

The Age Of INDUSTRIALISATION...



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The Industrial Revolution

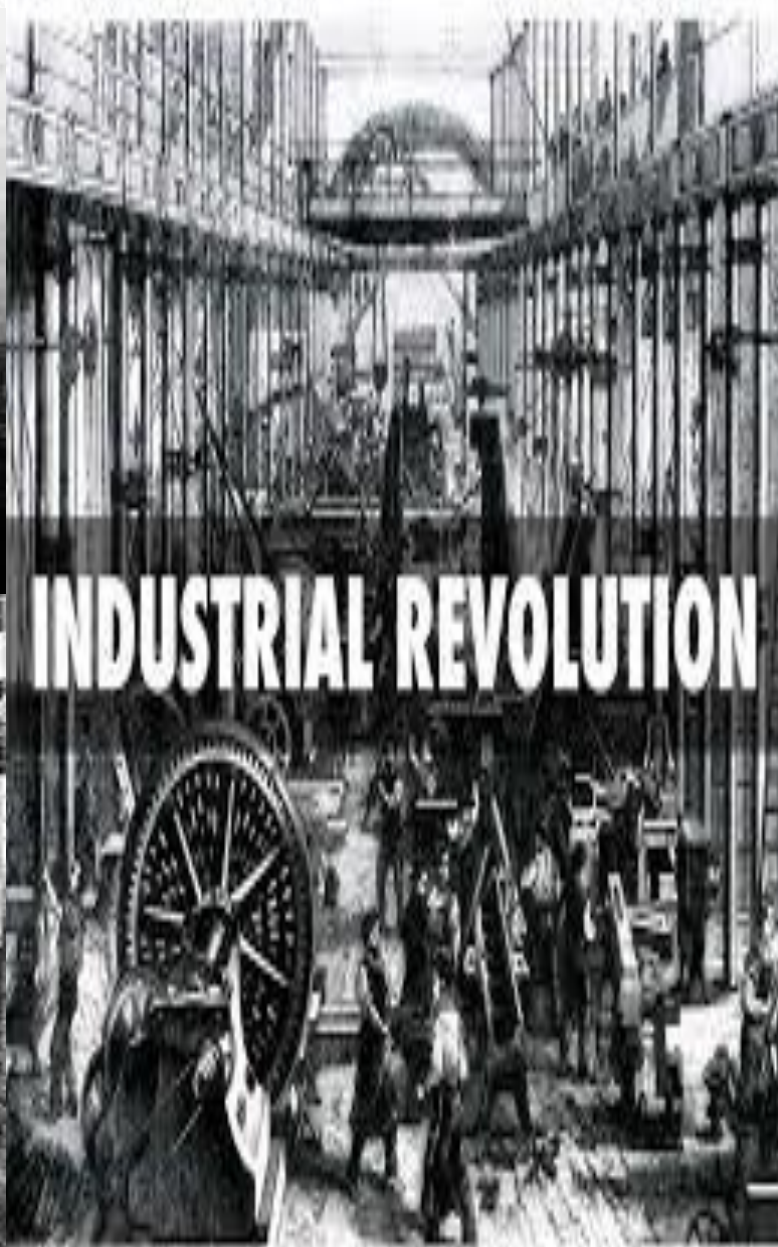
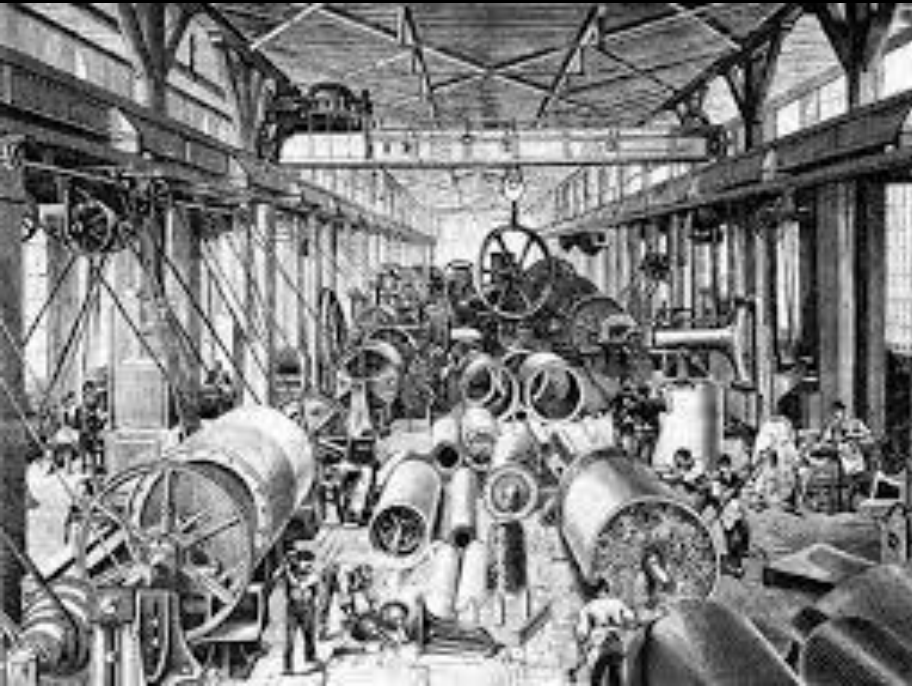


