CHAPTER 28 - THE NEW POWER BALANCE, 1850–1900

I. New Technologies and the World Economy
   A. Railroads
      1. By 1850 the first railroads had proved so successful that every industrializing country began to build railroad lines. Railroad building in Britain, France, Germany, Canada, Russia, Japan, and especially in the United States fueled a tremendous expansion in the world’s rail networks from 1850 to 1900.
      2. In the non-industrialized world, railroads were also built wherever they would be of value to business or to government.
      3. Railroads consumed huge amounts of land and timber for ties and bridges. Throughout the world, railroads opened new land to agriculture, mining, and other human exploitation of natural resources.
   B. Steamships and Telegraph Cables
      1. In the mid-nineteenth century a number of technological developments in shipbuilding made it possible to increase the average size and speed of ocean-going vessels. These developments included the use of iron (and then steel) for hulls, propellers, and more efficient engines.
      2. Entrepreneurs developed a form of organization known as the shipping line in order to make the most efficient use of these large and expensive new ships. Shipping lines also used the growing system of submarine telegraph cables in order to coordinate the movements of their ships around the globe.
   C. The Steel and Chemical Industries
      1. Steel is an especially hard and elastic form of iron that could be made only in small quantities by skilled blacksmiths before the eighteenth century. A series of inventions in the eighteenth and nineteenth centuries made it possible to produce large quantities of steel at low cost.
      2. Until the late eighteenth century chemicals were also produced in small amounts in small workshops. The nineteenth century brought large-scale manufacture of chemicals and the invention of synthetic dyes and other new organic chemicals.
      3. Nineteenth century advances in explosives (including Alfred Nobel’s invention of dynamite) had significant effects on both civil engineering and on the development of more powerful and more accurate firearms.
      4. The complexity of industrial chemistry made it one of the first fields in which science and technology interacted on a daily basis. This development gave a great advantage to Germany, where government-funded research and cooperation between universities and industries made the German chemical and explosives industries the most advanced in the world by the end of the nineteenth century.
   D. Electricity
      1. In the 1870s inventors devised efficient generators that turned mechanical energy into electricity that could be used to power arc lamps, incandescent lamps, streetcars, subways, and electric motors for industry.
      2. Electricity helped to alleviate the urban pollution caused by horse-drawn vehicles. Electricity also created a huge demand for copper, bringing Chile, Montana, and southern Africa more deeply into the world economy.
   E. World Trade and Finance
      1. Between 1850 and 1913 world trade expanded tenfold, while the cost of freight dropped between 50 and 95 percent so that even cheap and heavy products such as agricultural products, raw materials, and machinery were shipped around the world.
2. The growth of trade and close connections between the industrial economies of Western Europe and North America brought greater prosperity to these areas, but it also made them more vulnerable to swings in the business cycle. One of the main causes of this growing interdependence was the financial power of Great Britain.

3. Non-industrial areas were also tied to the world economy. The non-industrial areas were even more vulnerable to swings in the business cycle because they depended on the export of raw materials that could often be replaced by synthetics or for which the industrial nations could develop new sources of supply. Nevertheless, until World War I, the value of exports from the tropical countries generally remained high, and the size of their populations remained moderate.

II. Social Changes
A. Population and Migrations
1. Between 1850 and 1914 Europe saw very rapid population growth, while emigration from Europe spurred population growth in the United States, Canada, Australia, New Zealand, and Argentina. As a result, the proportion of people of European ancestry in the world’s population rose from one-fifth to one-third.

2. Reasons for the increase in European population include a drop in the death rate, improved crop yields, the provision of grain from newly opened agricultural land in North America, and the provision of a more abundant year-round diet as a result of canning and refrigeration.

3. Asians also migrated in large numbers during this period, often as indentured laborers.

B. Urbanization and Urban Environments
1. In the latter half of the nineteenth century European, North American, and Japanese cities grew tremendously both in terms of population and of size. In areas like the English Midlands, the German Ruhr, and around Tokyo Bay, towns fused into one another, creating new cities.

2. Urban growth was accompanied by changes in the character of urban life. Technologies that changed the quality of urban life for the rich (and later for the working class as well) included mass transportation networks, sewage and water supply systems, gas and electric lighting, police and fire departments, sanitation and garbage removal, building and health inspection, schools, parks, and other amenities.

3. New neighborhoods and cities were built (and older areas often rebuilt) on a rectangular grid pattern with broad boulevards and modern apartment buildings. Cities were divided into industrial, commercial, and residential zones, with the residential zones occupied by different social classes.

4. While urban environments improved in many ways, air quality worsened. Coal used as fuel polluted the air, while the waste of the thousands of horses that pulled carts and carriages lay stinking in the streets until horses were replaced by streetcars and automobiles in the early twentieth century.

