George Huppert Seaborne migration and Renaissance culture

The topic I am addressing today is a very large one. It is immodestly large. It is nothing less than an attempt to explain why Europeans took over the world:

Why they succeeded in exploiting the resources available elsewhere, why they managed to impose their languages, their religions, their technologies on the populations of distant continents. The end result of these spectacular developments is obvious to all of us: everywhere on our planet, from Brazil to Japan, from Sydney to Shanghai, public architecture is European in character, commerce and industry, as well as military affairs and government, all are copied, more or less successfully, on European models.

How did this happen? Economists and economic historians usually answer this question with a single phrase: the Industrial Revolution, which, they claim, turned the world upside down. All at once, some time in the late eighteenth century, Europe surged ahead of China, launching the global process that led to European dominance on a global scale.

Was China really at equality with Europe before 1750? In what sense? The case is usually made by comparing production and consumption statistics. The risk of incurring the wrath of my friends, the economists, I must introduce a cautionary note here: there are no reliable statistics of this sort for China, or for anyplace else on earth, before the eighteenth century, even for Britain. The itch from which economists suffer, their need to manipulate numbers even if the numbers may well be largely fictional, guesswork at best, this is a malady for which I have some sympathy. But this does not mean that I have to accept their conclusions, even when they come wrapped in seemingly scientific jargon.

No, the question whether China was as advanced, as prosperous as Britain in 1750, remains unanswerable. Advanced, prosperous: those are vague notions in the first place. I tend to side with David Landes and Eric Jones in thinking that Europeans—and not just Englishmen—had established the foundations of their eventual wealth and power much earlier, long before steam engines and mechanical advances made Britain's fortunes.[1] But I will resist pronouncing these matters. The evidence is far too impressionistic to allow us to compare tons of steel or mining ventures, to say nothing of domestic consumption or calorie intake.

What then? Do we give up on an explanation for the most significant development in world history? No. We just approach the question from a different angle. If we are justifiably reluctant to sign off on overall production figures for the eighteenth century, why not begin by asking the most obvious of questions: did Europeans have to wait for the Industrial Revolution to take over most the world?

Obviously not. By the late eighteenth century, Europeans had long ago, centuries earlier, staked their claims, successfully, to the wealth of the Americas, to the exploitation of African slave labor, to the lucrative trade of India, China, the Philippine Islands, Java, Malacca, even Muscovy. The asymmetrical relationship between Europe and the rest of

the world was already a reality in the early years of the sixteenth century: later developments merely accelerated the process.

What, I need to ask again, was the source of Europe's drive—its rapacity, some would say? Profit at any cost, in the face of any risk, would seem to be the easy answer. Allow me to provide you with a representative sample of this drive for profit, a sample, by the way, which has absolutely nothing to do with the Industrial Revolution or with the special qualities of Englishmen.

We are in 1545. In South America. Officially, in the territories of the Vice Royalty of Peru. Specifically, in what is now Bolivia. We see Spanish entrepreneurs exploring mining opportunities on a barren plateau, at very high altitudes. The scene is dominated by an abrupt mountain. In no time at all, the Spanish managers discover evidence of rich silver deposits deep inside the mountain, at 13,000 feet. Before you can absorb the news, they are setting up a network of canals and ore crushing machinery. They use native labor and native pack animals on a vary large scale to bring up provisions and materials and to carry down towards shipping points, the silver extracted by the latest chemical methods. The unprecedented scope of this industry, the never before seen wealth resulting from it, leads to establishment of a boom town known as Potosi at the foot of the mountain. Potosi filled with elegant mansions and innumerable churches, will soon reach a population of close to 100,000, another Venice, Amsterdam or London far from everything. Mind you, London, in spite of its natural advantages, probably had no more than 40-50,000 inhabitants when the Spaniards establish Potosi.[2]

What am I driving at? Having pretty much dismissed all attempts at comparing the West to the East, Europe to China, by means of fanciful calculations of production figures, I have just invited you to take a close look at the Bolivian enterprise carefully analyzed, on the basis of real records, by Professor Bakewell. But it is not the calculation of pounds of silver that interest me here. Something else captures my attention, something intangible—and that is, broadly speaking, the culture of the Europeans whom we encounter everywhere, in the sixteenth and seventeenth centuries—in the captains' cabins or their sailing ships, in colonial Cyprus and Crete, in Batavia, Goa, Macao, Manila in the busy ports of the Canary islands, along the wharves of Antwerp and Lisbon or along caravan routes snaking across Middle Eastern deserts on the way to Red Sea ports.