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The INDUSTRIALISATION



Before the Industrial Revolution...

- We often associate industrialisation with the growth of factory industry.
- When we talk of industrial production we refer to factory production. Histories of industrialisation very often begin with the setting up of the first factories.
- Even before factories began to dot the landscape in England and Europe, there was large-scale industrial production for an international market. This was not based on factories. Many historians now refer to this phase of industrialisation as proto-industrialisation.
- With the expansion of world trade and the acquisition of colonies in different parts of the world, the demand for goods began growing.
- But merchants could not expand production within towns.

REASONS...

- This was because here urban crafts and trade guilds were powerful.
- These were associations of producers that trained craftspeople, maintained control over production, regulated competition and prices, and restricted the entry of new people into the trade.
- Rulers granted different guilds the monopoly right to produce and trade in specific products. It was therefore difficult for new merchants to set up business in towns. So they turned to the countryside.

Situations in the COUNTRYSIDE...

- In the countryside poor peasants and artisans began **working for merchants**.
- Cottagers and poor peasants who had earlier depended on common lands for their survival, gathering their firewood, berries, vegetables, hay and straw, had to now look for alternative sources of income.
- By working for the merchants, they could **remain in the countryside** and continue to cultivate their small plots.
- Income from proto-industrial production supplemented their **shrinking income** from cultivation.
- It also allowed them a **fuller use** of their **family labour resources**.
- Within this system **a close relationship** developed between the **town and the countryside**.
- Merchants were based in towns but the **work** was done **mostly** in the **countryside**.
- Eg. A merchant clothier in England purchased wool from a wool stapler, and carried it to the spinners; the yarn (thread) that was spun was taken in subsequent stages of production to weavers, fullers, and then to dyers. The finishing was done in London before the export merchant sold the cloth in the international market.
- **London** in fact came to be known as **a finishing centre**.

The Coming Up of the Factory

- The earliest factories in England came up by the 1730s.
- But it was only in the late eighteenth century that the number of factories multiplied.
- The first symbol of the new era was cotton. Its production boomed in the late nineteenth century.
- A series of inventions in the eighteenth century increased the efficacy of each step of the production process (carding, twisting and spinning, and rolling).
- They enhanced the output per worker, enabling each worker to produce more, and they made possible the production of stronger threads and yarn.
- Then Richard Arkwright created the cotton mill.
- The costly new machines could be purchased, set up and maintained in the mill.
- A more careful supervision over the production process, a watch over quality, and the regulation of labour, all of which had been difficult to do when production was in the countryside.
- So magical seemed to be the power of new technology, that contemporaries were dazzled. They concentrated their attention on the mills.

