Chapter Nine

THE CLIMAX OF THE ENLIGHTENMENT

I. THE CULT OF PROGRESS

IN THE correspondence columns of popular journals, a desultory, though occasionally heated, debate was carried on in 1899 as to whether this year or the next would bring the nineteenth century to a close. Ecclesiastical authority at Rome, appealed to by an enterprising American daily, confirmed the seemingly odd judgment of historians and mathematicians that the year 1900 belonged to the 1800's and that not until January 1, 1901, would a new century dawn.

The passing of the nineteenth century, its posterity can now see, had significance beyond the merely arbitrary timekeeping of calendars and almanacs. Whether its actual demise be dated from 1899 or 1900 doesn't matter, but it does matter that about this time the generation which had come into the European limelight in the days of the Franco-Prussian War of 1870 was fast disappearing. The generation had been preponderantly materialist. That is, it had been especially devoted to, and proud of, material achievements, and it had been imbued, in so far as it had a philosophy, with simply material and mechanical conceptions and a frankly this-worldly pragmatism.

The materialism of this generation must not obscure, however, its intimate relationship to, and its apostolic succession from, those eighteenth-century generations which gave birth and mission to the most distinctive intellectual movement of modern times—the so-called Enlightenment. The Enlightenment did not end, as one might gather from textbooks, with Voltaire, Gibbon, or Beccaria, with Hume, Adam Smith, or the French Encyclopedists. It extended to a climax in the final decades of the nineteenth century. The Generation of Materialism was the supreme one of Enlightenment.

Of abiding features of the Enlightenment, probably the most characteristic and most cherished was the belief in progress, and in a progress which proceeded not along a jagged line of ups and downs, with the ups only slightly exceeding the downs, but rather along a straight line steeply ascending. Such progress had originally been posited for science, education, and reform; and after two centuries it was most strikingly evident in precisely these three domains.

There had certainly been steady and glorious progress in science. Crowning the pioneer labors of Galileo and Newton were such ultimate physicists as Helmholtz and James Thomson and Röntgen; and the fruitful method of the physical sciences was now being applied with ever greater fruitfulness to the chemical and biological sciences, to the social sciences, to psychology and sociology. All phenomena, it seemed, were explicable in terms of matter and force; all were governed by mathematical and mechanical laws; and matter was so simple and so real. Science, moreover, was so practical and beneficent. Its continually multiplying applications were enabling men to converse with one another wherever they might be, to escape physical pain, to lengthen their span of life, and to possess knowledge and enjoy creature comforts beyond the experience of any philosopher or prince of previous ages.

Progress in education was quite as clear. The generation of materialism was finally realizing the hopes of eighteenth-century *philosophes* and the *projets* of French Revolutionaries; it was putting the youth of entire nations into school and teaching them to read and write and to aspire to fuller knowledge. Thereby, with increasing leisure for self-improvement and greater opportunities for higher technical education, the masses no less than the classes bade fair to assure the continuity of progress.

There was palpable progress in the reforming of government and society. Throughout central as well as western Europe, both constitutional government and personal liberty, which had once been deemed wildly revolutionary, were now usually regarded as respectably evolutionary and quite normal. Not merely Jacobins and Liberals accepted them, but likewise most Conservatives and most Marxians. Indeed, reforms were now being wrought, not violently or dictatorially in the perverse manner of a Robespierre or a Bona-

parte, but intelligently by a process of enlightened free consent. Liberty was being supplemented by democracy, and the abuses of economic liberalism by a socializing state solicitude for the health and material well-being of the whole citizenry.

