10 Economics, Society and Enlightenment of the 18th Century

Industrialization

The industrialization of Europe’s economy began in the second half of the 18th century

This development wrought numerous revolutionary changes

It increased humanity’s control over the forces of nature

And made possible the production of more goods and services

It met existing consumer demands while creating new ones

It raised standards of living and ended widespread poverty

It inaugurated an era of unprecedented sustained economic growth

However, the process of industrialization exacted a high social cost

New means of production demanded new skills, new discipline in work, and a large labor force

By the middle of the 19th century, it was apparent that industrialization caused unanticipated problems with the environment

The most visible aspect of the Industrial Revolution was the invention of machinery, the establishment of factories, and the creation of a new kind of work force

In the early 18th century, an unprecedented demand for the humble goods of everyday life encouraged ingenuity on the part of designers and inventors

As each consumer expectation was met, a new one took its place, and the demands of the market drove the development of an ever more productive industrial economy

Numerous factors contributed to the growth of a new, consumer driven economy

During the 17th century the Dutch had enjoyed enormous prosperity that enabled them to pioneer a society centered on consumption

In the 18th century, increasing numbers of people acquired more disposable income, and this allowed them to buy more consumer goods and to create an economy by expanding domestic markets in Europe, and not by exporting things abroad

People had to be persuaded that they needed or wanted new consumer goods, and entrepreneurs did this by developing new methods of marketing

Manufacturers would increase demand by advertising, opening showrooms, and by changing styles

As people saw what others were consuming, they began to imitate their neighbors

Fashion publications made people aware of new styles

New foods and beverages created new demands for kinds of dishware

People were encouraged to define their status by the quality and quantity of goods they consumed

Ever-increasing consumption has become a hallmark of modern life, and availability of consumer goods has become the hallmark of a nation’s prosperity

And the lack of these things contributes to increasing social tensions

Great Britain inaugurated the Industrial Revolution and maintained industrial leadership into the middle of the 19th century

Britain’s industrialization was made possible by an increasing domestic demand for good and the markets that existed in Britain’s North American colonies

England took the lead on the invention of the consumer society

Newspapers facilitated the advertising that spurred demand

London, the largest city in Europe, set the standards of fashion and taste, and the structure of British society allowed people to imitate the lifestyles of their superiors

The British were the first to develop a love affair with fads and fashions that created the appetites for new goods

Britain was the single largest free-trade area in Europe and had an excellent infrastructure of roads and waterways without tolls or trade barriers

The country was endowed with abundant natural resources

Fertile land

Coal

Iron ore

The sound system of banking and credit maintained a stable economic climate for investment

Taxes were high, but collection of taxes was efficient and fair

Parliament regulated taxes so that all social ranks and regions paid the same dues

British society was also relatively mobile

The aristocracy accepted into its ranks entrepreneurs who amassed large fortunes

Even persons of wealth not admitted into the aristocracy enjoyed social prominence and political influence

Textile manufacturers spearheaded the Industrial Revolution

This development began in the countryside as peasant families made up the basic unit of production, combining farming with other kinds of labor

Peasants tilled the land in the spring and summer and spun thread and wove textiles in the winter

This so-called “domestic system” saw urban textile merchants buying wool and other unfinished fibers and sent it to the homes of peasants to be spun into thread and woven into cloth before being returned to the merchant

A spinning wheel and a hand loom were standard equipment in peasant homes

By the middle of the 18th century, the demand for cotton textiles outstripped home textile production and prompted the invention of machinery that transformed the industry

Thanks to the invention of the flying shuttle in the 1730s, weavers had the capacity to produce the quantity of cotton fabric demanded

Spinners could not provide enough threat however, until James Hargreaves invented the spinning jenny

This device spun 16 spindles of threat all at the same time

By the end of the 18th century, this capacity expanded to 120 spindles

The spinning jenny broke the bottleneck between productive capacity of spinners and weavers, but it was still a machine intended to use in peasant’s cottages

The invention that took cotton textile manufacturing out of peasants’ homes and into the factory was the water frame, invented by Richard Arkwright and patented in 1769

This was a water-powered device that produced 100% cotton fabric rather than the standard earlier blend of cotton and linen

Domestic production decreased as factories sprung up in the country alongside streams that provided the waterpower for the machines

