

## **UNIT 2. The Industrial Revolution.**

**(2478) Economic History.**



## Suggested citation

- MARTÍNEZ-RODRÍGUEZ, Susana. 2022a. “(2478) Economic History. Unit 2. The Industrial Revolution.” Departamento de Economía Aplicada-Universidad de Murcia. (Lecture 28.09.2022)

- CONVOCATORIA PARA EL IMPULSO Y LA CONSOLIDACIÓN DE PROYECTOS DE DOCENCIA BILINGÜE DURANTE EL CURSO 2021/2022 (Resolución R-1000/2021)

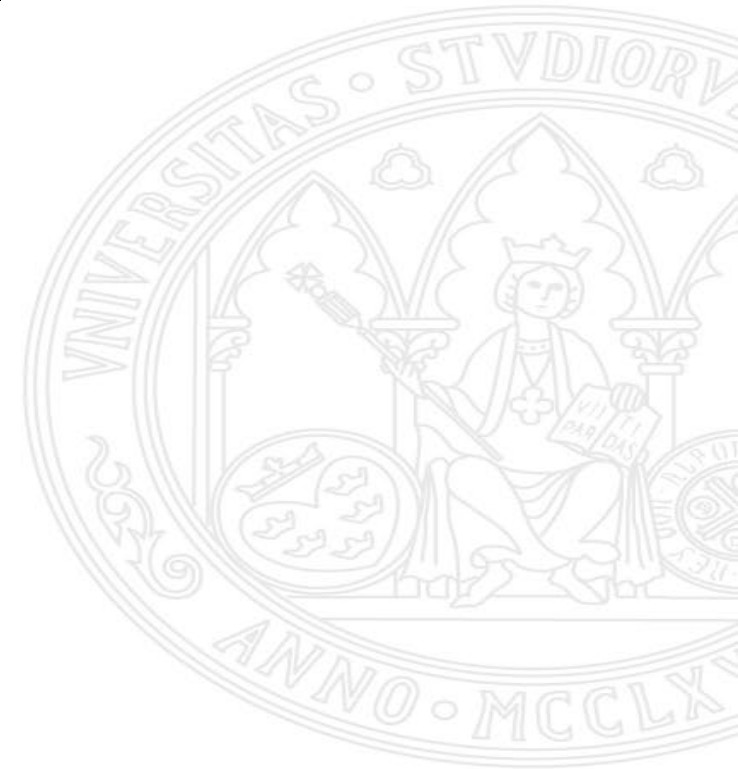
- **2. The Industrial Revolution (IR).**
- **2.1. Introduction.**
- **2.2. Basic Determinants of the Industrial Revolution.**
- **2.3. The Industrial Revolution and its Patterns of Development.**
- **2.4. Industrialization in Spain.**
- **2.5. Conclusions.**



## UNIT 2. References.

### Textbook:

- ALLEN, Robert. 2011. Global Economic History: A Very Short Introduction (Very Short Introductions), Oxford University Press, 27-30.
- **For other resources, please, check the presentation**