Remember, when silver starts coming down the mountain to reach Potosi and eventually Manila, flooding the world economy with unprecedented wealth, the men who invent and organize those elaborate arrangements, are educated men, educated in ways that did not exist much earlier. We are back to 1545. Two years earlier, Copernicus' book was published—as was Vesalius' anatomy textbook. In the course of two generations, roughly since the year 1500, vast numbers of inexpensive printed books reached readers in every European city. Literacy, in the vernacular languages, was becoming truly widespread among the better off inhabitants of cities such as Venice, Paris, or London. Ordinary provincial towns followed suit. Already many of them were going much further: they created high level Latin schools, colleges, in which learned masters taught not only Latin literature, history and philosophy, but Greek and Mathematics as well, in

the advanced classes. All this, in the French case especially, open to all the boys of city residents at no charge.

The comparisons between East and West, I am suggesting, should not be made on the basis of uncertain statistics or interminable discussions concerning the size and seaworthiness of Chinese fleets. Instead, it will be more useful to size up the mentality, the mindset of Europeans and try to compare their outlook to that of others---Turks or Chinese, for instance.

Here is an example. Let us take the case of the giraffe presented to the Chinese emperor. Here I am following the analysis offered by Professor Duyvendak.[3] This giraffe arrived at the Imperial Court in the year 1414. No one had every seen a giraffe in China. The exotic animal was presented to the Emperor at the time of the unique and extraordinary ventures led by the Muslim Eunuch Zhen He, who set out the with a large fleet, heading for Indian ports to show the flag, one supposes. These expeditions came to a full stop in 1433. The ships were dismantled and henceforth Chinese subjects were forbidden to leave the country on pain of death.

As for the giraffe, brought to Bengal from East Africa and carried to China by one of Zheng He's ships, it presented a difficult problem of interpretation to the Confucian intellectuals at the Imperial Court. What was this new animal? How was one to interpret its appearance at a time when other strange events were brought to the Court's attention, including the report of an encounter with a vegetarian tiger?

Did this newly arrived animal have a name? The Somali word for giraffe is something like "girin." To the ears of the courtiers, this sounded close to k'ilin or ch'i lin, the name of a fabulous creature in Chinese legend, something like a unicorn, whose presence, it was thought, was to be considered a happy portent, a sign of Heaven's favor and proof of the current Emperor's virtue.

As the Emperor and his suite proceeded through the Feng-t'ien gate to meet the giraffe, counselor Shen Tu, speaking for the Imperial Academy, made the following speech to the assembled and prostrate Imperial Court. Addressing the Emperor, Shen Tu praised him (your virtue transforms the world) and this is why, he explained, a vegetarian tiger has appeared. Now a k'i-lin was presented. All gaze at it and their joy knows no bounds. I, your servant, have heard that when a sage possesses the virtue of the utmost benevolence, it is then that a k'i-lin appears. This shows that your majesty's virtue equals that of Heaven."

The speech was followed by a hymn of praise, which included the following information: "in a corner of the western seas, in the stagnant waters of a great morass, truly was produced a k'i-lin whose shape was 15 feet high. It walks in a stately fashion…its harmonious voice sounds like a bell… gentle is the animal that in all antiquity has been seen not once. The manifestation of its divine spirit rises up to Heaven's abode."

This, then, is a sample of zoological science at the Chinese Imperial Court. By the way, speaking of the giraffe's harmonious voice that sounds like a bell: giraffes make no sound at all.

Europeans were not immune to fantasies concerning exotic beasts, as late as 1414. But, soon after, toward the turn of the century, when Leonardo da Vinci and Copernicus, among others, turned their observational powers on to every aspect of the natural world, armed with the latest discoveries, including the dialogues of Plato and notions of the calculations of Archimedes, it was then that botany and zoology matured into serious sciences.

