

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/231758098>

Culture, Clocks, and Comparative Costs David Landes on the Wealth of the West and the Poverty of the Rest

Article in *Itinerario - European Journal of Overseas History* · December 1997

DOI: 10.1017/S0165115300023512

CITATIONS

6

READS

518

1 author:



Peer Vries

Koninklijke Nederlandse Akademie van Wetenschappen

95 PUBLICATIONS 247 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



Japan and the Great Divergence. A book Averting a great divergence. State and economy in Japan, 1868-1937 will be published with Bloomsbury Academic 08-08 2019

[View project](#)

Culture, clocks, and comparative costs. David Landes on the wealth of the West and the poverty of the rest.

A review of D.S. Landes, *The wealth and poverty of nations. Why some are so rich and some so poor*. A Little Brown Book ISBN 0 316 90867 3 Little, Brown and Company UK London 1998. First published in the United States by W.W. Norton & Company Inc, New York 1998, pp 650.

It would be hard to find a more fundamental question in economic history than the one professor Landes asks in his latest book: Why are some nations so rich and some so poor? To every economist and economic historian analysing this problem is an immense intellectual challenge. Landes however does not merely tackle it from a strictly intellectual perspective. He also hopes that by writing the book under review he can contribute to an answer and thereby help the poor to become healthier and wealthier. He approaches his subject historically. He does so not just because he is a historian, but also because he thinks the best way to understand a problem is to ask: How and why did we get where we are? (XX-XXI)

In his analysis and interpretation he spreads his wings very widely. He has read a staggering amount of literature and covers the whole globe. The book opens with a discussion of the importance of geography in economic development. Next Landes presents us with chapters on European exceptionalism and on the invention of invention, in which he emphasises the *joie de trouver* and its institutionalisation which he supposes to be characteristic of Europe. He continues with chapters on the voyages of discovery and their effects. It will come as no surprise that after these chapters the Industrial Revolution receives extensive attention, in particular the questions why it took place in England, why it took place when it took place, and how it could spread so easily - relatively speaking - over Western Europe. The so-called second Industrial Revolution and its financial and technological aspects is not passed over lightly either. Having finished his discussion of these revolutions, Landes starts a *grand tour* around the world, discussing the way in which the US and Mexico, Latin America, China, Japan and the Islamic world modernised, or failed to modernise. Chapters titled "Empire and after", on colonisation and decolonisation; "Loss of leadership", on the question why in international economic competition it is not always the same countries and companies that are front-runners; "Winners and...", "Losers", containing some thoughts on economic developments in the twentieth century; and a chapter with concluding remarks bring the book to its end.

Asking why necessitates giving explanations, Landes comes up with quite a few, which can be placed under four headings: geography, culture and institutions, knowledge - science and in particular technology - and money. After his two opening chapters, on "Nature's inequalities" and "Answers to geography: Europe and China", references to geographical factors are very few and far between. From this point the other factors take over. As he puts it on page 276: "Institutions and culture first; money next; but from the beginning and increasingly, the payoff was to knowledge." The role of money is explicitly analysed in chapter 17: "You need money to make money." I do not think it is unfair to the author to conclude that the focus of his explanation is on knowledge (in particular science and technology) and, even more, culture and institutions. He himself even goes as far as to claim: "If we learn anything from the history of economic development, it is that culture makes all the difference." (516)

Landes explicitly declares that he wants his study to *contribute to* finding answers that can be useful in tackling contemporary problems. (XX) It is only fair then to see what kind of lessons he thinks can be derived from his findings. Indeed, at the end of the book, he does make some general comments. He makes these however without wanting to advocate any particular national policy. (522) The "lessons" are the following:

- The gains from trade are unequal. As history has shown, some countries will do much better than others. The primary reason is that comparative advantage is not the same for all, and that some activities are more lucrative and productive than others. (A dollar is not a dollar is not a dollar) They require and yield greater gains in knowledge and know-how, within and without.
- The export and import of jobs is not the same as trade in commodities. The two may be fungible in theory, but the human impact is different.
- Comparative advantage is not fixed and it can move for or against.
- It always helps to attend and respond to the market. But just because markets give signals does not mean that people will respond timely or well. Some people do this better than others, and culture can make all the difference.
- Some people find it easier and more agreeable to take than to make. This temptation marks all societies, and only moral training and vigilance can hold it in check. (522)

So much for the content of the book. Even this short overview should suffice to convince the reader that Landes is not short of ambition. Whatever the merits of his answers, he must in any case be praised for having written a book like this, in a time when too many historians use fashionable fuss about "the end of grand narratives" and "deconstruction" as an excuse to shy away from their societal task and instead cultivate their ever smaller gardens. His erudition is truly impressive. He seems to feel at ease in discussing all kinds of subjects, although

the fact that he is an economic historian specialised in the history of Western Europe, will not be lost on the reader. He has a kind of insider knowledge of technological and financial matters, which distinguishes him from many of his colleagues. Fortunately, he makes no effort to hide this. He misses no occasion to discuss his favourite subject: the history of clocks, to which he attaches a fundamental importance. He is not one of those economic historians who think their job is only a matter of mixing theory and figures, regardless of what happens in concrete reality and regardless of the people behind the figures. Landes is surely right in criticising those who neglect culture and institutions, just as in pointing at contingency and path dependency. In his enthusiasm for a just cause he unfortunately tends to overlook historians and social scientists, who do pay attention to culture and institutions in their analysis of economic development. I need only refer to works of the so-called institutionalists among economic historians and economists, for example Nobel Prize winner Douglass North; writer of amongst other titles *The rise of the Western world*, who does not even figure in Landes' bibliography! One might also think of Fukuyama's *Trust* or Putnam's fine analysis *Making democracy work*.¹ The last book, moreover, throws light on a problem that Landes treats rather casually: the puzzle why the southern parts of Italy are so poor whereas the north is so rich. (184-185 and 250-251)

The book is excellently written. It is very witty and entertaining. It invites you to continue reading, which is more than can be said of many pieces of economic history. Landes wants to show what on a human scale is going on in the economies and societies he is analysing. Vignettes which not only enliven it, but which also really illustrate the problems at hand, repeatedly punctuate his grand narrative. To a large extent the book is so entertaining and - what of course is more important - interesting, because its author has a view on things. Or better, because he has a strong view on just about anything. He does not mince his words and holds firm to what he thinks is true. He seems to be political incorrect almost by principle. In his own words, because he prefers truth to goodthink. (XXI) Not only does he hold strong views on how the world worked and works, but also on how it should be studied. So he starts the book with a plea for involving geography in the project of explaining economic development. He, rightly, sees no reason why one should not refer to geographical circumstances in an explanation of why some are rich and others are poor. Nature is unequal. It is not only by his explicit reference to geography that Landes strikes a particular note as an economist and economic historian.² Overall in this book his approach is not exactly in line with the mainstream of economic history as it is practised nowadays in the Anglo-Saxon world. He definitely is no friend of the New Economic History. No opportunity is missed to mock what he calls its number crunching and its inordinate confidence in model building and testing. Ruling neo-classical ideas in his opinion have one fundamental flaw: experience tells us otherwise. Market forces, factor endowment, comparative costs and mobility of the factors of production are not variables which explain it all. They do not guarantee economic convergence, as anyone can see.

