

## Chapter 18 Outline

### I. Explaining the Industrial Revolution

- A. At the heart of the Industrial Revolution lay a great acceleration in the rate of technological innovation, leading to enormous increases in the output of goods and services.
  - 1. use of new energy sources (steam engines, petroleum engines)
  - 2. in Britain, output increased some fifty-fold in the period 1750–1900
  - 3. based on a “culture of innovation”
  - 4. before 1750/1800, the major Eurasian civilizations were about equal technologically
  - 5. greatest breakthrough was the steam engine
    - a. soon spread from the textile industry to many other types of production
    - b. agriculture was transformed
  - 6. spread from Britain to Western Europe, then to the United States, Russia, and Japan
    - a. became global in the twentieth century
- B. Why Europe?
  - 1. many scholars have debated why industrialization appeared first in Great Britain, and why it started in the late nineteenth century
    - a. older views: there’s something unique about European society
  - 2. that view has been challenged by:
    - a. the fact that other parts of the world have had times of great technological and scientific flourishing
      - i. Islamic world 750–1100 c.e.
      - ii. India was the center of cotton textile production and source of many agricultural innovations
      - iii. China led the world in technological innovation between 700 and 1400 c.e.
      - iv. all had slowed or stagnated by the early modern era
    - b. the fact that Europe did not enjoy any overall economic advantage as late as 1750
      - i. across Eurasia, life expectancy, consumption and nutrition patterns, wage levels, living standards, etc., were broadly similar in the 18th century
    - c. the rapid spread of industrial techniques to much of the world in the past 250 years
  - 3. contemporary historians tend to see the Industrial Revolution as a rather quick and unexpected eruption in the period 1750–1850
  - 4. why it might have occurred in Europe
    - a. some patterns of European internal development favored innovation
      - i. small, highly competitive states
    - b. European rulers had an unusual alliance with merchant classes
      - i. groups of merchant capitalists were often granted special privileges
      - ii. it was in governments’ interest to encourage commerce and innovation
      - iii. in Venice and Holland, merchants controlled the state
  - 5. other societies developed market-based economies by the eighteenth century (e.g., Japan, India, and China)
    - a. but Europe was at the center of the most varied exchange network
    - b. contact with culturally different peoples encouraged change and innovation
      - i. quest for the products and ideas of Asia
      - ii. competition with Indian cotton cloth manufacture
      - iii. popularity of other Asian goods prompted imitation
    - c. the Americas provided silver, raw materials, and foods

### C. Why Britain?

1. Britain was the most commercialized of Europe's larger countries
  - a. small farmers had been pushed out (enclosure movement)
  - b. market production fueled by a number of agricultural innovations
  - c. guilds had largely disappeared
2. ready supply of industrial workers with few options
3. British aristocrats were interested in commerce
4. British commerce was worldwide
  - a. Royal Navy protected a large merchant fleet
5. British political life encouraged commercialization and economic innovation
  - a. policy of religious toleration (established 1688) welcomed people with technical skills regardless of faith
  - b. British government imposed tariffs to protect its businessmen
  - c. it was easy to form companies and forbid workers' unions
  - d. unified internal market, thanks to road and canal system
  - e. patent laws protected inventors' interests
  - f. checks on royal authority gave more room for private enterprise
6. emphasis of the Scientific Revolution was different in Great Britain
  - a. on the continent: logic, deduction, mathematical reasoning
  - b. in Britain: observation and experiment, measurement, mechanical devices, practical applications
  - c. in Britain, artisan/craftsman inventors were in close contact with scientists and entrepreneurs
  - d. the British Royal Society took the role of promoting "useful knowledge"
    - i. publicized information on recent scientific advances
7. Britain had plenty of coal and iron ore, often conveniently located
8. Britain was not devastated by the Napoleonic wars
9. social change was possible without revolution