In 1545, while silver was being mined in South America, a young French botanist by the name of Pierre Belon, was traveling to Constantinople and from there to the Aegean islands and hence, again by ship, at considerable risk in pirate infested waters, to Alexandria, to Jerusalem, and eventually back across the Taurus Mountains. After some 3 years of collecting specimens, Belon was back in Paris and ready to publish his results in a book he entitled LES OBSERVATIONS DE PLUSIEURS SINGULALRITES ET CHOSES MEMORABLES TROUVEES EN GRECE, TURQUIE, JUDEE, EGYPTE, ARABIE ET AUTRES PAYS ETRANGES.[4] (4)

Belon's book was filled with very close observations of plants and animals. The author had gotten his start as a self taught apprentice apothecary in the service of his bishop. He had further developed his skills as a botanist by working with a famous professor at the Lutheran university of Wittenberg and consulting with other specialists in Italy.

His decision to write what was essentially a zoological and botanical treatise in French rather than in Latin, resulted in the book's considerable popularity outside of strictly academic circles. It was published in 1553 by the Plantin firm in Antwerp. The flourishing book trade, by then, reached a world wide audience and very quickly. Belon's reports concerning the flora and fauna of exotic regions in this way because the common property of readers everywhere, almost as soon as the author returned from his field work.

As for his method, it is a far cry from the fantasies we have observed in China. A far cry, too, from the notions entertained by earlier European writers. "I wrote in French, seeking a simple form and avoiding all artifice or elegance" explains Belon. He is concerned with serving the greatest possible number of readers. His objective is *utilite publique*. "Isn't it true," he asks, "that anything worthwhile is all the more so if it is shared by the greatest number?" Belon collected specimens, to be sure, but he had more ambitious objectives in mind. He had started out with the intention of translating the work of the ancient Greek naturalist, DIOSCORIDES, into French. He soon came to realize how difficult it would be to find precise French equivalents for the names of plants or animals given by the ancient author. He now hoped to establish a clear and unassailable nomenclature for the varieties of birds, fish and plants native to the Mediterranean shores. He proceeds by means of what he calls "ocular observations:" that is, he will report nothing that he has not seen with his own eyes. This method makes no allowances for

cherished and ancient beliefs. He disappoints tourist guides everywhere. On the island of Crete, he is taken to see the ancient Labyrinth once inhabited by the Minotaur. A simple stone quarry, he reports. Out of Jerusalem, he travels to Hebron, to observe the famous river said to be so obedient to the Lord's commands that it does not flow on the Sabbath. He looks at the river and declares that of course it flows on that day as on all others. While he is at it, he dismisses another popular myth: Jews are supposed to bleed profusely on Good Friday. "We were with them on Good Friday," he notes dryly, "and we did not observe any loss of blood." And then there are the unicorns. Aristotle reported on an animal believed to sport a single horn, but Belon could find no evidence to corroborate the story. What about the Sphinx? Was there such an animal? Nonsense, says Belon. "Everything that has been written about this animal is a fable." His proof is unassailable. It is founded on the assumption of the uniformity of Nature: had there ever been such an animal, its appearance would have been unchanging. Yet the various artistic representations of the Sphinx—in stone or in medals, in Egypt or in Rome, are far from uniform, he concludes, after painstaking observation. The artists, it follows, could not have been working from a live model.

Whether he is correcting a mistaken plant identification or an erroneous account of the construction techniques employed by ancient Egyptians, Belon takes the trouble to get it right and chides those who came before him for their lack of precision. The problem, he explains, is that they were not thinking correctly: *ils pensent mal*!

This takes us back to the giraffe in the Chinese capital. Clearly, those mandarins were not thinking correctly. And they were hardly alone: nowhere in the world could someone like Belon have found people who thought correctly, once he left the familiar world of the west, where schools and universities and publishing houses represented a fairly recent transformation. "The minds of men," he allows, "which had been for so long mired in a deep sleep and smothered in ancient ignorance, were now at last emerging out of the darkness in which they had been buried for so long." Rising from the noxious coma, his contemporaries were discovering every kind of knowledge. Belon is acutely conscious both of his debt to the admired authors of Antiquity and of his own situation, as a pioneer venturing into the unknown.

