

# UNIT 3: THE INDUSTRIAL REVOLUTION

## THE BEGINNINGS OF INDUSTRIALIZATION

**MAIN IDEA:** the Industrial Revolution started in England and soon spread elsewhere.

**WHY IT MATTERS NOW:** the changes that began in Britain paved the way for modern industrial societies.

**SETTING THE STAGE:** A revolution transformed the way people did work. The Industrial Revolution refers to the greatly increased output of machine-made goods that began in England during the 18<sup>th</sup> century. Before the Industrial Revolution, people wove textiles by hand. Beginning in the middle 1700s, machines did this and other jobs as well. The Industrial Revolution started in England and soon spread to Continental Europe and North America.

**THE INDUSTRIAL REVOLUTION BEGINS** By 1700, small farms covered England's landscape. Wealthy landowners, however, bought up much of the land that village farmers had once worked. Beginning in the early 1700s, large landowners dramatically improved farming methods. These agricultural changes amounted to an agricultural revolution. They eventually paved the way for the Industrial Revolution.

**The Agricultural Revolution.** After buying up the land of village farmers, wealthy landowners enclosed their land with fences or hedges. The increase in their landholdings enabled them to cultivate larger fields, using new seeding and harvesting methods. Within these larger fields, called **enclosures**, landowners experimented to discover more productive farming methods to boost crop yields. The enclosure movement had two important results. First, landowners experimented with new agricultural methods. Second, large landowners forced small farmers to become tenant farmers or to give up farming and move to the cities.



**Crop Rotation.** The process of **crop rotation** proved to be one of the best developments of the scientific farmers. The process improved upon older methods of crop rotation, such as the medieval three-field system. One year, for example, a farmer might plant a field with wheat, which exhausted soil nutrients. The next year he planted a root crop, such as turnips, to restore nutrients. This might be followed in turn by barley, then clover.

Livestock breeders improved their methods, too. In the 1700s, for example, Robert Bakewell increased his mutton output by allowing only his best sheep to breed. Other farmers followed Bakewell's lead. Between 1700 and 1786 the average weight for lambs climbed from 18 to 50 pounds.

These improvements in farming made up an agricultural revolution. As food supplies increased and living conditions improved, England's population mushroomed. An increasing population boosted the demand for food and goods. As farmers lost their land to large enclosed farms, many became factory workers.

**Britain's Advantages.** Why did the Industrial Revolution begin in England? In addition to a large population of workers, the small island country had extensive natural resources. And **industrialization** –the process of developing machine production of goods- required such resources. These natural resources included:

### Unresolved Problems

#### Feeding a Growing Population

Charles Townsend was a landowner in England. He encouraged the use of a four-crop rotation system using turnips, grain, and clover. These crops were used to feed humans and animals. The technique was so successful that Townsend gained the nickname "Turnip."

Changes in farming practices resulted in more and cheaper food. For example, in 1700 each English farmer produced enough food for 1.7 people. By 1800 that farmer could produce enough food for 2.5 people.

- 1 water power and coal to fuel the new machines
- 2 iron ore to construct machines, tools, and buildings
- 3 rivers for inland transportation
- 4 harbors from which its merchant ships set sail

**Economic Strength and Political Stability.** IN addition to its natural resources, Britain had an expanding economy to support industrialization. Businesspeople invested in the manufacture of new inventions. Britain's highly developed banking system also contributed to the country's industrialization. People were encouraged by the availability of bank loans to invest in new machinery and expand their operations. Growing overseas trade, economic prosperity, and a climate of progress contributed to the increased demand for goods.

Britain's political stability gave the country a tremendous advantage over its neighbors. Though Britain took part in many wars during the 1700s, none of these struggles occurred on British soil. Furthermore, their military and political successes gave the British a positive attitude. Parliament also passed laws that protected business and helped expansion. Other countries had some of these advantages. However, Britain had all the **factors of production**. These were the resources needed to produce goods and services that the Industrial Revolution required. They included land, labor and capital (or wealth).

**INVENTIONS SPUR TECHNOLOGICAL ADVANCES** In an explosion of creativity, inventions now revolutionized industry. Britain's textile industry clothed the world in wool, linen, and cotton. This industry was the first to be transformed. Cloth merchants boosted their profits by speeding up the process by which spinners and weavers made cloth.

**Major Inventions in the Textile Industry.** By 1800, several major inventions had modernized the cotton industry. One invention led to another. In 1733, a machinist named John Kay made a shuttle that sped back and forth on wheels. This flying shuttle, a boat-shaped piece of wood to which yarn was attached, doubled the work a weaver could do in a day.

Because spinners could not keep up with these speedy weavers, a cash prize attracted contestants to produce a better spinning machine. Around 1764, a textile worker named James Hargreaves invented a spinning wheel he named after his daughter. Hargreaves's spinning jenny allowed one spinner to work eight threads at a time.

