

16 THE INDUSTRIAL REVOLUTION

1740 — 1914

THE GLOBAL CONSEQUENCES OF INDUSTRIAL EXPANSION AND IMPERIALISM

COMMENTARY

As we saw in the previous chapter, the political revolutions in Britain's North American colonies and in France, the most populous and powerful European monarchy at the time, ignited a series of revolutionary movements in Europe, Haiti and Latin America and initiated profound and seemingly irreversible effects on western society. It was not just that the personnel and forms of governments were altered; the entire basis of government was altered, and with it conceptions of society, including those of nationality, social class, human rights, and gender roles. These revolutionary political and social trends continued and grew in the 19th century, manifesting themselves in **democratic** and **nationalist** movements and uprisings against arbitrary or foreign rule throughout Europe, in the transatlantic campaign for the abolition of slavery and the slave trade, and in the smaller, but steadily rising, chorus demanding equal rights for women. This revolutionary dynamic was reinforced by, and eventually merged with another wave of changes brought about by an **Industrial Revolution**, resulting in a tidal wave of political, economic and social change that was to sweep across the entire globe before the end of the century. Just as the political revolutions replaced feudal rulers with elected leaders and established new forms of government, the Industrial Revolution saw the substitution of machines and **inanimate sources of power** for much human labor and the replacement of craft guilds and domestic production by the **factory system** of manufacturing and the organization of businesses into **corporations** or **cartels**. And, just as the political revolutions had resulted in an ever-growing number of citizens participating in government, these technological and organizational changes effected an enormous increase in production and hitherto undreamed of economic growth in the industrialized societies.

The unanticipated consequences of this unprecedented rise in productivity and prosperity were enormous. As the Industrial Revolution spread rapidly from its birthplace in Britain to France, Belgium, Germany, and the United States, new manufacturing cities arose, inhabited by a new form of unskilled urban labor, the industrial **proletariat**, and a new, managerial, middle class. Rapid, unplanned **urbanization** and rampant exploitation of their workers (many of whom were women and young children) by the factory owners led to calls for government intervention and regulation and, as those pleas were heeded in the form of **Factory Acts**, **Poor Laws**, and **Public Health Boards**, large increases in the size, scope, and cost of government. As men of the business and professional classes gained the right to vote, workers began to demand the right to vote and to organize into **labor unions** to protect their interests. Strong resistance to the workers' demands by their employers and their governments led to the rise of **socialist movements**, some of which, following the reasoning of **Karl Marx**, in the *Communist Manifesto*, argued that a revolutionary overthrow of the entire **capitalist** system was the only means by which an equitable distribution of the benefits of industrialization would be achieved. By end of the century, the newly unified nation of **Germany** and newly reunified (after the Civil War) United States of America had begun to overtake Britain as industrial powers. At the same time, industrialization provided Europeans and Americans with the financial, organizational and technological resources — as well as the motivation — to expand their power and influence throughout the world in the pursuit of new markets for their products, cheap sources or raw materials, new opportunities for capital investments, and new agricultural lands for their ever-growing populations. Millions of Europeans migrated to the Americas, Australia and New Zealand, and parts of Africa and Asia. The non-industrial societies of the world were usually unable to resist the economic encroachment, military domination, and political **colonization** of the **New Imperialism**. North America, India, Southeast Asia, and virtually all of Africa came under European or U.S. control by 1900, and Latin America became an economic dependency of the industrial powers. The Ottoman Empire and the Qing Dynasty in China were fatally weakened by their failure to respond to external pressures and the political and social unrest they produced within their borders. Only **Japan** was able to respond effectively, by initiating her own program of industrialization and modernization (as we shall see in the next chapter).

Chapter 16 examines these developments and addresses a number of significant questions. How and why did the Industrial Revolution begin in Britain? How was the second phase of industrialization qualitatively different from the first, and why did Britain lose its industrial hegemony to Germany and the United States by 1914? What prevented the proletarian revolutions predicted for the industrialized societies by Marx and Engels? What was the principal motivation for the New Imperialism? And how did Europeans and Americans reconcile their often brutal imperial

domination of Africans, Asians, and the indigenous peoples of the Americas and the Antipodes with their own, self-proclaimed, beliefs in democracy, human dignity, and the rights of the individual?

