China – the empire that did not bark: the economics of a failed attempt at modern economic growth. *
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*following the Sherlock Holmes story "Silver Blaze" by Sir Arthur Conan Doyle, Holmes was able to deduce that the killer of Colonel Ross's racehorse was the owner of the stable dog, the dog that did not bark. What does not happen is often as important as what does.

Abstract

Recent scholarship demonstrates that late imperial China and early modern Europe were broadly similar in terms of economic possibilities, yet then experienced radically different growth trajectories.

I argue that this divergence, the English Industrial Revolution, had primarily fortuitous geographic and economic, rather than cultural or institutional, causes. China did not undergo the underlying energy revolution that England did because it did not have necessary *economic* conditions, although it had sufficient institutions.

Introduction and research questions

While there are sufficient unsettled questions for a career, here I focus on those key facts about China and its paradoxical failure to participate in the growth miracle emerging from the English Industrial Revolution.

Given that recent scholarship suggests that eighteenth-century per-capita incomes in England and similar parts of China were roughly comparable and had both grown somewhat since the sixteenth century, why did English output then accelerate into the first continually sustained period of per-capita growth ever experienced and Chinese output, at least relatively, stagnate?

China, a highly integrated society sharing world population dominance with India, by all the known rules explaining economic dynamics up to that time as summarized by the Reverend Thomas Malthus, should have dominated the world economy. And it did. From Angus Maddison's data (2010), China and India had roughly 50 percent of both world population and gross domestic product (GDP) at the beginning of the sixteenth century, while England accounted for 1 percent of population and 1 percent of GDP. Yet England's growth so dominated the eighteenth and nineteenth century that in 1900 England's share of world GDP was 9 percent while her population was only 3 percent of the world total. China and India's combined share of GDP in 1900 had fallen to 20 percent while their combined population was still 44 percent of the world total.

Many scholars search for and discern some combination of social, cultural, and/or institutional factors to explain the phenomenon of the Industrial Revolution. Yet the magnitude of the post eighteenth-century growth trajectory differences imply a level of English exceptionalism in those factors that strains credulity. Are we to believe that, over a very few generations, English "growth enabling" institutions somehow grew sufficiently superior to Chinese to account for the growth differences? This class of explanation is even more problematic in that it at least implicitly assumes that some one or some group understood what institutions were needed for this sui generis event and had the power to form them.

A further mystery is the "Needham question" that arises from the fact, as Joseph Needham documented in the seven volumes of "Science and Civilisation in China," (Needham 1954) that China had great scientific and technological discoveries but lost the "race" to both the Scientific and Industrial Revolutions. This supports the idea of functionally sufficient Chinese institutions of the very kind needed to supply the inventions required to participate in the revolutions.

Further, in the long sweep of history, England had a relatively brief period of per-capita growth dominance. By no later than 1875, the growth revolution was quickly spreading to North Western Europe, North America, and Meiji Japan. If England's lead in growth was uniquely determined by a specific set of exceptional institutions, is there evidence that such usually long-gestation changes in culture, institutions, and society itself were so quickly transmitted to other cultures?

And if transmitted institutional exceptionalism accounts for the rapid spread of growth, why was it transmitted relatively narrowly until the second half of the twentieth century? Why didn't China immediately converge? Is the relevant effect in fact that societies oppose fundamental economic changes that in turn cause societal changes until the economic forces becoming overwhelming? Was China "not barking" because there was nothing to bark at, because the dog saw nothing but the long familiar non-threatening agrarian empire? This explanation is certainly consistent with a story of China not enjoying English-style exceptionalism. Or, is it rather a story that there were no Chinese economic forces that at the macro level would have driven Chinese entrepreneurs to English style energy innovation? The literature on English exceptionalism, from Weber through Landes to McCloskey is well known; I focus elsewhere.

In this paper I explore the counter question: what underlying *economic* reasons might account for this remarkable series of events and non-events? I argue elsewhere that what England discovered and transmitted, initially narrowly, to the world, was an energy revolution in economic activity. Why did China fail to follow that revolutionary path until the twentieth century? Does *economics* provide a more satisfactory explanation . . . within the simplifying context of Ockham's Razor . . . than "exceptionalism?"

In the end, the question must be one of primary causality, not monocausality: England had the Industrial Revolution; China did not. Institutionalists claim that superior institutions were the primary cause of the Industrial Revolution. I claim that superior economic conditions were the primary cause, while fully acknowledging as proximate the supporting and surrounding institutional and cultural fabric.

References

Maddison, A. (2010), 'Maddison data', http://www.ggdc.net/.
URL: *http://www.ggdc.net/*

Needham, J. and Wang, L. (1954), *Science and Civilisation in China*, University Press, Cambridge [Eng.].