Nebuchadnezzar’s deportation of the Israelites to Babylon. What comparison occurred to us in 1992 as we heard the first news of concentration camps for Bosnians in Serbia? What the Holocaust was was the first genocide both deliberately designed and designed for the extermination—as opposed to the mere displacement—of peoples. Since it was also the first genocide designed around camps or prisons, the true story of the death camp must begin with the prisons and workhouses of premodern Europe. Nevertheless, the camp descends not only from traditions about incarcerating individuals, but also, and even more intimately, from traditions about segregating groups, including the imperial habit of enclaving and resettling entire peoples. This story seems to begin in resettlements made by the ancient Assyrians, in the medieval pales set up by England in Ireland and by Russia in Poland, in the deportation of the Acadians, in the Ottoman administrative device called *millets*—rural villages separated by religion—which the Russians seem to have copied, and in a notable American contribution known as the reservation.

The concentration camp, however, seemed new, and its newness came from ideas. Among these ideas was the change the Mendelians helped wreak in biological thought from “soft” inheritance theories, where characteristics acquired during the life of an organism can be biologically transmitted to its offspring, to those of “hard” inheritance, in which whatever appears in the children must have come from one parent or the other—a fortiori from one of the eight great-grandparents, exclusively, and so on by squares.¹ Concentration camps were in fact a very Modern invention—Modern in their insistence on analysis and fragmentation. The camp begins in the minds of those who have begun to see the human species as fundamentally discontinuous, capable of being separated into parts like Dedekind’s number line, or assigned like elements to Cantorian subsets that can be precisely and unambiguously defined. Used by nineteenth-century Marxists like Stalin, or nineteenth-century romantic nationalists like Hitler, it could and did turn into an instrument of extermination. Just as the nineteenth century’s legacy to political thought was a plethora of ideologies, so the most memorable legacy of the twentieth century, if it cannot make democracy work, may end up being the concentration camp. For the concentration camp was invented and given its name at the same time as cubism and quantum physics, by the same civilized Westerners. Its story begins in 1896 with Valeriano Weyler and his *campos de reconcentraci6n*.

Weyler's policy lasted a year and a half. Thousands were dying in the camps by 1898 and in the United States a strong political and humanitarian interest in the Cuban situation had developed. On June 24, 1897, Secretary of State John Sherman had handed a note to the Spanish ambassador in Washington protesting what he called the "policy of reconcentration" of the new governor of Cuba. Editorials in the United States called it "cruel." So did at least one newspaper in Spain—giving Weyler credit, in an August 15 editorial titled "Crueldad española," for "inventing *la concentracion*."² But Secretary Sherman probably knew better than any Spanish journalist how "cruel" Weyler's policies were, for he was the brother of William Tecumseh Sherman, the general who had become famous by marching from Atlanta to the sea and becoming the first to treat civilians as combatants in a modern war. The Spanish knew it, too. With a fine sense of irony, Madrid replied to Secretary Sherman's protest against what Spain was doing in Cuba by calling attention to what the Secretary's brother had done in Georgia and Carolina thirty years before.

We don't know who in the Spanish foreign ministry put that reminiscence in the note, but the odds favor Weyler himself. At the time of the March to the Sea, the future Captain-General of Cuba had been twenty-five, serving as the Spanish military attaché in Washington, and writing home about how impressed he had been by General Sherman's remarkable new interpretation of the laws of war. Civil wars do not teach magnanimity. Later, Weyler had fought in his own civil war, the 1870s Carlist Revolt in Spain. Still later, as Captain-General of Spain's Pacific colony, the Philippine Islands, Weyler had learned even more about the attitudes one takes toward a conquered people. His last job before going to Cuba had been Captain-General of Catalonia, in which capacity he had become the target of a bomb thrown at the Corpus Christi procession in Barcelona. His response had been to order a roundup of some seventy anarchists to be hustled through torture, confession, and drumhead court-martial. Five were executed by garroting. In Weyler's experience, egalitarianism, like generosity, was a fault.

In the event, at the end of 1897 Weyler was removed by the Spanish government, but no one changed the reconcentration policy, despite growing disapproval from what was, even then, world opinion. Finally, Congress and the President of the United States began making a series of demands on Spain. To these Spain replied, and each reply contained further concessions, and each concession had less effect. On March 31, 1898, the Spanish ambassador delivered a note offering to do most of what the United States asked, including putting an end to *reconcentraci6n*. On April 9, Spain even agreed to an armistice in the War of Independence. President McKinley's reply to that, two days later, was to ask Congress to declare the Spanish-American War. Three weeks after that

the United States was in possession not only of Cuba, but also of Puerto Rico and the Philippines, putting an end to the Spanish Empire, the oldest Western colonial empire in the Americas. Deeply disillusioned, Valeriano Weyler returned to Spain to resume his brilliant military career, serving the first of several terms as Minister of War in 1901 and putting down the great Barcelona labor uprising in 1909. He lived until 1930, devoting himself to the training of a new generation of dedicated officers, including a hero-worshipping cadet named Francisco Franco.

In retrospect, the Spanish-American War seems the end of the vintage years for imperialism. Before 1898, empire had had honest advocates, and for more than fifty years colonization as uplift had made sense. After 1898, all the old rationalizations, not to mention all the new events, seemed unable to bear scrutiny any longer. In 1899, after months of serious debate, the United States invoked its long anti-imperial tradition and agreed to set Cuba free; but at the same time it agreed to annex all the other conquered Spanish colonies, including the Philippines, to a new overseas American empire. In 1899, after raiding for three years across each other's borders, the two European uplifters of southern Africa, Dutch and English, went to war against each other. The year of disillusion had begun in February with the magazine serial "Heart of Darkness," Conrad's story of the scandal in the Congo colony. A day or two later, on February 4, 1899, the United States Army opened hostilities against the people of the Philippines in a bloody three-year colonial war that came to be called (by the few who had the stomach to remember it) the Philippine Insurrection.

Both the Boer War and the Philippine Insurrection were wars for independence and survival. The Dutch had been in South Africa long enough to consider themselves native to the place. The Filipinos felt even more native, having been there about 10,000 years. Both fought with deteriorating respect for Western rules of engagement, and after a year of guerrilla war, the English and the Americans had largely abandoned their own commitment to the rules as well. In September 1900, General Roberts reported to General Kitchener, commanding the British Army in South Africa, on a new strategy involving the construction of camps within the disputed areas. They were for "burghers who voluntarily surrender," Robertson wrote on September 3, and were designed (of course) for the burghers' own protection.³ Their builders called them *laagers*, a Dutch-Afrikaans word originally used for a defensive circle of wagons and meaning, roughly, "encampment." One month later, in October, it was the turn of the United States War Department to consider more radical strategies for taking over from the Spaniards in the Philippines. The election in November forced them to shelve the planning, but it went forward again once McKinley had been reelected.⁴

It was only a week or two after election day that the news leaked

to that hotbed of anti-imperialism, Boston, Massachusetts. There it was reported in the *Herald* on November 19 that the Kitchener "plan of reconcentration" in South Africa was being carefully studied in Washington for possible use in the Philippines; and in the *Globe* that the War Department thought the Insurrection could not be suppressed "unless the Filipinos are forced to leave the country districts and settle in the towns where they can be kept under the eye of the military authorities."⁵ As near as we can tell, the first American concentration camps were built for the Filipinos in that month of November 1900, which means that the British were just ahead of the Americans in adapting Weyler's invention. By December 20, when General Order Number 100 on the treatment of civilian "war rebels" was issued by General MacArthur (this was Arthur MacArthur, whose son Douglas was to follow in his and Weyler's footsteps as consul of the Philippines), the "reconcentration camps" were there to receive them.

On the same day, halfway across the world in South Africa, Kitchener issued a memo on how *laagers* were to be designed, with fenced areas and "blockhouses" used as they were in prisons to observe and prevent attempts at escape. By January 1901, *laagers* had been built for Boers at Bloemfontein, Norval's Point, Aliwal North, Springfontein, Kimberley, and Mafeking in the Transvaal. There would eventually be forty-three of them, plus thirty-one more for those the Dutch called *kaffirs*, the original black natives of South Africa.⁶

Thus our century, whether it began in 1900 or 1901, has been from birth the century of the concentration camp. Once the *laagers* were available in South Africa, the generals could dream up new ways of using them. In March 1901, Kitchener conceived a new strategy in South Africa involving "drives" and "bags" of "refugees" to fill the *laagers* and assigned the civilian governor, Milner, to execute it.⁷ By the end of June, Kitchener estimated that over half the population of South Africa was in either the *laagers* or conventional prisoner-of-war camps, and he so reported to Broderick in the War Office with the suggestion that the inmates be deported permanently to South America so that there would be "room for the British to colonize."⁸ By the end of July, Kitchener was pushing for a policy of executing or deporting persistent rebels, and at the end of August he was advocating selling their property to pay the cost of the ever-expanding camps.

It quickly became clear that *laagers* were not exactly for the convenience of "burghers who voluntarily surrender," and that once one got into a *laager* it would be the very devil to get out again. As for those incarcerated in the *laagers*, many had begun to suffer before the first month was out. An appalling death rate established itself during April (the South African autumn) and then proceeded to rise inexorably. By October, published reports put it at 34.4 percent, which included the 60

percent death rate for children.⁹ Because the main cause of death was disease, this was not evidence of deliberate extermination; but to many who did not like it (and a few who did), the rates made it seem hardly less deliberate than a shooting.

We owe most of the foregoing knowledge to an inspection trip by an extraordinary woman named Emily Hobhouse. On December 27, 1900, Hobhouse stepped off a steamship at Table Bay, South Africa, intent on spending the first weeks of the new century seeing what her taxes were accomplishing in the Boer War. She succeeded, and was horrified. "Since Old Testament days," she asked, "was ever a whole nation carried captive?"¹⁰ In a month, she had found her way to the Bloemfontein *laager*, and was intimidating British camp officials into letting her check things out. From there she went from camp to camp for a stay she extended to two full months, sniffing her way to the inadequate rations, the infected water, the primitive sanitation, and the ever-increasing suffering. When she came home, she went right to the press with her neatly written reports and got them into print, bit by scandalous bit, from the end of April to the end of June.

