

WHY THE WEST?

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Resumen: The question of how 'the West' came to dominate the globe during the modern era has been debated recently among historians. The debate has been polarized between those who view 'modernity' as the result of a 'European miracle', the culturally unique and internally generated project of the West, and those who question this 'European miracle' paradigm as Eurocentric, and look to other factors to understand and explain Western economic and political world dominance. The traditional narrative, represented by David Landes in his recent *The Wealth and Poverty of Nations*, attributes European success to its unique cultural values, social institutions, and political practices. This success was entirely 'internally driven' by these characteristics. Recently, a number of historians have questioned this 'European miracle' paradigm as Eurocentric, and look to other factors to understand and explain Western economic and political world dominance. After surveying the recent work of historians addressing this problem, this paper argues for placing European expansion within a global context, and understanding the Industrial Revolution as a global transformation. This perspective allows us to understand European technological and economic changes within the larger context of patterns of worldwide economic and cultural interaction.

Palabras Clave: Eurocentric, European miracle, globe, Western, Western economic.

"So the years passed, and the decades, and the centuries. Europe left China far behind. At first unbelieving and contemptuous, China grew anxious and frustrated. From asking and begging, the Westerners became insistent and impatient. The British saw two embassies dismissed with contempt. The third time, in 1839, they came in with gunboats and blew the door down"

(David Landes, *The Wealth and Poverty of Nations*)

If one wanted to tell the story of Europe coming to dominate the globe during the nineteenth and into the twentieth centuries as the parable of the big bad wolf and the three little pigs, the passage quoted above from David Landes's *The Wealth and Poverty of Nations* would seem to do nicely. However, in Landes's version of the Rise of the West, the Europeans are not the "bad guys," they are the heroes of the story. But whether they were villains or messengers of historical necessity, the question of how Europeans acquired this dominance is one of the most hotly contested problems today among historians concerned with world history. In recent years the discussion has intensified as non-Europeanists, particularly Asianists, have entered the fray over this question and are challenging many of the long-accepted explanations for European domination.

I think at the heart of this debate is a quarrel over the very nature of history and historical explanation. Does history run in a single direction, to a definite destination, if only one takes the right path? Is it structured and driven by large forces, perhaps economic, perhaps geographic? Or, is it contingent on innumerable factors with many possible directions and solutions to the dilemmas that are faced by societies? Scholars examining the problem of European global dominance have taken all of these approaches in recent years, and not surprisingly come to very different conclusions.

The disagreements are not only over the reasons for European dominance but also the timing, with vastly different interpretations of Europe's role in the world during the early modern period, 1500-1800 AD. The disputants in the current debate have staked out clear positions, and the rhetoric duplicates the academic culture wars over Western Civilization that for the past decade have occupied those concerned with how history is taught. Pursuing this large question

requires shaking up a hornet's nest of difficult historical problems. This paper will examine the recent debate over "the rise of the west," and will primarily focus on several recent works on this topic. The debate has been polarized between those who view "modernity" as the result of a "European miracle"², the culturally unique and internally generated project of the West, and those who question this "European miracle" paradigm as Eurocentric, and look to other factors to understand and explain Western economic and political world dominance. David Landes has written a recent book vigorously stating the argument for European economic and political dominance resulting from internal development, and attributing the motive force for this development to culture. On the other hand, Andre Gunder Frank sees European economic ascendancy as a recent and temporary phenomenon, and attempts to place it in the context of a longstanding world-economic system³. R. Bin Wong⁴ and Kenneth Pomeranz⁵ use comparative strategies to account for the energy transformation of the industrial revolution, which they see as crucial to Western economic advantages. Jack Goldstone argues for the importance of certain political, cultural, and scientific changes which occurred specifically in England after 1688 in leading to the technological breakthroughs of the industrial revolution a century later⁶. I will look at the arguments of these historians, offer some critique of their strengths and weaknesses, and finally suggest some directions for conceptualizing the analysis and further research.

David Landes attributes European success to its unique cultural values, social institutions, and political practices. This success was entirely "internally driven" by these characteristics. Europe was indeed "exceptional," and "took another path," from the rest of the world's societies. He argues that "for the last thousand years, Europe (the West) has been the prime mover of development and modernity"⁷. It took 500 years of preparation to assume world dominance, but when Europeans appeared in the Indian Ocean around 1500 they already had the advantages necessary to dominate the world. This shift to European world supremacy is marked for Landes by the Portuguese fleet sent out in 1500 to follow up on Vasco Da Gama's circumvention of Africa and entrance into the Indian Ocean in 1498. The Portuguese were superior to anyone they would find there, and they knew it. What made this so? In a word,

firepower: "Europe could now plant itself anywhere on the surface of the globe within reach of naval cannon"⁸. Pedro Alvares Cabral, commanding this fleet of thirteen ships, was sent by the Portuguese just to do a little business, it seems. As Landes explains, "they sent him to make money and told him not to look for trouble; but if a hostile vessel should try to do him harm, he was not to let it come near, but rather to stand off and blow it out of the water"⁹. It is significant to Landes that shortly after this, European ships were regularly calling on ports throughout the world, while no Asian ships appeared in Europe. China had abruptly stopped its voyages under Zheng He in the early 15th century, an example of its essentially static and inward-looking culture.

So Europeans had seized the world initiative, and it was their unique cultural values that allowed for them to do this. This European exceptionalism goes back for Landes to classical times, as "Europe had always thought of itself as different from the societies to the east"¹⁰. The difference, of course, was the distinction between the "free city" of the West and the despotisms of the East. Linked with Western democracy was the notion of private property. Landes finds that the Western conception of property rights goes back to biblical times. Judaic and Christian values play an important role, particularly later during the early modern period, in his argument for European exceptionalism. More than this, however, "the very notion of economic development was a Western Invention"¹¹. We are not surprised when Landes later explicitly invokes the Weberian thesis of the relationship between Protestant ethics and capitalism. He asserts that "the heart of the matter lay indeed in the making of a new kind of man –rational, ordered, diligent, productive"¹². Ah yes, the relationship between values and economic success! Let's not forget those other European characteristic mentioned by Landes at various points: honesty and thrift, as well as greed and passion. These factors in his argument cannot be stressed too much, since he declares, "if we learn anything from the history of economic development, it is that culture makes all the difference"¹³.