Cotton output increased by 800 percent between 1780 and 1800

By 1815 cotton composed 40% of the value of Britain’s domestic exports

By 1830 it was over 50%

The full ramifications of the Industrial Revolution were felt by the early 19th century

The expansion of industry and the incorporation of new inventions took place slowly, and not all the social ramifications of industrialism appear immediately

For example, James Watt’s steam engine of 1769 wasn’t perfected until the end of the 18th century, and it wasn’t until then when factories could be located in cities

The steam engine made possible the modern combination of urbanization with industrialization

The steam engine permitted almost all areas of production to be industrialized because it provided a new source of energy

For the first time in history, people had at their disposal a steady and essentially unlimited source of power

Unlike engines moved by water, wind, animals, and people, the steam engine was portable, dependable, and inexhaustible

The steam engine had been invented in the early 18th century by Thomas Newcomen

This machine was heavy and energy inefficient, but it was widely used to pump water out of coal and tin mines

James Watt’s design was much more efficient, however it required precise metal work

The first Watt engine was also used to pump water from mines

Watt didn’t make any improvements to his machine until he was persuaded to develop machines to be used for things other than water pumps for mines in the early 19th century

Steam engines then became applied to cotton mills, and by the early nineteenth century, the steam engine had become the prime mover in every industry and had begun to transform transportation

The manufacture of high-quality iron has been basic to modern industrial development

Iron is the main material used in all heavy industry and transportation

In the early 18th century, British ironmakers produced less than 25,000 tons annually

Technical problems imposed a limit on British iron production

Charcoal was originally used to produce the heat to smelt iron

However, wood was limited, and it was difficult to get charcoal to burn at ideal temperatures to smelt iron ore

Things improved when ironmakers began to use a derivative of coal called coke, which was abundant and burned at higher temperatures

This had the benefit of improving the production of iron and increasing the demand for it

Other innovations helped remove more impurities from the molten iron ore and produced better iron

The development of rolling mills that formed molten metal into continuous bars, rails, or sheets cut costs to manufacturing and production

By the early 19th century Britain produced over a million tons annually

The agricultural and industrial revolutions diminished the role for women who had traditionally been a part of Europe’s workforce

When increasing commercialization and mechanization began to transform farming methods, men and machines took over many tasks that had previously been associated with women

Many women tended to oppose the changes associated with these developments, and many proponents of the new agricultural and industrial techniques saw women as impediments to reform

A similar development took place in the textile industry

The industrialization of textiles made jobs for men and it relegated women to lesser skilled and lesser paid jobs in the factories

Many women continued in cottage industries, but they found work manufacturing items of lesser value such as buttons, knitted items, baskets, gloves, etc.

Another alternative for women was to work as domestic servants in the homes of landed or commercial families

During the 19th century this was the largest area of female employment

By the end of the 18th century, the work and workplaces of men and women became separate and distinct

Women’s work was associated with domestic service, and men’s work was associated with the industrial factories

Urbanization

Growth in towns was rapid in the 18th century

In 1700 London had about 700,000 inhabitants

Paris almost 500,000

Berlin, 170,000

Warsaw, 120,000

St Petersburg, founded in 1703, 250,000 by end of 18th century

Nevertheless, still less than 20% of the population lived in cities

And towns of 10,000 inhabitants were more common than the big cities

From 1500 to 1750, most urban expansion took place within the major cities that were already established

After 1750, the pattern changed

New cities were founded, and smaller old cities grew rapidly

The cities that grew the fastest from 1600 to 1750 were capitals and ports

These sites profited from the development of the monarchical state with its bureaucracies, armies, courts, and administrators

Port cities reflected the expansion of overseas trade, especially across the Atlantic

Except for Manchester in England and Lyon in France, the great centers of urbanization were not centers of industrial manufacturing

During the period of 1600-1750, cities with populations of fewer than 40,000 inhabitants declined due to the expansion of the domestic system in the countryside which took production away from the towns where it had developed in medieval times

In the middle of the 18th century, a new pattern emerged which continued into the nineteenth century

There was general population increase that affected large and small cities, and contributed to the development of new ones

The Industrial Revolution fostered the growth of smaller towns and cities, and even some new towns

Even in areas where there was little industrialization, the increasing prosperity of European agriculture prompted urban development