Her timing was exquisite. The Liberal anti-imperialists in Commons had already broached the issue. On March 1, two radical members of Parliament, C. P. Scott and John Ellis, had used the phrase "concentration camps" for the first time in English referring to the *laagers* in South Africa.¹¹ No less than the leader of the Liberal shadow-cabinet, Henry Campbell-Bannerman, soon made a speech at a Party dinner in a London restaurant calling the British camp policies "methods of barbarism," and comparing them to their originals, those of the Spanish in Cuba. Three days later, on June 17, 1901, the Party's rising star, David Lloyd George, rose in the House of Commons to answer Brodrick of the war ministry, stripping the weasel words from the debate and unambiguously branding reconcentration as "a policy of extermination." Replies from the government bench were unconvincing. Tory MP Winston Churchill, elected the year before on the strength of his intrepid escape from a Boer prison in December 1899, knew better than to say anything at all; but then, he was in the habit of getting out of countries just as concentration was about to begin. In 1895 he had accompanied the Spanish colonial army in Cuba, getting out just before Weyler's appointment, and remembering only the thrill, on the day he turned twenty-one, of hearing the shots of rebel Cubans "whistle through the air." On December 12, 1900, when Hobhouse was on the boat for South Africa, Churchill had been lecturing about the Boer situation in New York, trying to ignore the fact that Mark Twain had taken it upon himself in his introduction to call the British war in South Africa the twin of the American war in the Philippines, and to remind the audience that the two aggressors were united in Churchill's ancestry. Churchill's simple Tory militarism might fill halls and sell books;

but the dissent launched by the Liberals in the Commons debate of 1901 was a rising tide, a tide that had much to do with stopping the Boer War and eventually putting the Liberals in power.¹² It seems it was still possible to stop barbarism by bringing it into the light, at least as long as most of its victims were fellow Europeans.

The British Army didn't like it a bit. Hobhouse's reports and their reception were one of the reasons Kitchener pushed harder and harder for deportation and dispossession of rebels in the summer of 1901; but the day when a government could commit atrocities in total secrecy still lay in the future. Besides, Hobhouse was irrefutable. In August the government found Millicent Fawcett, a woman who proved to be clearly in favor of the war and was willing to visit the camps and file a counter-report. Unfortunately Fawcett's figure for the death rate was no better than Hobhouse's (20,000 or more died in the camps from January 1900 to February 1902), and her recommendation to continue the camps, but with better plumbing, arrived too late to turn the tide of opinion.

The spring of 1901 was not much better for the United States Army than it was for the British, though the opposition had no Hobhouse and was never as well informed. Opposition to annexing the Philippines was led by the New England Anti-Imperialist League, a classic Boston institution, and a phalanx of Senators headed by George Frisbie Hoar, a pink-faced Republican radical from Worcester, Massachusetts. Hoar had put himself on record back in 1898 against acquiring the Philippines at all, and was doubly outraged in the next few years to see them being secured by a war against the Filipinos. In January 1901, the League, which had been founded to prevent the acquisition, heard a speech by Gamaliel Bradford describing something called "the water cure," which U.S. troops were now using against captured Filipinos. It was a way of getting a prisoner to talk. To administer the water cure, one inserted a funnel in the prisoner's mouth and poured water down it until the victim "swell[ed] up like a toad" and he either cooperated or drowned.¹³ According to Bradford, the Americans had learned it from the Macabebe minority of the Philippines, who were said to have learned it in their turn from the Spanish Inquisition early in their history as a Spanish colony. On March 30, as Hobhouse was visiting the *laagers*, an aroused League held a mass meeting in Faneuil Hall, Boston, where the abolitionists had spoken two generations ago, and cheered as speaker after speaker denounced the "reconcentration" policy of the United States Army in the Philippines.

Unfortunately, in America the effect of protest was minimal. The Anti-Imperialists were a fringe group and Hoar was rapidly becoming a fringe Senator. The Army listened to neither. After a successful Filipino surprise attack on his troops on September 28, which he dubbed the "Balangiga Massacre," General Jacob Smith introduced "reconcentration" on Samar Island. The *Manila Times*, organ of the elite, endorsed

it.¹⁴ Only later was it learned that Smith's oral order had been to turn Samar into a "howling wilderness." Later, in December, General J. Franklin Bell issued the first of a series of thirty separate orders implementing the "concentration" of nearly 100,000 civilians in the Batangas province of southern Luzon. This figure makes it clear that the Americans were working on the same scale as the British, who, from December 1900 to February 1902, had locked up about 120,000 Boers.¹⁵ On the whole, too (I think), it is the Americans who came closest to turning a resettlement or concentration policy into a policy of extermination. The 20,000 Boers who died in the British camps died almost exclusively of epidemic disease; but we do not yet know how many Filipinos died in the American camps, or how they died.

As a colonial settler state, the United States had a history going back nearly three centuries of dealing brutally with colonized peoples. It was the United States that invented, in about 1834, the reserve or reservation for indigenous ethnic minorities. It was the governor of the American state of Missouri who first suggested, apropos of the Mormons in 1838, that expulsion or extermination was an appropriate policy for fellow citizens, and it was a Missouri militiaman, explaining his execution of that policy on a nine-year-old Mormon boy, who first said, "Nits will make lice." It was an American, Philip Sheridan, commanding general of the U.S. Army, who polished up the thought by observing that the only good Indian was a dead Indian. Indeed, in that year of the Philippine Insurrection, 1901, while the Apache chief Geronimo was spending his fifteenth year of imprisonment at Fort Sill, Oklahoma, General Nelson Miles, whose false promises had induced Geronimo to surrender, was concluding his own career as the Army's overall commander and accepting a final promotion to lieutenant-general.

Of course, there was a debate in the Senate, and after that a Senate Committee to investigate the atrocities in the Philippines. The investigation began in February, hearing from officers and noncoms about torture, concentration, and massacre, and sent many on to courts-martial. It adjourned in June, after the courts condemned several enlisted men to prison and fined and "severely admonished" several colonels and generals. The new president, Theodore Roosevelt, promised a full investigation. He never delivered. He did send a general over to the Philippines to "inspect" the Army's treatment of the Filipinos; but for some reason the general's report did not name very many names or place very much blame. Perhaps this general—Lieutenant-General Nelson Miles—had not been the right man to send.¹⁶ Of course, by then the Insurrection was over, its leader had been captured, and the Americans had won. Besides, it was Roosevelt who, as Secretary of the Navy, had ordered the fleet to take the Philippines in the first place.

"There is no special Providence for Americans and their nature is the

same with that of the others," John Adams wrote in 1787, and John Adams did not think there was a special providence for any other nation either.¹⁷ In 1904 it became the turn, at last, of the Germans, who until then had been leveling withering moral criticism against the uncivilized behavior of the British in the Boer War. Their colony, called South-West Africa, was just north of British South Africa. Their man in charge there, General von Trotha, issued an order on October 2, 1904 that came to be known as the *Vernichtungsbefehl*—the Annihilation Order. Designed to avoid the sort of failure Spain had suffered in Cuba, it required the German troops in South-West Africa, who had just attacked and defeated the troublesome Herero tribe, to hunt them down, drive them past barbed wire into the waterless Kalahari Desert, and exterminate them if they came back. The troops did their best: estimates conclude that only 15,000 Hereros remained out of a total of 80,000 after their work was done. Forced to retract his order in December, von Trotha provided two concentration camps, where survivors were branded and put to forced labor nearby; but the massacres had already happened, and most of the Hereros who were to die had already done so by the time the camps were opened.¹⁸

In 1904, when Adolf Hitler was sixteen, extermination and concentration were still separate policies. Eight years later, for example, in 1912, a private entrepreneur seems to have become the first to use concentration camp inmates specifically for forced labor. This was Julio Arana, the South American rubber baron, who employed a private army of Barbadian blacks to round up nearly 30,000 of the 50,000 Indians of the Bora, Andoke, Huitoto, and Ocaina tribes, put them in camps, and use them as slave labor in the rubber harvest. It was said that before he was stopped, there were fewer than 8,000 Indians remaining along the Putumayo River between Peru and Colombia, and that the rubber Arana produced was costed out at seven lives per ton; but this, it could be argued, is more carelessness than policy.¹⁹

The problem of definition cannot, I think, be reduced to a question of scale. The famous Turkish extermination of the Armenians, which had been adumbrated already in 1909, got under way in earnest in 1915 as Turkey lumbered into World War I. An order may have come in a cipher telegram from Enver Pasha to his provincial army commanders on February 27.²⁰ The Turkish method was to send military units from village to village, drive the Armenians out onto the roads as refugees, and then massacre them in the countryside. In cities, they simply laid siege to the Armenian neighborhoods, or if necessary, to the whole city. The precedent it set for the appalling future was in the use of neighborhoods as temporary prisons and in the understanding of how much easier it was to kill moving refugees than rooted villagers. Although there is a cave near a place called Deir ez Zor that was used at the end of one march to

store prisoners until they starved, no "camp" seems ever to have been planned for the Armenians. It was not the technique of concentration that made this massacre the largest so far (at least eight hundred thousand and probably more than a million killed), but military technology, organization—and sheer ruthlessness.²¹

Next after the Turks came their ancient enemies, the Russians. Under the Czars, Russia had become expert at handling national minorities through ethnic repression and by applying the old Turkish policy of divide and conquer. It was the homeland of the pogrom, or officially sponsored anti-Semitic raid. After the Revolution, though official sponsorship was withdrawn, the pogroms did not stop; and the first concentration camps appeared. The order was Leon Trotsky's, dated June 4, 1918, proposing "concentration camps" for insubordinate Czechs. In August, Trotsky ordered two "concentration camps," in Mourom and Arzamas, for a mixed bag of offenders, including "underhanded agitators, counter-revolutionary officers, saboteurs, parasites, and speculators." That same week, Lenin ordered "massive terror" against kulaks and white guards in Penza and added, "Lock up doubtful elements in a concentration camp."²² Ethnic minorities were not included in these August orders, which means the term "concentration camp" had clearly acquired, in Russian, an additional, penological meaning.