The dynamic nature of European technology is a product of the Middle Ages, which Landes calls "one of the most inventive societies that history had known"¹⁴. Not only did Europeans create the notion of economic development, they are also responsible for "the invention of invention,"

the title of one of Landes's chapters. The quality of European technology is of course for Landes a result of European culture's openness to innovation and change. He cites several examples of European invention, or adoption and novel use of other's technology. These examples include the water wheel, eyeglasses, gunpowder, and printing. He also writes of the superiority of European shipbuilding, and their use of technology that allowed them to navigate the oceans. Other societies had been unable to take advantage of technology as Europeans did due to their hostility to change, lack of protection of private property, or arrogant complacency.

The Industrial Revolution, for Landes, was a natural development of the growth of European commerce, advancing technological knowledge, and capital accumulation. It is important, but does not play a central role in the Rise of the West. It is no watershed event, as Europe in this account has already left the rest of the world far behind. This "continuing accumulation" occurring in Europe is contrasted with "the interruption of Islamic and Chinese intellectual and technological advance, not only the cessation of improvement but the institutionalization of the stoppage"¹⁵. Landes identifies three factors that he sees as critical for understanding why the Industrial Revolution occurred in Europe and during the late 18th century. These three factors are: (1) the growing autonomy of intellectual inquiry; (2) method, that is, a language of proof; and (3) the routinization of research and its diffusion¹⁶.

What we have here is a restatement of the unique and intrinsic cultural characteristics that Landes attributes to Western Civilization: freedom, individualism, rationality, innovativeness, openness. The fruit of these cultural qualities was their inevitable culmination in the Industrial Revolution. Specifically, Great Britain was the site where industrialization first occurred, and this "was not a matter of chance. but the result of work, ingenuity, imagination, and enterprise." Britain seems to have embodied as a nation the Western cultural values lauded by Landes, who asserts that "Britain had the makings; but then Britain made itself"¹⁷.

Critics of the argument that Western dominance resulted from Europe's natural internal development point to its origins in nineteenth-century European social thought. The Grand

Narrative of this approach, typified by such thinkers as Karl Marx and Max Weber, was to see modernity as the great teleological project of the West. The practice of world history, using the approaches of these European social sciences, takes the history of Europe as the norm when examining the history of other parts of the globe. Therefore, revisionists start by questioning the fundamental assumptions of historians who situate the origins of modernity within the history of Europe, and their critique attempts to place these assumptions and the social science that articulated them within the historical context of nineteenth-century European experiences with industrialization and imperialism¹⁸. One of the most strident of recent critics of the Eurocentric perspective is Andre Gunder Frank.

As obvious as it is to Landes that in the last millennium "Europe (the West) has been the prime mover of development and modernity," creating with its expansion a European global economy, it is equally obvious to Andre Gunder Frank that until 1800 Europe was relatively unimportant and backward. For Frank, the notion of European dynamism contrasted with Asian stagnation is a Eurocentric myth that is not supported by the evidence. In *ReOrient: Global Economy in the Asian Age* he asserts that the "real world" between 1400 and 1800 is one in which Asia dominated an already existing world economic system.

Frank rejects any notion of European exceptionalism. He argues that because of its economic backwardness, Europe was able to participate in the global economy during the early modern period solely because of American silver and gold. Europe only became economically dominant in the world after 1800, as a result of global economic factors. In *ReOrient*, his mission is to combat the historically inaccurate "Eurocentric paradigm" in favor of a "humanocentric global paradigm," and to propose an explanation for the rise of Europe after 1800 that does not hinge on European exceptionalism.

Frank is an economic structuralist who discounts cultural interpretations for the "Rise of the West." What is essential to his argument is the existence, prior to European expansion around 1500, of an already existing world economic system. Rather than being generated by internal cultural, economic, or institutional factors, any European "rise," and for that matter Asian

"decline," occurred within the context of this world economy. Furthermore, he argues that within this world economy there are cycles of growth and decline, called Kondratieff cycles, which affect the entire global economy.

It was the existence of this global economic system that had attracted Europe to seek access to trade with Asia since the time of the crusades. The so-called voyages of discovery were a result of this attempt to get at the wealth of Asia. Frank outlines in detail the structure of global trade within this world economy. Europe used gold and silver stolen from the New World to buy its way into this already established world economic system. During the early modern period, Europe was economically backward in relation to the rest of Eurasia and Europeans had nothing other than gold and silver to offer in the global market. Most of the silver extracted from the New World flowed into China in exchange for the Asian commodities Europeans coveted. The degree of Europe's trade deficit is demonstrated by the fact that gold and silver never constituted less than two-thirds of its total exports. As a result, there was no significant capital accumulation in Europe, as others have argued, and European participation in the global economy remained dependent on the flow of precious metals from America.

In effect, Frank reverses Landes's picture of a commercially dynamic Europe and a stagnant, declining Asia. Asia, rather than relinquishing its economic dominance to Europe, remained the dynamic center of a world economic system throughout the early modern period. Frank asserts that "Asians were preponderant in the world economy and system not only in population and production, but also in productivity, competitiveness, trade, in a word, capital formation until 1750 or 1800. Moreover, contrary to latter-day European mythology, Asians had the technology and developed the economic and financial institutions to match"¹⁹. While he admits that accurate figures are difficult to come by, he cites statistics indicating such measures as per capita income, population growth, and GNP to support his position. Comparisons aside, worldwide economic relationships, which created the conditions for Asian superiority and European marginality, are what really matter.