## II. The First Industrial Society

- A. There was a massive increase in output as industrialization took hold in Britain.
  1. rapid development of railroad systems
  2. much of the dramatic increase was in mining, manufacturing, and services
  3. agriculture became less important by comparison
  4. vast transformation of daily life
    - a. it was a traumatic process for many
    - b. different people were affected in different ways
- B. The British Aristocracy
  1. landowning aristocrats had little material loss in the Industrial Revolution
  2. but the aristocracy declined, because urban wealth became more important
    - a. many businessmen, manufacturers, and bankers were enriched
    - b. aristocrats had declining political clout
    - c. by 1900, businessmen led the major political parties
  3. titled nobles retained great social prestige and personal wealth
    - a. **many found an outlet in Britain's colonial possessions ( topic of next unit)**
- C. The Middle Classes
  1. the middle classes had the most obvious gains from industrialization
  2. upper middle class: some became extremely wealthy, bought into aristocratic life

3. middle class: large numbers of smaller businessmen and professionals
  - a. politically liberal
  - b. stood for thrift, hard work, rigid morals, and cleanliness
  - d. middle-class women were more frequently cast as homemakers, wives, and mothers
    - i. moral centers of society
    - ii. managers of consumption (rise of “shopping”)
    - iii. rising “ideology of domesticity”
4. lower middle class: service sector workers (clerks, secretaries, etc.)
  - a. by 1900, they were around 20 percent of Britain’s population
  - b. employment opportunities for women as well as men
    - i. almost all were single and expected to marry and give up jobs

#### D. The Laboring Classes

1. in the nineteenth century, about 70 percent of Britons were workers
2. laboring classes suffered most/benefited least from industrialization
3. rapid urbanization
  - a. by 1851, a majority of Britain’s population was urban
  - b. by 1900, London was the largest city in the world (6 million)
4. horrible urban conditions
  - a. vast overcrowding
  - b. inadequate sanitation and water supplies
  - c. epidemics
  - d. few public services or open spaces
  - e. little contact between the rich and the poor
5. industrial factories offered a very different work environment
  - a. long hours, low wages, and child labor were typical for the poor
  - b. what was new was the routine and monotony of work, direct supervision, discipline
  - c. industrial work was insecure
  - d. many girls and young women worked
    - i. usually left outside paid employment when they married
    - ii. but often continued to earn money within the home

#### E. Social Protest among the Laboring Classes

1. “friendly societies,” especially of artisans, for self-help were common
2. other skilled artisans sometimes wrecked machinery and burned mills
3. some joined political movements, aimed to enfranchise working-class men
4. trade unions were legalized in 1824
  - a. growing numbers of factory workers joined them
  - b. fought for better wages and working conditions
  - c. at first, upper classes feared them
5. socialist ideas spread gradually
  - a. Karl Marx (1818–1883) laid out a full ideology of socialism
    - i. human history is a history of class struggle
    - ii. in his own time, saw a growing hostility between the *bourgeoisie* and the *proletariat*
    - iii. argued that capitalism can never end poverty
    - iv. foretold a future (communist) golden age when industrial technology would serve the whole community
  - b. socialist ideas were attractive among more radical trade unionists and some middle-

class intellectuals in the late nineteenth century → more in Germany than with the British working class

6. British working-class movement remained moderate
  - a. material conditions for workers improved in second half of the century
  - b. capitalists and impoverished working class didn't polarize because of the large middle and lower middle class
  - c. workers bettered their standard of living
    - i. wages improved
    - ii. cheap imported food improved diets
    - iii. infant death rates fell
    - iv. male workers gradually got the vote
    - v. sanitary reform cleaned up cities
    - vi. even some urban parks were established
7. but immense inequalities remained
8. by 1900, Britain was in economic decline relative to newly industrialized states like Germany and the United States