The ranks of the rich and poor were visibly segregated

Poorest town dwellers lived along the banks of the rivers

Small merchants and craftsmen lived above their shops

The nobles, large merchants, and government officials made up the highest ranks

They controlled the town as the town council selected from these ranks members to serve on city corporations or town councils

Therefore, it was common for cities to be run by oligarchies, the nobility, and wealthy families

The middle ranks, merchants, lawyers, small factory owners improved their social standing by amassing capital

They were energetic, productive workers who supported reform, change, and legislation that promoted growth

Although they were envious of the nobility, they imitated their manners and behaviors

The middle ranks led the revolution in consumption

They produced and sold goods for a consumer market in which they were the main consumers

The relationship between the middle ranks and the nobility was complicated

They clashed, not over values, but over sharing power

The upward mobility of the middle ranks threatened the exclusive privileges of the nobility, and they used their control of government bureaucracies and patronage to frustrate traders, lawyers, bankers, and manufacturers

Both the middle ranks and the nobility were suspicious of the poor as a potentially violent element in society, a threat to private property, and a drain on community resources as objects of charity

Poorer shop keepers, artisans, and wage earners composed the largest number of the population of any city

Like the peasants they were conservative in their values, culture, and institutions

They also contributed to the revolution in consumption

They could buy more goods than the poor of earlier generations, and many tried to copy the domestic consumption of the middle ranks

The lives of artisans and shopkeepers centered on their work and their neighborhoods

They usually lived at their employment which were usually workshops

Guilds continued to exist, but they had lost much of their power

They mostly focused on preserving the jobs of their members by trying to reduce competition and preventing too many people from entering a specific trade

The guilds were the artisans’ main protection against the operation of the commercial market

The conservative outlook of artisans shaped their outlook on social and economic justice

These poorer ranks accepted grim conditions, but they opposed any change that threatened to increase their burdens and reduce their opportunities

Revolution from above creates revolution from below

Oftentimes the only way they could get the attention of town governments was by rioting in the streets

Things like changes in the price of bread could spark urban riots

The fear of provoking a riot was the thing that restrained the greed of merchants, and this helped regulate prices and the economy

Riots of all kinds were common in the 18th century

Rioters were mostly small shopkeepers, freeholders, craftsmen, and wage earners

Their intent was mostly to restore some traditional right or practice that they feared was endangered

During the last half of the 18th century, urban riots were often manipulated by politicians for private ends

The rioters could become the tools of warring factions of the higher ranks and nobility

The Parlement of Paris oftentimes encouraged people to riot in order to strengthen its position with regard to the monarchy

In Great Britain in 1792, the government incited mobs to attack people who sympathized with the French Revolution

Another urban population that developed at this time were the communities of Jews that lived in separate districts or ghettos

The vast majority of Jewish communities in Europe were found in Eastern Europe

In most nations, unless rights were especially granted to Jews, they didn’t enjoy the same privileges as Christians

They lived apart from the majority population in ghettos which were separate ethnic districts in cities, towns, and villages in the countryside

In Poland, Jewish communities were self-governing

In other places, Jews struggled under the burden of discriminatory legislation

Since Jews were often prevented from owning land, many were driven into trade and commerce

Some became very successful bankers, and a few helped finance the wars of the 18th century

Those loans were often not repaid, but the “court Jews” became famous for their financial acumen and influence

The Jews formed a small and intimate network of closely intermarried, exclusive families

Most European Jews lived in poverty

Their ghettos were in the most undesirable sections of cities or poor rural villages

And they worked in the lowest occupations

Religion kept them apart from the Christian majority and they were relegated to positions of social inferiority

Jews were barred from some professions, restricted in their freedom of movement, deprived of political representation and protection under the law, subjected to exile and confiscation of their property, and generally regarded as lesser beings

Sometimes force was used to persuade them to convert, or their children were taken away from them for Christian indoctrination

The Age of Enlightenment

The leaders of the Enlightenment argued that human reason could comprehend the processes of nature and could manipulate them to create a better world

They also argued that the rational order of the physical universe uncovered by the Scientific Revolution should also be able to be revealed in human societies

They assumed that reason provided them with the means to critique traditions and to inspire innovations and improvement

The writers who championed the Enlightenment were called *philosophes*

The *philosophes* were activist philosophers who viewed tradition critically and advocated the use of reason and common sense to reform traditional institutions and society

The *philosophes* were not part of a unified movement, and they all didn’t argue for the same things