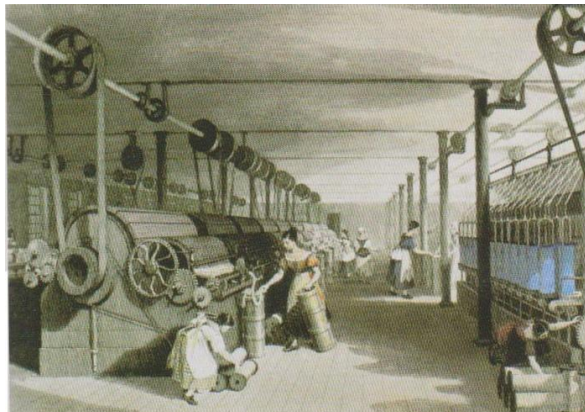


Spinning-jenny.

Richard Arkwright invented the water frame in 1769. The machine used the water-power from rapid streams to drive spinning wheels. In 1779, Samuel Crompton combined features of the spinning jenny and the water frame to produce the spinning mule. The spinning mule made thread that was stronger, finer, and more consistent than earlier spinning machines.

The water frame, the spinning mule, and the power loom were bulky and expensive machines. They took the work of spinning and weaving out of the house. Wealthy textile merchants set up the machines in large buildings called **factories**.

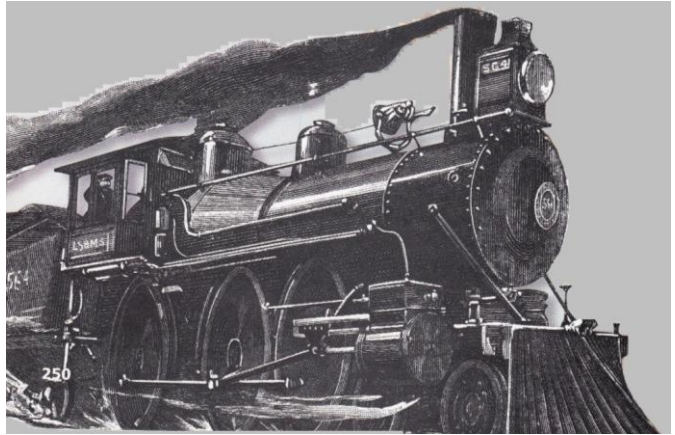
The Industrial Revolution that began in Britain was spurred by a revolution in technology. This is most obvious in the textile industry where inventions in the late 1700s transformed the manufacture of cloth. These developments, in turn, had an impact on the rest of the world. For example, England's cotton came from plantations in the American South, where cotton production skyrocketed from 1790 to 1810 (From 1.5 million pounds to 85 million pounds) in response to demand from the textile mills of England.



**Improvements in Transportation.** Progress in the textile industry spurred other industrial improvements. The first such development, the steam engine, stemmed from the search for a cheap, convenient source of power. The earliest steam engine was used in mining as early as 1705. But this early model gobbled great quantities of fuel, making it expensive to run.

James Watt, a mathematical instrument maker at the University of Glasgow in Scotland, thought about the problem for two years. In 1765, Watt figured out a way to make the steam engine work faster and more efficiently while burning less fuel.

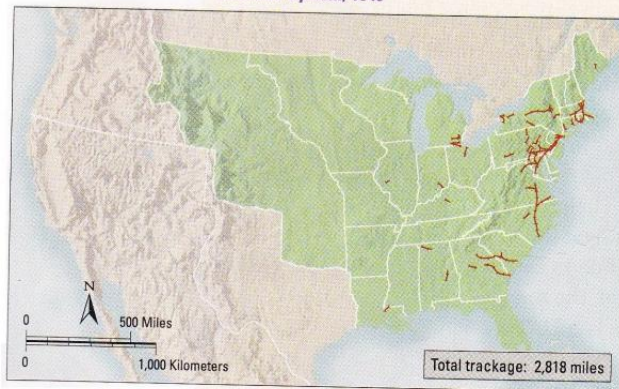
Water transportation: steam could also be used to propel boats. In England, water transportation improved with the creation of a network of canals, or human-made waterways. By the mid- 1800s, 4250 miles of inland channels slashed the cost of transporting raw materials.



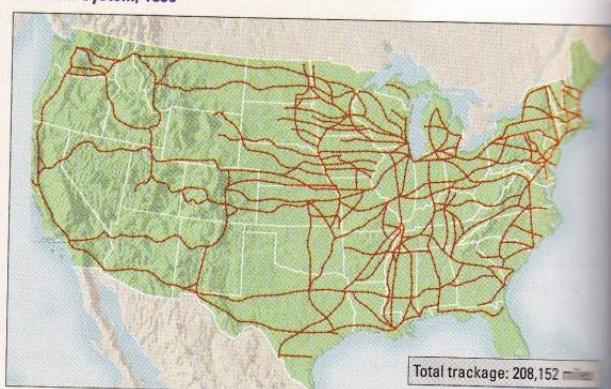
Road Transportation: British roads improved, too. The roadbeds were equipped with a layer of large stones for drainage. On top, it was placed a carefully smoothed layer of crushed rock. Even in rainy weather heavy wagons could travel over the new “macadam” roads without sinking in mud.

The Railway: Steam-driven machinery propelled English factories in the late 1700s. A steam engine on wheels –the railroad locomotive- drove English industry after 1820. First, railroads spurred industrial growth by giving manufacturers a cheap way to transport materials and finished products. Second, the railroad boom created hundreds of thousands of new jobs for both railroad workers and miners. These miners provided iron for the tracks and coal for the steam engines. Third, the railroads boosted England’s agricultural and fishing industries, which could transport their products to distant cities. Finally, by making travel easier, railroads encouraged country people to take distant city jobs. Also railroads lured city dwellers to resorts in the countryside. Like a locomotive racing across the country, the Industrial Revolution brought rapid and unsettling changes to people’s lives.