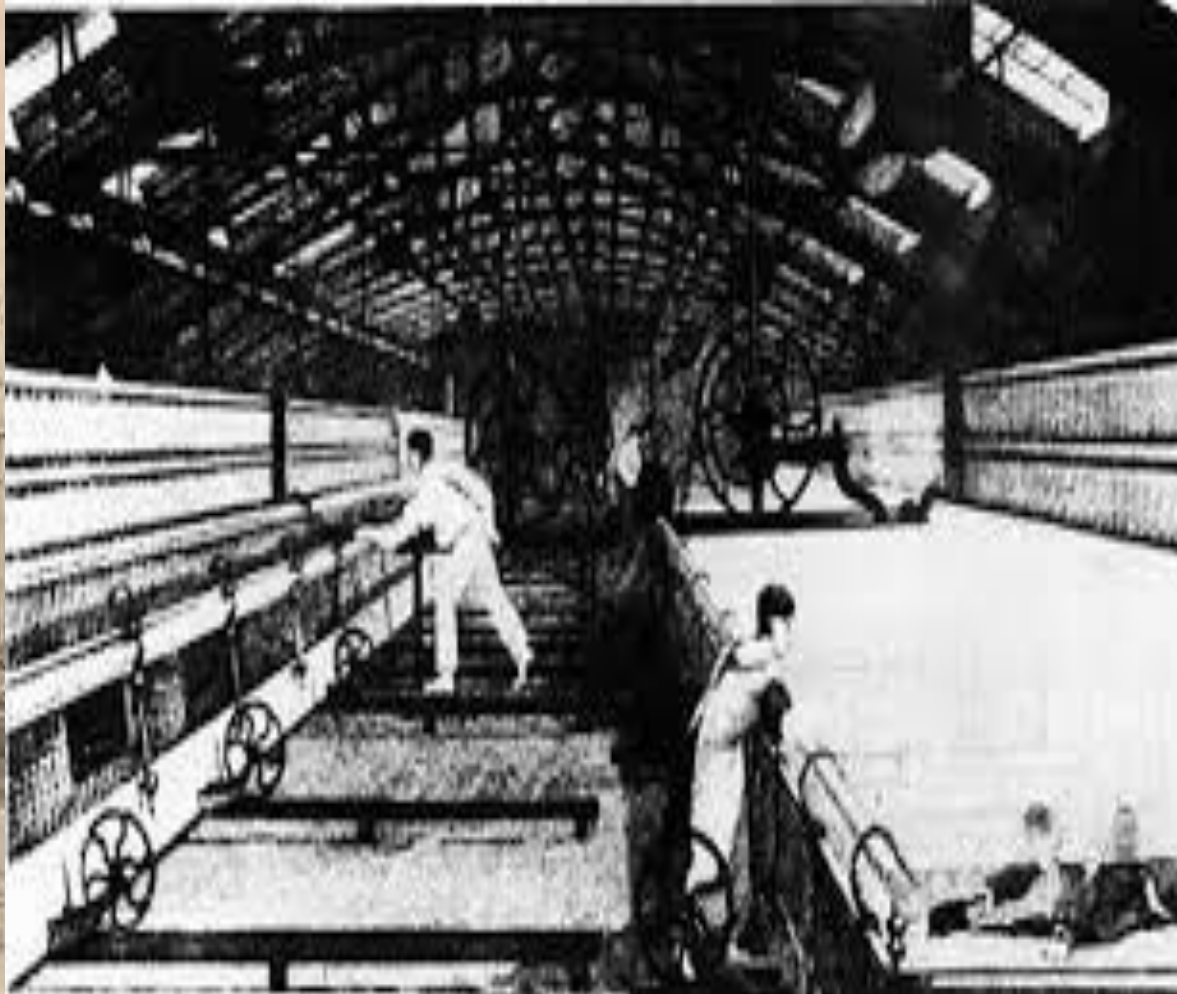


The Pace of Industrial Change

- The most dynamic industries in Britain were clearly cotton and metals.
- Growing at a rapid pace, cotton was the leading sector in the first phase of industrialisation up to the 1840s.
- After that the iron and steel industry led the way. With the expansion of railways, in England from the 1840s and in the colonies from the 1860s, the demand for iron and steel increased rapidly.
- The new industries could not easily displace traditional industries. Textiles was a dynamic sector, but a large portion of the output was produced not within factories, but outside, within domestic units.
- The pace of change in the 'traditional' industries was not set by steam-powered cotton or metal industries, but they did not remain entirely stagnant either.
- Technological changes occurred slowly. They did not spread dramatically across the industrial landscape.
- New technology was expensive and merchants and industrialists were cautious about using it. The machines often broke down and repair was costly. They were not as effective as their inventors and manufacturers claimed.
- James Watt improved the steam engine produced by Newcomen and patented the new engine in 1781.
- Historians now have come to increasingly recognise that the typical worker in the mid-nineteenth century was not a machine operator but the traditional craftsperson and labourer.

