

### Why Did the Industrial Revolution Happen?

There is almost never one simple explanation for an important event, whether in history or in your own life. There are many reasons behind every big happening. As a result, most historians believe in what is called **multiple causation**. This means that it takes a number of causes to explain a historical event. This idea of multiple causation applies to the Industrial Revolution.

No single reason can by itself explain how the Industrial Revolution developed in England. This event did not take place because people planned and willed it to happen. Men and women did not band secretly together, plotting to overthrow the old way of life in eighteenth century England. The people who invented new machines and set up new factories had no idea they were contributing to a revolution. They did not even realize a revolution was going on. The Industrial Revolution was an unplanned, free, natural series of events.

Thus, we cannot say that one single thing caused the Industrial Revolution. However we can point to a number of conditions, or factors, that needed to be present so that industry could grow.

#### ***New Technology***

People have been inventing things ever since the discovery of tools and fire. Yet the pace of invention in the last two hundred years has been far swifter than at any other time in human history. The rush of new inventions created a new technology. This new technology, which helped bring about the Industrial Revolution, can be defined as the way new machines were used to produce more goods. It had three significant features.

First, there were new discoveries. New sources of power and new machines were invented. This was usually done to solve a specific problem. For example, the steam engine was developed to pump the water out of coal mines. Only later was it used for locomotives, boats, and factory machinery. The old saying, "necessity is the mother of invention," often proved correct.

Second, the new inventions were used for production of goods and services. Earlier civilizations knew the principle of steam power. But these civilizations did not put their knowledge to work to solve practical problems or to produce more goods. In the Industrial Revolution organizers of factory production were quick to use the new inventions to

increase output. Workers could produce much more by using the new machinery than they could by hand.

Third, technology includes also the systematic organization of production, or organizing production according to a carefully thought-out plan. The best example is Henry Ford and his development of the assembly line. By rearranging the different steps in producing automobiles, Ford greatly increased the output of cars.

Thus, new technology can be defined as new machines, the use of new machines for productive purposes, and the systematic organization of production itself. Without question new technology was an important factor in the Industrial Revolution.

#### ***Capital***

When we think of capital, we usually think of money. Capital can be money but it is money of a special kind. *Capital is wealth that is used to produce new wealth.*

Capital can refer to other things as well as money. If one builds a textile factory, the machines and the buildings of this factory are called capital goods. These machines and buildings represent wealth which is used to produce more wealth. People who use their wealth to produce more wealth are called capitalists.

#### ***Adequate Labor Supply***

Many workers are needed when production is set up in factories. These people must live close enough to the factory to be at work each day. They must be skilled enough to operate the machines without breaking them. And they must be willing to work steadily for the number of hours that factory production requires. Having such people available is what an adequate labor supply means. Without an adequate labor supply, industrialization is impossible.

#### ***Natural Resources***

Coal and iron ore were the most important natural resources for the Industrial Revolution. Coal heated furnaces and powered steam engines. Iron products were used to construct steam engines, power looms, and other machinery.

England was fortunate in having large deposits of coal and iron ore. Moreover, during the