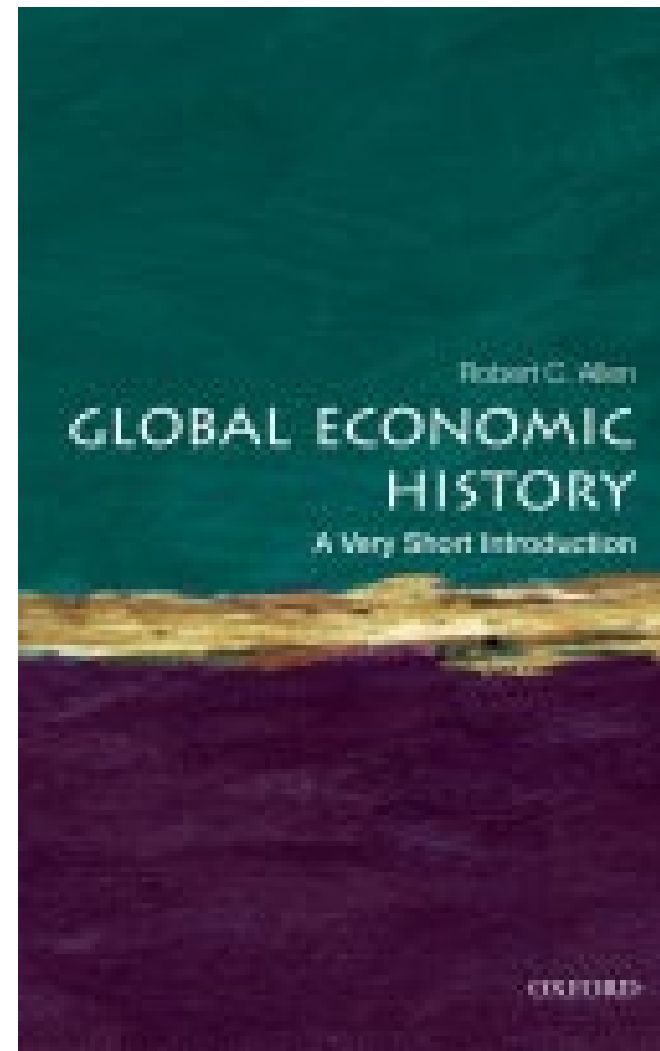
NEW APPROACHES TO ECONOMIC AND SOCIAL HISTORY

## THE BRITISH INDUSTRIAL REVOLUTION IN GLOBAL PERSPECTIVE

Robert C. Allen



Cambridge

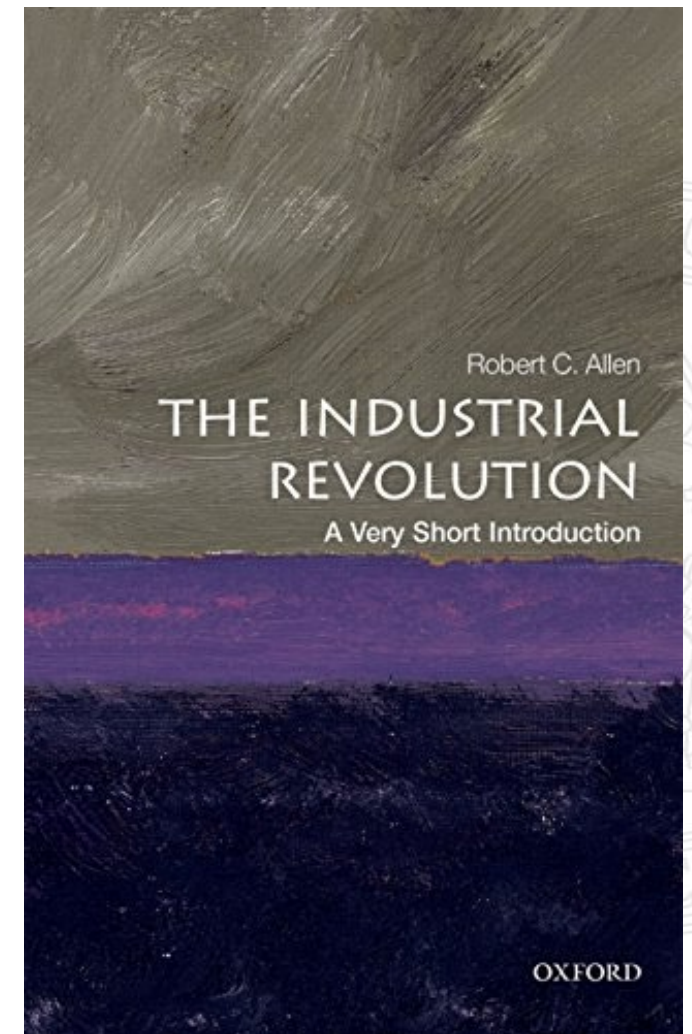


Robert C. Allen

## GLOBAL ECONOMIC HISTORY

A Very Short Introduction

OXFORD



Robert C. Allen

## THE INDUSTRIAL REVOLUTION

A Very Short Introduction

OXFORD

- **1.1 Introduction:**
- In the following video R. Allen discusses why Britain became industrialized while other countries did not.
- This clip is part of *The CORE project*. CORE is an open-access, interactive ebook-based course for anyone interested in learning about the economy and economics.
- Here you can read the transcript of the previous video: [https://www.core-econ.org/the-economy/book/text/bob-allen\\_why-britain-industrialised-when-others-did-not-transcript.html?query=economic+history](https://www.core-econ.org/the-economy/book/text/bob-allen_why-britain-industrialised-when-others-did-not-transcript.html?query=economic+history)



- Robert Allen: The Industrial Revolution

- Why did it happen in England?
- Why did it happen in the 18th Century?



- *“The industrial revolution was fundamentally a technological revolution, and progress in understanding it can be made by focusing on the sources of invention.... [T]he reason the industrial revolution happened in Britain, in the eighteenth and nineteenth centuries, was not because of luck (Crafts 1977) or British genius or culture or the rise of science. Rather it was Britain’s success in the international economy that set in train economic developments that presented Britain’s inventors with unique and highly remunerative possibilities. The industrial revolution was a response to the opportunity...”*[Source: <https://www.bradford-delong.com/2012/02/robert-allen-the-british-industrial-revolution-in-global-perspective.html> (27.09.2022)]



Spinner: meaning female spinner  
Building labourer: meaning male  
building labourer.

The reason why a woman's earnings  
rose in spinning so much was because  
the textile industries expanded rapidly  
to supply Britain's growing commercial  
empire

Wages increasing made much more  
profitable to use capital intensive  
technology

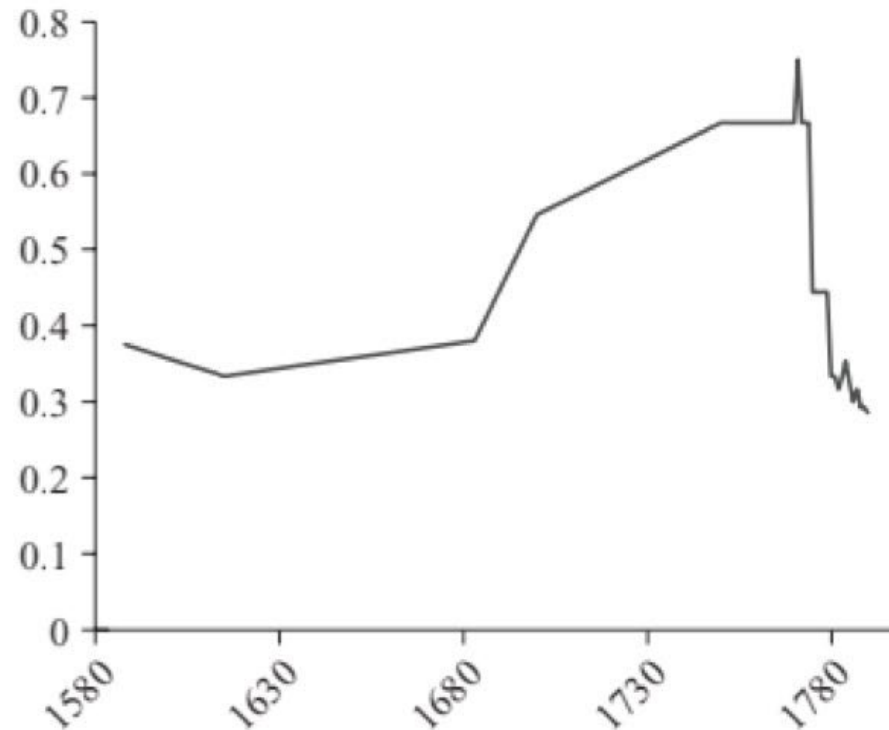
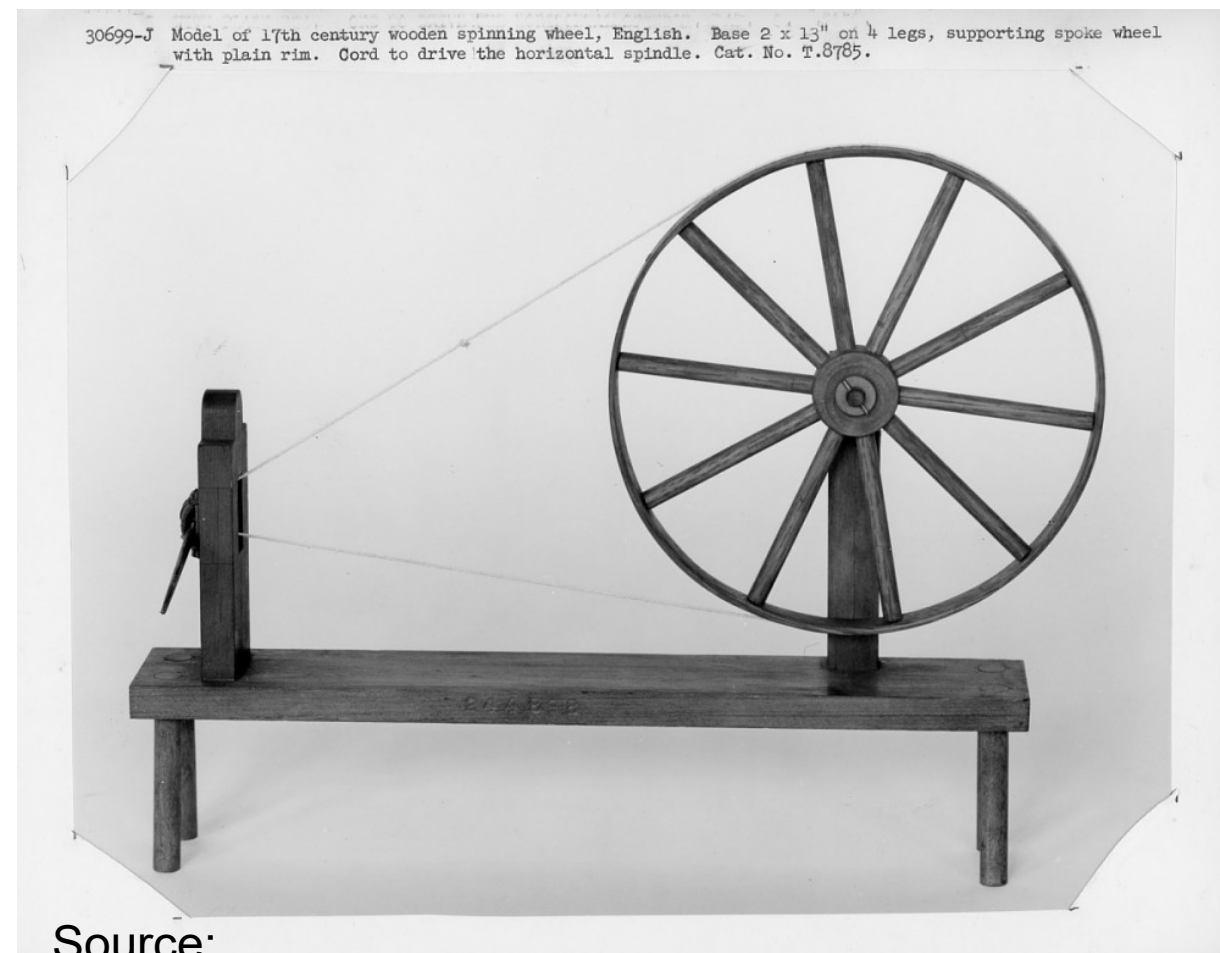