C. Middle-Class Women's “Separate Sphere”
1. The term “Victorian Age” refers not only to the reign of Queen Victoria (r.1837–1901), but also to the rules of behavior and the ideology surrounding the family and relations between men and women. Men and women were thought to belong in “separate spheres,” the men in the workplace, the women in the home.

2. Before electrical appliances, a middle-class home demanded lots of work; the advent of modern technology in the nineteenth century eliminated some tasks and made others easier, but rising standards of cleanliness meant that technological advances did not translate into a decrease in the housewife’s total workload.
3. The most important duty of middle-class women was to raise their children. Victorian mothers lavished much time and attention on their children, but girls received an education very different from that of boys.

4. Governments enforced legal discrimination against women throughout the nineteenth century, and society frowned on careers for middle-class women. Women were excluded from jobs that required higher education; teaching was a permissible career, but women teachers were expected to resign when they got married. Some middle-class women were not satisfied with home life and became involved in volunteer work or in the women’s suffrage movement.

D. Working-Class Women
1. Working-class women led lives of toil and pain. Many became domestic servants, facing long hours, hard physical labor, and sexual abuse from their masters or their masters’ sons.

2. Many more young women worked in factories, where they were relegated to poorly paid work in the textiles and clothing trades. Married women were expected to stay home, raise children, do housework, and contribute to the family income by taking in boarders, doing sewing or other piecework jobs, or by washing other people’s clothes.

III. Socialism and Labor Movements
A. Marx and Socialism
1. Socialism began as an intellectual movement. The best-known socialist was Karl Marx (1818–1883) who, along with Friedrich Engels (1820–1895) wrote the *Communist Manifesto* (1848) and *Das Kapital* (1867).

2. Marx saw history as a long series of clashes between social classes.

3. Marx's theories provided an intellectual framework for general dissatisfaction with unregulated industrial capitalism.

4. Marx took steps to translate his intellectual efforts into political action.

B. Labor Movements
1. Labor unions were organizations formed by industrial workers to defend their interests in negotiations with employers. Labor unions developed from the workers’ “friendly societies” of the early nineteenth century and sought better wages, improved working conditions, and insurance for workers.

2. During the nineteenth century workers were brought into electoral politics as the right to vote was extended to all adult males in Europe and North America. Instead of seeking the violent overthrow of the bourgeois class, socialists used their voting power in order to force concessions from the government and even to win elections; the classic case of socialist electoral politics is the Social Democratic Party of Germany.

3. Working-class women had little time for politics and were not welcome in the male dominated trade unions or in the radical political parties. The few women who did participate in radical politics found it difficult to reconcile the demands of workers with those of women.

IV. Nationalism and the Unification of Germany and Italy
A. Language and National Identity Before 1871
1. Language was usually the crucial element in creating a feeling of national unity, but language and citizenship rarely coincided. The idea of redrawing the boundaries of states to accommodate linguistic, religious, and cultural differences led to the forging of larger states from the many German and Italian principalities, but it threatened to break large multiethnic empires like Austria-Hungary into smaller states.
2. Until the 1860s nationalism was associated with liberalism, as in the case of the Italian liberal nationalist Giuseppe Mazzini. After 1848 conservative political leaders learned how to preserve the social status quo by using public education, universal military service, and colonial conquests to build a sense of national identity that focused loyalty on the state.

B. The Unification of Italy, 1860–1870
1. By the mid-nineteenth century, popular sentiment favored Italian unification. Unification was opposed by Pope Pius IX and Austria.
2. Count Cavour, the prime minister of Piedmont-Sardinia, used the rivalry between France and Austria to gain the help of France in pushing the Austrians out of northern Italy.
3. In the south, Giuseppe Garibaldi led a revolutionary army in 1860 that defeated the Kingdom of the Two Sicilies.
4. A new Kingdom of Italy, headed by Victor Emmanuel (the former king of Piedmont-Sardinia) was formed in 1860. In time, Venetia (1866) and the Papal States (1870) were added to Italy.

C. The Unification of Germany, 1866–1871
1. Until the 1860s the German-speaking people were divided among Prussia, the western half of the Austrian Empire, and numerous smaller states. Prussia took the lead in the movement for German unity because it had a strong industrial base in the Rhineland and an army that was equipped with the latest military, transportation, and communications technology.
2. During the reign of Wilhelm I (r. 1861–1888) the Prussian chancellor Otto von Bismarck achieved the unification of Germany through a combination of diplomacy and the Franco-Prussian War. Victory over France in the Franco-Prussian War completed the unification of Germany, but it also resulted in German control over the French provinces of Alsace and Lorraine and thus in the long-term enmity between France and Germany.

D. Nationalism after 1871
1. After the Franco-Prussian War all politicians tried to manipulate public opinion in order to bolster their governments by using the press and public education in order to foster nationalistic loyalties. In many countries the dominant group used nationalism to justify the imposition of its language, religion, or customs on minority populations, as in the attempts of Russia to “Russify” its diverse ethnic populations.
2. Herbert Spencer (1820–1903) and others took up Charles Darwin’s ideas of “natural selection” and “survival of the fittest” and applied them to human societies in such a way as to justify European conquest of foreign nations and the social and gender hierarchies of Western society.