Historians who argue that European expansion and the industrial revolution were internally generated make much of European technological

superiority from an early date. Landes, as we saw, argues that Medieval Europe itself was technologically creative and dynamic, and that during the early modern period European technology was largely superior to that of the rest of the world, which was tradition-bound and uninterested in technological innovation. Scientific method and technological innovation are seen as two sides of the same coin of a uniquely secular modernizing Europe. For Franks this is just another Eurocentric myth; the rest of Eurasia was anything but stagnant and technology-phobic. Among the examples he cites to counter this myth are guns and military technology. He cites the excellence of Ottoman military technology, particularly guns, which were copied by Europeans, and disputes the "Eurocentric fable" that the Chinese invented gunpowder but did not know how to use it. In terms of scientific knowledge, he also cites examples of superior scientific knowledge from Asia, such as the fact that the theory and practice of inoculation against smallpox came from India.

Again, however, Franks insists that technology and science must be seen in a global, not national or regional, context: "Technology turns out not to be independently parallel. Instead, technology is rapidly diffused or adapted to common and/or different circumstances. In particular, the choice, application, and 'progress' of technology turns out to be the result of rational response to opportunity costs that are themselves determined by world economic and local demand and supply conditions"²⁰. He also maintains that scientific theory played no part in technological innovation at least until the mid-19th century. Furthermore, non-European societies made significant contributions to science and technology²¹. "There was no European technology! In the worldwide division of labor in a competitive world economy national, regional, or sectional technological superiority could not be maintained as long as at least some other real or potential competitors had sufficient interest and capacity to acquire such technology as well"²².

Frank even marshals evidence that European contemporaries in the early modern period and on the eve of the industrial revolution saw Europe as less economically developed than Asia. With particular glee, not to mention irony, he cites Adam Smith himself on this topic. In *The Wealth of Nations*, published in 1776, Smith observes the crucial role of America as a

market for European manufactured goods, the superior wealth and manufacturing of China to Europe, and that it is American silver and gold (not their manufactured goods) that allows Europe to trade with Asia²³.

So with all of Europe's disadvantages, how can the industrial revolution and European 19th and 20th century global domination be explained? To a great extent Europe's relative backwardness to the rest of Eurasia was key. But first we have to return to Frank's Kondratieff cycles in the global economy. He finds that a long growth phase, an "A" phase, was ending in the mid-eighteenth century, and that the global economy was entering into a contractive "B" phase. So, while the rest of the economic Asian powerhouse was entering a contraction, the relatively underdeveloped Europe was able to escape this contraction and take advantage of the rest of Eurasia's weakness. This is where the technological advances known as the Industrial Revolution come in.

Importantly for Frank, the context for the Industrial Revolution was not European, but global. It is viewed as a "world development" that moved to the West: "the relevant question is not so much what the 'distinctive' European features or factors are of the industrial revolution as how and why this industrial shift took place from East to West"²⁴. Here I am boiling down Frank's argument to its simplest form, but I think this is essentially accurate. Because of Europe's relative underdevelopment, it had a lower population to land-resource ratio than the rest of Eurasia. This meant that workers in labor-intensive proto-industrial manufacturing received higher wages, which provided an incentive for developing labor saving technology in Europe. This incentive did not exist in Asia since the low wages resulting from a high population to land-resource ratio kept labor-intensive proto-industrial manufacturing profitable. The money that continued to flow from America was also crucial to the continuation of this labor saving, capital-intensive industrial development²⁵.

A different approach from Frank's integrative model is the comparative approach taken by R. Bin Wong. Wong, as with both Frank and Pomeranz, disputes the portrayal of China as static, despotic, economically backward, and closed to innovation. He starts by critiquing the assumptions of the social science models used by historians that take European models of

development as normative. He points out that comparative approaches have generally assumed that either Europe had something crucial for industrialization lacking in other societies, or that non-European regions had some flaw blocking the "normal" progression to industrial modernity followed by Europe. Therefore, the goal of comparing Europe and China has typically been to identify what Chinese society lacked for the development of an industrial economy. Wong's approach is intended to overcome the biased assumptions of European social science:

"To transcend Eurocentric views of the world, I believe we should return to European cases to consider carefully how national state formation and capitalist development actually took place as historical processes rather than as abstract theoretical models. After assessing Chinese dynamics according to European measures of changes I evaluate European possibilities according to Chinese standards in order to introduce comparisons not usually made by contemporary analysts. Sustained comparison of Chinese and European patterns of economic development, state formation, and social protest can suggest ways of interpreting historical change in both parts of the world, identify those subjects on which additional historical research may be especially useful, and contribute to the construction of social theory grounded not only in the European historical past but that of other regions as well"²⁶

In attempting to understand why Europe experienced an industrial revolution in the nineteenth century and China did not, historians point out a number of differences between China and Europe. The problem, according to Wong, is that it is difficult to assess which of those differences were significant. Wong begins by identifying broad similarities in the pre-industrial economic patterns of early modern Europe and late imperial China. In fact, he demonstrates that commerce in late imperial China operated according to the market dynamics identified by Adam Smith. Both Europe and China experienced economic expansion during the 17th and 18th centuries, including "increased rural industries, more productive agricultures, and expanded commercial networks"²⁷.

Wong concludes that none of these aspects of economic growth can be seen as crucial factors in Europe's 19th century Industrial Revolution.

Pre-industrial economic growth and post-industrial economic take-off are not causally linked. No one could have foreseen the Industrial Revolution and the economic expansion that resulted in Europe. In fact, Adam Smith and all other political economists assumed that there were natural limits to economic growth that could not be overcome²⁸.