Figure 3. *Earnings of a spinner relative to a building labourer*

Sources: Spinners' wage from Muldrew, 'Th'ancient distaff', pp. 504-11, 519. Labourers' wage from Woodward, *Men at work*, pp. 274-5; Gilboy, *Wages*, pp. 280-2.

[[Wooden model 16 inches high 11 inches wide, 20 inches long--it ha 12 spindles operated by hand crank. This is a model of the spinning jenny invented by James Hargreaves, June 22, 1770. This model was accessioned in 1906]]

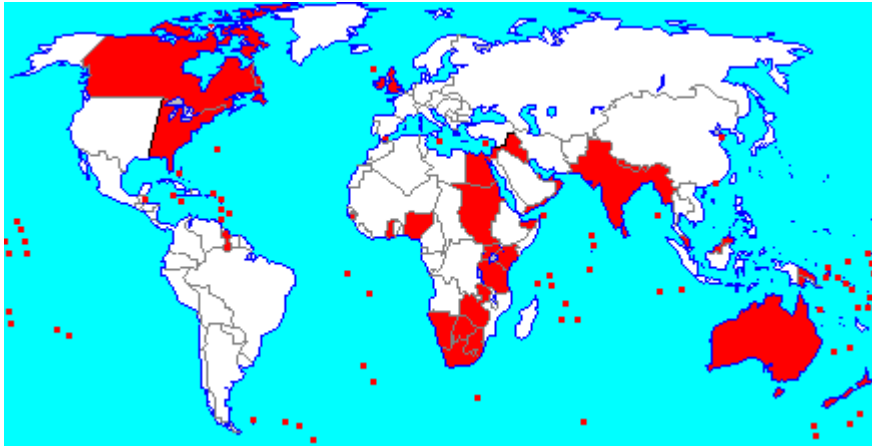
The wages of women made the spinning jenny profitable in the 18<sup>th</sup> Century whereas would have not been in the 17<sup>th</sup> C.



Source:

[https://americanhistory.si.edu/collections/search/object/nmah\\_625460](https://americanhistory.si.edu/collections/search/object/nmah_625460)

- *“So, the answer to the big question, the reason that machinery was invented in Britain at the end of the 18th century, is because Britain was a high wage economy then, and it was a high wage economy because of the economic expansion induced by her successful imperialism”.*



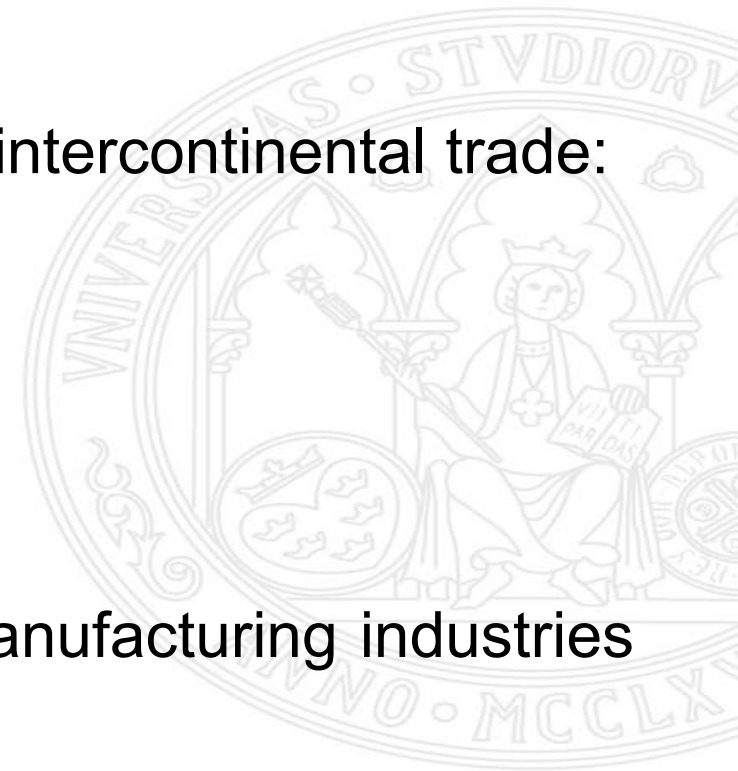
In 1760 the British Empire stretched around the world, from North America to India and points in between.

Source:

<https://sageamericanhistory.net/revolution/topics/amrev1761-74.html>

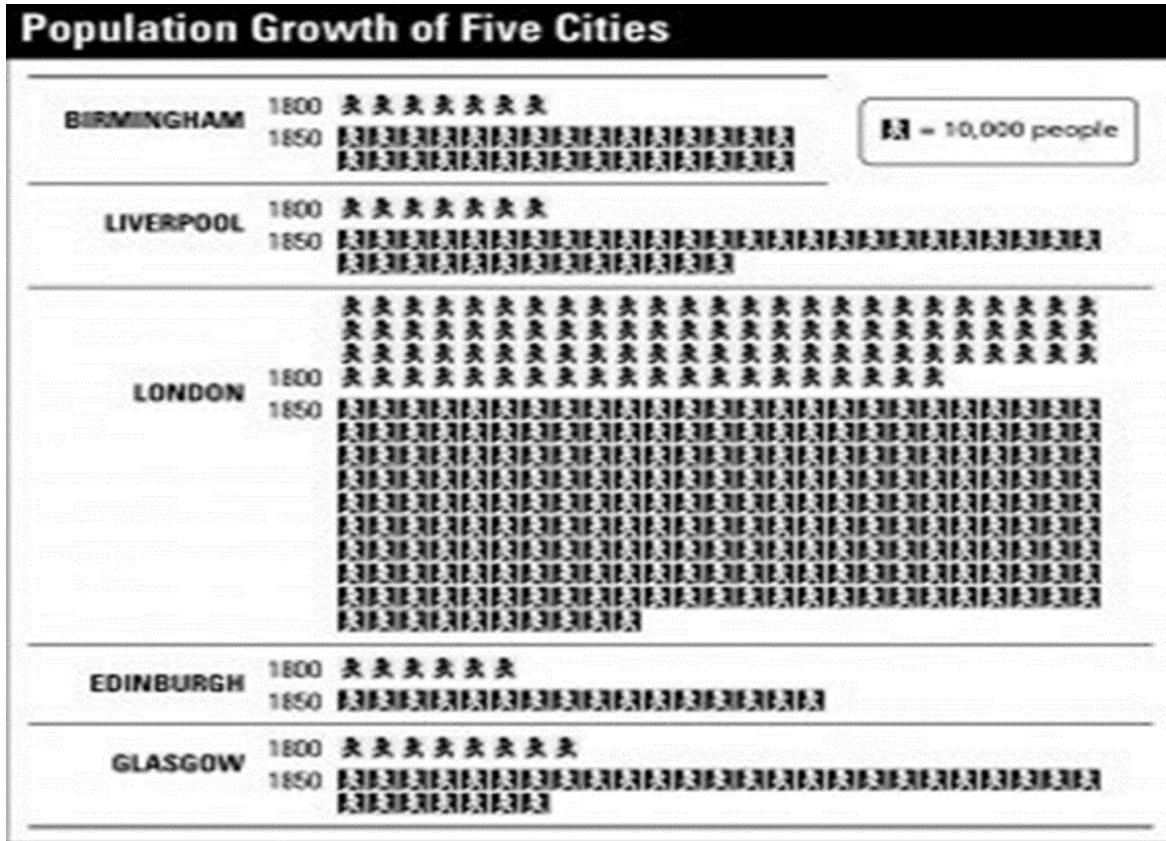
- **2.2. Basic Determinants of the Industrial Revolution.**
- The Industrial Revolution (IR) was the result of the transformation of the early modern economy.
  - England: high wages and salaries, low energy prices.
- (Allen, 2009). Britain's creative response to the challenges and opportunities created by the global economy that emerged after 1500.
  - 1st step: Britain took a commanding position in the extensive market that emerged.
    - 16<sup>th</sup> – 17<sup>th</sup> C.: The British wool textile industry competed with the established producers in Italy and the Low Countries.

- **2.2. Basic Determinants of the Industrial Revolution.**
- 1st step: Britain took a commanding position in the extensive market that emerged.
  - 17<sup>th</sup> -18<sup>th</sup> C.: Britain extended her lead by expanding intercontinental trade:
    - Acquisition of colonies.
    - Mercantilism.
    - Trade promotion.
    - Naval power.
- 2nd step: Britain's success in the expansion of rural manufacturing industries and rapid urbanization.





# UNIT 2.2. Basic Determinants of the Industrial Revolution.



## 2.2.1. Cultural and Political context.

London's Population:

1500: 50,000

1600: 200,000

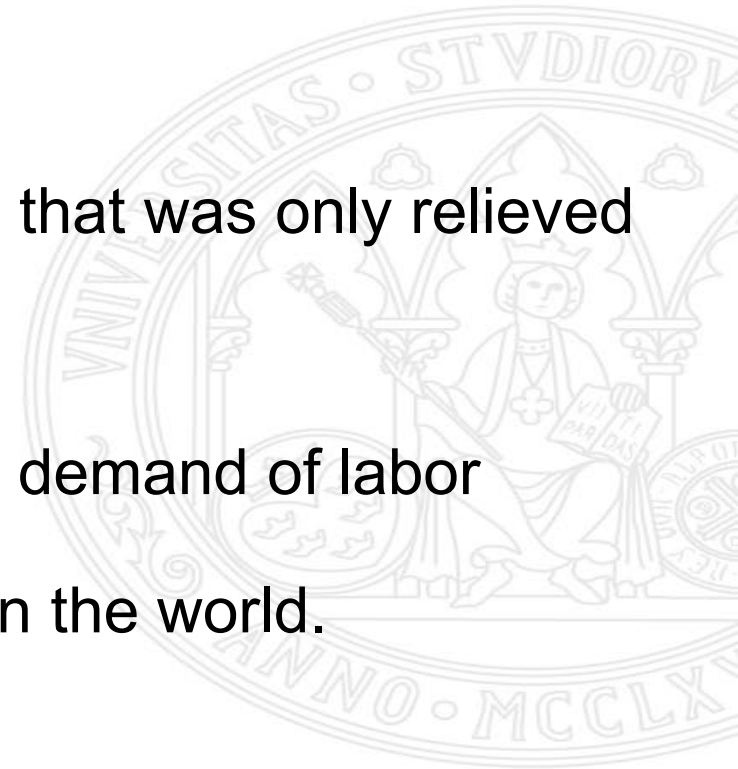
1700: 500,000

1800: + 1,000,000

<https://studentmadehistory.wordpress.com/2015/05/20/what-impacts-did-the-industrial-revolution-have-on-population-and-urbanization-by-abdullahi-mohammed-jesus-alvares-and-fluffy-hernandez/>

- **2.2.1 Cultural and Political Context.**

- The growth of British commerce had three important consequences (R. Allen, 2009):
  - 1. The growth of London created a shortage of firewood that was only relieved by the use of coal.
  - 2. The growth of cities and manufacturing increased the demand of labor
    - British wages and living standards were the highest in the world.
      - Beer, bread and beef.
  - 3. The growth of cities and wages stimulated agriculture.



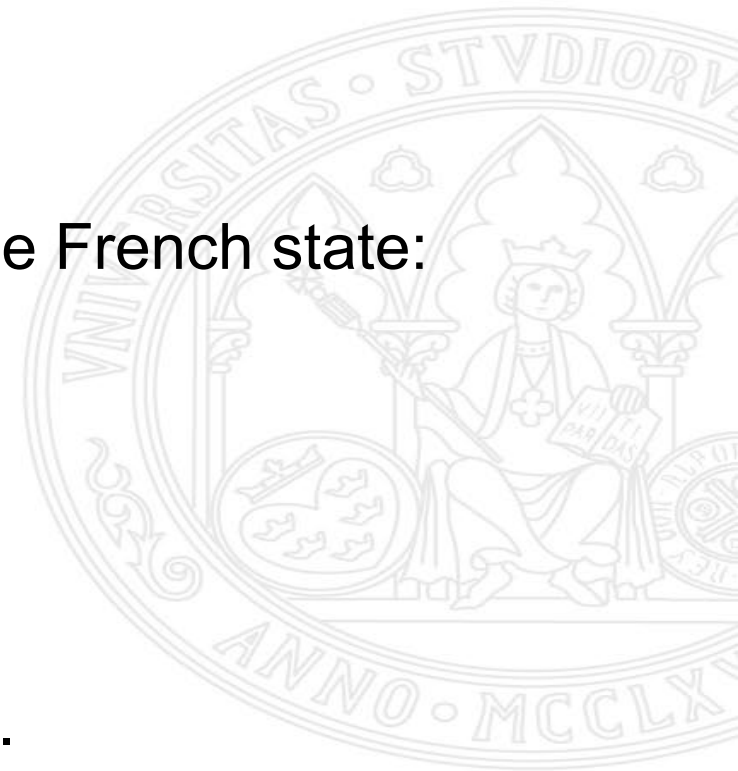


- **2.2.1 Cultural and Political Context.**
- The IR was a turning point in world history.
  - A new era of sustained economic growth (1760-1850).
- The IR was the result of the transformation of the early modern economy.
  - 1.5% growth per year (1760 [1776]).
  - It was not the abrupt discontinuity that its name suggests.
- Technological change was the driving force behind the IR.
  - Inventions, innovations, new products:
    - were responses to the high wages and cheap energy of the British economy.
    - meant labor was replaced with capital and energy.