Railroad System, 1840



Railroad System, 1890



EUROPE 1870

## INDUSTRIALIZATION

**MAIN IDEA:** the factory system changed the way people lived and worked, introducing a variety of problems.

**WHY IT MATTERS NOW:** the difficult process of industrialization is being repeated in many less-developed countries today.

**SETTING THE STAGE:** The Industrial Revolution eventually led to a better quality of life for most people. Yet the change to machine production also caused immense human suffering. In Britain, the Industrial Revolution proved to be a mixed blessing.

**INDUSTRIALIZATION CHANGES WAYS OF LIFE** The pace of industrialization quickened in Britain. By the 1800s more people could afford to heat their homes with coal. They wore better clothing, too, woven on power looms in industrial cities. These cities soon swelled with workers. However, other people suffered from industrialization.

**Growth of Industrial Cities.** For centuries, most Europeans had lived in rural areas. After 1800, the balance shifted toward cities. The growth of the factory system—manufacturing goods in a central location—brought waves of jobseekers. Most of Europe’s urban areas at least doubled in population. This period was one of **urbanization**—city building and the movement of people to cities. Some cities, such as Glasgow and Berlin, tripled or even quadrupled in size.

Britain’s capital, London, was the country’s most important city. Containing twice as many people as its closest rival (Paris), London became Europe’s largest city. It had a population of about 1 million people by 1800.

**Living conditions:** No plans, no sanitary codes, and no building codes controlled the growth of cities. They lacked adequate housing, education, and police protection for the people who poured in from the countryside seeking jobs. Most of the unpaved streets had no drains and collected heaps of garbage. Workers lived in dark, dirty shelters, whole families crowding into one bedroom.

Not surprisingly, sickness was widespread. Cholera epidemics regularly swept through the industrial cities.

**Working Conditions.** Factory owners wanted to keep their machines running for as many hours a day as possible. As a result, the average worker spent 14 hours a day at the job, 6 days a week. Instead of changing with the seasons, the work was the same week after week, year after year. Workers had to keep up with the machines.

Industry also posed new dangers in work. Factories were seldom well-lit or clean. Machines injured workers in countless ways. A boiler might explode or a drive belt might catch the worker’s arm. And there was no government program to provide aid in case of injury. The most dangerous conditions of all were found in the coal mines. Frequent accidents, damp conditions, and the constant breathing of coal dust made the average miner’s life span ten years shorter than that of other workers.

**Class tensions.** Not everyone in the new cities lived miserably. Well-to-do merchants and factory owners built fancy homes in the suburbs. In addition, a new class began to emerge.

Though poverty gripped working classes, the Industrial Revolution created enormous amounts of money in the countries. Most of this wealth lined the pockets of factory owners, shippers, and merchants. These wealthy people made up a growing **middle class**—a social class of skilled workers, professionals, businesspeople, and wealthy farmers.

The new middle class transformed the social structure. In the past, landowners and aristocrats occupied the top position in Society. With most of the wealth, they wielded the power. Now some factory owners, merchants, and investment bankers grew wealthier than the landowners and aristocrats.

Yet important social distinctions divided the two wealthy classes. Landowners looked down on those who had made their fortunes in the “vulgar” business world. Not until late in the 1800s were rich entrepreneurs considered the social equals of the lords of the countryside.

Gradually, a larger middle class—neither rich nor poor—emerged. This group included an upper middle class of government employees, doctors, lawyers, and managers of factories, mines, and shops. A lower middle class consisted of factory overseers and such skilled workers as toolmakers, mechanical drafters, and printers. These people enjoyed a comfortable standard of living.

During the years 1800 to 1850, however, poor workers saw little improvement in their own living and working conditions. Frustrated workers watched their livelihoods disappear as machines replaced them. In response, they smashed the machines they thought were putting them out of work. One group of such workers was called the **Luddites**. They destroyed weaving machinery around 1779. The Luddites attacked whole factories destroying labor-saving machinery. Outside the factories, mod disorder took the form of riots, mainly because of the poor living and working conditions of the workers.

## PATTERNS OF CHANGE: Industrialization

### Effects of Industrialization

Size of Cities	<ul style="list-style-type: none"><li>• Growth of factories, bringing job seekers to cities</li><li>• Urban areas doubling, tripling, or quadrupling in size</li><li>• Factories developing near sources of energy</li><li>• Many new industrial cities specializing in certain industries</li></ul>
Living Conditions	<ul style="list-style-type: none"><li>• No sanitary codes or building controls</li><li>• Lack of adequate housing, education, and police protection</li><li>• Lack of running water and indoor plumbing</li><li>• Frequent epidemics sweeping through slums</li><li>• Eventually, better housing, healthier diets, and cheaper clothing</li></ul>
Working Conditions	<ul style="list-style-type: none"><li>• Industrialization creating new jobs for workers</li><li>• Workers trying to keep pace with machines</li><li>• Factories dirty and unsanitary</li><li>• Workers running dangerous machines for long hours in unsafe conditions</li><li>• Harsh and severe factory discipline</li><li>• Eventually, higher wages, shorter hours, and better working conditions</li></ul>
Emerging Social Classes	<ul style="list-style-type: none"><li>• Growing middle class of factory owners, shippers, and merchants</li><li>• Upper class of landowners and aristocrats resentful of rich middle class</li><li>• Lower middle class of factory overseers and skilled workers</li><li>• Workers overworked and underpaid</li><li>• In general, a rising standard of living, with some groups excluded</li></ul>