But the whole point of what I am saying is that Belon is not at all alone. He is a particularly lively and intelligent thinker, but he is representative of his generation, of the thousands of Europeans, French, Italians, Spanish or Dutch, among others, whose minds are filled with Greek philosophy and science and who find themselves gazing with wonder at the ignorance and superstition they encounter in their travels. In the East, Belon notes, the Greeks live "in an amazing condition of ignorance." There is not a single university anywhere. There are no books to be found in Greek monasteries. The monks are illiterate for the most part. In sum, "there has not been a person of learning in all of Greece for a very long time."

The suggestion that emerges from the opposition between literate, book-reading Europeans and the people they encounter, is that Europeans were already different in

profound ways in the sixteenth century—and that this difference had to do not with tons of coal and iron, but with the contents of their books and their minds.

The singularity of Europeans at the time of publication of Pierre Belon's *Observations* is a truly complex matter. I can offer here today, only a partial perspective. Noting how efficiently a young man like Belon can propose a research agenda, finding funding for it, do field work in Islamic regions, return home and send his manuscript to the publishers so as to serve "public utility," we would naturally point to the enormous and very rapid growth of the new printing and publishing industry as one of the aspects of Europe's singularity. I will spare you a summary of this development, since it has been copiously studied.

Instead, I invite you to follow me on a quick tour of a related development: the transformation of formal education between 1520 and 1550. Here I will focus on the French case, where the evidence is fully visible, largely as a result of the researches conducted by French archivists between 1870 and 1914 and my own modest contribution to this field.[5] You will ask to what extent the French experience is representative? My tentative answer is that we will have to wait for more evidence, the French case being by far the best documented. But I can suggest two observations: one, that the founding of schools resembling the French ones is almost certainly a European-wide phenomenon, even if it is unlikely that it was as massive elsewhere as it was in the French case. The second observation has to do with the secular character of the French schools. They owe nothing to the Church, which actively and often violently opposed their foundation. The French schools in Pierre Belon's time are public schools, entirely supported by municipal funds and overseen by elected officials.

Now what were those schools like? What did they teach? Who attended them, how was their faculty recruited? What distinction existed between high level classical schools, the forerunners of modern French colleges and Lycees like the ones I attended in the 1940's, and the village schools which taught only reading and writing in the vernacular and other practical subjects?

The newly founded Grandes Ecoles or colleges of this period did not, on the face of it, teach anything practical. They taught Latin, first of all, classical Latin, often beginning reading instruction in Latin rather than French to large groups of six year olds. From this starting point, students were moved up by means of an ingenious system of classes, to the point of being able read and understand Caesar, Cicero, Horace and other recommended authors—the *optimi auctores* of whom Quintilian and Erasmus approved.

By the time they were teenagers, the students knew a great deal about life and letters in ancient Rome. In the advanced classes they were introduced to Greek, they also studied mathematics and foreign languages, especially if some of the professors came with specialized skills. This was fairly common, because recruitment was wide open and international in scope. Candidates for academic positions were invited to give job talks, usually in competition with one or two rivals. There were Scots, Germans, Portuguese and Italians teaching in the French schools. No language barrier existed, Latin was their

Esperanto. I should add that the competence of those Renaissance academics was very high. Many published erudite monographs and editions of texts. Most would easily have tenure in this university, were it not for their formidable talent for dispute, dissension and political squabbling.

The French classical schools were simply ubiquitous. The French clergy often sounded the alarm about the consequences of this educational revolution: there are far too many colleges in France wrote one clerical lobbyist, "even in the smallest towns of the kingdom, to the great detriment of the State, since, by such means, merchants and even peasants find ways of getting their children to abandon trade and farming in favor of the professions." Worst of all, "it is the ease of access to this bewildering number of colleges that has enabled the meanest workers to send their children to these schools, where they are taught free of charge—and that is what has ruined everything."