If there were one approach that suits him, it would be classical political economy. The title of his book, of course, is derived from Smith's *magnum opus*. It's introductory motto, "... the causes of the wealth and poverty of nations - the grand object of all enquiries in political economy", is taken from a letter by Malthus to Ricardo. He is not a blind disciple: one of the *bêtes noires* of the book is the law of comparative advantage, which has always been associated with the name of David Ricardo, one of the greatest of classical political economists.

There is much to be praised in the book. But of course there is and should be room for critical remarks. There would be every reason for suspicion if a mega-project as Landes' study would seem to be immune to criticism. The subject studied is just too big and too controversial to expect that even as bright an historian as Landes could give the final verdict. To quote a scholar who would know: "Without controversy, no serious pursuit of knowledge and truth."³ So the rest of this review will be a critical scrutiny of the text. No doubt, it will be possible to find small factual mistakes somewhere in a book as encompassing as this. As a Dutchman I was struck by the fact that early modern Holland is described as almost as small as Portugal. (137) As a matter of fact, Portugal is more than twice the size of Holland. In case the remark was meant to refer to population, it would not be true either. Portugal's population during the early modern period for most of the time was larger than the population of Holland.⁴ Dutch readers will be surprised to hear that Charles V came to power in the early seventeenth century (138), or wonder what Landes means when he writes that Amsterdam only came over to the side of independence when the war (against Spain) was won. (140) That the Dutch "could not wait to let go Indonesia" is, to say the least, a highly original interpretation of the birth of independent Indonesia. (439) But looking for factual mistakes like these is something of an insult to book and author. It is in any case not what a serious review should be about. I will therefore focus on the plausibility of its explanations and interpretations. Relevant differences of opinion on factual matters will then, if they exist, automatically show.

Landes' explanation, as indicated, can be said to consist of four elements: geography, money, knowledge, and especially culture. Of course in a book like this, on almost every page reference to money will have to be made, and is indeed made. However, it is only in Chapter 17 that Landes explicitly and extensively treats its role and studies the way continental follower countries went about to attain money to finance their industrialisation. As far as a non-expert in monetary and financial affairs can judge, Landes is on sure ground when handling these topics.

When it comes to (technological) knowledge and especially its role in industrial development, it will be hard to find a person better equipped than Landes, author of *The unbound Prometheus*.⁵ He is highly qualified to discuss these topics and does not let his readers down. I have not come across an analysis of the Industrial

Revolution in England that in so few words gives so many clues as to what this turning point in history was about, and how and why it came about. In his concise, but very confident analysis, Landes convincingly shows that those historians who claim the Industrial Revolution is a dead horse, are on the wrong track: The Industrial Revolution is truly a revolution and the beginning of “the great bifurcation”, the big divide between rich and poor that is so characteristic of the industrial age. (194-195)⁶ Only someone with an extensive knowledge can come up with a description as concise and illuminating, as the one Landes supplies in this book. Maybe it would have made sense to put even more emphasis on the role of technology and science in the great transformation of British economy and society. In any case, they get their fair share of attention in Landes’ analysis of what he aptly calls “the pursuit of Albion” i.e. the ways in which other countries tried to catch up with the first industrial nation, or even to surpass it. For some decades Britain was by far the most advanced industrialising country, with such a powerful position in international economic relations, that it could not fail to inspire other countries to try and industrialise as well.⁷ It is very important to emphasise, as Landes does, that this pursuit was not a race identical to all competitors. Different routes were taken in different countries and at different moments in time. There have been different types of industrialisation. This is of course well known among economic historians, but it is all too easily passed over in studies on the rise of the West in which there too often a simple dividing line is drawn between an industrialising West and a non-industrialising or non-industrialised “rest.”

Nobody would want to doubt Landes’ expertise in matters of finance, manufacture and industry. When it comes to agriculture however – by far the biggest sector of the economy in the pre-industrial world - his grip seems to be less firm. Or rather, he pays little attention to it, at least relatively speaking. This might of course be a matter of principle. Landes may well think that the role of agriculture in economic development is relatively unimportant. However that may be, reading his book one gets the impression that development ultimately is a matter of cities, trade and industry, and that the countryside and agriculture have no fundamental role to play. I really doubt that. Agriculture was not only a brake on development. It was also, as Landes of course knows, a supplier of products, people and money to industry and trade; and agricultural demand must have been very important for industry. His analysis definitely would have gained if the positive role of agriculture in the process of economic development had received more attention.

Landes is right in his claim that geography matters, specifically, in his reference to the bad deal nature gave to Africa. Thereby he is pinpointing an important explanatory factor of this continent’s rather unsuccessful economic history. His overall reasoning on the role of climates, diseases et cetera, makes sense. Geography was good to Europe, less so to Asia and least of all to Africa. I fail to understand how a geographer like Blaut can deny that.⁸ But I am not an expert in this field. So I think it wise not to make too much of this and leave it to those who are. From a methodological stance, the trouble with referring to geographical factors in explaining different historical developments is that *by themselves* these references can not indicate why certain geographical differences had particular effects in particular periods of time, and why they had them exactly in the way they did. This boils down to the question, to what extent geography can be said to determine, and to what extent it is itself determined. Putting the problem like this, does not mean one should be looking for a general answer. That does not exist. I just want to point to a problem. Take for example Landes’ comparison between the way Europe and China “answered” to geography. His interpretation of respective developments, and in particular those in China, verges on geographical or agricultural determinism. He claims that there was an overwhelming concentration on producing rice in China. (26) This is a very labour-intensive undertaking that, moreover, requires a lot of water. This is taken to explain why Chinese families had many children. Which puts into operation a treadmill: lots of children take a lot of food, which takes a lot of children. (23) Looking after the irrigation works necessary to be able to produce rice, calls for supralocal power and so promotes imperial authority. (27) The next step in this chain of reasoning will not surprise the *cognoscente*: China became a hydraulic state, characterised by Oriental despotism. Which in turn explains the absence of “Western-style” economic development there.