**Positive effects of the Industrial Revolution.** Despite the problems that followed industrialization, the Industrial Revolution eventually had a number of positive effects. It created jobs for workers. It contributed to the wealth of the nation. It fostered technological progress and invention. It greatly increased the production of goods and raised the standard of living. Perhaps most important, it provided the hope of improvement in people's lives.

The Industrial Revolution produced a number of other benefits as well. These included healthier diets; better housing; and cheaper, mass-produced clothing. Because the Industrial Revolution created a demand for engineers as well as clerical and professional workers, it expanded educational opportunities.

The middle and upper classes prospered immediately from the Industrial Revolution. For the workers it took longer, but their lives gradually improved during the 1800s. Labor eventually won higher wages, shorter hours, and better working conditions.

The long-term effects of the Industrial Revolution are still evident. Most people today in the industrialized countries can afford consumer goods that would have been considered luxuries fifty or a hundred years ago. Further, their living and working conditions are much improved over those of workers in the 19<sup>th</sup> century.

### INDUSTRIALIZATION SPREADS

**MAIN IDEA:** the industrialization that began in Great Britain spread to other parts of the world.

**WHY IT MATTERS NOW:** the Industrial Revolution set the stage for the growth of modern cities.

Britain's favorable location, geography, financial systems, political stability, and natural resources sparked its industrialization. British power-driven machinery began to mass-produce textiles and other goods at the end of the 1700s. Paying low wages to many workers, British merchants built the world's first factories. When these factories prospered, wealthy business leaders invented more labor-saving machines. They also built more factories, and eventually industrialized the country. The Industrial Revolution that began in Britain soon spread to other countries. They had similar conditions that made them ripe for industrialization.

## WORLDWIDE IMPACT OF INDUSTRIALIZATION

The industrial Revolution shifted the world balance of power. It promoted competition between industrialized nations and increased poverty in less developed nations.

**Rise of Global Inequality.** Industrialization widened the gap between industrialized and non-industrialized countries, even while it strengthened their economic ties. To keep factories running and workers fed, industrialized countries required a steady supply of raw materials from less developed lands. In turn, industrialized countries viewed poor countries as markets for their manufactured products. A large inequality developed between the industrialized West and the rest of the world.

Britain led in exploiting its overseas colonies for resources and markets. Soon other European countries, the United States, Russia, and Japan followed Britain's lead, seizing colonies for their economic resources. Imperialism, the policy of extending one country's rule over many other lands, gave even more power and wealth to these already wealthy nations. Imperialism was born out of the cycle of industrialization, the development of new markets around the world, and the need for resources to supply the factories of Europe.

**Transformation of Society.** Between 1700 and 1900, revolutions in agriculture, production, transportation, and communication changed the lives of people in Western Europe and the United States. Industrialization gave Europe tremendous economic power. Much of Europe was gaining the capability to produce many goods faster and more cheaply. In contrast, the economies of Asia and Africa were still based on agriculture and small workshops.

The industrialization that took place in the 1700s and 1800s revolutionized every aspect of society, from daily life to life expectancy. Despite the hardships early urban workers suffered, population health, and wealth eventually rose dramatically in all industrialized countries. The development of a middle class created great opportunities for education and democratic participation. Greater democratic participation, in turn, fueled a powerful movement for social reform.



## AN AGE OF REFORMS

**MAIN IDEA:** the Industrial Revolution led to economic, social, and political reforms.

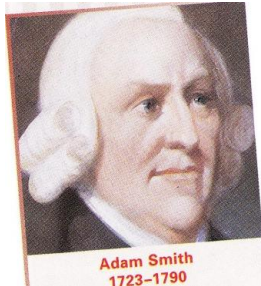
**WHY IT MATTERS NOW:** Many modern social welfare programs developed during this period.

**SETTING THE STAGE:** In industrialized countries in the 1800s, many business leaders believed that progress opened a gap between rich and poor. These leaders cautioned governments to stay out of business and economic affairs. Reformers, however, felt that governments should play an active role in bettering conditions for the poor.

**THE PHILOSOPHERS OF INDUSTRIALIZATION** The term *laissez faire* refers to the economic policy of letting owners of industry and business set working conditions without interference. That policy favors a free market unregulated by the government. The term comes from a French phrase that means “let do”, and by extension, “let people do as they please”.

**Laissez-faire Economics.** *Laissez faire* stemmed from French economic philosophers of the 18<sup>th</sup>-century Enlightenment. They criticized the idea that nations grow wealthy by placing heavy tariffs on foreign goods. In fact, they argued, government regulations only interfered with the production of wealth. These philosophers believed that if the government allowed free trade –the flow of commerce in the world market without government regulation- the economy would prosper.