Progress in these and all other respects depended, the eighteenth-century champions of Enlightenment had believed, on man's proper use of his own reasoning powers, which were then assumed to be very real and very great. To the later materialistic generation of the Enlightenment, however, such confidence in rationalism might have seemed a bit naïve. In the light of the newer evolutionary conceptions of Darwinian biology and physiological psychology, one could well question whether man's "animal mind" was capable of independent direction or truly rational functioning. Yet perhaps because the men of the 1880's and 1890's were more inclined to the practical than to the theoretical, few pushed the lessons of biology and psychology to upsetting conclusions. Most of them talked and acted as if they shared the full rational faith of the men of the 1770's. But if peradventure one seriously doubted the efficacy of "pure reason" in a being akin to cave men and gorillas, and ultimately maybe to carbon compounds, one could now repose a new and livelier faith in the efficacy of the evolutionary process itself. To this, Herbert Spencer pointed the way, and Francis Galton landmarked it with eugenics, and Nietzsche with supermen. Individual men might not be so reasonable as had been imagined in the eighteenth century, but the race was evolving upward and could be assisted by science or "will" to evolve faster. In fine, evolution bolstered the generation's optimism by rendering progress automatic.

The Enlightenment from its inception had been associated not only with humanitarianism, which found progressive expression in social reform, in emancipation of slaves and serfs, in ameliorative penal and labor and health legislation. It had been associated also with the humanism of still earlier modern times—the neo-paganism of a Boccaccio, for example; the delighting in man as man, and in man's body as well as in his mind. There had been, of course, an interregnum in the sway of this humanism in the nineteenth cen-

tury, especially in "mid-Victorian" England. But prudery and smug respectability proved transitory. By the 1890's a complete restoration of humanism impended. The English word "sport" passed into every other European language. Outdoor games and athletic contests multiplied and spread. Women everywhere took to bicycling. Circumlocution gave place to startling paradox, and this in turn to stark frankness. And while such literary artists as Anatole France, George Moore, and Samuel Butler inveighed against hypocrisy, the nude became once more a favorite subject of pictorial art. Here, too, one detected vitalizing progress.

To be sure, the climax of the Enlightenment was attended, as had been its initial stages, by some curious anomalies which smacked of credulity and even superstition. Just as Voltaire and Hume had had to divide popularity back in the 1770's with Mesmer and Cagliostro, so in the 1880's and 1890's multitudes of Europeans (and Americans) were not sufficiently scientific to be deterred from patronizing astrologers, palmists, or phrenologists, who still plied their lucrative professions in every sizeable town. Besides, since the astonishing exploits of the Fox sisters in America in the late 1840's, there had been a constant crescendo of spiritist séances, with mysterious mediums and strange rappings and tumultuous table-turnings. Even scientists as distinguished as Alfred Russel Wallace and Sir Oliver Lodge insisted that there must be something in all this spiritism, and in 1882 was founded at London a *Society for Psychical Research*, which over succeeding years and in voluminous reports recorded its testing of various hypotheses—"telepathy," "suggestion," "psychical radiation," "disembodied spirits." It was queer business for a generation of materialism, but in justice to the generation it should be said that the chief concern was with material manifestations (and explanations) of the "spirits."

Another and allied curiosity of the era was hypnotism. It was eighteenth-century mesmerism with Mesmer's "animal magnetism" expurgated. One no longer stroked the patient with magnets. One merely fixed him with a look. Yet there was a progressive popularity about it. It provided entertainment alike for the masses and for persons of fashion; and by many contemporary medical men and

psychologists it was regarded as a phenomenon of the highest importance. One of the most popular stories of the 1890's was George Du Maurier's about Svengali's hypnotic power over Trilby.

Curious also was the attraction of would-be intellectuals to semi-esoteric cults imported into Europe from the Orient or from America. Some found a kind of escape from materialism in the gospel of Mary Baker G. Eddy and dismissed physicians to call in Christian Science "readers." Others discovered in a Syrian mystic, Abdul Baha, an up-to-date prophet, a new incarnation of the divine. Still others, following the lead of that much-traveled Russian lady, Helena Blavatsky, joined the *Theosophical Society* which she founded at New York in 1875 to propagate "the occult wisdom of the East," and which ushered in a vogue of quaintly garbed mahatmas and yogis. Despite numerous "exposures" of Madame Blavatsky and her cult,[1] the professed Theosophists in Europe numbered over 100,000 at the time of her death in 1891. Apparently there were many different ways of being enlightened and progressive.