Wong considers whether the resources that flowed into Europe from the New World, the wealth they were able to expropriate, and the capital accumulation from slave labor and other activities could have been the factors allowing for the transcending of natural economic limits, but concludes that they were not. What set Europe off from China, were the technological discoveries associated with energy that allowed for dramatic increases in productivity. However, Wong's point is that these discoveries could not have been predicted and did not inevitably follow from Europe's cultural, economic, or social development.

If proto-industrial development in Europe and China were so similar, why is it that China failed to make the technological innovations that occurred in Europe? Rather than search for reasons to account for the failure of China to produce an Industrial Revolution, Wong again questions the assumptions upon which such an approach would be based. He states that there is no reason to assume that cultural attitudes and governmental institutions should have an effect on the pace of technological innovation. Pointing to the work of Joel Mokyr²⁹ that demonstrates that "bursts of technological change are relatively rare in world history," Wong concludes that "we should be less perplexed by the apparent slowdown of Chinese technological change and more puzzled by Europe's technological innovations"³⁰. He does not propose an explanation of the European Industrial Revolution, but instead demonstrates the inadequacy of the prevailing explanations. Wong's methodological approach is intended to undermine notions of historical necessity and inevitability.

Kenneth Pomeranz combines aspects of Wong's comparative approach to analyze claims of European superiority during the early modern period and Frank's global integrative approach to understand the factors resulting in Europe's eventual global dominance. In seeking the point of European divergence from the rest of the world, Pomeranz locates it around 1800 with the

sudden and unanticipated development of coal and steam driven technologies in England. Up until this time he sees nothing exceptional in Europe's economic situation relative to the rest of Eurasia, writing, "there is little to suggest that western Europe's economy had decisive advantages before then [the 1800's], either in its capital stock or economic institutions, that made industrialization highly probable there and unlikely elsewhere"³¹. He makes careful comparative analyses of various regions from around the world, focusing primarily on England and the lower Yangzi delta in China, concluding that China and Europe were roughly equal in all important indices of economic development.

Similarly to Frank, Pomeranz spends much of his analysis disputing some of the "received wisdom" of European superiority in the early modern period. Technology is one of those areas. He shows that there were some areas in which European technology was the best in the world. He states, for instance, that in 1750 some European pumps and technology for canal locks were the world's best. (He attributes this to the application of Newtonian mechanics, a claim that would undermine Frank's assertion that European science made no contribution to its technology until mid-19th century.) On the other hand, there were areas in which Europe lagged behind. This was the case with textile weaving and dyeing processes, porcelain manufacturing, and iron quality. He similarly demonstrates the comparability of population, capital accumulation, and the market economies of Europe and Asia³².

Based on these comparative analyses, Pomeranz concludes that Europe was not more advanced than the other developed regions of Eurasia prior to the 19th century. It was only after the Industrial Revolution that Europe began to outpace the rest of Eurasia. The task then is to account for these technological innovations occurring in Europe. Since Pomeranz rejects the notion of European cultural exceptionalism ("European science, technology, and philosophical inclinations alone do not seem an adequate explanation")³³, he looks to global conjunctures outside of Europe to account for this transformation.

Pomeranz argues that both Europe and China were on the brink of ecological exhaustion around 1750. Europe's success, and the source of the industrial revolution, was based on two factors. The first was the convenient location of

coalfields relative to manufacturing sites in England. The second was that Europe could use the relatively open land space of the Americas as "ghost acreage" for important necessary resources, such as fiber and wood, allowing it to escape pre-industrial Malthusian constraints and the consequences of the impending ecological exhaustion. Thus, he sees a conjuncture between the accident of England possessing advantages in an area of technology which allowed the use of conveniently located resources for energy conversion, and the fruits of European expansion and coercion to avoid the consequences of exhausting Old World resources through such processes as deforestation. This helped Europe bridge the gap between the initial appearance of the new energy conversion technologies and the century it took to start reaping great profit and advantage³⁴.

In Pomeranz's analysis, Europe's Atlantic system, based on conquest and coercion, gave it a number of advantages. Not only could the New World supply crucial resources that were diminishing in the Old World, but also America provided a perfect market fit for European products that had no market in Asia. Furthermore, the plantation system in the Caribbean, with its reliance on slavery, gave Europe a market for its goods, and a source of cheap, labor-intensive resources. There were also the precious metals that gave Europe the currency to participate in Old World markets. Pomeranz contends that without the windfalls from the New World, Europe would have been forced down the same labor-intensive path that the rest of Asia had to follow to deal with ecological stresses. European overseas expansion generated various institutional forms that were given the state-sanctioned right to use force, including not only slavery and the plantation system, but also joint-stock companies and licensed monopolies. Pomeranz asserts that the European record in the 18th century was mediocre when competing with the Old World regions without using force³⁵.

In the final analysis, European institutions did matter. Pomeranz especially takes notice of the institutions that emerged from Europe's Atlantic system and the unique relationship between European commerce and the state. Europe's overseas practices were, in Pomeranz's words, "the projection of interstate rivalries overseas"³⁶. Despite the broad similarities throughout Eurasia after 1500, for the sake of understanding which features ultimately made a difference,

Pomeranz concludes, "when we combine this notion of European capitalism, in which links to the state and the right to use force and preempt certain markets loom large, with the idea that advanced market economies everywhere faced growing ecological problems, a new picture emerges of what Europe's most significant differences were"³⁷.

Jack Goldstone, a historian of early modern Europe, allies himself with Frank, Wong, and Pomeranz in placing the "divergence" of Europe from the rest of the world rather late. He raises fundamental questions of method in pointing out that historians too often confuse sequence for causation, assuming that just because something came before an event, that it caused it. Historians who know the outcome of European 19th and 20th century dominance too easily privilege aspects of the past that resemble their view of the present, and dismiss other aspects of the past that do not fit their perspective.