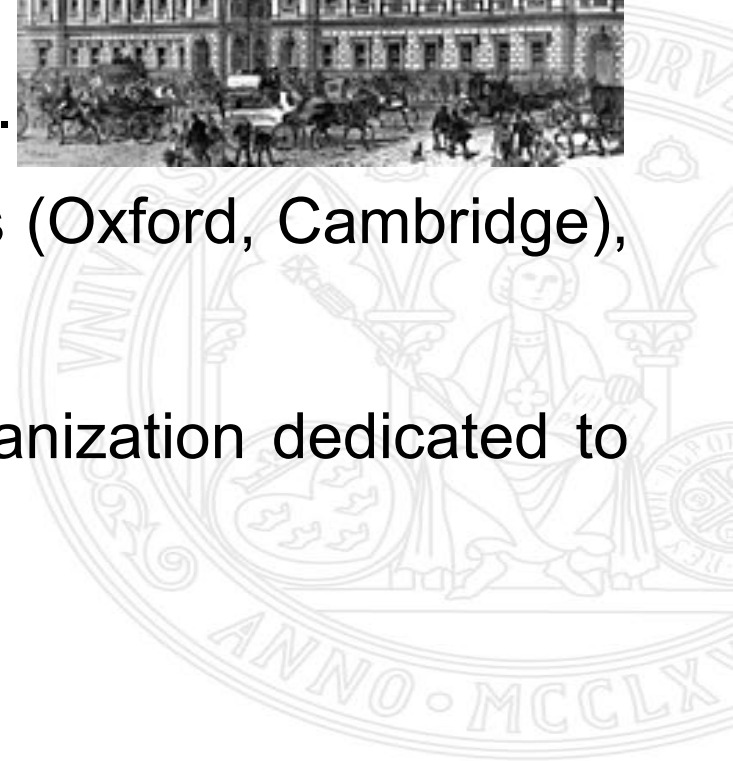
- *“The spinning jenny helps explain why the Industrial Revolution occurred in Britain rather than in France or India. Wages were exceptionally high relative to capital prices in Britain, so the jenny was profitable to use in Britain but not elsewhere. Since it was only profitable to use the jenny in Britain, that was the only country where it as worth incurring the costs of developing it. Irrespective of the quality of their institutions or the progressiveness of their cultures, neither the French nor the Indians would have found it profitable to mechanize cotton production in the eighteenth century” (Allen, 2009\*.*
- (\*) **The Journal of Economic History** , Volume 69 , Issue 4 , December 2009 , pp. 901 – 927 DOI: <https://doi.org/10.1017/S0022050709001326>



- **2.2.1 Cultural and Political Context. England:**
  - A. Scientific Revolution (17<sup>th</sup> C.).
  - B. English Constitution and Parliament.
  - C. England collected twice as much taxes per capita as the French state:
    - i.e.: the Navy Act.
  - D. Power to take people's property:
    - i.e.: the Enclosure Act.
  - E. Public Utilities: infrastructure such as canals and roads.



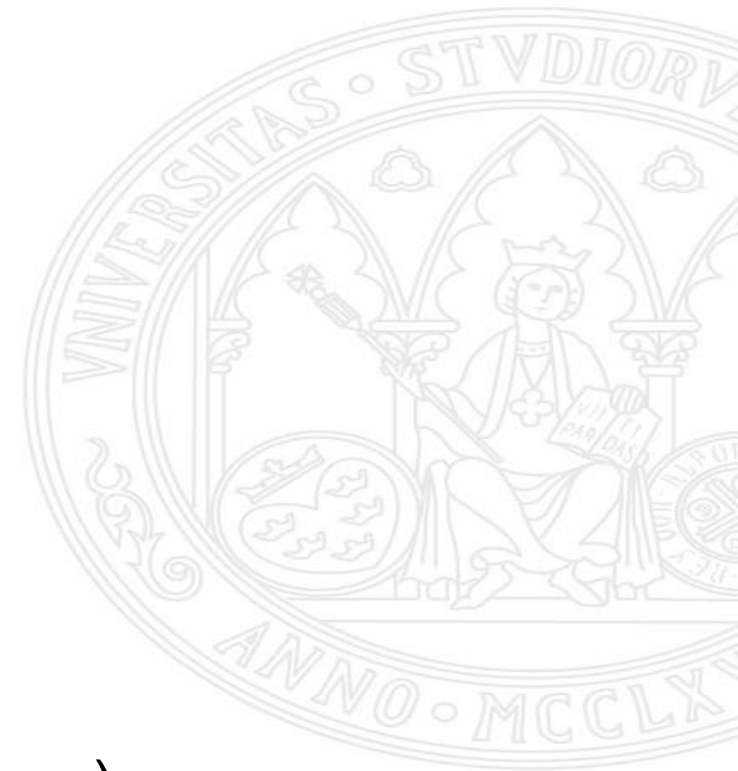
- **2.2.1 Cultural and Political Context. England.**
- **A. Scientific Revolution 17<sup>th</sup> C.**
- New vision of the world: methodological and mechanical.
- Science spread rapidly through education in universities (Oxford, Cambridge), academies and scientific societies.
- The Royal Society of England: the first permanent organization dedicated to scientific activity.



- **2.2.1 Cultural and Political Context. England.**
- **B. English Constitution and Parliament.**
  - The Revolution of 1688.
  - When James II was overthrown, modern English parliamentary democracy began.
  - Bill of Rights of 1689: the monarch held absolute power.
  - Changes following the Glorious Revolution:
    - The king was no longer above the law.
    - The Crown could not call or disband parliament.
    - Parliament gained a direct role in financial matters.