Life is not that simple, not even in China. Landes does not have all the available evidence, and logic, on his side. To begin with, he strongly relativises his own argument by writing that in the eighteenth century rice no longer was China’s most important provider of nourishment: potato, sweet potato, peanuts and yams, had begun to outstrip it. (169) Which at least makes you want to ask whether growing these crops also requires many children and lots of water. And, what is more important: does cultivating rice, or whatever crop, really *require* many children? Landes quotes an old Chinese saying: “The land is scarce and the people are many” and tells us riverine civilisations maximise population. (22-23) But why is this? Or rather, does it really have to be that way? A comparison with Japan forces itself on the reviewer. There, on the one hand population density in pre-industrial times was higher than in China but, on the other hand, from a certain moment in time – already at the beginning of the eighteenth century - population growth was kept in check and families were planned. The link between rice cultivation, water-management and hydraulic state – if such a state existed in China, which is much more debatable than Landes wants to admit - is also more problematic than a simple “answer to geography-analysis” suggests. Water control in for example Holland or in Valencia in Spain has always been regarded as a basis for “democratic” rule, while in rice-producing Japan there apparently was no hydraulic state. Character, causes and effects of the hydraulic state and of oriental despotism have been discussed extensively, not to say too extensively, and I will not go into them here. But I think that even so it has become clear that there are some loose ends in the kind of geographical explanations Landes presents.

Another subject into which Landes might have more deeply delved, and one that at least is related to geography, is the fact that Europe was, in his words, as nowhere else, a power-based civilisation (46) and a civilisation that could and did raise more livestock than other civilisations. (23)⁹ Both facts, I think, are also related, as causes and/or effects, to European demography. This is an extra reason to go along with McNeill, who in his review points at the fact that Landes pays hardly any attention to demography, neither as an explanatory factor nor as a factor to be explained.¹⁰ As was indicated, and this is just one example, population in China is just taken to grow and grow as if it were a natural necessity. Which of course it is not and which, as a matter of fact, it did not always do. A reviewer can always object that an author does not pay enough attention to some subject, in general his or her favourite subject. But I think demography is too important to neglect in a book like Landes', whatever one's preferences.

In the many reviews that have already appeared of *The wealth and poverty*, the sentence most quoted is undoubtedly the one in which Landes claims culture does make all the difference. (516) A claim that, by the way, six pages later is already toned down to the assertion that culture *can* make all the difference, and that even then still is rather confusing considering the fact that Landes himself refers to other explanatory factors in his book. In contrast to his not very controversial remarks on knowledge, technology and geography, this "culturalism" has elicited a lot of criticism. Landes is aware that bringing in culture as an explanatory variable when discussing wealth and poverty, is not very popular: "It has a sulfuric odor of race and inheritance, an air of immutability." (516) One would expect him therefore to be very careful in defining the concept. The only explicit definition, however, he gives, to wit "the inner values and attitudes that guide a population" (516) creates as many problems as it solves. When this is what culture is about, and culture is supposed to make all, or at least an awful lot of difference, then becoming wealthy is a matter of having the right values and attitudes. In various places Landes writes as if he thinks this were true: "... what counts is work, thrift, honesty, patience, tenacity" (523); "... too many of us work to live and live to be happy. Nothing wrong with that; it just does not promote high productivity. You want high productivity? Then you should live to work and get happiness as a by-product. Not easy. The people who live to work are a small and fortunate elite" (523): "... they live to work. ... Members, then, of a rare aristocracy: most people work to live." (478) Statements like these can easily be interpreted as implying that if you are not rich, your culture is to blame. More specifically, you just should have worked harder. That is not fair. There are many people in poor countries working far harder than Westerners will ever do or have done, but who nevertheless are very poor. And that is because of - *amongst other things*, of course - the way their society is organised and because of (inter) national power relations.

One might object and claim that institutions and power relations in a nation are a reflection of the culture of its inhabitants. Which, incidentally, would still, against an immense amount of evidence, suggest that international relations have no effect on the wealth of a country. But such a proposition is highly dubious, even for democratic nations, and patently untrue for all undemocratic nations. Many people get the society they do not deserve. It is unfortunate Landes has, in these matters, not been more careful in his wording. People could feel offended by the statements I just quoted, and by similar ones I did not quote.¹¹ He seems to be doing what he claims he does not want to do i.e. arguing that Westerners are richer because they work harder. Overall, I think this is not Landes' intended message. But if he is "misunderstood", he has himself to blame.

Looked at more closely, it appears that in his analysis Landes time and again does not so much refer to inner values and attitudes of a population, as to institutional arrangements and thereby (in)directly to power relations. In many cases, it is not so much what people really value and would want to do - if it were possible to find that out for, let's say, an eighteenth-century Chinese peasant! - as what they are allowed or forced to do, which appears under his cloak of culture. He uses the concepts "culture" and "institutions" as more or less interchangeable. It is institutions and, to a lesser extent, power relations that make the fundamental difference in his analysis, as I think they should. That makes it easier to understand and explain why members of one and the same culture sometimes and in some places do things completely different from people who are supposedly sharing their culture. This is something of which Landes of course is aware of and which causes him to emphasise that monocausal explanations will not work. (516) Culture is not a stable thing; it is not a constant. Its beneficial effects can and do shift back and forth. The Chinese in China are presented as not having been thrifty enough to prevent their empire from sinking back in stasis and retreat. Which, by the way, makes you wonder what it was that made those same Chinese so extremely innovative under the Sung, much more than medieval Europeans, who are supposed to have lived in one of the most inventive societies history has ever known. (45) Since Deng's change of policy, again, a completely different ethic seems to have taken hold of Mainland China, so that the old Middle Empire could partake in the Asian Miracle. The overseas Chinese, finally, are said to be something of a paradigm of thrift and to have a work ethic that makes a Weberian Calvinist envious. (477) To a large extent these shifts can be explained by changes in institutions and power relations. They need not be a direct expression of a people's values and attitudes. The latter, on the other hand, are to a large extent dependent on institutions and power relations, and determine to a large extent what will be the effects of specific values and attitudes. "Culture", "institutions" and "economic performance", in short, are linked. Changes in one will work back on the other and vice versa .