CHAPTER OUTLINE

- A. The Industrial Revolution: What Was It? What Was Its Significance?
- B. Britain, 1740-1860
 - 1. Revolution in textile manufacture
 - a. Technological innovations
 - b. Greatly increased productivity
 - c. Social dislocation and political unrest: the Luddites
 - d. Widespread ripple effect outside Britain: cotton plantations in the United States
 - 2. Capital goods: iron, steam engines, railways and steamships
 - 3. Why did the Industrial Revolution begin in Britain? How do we know?
 - a. SOURCE: Conflicting Images of Early Industrial Life — the English Romantic Poets
 - b. Reasons for Britain's industrial leadership
- C. The Second Stage of Industrialization, 1860-1910
 - 1. New products and new nations
 - a. Steel and chemical industries
 - b. Electricity
 - 2. SPOTLIGHT: Through the Camera's Lens
 - 3. Factory production
 - 4. Warfare and industrialization
 - 5. Effects of the Second Industrial Revolution worldwide
- D. Social Changes: the Conditions of Working People
 - 1. What Do We Know and How Do We Know It?
 - 2. Demographic causes and effects of the Industrial Revolution
 - 3. Winners and losers in the Industrial Revolution
 - a. Social and economic effects on the workers
 - b. Government responses: reform legislation
- E. Political Reaction in Britain and Europe, 1800-1914
 - 1. Political responses in Britain
 - a. Extending democracy: the Parliamentary Reform Acts of 1832 and 1867
 - b. Factory Acts and Chartism
 - 2. Labor organization (in Britain)
 - a. FOCUS: Labor Organization and Parliament
 - b. Trade Union Act of 1871
 - 3. Labor organization outside Britain
 - a. Karl Marx and theories of worker revolution: *The Communist Manifesto* (1848)
 - i. Class struggle: bourgeoisie and proletariat
 - ii. Workers' revolution
 - b. Germany, 1870-1914
 - c. The United States, 1870-1914
 - d. France, 1870-1914
- F. Competition among Industrial Powers: the Quest for Empire
 - 1. European pre-eminence and social Darwinism
 - a. Darwin, Spencer and survival of the fittest
 - b. SOURCE: Assertions of European Supremacy and Obligation
 - 2. The Ottoman Empire: the Sick Man of Europe, 1829-1876
 - 3. Southeast Asia and Indonesia, 1795-1880
 - 4. India, 1858-1914
 - a. British rule and economic domination
 - b. SOURCE: The Attack of King Industry
 - 5. China, 1800-1914
 - a. The Opium Wars and the Taiping Rebellion, 1839-1864

- b. The Boxer Rebellion, 1898-1900
- c. PROFILE: The Dowager Empress

G. Africa, 1653-1912

- 1. Egypt, 1798-1882
 - a. Mehemet Ali (1769-1849) and Egyptian modernization
 - b. The Suez canal (1869) and British domination
- 2. Algeria, 1830-1871
- 3. South Africa, 1652-1910
 - a. Zulus, Boers and British, 1816-1902
 - b. Labor issues: coercion and unionization
- 4. European explorers in central Africa
- 5. The Scramble for Africa, 1884-1912

H. What Difference Does It Make?

- 1. Theories of imperialism and dependency
- 2. Post-colonial analyses

IDENTIFICATION TERMS

For each term, students should be able to provide an identification or definition, an approximate date, a geographical location (if relevant) and —most important —a concise explanation of its significance in the context of the chapter. Terms that appear in the *Study Guide* are listed in **bold** font in the first column.

Luddite riots	Crystal Palace	Indian Mutiny
Natives Land Act	Second Industrial Revolution	Otto von Bismarck
Hiram Maxim	Bessemer converter	Samuel Gompers
extraterritoriality	Thomas Edison	Paris Commune
Edwin Chadwick	Louis Daguerre	The White Man's Burden
Stanley and Livingstone	Krupps	Crimean War
cartels	<i>Self-Help</i>	Sick Man of Europe
Chartist Movement	Corn Laws	Opium Wars
Mehemet Ali	Reform Act of 1832	Taiping Rebellion
class struggle	Factory Acts	Dowager Empress
spinning jenny	Benjamin Disraeli	Shaka
James Watt	William Gladstone	Boer War
Stephenson's <i>Rocket</i>	Combination Acts	King Leopold
Friedrich Engels	<i>Communist Manifesto</i>	the <i>Mahdi</i>
Arnold Toynbee	proletariat	J. A. Hobson