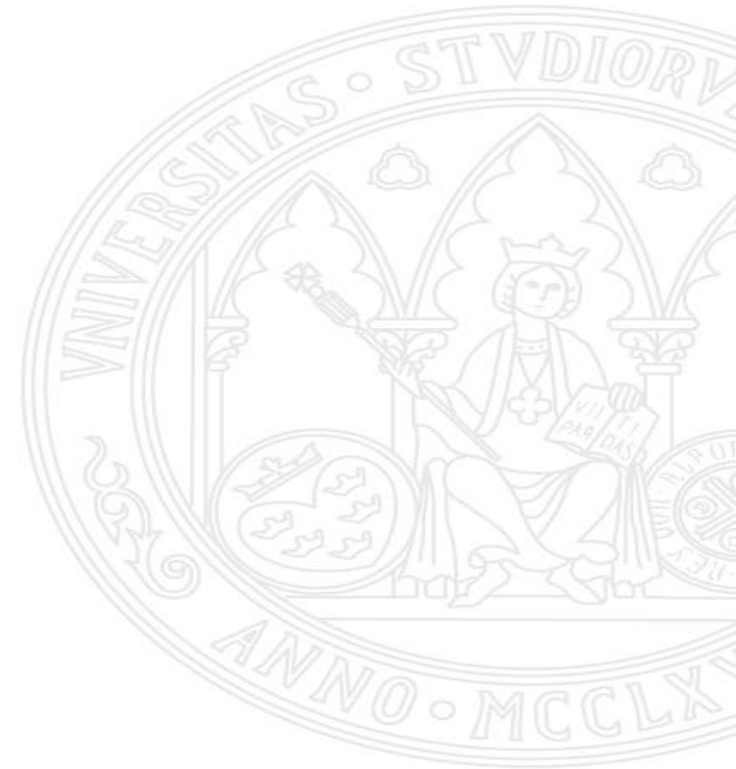


- **2.2.1 Cultural and Political Context. England.**
- **B. English Constitution and Parliament.**
  - Parliament introduced a land tax in 1693.
    - The French nobility was exempt from taxation.
  - But: most revenue was raised from consumer goods.
    - Beer.
    - Tobacco (colonies).
    - Sugar (colonies).
  - (NOTE: Wages higher than bare-bones subsistence wages).





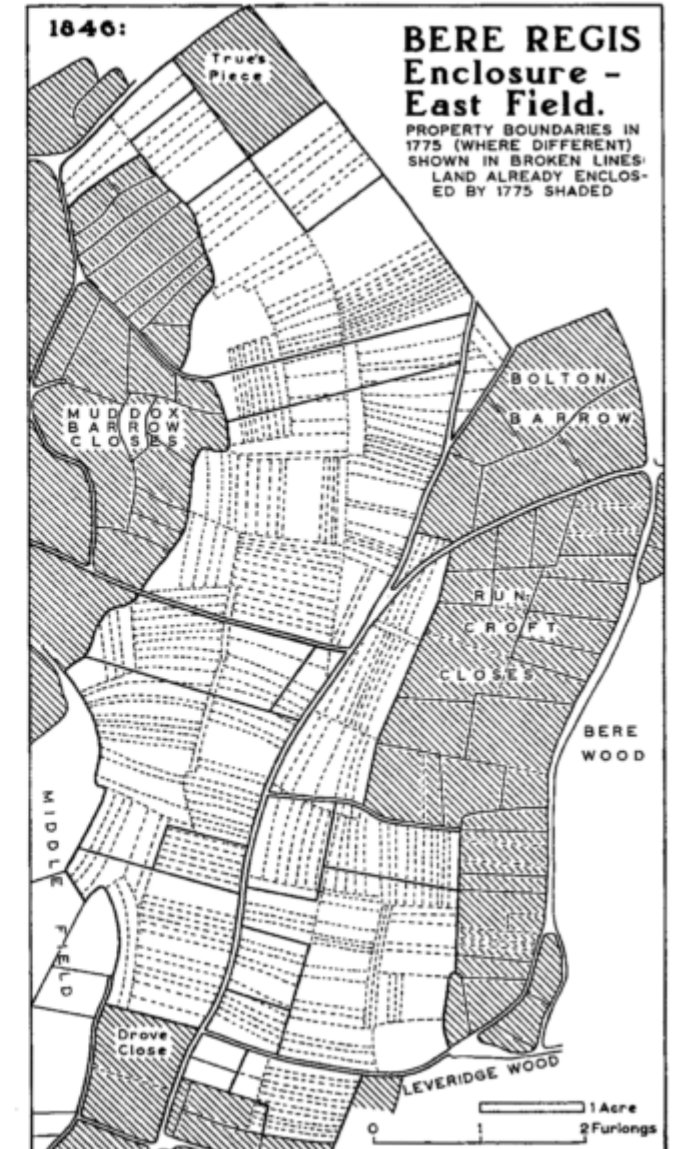
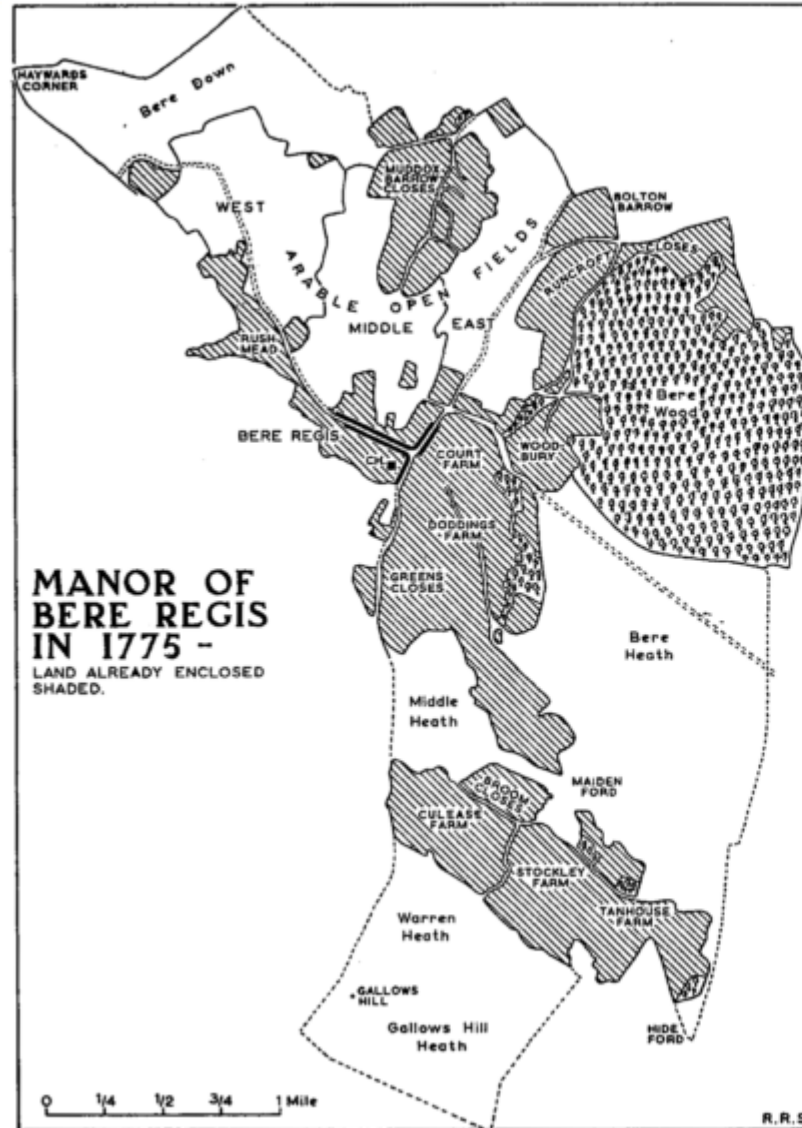
- **2.2.1 Cultural and Political Context. England.**
- **C. English collected twice as much per capita as the French state.**
  - Navy → to promote commerce (Navy Act).
    - Monopoly with the colonies.
    - To promote trade & economic growth.