Hand Labour and Steam Power

- In **Victorian Britain** there was **no shortage of human labour**.
- Poor peasants and vagrants **moved to the cities** in large numbers in search of jobs, waiting for work, when there is plenty of labour, **wages are low**.
- So industrialists had **no problem of labour shortage or high wage** costs. They did not want to introduce machines that got rid of human labour and required large capital investment.
- In many industries the **demand for labour was seasonal**.
- Eg. **Gas works and breweries** were especially busy through the cold months.
- Eg. **Bookbinders and printers**, catering to Christmas demand, too needed extra hands before December.
- Eg. At the waterfront, winter was the time that **ships were repaired** and spruced up.
- In all such industries where production fluctuated with the season, industrialists usually **preferred hand labour**, employing workers for the season.
- A range of products could be produced only with **hand labour**.
- Machines were oriented to producing uniforms, standardised goods for a mass market. But the demand in the market was often for goods with intricate designs and specific shapes



Life of the Workers

- The **abundance of labour** in the market affected the lives of workers.
- As news of possible jobs travelled to the countryside, **hundreds tramped to the cities**.
- The actual possibility of getting a job depended on **existing networks of friendship and kin relations**.
- Many jobseekers had to wait weeks, spending nights under bridges.
- **The homeless in London** apply for tickets to stay overnight in a workhouse. These shelters were maintained under the supervision of the Poor Law Commissioners for the 'destitute, wayfarers, wanderers and foundling'.
- **Staying in these workhouses was a humiliating experience**: everyone was subjected to a medical examination to see whether they were carrying disease, their bodies were cleansed, and their clothes purified. They had to also do **hard labour**.
- **Seasonality of work** in many industries meant prolonged periods without work.
- After the busy season was over, the **poor were on the streets again**.
- The income of workers depended not on the wage rate alone. What was also critical was the period of employment: the number of days of work determined the average daily income of the workers.
- The **fear of unemployment** made workers hostile to the introduction of new technology.

The Age of Indian Textiles

- Before the age of machine industries, **silk and cotton goods** from India dominated the international market in textiles.
- **Armenian and Persian** merchants took the goods from Punjab to Afghanistan, eastern Persia and Central Asia.
- ~~Bales of fine textiles were carried on camel back via the north-west frontier, through mountain passes and across deserts.~~
- A vibrant sea trade operated through the main pre-colonial ports. Surat on the Gujarat coast connected India to the Gulf and Red Sea Ports; Masulipatam on the Coromandel coast and Hoogly in Bengal had trade links with Southeast Asian ports.
- **Supply merchants** linked the port towns to the inland regions.
- They gave **advances to weavers**, procured the woven cloth from weaving villages, and carried the supply to the ports. At the port, the big shippers and export merchants had brokers who negotiated the price and bought goods from the supply merchants operating inland.
- The European companies gradually gained power – first securing a variety of concessions from local courts, then the monopoly rights to trade.
- While **Surat and Hoogly** decayed, **Bombay and Calcutta** grew.



Conditions of the WEAVERS...