Very important in Landes' concept of culture is a willingness to work hard. This of course will not be

unrelated to the conviction that this makes sense, i.e. that as an individual, family, firm, nation et cetera, one can gain something by it. Without the right circumstances, hard work, thrift et cetera, will not be of much avail. Landes of course knows this, and repeatedly refers to internal safeguards as for example property rights. External conditions are, unfortunately, taken less into consideration by Landes. According to him, for example, one could have foreseen the postwar economic success of Japan and Germany by taking account of culture. (517) This makes you wonder why hardly anyone *did* foresee it, but what is more: I am afraid, that without the Cold War and the economic support of the US, all the hard work of Japanese and Germans would not have had miraculous results. The different reaction of China and Japan to the challenges both countries faced in the nineteenth century, to give another example, should - among other things - be related to the fact that Japan never lost its sovereignty, whereas China did.

With regard to this willingness to work hard, Landes underlines the importance of Christianity and in particular of Calvinism. He even defends the Weber-thesis, something not many of his colleagues would be willing to do. (58-59 and 174-179) Personally, I do not believe that there has ever been something of a specific Catholic, growth promoting view of labour, nature or, for that matter, progress.¹² The Weber-thesis, as a thesis that presupposes an elective affinity between Calvinism as a set of religious convictions (or even Protestantism in general) and capitalism (or even economic growth in general), has been rightly rejected. There are too many facts that do not fit in. What could be upheld with Landes however, is a thesis that there is a clear correlation in Europe between regions that became Protestant and regions that became highly developed. A correlation on which Peyrefitte, in a book that is in Landes' bibliography, has some interesting things to say.¹³

Economic growth can depend not only on all kinds of "private" sacrifice, but also on something one could call "a collective willingness"; a collective involvement in enhancing not only one's own private wealth, but that of the nation. According to Landes, England's industrialisation was facilitated by the fact that it was a nation. (221-223) In his analysis of developments in Japan the role of national feeling in creating economic growth figures very prominently. The fact that Europe was divided in all sorts of 'national' political entities, is so made to combine the advantages of freedom (the existence of an exit option) with those of collective, national enthusiasm. In nation states - or better, national states, because real nation states hardly exist - people are supposed to identify more with the common cause than in empires, where communality and sympathy between rulers and rule is less great. Again the Japanese empire is a kind of exception that proves the rule: it is not really an empire, but a kind of archipelago of small states whose inhabitants however do feel Japanese.

One can indeed easily imagine all the advantages of a civilisation being split up in small competing nations whose inhabitants identify with one another and their common nation. Reference to the European states-system figures in almost all discussions of the Rise of the West. But it does not take a lot of imagination to argue that the European state-system was anything but a fertile soil for economic development. I need only refer to the immense costs in money and lives of the never-ending wars that characterise European history; or to the economic *disadvantages* of having many small politico-economical entities instead of one big one. Think of the extra costs incurred because of all the tolls and trade-barriers, of differences in language, law and currency, et cetera. Theoretically one might just as well claim large empires are inherently superior. In China the Grand Canal was dug, more than a thousand miles long, which in Europe would span the distance between Amsterdam and Rome or Madrid. There, a Great Wall was built, more than six thousand kilometres long. The Chinese Empire had many economies of scale and lower transactions cost. The European state-system turned out to be the seedbed of modern economic growth, but the real need not be the rational.¹⁴ It would have been nice had Landes, who after all is an economist, devoted some more space to explaining whether he thinks the market will *of necessity* be more efficient than central planning, and - if so - also to explaining why he thinks this to be the case.

Landes clearly is aware of the positive role of some institutions in fostering economic growth and does refer to them. But in his book, as is to be expected of a friend of *laissez-faire*, they primarily appear as barriers and impediments. It was not by accident that Britain was the first to industrialise. It was largely free of the irrational constraints on entry that dogged most Continental societies. (223) Its industry was as free or freer than in any other part of Europe. (219) Britain came nearest to what Landes considers the society best suited to pursue material progress and general enrichment i.e. a prototypical, liberal-democratic, rule of law state. (217) All parties had agreed to the necessity of favouring commerce. (234) Peasants were free, the influence of guilds, and other institutions that Landes thinks are impediments to growth, was negligible and there were hardly any barriers to trade.

The institution *par excellence* that could foster or hinder growth, is the state. Landes does not make a secret of the fact that he thinks one can not generalise easily about its exact role in these matters: "The record (of state intervention P.V.) is clearly mixed." (520) Let us for the sake of convenience, just as Landes seems to be doing, differentiate between state intervention in internal, and state intervention in external economic affairs. His interpretation of the role of the state in internal economic affairs at first seems unambiguous, and completely in line with the ideas of Adam Smith. This can be most clearly seen in his sketch of "an ideal case", of the society theoretically best suited to pursue material progress and general enrichment. (217-223) Examples, however, abound. See his analysis of institutional and cultural impediments to economic growth. (231-255) The

role of the state is crucial in the sense that it is expected to create an ideal space in which the market can operate. The task of a government is not to actively interfere in economic life, but to create optimal conditions for its citizens to compete. The invisible hand then will take care of the common wealth. The clearest exception to this rule appears to be the Japanese case, where Landes does not frown upon the fact that state policy often went further than just creating good preconditions for the growth of the private economy.

When it comes to the role of governments in international competition, Landes favours a much more activist role of national governments. Here his position can best be described as “neo-mercantilist.” Firstly, because according to him the historical record shows that front-runner nations only started to extol the virtues of free trade *after* they had won their economic battles. The road to their hegemony was not one of free trade and comparative advantage, but of ‘mercantilism’ i.e. protectionism of all sorts.¹⁵ Secondly, and of course almost indistinguishable from the first argument, he is not convinced of the ‘superiority’ of free trade on theoretical grounds either. Although he sometimes writes as if he were a real free trader¹⁶, his relentless attacks on the concept of comparative advantage - which according to him is at the basis of all pleas for international free trade - show he is not. His negative comments on the theorem of comparative advantages, for example in his “lessons”, and the whole design of his book, clearly indicate that Landes thinks that nations do (still) compete with one another - and that they had better not specialise in what they can do relatively best, as the theorem of comparative advantage, according to him, prescribes.¹⁷ He fundamentally disagrees with Krugman and McCloskey, who think comparative costs should basically determine trade relations, and with Krugman, who denies that it makes sense to talk in terms of nations which are in economic competition.¹⁸ We will return to comparative advantages later on. Firstly, we will discuss Landes’ view of the role of the state in economic affairs.