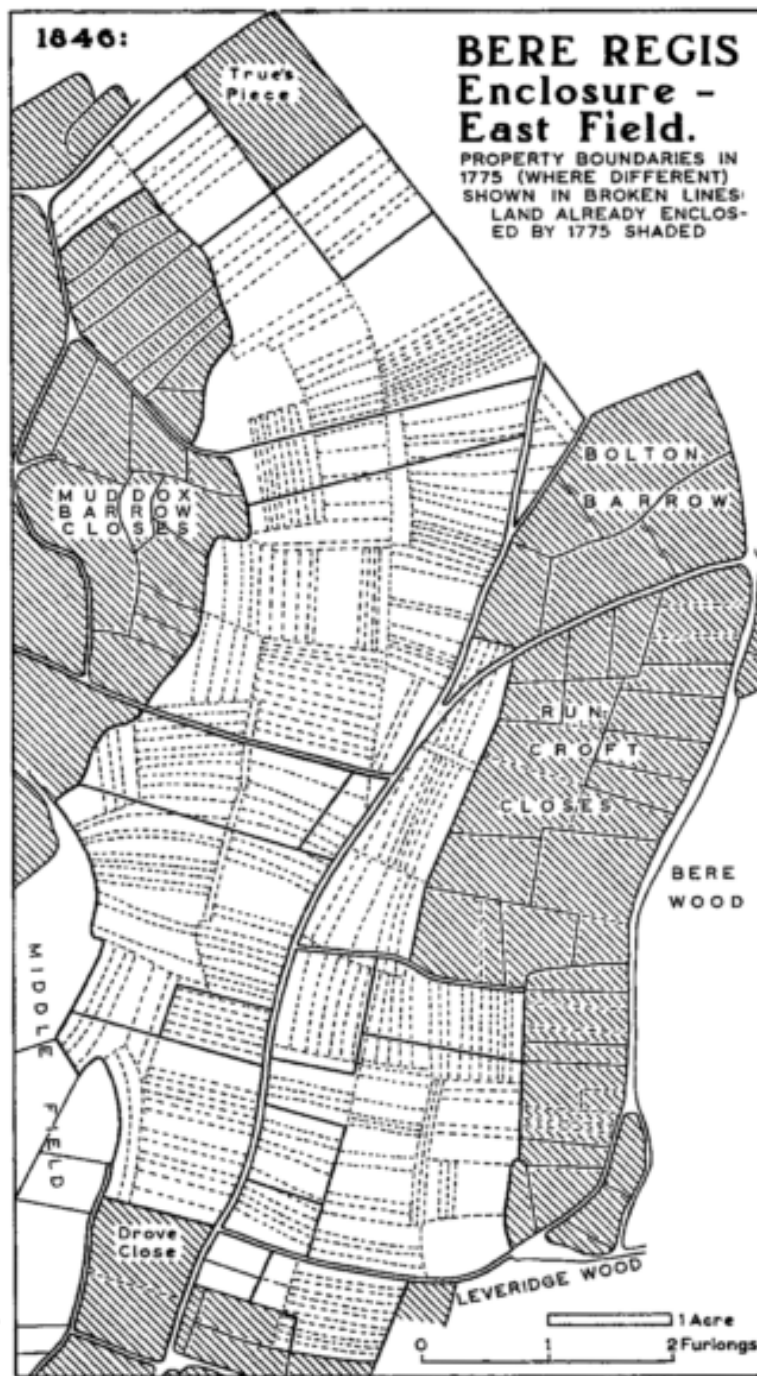
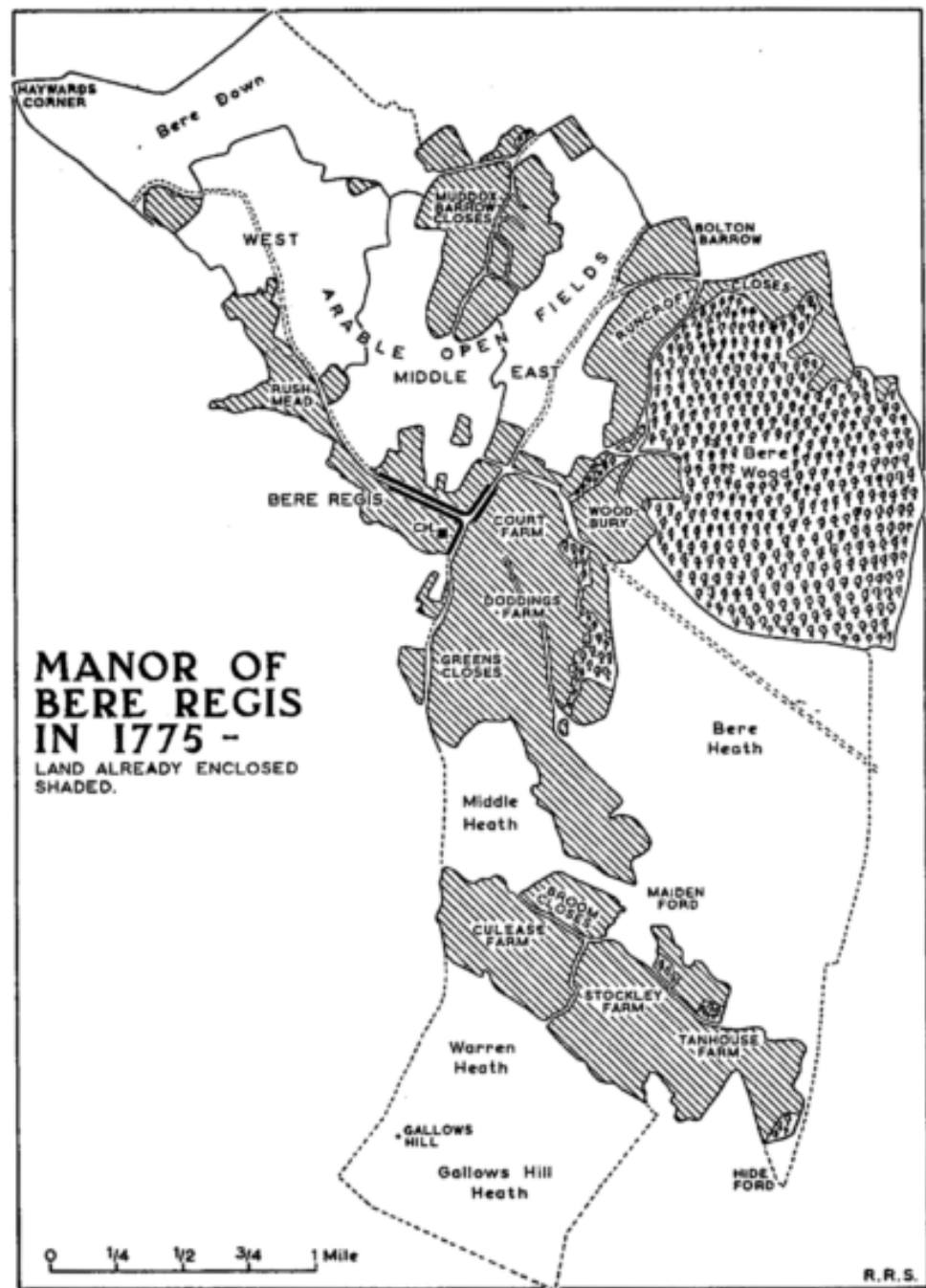


## UNIT 2.2. Basic Determinants of the Industrial Revolution.

- 2.2.1 Cultural and Political Context. England.
- D. Power to take people's property in the name of the Parliament.
- Enclosure Act: laws that enclosed open fields and common land in the country.
  - Created property rights for land that was previously considered common.