**Adam Smith** defended the idea of a free economy, or free markets, in his 1776 book *The Wealth of Nations*. According to Smith, economic liberty guaranteed economic progress. Smith claimed that government need not interfere in the economy.



**The Ideas of Malthus and Ricardo.** Economists Thomas Malthus and David Ricardo supported Smith’s basic ideas. Like Smith, they believed that natural laws governed economic life. Their important ideas were the foundation of *laissez-faire* capitalism. **Capitalism** is an economic system in which money is invested in business ventures with the goal of making a profit. These ideas helped bring about the Industrial Revolution.

**RISE OF SOCIALISM** In contrast to *laissez-faire* philosophy, which advised governments to leave business alone, other theorists believed that governments should intervene. These thinkers believed that wealthy people or the government must take action to improve people’s lives. The French writer Alexis de Tocqueville gave a warning:

*“consider what is happening among the working classes.... Do you not see spreading among them, little by little, opinions and ideas that aim not to overturn such and such a ministry, or such laws, or such a government, but society itself, to shake it to the foundations upon which it now rests?” Alexis De Tocqueville, 1848 speech*

**Utilitarianism.** Modifying the ideas of Adam Smith, an English philosopher named Jeremy Bentham introduced the philosophy of utilitarianism. Bentham wrote his most influential works in the late 1700s. He argued that people should judge ideas, institutions, and actions on the basis of their utility, or usefulness. He argued that the government should try to promote the greatest good for the greatest number of people. A government policy was only useful if it promoted this goal. Bentham argued that in general the individual should be free to pursue his or her own advantage without interference from the state.

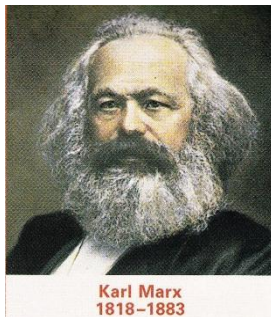
John Stuart Mill, a philosopher and economist, led the utilitarian movement in the 1800s. Mill came to question unregulated capitalism. He believed it was wrong that workers should lead deprived lives that sometimes bordered on starvation. Mill wished to help ordinary working people with policies that would lead to a more equal division of profits. He also favored a cooperative system of agriculture and women’s rights, including the right to vote. Mill called for the government to do away with great differences in wealth. Utilitarians also pushed for reforms in the legal and prison systems and in education.

**Utopian Ideas.** Other reformers took an even more active approach. Shocked by the misery and poverty of the working class, a British factory owner named Robert Owen improved working conditions for his employees. Near his cotton mill in New Lanark, Scotland, Owen built houses, which he rented at low rates. He prohibited children under ten from working in the mills and provided free schooling.

Then, in 1824, he traveled to the United States. He founded a cooperative community in New Harmony, Indiana, in 1825. He intended this community to be a utopia, or perfect living place. New Harmony only lasted three years. However, it inspired the founding of other communities.

**Socialism and Marxism.** French reformers such as Charles Fourier, Saint-Simon, and others sought to offset the effects of industrialization with a new kind of economic system called socialism. In socialism, the factors of production are owned by the public and operate for the welfare of all. Socialism grew out of an optimistic view of human nature, a belief in progress, and a concern for social justice.

Socialists argued that the government should actively plan the economy rather than depending on free-market capitalism to do the job. They argued that government control of factories, mines, railroads, and other key industries would abolish poverty and promote equality. Public ownership, they believed, would help the workers, who were at the mercy of greedy employers.



**The Communist Manifesto.** The writings of a German journalist named Karl Marx introduced the world to a radical type of socialism called Marxism. Marx and Friedrich Engels, a German whose father owned a textile mill in Manchester, outlined their ideas in a 23-page pamphlet called *The Communist Manifesto*. In their manifesto, Marx and Engels argued that human societies have always been divided into warring classes. In their own time, these were the middle-class “haves” or employers, called the bourgeoisie, and the “have-nots” or workers, called the proletariat. While the wealthy controlled the means of producing goods, the poor performed backbreaking labor under terrible conditions. This situation resulted in conflict:

*“Freeman and slave, patrician and plebeian, lord and serf, guild-master and journeyman, in a word, oppressor and oppressed, stood in constant opposition to one another, carried on an uninterrupted, now hidden, now open fight, a fight that each time ended, either in a revolutionary reconstitution of society at large, or in the common ruin of the contending classes.”* **Karl Marx and Friedrich Engels, *The Communist Manifesto* (1848)**


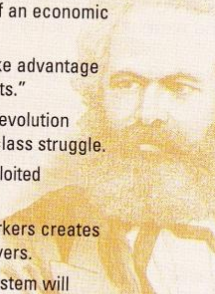
According to Marx and Engels, the Industrial Revolution had enriched the wealthy and impoverished the poor. The two writers predicted that the workers would overthrow the owners: “the proletarians have nothing to lose but their chains. They have a world to win. Workingmen of all countries, unite.”

The future According to Marx. Marx believed that the capitalist system, which produced the Industrial Revolution, would eventually destroy itself in the following way. Factories would drive small artisans out of business, leaving a small number of manufacturers to control all the wealth. The large proletariat would revolt, seize the factories and mills from the capitalists, and produce what society needed. Workers, sharing in the profits, would bring about economic equality for all people. The workers would control the government in a “dictatorship of the proletariat. The workers would control the government in a “dictatorship of the proletariat”. After a period of cooperative living and education, the state or government would wither away as a classless society developed.