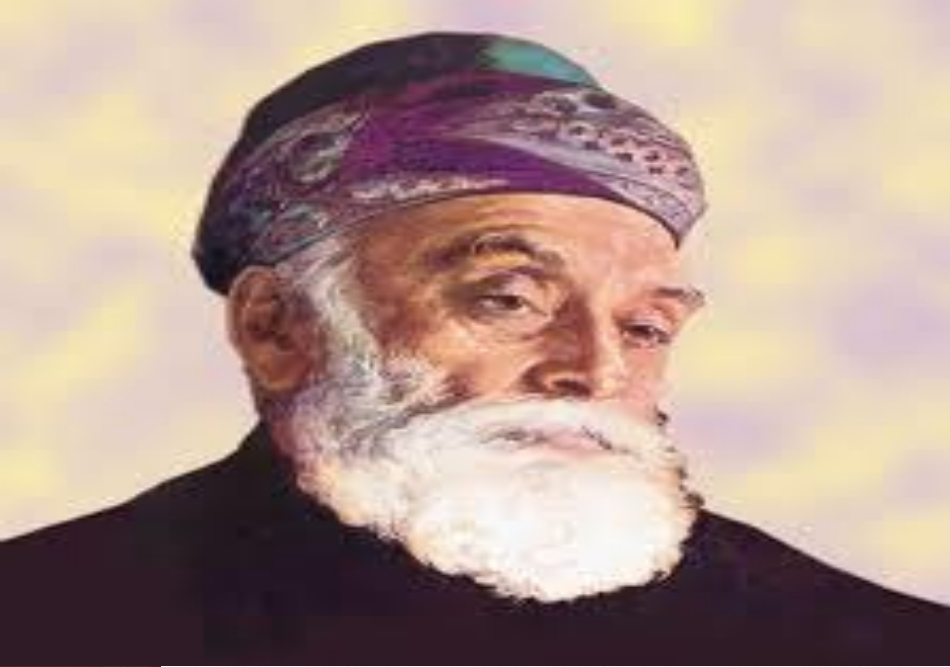
- British cotton industries had not yet expanded and **Indian fine textiles were in great demand** in Europe. So the company was keen on expanding textile exports from India.
- The **French, Dutch, Portuguese** as well as the local traders **competed** in the market to secure woven cloth.
- In their letters back to London, **Company officials** continuously **complained of difficulties of supply and the high prices.**
- The East India Company established political power, it could assert a monopoly right to trade.
- First: the **Company tried to eliminate** the existing traders and brokers connected with the cloth trade, and **establish a more direct control** over the weaver.
- It appointed a paid servant called the **gomastha** to supervise weavers, collect supplies, and examine the quality of cloth.
- Many weavers had small plots of land which they had earlier cultivated along with weaving, and the produce from this took care of their family needs.
- Now they had **to lease out the land** and devote all their time to weaving. Weaving, in fact, required the labour of the entire family, with children and women all engaged in different stages of the process.
- **Weavers** along with the village **traders revolted**, opposing the Company and its officials. Over time many weavers began refusing loans, closing down their workshops and taking to agricultural labour.

Manchester Comes to India

- Henry Patullo, a Company official, had ventured to say that the demand for Indian textiles could never reduce, since no other nation produced goods of the same quality.
- As cotton industries developed in England, industrial groups began worrying about imports from other countries.
- They pressurised the government to impose import duties on cotton textiles so that Manchester goods could sell in Britain without facing any competition from outside.
- At the end of the eighteenth century there had been virtually no import of cotton piece-goods into India.
- Cotton weavers in India thus faced two problems at the same time: their export market collapsed and the local market shrank, being glutted with Manchester imports.
- Civil War broke out and cotton supplies from the US were cut off, Britain turned to India. As raw cotton exports from India increased, the price of raw cotton shot up.
- Weavers in India were starved of supplies and forced to buy raw cotton at exorbitant prices. In this, situation weaving could not pay.
- Factories in India began production, flooding the market with machine-goods.

The Early Entrepreneurs

- The British in India began exporting opium to China and took tea from China to England. Many Indians became junior players in this trade, providing finance, procuring supplies, and shipping consignments.
- In Bengal, Dwarkanath Tagore made his fortune in the China trade before he turned to industrial investment.
- In Bombay, Parsis like Dinshaw Petit and Jamsetjee Nusserwanjee Tata who built huge industrial empires in India, accumulated their initial wealth partly from exports to China, and partly from raw cotton shipments to England.
- Seth Hukumchand, a Marwari businessman who set up the first Indian jute mill in Calcutta in 1917, also traded with China. So did the father as well as grandfather of the famous industrialist G.D Birla.
- When opportunities of investment in industries opened up, many of them set up factories.
- Till the First World War, European Managing Agencies in fact controlled a large sector of Indian industries.
- Three of the biggest ones were Bird Heiglers & Co., Andrew Yule, and Jardine Skinner & Co. These Agencies mobilised capital, set up joint-stock companies and managed them.
- In most instances Indian financiers provided the capital while the European Agencies made all investment and business decisions.
- In 1912, J.N. Tata set up the first iron and steel works in India at Jamshedpur. Iron and steel industries in India started much later than textiles. In colonial India industrial machinery, railways and locomotives were mostly imported. So capital goods industries could not really develop in any significant way till Independence.