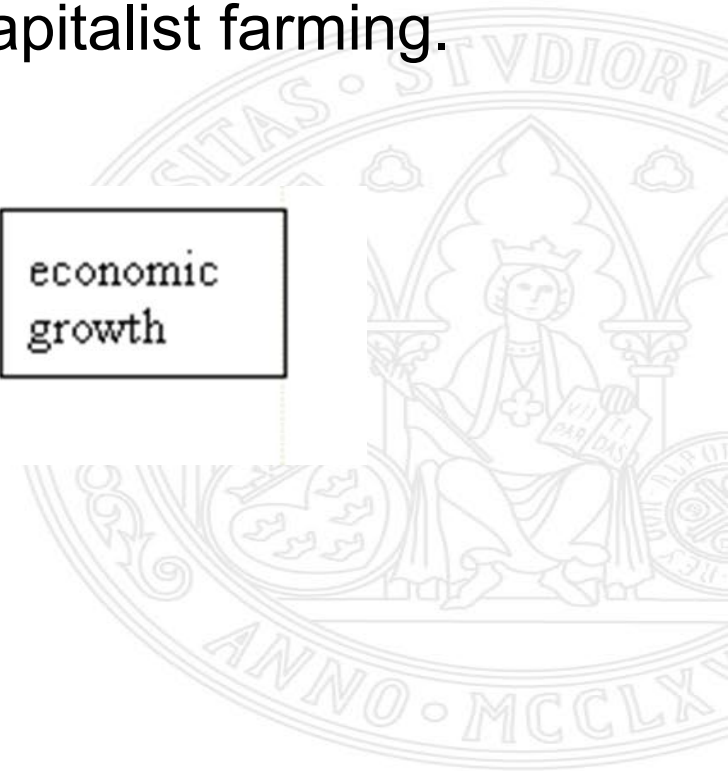
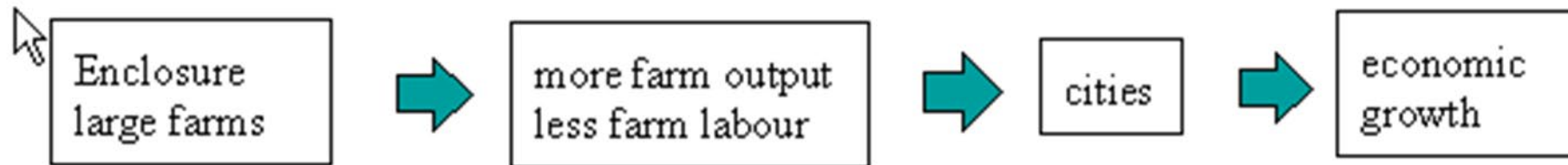




The map of the Enclosure Award of the East Field shows the roads and boundaries drawn by the commissioners in 1846 across the strips marked in the 1775 survey. The contrast between the size of the new fields and the old strips is very marked

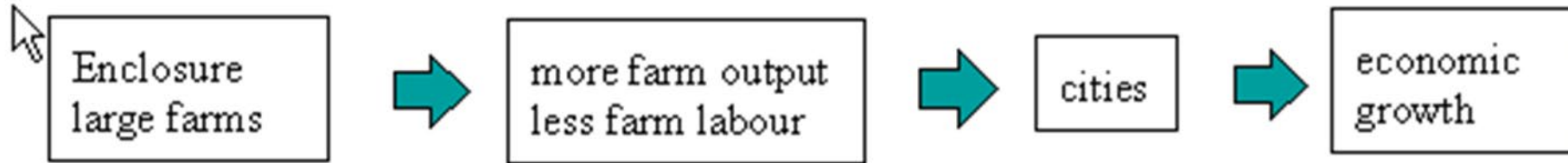
Source: <https://www.wilcuma.org.uk/the-history-of-dorset-after-1066/dorset-enclosures/>

- **Enclosure Act:**
- The standard explanation emphasizes enclosures and capitalist farming.

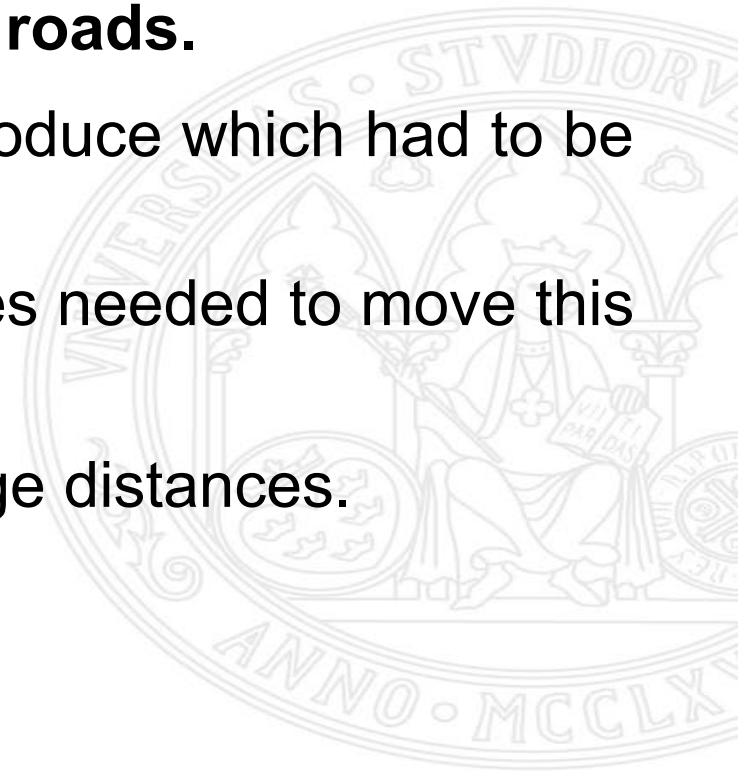


## UNIT 2.2. Basic Determinants of the Industrial Revolution.

- Initiatives to enclose came from:
  - Landowners hoping to maximize rent from their estates.
  - Tenant farmers hoping to improve their farms.
- Parliament supported enclosure: bills.



- **2.2.1 Cultural and Political Context. England.**
- **E. Public Utilities: infrastructure such as canals and roads.**
- Industrial Revolution created huge amounts of heavy produce which had to be moved.
  - Roads could not handle such weights and the vehicles needed to move this produce did not exist.
  - Canals were the answer to moving heavy objects large distances.





- **2.2.1 Cultural and Political Context. England.**
- **E. Public Utilities: infrastructure such as canals, turnpikes.**
- *“Although the turnpike trusts became outmoded in the Victorian era, it must not be forgotten that this most ubiquitous institution, an important feature of the landscape for over 150 years, had been one of the central pillars on which the industrial revolution was based.”*

*Transport in the Industrial Revolution, D. H. Aldcroft (1983).*

- Turnpike trusts were authorized by Acts of Parliament to build, maintain and operate toll roads in Britain.