It is, however, to the Russians that we owe the final conflation of concentration and extermination. It dates rather precisely to an order given not by Lenin or Trotsky, but by the man who ended up in charge of all these new penal institutions demanded by the Revolution: Felix Dzerzhinsky, the head of the secret police. On September 17, 1918, eager to open up more space in the camps and convinced that the fact of being in a concentration camp in the first place was evidence of treason to the Revolution, Dzerzhinsky ordered the "liquidation of suspended affairs." He meant the killing of every prisoner whose case was under investigation.²³ A few months later, after the protests within the Communist Party had been settled, Dzerzhinsky was made People's Commissar of the Interior, and his Cheka was given official control of the entire metastasizing network of concentration camps, including the right to put people into them and, it was understood, the right to put people out of them, dead or alive. In April 1919, the Central Committee defined two kinds of camps: "forced-labor camps" for those who had been sentenced as criminals, and "concentration camps" for those who had not faced a trial but were merely "administratively detained." In May, Dzerzhinsky followed it up with a decree that there would be one camp in each province of the new Soviet Union, each holding at least 300 prisoners in one of 16 categories.²⁴ Some of those categories were individual, many were class or economic, and a few (a very few) were essentially ethnic. By the end of 1919, they were part of the fabric of the Soviet Union.

These camps survived Dzerzhinsky and all but the last of his sinister successors in the commissariat of state security. In the late 1930s deaths from disease and malnutrition in the camps were probably exceeded by deliberate executions. Inmates in the 1950s, like Solzhenytsin, referred to them as the “Gulag Archipelago.” When Hitler and Himmler opened their first camps (Oranienburg, Dachau, and Columbia House) in 1933 and 1934, the first two years of his Chancellorship, their most important models were the labor camps in Russia, then beginning a major expansion under Stalin. True, they thought they knew what had really happened to the Armenians, thanks to the publication in 1920 of the purported extermination order of Enver Pasha, and they even knew of official Germany’s complicity in the crime of her Turkish ally, thanks to the publication in Russia in 1918 of the papers of a murdered German socialist. Nevertheless, they had not yet designed for extermination, and would not until after Hitler’s oral order of January 21, 1939. That order was followed seven months later by Hitler’s invasion of Poland and the Führer’s famous question, “Who talks nowadays of the extermination of the Armenians?”²⁵ If they had any usable memory of the *campos de reconcentraciòn*, the South African *laagers*, the Philippine concentration camps, or even the Herero massacre, it has not so far shown up in the documents. The concentration camp, with a built-in auxiliary capacity for extermination, was now a general, noncopyrighted product of Western civilization, and, as it happened, soon to be available to the entire world. To historians, who have seen it used since by the Japanese against the Taiwanese and Koreans, by the descendants of the Boers against the Africans, by the Kenyans against their Indians, by the Khmer Rouge against their city-dwellers, and even by the Israelis against the Lebanese Moslems, it was not surprising to see it used by the Americans against the Nisei in 1941, and it is more than irony to see it used by Europeans once again against each other in the Balkans.

The West’s invention of the twentieth century’s classic political weapon has left our culture with a bad conscience. Resolution can only begin with words like those that old Calvinist John Adams could not resist putting into his *Defence* of the American constitutions: “There is no special Providence for Americans, and their nature is the same with that of the others.”



SIGMUND FREUD

TIME REPRESSED AND EVER-PRESENT

1899

On the fourth day of the new year, 1899, Sigmund Freud wrote to Wilhelm Fliess, his intimate friend, confessor, and scientific sounding board, “today I cannot go on writing along the lines I intended because the thing is growing. There is something to it. It is dawning.”¹

Freud was at his desk on the second floor of Berggasse 19, the mezzanine floor below his apartment, trying to find something beyond his livelihood as a doctor that would bring him recognition as a scientist. For seven years he had spent most of his late evenings here alone, smoking and scratching away with a steel-point pen at articles for medical journals. Before him were the ashes of spent cigars and a large, disorderly, steadily growing manuscript that he called the “Egyptian Dream-book” and sometimes just “the Dream.” He had been thinking about it for six years. In 1897 he had begun putting it on paper and given it a working title: *Die Traumdeutung*—giving meaning to dreams. Six months ago Freud had put the manuscript away in a drawer; but in this wintry first week in January 1899, he pulled it out again. One of his memories—two boys and a girl eating fresh bread near a field full of dandelions—had just proved to be in the wrong place in time, projected from his early childhood (when it had really happened) to his teens. In its new place it had acted like a screen, veiling a youthful sexual longing that he hardly remembered at all. This discovery of what Freud decided to call a “screen memory” was no more strange and counterintuitive than so many other discoveries he had been making since beginning his psychotherapeutic practice in 1886; but this was the one that brought *Die Traumdeutung* out of the drawer and onto the desk for good. He began a short paper on it, centered on a dialogue between Doctor Freud and himself disguised as his own patient, a sly transformation of confession into case history that pointed toward a new and final form for the “Egyptian dream-

14 MEET ME IN SAINT LOUIS

MODERNISM COMES
TO MIDDLE AMERICA

1904

The lyrics to “Meet Me in Saint Louis” came to songwriter Andrew B. Sterling one evening in New York City in 1904. He was in a Broadway saloon when someone hailed the barman for another beer. The barman’s name was Louis, the beer had been brewed in St. Louis; and what Sterling heard was, “Another Louis, Louis!”

Meet me in Saint Louis, Louis,
Meet me at the Fair.
Don’t tell me the lights are shining
Any place but there.
We will dance the Hoochee Koochee,
I will be your tootsie wootsie,
If you will meet me in Saint Louis, Louis,
Meet me at the Fair.¹

St. Louis, Missouri brewed a lot of beer, and a lot of it was drunk in New York. If the beer was draft, it was probably Busch; if bottled, probably Budweiser. Leading St. Louisan Adolphus Busch, who had named his company after himself and his wife Lilly Anheuser, had pioneered the sale of pasteurized beer in glass bottles in 1876. By 1904 he was one of the nation’s richest men, and bottles of his Budweiser could be bought almost anywhere in it.

Sterling’s lyric began with Louis and his wife, Flossie, New Woman enough to run away to the St. Louis World’s Fair.

When Louis came home to the flat,
He hung up his coat and his hat.
He gazed all around, but no wifey he found,
So he said, “Where can Flossie be at?”
A note on the table he spied,
He read it just once, then he cried.

It ran: “Louis, dear, it’s too slow for me here,
So I think I will go for a ride.”
“Meet me in St. Louis, Louis, . . .”

New Yorker Kerry Mills wrote the melody that has helped make Sterling’s verse immortal, and it is the song, revived for a movie in 1944 and for a musical in 1993, that has done the most—even at home in St. Louis—to keep the memory of the great World’s Fair green.

St. Louis itself has faded a bit since 1904. Even in that year it had already passed its peak, as Americans measure peaks, in population and wealth. “The first time I ever saw Saint Louis, I could have bought it for six million dollars,” wrote Mark Twain, “and it was the mistake of my life that I did not do it.”² The Louisiana Purchase Exposition—the world’s fair—was intended to commemorate the hundredth anniversary of President Jefferson’s purchase of the vast territory of Louisiana from its original colonizers, the French, in 1803. In the sixty years that followed it, the Purchase had made St. Louis the principal gateway for the great imperial movement of the United States westward toward the Pacific and Asia. It had been to the 1860s what Los Angeles became to the 1960s. Only a slight delay in St. Louis’s railway construction had given the edge to Chicago after the Civil War. More recently, Milwaukee, Chicago, and Philadelphia brewers, adopting Anheuser-Busch’s glass-bottle, pasteurized-beer process wholesale, were out-exporting St. Louis from second to fifth place in beer sales, and the city’s great tobacco packers were being bought out by an Eastern monopolist. On the eve of the Fair, Lincoln Steffens had published an article on St. Louis in his “Shame of the Cities” series in *McClure’s*, and St. Louis was having to face the fact that in the matter of municipal corruption, as in professional baseball, it was in the big leagues.

St. Louis at the turn of the century was the nation’s fourth most populous city after New York, Chicago, and Philadelphia, and one of its five richest; but perhaps it was the nagging suspicion that St. Louis would never be those things again that induced its civic leaders to bid against Chicago for the Columbian Exposition of 1893 and to win the next World’s Fair for themselves. St. Louis was unquestionably fit for the role. It was a real city, with a coherent commercial aristocracy serving as a fount of classic civic pride. It had taxed itself for a third of the Fair’s symbolic \$15 million price tag, the price Jefferson had paid for Louisiana. St. Louis was also a very Western city, looking up the Missouri River over the Great Plains to the Rocky Mountains, whose merchants had equipped every sort of emigrant from cowboys and farmers to gold diggers and sheepmen. Custer had passed through it on his way to the Little Big Horn in 1876, probably without pausing to reflect on the bones of the once prosperous Mound-Builders that lay beneath his feet; and it was

the war he began with the Sioux that had ended St. Louis's sixty years as the western outpost of Western civilization. Finally St. Louis was a thoroughly American city whose neighborhoods were a palimpsest of successive tribes of immigrants. Ethnic layering is not what the French poet Baudelaire had meant to refer to when he coined the word *américanisé* during the Paris World's Fair of 1855; he meant instead the industrial progress that homogenized traditions, speeded up manners, and concentrated men and women into masses—or sometimes the unmannerly freedom of settlers on a frontier. Still, no matter how industrial St. Louis was and no matter how close to its frontier past, it was the city's bubbling mix of peoples that today seems most American. Of 575,238 St. Louisans in 1900, 19.7 percent were foreign-born and 41.6 percent had foreign-born parents. Only six American cities had more immigrants than St. Louis.³

Its founders had been French, many of them emigrés from the Haitian Revolution who had come via New Orleans. They were no longer “foreign-born”; but there had never been very many of them, even a hundred years before when the city became American. The Irish had come in much larger numbers after the 1840s. By 1850 revolutions in Germany had sent the city enough Germans to completely supersede both French and Irish. Newspapers were still printed in German in 1904, and from 1864 to 1887 the city's own German-language primary schools had defied Missouri's ban on bilingual education. All three of these ethnicities, plus the numerically smaller Italian, Polish, Czech, and Slovak communities, had contributed to making St. Louis one of a Protestant nation's most Catholic cities. *The Awakening*, by St. Louis writer Kate Chopin, was the sort of story such a city could both engender and execrate: a creole wife who takes a lover and leaves her husband and children. St. Louis made Chopin a pariah when the novel appeared in 1899, and in 1904 she died of heart failure after her first visit to the Fair.