Marx called this final phase pure communism. Marx described communism as a form of complete socialism in which the means of production –all land, mines, factories, railroads, and businesses- would be owned by the people. Private property would in effect cease to exist. All goods and services would be shared equally.

Published in 1848, *The Communist Manifesto* produced few short-term results. Though widespread revolts shook Europe during 1848 and 1849, Europe’s leaders eventually put down the uprisings. Only after the turn of the century did the fiery Marxist pamphlet produce explosive results. In the 1900s, Marxism inspired revolutionaries such as Russia’s Lenin, China’s Mao Zedong, Vietnam’s Ho Chi Minh, and Cuba’s Fidel Castro. These revolutionary leaders adapted Marx’s beliefs and arguments to their own specific situations and needs.

In their pamphlet, Marx and Engels condemned the inequalities of early industrial economies. Yet several of Marx’s and Engel’s predictions have since proved wrong. They believed that economic force alone dominated society. Time has shown, however, that religion, nationalism, ethnic loyalties, and a desire for democratic reforms may be as strong influences on history as economic forces. In addition, the gap between the rich and poor within the industrialized countries failed to widen in the way that Marx and Engels predicted, mostly because of the following types of reform.

Capitalism vs. Marxism	
Capitalist Ideas	Marxist Ideas
 <ul style="list-style-type: none"> <li>• Progress results when individuals follow their own self-interest.</li> <li>• Businesses follow their own self-interest when they compete with one another for the consumer's money.</li> <li>• Each producer tries to provide goods and services that are better and less expensive than those of competitors.</li> <li>• Consumers compete with one another to purchase the best goods at the lowest prices.</li> <li>• Market economy aims to produce the best products and the lowest prices.</li> <li>• Government should not interfere in the economy.</li> </ul> <p><b>Adam Smith</b></p>	 <ul style="list-style-type: none"> <li>• All great movements in history are the result of an economic class struggle.</li> <li>• The "haves" take advantage of the "have-nots."</li> <li>• The Industrial Revolution intensified the class struggle.</li> <li>• Workers are exploited by employers.</li> <li>• The labor of workers creates profit for employers.</li> <li>• The capitalist system will eventually destroy itself. The state will wither away as a classless society develops.</li> </ul> <p><b>Karl Marx</b></p>

**UNIONIZATION AND LEGISLATIVE REFORM** Factory workers faced long hours, dirty and dangerous working conditions, and the threat of being laid off. By the 1800s, working people became more active in politics. To press for reforms, workers joined together in voluntary associations called unions.

**The Union Movement.** A union spoke for all the workers in a particular trade. Unions engaged in collective bargaining –negotiations between workers and their employers. They bargained for better working conditions and higher pay. If factory owners refused these demands, union members could strike, or refuse to work.

Skilled workers led the way in forming unions because their special skills gave them extra bargaining power. Management would have trouble replacing such skilled workers as carpenters, printers, and spinners. Thus the earliest unions helped the lower middle class more than they helped the poorest workers.

The union movement underwent slow, painful growth in Great Britain. For years, the British government denied workers the right to form unions. The government saw unions as a threat to social order and stability. Indeed, the Combination Act of 1799 and 1800 outlawed union and strikes. Bravely ignoring the threat of jail or job loss, factory workers joined unions anyway. Parliament finally repealed the Combination Acts in 1824. After 1825, the British government unhappily tolerated unions.