LEARNING OBJECTIVES

After reading and studying Chapter 16, students should be able to:

1. Demonstrate an understanding of the historical concept of an industrial revolution and be able to describe and explain the model proposed by Arnold Toynbee.
2. Discuss why the Industrial Revolution began in Britain.
3. Explain how an industrial revolution that was rooted in *laissez-faire* economic theory and practice gradually led to increased government intervention and regulation of the economy and society in all industrializing nations.
4. Understand the connection between industrialization and political democratization.
5. Explain the basic elements of Marxian socialism, the reasons for its attraction among many European workers, and the reasons why the *Communist Manifesto*'s predictions of a proletarian revolution did not eventuate.
6. Explain the various directions taken by organized labor movements and parties in Europe and the United States and the reasons for these differing approaches.
7. Understand the economic and political background of European and U.S. imperialism in the 19th century, with particular reference to the Hobson Thesis and other historical explanations and models discussed at the end of the chapter.
8. Describe the various responses by leaders, governments and peoples in Asia and Africa to the threat of western imperialism and analyze the reasons for their relative success or failure.

SUGGESTIONS FOR LECTURE TOPICS

1. Discuss the origins of the Industrial Revolution, connecting it to economic, cultural, social and political developments discussed in Chapters 13-15, and explaining why it began to develop first in Britain.
2. Discuss the domino effect of technological improvements in the textile, mining, iron, chemical and electrical industries during the Industrial Revolution.
3. Differentiate between the first and second Industrial Revolutions, discussing the economic, social and political impact of each.
4. Explain Marxism in the context of responses to industrialization, clarifying the salient points of Marx's arguments and pointing out both the correctness and the incorrectness of various arguments.
5. Discuss modernization movements in the non-western world before and during the age of imperialism and connect them with the varying responses or reactions to western expansion. Then discuss the impact of imperial rule on its colonial subjects, using India, China, the Congo and South Africa as examples.
6. Discuss the ongoing historical debate regarding imperialism, its motivations and its effects, including the Hobson-Lenin thesis and its critics, Wallerstein and world systems theory, and the Robinson and Gallagher thesis.

TOPICS FOR ESSAYS AND CLASS DISCUSSIONS

1. Why did the Industrial Revolution begin in Britain when it did? What specific factors have been identified as being crucial in laying the groundwork for industrialization and how did they do so?
2. What was so revolutionary about the Industrial Revolution?
3. What made the Second Industrial Revolution different from the first? Why do you suppose it was Germany and the United States, rather than Britain, who took the lead in the second phase of industrialization?
4. Compare the methods of imperial domination and rule over their respective colonies in Africa and Asia, as practiced by British, French, Belgian and Dutch imperialists. What areas were taken over by each European country? What correlations between motivations and methods can you detect?
5. Current events & issues: The Industrial Revolution in Britain and elsewhere was promoted primarily by men who were firm believers in capitalism, free market enterprise, and *laissez-faire*. Yet one of the most significant results of industrialization in Europe and the United States was the growth of government and increased government intervention in business and society. How can this apparent contradiction be explained?
6. Discuss the various historical interpretations of the motivations and effects of the New Imperialism as reviewed at the end of the chapter. What seems to have been the primary goal of the imperial powers, according to most of those theories? What effects did imperialism have on the subject peoples and societies?
7. According to their *Communist Manifesto* (1848), why did Karl Marx and Friedrich Engels believe that the only recourse of the industrial proletariat was violent revolution? Why did this prediction turn out to be incorrect in Britain, Germany and the United States, the most industrialized societies at the end of the 19th century?
8. Group work: Explain and compare the effects of European encroachment on the Ottoman Empire, Egypt, China and India in the 19th century. Citing examples such as Mehemet Ali, Dalpatram Kavi, and the Dowager Empress, discuss how those societies attempt to respond to the twin challenges of industrialization and imperialism. What factors affected their respective responses? How successful were their respective strategies?
9. What exactly was The White Man's Burden according to Rudyard Kipling? What political ideas and arguments were employed by Europeans and Americans to justify imperialism? How would modern historians who stress theories of dependency and underdevelopment respond to Kipling today?
10. Debate: Using the primary sources (documents, quotations and illustrations) throughout the first half of the chapter, assess the impact of the Industrial Revolution on British and European workers. In the long run, was industrialization ultimately more destructive or beneficial to the working classes? What effects are evidenced by the sources? How did the workers respond to these changes? What different methods did they try, in order to improve their conditions?