II. GREAT EXPECTATIONS

The Enlightenment, since its beginnings in the seventeenth and eighteenth centuries, had been essentially an intellectual movement, and for long its progress had been measured chiefly by the advance of experimental science, of education and literacy, and of individual liberties and constitutional government. In the latter part of the nineteenth century, however, a new and more material measuring rod was applied—that of the machine production of goods. The Generation of Materialism saw industrial machinery on all sides, doing all sorts of work and doing it ever faster and more efficiently. Machinery was indeed dynamic, not static. By a kind of parthenogenesis, it multiplied itself; so that everybody was now minded to talk, in the manner of the enlightened Englishman described by Chesterton, "as if clocks produced clocks, or guns had families of

1 To Blavatsky's own exposition of her doctrines, *Isis Unveiled* (New York, 1875), a major counterblast was Edmund Garrett's *Isis Very Much Unveiled* (London, 1895). One of Blavatsky's most celebrated converts, the English feminist and socialist Annie Besant, succeeded her as head of the Theosophical Society.

little pistols, or a penknife littered like a pig."[2] And the resulting output of manufactured commodities must continue to grow, it seemed fair to expect, as by a geometric progression approaching infinity.

Increase of mechanical production was tangible and statistically measurable proof of progress—and of progress in which everyone could share and from which were derivable the greatest expectations for the future. By the aid of machinery, the time should soon come, it was reasoned, when nobody need fear famine or inclement weather, when more food would be provided than could be consumed, more clothing made than could be worn, more houses built than could be inhabited. Not just the bare necessities of life would be available, but an abundance and range of luxuries, and withal a leisure and a physical health, beyond the ken of any lord of previous ages. Europe, once reputed a poor and sparse continent, was already rich and populous. The prediction did not seem too sanguine that by the turn of another century at least eight hundred million persons would be living quite comfortably and happily in Europe.

At the turn of the nineteenth century there appeared to be no serious problem about the production of wealth. Machinery was solving it. There were, admittedly, some new-found paradoxes about capitalism and some stubborn problems about the distribution of wealth. But these, too, it was confidently believed, would in time be solved. The Enlightenment had led to machinery and physical health and material wealth, and these things must inevitably lead to still greater and more diffused enlightenment, through which some sort of utopia was sure to be achieved for everybody. Not Marxians alone expected it, but the general run of intellectuals and also industrialists and statesmen. One had only to follow the latest trends of corporate enterprise and social legislation.

Material progress was spatial, as well as temporal. As it had already spread from England to the Continent, so now from Europe it was spreading fanlike to the whole world. This was, after all, the role of the newest imperialism, to Europeanize all the other

2 *Victorian Age in Literature* (London, 1913), 33.

continents in the sense of superimposing on their several traditional cultures the material civilization of Europe—the same science and technology, the same mechanical modes of production, the same ways of working, traveling, and living. And with common civilization over the entire globe, where could barbarians come from to destroy, or even threaten, the civilization of Europe?

An interesting index to the advancing international character of material civilization was furnished by the series of industrial expositions which had begun with the one in the Crystal Palace at Hyde Park, London, in 1851. None of those held down to and including the Vienna Exposition of 1873 was really "universal" or attended by any extraordinary number of visitors. But then, with the expansion of industry and education and the greater facilities for transport and travel brought about by the extension of railways and steamship lines, a change occurred. At the Philadelphia Exposition of 1876 the display of machinery was the largest and finest yet seen, and the visitors numbered close to ten million.