### **III. Variations on a Theme: Comparing Industrialization in the United States and Russia**

- A. The Industrial Revolution soon spread to continental Western Europe.
  1. by 1900, it was established in the United States, Russia, and Japan
  2. industrialization had broadly similar outcomes wherever it was established
    - a. aristocratic, artisanal, and peasant classes declined
    - b. middle-class women withdrew from paid labor altogether
      - i. working-class women tried to leave paid labor after marriage
      - ii. women received lower wages than men, were accused of taking jobs from men
    - c. establishment of trade unions and socialist movements
  3. but the spread of industrialization was affected by the cultures of the lands where it was established, pace and timing of industrialization, nature of major industries, role of the state, political expression of social conflict, etc.
    - a. French industrialization was slower, perhaps less disruptive
    - b. Germany focused at first on heavy industry
      - i. was far more concentrated in huge companies
      - ii. generated a more militant and Marxist-oriented labor movement
  4. variations are most apparent in the cases of the United States and Russia
- B. The United States: Industrialization without Socialism
  1. American industrialization began with New England textiles (1820s)
  2. explosive growth after the Civil War
    - a. by 1914, the United States was the world's leading industrial power
    - b. closely linked to European industrialization
      - i. Europeans provided around one-third of the capital investment
  3. the U.S. government played an important role through tax breaks, land grants to railroads, laws making formation of corporations easy, absence of overt regulation
    - a. encouraged development of very large enterprises
  4. pioneering of mass production techniques
  5. creation of a "culture of consumption" through advertising, catalogs, and department stores
  6. self-made industrialists became cultural heroes (Ford, Carnegie, Rockefeller)

7. serious social divisions rose
  - a. growing gap between rich and poor
  - b. constant labor of the working class
  - c. creation of vast slums
  - d. growing labor protest
    - i. sometimes erupted in violence
    - ii. but no major political party emerged to represent the working class
    - iii. socialism (especially Marxism) didn't have great appeal for Americans
    - iv. even in the Great Depression (1930s), no major socialist movement emerged
  - e. Why didn't socialism appeal to American workers?
    - i. U.S. union organizations were relatively conservative
    - ii. American Federation of Labor focused on skilled workers
    - iii. American population was extremely heterogeneous
    - iv. American workers had a higher standard of living than did their European counterparts
    - v. middle-class aspirations of white-collar workers
  - f. "Populists" denounced corporate interests
    - i. but populism had little appeal in growing industrial areas
  - g. "Progressives" were more successful, especially after 1900
    - i. aimed to remedy the ills of industrialization
  - h. socialism was labeled as fundamentally "un-American"

#### C. Russia: Industrialization and Revolution

1. Russia was an absolute monarchy, with the greatest state control of anywhere in the Western world
  - a. in 1900: no national parliament, no legal political parties, no nationwide elections
  - b. dominated by a titled nobility (many highly Westernized)
  - c. until 1861, most Russians were serfs
2. in Russia, the state, not society, usually initiated change
  - a. Peter the Great (r. 1689–1725) was an early example of "transformation from above"
  - b. Catherine the Great (r. 1762–1796) also worked to Europeanize Russian culture and intellectual life
  - c. the state directed freeing of the serfs in 1861
    - i. stimulated by Russia's defeat in the Crimean War
  - d. the state set out to improve Russia's economic and industrial backwardness
3. Russian Industrial Revolution was launched by the 1890s
  - a. focused on railroads and heavy industry
  - b. substantial foreign investment
  - c. industry was concentrated in a few major cities
  - d. fewer but larger factories than was typical in Western Europe
4. growing middle class disliked Russia's deep conservatism, sought a greater role in political life
  - a. but they were dependent on the state for contracts and jobs
  - b. also relied on the state to suppress worker radicalism
5. Russian working class (only about 5 percent of the population) rapidly radicalized
  - a. harsh conditions
  - b. no legal outlet for grievances
  - c. large-scale strikes