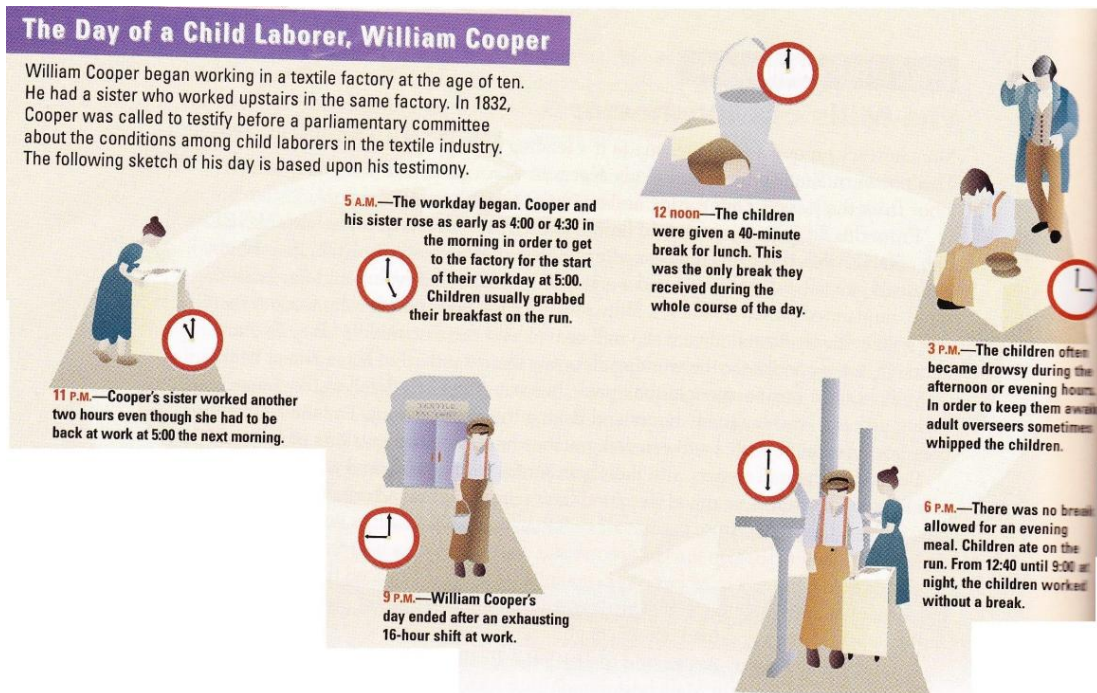


The passage of the bill, however, encouraged reformers. Among the workers and other groups who still could not vote, a popular movement arose to press for more rights. It was called the Chartist movement because the group first presented its demands to Parliament on a petition called The People's Charter of 1838. The Chartists wanted to make Parliament more responsive to the interests of the lower classes. To achieve this, they demanded a secret ballot, and end to the property requirements for serving in Parliament, and pay for members of Parliaments. Parliament rejected the Chartists' demands. However, their protests convinced many people that workers had sound complaints.

British unions had shared goals of raising wages and improving working conditions. By 1875, British trade unions had won the right to strike and picket peacefully. They had also built up a membership of about 1 million people.

**Reform Laws.** In Great Britain new laws reformed some of the worst abuses of industrialization. In 1832, for example, Parliament set up a committee to investigate child labor. As a result of this committee's findings, Parliament passed the Factory Act of 1833. The new law made it illegal to hire children under 9 years old. Children from the ages of 9 to 12 could not work more than 8 hours a day. Young people from 13 to 17 could not work more than 12hours. In 1842 the Mines Act prevented women and children from working underground.

In 1847, the Parliament passed a bill that helped working women as well as their children. The Ten Hours Act of 1847 limited the workday to ten hours for women and children who worked in factories.



**OTHER REFORM MOVEMENTS** Almost from the beginning, reform movements sprang up in response to the negative impact of industrialization. These reforms included improving the workplace and extending the right to vote to working-class men. The same impulse toward reform, along with the ideals of the French Revolution, also helped to end slavery and promote new rights for women and children.

**Abolition of Slavery.** William Wilberforce, a highly religious man, was a member of Parliament who led the fight for abolition—the end of the slave trade and slavery in the British Empire. Parliament passed a bill to end the slave trade in the British West Indies in 1807. After he retired from Parliament in 1825, Wilberforce continued his fight to free the slaves. Britain finally abolished slavery in its empire in 1833.

British antislavery activists had mixed motives. Some were morally against slavery, such as the abolitionist William Wilberforce. Others viewed slave labor as an economic threat. Furthermore, a new class of industrialists developed who supported cheap labor rather than slave labor. They soon gained power in Parliament.

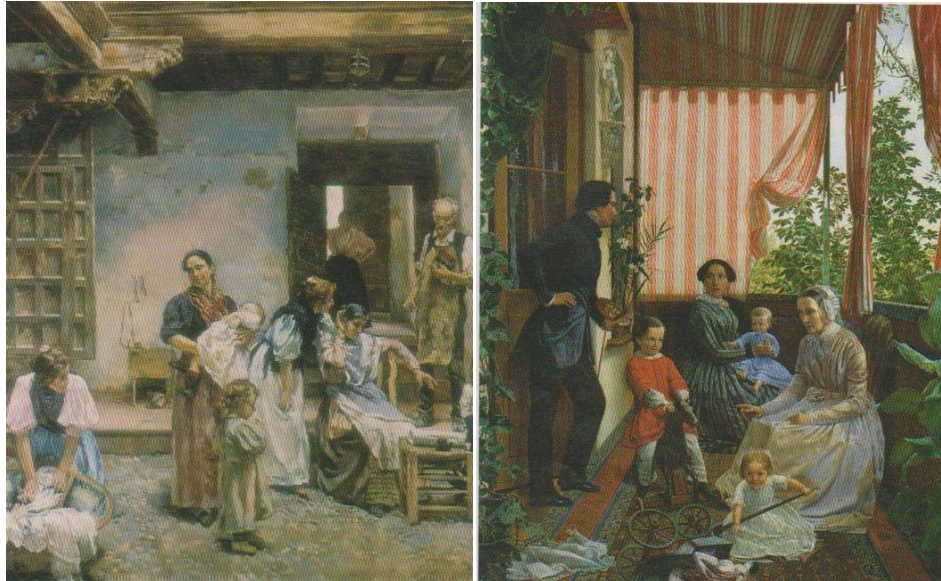
In the United States the movement to fulfill the promise of the Declaration of Independence by ending slavery grew in the early 1800s. The enslavement of African people finally ended in the United States when the Union won the Civil War in 1865.

With the end of the U. S. Civil War, enslavement persisted in the Americas only in Puerto Rico, Cuba and Brazil. In Puerto Rico, slavery was ended in 1873. Spain finally abolished slavery in its Cuban colony in 1886. Not until 1888 did Brazil's huge enslaved population win freedom.