TEXT RESOURCES (Spodek, 2nd ed.)

Timetables, charts and graphs:	Industrialization in the West, 1760-1900	(p. 518)
	The World Beyond the Industrialized West, 1800-1914	(p. 540)
	Major Discoveries and Inventions, 1830-1914	(p. 554)
Large photographs or illustrations:	Interior of the Crystal Palace, London	(p. 523)
	A canal connects two oceans	(p. 524)
	Putters or trolley boys [from <i>Mines and Miners</i>]	(p. 530)
	Massacre of the Paris radicals	(p. 536)
	The steamer <i>Nemesis</i> destroying Chinese junks	(p. 544)
	Boxers on the March	(p. 548)
Maps:	The Industrial Revolution	(p. 521)
	European imperialism, 1815-1870	(p. 537)
	The decline of the Qing Dynasty	(p. 545)
	European expansion in Africa	(p. 549)
	Dr. Livingstone, I presume	(p. 552)
SPOTLIGHT:	Through the Camera's Lens	(pp. 526-7)
PROFILE:	The Dowager Empress	(p. 547)
FOCUS: 533)	Labor Organization and Parliament: Contrasting Views	(p. 533)
SOURCES:	Conflicting Images of Early Industrial Life:	(p. 522)
	The English Romantic Poets	
	Assertions of European Supremacy and Obligation:	(p. 538)
	Kipling, The White Man's Burden The Attack of King Industry [Dalpatram Kavi]	(p. 543)

ADDITIONAL PRIMARY SOURCES (*Documents Set & www.prenhall.com/Spodek*)

- 16-1 Horatio Alger and the heroes of self-help: early expressions of the American dream [from *Strong and Steady or Paddle Your Own Canoe*]
- 16-2 Cracks in the laissez-faire system: the 10-hour campaign
- 16-3 Louis Blanc: an idealist's hopes betrayed [from *1848: Historical Revelations*]
- 16-4 Luddism: an assault on technology
- 16-5 The Chinese Boxer uprising: atrocities of frustration
- 16-6 The Zulu War: the fury of resistance to imperialism [from *The Red Soldier, Letters from the Zulu War*]
- www River of horrors: Leopold's Congo

AUDIO-VISUAL RESOURCES (videos, DVDs, CD-ROM, websites)

***An Age of Revolutions: Films for the Humanities & Sciences.* [video; 24 minutes, color]**

This short film explores the political, social, cultural and economic impact of the French and Industrial Revolutions on 19th century Europe (part of The Europeans series).

***Center for Chinese Studies Library, Berkeley:* <http://www.lib.berkeley.edu/CCSL/> [website]**

The UC Berkeley Library's China collection is catalogued here, and there are links to many other sites.

***The Emperor's Eye — Art and Power in Imperial China: Filmmakers Library.* [video; 58 minutes, color]**

This documentary reveals the story of the art collection of the Qing Emperor Chienlung, relating its fortunes to the revolutionary political changes that took place in China in the 19th and 20th centuries. Fascinating film.

***The Industrial Revolution: Modern Talking Picture Services, 1986.* [video; 90 minutes, color and B&W]**

This film explains why the industrial revolution came to England first, and explains the major stages in the nation's economic metamorphosis. Describes the effects of the revolution on society, particularly the working classes.

The Nationalists: Films for the Humanities & Sciences. [video; 24 minutes, color]

Another film in The Europeans series, this program examines the growth of liberal nationalism from the French Revolution to the middle of the 19th century and the circumstances of the transformation of nationalism from a liberal movement to a jingoist, racist philosophy and major cause of the First World War.

Victorian Web: <http://www.stg.brown.edu/projects/hypertext/landow/victov.html> [website]

This site includes many different links to topics on the social, political, economic and cultural history of Victorian England.

Zulu: MGM, 1964. [video; 150 minutes, color]

This historically accurate, classic war movie starring Michael Caine depicts the defense of Rorke's Drift by British soldiers during the Zulu War of 1879. Although the story is told from the British viewpoint, Zulu society and military organization and tactics are presented fairly and sympathetically. The crucial importance of overwhelming European firepower during the Age of Imperialism is vividly emphasized.