The way Landes conceptualises the role of the state, and more broadly of market regulation of any kind, is not without its problems. I am not referring to the remarks of, for example McNeill or Krugman, who think he is unable to make up his mind.¹⁹ This I suppose must be interpreted as meaning that he does not come up with one “general law” on the relation between the state and economic development. Landes has made up his mind. He just happens to think the record is mixed, and so it is. It is impossible to determine unequivocally the role of the state in fostering or hindering growth. It all depends on the kind of growth and the kind of state: in short, on the circumstances. History and social sciences are not disciplines to find monocausal explanations. They belong to the realm of so-called “conjunctural” and “plural causation.”²⁰ It might nevertheless have been instructive, had Landes expanded more on the question of in what kind of circumstances what kind of state did, or can, foster what kind of growth. China had a period of impressive economic growth under the Sung, a growth that levelled off or even disappeared under the Ming and Qing. Soviet Russia has in the end proved to be an immense economic failure, but there has been a time that its economy grew impressively. In what way is that related to a specific state policy? (See for example his remarks on pages 543, note 5; 565 note 16; 566, note 19)

Landes claims that one of the explanations for Europe’s wealth is the fact that more than other economies in the world it was a market economy. (see explicitly 58-59) There is reason to at least put this strongly into perspective. During most of the time most European countries were not market economies, certainly not before industrialisation, but also during and after this great transformation. The expression “*laissez-faire*” dates from the eighteenth century. Not by accident, it is only then that the idea that markets should be free, really caught on. Till then, European economic life had always been heavily regulated. There had always been a lot of rents to favour and position. The market economy in Europe is a quite recent phenomenon, and most of the time it has been more an ideology than a reality. Although probably it was indeed more prominent in Europe and had some specific characteristics, in itself it was not what distinguished Europe fundamentally from the rest of the world. A case could be made, and has been made, for also seeing positive effects in all kinds of market regulation and interference with *laissez-faire*, which Landes tends, with a broad brush, to characterise as impediments to growth.²¹ Braudel definitely has a point in saying that capitalism, to him and many other analysts a distinctly European phenomenon, has always been an anti-market, in its mercantile as well as in its industrial variety.²² Something of an “infant industry” argument can just as well be made with regard to developments inside a specific country, as with regard to competitive relations between enterprises in different countries.

This brings us to Landes’ interpretation of the role of the state in international trade. Here protectionism of a kind is indeed the rule. All economic leaders have been, as Landes rightly indicates, protectionists till their economies were strong enough to withstand all competition. In shielding a country off from unwarranted foreign competition, the role of government has always been crucial. The implications, however, of this remarkable fact had deserved more attention than they receive. To begin with: How is one to combine his overall plea for *laissez-faire* and a market-economy, when he discusses national economies, with his plea for a kind of neo-mercantilism in international economic affairs? The latter sooner or later implies regulating business, and in any case interfering with the internal workings of a national economy. How to compare the positive effects that protectionism might have in one country, with the negative effects it is bound to have for other countries, and for those compatriots who, for instance as consumers, pay a price for the protection of a specific branch of enterprise? The wealth and poverty of *nations*, is not identical to the wealth and poverty of *a nation*: what is good for one, can be bad, sooner or later, for all. Is neo-mercantilism not, in the last instance, a plea to beggar your neighbour? The fact that economic front-runners started as protectionists, need not, and I think does not,

imply that protectionism is a way to create more rich countries, or even an overall i.e. global, increase in GNP. I do not see how the thesis that nationally and internationally GNP will in the long run be highest in a situation of complete *laissez faire* can be theoretically refuted.²³ Landes' examples refer to countries which embraced *laissez-faire* only when they were on top, but by definition there is not much room on top. What does this mean for the non-top nations? Might it not be the case that many nations in a world of protectionism never have become as rich as they might have become in a world of complete free trade? Might it not be the case that richer and more powerful nations have hindered the poorer ones in becoming rich? Even if all kinds of protectionism have proved to be a successful strategy for nations that have strong potential and are rising: Can it be a lasting strategy, and: is it a strategy that increases global GNP? As Landes himself indicates protectionism can be bad for a nation's economy. (see for example 492-495) I would have liked to learn more specific details about in what circumstances its effects are positive and in what circumstances they can be expected to be negative.

Two additional problems pop up in Landes' analysis of international trade. In the history of economic thinking about this subject, the theory of comparative advantage has always been regarded as a very important, - though definitely not the only one! - explanation of why international trade existed and why trade flowed the way they it did. On numerous occasions in his book Landes lashes out against this principle. It is, however, hard to find out why exactly he does so. I cannot help thinking that Landes refers to himself, except of course the *sotto voce*, when, on pages 453-454, he writes: "... the neoclassicist would insist that a dollar of hamburger is the same as a dollar of computer chip ... the dissenters, strangely cowed, caught between logic and intuition, object *sotto voce*." In any case I am not quite sure whether he interprets it as Ricardo intended it. Firstly, does the theory really imply that comparative advantage is static?²⁴ Secondly, does it really imply that a country must specialise in those products with the highest comparative advantage, or does it only assert that a country, whose *absolute* costs for all products are higher than those of its competitors, can still compete because of *comparative* advantages? According to Landes, a dollar earned by producing a hamburger is not worth the equivalent of the dollar earned by making computer chips. Paraphrasing his own words, I tend to agree with him intuitively, but to disagree with him from a logical point of view. To know exactly what Landes means, and to decide whether he is right, one would need some more information as to what he means when he says a product is "worth" something. Is he referring to the total amount of money paid on the market for a product, or does he mean total value added? The value added of products can be something completely different from their price, and from the profits made in selling them. Again, intuitively one could easily agree with Landes' suggestion that even when two products earn a country exactly the same amount of money – the computer chip for instance and the hamburger – producing the computer chip is a more fruitful activity than producing the hamburger. (453) Let us suppose it indeed yields greater gains in knowledge and know-how. Nevertheless, knowledge and know-how are not dollars. Besides, suppose that - and this is what comparative advantage is about - 1) country A is capable of producing hamburgers as well as computer chips cheaper than country B, and 2) its comparative advantage is biggest in producing computer chips. What then does it imply if country B nevertheless decides it wants to produce computer chips, and not hamburgers? Even if things eventually turn out fine for B, what are the negative consequences of such a choice for the economies of A, of B, and of the rest of the world? Landes will have to do quite some explaining if he wants to convince mainstream, neo-classicist economists their beloved theorem is wrong.

The second remark concerns the idea that there one could speak of an economic competition between nations. Krugman, and to a lesser extent McCloskey, seem to find the idea ridiculous.²⁵ Landes, correctly, does not. Of course, a nation is not a firm. It is the sum total of all producers in a country. But nations do have, what we call, a "national income." This to a large extent depends of what one could call a "national economic policy." Such a policy can be defined as, amongst many other things, a set of measures taken to enhance the wealth and/or, welfare of the nation, including of course the government. At the moment in OESO nations the government share of GNP oscillates between 35% and more than 50 %. There is such an immense quantity of measures a government can take to influence the economic behaviour of its people, that I can see nothing wrong in analysing government policy and national policy as *a form* of economic strategy. In this context I would also want to refer to what has been said about collective efforts to create a strong national economy.