**Women Fight for Change.** The Industrial Revolution proved a mixed blessing for women. On the one hand, factory work offered higher wages than work done at home. Women spinners in Manchester, for example, earned much more money than women who stayed home to spin cotton thread. On the other hand, women factory workers usually made only one-third as much money as men.

Women led reform movements to address this and other pressing social issues. During the mid-1800s, for example, women formed unions in the trades where they dominated. In Britain, some women served as safety inspectors in factories where other women worked. And the women who had rallied for the abolition of slavery began to wonder why their own rights should be denied on the basis of gender.

**Reforms Spread to Many Areas of Life.** In Western Europe and U. S., reformers tried to correct the problems troubling the newly industrialized nations. Public education and prison reform ranked high on the reformers' lists.



Workers and bourgeoisie way of life

## IMPORTANT TERMS, PEOPLE, AND EVENTS

Bourgeoisie - Term used to refer to the "middle class." In the 19th century concept of class struggle, the bourgeoisie were those who owned the means of production and the proletariat consisted of their workers.

Capitalism - Economic system based on private ownership and on the investment of money in business ventures in order to make a profit. Generally middle-class economic ideology emphasizing free markets, the ownership of private property, and the accumulation of wealth by enterprising businesspeople.

Communism - An economic system in which all means of production –land, mines, factories, railroads, and businesses- are owned by the people, private property does not exist, and all goods and services are shared equally.

Chartist Movement – a 19<sup>th</sup> century British movement in which members of the working class demanded reforms in Parliament and in elections, including suffrage for all men.

Collective bargaining – negotiations between workers and their employers

Dialectic - Theory of thought and historical progress in which opposites are created, and then reconciled to create a synthesis. This approach was pioneered by Hegel.

Laissez Faire - In French, it means "allow to do". This economic philosophy suggests that if government interferes in the economy as little as possible markets will equilibrate and the economy will run as smoothly as possible. The idea that government should not interfere with or regulate industries and business.

Liberalism - 19th century ideology that sought self-government, increased male suffrage, and legal equality for all and free-market economic policies. 19th century "liberalism" is a far cry from what "liberalism" means today. Because 19th century "liberalism" ultimately triumphed in Western Europe and the United States, 19th century "liberalism" is actually closer to what is "conservative" in our own time.

Manchester - Industrial city in Northern England, which greatly increased in population during the Industrial Revolution. Because of the Rotten Boroughs, its interests were underrepresented in Parliament during the early 19th century.

Proletariat - In the 19th century, a term developed to refer to the working class. Proletariats were employed by, and involved in class struggle with, the bourgeoisie.

Socialism - Economic ideology or system in which the factors of production are owned by the public, the government, and operate for the welfare of all. So that workers will not be abused by bourgeoisie factory owners.

Strike. To refuse to work in order to force an employer to meet certain demands.

Union An association of workers, formed to bargain for better working conditions and higher wages.

Utilitarianism Theory, proposed by Jeremy Bentham in the late 1700s, that government actions are useful only if they promote the greatest good for the greatest number of people, society.

Adam Smith professor at the University of Glasgow, Scotland. In his book *The Wealth of Nations*, he argued that if individuals freely followed their own self-interest, the world would be an orderly and progressive place. After all, sellers made money by producing things that other people wanted to buy. Buyers spent money for the things they wanted most. In such a market-place, Smith thought, social harmony would result without any government direction, "as if by an invisible hand". Smith's ideas were central to the development of capitalism.

Jeremy Bentham. English philosopher, a father of Radicalism and Utilitarianism. One example of his unconventional nature: when he died in 1832, he had his body preserved and placed on display in a cabinet in University College, London, where it remains to this day.

Robert Malthus. British economist. His most famous idea was that increasing the food supply would always increase the population, meaning that eradicating the suffering of the lower classes was impossible.

Karl Marx. German economist and philosopher who, along with Friedrich Engels, wrote *The Communist Manifesto* and *The Kapital* while in living in England. The ideology of Communism draws its inspiration from Marx and Engels' work, which was influenced by the social environment in Western Europe during the first half of the 19th century.

Robert Owen. Manchester manufacturer who grew upset by the conditions endured by workers in Industrial Revolution Britain, and became a reformer.

David Ricardo. Early British economist who helped develop "Classical" economics. He was responsible for formulating the "Iron Law" of wages, which stated that any attempt to improve workers' lots would lead to such a population increase that the increased competition for labor would ultimately bring workers' wages back down. This argument held that no improvement in workers' lives was possible, so the government should not bother legislating wage increases.

Enclosure Movement. 18th century movement among wealthy British landed aristocrats to rationalize their farms. Using new farming technology and systems of crop rotation, they forced the agrarian poor off the old "village commons" that now became "enclosed" as private property. The jobless poor ended up constituting the proletariat working class in the upcoming Industrial Revolution.

Industrial Revolution. 18th and 19th century development, beginning in Britain, in which manufacturing was increasingly done in factories by machines, rather than in small workshops by hand labor. The Industrial Revolution, in combination with the earlier the Enclosure Movement, radically reshaped the world economy and social and political development.