If St. Louis had a hometown writer in 1904, however, it was not Kate Chopin but Mark Twain. By 1904 Mark Twain had been just about everywhere on earth, but his life had begun on the Mississippi about 130 miles upriver from St. Louis, and piloting riverboats had been his first profession. In 1902 he had been invited back to St. Louis to dedicate a part of the World's Fair grounds and to help give a new name, *Mark Twain*, to the old steamboat *Saint Louis*, but that was at least his third time back. His most enduring book, *Huckleberry Finn* (1884), was a comic autobiography whose axis was the River; and as it was being printed, Twain had been in St. Louis reading parts of it to paying audiences. *Huckleberry Finn* was “a masterpiece,” thought T. S. Eliot, but Eliot, who had grown up in St. Louis, had Yankee parents who had forbidden him to read it.⁴ The Mississippi River, as Twain saw it in 1884, “from end to end was flaked with coal-fleets and timber rafts;” while

Eliot, sixteen in 1904, and just gone east to boarding school, would remember a “river with its cargo of dead Negroes, cows and chicken coops.”⁵ To “Huck Finn's autobiography,” Twain's incipiently Modern monologue, Eliot would add a modern monologue of his own, “The Love Song of J. Alfred Prufrock”; but not until 1910, by which time he would have read Laforgue and gone to Paris.

Twain loved the Mississippi, except when it came through a faucet. The drinking water in St. Louis was, he wrote, “too thick to drink and too thin to plow.” “A score of years,” he wrote after his 1884 visit, “had not affected this water's mulatto complexion in the least. . . . It comes out of the turbulent bank-caving Missouri, and every tumblerful of it holds nearly an acre of land in solution.”⁶ Such richness had undoubtedly played a large part in giving St. Louis its taste for beer. Nevertheless, for the millions of visitors it expected for the great Exposition, St. Louis was prepared to provide something better. On March 21, 1904, a new filtration plant north of the city came on line, coagulating and settling the Missouri silt with large doses of ferrous sulfate and milk of lime, and the first clear drinking water in the history of St. Louis began to run out of the taps. The Fair could begin, on schedule, a month later.

When the Louisiana Purchase Exposition was opened to the public on April 30, 1904, President Theodore Roosevelt was not on hand. Remembering, perhaps, that he had come to the presidency because an assassin had shot William McKinley at a Fair in 1901, the president instead stood up in Washington, D.C. and pressed a gold telegraph key. Simultaneously (that is, five thousandths of a second later), the lights went up on the largest World's Fair site ever assembled (then or since)—nearly two square miles in Forest Park and the Washington University campus, including a central complex of exhibition buildings called the “Ivory City;” a mile-long amusement midway called “St. Louis Pike;” and the Fair's technological centerpiece, a great complex of electrically illuminated fountains, artificial waterfalls, and watercourses called “The Cascade Gardens.” On the podium as the Cascades were lighted, David R. Francis, the Fair's tireless fundraiser, intoned, “Enter herein ye sons of men.” Representing Roosevelt was his Secretary of State, John Hay, author of the Open Door Notes to the great powers on China, and Hay's old friend Henry Adams, who had by now become something of a collector of international expositions.

Adams had just published *Mont Saint-Michel and Chartres*, an extended meditation on the cathedrals and how the spiritual sources of energy that had built them might stack up against the gargantuan power generators he had seen in Paris in 1900. “The new American . . . was the servant of the power-house, as the European of the twelfth century was the servant of the Church. . . . The St. Louis Exposition was its first creation in the twentieth century, and, for that reason, acutely interesting.”⁷

Adams was in St. Louis to peer once more into the future, and to try to understand the twentieth century he knew he would not long inhabit. What he saw instead with increasing clarity was how the mental world of the nineteenth century had run down. He had just finished reading the new 1900 edition of Karl Pearson's *The Grammar of Science*, which strictly limited physical science to operations with phenomena—mental manipulation of mental events.⁸ In *The Grammar of Science*, Adams read that “in the chaos behind sensations, in the ‘beyond’ of sense-impressions, we cannot infer necessity, order or routine.”⁹ Pearson led him on to Ernst Mach, who had made the same points in Vienna and undermined the nineteenth-century *summa* of Ernst Haeckel, who still clung to his faith that the universe was at bottom composed of only one substance.¹⁰ The French polymath Poincaré also had a book in print suggesting that science was convention rather than reality. Mach, Pearson, Poincaré, and Wilhelm Ostwald had convinced Adams that the singleness of mind he so yearned for, and which nineteenth-century science had made so difficult to achieve, was in the next century doomed to become impossible. Not only would Complexity replace Unity; matter itself would become a philosophical construct and “the kinetic theory of gas . . . an assertion of ultimate chaos.”¹¹ In this state of mind Adams came to St. Louis, “a third-rate town . . . with no tie but its steam-power and not much of that,” and watched it “thr[o]w away thirty or forty million dollars on a pageant as ephemeral as a stage flat.” As the lights went on, he mused, “The world had never witnessed so marvelous a phantasm . . . with its vast, white, monumental solitude, bathed in the pure light of setting suns.”¹²

Adams left for Paris before the month was out. He had not quite perceived what the new world would bring, the modern become Modernism. Of course the Fair, like so many fairs, tried very hard to look forward, and there was in every exhibit an attempt at what the 1939 New York Fair would call “futurism.” In retrospect, however, the only certain leap into the future at the St. Louis Fair came at the very end of its last conference, when Henri Poincaré, who had been the keynote speaker in three separate Congresses in Paris in 1900, spoke on the “crisis” of current physical theory. Within six months of his talk Einstein would show just how far Poincaré had managed to see into the next century—and how narrowly he had missed becoming its Newton.

In the meantime, the Fair made at least one contribution to twentieth-century culture that still passes for permanent. As the hot continental summer came to the Pike, it suddenly occurred to ice cream vendors, who usually sold the delicacy in dishes accompanied by a French waffle-baked cookie, to try rolling the waffle into a cone and serving the ice cream inside it. The “ice-cream cone” has proved as enduring as the earlier “ice-cream soda,” but no more so than George W. Ferris's 250-

foot Wheel, which had first appeared at the Chicago Fair of 1893 and was back by popular demand at St. Louis. On the Pike where the Ferris Wheel was set up, there were diving elephants, visits to the moon, alpine climbs, Jim Key the educated horse, and daily reenactments of the Galveston Flood, the Battle of Santiago de Cuba, Custer's Last Stand, and the Boer War. Exclusive rights to film the Fair had been secured, to the dismay of Edison's western distributor, by Biograph, and the results could be seen at the moving picture exhibits on the Pike. (Downtown St. Louis had only one movie house in 1904, the brand-new World's Dream Theater.) The obligatory Near Eastern exhibit, “Cairo,” with twenty-six buildings and a bazaar, suffered from the absence of Fatima, the dancer who had stolen the show in Chicago with “hoochee-koochee,” and who, in spite of “Meet Me in Saint Louis,” had been prohibited from belly-dancing in St. Louis. (Undaunted, she had opened in Coney Island under the name of “Little Egypt.”)

The St. Louis Fair did better with mass culture than it did with class. One of “The Eight,” William Glackens, won a silver medal for what the East Coast would later dub the Ashcan School of American art; but the newest, “post-impressionist” art was hardly there, any more than it had been in Paris in 1900 while Matisse was decorating the hall where Picasso's last academic painting would be hung. Forty-five of the United States had separate exhibits at the Fair, and forty-three nations; but of all of them only the Austrian Pavilion showed any systematically Modern design. Gustav Klimt's Vienna University mural, *Jurisprudence*, had been cut from the Austrian exhibit as too stark and explicit, and there was as yet no cubism, or even fauvism to speak of; but there was one altogether original artist exhibiting there: Frantisek (or Frank) Kupka, born in the Austrian provinces near Prague and now living in Montmartre (since 1895 or 1896). An anarchist and a mystic, Kupka had just met Marcel Duchamp and was already on his way toward the invention of nonobjective art. Also on display in the Austrian pavilion were designs for interiors that Koloman Moser and his students from the Vienna Kunstgewerbeschule had made in 1901. Everything in Forest Park was in the old Beaux-Arts style, in spite of the fact that St. Louis had had at least one Chicago-style skyscraper since 1890—Louis Sullivan's 135-foot, steel-skeleton Wainwright Building, and there was at least one tomb designed by Sullivan in Bellefontaine Cemetery. Louis Sullivan and his colleague Frank Lloyd Wright had said the Chicago Fair had set back the development of modern American architecture by a generation. St. Louis proved their point—to an extent Wright himself may have ruefully assessed when he visited the Austrian pavilion to marvel at the designs of Joseph Maria Olbrich, the architect of the Vienna Sezession. Already Adolf Loos, who had visited Chicago in the year of its Fair, was putting up buildings with a spare Modernist look in the middle of old Vienna.