However, they had a common desire to reform intellectual attitudes, society, and government to enhance human liberty

They were intellectuals who were interested in practical innovations that would transform everyday life through reason alone, without invoking the supernatural aid of God

The *philosophes* were mostly from the middle ranks in European society, and it was the middle ranks that mostly read and discussed their works

Although the philosophes did not consciously champion the cause of the middle ranks, they contributed to an intellectual ferment among those ranks that undermined traditions that those ranks found restrictive

By the middle of the 18th century, philosophes had succeeded in awakening widespread interest in reform and in creating an intellectual community which promoted rationalism and scientific ideas

In the second half of the 18th century, having convinced many Europeans that change, and reform were good ideas, philosophes focused on making suggestions which reforms were the most desirable

The Englishmen, Isaac Newton and John Locke were the precursors of the Enlightenment

Newton’s work demonstrated that the human mind could discover truths of reality without the help of divine revelation

All that the search for truth required was the use of reason to formulate hypotheses that could be confirmed by empirical observation

Locke contended that human nature is the product of the environment, and therefore human nature could be engineered by controlling the environment that shaped it

Newton and Locke created a rationale for a reformist approach to society and the stability of England and Great Britain after the Glorious Revolution provided a test case that encouraged other reformers on the Continent to pursue reform

England had

Religious toleration

Relatively free press and speech

Limited monarchy

Representative political sovereignty

Courts that protected citizens from arbitrary government actions

A small standing army

England was freer than any other European state and it’s liberal policies created a loyal prosperous citizenry

If Great Britain was a model for social reform, France demonstrated the necessity of reform:

An absolute monarchy

Large standing army

Heavy taxation

Religious persecution

All of these things rendered misery among the French people

Critics of the regime were subject to arbitrary arrest

State regulation hampered economic growth

And aristocrats gloried in a culture of militarism

The need for change motivated French intellectuals to make France the intellectual center of the Enlightenment

One of the earliest French philosophes was Voltaire (Francois Marie Arouet)

Voltaire visited England in 1733, and he was inspired to write a book that lauded England for its intellectual openness and political freedom

In 1738 he published his book on the thought of Isaac Newton popularizing the thought of Newton and establishing Voltaire’s reputation as an important writer and philosopher

Voltaire’s essays, histories, plays, stories, and letters ridiculed war, religious persecution, and confidence in the goodness of the human nature

The print media was crucial for the success of the Enlightenment

The volume of printed material had increased dramatically during the 18th century and became the chief vehicle for the communication of ideas

The members of the aristocracy and the middle ranks were increasingly literate and were expected to be familiar with books and ideas

People gathered in private homes and coffee houses for serious discussions

Secret societies, such as the Freemasons, also promoted reading and debate

The expanding reading market made it possible for writers such as Voltaire to earn a living and fortunes

The spread of printed materials created a new social force: public opinion

Didn’t exist before the mid 18th century

Writings could reach thousands of readers and could persuade them to a single point of view

This meant that governments could no longer disregard the opinions of their subjects

The government, as well as their critics, had to explain and discuss openly

Of course, governments sensed the political power of the printed word and understood that it threatened their traditional authority

Consequently, writings were censored

However, the rise of the printed media revealed the importance of the freedom of the press as an instrument for maintain political accountablility

One of the greatest productions of the Enlightenment to appear was the Encyclopedia edited by Denis Diderot and Jean le Rond d’Alembert

The first volume was issued in 1751 and the last, number 17, in 1772

The Encyclopedia was designed to secularize learning and undermine intellectual assumptions that lingered from the Middle Ages and the Reformation

All the major French *philosophes* were invited to contribute articles on various topics and subjects that represented the most advanced ideas of the day

Therefore, it served as collective plea for reform

The Encyclopedia annoyed the French government which made attempts to censor and halt its publication

The *philosophes*, being anti-traditionalist liberals, argued that religion was the main impediment to the improvement and happiness of the people

They argued that piety and religious authoritarianism hindered the scientific study of nature and the pursuit of a life guided by reason

They not only attacked religious ideas, but they also attacked the institution of the church

Even though philosophes attacked religion and the church, they were not, somewhat ironically, opposed to all religion

What they wanted was a religion without fanaticism and intolerance, a faith that would not substitute the authority of tradition for the authority of human reason

Deism was the main type of religion promoted by the Enlightenment thinkers

Deism understood God as the creator and the force that set nature in motion, and then allowed it to develop on its own