Where Did the Workers Come From?

- **Factories needed workers.** With the expansion of factories, this demand increased.
- In most industrial regions workers came from the **districts around**. **Peasants and artisans** who found **no work in the village** went to the industrial centres in search of work.
- Getting jobs was **always difficult**, even when mills multiplied and the demand for workers increased. The **numbers seeking workers** were always more than the jobs available.
- The number of **factory workers increased** over time. However, as you will see, they were a small proportion of the total industrial workforce.
- **Vasant Parkar**, who was once a **millworker in Bombay**, said: 'The workers would pay the jobbers money to get their sons work in the mill ... The mill worker was closely associated with his village, physically and emotionally. He would go home to cut the harvest and for sowing. The Konkani would go home to cut the paddy and the Ghati, the sugarcane. It was an accepted practice for which the mills granted leave.'
- **Bhai Bhosle, a trade unionist of Bombay**, recollected his childhood in the 1930s and 1940s: 'In those days, the shift was 10 hours – from 5 pm to 3 am – terrible working hours. My father worked for 35 years; he got the asthma like disease and could not work any more...Then my father went back to village.'

The Peculiarities of Industrial Growth

- European Managing Agencies, which dominated industrial production in India, were interested in certain kinds of products.
- They established **tea and coffee plantations**, acquiring land at cheap rates from the colonial government; and they invested in mining, indigo and jute.
- Most of these were **products** required primarily for export trade and **not for sale in India**.
- When Indian businessmen began setting up industries in the late nineteenth century, they avoided competing with Manchester goods in the Indian market.
- The yarn produced in Indian spinning mills was used by handloom weavers in India or **exported to China**.
- As the **swadeshi movement** gathered momentum, nationalists mobilised people to **boycott foreign cloth**. Industrial groups organised themselves to protect their collective interests, pressurising the government to increase tariff protection and grant other concessions.
- With British mills busy with war production to meet the needs of the army, **Manchester imports into India declined**.
- After the war, **Manchester could never recapture** its old position in the Indian market. Unable to modernise and compete with the US, Germany and Japan, the economy of Britain crumbled after the war.
- **Cotton production** collapsed and exports of cotton cloth from Britain fell dramatically. Within the colonies, local industrialists gradually consolidated their position, substituting foreign manufactures and capturing the home market.

Small-scale Industries Predominate

- While factory industries grew steadily after the war, large industries formed only a small segment of the economy.
- Handicrafts production actually expanded in the twentieth century. This is true even in the case of the handloom sector.
- While cheap machine-made thread wiped out the spinning industry in the nineteenth century, the weavers survived, despite problems.
- Handicrafts people adopt new technology if that helps them improve production without excessively pushing up costs.
- This increased productivity per worker, speeded up production and reduced labour demand.
- Certain groups of weavers were in a better position than others to survive the competition with mill industries.

Market for Goods

- One way in which new consumers are created is through **advertisements**.
- When Manchester industrialists began selling cloth in India, they put **labels** on the cloth bundles.
- When buyers saw '**MADE IN MANCHESTER**' written in bold on the label, they were expected to feel confident about buying the cloth.
- But labels did not only carry words and texts. They also **carried images** and were very often beautifully illustrated.
- **Images of Indian gods and goddesses** regularly appeared on these labels. It was as if the association with gods gave divine approval to the goods being sold.
- Like the images of gods, figures of important personages, of emperors and nawabs, adorned advertisement and calendars.
- The message very often seemed to say: if you respect the royal figure, then respect this product; when the **product was being used by kings**, or produced under royal command, its **quality could not be questioned**.
- When Indian manufacturers advertised the **nationalist message** was **clear and loud**. If you **care for the nation** then buy products that Indians produce. Advertisements became a vehicle of the nationalist message of **swadeshi**.