The St. Louis that had built the Ivory City and cultivated the approval of Europe studiously avoided any mention of Dred Scott, the slave who had lost his freedom in its courts. Its baseball team, the Browns, had inaugurated the racial segregation of the professional game by refusing to play mixed-race teams in 1887. The city could scarcely be brought to admit that more than 35,000 of its citizens were black, or that black neighborhoods like Mill Creek Valley, Chestnut Valley, and the old waterfront's Biddle Street existed. In spite of official silence, something was brewing in those neighborhoods that would prove even more exportable than beer, and might fairly be called the city's largest single contribution to the arts of Western or any other civilization—jazz. In 1904 the new word "jass" was not yet its name. It was still a music formed of a series of fusions between Western and West African, some of which went as far back as the creolized common languages of the slaves of the West Indies, and some of which were as recent as the infiltration of the guitar from Mexico into Texas at about the same time as the boll weevil. The complicated, largely oral history of all these fusions, combining everything from melody and tonal scales to performance practice and rhythm signatures, has been giving musicologists something to argue about for half a century. About the only thing certain is that all of them have involved transmission up and down the Mississippi among most of the towns and farms in the great basin once called *La Louisiane*. Here field hollers and festival dances mothered in Africa could meet the mainstream's most popular music—brass band marches, Protestant hymn tunes, and sentimental waltzes like "Meet Me in Saint Louis"—in a fertile region where the combination could hope to bear fruit. As racial segregation began to become law in the 1880s (and the first phonograph recordings began to be made), Mississippi River cities like New Orleans, Memphis, and St. Louis, creole and formerly slave, became known as places where people who called this music "low-down," and could not make it themselves, could at least go down and hear it. In 1892 W. C. Handy, down and out in St. Louis, heard "shabby guitarists" sing a tune he remembered calling "East St. Louis."¹³ With a one-line verse of less than twelve bars it wasn't formally a blues, but others like it with three-line verses and flatted thirds and sevenths, including "One Dime Blues," "Red River Blues," "Jim Lee Blues," "Crow Jane," and "Sliding Delta" were then making their way toward the American mainstream.¹⁴ Between 1909 and 1914 Handy would write and publish three blues of his own, the third being the instant classic "St. Louis Blues." A decade after Handy's discovery, the performer Gertrude ("Ma") Rainey made a similar one. Working a tent show near St. Louis, she heard "a girl from town" sing a "strange and poignant" song. "It's the Blues," the girl told Rainey, and Rainey began to perform the Blues.¹⁵ When "St. Louis Tickle" was published in 1904, its tune already had a long history, beginning with Mississippi River

roustabouts from New Orleans to St. Louis. It would be no surprise to see it turn up years later in Jelly Roll Morton's "Buddy Bolden's Blues."¹⁶

In a town like St. Louis, you could even hear the new music under a roof, at the Rosebud Café at 2220 Market Street, near where Frankie had shot Johnny,¹⁷ or the Booker T. Washington Theater, or the New Douglass Hall, or at one of the attractions of St. Louis never described in World's Fair brochures—the Castle Club, usually referred to by its madam, Babe Connors, as a "sporting house." In September 1895, the white singing star May Irwin premiered a number she called the "Bully Song" in a show called *The Widow Jones* at New York's Bijou Theatre.¹⁸ The lyric was in something then called "negro" dialect and the music was "stride," "jig," or "barrelhouse." Irwin, who made the song her signature in succeeding years, always claimed she had learned it from a ragtime guitar player on the San Francisco to Chicago train in 1894; and that the guitarist in turn had learned it from a singer named Mama Lou who sang it at the Castle Club.¹⁹

Fairs, whether county or world's, always attracted music, and those in the Mississippi basin tended to pull in the scattered and itinerant artists who made the earliest jazz, whether or not the fairs sponsored the music. At the Chicago World's Fair in 1893, ukelele players from the recently annexed territory of Hawaii inadvertently passed the sliding-stop technique on to guitarists like Blind Lemon Jefferson.²⁰ Outside the fairgrounds, *The Creole Show* had played at Sam T. Jack's Opera House, the first black-run show with black performers that was not a minstrel show. Not far away theatergoers could hear the great black musicians, soprano Sissieretta Jones and violinist Joseph Douglass.²¹ "Sporting house" entertainers gathered from all over the Mississippi valley to play on the "Midway" (the Chicago Fair's amusement mall), or at houses like Pony Moore's at 22nd and Dearborn in the red light district. Among them was a young composer-entertainer named Scott Joplin. In the city of Chicago, or on the Chicago fairgrounds, called "The White City," where the only restaurant or toilet facilities available to him were in the Haiti Pavilion,²² Joplin earned his keep playing "jig" piano, using tunes then loosely called "cakewalks" after the black dances that parodied the white "promenade" steps. They sounded something like a broken- or double-rhythm version of the marches John Philip Sousa's Marines performed daily on the World's Fair bandstand.

Eleven years later at the St. Louis Fair, Joplin was better prepared. He had been in St. Louis as far back as 1885, when he played jig-piano at a "joint" called the Silver Dollar Saloon owned by "Honest John" Turpin. Born in Texas in 1868, the child of freed slaves, Joplin had come up the Mississippi in his teens and made himself a Missourian, defining a route later followed by Jelly Roll Morton and King Oliver. After the Chicago Fair closed he had gone to the central Missouri town of Sedalia,

where he combined gigs at the Maple Leaf Club with studies of music theory at George R. Smith College for Negroes, and where, a year later, he had published his first two songs. In 1896 he had started in Sedalia what seems to be the first band ever to play "ragtime;" and in 1897 he had written "Maple-Leaf Rag," the rag that had hit the charts and defined the style when it was published in 1899. In the next ten years, a time when most American music came out of parlor pianos and local bands and choruses, "Maple Leaf Rag" sold 500,000 copies, making its Sedalia publisher rich and giving Joplin a chance to get married and move straight down the Missouri River into St. Louis. In the years before the World's Fair the country was just about convinced that Joplin had invented ragtime. He hadn't really. Even in St. Louis there were rag composers who had beaten him into print, like Honest John Turpin's son Tom, the three-hundred-pound black proprietor of the Rosebud Café.²³ In polyglot New York City, Ben Harney, whose race no one was ever allowed to determine, had performed ragtime at Tony Pastor's Music Hall in 1896; and in Tin Pan Alley down around Union Square, whites had already found the beat and tried to pick it up.²⁴ Kerry Mills had written and published his own rags seven years before he found his melody for "Meet Me in Saint Louis," and in 1904 Charles Ives, an insurance executive who moonlighted as an organist and composer, was finishing something he called "Ragtime Pieces (Dances)."²⁵ Further downtown at "Nigger" Mike Kelley's Pelham Café in Chinatown, a newly hired Jewish singing waiter named Israel Baline was drinking it all in in 1904, assembling the makings for the international hit "Alexander's Ragtime Band," which would make his name as Irving Berlin in 1911.

But Scott Joplin had probably written the most rags of all—three in 1904 alone.²⁶ Moreover, Joplin was in St. Louis, where ragtime had been born, and where, on February 22, 1904, a "cutting contest" of ragtime pianists (won by a hometown genius named Louis Chauvin) had opened the year of the Fair.²⁷ Of course, Joplin had other musics in mind. Soon after moving into St. Louis Joplin had gone back to studying the likes of Beethoven with a German-born St. Louis conductor, with the idea of colonizing musical forms he took to be more demanding, more Western, and more respectable. His aspiration, familiar to many creators of this American music of fusion, had resulted in the premiere of Joplin's first opera, *A Guest of Honor*, performed by "Scott Joplin's Ragtime Opera Company" in St. Louis a few months before the Fair. It failed; but its failure had not discouraged Joplin. When the World's Fair opened, he was there with his piano and his pen writing a rag called "Cascades" to commemorate the Fair's symbolic centerpiece. Ragtime meant exactly that in 1904—a tearing up of the standard pop music beat (4/4 and occasionally 3/4 time) into smaller bits of not always equal sizes and stitching them back together again to allow polyrhythm and syncopation. The

name "stride" piano was attached to it because of the strict pace or stride kept by the left hand while the bits and syncopations were played counter-rhythmically by the right. You could march to it if you had to, but its real message was a dance. At the Fair, Joplin's own performance of "Cascades" must have been easier to understand than the one by Sousa's Marine Band.

We do not know whether Scott Joplin could find a place to eat or to go to the bathroom in Forest Park. The odds are he could, but the circumstances may have been worse. The Louisiana Purchase Exposition's exhibits had been planned by Frederick J. V. Skiff to illustrate the "development of man," and Skiff was convinced that the course of this development had culminated in the worldwide expansion of Western races and cultures. He had hired the leading Americans in the young field of anthropology—William McGee, Ales Hrdlicka, and Franz Boas—to provide for Fair visitors a living museum of the differences between the races and cultures of humankind. This took the form of the largest encampment of the world's non-Western peoples ever assembled, considerably larger than the one Henry Adams had seen in Paris in 1900. At the height of the West's imperial moment in the world's history, looking out over the Great Plains that had been cleared of Sioux and Cheyenne only a generation before, from a site that had once been a Mound-Builder capital, the encampment was a thinly veiled monument to Western victory; and behind its fences it bore disturbing resemblances to a human zoo. There were Inuit from the Arctic, Patagonians from near-Antarctic South America, "Hairy" Ainu from northern Asia, Zulu from southern Africa, a Philippine negrito dubbed the "Missing Link," and no less than fifty-one different tribes of Indians, together with such chiefs as Quanah Parker of the Kiowa, Chief Joseph of the Nez-Percé, and Geronimo of the Chiricahua Apache, who was not a "guest" but a prisoner of war. "Natives of North America," one called these chiefs, though the continent was named in none of their languages, any more than Africa had been named in Zulu or Asia in Ainu. At one point a "Wild West Indian Congress" was held among the representatives of the fifty-one Tribes, although (fortunately, perhaps, for the anthropologists) no American Indian union emerged from it. Later in the year Chief Joseph of the Nez-Percé would die in the state of Washington twenty-seven years after he had surrendered his exhausted people to the U.S. Army.