Goldstone proposes an "odd and quirky story" to explain European divergence. In the 17th century the most powerful empires in the world, the Spanish Empire, the Mughal Empire, and the Ming Empire, and many other regions, experienced rebellions. Each of these societies was able to restore order and reassert authority leading to a new period of stability and prosperity, "but that strength and unity comes at the price of cultural conformity and intensifying traditional orthodoxies regarding beliefs, social hierarchy, and state power"³⁸. The exception to this pattern is that in Britain William of Orange's invasion of England resulted in a settlement that precluded the kind of repressive return to orthodoxy experienced in other parts of the world. Goldstone claims that this created in Britain "the same kind of pluralistic open culture, and a substantial minority that can only advance economically, as was found in pluralistic and innovative periods in other societies. [and] in the space opened by this settlement, innovators and entrepreneurs emerged and flourished"³⁹.

This opening that allowed for three breakthroughs that would lead to the technology of the Industrial Revolution: Newtonian physics, the principles of atmospheric pressure and the vacuum, and the invention of the steam-powered pump. It also allowed for the adoption of experimental science among craftsmen and led to its application to solve a very specific problem in Britain, the need to pump water out

of mines. Initially, the steam-powered pump was highly inefficient, and only useful in locations with plenty of coal and water nearby. Although the first of these pumps was installed in 1712, it was not until after Watt and Boulton's modifications in 1765 that this technology became more widely applicable. On the basis of this technology British industry, and later the rest of Europe, caught up with that of China and India⁴⁰.

This argument at first blush may sound somewhat like Landes's, with its emphasis on an open society allowing for innovation. However, Goldstone specifically rejects the notion that Europe had long-since passed Asia by, and that its economic and technological progress resulted from intrinsic cultural attributes. His argument is that historically contingent, serendipitous, and unpredictable events led to the conditions that resulted in a specific technological innovation with unforeseeable consequences.

One very interesting aspect of Goldstone's critique is his discussion of European expansion after 1500. He challenges the notion that this expansion is evidence of, or resulted from, European cultural, technological, or economic superiority to the rest of Eurasia. He equates the Spanish and Portuguese conquests to those of the Huns, Mongols, and other groups who conquered more advanced civilizations, stating "it has been a general pattern that smallish groups of underdeveloped, barbarian peoples on the periphery of great and populous civilizations can achieve stunning geopolitical victories when the great civilizations are in decline"⁴¹. Goldstone points out that, rather than resulting from superior civilization, the Spanish victories over the Aztec and Incas resulted from their "ruthlessly and brutally" exploiting advantages gained due to epidemic disease and internal weaknesses. Likewise in Mughal India, the British were able to exploit the internal divisions of an already declining empire. These examples are contrasted with the inability of the British to gain entrance into China until well into the 19th century. Rather than demonstrating an advanced civilization and indicating the potential for an Industrial Revolution, Goldstone observes, "until well into the 1800s, the European conquests are not greatly different than [sic] the other great barbarian conquests of history"⁴².

The recent dispute over the origins of European world domination seems to revolve around two interrelated questions. The first has to do with

when Europe surpassed the rest of the world in terms of wealth and technological achievement. Intense scrutiny and disputation has focused on the relationship between Europe and the rest of Eurasia between 1500 and 1800. The "Landes camp" sees Europe as already being uniquely wealthy and advanced in relation to a poverty stricken, stagnant, and despotic Asia, while the "revisionists" believe that Europe and Asia were comparable in terms of technology, commerce, and industry by the mid-18th century. The second question has to do with the reasons for Europe's technological innovations in energy production that led to the Industrial Revolution. Those who believe that Europe already had unique advantages see this as a continuation of an ongoing process of technological advance and capital accumulation, while those who believe that Europe and Asia were roughly comparable at the time see it as an unexpected discontinuity that must be understood through examining the contingencies of its historical context. Furthermore, everyone seems to be using the same evidence, from the meaning of events to economic and demographic statistics, and arriving at dramatically different conclusions.

An example of how the same event is used by historians to support contradictory conclusions is that of the Chinese voyages during the 15th century that reached as far as the eastern coast of Africa. For Landes the abrupt end to these ventures and the subsequent expansion of European sea travel into the Indian Ocean is evidence of Europe's vigor and China's stagnation and lack of curiosity. For Jack Goldstone the end of these voyages has an entirely different meaning. This was an entirely rational economic decision with no other implications for Chinese economic strength in Asia. The reason was simple, "there was nothing there to justify the costs of such voyages. The further China sailed, the poorer and more barren the lands that they found." He describes the flow of Asian sea trade as converging on Malacca, which the prevailing winds made the most convenient point, and China continued to dominate this Asian sea trade until the nineteenth century⁴³.

Landes characterizes non-European societies as stagnant and technologically backward. According to him, there is really no such thing as science outside of Europe. Useful technology moved in one direction after 1500, from Europe to the rest of the world. Except that in Landes's

account, the rest of the world was not very interested. Both Frank and Pomeranz dispute this characterization and see it as yet another example of Eurocentrism. They both portray China and India as roughly equal to Europe in technology and science around 1750. Frank cites examples of Europe learning from Indian science. Two such examples are vaccination against smallpox and the importation into Europe of astronomical tables. We have two such startlingly different views of world technology during the pre-modern period that it is hard to assess the claims. There are two issues here. The first is whether or not European science and technology were clearly superior to the rest of the world in the early modern period. The second is the more fundamental question of how technology and scientific knowledge actually grows and changes.

As to the superiority of European technology and science, none of these arguments have left me with any certainty on the matter. Examples can, and have been, marshaled to support both sides. But the mere listing of machines, tools, or processes by itself is not compelling. In some cases, such as military technology and guns that I mentioned above, historians make assertions that flatly contradict each other. For instance, were the Ottomans hopelessly backward in this area, as Landes claims, or were their guns the standard to which Europeans aspired, as claimed by Frank? I find Landes's characterization of Asian societies as technologically dormant and disinterested suspiciously stereotypical, and yet Frank has not succeeded in arguing away the superior technological achievement of Europe as merely a Eurocentric myth. Less polemical and more promising is Pomeranz's approach. After taking on the "received wisdom" of European technological and scientific superiority, he then sets aside the question of who was more advanced. As I understand his approach, with regard to technology and scientific knowledge, the issue is not whose was better, but how and why did they differ?