6. Marxist socialism appealed to some educated Russians, gave them hope for the future
  - a. founded the Russian Social-Democratic Labor Party (1898)
  - b. got involved in workers' education, union organizing, and revolutionary action
7. major insurrection broke out in 1905, after defeat in war by Japan
  - a. in Moscow and St. Petersburg, workers went on strike, created their own representative councils ("soviets")
  - b. peasant uprisings, student demonstrations
  - c. non-Russian nationalities revolted
  - d. military mutiny
  - e. brutally suppressed, but forced the tsar's regime to make reforms
    - i. granted a constitution
    - ii. legalized trade unions and political parties
    - iii. created a national assembly (the Duma)
8. limited political reforms failed to pacify the radicals or bring stability
  - a. growing belief that only a revolution would help
  - b. World War I provided the revolutionary moment
9. Russian Revolution broke out in 1917
  - a. brought the most radical of the socialist groups to power—the Bolsheviks, led by Vladimir Ulyanov (Lenin)
  - b. only in Russia did industrialization lead to violent social revolution

#### **IV. The Industrial Revolution and Latin America in the Nineteenth Century**

- A. Beyond Europe and North America, only Japan underwent major industrialization in the 19th century.
  1. elsewhere, only modest experiments in industry
  2. did not transform societies
  3. non-industrialized societies still felt the impact of European and North American developments
- B. After Independence in Latin America
  1. the struggle for independence in Latin America took a long time and was very destructive
  2. international wars hindered development of the new nations
    - a. Mexico lost vast territories to the United States (1846–1848)
    - b. Paraguay was devastated by war (1864–1870)
  3. political life was highly unstable
    - a. conservatives tried to maintain the old status quo
    - b. liberals attacked the Church, sought some social reforms, preferred federalism to a centralized government system
    - c. often, military strongmen (*caudillos*) gained power
      - i. they were unstable, too
    - d. states ran through multiple constitutions
  4. independence brought little fundamental change to social life
    - a. slavery was abolished (though not until late 1880s in Brazil and Cuba)
    - b. most legal distinctions between racial categories were abolished
    - c. but creole whites remained overwhelmingly in control of productive economic resources
    - d. small middle class allowed social mobility for a few
    - e. the vast majority were impoverished
      - i. Caste War of Yucatán (1847–1901) was one of the few rebellions of the poor

C. Facing the World Economy

1. second half of the nineteenth century: greater stability, integration into world economy
2. rapid growth of Latin American exports to industrializing countries
  - a. exported food products and raw materials
  - b. imported textiles, machinery, tools, weapons, luxury goods
3. major investment of European and U.S. capital in Latin America

D. Becoming like Europe?

1. rapid population increase
2. rapid urbanization
3. actively sought European immigrants
4. few people benefited from the export boom
  - a. upper-class landowners did very well
  - b. middle class grew some
  - c. but over 90 percent of the population was still lower-class
5. industrial workers made up a modest segment of the lower class
  - a. attempted unions and strikes
  - b. harshly repressed
6. most of the poor remained rural
  - a. many farmers were forced off their land, became dependent laborers
7. only in Mexico did conditions provoke a nationwide revolution
  - a. overthrow of the dictator Porfirio Díaz (1876–1911)
  - b. major, bloody conflict (1910–1920)
  - c. huge peasant armies
  - d. transformed Mexico
    - i. new constitution (1917) proclaimed universal suffrage, land redistribution, disestablishment of the Catholic Church, minimum wage, eight-hour workday, etc.
8. the export boom did *not* cause a thorough Industrial Revolution
  - a. there was little internal market for manufactured goods
  - b. rich landowners and cattlemen had little incentive to invest in manufacturing
  - c. governments supported free trade, so cheaper and higher-quality foreign goods were available than could be made at home
  - d. instead, economic growth was dependent on Europe and North America
    - i. some have regarded it as a new form of colonialism
    - ii. the case of the “banana republics” under pressure from the United States
    - iii. repeated U.S. military intervention