The Philippine Islands, newly pacified by the United States, were assessed more than 1,100 natives by the U.S. War Department. Members of several of their indigenous peoples, including Moro, Bagobo, Visayan, and Igorot, were deconcentrated from the Philippines in order to be re-concentrated on a 47-acre military-run reservation right on the fairgrounds. The Igorots' native costume, or lack of it, so fascinated the press and public that President Teddy Roosevelt felt it necessary to order that

the tribe put on clothes in order to avoid the charge that the United States was failing in its duty to "civilize" the Philippines. At about the same time this order was issued, in mid-June, a ship docked in New Orleans carrying a certain Samuel P. Verner, a Protestant missionary turned African explorer, sent up the Congo River by the Fair's anthropology department nearly a year before to bring in a dozen central Africans. Near Stanley Pool, he had found three Baluba tribesmen and five Batwa, or pygmies, one of whom, Ota Benga, he had bought from a Baluba for a few bolts of cloth at what amounts to a slave auction. After landing at New Orleans, the travelers entrained for St. Louis, and Verner delivered his eight Africans the last week in June. For Verner, the trip up the Congo had been much easier than it had been for Joseph Conrad in 1890, and any resemblance to a heart of darkness seemed to have escaped him. The pygmies, as everyone called them, were a great hit with the public.

So was Geronimo. The press referred to him as the "Human Tyger," but he wept upon meeting a long-lost daughter and made an arrowhead as a gift for Ota Benga. He also rode the Ferris Wheel, saluted the American flag, and took a part in the periodic reenactments of Custer's Last Stand on the Pike. Will Rogers, the part-Cherokee comic whose career in vaudeville began with a bit part as the last cavalryman to die in the Last Stand, remembered Geronimo playing the juicy role of Chief Sitting Bull to perfection.²⁸

But first came the Olympic Games. St. Louis had gotten them too, as Paris had in 1900, the third in this lengthening series of exercises in internationalism. On July 1, track and field events began at Francis Field, the stadium of Washington University, whose new campus next to Forest Park had been temporarily lent to the Fair.²⁹ Archibald Hahn, "The Milwaukee Meteor," won the hundred-meter dash in 11.0 seconds, and his U.S. team went on to win eighty gold, eighty-six silver, and seventy-two bronze medals, better than any other. Second in these unofficial standings was Germany, with five gold, four silver, and six bronze medals. Third with five, four, and six respectively was Cuba, whose independence had just been guaranteed—somewhat reluctantly—by the United States Senate. As the Games dragged to a close on November 23, it was clear to at least a few that the home team's victory had not been entirely pure. Only twelve nations, all told, had participated, and Hahn had won his hundred meters against a field of only five other runners, all Americans. When the United States swept the tug of war, it had done so by fielding four separate teams against opponents who had only one apiece. Team depth insured a U.S. sweep in three kinds of tennis, roque (a sort of croquet), and team golf—Canada's gold-medal individual golfer being unable to stem the tide. The last ignominy came when a lone Cuban came in fourth in the marathon with only his street shoes to race in, while the American gold medalist was found to have hitched a ride in an automobile and had

to return his prize. From all these sports women were blandly excluded, though they had played Olympic tennis in Paris in 1900. The six women athletes at the 1904 Games (as against 681 men) were there only for the four archery events. In histories of the Olympic movement, St. Louis often figures as the low point.

But the St. Louis Olympics had a low point all their own. The Fair called them the "Anthropology Days." On August 12, all those whose misfortune it had been to be part of the great ethnic exhibit were pitted against each other in a meet of their own. The organizers (all white) seem to have conceived of this intercultural Olympics as a way of determining the differing fitnesses of the races of humankind. George Poage of Milwaukee had won the first Olympic medals ever awarded to a black man—including a silver medal in the high hurdles—so perhaps it preserved self-esteem all around to give the ethnics their own "games." In the event, a Negrito won the pole climb, a Crow the mile run, Patagonians the tug-of-war and the baseball throw, and Sioux the running high jump, the quarter-mile run, and the hundred-yard dash.³⁰ The "Pygmies" were set up in an intramural mud fight. A Moro from the Philippines took the javelin throw (the Pygmy who came in second gave Fair anthropologists much to think about), a Chippewa the low hurdle, and Cocopa Indians the archery and something called the distance baseball kick. Geronimo, who did not compete, looked on impassively from the bleachers. No Fair facilities were officially segregated, as they had been in Chicago in 1893; but the larger point was made in these "native" olympics.³¹ The future of racial separation seemed both secure and universal.

Soon after the Olympics had opened, the Democratic National Convention came to St. Louis. The city had lobbied hard to add the Convention to its banner-year list, and although the result was a bit of a bust for the city, it had many meanings for one of the delegates, William Jennings Bryan. His career as a left-wing agrarian reformer from the Great West had been made in St. Louis in 1896 when the radical People's Party convention had nominated him for president, seconding the Democrats. His Republican opponent, McKinley, had also been nominated in St. Louis. In 1900, across the state from St. Louis in Kansas City, the Democrats had nominated Bryan again, seconding the Populists. Despite two nominations, Democratic and Populist, Bryan had lost to McKinley in 1896, and again—very badly—in 1900. In a children's book called *The Wonderful Wizard of Oz*, published during the 1900 campaign, Bryan had been a model for the wizard. At St. Louis, on July 10, 1904, the Democrats chose Alton B. Parker to run against Theodore Roosevelt, perhaps the surest loser ever to be nominated for president by a major party. Bryan did not interfere, expecting Parker's loss in 1904 to be his gain four years later. Indeed, Bryan would get the Democratic nomination again (and lose yet again) in 1908, while a Populist remnant would convene in

St. Louis and disintegrate completely. Harry Truman, twenty years old in 1904 and just starting work as a banker in Kansas City, had been a page at the 1900 Democratic Convention there. He had visited St. Louis once in 1901 to see his Aunt Hettie and to bet on a horse, but he never seems to have gone back there for the Fair.³² Nevertheless, Missouri's conventions may have taught him an enduring lesson. A major party might survive a split over a candidate, but a third party was doomed no matter what candidate it chose.

Toward the end of the summer came the first of many meetings, intended, attempted, and omitted, that together make 1904 into a kind of comedic curtain for the literature of the old century. On August 30, Henry James, alighting from the ferry that had taken him to Manhattan on his first trip back to his own country in twenty years, was told to turn around and go back to New Jersey. An old friend wanted him to meet Mark Twain. The dinner that night was animated, but no meeting of minds occurred. Twain that year had lost both his wife and his sister-in-law. His daughter Clara had collapsed, his sister was ailing, and he was not even planning to go back to St. Louis for the Fair. James wasn't sure he wanted to go either. The next day he went up to see his brother William at his summer house in Chocorua, New Hampshire. The brothers' reunion was not a long one. William was expecting a raft of intellectual friends to visit him on their way to St. Louis. Heinrich Høffding, the philosopher of psychology, and Otto Jespersen, the linguist, were coming from Denmark, and Charcot's former pupil, Pierre Janet, was coming from France. William met them on his porch, in shirtsleeves and shorts, and fighting off depression, which greatly impressed Høffding.³³ They all went down to Harvard and gave lectures, whereupon William James left rather suddenly to tour Greece. Brother Henry decided to motor around the Berkshires with Edith Wharton. He too had had a few invitations to lecture, and he accepted one at the University of Pennsylvania to speak on "The Lesson of Balzac." Among the undergraduates at Penn that fall were Hilda Doolittle (H. D.) and William Carlos Williams, but if they learned anything from Balzac or from James during the long process of becoming leading Modernist poets, they never said much about it. Their friend Ezra Pound missed the lecture, having just transferred from Penn to Hamilton College in upstate New York because it was stronger in classical languages. Later, when James came back east to Philadelphia and gave the same lecture at Bryn Mawr, he had the same null effect on Marianne Moore, who had only just been admitted and had not yet arrived on campus.³⁴

At Harvard, Høffding gave a lecture to William James's students. Called "A Philosophical Confession," it was a very personal account of his lifelong fascination with the difficult philosophy of Søren Kierkegaard, unknown until recently outside Denmark. Every year Høffding

taught Kierkegaard's concept of disjunction, or discontinuity, in ethics, and this last academic year, in his required freshman course in philosophy at the University of Copenhagen, he had taught it to a young aspiring physicist named Niels Bohr. Neither he nor James had much to say to the Harvard students about James's friend Charles Sanders Peirce. Peirce's long series of papers on the foundations of logic had begun in the 1860s, and some of the first had been published in St. Louis, in the *Journal of Speculative Philosophy*. In 1878 Peirce had invented the pragmatism for which James was now celebrated,³⁵ and at Harvard's Sever Hall in 1903 he had given, under James's sponsorship, the last lectures of his crabbed and checkered career.³⁶ As for Bertrand Russell's book, which had appeared the year before at the same time Peirce was giving his lectures, neither James nor Høffding mentioned anything about it. Høffding's subject at St. Louis in September, like Janet's, would be psychology.

Conventions held at St. Louis to coincide with the World's Fair included the National Education Association, the National Federation of Women's Clubs, the Ancient Order of Hibernians, the Catholic Total Abstinence Union, and the National Nut Growers' Association. Scientists were coming from Europe for the International Electrical Congress and the International Congress of Arts and Sciences. Many had never been to America before and were looking forward to seeing the "Wild West," an invention of the East Coast press already thoroughly romanticized in Europe.

The International Congress of Arts and Sciences had its opening session on Monday, September 19. The plan of the conference was to sum up the nineteenth century and try to project the twentieth. William James's colleague, Hugo Münsterberg, was given the outsize task of allotting to each academic discipline its place in the totality of human knowledge as of 1904. He knew what he had to do: "A mere heaping up of information can be merely a preparation for knowledge, and that the final aim is a *Weltanschauung*, a unified view of the whole of reality."³⁷ For that world view he chose the familiar positivist hierarchy of Auguste Comte, published more than eighty years before.