The Paris Exposition of 1878 covered sixty-six acres of the Champ de Mars, with an Avenue des Nations devoted to specimens of domestic architecture and products of almost every country in Europe (except Germany) and of several in Asia, Africa, and America, and with capstone, on the right bank of the Seine, in the bizarre Palace of the Trocadero. The visitors totaled thirteen million. Still more impressive was the Paris Exposition of 1889. This, covering seventy-two acres, drew its thirty-two million visitors to the latest miracle of steel construction, the Eiffel Tower, a thousand feet high, and especially diverted them with a faithful reproduction of a street in Cairo. Industrial America was host to the next great universal exposition, that of Chicago in 1893, with most countries represented and with plethora of side shows along a "Midway Plaisance."

Then came the Paris Exposition of 1900. It was the climax of one cycle and harbinger of another. It brought to the French capital mountains of marvelous exhibits and multitudes of awe-struck tourists from practically every country of the world, this time including Germany. It was high-lighted with magnificent electrical

displays, and graced with two exquisite palaces of the fine arts and a beautiful new bridge named in honor of the Tsar Alexander III. The grounds embraced five hundred and fifty acres, and the attendance reached the amazing figure of thirty-nine million.

As civilization was becoming worldwide, why shouldn't the world have a common language? And if everything else could be manufactured, why not language? Very progressive people were as expectant of synthetic philology as of synthetic rubber, and inventors of either were not lacking. A German priest, Johann Schleyer, invented the odd-looking language of "Volapük" in 1879-1880. A first congress of its devotees was held on Lake Constance in 1884, a second at Munich in 1887, a third at the Paris Exposition of 1889. By this date there were 316 textbooks in the new language.

But in the 1890's Volapük was largely supplanted by a still newer language, the invention of a Polish Jew, Louis Lazarus Zamenhof. He published in 1887 a pamphlet entitled "La Lingvo Internacia de la Doktoro Esperanto," meaning, of course, to English-speaking people, "The International Language of Dr. Hopeful"; and Esperanto was created. It was subsequently improved and perfected, like any industrial product, and in 1898 it began to be advertised by a *French Society for the Propagation of Esperanto*. It was the subject of a paper read before the French Academy in 1889; and at the Paris Exposition of 1900 it was, so to speak, placed upon the world market. Great expectations were attached to the future of Esperanto.

At least to many optimists in the year 1900, a made-to-order world language was but the natural accompaniment of a trend toward a new world order which would be not only mechanically productive but spiritually pacific. One felt pretty sure of this trend as one looked back from 1900 over the preceding quarter-century. One beheld so many ripening fruits of international co-operation —the Universal Postal Union of 1875, the convention of 1883 for the standardization of patent laws and that of 1887 for uniform copyright laws, the succession of world's fairs from the Viennese of 1873 to the Parisian of 1900. What was still more reassuring, one failed to descry latterly within Europe any bloody revolution or deadly civil war or any large-scale international war. Armed con-

flict was now confined to "backward" areas, principally outside Europe, and was incidental to the imperialism which was Europeanizing and civilizing the world. It appeared reasonable to expect that the trend would continue, that just as the duel and the blood feud had disappeared, just as interurban and internecine warfare had ceased, so in another generation even imperialistic wars would not have to be waged. At any rate, the great civilized powers must already be too intelligent and too humane to resort to war among themselves; and besides, in the face of constantly expanding industrialization, any struggle between huge national armies equipped with the latest mechanical implements of destruction must be quite too costly and too risky. It seemed not inappropriate that the nineteenth century—and the Generation of Materialism—should culminate in the Hague Conference which discussed the limitation of armaments and established the Permanent Court of International Justice.

III. THE LURKING NEMESIS

Yet from the standpoint of a later and much more disillusioned generation, it is easy to perceive that logically, as well as chronologically, the materialistic age which opened with the Franco-Prussian War of 1870-1871 did not really close with the Hague Conference of 1899, but rather with far-flung military exploits of 1900—British battling Boers, Americans fighting Filipinos, Europe combating Chinese Boxers. The war in South Africa was no slight affair. It dragged on during the entire year of 1900, and beyond; and it required the major combined resources of Great Britain and the British Empire to beat down the Boers. To be sure, the danger of joint intervention by Germany, France, and Russia, which had alarmed London in 1899, and which, if actually realized, might have precipitated a catastrophic world war, was practically removed in 1900. Britain's rivals found a more inviting field for forceful action in China.

