



BASHING THE INDUSTRIAL REVOLUTION

Given the advances in many areas of society that arose either directly or indirectly out of the Industrial Revolution, criticism of this era is surprising.

Benefits

Widespread suffrage: the list of countries that enacted suffrage throughout the male and female population in the 1800s and early 1900s, is almost entirely a list of industrialized nations.

Upward mobility: industrial societies demonstrate a much higher rate of upward mobility than agricultural societies.

Public health: The first societies to liberate themselves from the threat of epidemics were industrial societies, that had the technology and wealth to support public hygiene.

Life expectancy. In 1950, the more industrialized parts of the planet (Europe and North America) had a life expectancy between 60 and 70 years; the rest of the world ranged between 40 and 50 years).

All of this is, of course, to say nothing of the fact that industrialized societies have many conveniences (cars, computers, air conditioning, refrigerators, and stereos) that other societies haven't enjoyed.

Critics of the Industrial Revolution have very legitimate concerns, but most of the time, their blame of the Industrial Revolution is simply taking the wrong approach to the problem.

- *Inequality.* The IR has manifested much inequality, but both lower and upper classes are better off. Much more mobility than most realize; In the last three decades alone, the Industrial Revolution has lifted hundreds of millions out of poverty (in China and India). It wasn't until the IR that many people could opt for other jobs, other than farming.
- *Exploitation of poor.* Actually, rural poor have existed long before the IR, and in England they were flocking to big cities, and to British colonies, long before the IR. The IR simply gave this group a fighting chance to survive—much like is going on in China right now.

- *Diseases.* This is getting things completely backwards. Agricultural populations have always been prey to epidemics, and had low life expectancies. Charts of the death rates per 1000 people in countries that are now industrialized, show that mortality in normal years has dropped steadily; peaks in mortality due to epidemics have almost entirely disappeared. The major epidemics that did occur in large industrial urban centers in the later 1800s occurred because the IR hadn't developed *enough*: the widespread presence of horse manure, and lack of treated water. As soon as cars and treated water became commonplace (along with medical advances made using technology), epidemics were eliminated.
- *Monopolistic control.* Yes, a company that provides the best or cheapest product in one generation has tended to acquire a dominating market share. But if they don't keep making new products that their customers want, *they lose that market share.* Just ask GM what happened to its 50% share of the US car market; US Steel what happened to its 67% share of the American steel market; or AT&T or Microsoft how their monopolies have translated into the mobile phone market.
- *Global Warming:* The earth's temperature has ranged quite a lot in its 4 billion year history. The earth has seen Ice Ages, as well as temperatures so moderate that pine forests grew in Greenland, today covered with ice. Moreover, in the Pleistocene era, Britain was host to hippopotamuses that were 50% larger than those with us today—that thrive in hot, humid climates with lots of water and wild grass. Clearly the warmer temperatures were not caused by cavemen burning too many fossil fuels. Now it is quite possible that the earth's temperature might have been getting warmer in recent decades—I said “possible”—but it is premature to insist that any warming is being caused by burning fossil fuels, when the Earth has seen temperatures rise much higher than they are now, and vary up and down, due to natural causes.
- *Environmental pollution.* This is the most legitimate and undeniable of all the criticisms of the Industrial Revolution, although one has to weigh the alternative. In exchange for dirtier air and water, and food that is no longer organic, our life expectancy has increased from the 30s to the 70s. And instead of 1 billion people (in the early 1800s) worldwide, we can support 7 billion. 780,000 people in the US died in 2013 from *either* tobacco or obesity, for outweighing any other cause of death. This is a quality problem, compared to dying from a famine or epidemic. I see that as a major plus. As late as 1900, the 5 leading causes of death in the US, in order, were: influenza and pneumonia; tuberculosis; gastrointestinal infections; heart disease; cerebrovascular disease. Technology, a better supply of food, and the Industrial Revolution have eliminated most of the major causes of death as late as a century ago.