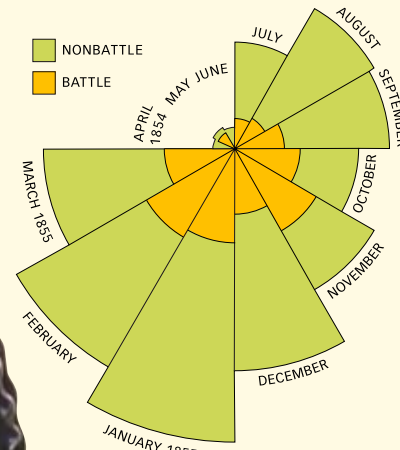


WHERE WOULD SOCIAL SCIENCE BE WITHOUT MATHS?

Malthus posited the hypothesis that unchecked population growth always exceeds the growth of the means of subsistence.



Nightingale believed statistical data could be used as powerful arguments for medical reform.



Galton's work on human intelligence sought to separate the sheep from the goats and sparked the ideas of the eugenics movement. He was heavily influenced by his cousin Charles Darwin.



Durkheim is considered a father of sociology. He discovered collective tendencies toward suicide and drew theoretical conclusions on its social causes.



Rowntree's statistical revelations about urban and rural poverty exposed the failings of capitalism.



George Gallup embarrassed the leading US pollster, the Literary Digest. He knew his rivals' use of phone listings and car registrations would skew its sample toward the wealthy.



Fogel used computer technology to calculate that railroads contributed far less to the growth in the US economy than had been thought.



Goldthorpe has contributed to the understanding of social mobility. The well-established Goldthorpe class schema is a standard approach to describing different social classes.



Wilkinson and **Pickett** have shown that in more equal societies, such as Japan, people are happier and healthier.



1662

John Graunt, a merchant, publishes *Natural and Political Observations Made Upon the Bills of Mortality*. He produced a primitive life table, and can be seen as the father of insurance mathematics.

1798

Thomas Robert Malthus publishes his *Essay on Population*, drawing attention to the potential dangers of population growth.

1801

First comprehensive census in Britain.

1835

Adolphe Quetelet publishes *A Theory of Man* and devises Social Mechanics.

1855

Florence Nightingale's 'coxcomb' pie chart shows the number of soldiers who died of wounds, disease or other causes during the Crimean War.

1869

Francis Galton's Hereditary Genius investigates whether human intelligence is passed down through families. In the late 1860s, Galton invented 'correlation' and 'regression'.

1897

Emile Durkheim publishes his monograph on suicide.

1901

Seebohm Rowntree's Poverty: A Study of Town Life was to influence much subsequent research.

1936

Gallup poll accurately calls US election for Franklin Delano Roosevelt (above).

1964

Robert Fogel's Railroads and American Economic Growth, heralds the rise of cliometrics, the systematic application of economic theory and quantitative methods to economic history.

1980

John Goldthorpe publishes *Social Mobility and Class Structure in Modern Britain*. **Lawrence Klein** wins Nobel Prize for creating computer models of national economies which can estimate the impact of policy changes.

1991

Cathie Marsh and colleagues publish *The Case for Samples of Anonymised Records from the 1991 Census* and open the way for a new strand of research, such as Finney and Simpson's *Sleepwalking to Segregation?* (2009).

2009

The Spirit Level by Richard Wilkinson and Kate Pickett uses statistics from around the world to explore the link between inequality and social problems.