Nor was the subjugation of the Philippine Islands precisely a picnic for the United States. It had been comparatively easy to expel Spain in 1898; but if the American Republic was to maintain

its newly won position as an imperialistic (and civilizing) World Power, it must suppress rebellious natives, who resolutely asserted the right of national self-determination and impartially damned Americans along with Spaniards. Throughout 1900 the United States waged war against the Filipinos, and not until two years later were they fully subdued.

In China, trouble had been brewing since the Japanese War of 1894-1895, and especially since the enforced lease of ports to European great powers in 1897-1898. Toward the end of 1898 the Chinese government, sharing its people's hatred of "foreign devils," ordered the strengthening and drilling of local militia companies as defense ostensibly against bandits, though actually against Europeans. These companies bore traditionally the quaint Chinese title of "Righteous and Harmonious Bands," but, by reason of the gymnastic exercises in which they indulged, they acquired the nickname of "Boxers." With official connivance, the Boxers inaugurated in the autumn of 1899 attacks upon European missionaries and Chinese converts in the province of Shantung, Germany's "sphere of influence"; and the next spring they extended their assaults and depredations along the Hankow-Peking and Tientsin-Peking railways. In vain the European powers protested. On June 10, 1900, a British admiral, with a small force of men picked from various European gunboats in the port of Taku, tried to go to the aid of foreigners in Tientsin; he met with stout Boxer opposition and was turned back. A few days later, Boxers occupied Peking, killed the German minister, and laid siege to the British legation, where other foreign ministers and residents had taken refuge. Concurrently, Boxers incited outbreaks in Manchuria, particularly along the railway which Russia was building there.

The Russian war minister, General Kuropatkin, on learning of the Boxer uprising, said: "I am very glad. This will give us an excuse for seizing Manchuria."[8] Although other members of the Tsar's government, notably Count Witte, tried to restrain the general, both the British and the Japanese governments were fearful of Russia's intentions and reluctant to have her intervene in China. Nevertheless, the British had their hands so full in South Africa

[8] *The Memoirs of Count Witte* (New York, 1921), 107.

that they could not themselves undertake intervention in China on any large scale or really prevent Russia from undertaking it. And both France and Germany backed Russia's proposal that an international expedition be despatched from Europe to put down what was euphemistically styled "the Boxer insurrection," the German Emperor attaching the condition that the commander in chief should be his own favorite, the head of the German general staff, Field Marshal von Waldersee.

On July 27, 1900, William II rather outdid himself in addressing the German expeditionary contingent which was being assembled. He boldly exposed the "yellow peril," fearlessly demanded that "no quarter" be given the Chinese, and perorated with a startling metaphor: "Just as the Huns a thousand years ago, under the leadership of Attila, gained a reputation by virtue of which they still live in history, so may the German name become known in such a manner in China that no Chinese will ever again dare to look askance at a German." On August 22, amid showers of similarly electrical messages from the Kaiser, Waldersee in dazzling gold braid finally embarked for the Far East. The Field Marshal was hardly gone, however, when William II must have suffered indescribable disappointment. News reached him that Peking had already been delivered from the Boxers by a special relief column in which a Russian general took the leading part and from which German soldiers were wholly absent.

This relief column had been gotten together, as an emergency measure and without too much consultation with faraway European capitals, from among foreign marines and guards in or near China. Japan contributed most, and Russia next; Great Britain and the United States furnished petty detachments; altogether the column numbered 18,000. After relieving Tientsin, it set out thence for Peking on August 4; and ten days later, after overcoming some resistance *en route*, it fought its way into the Chinese capital and found the British legation and its valiant defenders still intact. That was the virtual end of the Boxers, although Russia carried on military operations in Manchuria through the remainder of the year, and a final peace settlement with China was not arrived at until September 1901.