This leads us directly into the question of technological growth and change. I find Landes's cultural explanations to be unsatisfactory. His statements about cultural characteristics and technological innovation are much too broadly drawn. Cultural attitudes and beliefs certainly could have an impact on technological innovation, but I think that the argument would have to be drawn much more carefully, and focused more locally. Goldstone's

variation on this theme at least has the virtue of placing technological innovation within a specific historical context. Culture is always mediated through practices and institutions, and it is insufficient to pin technological achievement on inherent openness or curiosity. Landes wants to resuscitate the Weberian Protestant ethic argument, which has enormous appeal because it is elegant, but simplistic. There is something reassuring, yet too easy, about reducing whole cultures to character types, particularly for our society that makes much of personality traits.

Frank's economic-diffusionist perspective has advantages and drawbacks. He argues that technology is not "independently parallel," but that technological choices and innovation can only be understood in the context of the global economic system. This approach is much more congenial to a "world history" perspective, allowing us to focus on interconnections rather than identifying technologies as essentially "Western," or "Asian." Pomeranz shares this global perspective, but he is not so strictly structural in his approach. While Frank relies solely on global economic patterns for his explanations, Pomeranz uses this as context within which to comparatively analyze technologies in different regions. Instead of assuming that one area, China for instance, did not have a specific technological variant because of a cultural flaw, the method of "reciprocal comparison" employed by Pomeranz can demonstrate the contingent factors, such as social patterns or resource availability, that made the technology more likely to occur or more practical in one place versus another. Also, if we consider that regions may be technologically comparable, though with variations on technological strengths, there is no way of knowing in advance which technology will prove more advantageous in the future. It is only in hindsight that the historian knows which technology turned out to have more advantages under new circumstances, and it is non-historical to assume that the outcome was pre-ordained.

Much of the debate over the relative strengths of pre-1800 Europe and Asia hinges on the evaluation of economic and demographic evidence. While Landes rejects the approach of grounding historical arguments, even those about wealth apparently, in economic theory and "cliometrics," Frank, Wong, and Pomeranz rely heavily on these methods. But it makes their complex analyses dense reading, and I do not

feel competent to evaluate the statistical evidence. Writers on different sides of the debate interpret statistical evidence in contradictory ways. For instance, in support of his contentions of Asian economic dominance, Frank quotes estimates of GNP and worldwide per capita income from the economic historian Paul Bairoch, an advocate of European exceptionalism⁴⁴. Landes expresses skepticism about the use of statistics for reconstructing economic and social patterns during the early modern period, however he does use them when they seem to confirm his claims⁴⁵. For advocates of the Wealthy Asia/impoverished Europe thesis, the statistics show Asia to be a wealthy economic powerhouse. For historians who see European development already on the path to world dominance, at best the evidence is ambiguous and shows Europe growing more rapidly than Asia.

Whether or not Europe was already ahead of Asia, during the pre-modern period European states did dramatically expand their trade and commercial networks. In a review article, Charles Tilly quotes Landes on trade and commerce in the 17th century Indian Ocean: "Everyone in these Eastern waters was half-bandit, including the local sea jackals who ambushed the small boats and still in our time prey on defenseless refugees. But the English were the big guns, the pirates' pirates. No vessel too big for the taking. Not a bad strategy: if you can't make money in business, you grab from those who do." Tilly then remarks, "an unwary reader might expect such remarks to culminate in a theory of forcible expropriation"⁴⁶. However, Landes and others who argue that Europe "pulled itself up by its own bootstraps" dismiss the accusation that Europe acquired its wealth through "forcible expropriation." Landes admits that coercion and exploitation were aspects of European expansion, but see them as peripheral and not as significant factors in Europe's economic growth and eventual economic world domination. Instead, the key to European success was hard work, curiosity, free markets, and all of the concomitant virtues of the Protestant ethic. Yet, I have to agree with Charles Tilly, who points out that "much of Landes's narrative –as distinct from his conclusions– confirms the centrality of firepower and predation to European success"⁴⁷.

Coercion and exploitation included pushing indigenous peoples off their lands in America, taking the wealth of conquered people, using

military might to open markets or enforce unequal trade relations, and slavery. Profits from the slave trade, and production from slave labor, were important aspects of the Atlantic trade network. Eric Williams made a plausible and influential argument that the institution of slavery allowed European economies to accumulate the capital that was eventually used to fuel the Industrial Revolution⁴⁸. While we may not be able to credit this capital accumulation, if there in fact was such a thing, with causing the Industrial Revolution, it may still have played a role in financing this fledgling industrial process.

State formation and interstate conflict within Europe may have played a significant role in European expansion and in the development of commercial institutions that would later prove extremely advantageous in international economic competition when backed by industrial economies. Landes would have it that the limited role of government in commercial activity, its allowance for individual freedoms, and the restriction of governmental authority to protecting property rights was one of the keys to Western prosperity. This is not so clear to me, since one of the main preoccupations of European states during the early modern period was finding sources of revenue to support their growth. One historian of state formation in Europe, Martin van Creveld, in fact argues that it was the totalizing propensities of Western states that resulted in their ability to marshal the resources to eventually dominate the world⁴⁹.

With regard to the uniqueness of European banking and mercantile institutions, according to Frank and Pomeranz, it turns out that these supposedly unique institutions can be found everywhere in the world. However, it may be the case that "Western Europeans' innovations in organization for exploration and durable conquest and in creating institutions that combined entrepreneurship with intense coercion. gave them much of their edge"⁵⁰. In other words, Europeans may have pioneered forms of predatory commercial practices and institutions that worked well under certain circumstances, such as in the New World, and that combined well with the technological advantages gained in the later 19th century after industrialization.