V. The Great Powers of Europe, 1871–1900
A. Germany at the Center of Europe
1. International relations revolved around a united Germany, which, under Bismarck’s leadership, isolated France and forged a loose coalition with Austria-Hungary and Russia. At home, Bismarck used mass politics and social legislation to gain popular support and to develop a strong sense of national unity and pride amongst the German people.
2. Wilhelm II (r. 1888–1918) dismissed Bismarck and initiated a German foreign policy that placed emphasis on the acquisition of colonies.
B. The Liberal Powers: France and Great Britain
1. France was now a second-rate power in Europe, its population and army being smaller than those of Germany, and its rate of industrial growth lower than that of the Germans. French society seemed divided between monarchist Catholics and republicans with anticlerical views; in fact, popular participation in politics, a strong sense of nationhood, and a system of universal education gave the French people a deeper cohesion than appeared on the surface.
2. In Britain, a stable government and a narrowing in the disparity of wealth were accompanied by a number of problems. Particularly notable were Irish resentment of English rule, an economy that was lagging behind those of the United States and Germany, and an enormous empire that was very expensive to administer and to defend. For most of the nineteenth century Britain pursued a policy of “splendid isolation” toward Europe; preoccupation with India led the British to exaggerate the Russian threat to the Ottoman Empire and to the Central Asian approaches to India while they ignored the rise of Germany.

C. The Conservative Powers: Russia and Austria-Hungary
1. The forces of nationalism weakened Russia and Austria-Hungary. Austria had alienated its Slavic-speaking minorities by renaming itself the “Austro-Hungarian Empire.” The Empire offended Russia by attempting to dominate the Balkans, and particularly by the annexation of Bosnia-Herzegovina in 1908.
2. Ethnic diversity also contributed to instability in Russia. Attempts to foster Russian nationalism and to impose the Russian language on a diverse population proved to be divisive.
3. In 1861 Tsar Alexander II emancipated the peasants from serfdom, but did so in such a way that it only turned them into communal farmers with few skills and little capital. Tsars Alexander III (r. 1881–1894) and Nicholas II (r. 1894–1917) opposed all forms of social change.
4. Russian industrialization was carried out by the state, and thus the middle-class remained small and weak while the land-owning aristocracy dominated the court and administration. Defeat in the Russo-Japanese War (1904–1905) and the Revolution of 1905 demonstrated Russia’s weakness and caused Tsar Nicholas to introduce a constitution and a parliament (the Duma), but he soon reverted to the traditional despotism of his forefathers.

VI. Japan Joins the Great Powers, 1865–1905
A. China, Japan, and the Western Powers, to 1867
1. In the late nineteenth century China resisted Western influence and became weaker; Japan transformed itself into a major industrial and military power. The difference can be explained partly by the difference between Chinese and Japanese elites and their attitudes toward foreign cultures.
2. In China a “self-strengthening movement” tried to bring about reforms, but the Empress Dowager Cixi and other officials opposed railways or other technologies that would carry foreign influences into the interior. They were able to slow down foreign intrusion, but in doing so, they denied themselves the best means of defense against foreign pressure.
3. In the early nineteenth century, Japan was ruled by the Tokugawa shogunate and local lords had significant autonomy. This system made it hard for Japan to coordinate its response to outside threats.
4. In 1853, the American Commodore Matthew C. Perry arrived in Japan with a fleet of steam-powered warships and demanded that the Japanese open their ports to trade and American ships.
5. Dissatisfaction with the shogunate's capitulation to American and European demands led to a civil war and the overthrow of the shogunate in 1868.

B. The Meiji Restoration and the Modernization of Japan, 1868–1894
1. The new rulers of Japan were known as the Meiji oligarchs.
2. The Meiji oligarchs were willing to change their institutions and their society in order to help transform their country into a world-class industrial and military power. The Japanese had a long history of adopting ideas and culture from China and Korea; in the same spirit, the Japanese learned industrial and military technology, science, engineering, and even clothing styles and pastimes from the West.
3. The Japanese government encouraged industrialization, funding industrial development with tax revenue extracted from the rural sector and then selling state-owned enterprises to private entrepreneurs.

C. The Birth of Japanese Imperialism, 1894–1905
1. Industrialization was accompanied by the development of an authoritarian constitutional monarchy and a foreign policy that defined Japan’s “sphere of influence” to include Korea, Manchuria, and part of China.
2. Japan defeated China in a war that began in 1894, thus precipitating an abortive Chinese reform effort (the Hundred Days Reform) in 1898 and setting the stage for Japanese competition with Russia for influence in the Chinese province of Manchuria. Japanese power was further demonstrated when Japan defeated Russia in 1905 and annexed Korea in 1910.