The outcome of the "Boxer affair" of 1900 was hailed at the time as a triumph of international co-operation. Within four years, nevertheless, it was followed by the first war to be fought between great powers since the Franco-Prussian War of 1870-1871. This was the Russo-Japanese War of 1904-1905.

Hindsight is notoriously superior to contemporary judgment. Looking backward from 1914, or better from 1939, one can readily perceive a nemesis lurking in the era after 1871 such as was hardly perceptible at all at the fag end of that era in 1900. The nemesis had two aspects. On the one hand, the mechanistic and materialistic conception of physical science, which then seemed quite obvious and sure, and which lay at the base of most of the thinking and much of the action of the era, was proved shortly afterwards to be erroneous. Thanks to the "quantum" theory which Planck set forth in 1901, to ensuing atomic investigations, and to the work of Einstein (who was twenty-one years of age at the turn of the century), the certitudes of physical "law" eventually gave way to principles of "probability" and "relativity," and to skepticism about "mechanics," "matter," and even "causation." Apparently there were processes in nature which did not operate mechanically or according to mechanical laws. Apparently, too, matter could no longer be conceived of, in the time-honored way, as something extended in space and persistent in time, but merely as a mysterious sequence of events indistinguishable from energy and behavior. And the extraordinary discovery that the behavior of an electron was unpredictable, dealt a blow at the previously accepted doctrine of determinism. A veritable intellectual revolution would be the consequence.

On the other hand, while the ultimate scientific basis of the materialism of the generation from 1871 to 1900 was thus destined to disappear, only physicists and a few other individuals would be quick to recognize the fact or to deem it significant. Most people remained so fascinated by the passing generation's positive achievements that they continued to accept them unquestioningly as a whole and as a permanent legacy of the race.

Occasionally a doubt might be expressed, as in Kipling's line of

1897, "Lo, all our pomp of yesterday is one with Nineveh and Tyre," but certainly it required a much deeper disillusionment than any contemporary was capable of to question whether men of the era, with all its mechanical inventions and material gains, were actually any wiser or happier or clearer-eyed or more virtuous than men of pre-machine ages. For almost a full generation after 1900 the Enlightenment was all but universally assumed to be continuing. There remained the same optimism, the same reliance on machinery, the same supreme faith in material progress.

There remained, also, the popular vogue of "social Darwinism" —the incessant application of Darwin's evolutionary formula to social phenomena and human affairs, to law and religion, to classes, nations, and races. Few laymen paid serious attention to the drastic amendments which biology was making to the Darwinian formula itself, or to the strictures which isolated scholars were imposing on its general applicability, any more than they remarked the impending revolution in physical science. With the populace at large, as well as with most "social scientists," publicists, and statesmen, the errors no less than the truths of Darwinism enjoyed by 1900 a seemingly indestructible repute. For example, Karl Pearson, a popular English writer on science, declared in that year: "You may hope for a time when the sword shall be turned into the ploughshare . . . but, believe me, when that day comes mankind will no longer progress; . . . the relentless law of heredity will be controlled and guided by natural selection." Prince Bülow, who in the same year became German chancellor, wrote in like vein: "We must realize that there is no such thing as permanent peace, and must remember Moltke's words: 'Permanent peace is a dream, and not even a beautiful one, but war is an essential element of God's scheme of the world.' "

Did not nemesis decree the fulfillment of these precepts of 1900? At any rate, it was boys schooled by the Generation of Materialism who would grow up to fight the World War, and it was some of their sons who would follow supermen into the totalitarian state and into totalitarian war. This would mark the eclipse alike of liberalism and of conservatism as these had been known and fruitfully cherished during the three decades from 1871 to 1900.