The psychology section met on September 20, after philosopher Josiah Royce had tried to set the tone for what the planners had called the Division of Moral Sciences. James's student G. Stanley Hall spoke, followed by James Mark Baldwin, who pointed out that despite all the fashionable talk about experimental psychology and the indivisibility of consciousness, the psychological laboratory, invented in Germany, was as much a product of the dubious eighteenth-century doctrine of the "association of ideas" as any of the works of John Stuart Mill. In the audience was John B. Watson, who would go on to found "behaviorist" psychology, in which no examination or study of consciousness would be permitted.

The new president of Princeton, Woodrow Wilson, gave the keynote address for the Division of Historical Sciences on the 20th. The president of Harvard, A. Lawrence Lowell, did the same for the Division of Social Regulation. Franz Boas described the past and future promise of Anthropology, that section of the Division of Physical Science responsible for distinguishing the world's races. The next day, September 21, was the day Chief Joseph died.

The chemists gathered on September 21 heard Moissan, the man who had purified fluorine, and Ramsay, who had discovered the noble gases argon, neon, krypton, and xenon one by one over the preceding decade. The sociologists of religion heard from Ernst Troeltsch. The sociologists of politics were addressed by the German communitarian Ferdinand Tönnies, the American left-wing evolutionist Lester Ward, and Max Weber, who had just recovered from his five-year nervous breakdown. (Weber's *Protestant Ethic and the Spirit of Capitalism* would appear in the year following the Fair.) Finally, the biologists heard a paper by Hugo de Vries, comparing "Natural and Artificial Selection." De Vries, just in from lecturing in California (and hunting *Oenothera* primroses), talked of mutation and heredity without a single reference to Mendel or the segregation law he and Correns had helped to rediscover. Thomas Hunt Morgan, Columbia University's new man in "experimental biology," was in the chair. Soon Morgan's *Drosophila* fruit flies would begin breeding proofs of the theory unimagined by de Vries.

On September 22, the three musketeers of ionized particle theory took three separate podiums. Svante August Arrhenius, a Swede, had won the third Nobel Prize in chemistry awarded through the Swedish Academy in 1903 and was about to be offered the directorship of the Nobel Institute of Physical Research, newly founded in Stockholm by his (and Alfred Nobel's) king, Oscar II. As a young graduate student in 1883 he had discovered that compounds in solution dissociated into charged particles smaller than atoms, called ions. (Among the first people he had gone to for support was young Max Planck.) Jacobus Hendricus Van't Hoff, a Dutchman, had won the first chemistry Nobel in 1901 with an explanation of osmotic pressure that assumed these ions behaved according to Boltzmann's thermodynamic principles. (Some of Van't Hoff's data had come from de Vries.) Wilhelm Ostwald, a German, had been the first to accept Arrhenius's results, remained in his corner as the brickbats flew, and in the end would apply particle thermodynamics successfully to the problem of predicting the speed of a chemical reaction. Arrhenius, Ostwald, and Van't Hoff had stood for more than twenty years in the vanguard of ionization theory and its deeper implication that all of chemistry could be reduced to the movement of charged bits of atoms. Of course, Ostwald saw no reason to give up his view that ions, like any other "atomic" particles, could more easily be thought of as twists in a

field, while his friend Boltzmann insisted they were bits of matter. As recently as 1903, Boltzmann had opened his course in the philosophy of science at the University of Vienna by insisting that atoms were real and attacking the curious positivism of Mach, which had led him to think that atoms were merely hypothetical.³⁸ In 1904 the polemic relation of Ostwald and Boltzmann flared up again with Ostwald's "Faraday Lecture" against "those pernicious [atomic] hypotheses,"³⁹ followed by Boltzmann's "Reply to a Lecture on Happiness Given by Professor Ostwald," delivered to the Vienna Philosophical Society.⁴⁰ When they all came together at the International Congress of Arts and Sciences in September, it seemed certain the fur would fly.

It didn't. Ostwald did indeed define mechanics, physics, and chemistry in his paper as "Energetics," but he admitted that his program of replacing expressions of mass in equations with expressions of energy had "not yet got far enough to justify publication."⁴¹ Instead, Ostwald made bold to sum up the entire scientific enterprise, beginning with an epistemology based on "the continuous flux of our experiences"⁴² that was pure Mach, and continuing with a discussion of the basic science of arithmetic that was pure Frege. He mentioned neither man, but instead built to their conclusions from scratch, going on to order the sciences in the Comtean manner depending on how many and how inclusive their laws were, and stressing how much uncertainty remained in all of them. His discussion of continuity in the human experience of nature was tentative. If Boltzmann was in the audience, he might have thought he had won, except for the fact that Ostwald had begun with consciousness, and anyone who does that cannot be depended on to be solidly materialist about the world outside the mind.

On the same day the Logic section met, saying nothing about Frege or Peano or Russell, not to mention Peirce. The Psychiatry section met and heard nothing about Freud. The Neurology section heard references to the neuron theory, but no mention of either Freud or Cajal. In a long speech to the Anatomy section on the wonders of recent neuroanatomy and histology, Wilhelm Waldeyer made a brief reference to Cajal—as the man who had improved the Golgi stain. (On the last day of the conference, Freud was finally mentioned in the Abnormal Psychology section, not by Pierre Janet but by the American alienist Morton Prince, who offered a sentence citing Freud and Breuer as experts in "subconscious automatism.")⁴³ Meanwhile, the Social Regulation division was hearing from the English historian James Bryce, who had pondered why there were no distinguished people going into American politics, and the German economist Werner Sombart, who would soon write "Why Is There No Socialism in the United States?"⁴⁴

The next day, the 23rd, was the turn of the newest section of the Physical Sciences, "ecology," whose short history was summarized by one

of its pioneers, Oskar Drude. At the same time the General Psychology section of the Mental Science division was lectured to by Harald Høffding, who presented the subject confidently as both philosophy and science, and echoed his friend William James on the continuity of consciousness.⁴⁵ That evening the scholars gathered for a banquet at the Tyrolean Alps exhibit. Among those who offered toasts were James Bryce and a professor of law from the University of Tokyo, representing the only non-Western country at the Fair that could claim this year that it had fought a war with a Western nation and won. Once again, briefly, knowledge looked unified.

The last day of the Congress was the 24th. On that day, Brander Matthews, the critic who had first noticed that *Huckleberry Finn* was a monologue, gently poked fun at the task he had been given, summing up the past and future of prose literature in an hour and a half. He did his best, but no author or work he mentioned gave much of a hint of what Hamsun, Schnitzler, Stein, and Joyce had already set out to accomplish. Thomas Wolfe, who was visiting the Fair at about this time, already knew enough to have laughed. Meanwhile the Physics section called Physics of the Electron was hearing from Paul Langevin that these lately discovered "movable charges" were subatomic particles on which "the experimental facts impose . . . a discontinuous, granular structure."⁴⁶ Next after Langevin came Ernest Rutherford. In the past five years, at Cambridge University and Canada's McGill University, Rutherford's inspired tinkering with radium samples, foil, and evacuated tubes on a laboratory bench had made him the founding father of atomic physics. He summed up for the Congress the simple history of his eight-year-old science, including his most recent discovery of five distinct and elemental decay products of radium and his growing conviction that radioactivity was like alchemy, transmuting one element into another, atom by disintegrating atom, and producing a new kind of energy in the process. His work was big news for scientists everywhere. In 1904 he had already given substantially the same talk to the International Electrical Congress in St. Louis, to the American Association for the Advancement of Science, to the Royal Institution in London as the Bakerian Lecture, and as a published book called *Radio-activity*. Before the year was out he would receive the Royal Society's Rumford Medal and an invitation to give the Silliman Lectures at Yale.⁴⁷

At 3 o'clock that same afternoon, the inventor of statistical thermodynamics, Ludwig Boltzmann, took his place at the lectern in Hall Number 9 to sum up theoretical physics.⁴⁸ The title of the section, Applied Mathematics, was a consequence of the intellectual plan that had put theoretical and experimental physics in two completely different divisions of knowledge. The Congress was "a flood," said Boltzmann (ironizing perhaps on the Cascades outside), "a Niagara of scientific talks,"⁴⁹ so

instead of trying to sum up mathematical physics in general, Boltzmann proposed to deliver something more concise: a defense of his own celebrated and still embattled contribution to it, the hypothesis that nature was discontinuous.