His systematic contrasting of European culture and European institutions with culture and institutions of the rest of the world has earned Landes the label of "Eurocentrist." In his case that can not be interpreted as implying an unrestrained Europhilia. Various European countries are criticised sharply. The way in which Spain and Portugal, and in general Catholic countries, are described, will not exactly bring joy to their inhabitants. Europe to him really means North Western Europe, with a heavy penchant for Anglo-Saxons and Protestants. A penchant that crosses the ocean to reach out for the United States. On the other hand, Japan is presented as almost more Western than the West: it never really was an empire, its people have a work ethic that makes European Calvinists look like idlers and just as Europe it eventually opened up to external influences.

If Eurocentrism here is meant to mean that Europe is the cradle of modernity; that this was the case already long before the Industrial Revolution; that Europe became the first industrial region of the world and thereby the first region with modern self-sustaining economic growth: that this was due predominantly to its own efforts and to features typically European; that its lead and dominance were not accidental, but might have

been expected – which of course does not mean they were preordained or inevitable: then Landes definitely is a Eurocentrist, with heart and soul. Nothing can illustrate this better than some quotations from his book: “... the European contribution (to world history P.V.) – (is) no more or less than the invention and definition of modernity.” (513); “As the historical record shows, for the last thousand years, Europe (the West) has been the prime mover of development and modernity” (XXI); “Until very recently, over the thousand and more years of this process that most people look upon as progress, the key factor- the driving force – has been Western civilisation and its dissemination” (513) Elsewhere in his book these firm statements are somewhat toned down: “... say a thousand years ago ...the probability of European global dominance was somewhere around zero. Five hundred years later it was getting close to one.” (29) Reading his own description of Sung China makes it hard to believe Europe was already “number one” in the twelfth or thirteenth centuries. In various places in the book the beginning of Europe’s lead is put somewhere at the end of the Middle Ages.²⁶

In contrast to Landes, I do not think that the thesis that Europe was a latecomer and a free rider is *patently* (P.V) incorrect. (XXI) I do agree that Europe was the most dynamic part of the world and the region where most progress was made, but only – very roughly - from the voyages of discovery onwards. This difference of opinion with regard to periodisation need not, and I think does not, however, kill the thrust of Landes’ argument. Landes appears to be more fascinated by the deep roots of what eventually was to become an exceptional European tree, whereas I would prefer to focus on the moment the tree stood firm. If we look at GNP, Europe even in 1800 still had no clear advantage, as Landes is willing to admit, although he thinks Bairoch’s figures on which he bases his estimates should be slightly adjusted. (XX and 525) When it comes to political and military power, Europe’s real, world wide and undisputed hegemony dates from after industrialisation. The balances between Europe and the rest had already begun to change before that. This definitely is true in matters of science and technology.

This however can be no reason to suggest the rest of the world is as static, retreating or even backward as Landes does. I will confine myself to some comments on China, which according to Landes is the country anyone who wants to understand world economic history must study. (23) It is Landes himself who claims the historian must take seriously the opinions and recollections of contemporaries and eyewitnesses. (553, also 220-223) In that case, it is hard to understand why he does not refer to what Adam Smith, whom in many other instances he holds in such high esteem, says about China’s economy, to wit that China is a much richer country than any part of Europe.²⁷ Why does he not refer to the very positive impressions of China’s economy that even in the nineteenth century were (still) recorded by foreign visitors? He could have known that they exist: some of these impressions are analysed in Murphey’s *The outsiders*, a book that is in his bibliography.²⁸ Judging by that bibliography his information on China is too meagre to be a firm basis for his generalisations. Too many important recent studies on the history of Ming and Qing China are missing.

Can one really call China after the Yuan an empire of stasis and retreat? The immense growth of population between 1500 and 1850 is enough to warn us against such a rash interpretation. Chinese agriculture managed to march fast enough for a very long time. (compare 24) I would not go as far as Frank and say a big increase in population must be regarded as a sign that an economy is healthy and thriving.²⁹ But it takes a rather specific interpretation of economic development to see it as a sign of stasis and retreat.

Landes’ sketch of China as a hydraulic state, ruled by oriental despots, too, is oversimplified. Again, many eyewitnesses and a lot of new literature would agree on that. Of course I do not mean to suggest that China was ruled just like Western European states. By and large, being and staying an entrepreneur undoubtedly was less easy and less attractive in China than in Western Europe. At times, the Empire was indeed ruled too despotically, at times the government was far too weak and too poor to promote economic growth. In any case, the primary intent of governments was not to systematically promote the cause of economic growth and the rise of a class of *nouveaux riches* and proletarians.

Claiming, as Landes does, that China had no free market and institutionalised property rights, that its values were incompatible with economic development, and that it was characterised by a pattern of totalitarian control is, again, to give a too simple and one-sided explanation of what was going on there. With regard to the economic history of China, until the end of the eighteenth century, the fundamental question is not so much why it did not, as Landes puts it, “realise its potential” (55) - a difficult question to answer in any case - but to explain why we see the paradox of growth without development³⁰ and the operating of a so-called high-level equilibrium.³¹ For the nineteenth century it then becomes why the proud Empire disintegrated and its economy started collapsing. I expect that the answers to these questions will be more in terms of economic mechanisms and political strife than in terms of values or internal political organisation.

It is not only that China - but also some other parts of Asia – was not as backward, regressing and “Oriental” after 1500 as Landes suggest: Western modernity and dynamism did appear on the stage later than he claims. Or rather, they *dominated* the stage later than he suggests. That can be illustrated by referring to those European characteristics he presents in his chapter on European exceptionalism: 1) The very notion of economic development and the concept of property rights it implied 2) Political fragmentation and freedom of state control 3) The ideal of liberty that engraved itself in the souls of the Westerners 4) The existence of free cities 5) Political rivalry that created an exit option 6) The existence of a split between the religious and the secular 7) The fact that it was impossible to conquer Europe in a single stroke.