Not only do Frank, Wong, Pomeranz, and Goldstone disagree with Landes with regard to the origins and causes of the "Rise of the West,"

but they also take vastly different methodological approaches. While Landes tells a good story, there is no clear analysis contained with *Wealth and Poverty*. Neither is there an identifiable methodology. Landes bluntly asserts Western cultural supremacy as a fact, and then narrates a story of rise and advance, anecdotally relating what he considers important and representative events. While Landes continuously refers back to culture as the determining ground of the creation of wealth, what he really seems to be proposing is a form of cultural psychology. Europeans are repeatedly praised as industrious, curious, freedom loving, individualistic, rational, etc. In Landes's words, the European is "a new kind of man." This is the story of the "rise of the west" as a heroic adventure, with the European explorer, inventor, merchant, and industrialist as heroic archetype. This hero is a combination Prometheus and rugged individualist. This western self-image of the individualistic hero who carves out his own life from the wilderness may have resonance within contemporary culture, but it smacks of cultural narcissism⁵¹.

However, there is nothing in Landes's approach that can offer us useful new insights into the historical problem of the "rise of the West." Insistence on cultural superiority and the piling up of examples cannot get us away from the problem of teleology. Furthermore, *The Wealth and Poverty of Nations* is, in the final analysis, more a polemical synthesis of previous research and theory than an original work of historical analysis. Its stridency of tone is intended to cheer the already convinced and to rankle dissenters. His claims about culture are essentialist, contrary to his protestations. The cultural attributes he points to as fundamentally Western are posited as eternal verities. This is non-historical. He does not historically situate the cultural attributes, social institutions, political forms, technological accomplishments, etc, to demonstrate how they were advantageous in a particular historical context.

The work of Frank, Wong, and Pomeranz, in my opinion, all make important contributions to the discussion and offer useful insights and methodologies. An integrative perspective allows us to view the Afro- Eurasian world, and after 1500 the entire globe, as a whole. Frank makes the point that there were no European, nor for that matter, Asian technologies. The historical record shows that technology diffused across the Eurasian landmass; and regardless of

where an innovation initially appeared, it was taken up wherever it was useful. Could technological and commercial sophistication have reached a critical mass within the Eurasian landmass that would allow for crossing the threshold of certain technological and resource constraint thresholds? Is it that certain historical contingencies allowed Europe, or rather Great Britain, to be the take-off point? It seems a more illuminating perspective to place European expansion within a global context, and to see the Industrial Revolution as a global transformation. This perspective allows us to understand European technological and economic changes within the larger context of patterns of worldwide economic and cultural interaction.

Of course, Frank is in the minority in seeing a world system operating from ancient times, and the concept of a world system even in the early modern period not based on European hegemony is widely dismissed by historians⁵². However, the evidence appears to be overwhelming for networks of trade and contact across Afro-Eurasia from very early times. Even during periods when that contact was greatly diminished, for instance after the fall of the Roman and Han empires, contacts never ceased to function entirely. Janet Abu-Lughod's work on economic systems in Eurasia gives us a model for seeing interconnected economies, even where we might not see a fully integrated world-system⁵³.

The work of historians such as Frank, Wong, Pomeranz, and Goldstone have at the very least raised significant questions about the received wisdom of Western exceptionalism, and has proposed methods which allow us to ask new and more interesting questions than "why is the West unique?" The most innovative approach in these recent contributions to the Rise of the West debate is the comparative method of analysis used by Wong and Pomeranz. This method, called "reciprocal analysis" by Pomeranz, allows us to make comparisons from varying perspectives, rather than measuring a society or economy against a normative ideal. This can allow the historian to understand change, be it growth or decline, in the context of actual historical circumstances and contingencies, rather than with judgments of cultural superiority versus inferiority, or pronouncements about history having gone wrong. After all, in the course of human history the dominance of the West has been a brief phenomenon. Just as Europeans were able to

adapt technologies which originated outside of Europe to expand across the globe and for a time exercise political and cultural hegemony over large parts of the world, there is no reason to think that many of these same technologies and practices won't contribute to the growth and perhaps world dominance of other regions as historical contingencies change in the future. Perhaps then another historian like Landes will conclude that Europeans were quite clever innovators, but could not put their innovations to full practical use. If the challengers to the European exceptionalist position are correct, this has enormous implications for the teaching of history. The entire concept of Western Civilization is that Europe did have a unique and exceptional path, the roots of which can be traced back to very ancient times. If Europe was not already on the path to the Industrial Revolution and world dominance after 1500, then most of the world history courses that focus on the post-modern period, usually conceptualized something like "World and Rising West: 1450 to Present"⁵⁴, will have to be completely revised.

What is needed are nuanced analyses of non-European societies, similar to the research of Wong and Pomeranz, that can tell us about their economic and commercial patterns, social patterns, social institutions, commercial institutions, etc. without reducing them to simplistic stereotypes about despotism, indifference to trade, hostility to innovation, and the like.

This recent work has largely focused on comparisons between Europe and China. Similar comparative analyses focused on the Mughal and Ottoman Empires, or the coastal trading cities of India compared with the "free cities" of Europe could be equally illuminating. While it may turn out that Frank and Pomeranz are wrong about European wealth prior to 1750 or 1800, I think that their approaches are promising for gaining better historical understanding of world during the period 1500 to 1800, and for understanding the historical circumstances that led to the breakthrough of the Industrial Revolution.

If the past was closed and determined from early on, as Landes would have us believe, what does that say about our future? I will close with this sentiment and a quote from Bin Wong: "The plurality of historical pasts makes more likely

the persistence of multiple and contingent futures"⁵⁵.