In the new twentieth century, said Boltzmann, theoretical physics, like experimental physics, "is in the course of a revolution." The job of theoretical physics is to make sense and system of the facts, and to do that it must make bold hypotheses. The "most modern" theories call for hypotheses that have even an element of fantasy—like the luminiferous ether or electrical "fluids." Boltzmann's own hypothesis was that material nature was composed not of continua like ether and electrical fluid, but of molecular, atomic, and subatomic particles with nothing between them but empty space. Such hypotheses raised "questions as old as science itself" that had until recently been left to philosophy. Boltzmann, who had just taught philosophy at Vienna in the chair previously occupied by Mach and Brentano, was convinced, however, that "the query whether matter is to be conceived as continuous or as composed of discrete constituents (of very many but not mathematically speaking infinitely many individuals)" could not be answered by an appeal to pure reason, whether Zeno's or Kant's. The so-called laws of thought were not a priori true, but only an evolutionary legacy in the brain; indeed, they were not even laws. Cause and effect was not a "law," but simply the repeated experience of linked events. The job of philosophy should be not to ask these illusory questions, but to explain why they are pointless and retire them. Physicists ought not to try to make sense of infinite quantities or to work with the continua of monists and energeticists. They should ask instead "which represents the observed properties of matter most accurately, the properties on the assumption of an extremely large finite number of particles, or the limit of the properties if the number grows infinitely large?"⁵⁰

We cannot define infinity in any other way than as the limit of ever growing finite magnitudes. . . . If, therefore we wish to form a verbal image of the continuum, we must necessarily begin by imagining a very large finite number of particles endowed with certain properties and then examine the way this aggregate behaves. Certain of its properties may approach a definite limit when the number of the particles is made ever larger and their size ever smaller. We can then assert of these properties that they belong to the continuum, and this in my view is the only non-contradictory definition of a continuum endowed with certain properties.⁵¹

Planck, whom Boltzmann did not mention, would have been pleased at this formulation, since it was the lack of just such a definite limit that had led him to rule out the continuum, apply Boltzmann's summation strategy, and postulate the quantum. The resulting science, said Boltz-

mann, had been called “statistical mechanics [by] one of the greatest American scientists, perhaps the greatest . . . namely Willard Gibbs,” thus gently offering to Gibbs, who had just died, the honor of naming their field.⁵² The field was not ancillary, as Ostwald had argued in 1895, but fundamental. There was possibility in it, and even a kind of liberty. Statistical mechanics and Boltzmann’s equation, $S = k \log W$, relating entropy to probability, went to the heart of the deepest questions raised by the newest physics about time, space, and causality. In a universe of great but not infinite size made of enormous but not infinite numbers of particles, even reversals of entropy were “not absolutely impossible according to the theory, but merely highly improbable.”⁵³ Indeed, quantum electrodynamics has since shown us that they happen all the time.

Following Boltzmann to the podium was Henri Poincaré. Unlike Boltzmann, he had no quarrel with the plan of the Congress and intended, he said, to discuss the past, present, and possible future of “The Principles of Mathematical Physics.” Like Boltzmann, he saw, at the beginning of the twentieth century, “the eve of a second crisis” akin to the one that had been resolved by Newton.⁵⁴ Every basic principle was in question: increase of entropy, conservation of mass, the equality of action and reaction, conservation of energy, the principle of least action, and even the old “principle of relativity, according to which the laws of physical phenomena should be the same, whether for an observer fixed, or for an observer carried along in a uniform movement of translation.”⁵⁵

Poincaré thought Gibbs “difficult to read,” and was not convinced by Boltzmann’s solution to the entropy paradox—that entropy could possibly decrease, but only in a time comparable to the lifetime of the universe.⁵⁶ The Brownian movement of tiny particles in suspension looked like perpetual motion to Poincaré. As for conservation of mass, Poincaré thought it shaky. He had been reading the latest papers of the cathode-ray theorists, Abraham and Kaufmann, and their suggestion that at high velocities the electron might gain mass electrostatically. He had also read Hendrik Lorentz, who was pretty sure that the mass increased electrostatically *and* mechanically.⁵⁷ But if this were true what would happen to Newton’s principle that equated action and reaction, since both depended on constant masses multiplied by constant velocities? Could light or any other radiation exert pressure on matter? Under these conditions, Poincaré realized, the whole of Newtonian mechanics would collapse. What would then become, he must have wondered, of his own *magnum opus*, the three-volume *Celestial Mechanics*, which had sealed his reputation at the time of the World’s Fair Congress in Paris? Although it offered a mathematical demonstration of the ultimate unpredictability of the planetary orbits (the first step in “chaos theory”),⁵⁸ it depended completely on the Newtonian system. As for the principle of the conservation of energy, it was clearly threatened by the radioactivity first de-

tected by Becquerel in 1896, and even more by the extraordinary energy output of radium measured by Pierre Curie in 1903.⁵⁹ Not far from where Poincaré was speaking, on that same September afternoon, Ernest Rutherford was pointing out how inexplicable that energy was, while over at the technology exhibit, a small sample of radium itself was demonstrating its inexhaustible glow to visitors.

The principle of relativity too, Poincaré asserted, was “battered.”⁶⁰ Maxwell had shown how any electric charge in motion ought to produce an electric current (light or electrodynamic radiation) “in the ether,” but which motion counted? Any electric charge fixed on earth automatically moved through space at a great rate, since the earth was rotating, revolving around the sun, and who knew what else. Efforts to reduce all of these motions to one absolute motion with respect to a stationary ether had run up against Michelson and Morley’s experimental proof in 1887 that the “ether,” if it existed, had no such effect. Lorentz had offered a solution, said Poincaré, but the solution amounted to an “accumulation of hypotheses.” The most plausible of Lorentz’s hypotheses was the idea of “local time,”⁶¹ which was the time of a moving reference system; but although Poincaré had already shown that events were simultaneous only by convention,⁶² he could not quite give up the possibility of a nonlocal “absolute” time, applicable to several moving systems at once. Lorentz’s other hypothesis, that bodies contracted in the direction of motion, Poincaré thought much too convenient. “Thus all is arranged,” he said, “but are all doubts dissipated?”⁶³ Perhaps, Poincaré suggested, all would be swept away, even the principle of least action, the only grand principle left that was still unchallenged. However, he said as he finished his talk, “we should not have to regret having believed in the principles . . . the surest way in practice would still be to act as if we continued to believe in them. They are so useful.”⁶⁴ A century later, we can read this as prophecy.

That October, as the New York Giants refused to play a baseball World Series, the visiting scholars returned to their universities. Boltzmann returned by way of Niagara Falls, that great American sight—model for the St. Louis Fair’s Cascades to which he had compared the Congress. His son Arthur Ludwig was delighted, and thought Niagara the most exciting event on the trip.⁶⁵ Ostwald, who returned directly to Germany, was en route on October 2, when General von Trotha issued the now famous “Annihilation” Order in the German colony of Southwest Africa to exterminate all members of the indigenous Herero tribe who remained in rebellion against the colonizers. How Ostwald reacted, if he reacted at all, we do not know, any more than we know whether Skiff and the other designers of the “Development of Man” exhibit saw any connection between this event and the human zoo now being slowly dismantled in St. Louis.

At the beginning of November, Theodore Roosevelt was elected to

the presidency. His huge majority included the electoral votes of the state of Missouri, which broke the "Solid South" of Democratic states for the first time since the Civil War. Missouri also elected as its governor State Attorney Joseph Folk, who had convicted twenty-three people for bribery in a year-long assault on St. Louis's municipal corruption. Folk's phrase, "aggressive honesty," became part of the national Progressive movement as the "Missouri Idea."

The Louisiana Purchase Exposition finally closed on the first of December—its last day was named "David R. Francis Day," after its organizer—and the year-long, state-sponsored disneyworld slowly packed up and went home. The hot Midwestern summer had long since been succeeded by the cold continental winter, which, by January, would freeze Niagara Falls for the first time in living memory. The troupe that had so assiduously reenacted the Boer War on St. Louis Pike went east to Coney Island to go on with the show. Samuel Verner took Ota Benga and the remaining tribesmen and headed for Africa. The first stop was New Orleans, where black musicians still gathered on Sundays to perform in "Congo Square" and Buddy Bolden was playing trumpet in the seven-year-old legal red light district called "Storyville." Ota Benga was delighted with Mardi Gras, and joined the parade when it went by. Soon afterward Verner returned him, as promised, to the Congo. Once there, Ota Benga found he no longer felt at home in Africa, and decided to sail with Verner back to the United States. The trip to New York took most of Verner's savings. He found a job selling tickets on the Wall Street station of the new New York City subway, and lent Ota Benga for safekeeping to the new Bronx Zoo, where the pygmy made good his room and board by going on exhibit one Sunday in an animal cage.

On March 15, 1905, Geronimo paraded down Pennsylvania Avenue in Teddy Roosevelt's inaugural at the president's invitation. Afterward he saw the president alone and asked to be allowed to "die in my own country," Arizona, to which Roosevelt replied that he was sorry but it couldn't be done.⁶⁶ That same month, lecturing, as always, on "The Lesson of Balzac," Henry James finally reached St. Louis, and Scott Joplin left it for good, making his way east to Chicago and New York. As for Henri Poincaré, he had gone back to Paris with Paul Langevin, marveling at the great open spaces he had seen and the crisis in physics that continued to widen.⁶⁷ Paris would next hear from St. Louis twenty years later, when the last wisp of 1904's confident Western Spirit of St. Louis flew east from New York and electrified the Old World.

15 ALBERT EINSTEIN

THE SPACE-TIME INTERVAL AND THE QUANTUM OF LIGHT

1905

The man who was to answer Poincaré's challenge within the year—Albert Einstein—was nowhere near St. Louis in 1904. He was in Bern, Switzerland, holding down a desk job in the federal capital, a civil service appointment that had just been made permanent that September. He was grateful to have had two years' steady work at 3,500 Swiss francs annually, enough to get married on in 1903 and enough to take care of his brand new son. He was even more grateful that the job left him some time to read theoretical physics (including Boltzmann and Poincaré), and to write a few scientific papers of his own. Einstein was not yet a Zionist, a genius, or even a great physicist, except to a small circle of friends in Switzerland who called themselves, with great good humor, the Olympia Academy, but who were not themselves physicists. Some of them still came to visit Einstein at his new second-floor apartment at 49 Kramgasse in Bern. There was his college classmate Marcel Grossman, for example, a budding professor of mathematics who had helped Einstein get his job; and Michele Angelo Besso, for whom Einstein had done the same favor in 1904. There was Maurice Solovine, who had wandered into Einstein's poverty flat in Bern in 1903 to take him up on his offer to tutor physics and stayed to become an Olympian; and Conrad Habicht, now teaching science in the Protestant public school in Schiers, Graubünden, who had met Einstein in 1901, when both of them were novice teachers in Schaffhausen. There was also Mileva Maric, another classmate, who may have thought Einstein was special; but Mileva had married him, and that was after she had failed her exams twice.

Einstein himself was a college graduate, however, with a physics degree and a teaching certificate dated 1900 from the Swiss Federal Institute of Technology, "ETH," in Zurich. He was also already an exile (like Stein and Joyce) and already a pacifist. Because the academically elite Luitpold