The *philosophes* were also committed to religious toleration as a precondition for the conduct of a virtuous life

The Jewish philosophes Baruch Spinoza from Holland, and Moses Mendelsohn of Germany also made major contributions to the arguments for religious toleration

Spinoza thought that all traditional beliefs should undergo rational critique and reformulation

Mendelsohn urged governments to maintain neutrality on religious issues

Although most *philosophes* were dedicated to transforming religion into a humane force encouraging virtuous living, some philosophes were not in favor of proposing a virtuous religion and went on the offensive against all traditional beliefs

Most *philosophes* sought religion within the limits of reason alone

The *philosophes* argued that a rational examination of society would reveal that there were laws for human relationships like those that governed nature

They sought to discover laws that would make society function and end cruelty

For example, the Italian social reformer *philosophe*, Cesare Beccaria argued that crimes should be defined as transgressions of laws of nature and not of someone’s concept of God’s will

Thus, the intent of punishment should also not be vengeance, but the deterrence of further crime

The purpose of law was not to impose a divinely moral standard of conduct but to secure the greatest happiness for the greatest number of people

One could say that the idea of social science originated with the Enlightenment

18th century economics was dominated by government regulation and mercantilism, which used legislation to protect a country’s trade from foreign competition

Reform -minded economists in France, called physiocrats, argued that government intervention in the economy should be limited to protecting property and permitting owners to use it freely

However, it was Adam Smith’s book *Wealth of Nations* (1776) that was the most important contribution to economics in the Enlightenment

Smith argued that freedom was essential to an economic system, and he urged the abolition of almost all regulations associated with government management of the economy and mercantilism

The effect of these regulations was that it hindered economic growth for everyone

An important concept promoted by Smith was the four-stage theory of human social and political development

This idea suggested that all societies were destined to pass through four stages of economic development, each associated with a level of civilization

Nomadic hunters and gatherers

Herding societies

Farming societies

Commercial societies that practiced manufacture and trade

This idea had several effects

One was that it contributed to Europeans looking down on other societies not on the same level as Europe, and it encouraged Europeans to see that their mission was to civilize those societies, providing justification for colonization

Another was that it promoted the development of radical social-political philosophies that saw these stages as inevitable and leading to further inevitable stages of advanced collective societies

The French philosophes especially criticized the institutions of government since the political institutions of France were corrupted and decayed

Charles Louis de Secondat, Baron de Montesquieu was a noble lawyer and a member of his provincial parlement (court)

In 1721 he denounced the cruelty and irrationality of European society in a book titled *The Persian Letters*

In 1748 he published *Spirit of the Laws* in which he analyzed political institutions of ancient and modern times

In this study, Montesquieu argued that there could be no single set of laws that applied to all peoples at all times and in all places

Instead, numerous variables had to be taken into account to determine the best political system for a particular country

Size, population, social and religious customs, economic structures, traditions, and climate all helped determine the type of government that a country had

Montesquieu thought that France should have a limited monarchy in which groups of citizens curtailed the power of the ruler

Montesquieu’s most influential idea, however, was that power ought to be divided among branches of government

The British constitution was the source of this insight

There were *philosophes* that criticized the thinking of their fellow reformers

Contrary to *philosophe* arguments that suggested that the expansion of modern commerce and industry were regarded as important human activities, Jean-Jacques Rousseau argued that these things are what created society’s problems

Most 18th century philosophers assumed that society was the effect of people pursuing selfish goals and that the elimination of government restraint was an important aim in order to establish freedom

Rousseau argued that society is more important that the individuals in it, and that reformers should be aimed at creating communities that achieve the highest morality

He envisioned a world in which individuals found freedom by serving the interest of the community

His argument led him to the extraordinary conclusion that in order to have freedom, some people might have to be restrained and forced by the community to be free

Another who criticized their fellow *philosophes* was Mary Wollstonecraft, who in 1792 published *A Vindication of the Rights of Women*

Wollstonecraft indicted the *philosophes* for their failure to follow through on the Enlightenment’s commitment to the rational reform of society

She insisted that the progress of all of humanity was impeded when women were denied good educations

By demanding for women the liberty, the that philosophes had been claiming for men for over a century, Wollstonecraft broadened the reform agenda of the Enlightenment to include rights for women as well as men