All these characteristics can be said to date already from the high Middle Ages, if not earlier. But in

general, I think Landes' picture of the European Middle Ages is a little too positive and innovative. Wittingly or unwittingly he creates too strong an impression of continuity between the Middle Ages and the early modern period. I would say Europe's die is only cast somewhere in the seventeenth, or even eighteenth centuries. The place would indeed be England. Before, the European lead in any case was not a foregone conclusion. It is only then that property rights and other fundamental principles for capitalist economic growth were clearly circumscribed, that *laissez-faire* really spread and the idea of progress became more than a freakish idea of a minority of people. It is only then that the threat of a European empire really had dissipated, at least temporarily; that Catholicism, which after all appears not to be so favourable to economic growth as Landes had suggested for the Middle Ages, had given in to Protestantism; and that the Ottomans were no longer a constant danger to Europe. It is only then that science became established and that enterprise began to be free in Europe.

However this may be, and without in any case wanting to suggest there is something pre-ordained or inevitable in the Rise of the West, or something essentially better in the West: it was rising more and the East was stagnating more in early modern period. Until the age of discovery the West without any doubt was a very minor player on the global field. From then on the scales slowly began to tip in its favour, or rather in favour of some parts of the West. Without any doubt in what is often called the early modern period the West was developing faster than the rest, even if we admit, as I think we should, that Asia was far from backward and maybe even experiencing growth without development. The societal system of the West, in particular that of the British from the late seventeenth century onwards, was the least unlikely platform for an industrial breakthrough. Britain indeed approached the economist ideal country for growth and development on the threshold of the Industrial Revolution, more than for example France or the Netherlands, and definitely more than societies outside Europe.³²

Europe truly made a great leap forward and left the rest of the world behind only with its industrial revolution. Landes' interpretation of this phenomenon to me is very convincing. It was a break, but one with a preparation and one far more easily to imagine in Europe than elsewhere. It was in Europe that the great transformation of world economic history took place. That in itself is enough reason for everybody who writes on the wealth and poverty of nations to be Eurocentric. But it is no reason to pay so little attention as Landes does to the role of other civilisations in this breakthrough. What about the many inventions and innovations that Europe took over from elsewhere, and without which Europe's development would have been unthinkable? What about the bullion, the goods and people Europe extorted from the rest of the world? What about its role in obstructing development elsewhere? Just like Landes I think one should emphasise the internal causes of the rise of the West. In many aspects it was different from the rest, already long before the Industrial Revolution. These differences have indeed played a fundamental, indispensable part in explaining why the West industrialised first and not the rest. Intra-European developments are much more important in explaining Europe's rise than external ones. That, however, is no reason to pass so lightly over its external causes and effects as Landes does. Modernity indeed has been mainly a European creation, but, as Elvin puts it very succinctly, it should be seen in a context of world-exploitation and world-inspiration.³³

I can sympathise with Landes when fashionable anti-Eurocentrism irritates him. This is indeed often not much more than ancestor bashing, self-flagellation and "goodthink." He himself however tends to have too rosy and too teleological a view of how and why the West rose and he paints the world outside Europe, especially Asia, in rather dark colours. In short, he, unfortunately, has not always avoided the danger of erring in the opposite direction. His urge to be polemical sometimes makes him less even-handed than he can – and can afford – to be. I think he has not done himself a favour by dismissing the ideas of those he disagrees with so casually and harshly as he does in this book. The point is not so much whether he is right or wrong, but that in this way readers can easily be left wondering whether those adversaries who come to word so little, might not have a point after all. To put it in far too martial terms: I think it would have been better had Landes defeated his enemies – which I think in most cases he easily could have done – in stead of just ignoring, or even worse, insulting them.³⁴ Scholarship is a matter, not of knowing you are right, but of showing it.

Which brings me to my two last comments. The first one concerns Landes' approach. The book is a very fine piece of rhetoric, but sometimes is so at the cost of analysis. Of course it depends on the intended public. To my taste, at least, it might be more analytical. It is not a slip of the pen when on the flap one can read that it "exemplifies narrative history at its best." The Landes who wrote it, appears to be quite a different historian than the Landes who in the early seventies, together with Charles Tilly, wrote the famous plea for history as social science.³⁵ The second one concerns the lessons we can learn from Landes' book. I can imagine people feel disappointed when Landes summarises his findings and insights.³⁶ They do not seem very impressive. And perhaps they are not. I think however, that Landes' book teaches us more than what the author regards, tentatively, as its lessons. Those who would like to know what more can be learned from the book, would be well advised to read pages 217-223 and the review by Bradford de Long.³⁷

The intellectual value and excitement of the book is not in its approach or its lessons. It is in its broad scope, in the impressive amount of fascinating information it contains, in its provocative style that forces every reader to find out why he agrees or disagrees, and in its daring. Whatever criticism I have, and I think there is reason for some fundamental criticism, I would strongly advise everyone interested in the biggest problem in

economic history to read this book. Even if you disagree with its content, nobody can afford not to read it.

¹ D.C. North and R.P. Thomas, *The rise of the Western world. A new economic history* (Cambridge 1973); F. Fukuyama, *Trust. The social virtues and the creation of prosperity* (London 1995); R.D. Putnam, with R. Leonardi and R.Y. Nanetti, *Making democracy work. Civic traditions in modern Italy* (Princeton 1993).

² Among scholars who study “the Rise of the West”, however, attention to geographical circumstances has always been something quite self-evident. Some recent examples: D. Cosandey, *Le secret de l’Occident. Du miracle passé au marasme présent* (Paris 1997); J. Diamond, *Guns, germs and steel. A short history of everybody for the last 13,000 years* (London 1997); E.L.Jones, *The European Miracle. Environments, economies and geopolitics in the history of Europe and Asia* (second edition: Cambridge 1987); H. Kiesewetter, *Das einzigartige Europa. Zufällige und notwendige Faktoren der Industrialisierung* (Göttingen 1996); A. Macfarlane, *The savage wars of peace. Japan and England and the Malthusian trap* (Oxford 1997) and St. Sanderson, *Social evolutionism. A general theory of historical development* (Oxford 1995).

³ It is Landes himself who says so. See, *The wealth and poverty*, 203.

⁴ For estimates see S.L. Engerman and J.C. Das Neves, “The bricks of empire 1415-1999. 585 years of Portuguese emigration,” *The Journal of European Economic History* 26 (1997) 471-510, table I on page 478 and A. van der Woude, “Les Provinces-Unies” in: J-P Bardet and J. Dupâquier, eds., *Histoire des populations de l’Europe. Tome I. Des origines aux prémices de la révolution démographique* (Paris 1997) 425-444, Tableau 70, on page 429.

⁵ D.S. Landes, *The unbound Prometheus. Technological change and industrial development in Western Europe from 1750 to the present* (Cambridge 1969).

