

Gary S. Shea - Book review – The British Industrial Revolution in Global Perspective by Robert C. Allen

Professor Allen's book is in the Cambridge University's Press series New Approaches to Economic and Social History. It was therefore intended to serve as much as an advanced undergraduate introduction to the British Industrial Revolution as it was intended to summarise the results of a research agenda that has been followed by Allen since the early 1980s. It fulfils both roles admirably. Every generation of students who studies the Industrial Revolution is weaned on a textbook that summarises past authoritative research and even defines a research agenda for a considerable time to come. For this reviewer's generation that textbook was Phyllis Deane's *The First Industrial Revolution* and Allen's text will serve that same purpose for some time to come as well.

But between Deane and Allen the research landscape for the Industrial Revolution has changed a lot. We now know that the Industrial Revolution, when measured in terms of its impacts on aggregate growth, was both later and less intense than first thought. We have also come to appreciate how regionally diverse the earliest phases of the Industrial Revolution were. But what Allen's text brings foremost into the literature is the summary of a large body of research that puts the British Industrial Revolution into an international context and has foremost amongst its research questions, "why was Britain first"?

Never did this question have much hope of being answered well until we knew enough about the economic history of Europe and Asia so that comparative research could be done. For much of the last decade this research has been defined by scholarly interest in The Great Divergence, the divergence between Asia and Europe in terms of wealth, well-being and industry that can be dated perhaps to the 18th century. The emphasis in these researches was in how relative factor endowments, wages and prices differed between these two areas of the world and whether it was these differences that not only started the divergence, but also led to an extreme and unique configuration of factor prices in Britain that dictated that labour-saving innovations would have particularly high returns. This is a body of research, nowhere better illustrated than by the contributions made by the Global Price and Income History Group, on whose shoulders much of Allen's own researches stand.

What we learn in the pre-industrial revolution chapters of the book was that Britain became a high-wage, cheap-energy and rapidly urbanizing economy, relative to the rest of Europe and probably Asia, as well. Much of this was driven by a commercial revolution, which benefitted from Britain's unique location in the developing Atlantic economy and from some success (perhaps fortuitous) in empire building. Some of the most interesting arguments in the book stem from Allen's efforts to explain why the British, and not the Dutch, were first in preparing for the industrial revolution. Both economies were highly commercial, urbanised and had relatively high wages, but their respective endowments with regard to best, low-cost energy sources were different. Coal was the difference that mattered and Britain's coal fields also sat fortuitously near the best of Britain's ore deposits. Britain had not only a head start in developing coal as a source of heat for a rapidly growing London, the developing coal fields also became the locations of Britain's most precocious technological developments in steam power and metallurgy.

So, the conclusion that Allen basically comes to is that Britain was first in such industrial innovation because the returns to such innovations were higher in Britain than elsewhere. And there is much on this score of interest to business historians in Allen's text. The author revisits the earliest biographies of the heroes of the British Industrial Revolution, but now re-interprets their innovations and the businesses they created in terms of returns they generated - returns that were in excess of the high (perspiration) costs of invention and innovation. Steam power, cotton spinning and coke smelting are the inevitable examples whose extensive historical literatures are re-visited by the author in this way.

Like any other scholar's research conclusions, Allen's are not meant to be final. Their success will be measured by how well they point the way to research that will probably result in the next important textbook on the Industrial Revolution. Allen has done much to explore the extent to which factors in growth were exogenous or were endogenously generated in Britain. It is clear that historical scholarship on the Industrial Revolution will continue down this route and try to re-classify exogenous factors as endogenous. Although factors such as the locations of coal fields will always be truly exogenous, surely scholars will want to know more about how the high-wage structures of northern Europe came about. Allen's text does point back to the agricultural revolution and its influence in creating, not only an urbanised work force, but in creating a well-fed and highly productive work force.

In the closing chapter of his book, Modern Economic Growth is not the inevitable result of an industrial revolution. Growth can falter without continuous technological innovation. Whether that happens or not depends not just upon factor endowments and relative factor prices, but also depends upon whether societies take advantage of contemporary economic growth to invest in their infrastructure, institutions and in the quality of their own labour forces. Looking backwards from the British Industrial Revolution, Allen sees the successful investment that was made in commerce, agriculture, urbanisation and energy-development growth as key to preparing Britain for its own industrial revolution. Similarly when he looks forward to Modern Economic Growth he emphasises that it is not enough that economies benefit from past innovations. To sustain Modern Economic Growth economies actually have to become prepared to innovate in technology themselves. Theorists of Modern Economic Growth, as well as economic and business historians, will find much food for thought in Allen's text.

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