NOTES

¹ Landes, David S., *The Wealth and Poverty of Nations*. New York and London, W. W. Norton & Co, 344.

² Jones, Eric L., *The European Miracle: Environments, Economies, and Geopolitics in the History of Europe and Asia*, Cambridge, 1981. This book provides an earlier assessment of European economic growth based on internally generated factors.

³ Gunder Frank, Andre, *ReOrient: Global Economy in the Asian Age*. Berkeley, Los Angeles and London, University of California Press, 1998.

⁴ Wong, R. Bin, *China Transformed: Historical chances and the limits of european experience*. New York, Cornell University Press, 1997.

⁵ Pomeranz, Kenneth, *The Great Divergence: China, Europe and the making of the Modern World Economy*. Princeton and Oxford, Princeton University Press, 2000.

⁶ Goldstone, Jack, "The Rise of the West-or Not? A revision to socioeconomic theory". *Sociological Theory*, 18 (2000), 157-194.

⁷ Landes, David S., *The Wealth...*, op. cit., xxi.

⁸ *Ibid.*, 89, italics in the original.

⁹ *Ibid.*, 89.

¹⁰ *Ibid.*, 31.

¹¹ *Ibid.*, 32.

¹² *Ibid.*, 177.

¹³ *Ibid.*, 516.

¹⁴ *Ibid.*, 45.

¹⁵ *Ibid.*, 200.

¹⁶ *Ibid.*, 201.

¹⁷ *Ibid.*, 215.

¹⁸ James M. Blaut analyzed the relationship between the perspective of European exceptionalism and its origins in 19th century European social theory in *The Colonizer's Model of the World*, New York and London, Guilford University Press, 1993.

¹⁹ Gunder Frank, Andre, *ReOrient...*, op. cit., 166.

²⁰ *Ibid.*, 186.

²¹ *Ibid.*, 185-205.

²² *Ibid.*, 204.

²³ *Ibid.*, 131 and 278-79.

²⁴ *Ibid.*, 285.

²⁵ *Ibid.*, 258-320.

²⁶ Wong, R. Bin, *China...*, op. cit., 7.

²⁷ *Ibid.*, 278.

²⁸ *Ibid.*, 49-52.

²⁹ Wong cites Mokyr, Joel, *The Lever of Riches: Technological Creativity and Economic Progress*. New York, Oxford University Press, 1990.

³⁰ Wong, R. Bin, *China...*, op. cit., 55.

³¹ Pomeranz, Kenneth, *The great divergence...*, op. cit., 68..

³² *Ibid.*, 31-68.

³³ *Ibid.*, 68.

³⁴ Ibid., 211-297.

³⁵ Ibid, 182: "If emerging capitalist firms in western Europe had unique advantages, one would expect these advantages to show up where European firms competed with Asian merchants. But a European edge appears primarily where geography and local politics favored using force to create monopolies or near monopolies (mostly in spices)".

³⁶ Ibid., 19.

³⁷ Ibid., 20.

³⁸ Goldstone, Jack, "The rise...", op. cit., 169.

³⁹ Ibid., 170.

⁴⁰ Ibid., 171-176.

⁴¹ Ibid., 177.

⁴² Ibid., 180.

⁴³ Ibid., 160.

⁴⁴ Frank, Andre Gunder, *ReOrient...*, op. cit., 171-74..

⁴⁵ For example, Landes dismisses Bairoch's estimates of caloric intake, used by some to claim that the Indian ryot [peasant] lived better than the English farm laborer, "the opportunities to distort the result are endless, and the leverage of even a small mistake extended over two hundred years is enormous" (*The Wealth...*, op. cit., 165). However, he later uses comparative per capital product figures for Mexico, Barbados, and the territory of the United States in 1700, 1800, and 1989 to support his position that united States grew faster than Mexico and Barbados (ibid., 548).

⁴⁶ Tilly, Charles, "A grand tour of exotic Landes". *The American Historical Review*, 104 (1999), 1254. My impulse here is to break into song from Gilbert and Sullivan: "Oh, better far to live and die/Under the brave black flag I fly,/Than play a sanctimonious part/With a pirate head and a pirate heart./Away to the cheating world go you,/Where pirates all are well-to-do;/But I'll be true to the song I sing, And live and die a Pirate King./For I am a Pirate King!/And it is, it is a glorious thing/To be a Pirate King!/For I am a Pirate King! .When Sally forth to seek my prey/I help myself in a royal way./I sink a few more ships, it's true,/Than a well-bred monarch ought to do." "Oh, Better Far to Live and Die" from *The Pirates of Penzance*.

⁴⁷ Ibid., 1254.

⁴⁸ Williams, Eric, *Slavery and Capitalism*. Chapel Hill and London, The University of North Carolina Press, 1944.

⁴⁹ Van Creveld, Martin, *The Rise and Decline of the State*. Cambridge, Cambridge University Press, 1999.

⁵⁰ Pomeranz, Kenneth, *The great divergence...*, op. cit., 285.

⁵¹ Landes chides the Chinese for their "arrogance" and "cultural triumphalism." Furthermore, he writes as a universal psychologist and moralist, not a historian when he states, "this rejection of the foreign was the more anxious for the very arrogance that justified it. That is the paradox of the superiority complex, it is intrinsically insecure and brittle. Those who cherish it need it and fear nothing so much as contradiction." Landes, David. S., *The Wealth...*, op. cit., 336.

⁵² The work of Ferdinand Braudel and Immanuel Wallerstein take European economic expansion as the origin of a world economic system, with Europe as the core.

⁵³ Abu-Lughod, Janet L., *Before European Hegemony: The world system a.d. 1250-1350*. New York, Oxford University Press, 1989.

⁵⁴ The title of the second semester world history survey course at the University of Massachusetts, Amherst.

⁵⁵ Wong, R. Bin, *China...*, op. cit., 293.