⁶ See also D.S. Landes, “The fable of the dead horse; or the industrial revolution revisited” in: J. Mokyr, ed., *The British industrial revolution. An economic perspective* (Boulder 1993) 132-170; D.S. Landes, “What room for accident in history? Explaining big changes by small events”, *Economic History Review* 47 (1994) 637-656, and D.S. Landes, “Some further thoughts on accident in history: a reply to professor Crafts”, *Economic History Review* 48 (1995) 599-601.

⁷ For data on the dominance and lead of the first industrial nation see for example P. Bairoch, *Victoires et déboires. Histoire économique et sociale du monde du XVIe siècle à nos jours* (Paris 1997) Tome I, 404 and Tome II, 28-32.

⁸ J.M. Blaut, *The colonizer’s model of the world: geographical diffusionism and Eurocentric history* (New York 1993) 59-94.

⁹ Although Europeans indeed had more non-human power-sources at their disposal than people in other societies, one should not make too much of this. See V. Smil, *Energy in world history* (Boulder 1994) 224-235, where it is estimated that in 1200, 80 % of Europe’s total energy supply of prime movers – people, animals, windmills and water wheels - still consisted of human energy, as compared to 90 percent for China in the year 500. Apparently Smil has no data for China’s energy-supply in 1200. But there is every reason to suppose that the importance of human labor-power will have diminished compared to 700 years before. The picture changes however substantially when we look at the situation in the eighteenth century and take into account the role of wood as a source of energy. At that time Europeans consumed 14.000 calories of energy per capita, the Chinese only 4600. The fundamental difference was in the importance of wood, 7200 calories as against 360 and animal power, 5000 calories as against 2000. See P. Malanima, *Economia preindustriale. Mille anni: dal IX al XVIII secolo* (Milan 1995) 96-98.

¹⁰ W.H. McNeill, “How the West won”, *The New York Review of Books* April 23 (1998) 37-39.

¹¹ See for example Chapter 21, in which he is constantly talking about China and the Chinese being such and such – mostly something non-progressive- whereas what he actually is referring to, is the behaviour and thinking of the tiny group of Chinese people who happened to be in charge.

¹² See for example B.E.M. van den Hoven, *Work in ancient and medieval thought. Ancient philosophers, medieval monks and theologians and their concept of work, occupations and technology* (Amsterdam 1996) and Cosandey, *Le secret de l’Occident*.

¹³ A. Peyrefitte, *La société de confiance: essai sur les origines et la nature du développement* (Paris 1995).

¹⁴ Compare Jones, *The European Miracle*, 105.

¹⁵ See for some very explicit statements to this effect 266, 375, 473 and the chapters on Japan. For further information see P. Bairoch, *Economics and world history. Myths and paradoxes* (New York 1993) 16-55, which shows that protectionism and economic growth could, and, very often did go hand in hand.

¹⁶ See for example, *Wealth and poverty*, 492-495.

¹⁷ For his view that nations can be said to compete economically and will continue to do so for quite some time to come, see for example *The wealth and poverty*, 461 and 519. Negative remarks on the theorem of comparative advantage are spread throughout the book. I therefore refer to the Index.

¹⁸ For Krugman's views see P. Krugman, *Pop internationalism* (Cambridge Mass.1996). For McCloskey's see *The wealth and poverty*, 560 note 28 and eh.res.@ eh.net <eh.res@eh.net >, June 04, 1998.

¹⁹ McNeill, "How the West won", 39 and P. Krugman, "The trouble with history", a review of Landes' book and of D. Yergin and Joseph Stanislaw, *The commanding heights: the battle between government and the marketplace that is remaking the modern world* (New York 1998). <http://web.mit.edu/krugman/www/yergin.html>.

²⁰ For comments on these concepts see Ch.C. Ragin, *The comparative method. Moving beyond qualitative and quantitative strategies* (Berkeley and Los Angeles 1987) 34-52.

²¹ See for example S.R. Epstein, *Freedom and growth. The European miracle. London School of Economics & Political Science. Working papers in Economic History* number 22/94, October 1994.

²² F. Braudel, *Civilisation matérielle, économie et capitalisme, XVe- XVIII siècle* (Paris 1979) passim. See for example Volume I, 7-13; Volume II, 7-9 and chapter 5, and Volume III, 537-548.

²³ For a concise and intelligent analysis of recent debates on free trade and protectionism see M. Friedman, *The New York Review of Books*, October 8 (1998) 32-36, reviewing P.J. Buchanan, *The great betrayal: how American sovereignty and social justice are being sacrificed to the gods of the global economy* (Little, Brown London 1998) and Yergin and Stanislaw, *The commanding heights*.

²⁴ As Landes suggests on, for example, page 294. I have not been able to find places in Ricardo's work where he explicitly states that comparative costs must be static. On the other hand, I have not found an explanation of how they could be made to change and what that would imply. In practice countries can and have specialised in different things at different times. I have looked in D. Ricardo, *On the principles of political economy and taxation*, (edited with an introduction by R.M. Hartwell; Harmondsworth 1971). The book was first edited in 1817.

²⁵ See note 18.

²⁶ Compare for example: "... other societies were falling behind Europe (in technology. P.V.) even before the opening of the world (fifteenth century on) and the great confrontation" (54); "... some countries made an industrial revolution and became rich; and others did not and stayed poor. The process of selection actually began much earlier, during the age of discovery."(168-169)

²⁷ A. Smith, *An inquiry into the nature and causes of the wealth of nations*. Two volumes. Volume I, 208, See further passim under China. I refer to the edition of the Liberty Fund, Indianapolis 1981.

²⁸ R. Murphey, *The outsiders. The Western experience in India and China* (Ann Arbor 1977) chapter 9.

²⁹ See A.G. Frank, *ReORIENT: Global economy in the Asian age* (Berkeley 1998) 165-184.

³⁰ For this expression see J.K. Fairbank and M. Goldman, *China. A new history* (Enlarged edition; Cambridge 1998) 167-186.

³¹ M. Elvin, *The pattern of the Chinese past* (Stanford 1973) part 3.

³² See J.A. Goldstone, "The problem of the "early modern" world", *The Journal of Social and Economic History of the Orient* 41 (1998) 249-284, with whose views I completely agree.

³³ M. Elvin, *Another history. Essays on China from a European perspective* (Broadway Australia 1996) I.

³⁴ For some examples of how scholars should not treat those with whom they disagree see pages 54, 89, 514.

³⁵ D.S. Landes & Ch. Tilly, *History as social science* (Englewood Cliffs 1971).

³⁶ Krugman, “The trouble with history.”

³⁷See http://econ161.berkeley.edu/Econ_Articles/Reviews/landes.html. Although I do not think Landes would agree with lesson number 3 that Brad de Long derives from his work.