The question of what was being ruined, I leave to your imagination. But it is true that those classical colleges could be found everywhere, even in towns with populations that hardly exceeded 3,000. And it is also true that all the male children of urban residents could attend those schools, free of charge or for only a nominal tuition fee. Outsiders were excluded, unless their families were rich enough to pay for room and board at the college, a hefty sum, which went directly to the principal's purse. And then, there were gifted boys from peasant backgrounds who stayed with relatives in town and found their way to Cicero and Plato in this way. For instance, at random, I could mention famous intellectuals of that time, Peter Ramus, for instance, who was the son of a charcoal burner from Picardy and who managed to live with his Parisian uncle, a carpenter—and in this way became a classical scholar and the founder of the most experimental college in Paris and a *lecteur royal* or regius professor in what was to become the College Royal and later the College de France. Another case in point is that of the principal of the college in Bordeaux, Elie Vinet, who published many scholarly works as well as practical handbooks on surveying techniques. Vinet come from a peasant village and had the good fortune of being supported by a series of local patrons who were aware of his talent, both for classical studies and mathematics. In his college, at Bordeaux, he, in turn, aided others from humble backgrounds, like the local elementary school teacher who was allowed to audit his mathematics classes.

What about village schools and similar elementary schools in cities? French village schools could be found absolutely everywhere. They too were public. Usually there was only one teacher and often only in the winter months. He was paid a modest sum by the village community which also paid the rent for the one room school house. At times, the teacher was seconded by his wife, who took on the girls. At other times he taught boys and girls together—you can imagine the complaints coming from the parish priest and his superiors.

In the local archives which I have frequented over the years, I have always come away with an overall sense of permanent surprise—surprise at those endless stacks loaded with minutes of meetings and even flyers announcing competitions for teaching posts, and notations about the shortcomings of some instructors—they tended to drink too much, to

fight, to womanize—or worse. The inescapable impression is that of a society hell bent on educating every boy—no boy left behind, so to speak.

The result, it seems to me, was not only that a not insignificant proportion of the urban population could read classical authors in the original—and those who could not, soon found almost everything in French translation, including Plutarch, famously. The figure of Socrates became the darling of the middle classes. Montaigne's essays, published by a faculty member of the Bordeaux college, Simon Millanges, in 1580, soon became just about the most commonly read book among readers who graduated from those colleges. Those essays were popular largely because they touched on all the topics familiar to those readers, including the veneration of Socrates and the old philosopher's openness to competing points of view.

It is with this laudable intellectual baggage that Europeans found themselves thinking about the newly discovered civilizations. And this is what, I believe, made them so different—different of course, from the inhabitants and the rulers of Mexico or Peru, but different also from the Chinese or Japanese intellectuals, and Islamic ones as well.

Montaigne's readers were likely to nod their heads in agreement when he deplores the unfortunate fact that it was brutish Spanish adventurers who landed on Mexican beaches: how much better it would have been if the ancient Greeks had gotten their first! How enticing the prospect of a serious philosophical conversation between Plato and a native shaman!

Without for a moment suggesting the answer to one of the most complex problems historians can face is at hand, I do make the point that Europeans had acquired skills unavailable to other civilizations, including truly efficient networks for spreading information almost instantly and equally efficient and demanding educational institutions radically different from what had been the case only fifty years earlier.

Beyond those skills, there was another hard to grasp but probably all important factor: because of their rejection of traditional verities and their admiration for pagan Antiquity, Renaissance intellectuals found themselves looking at their own society from the outside, capable of criticizing almost every aspect of their world, demanding rational proof for any assertion that appeared unfounded to them. They joined Socrates and Montaigne in seeing themselves as citizens of the world. They claimed to be philosophes. And it is as philosophes that they approached new lands, new continents, new civilizations.

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[1] David Landes, *The Unbound Prometheus* (Cambridge University Press, 1969); Eric

Jones, *The European Miracle* (Cambridge University Press, 2003); See, more recently,

Gregory Clark and David Jacks, "Coal and the Industrial Revolution," *European Review of Economic History* 11 (April 2007).

[2] Peter Bakewell, *Silver and Entrepreneurship in Seventeenth Century Potosi* (University of New Mexico, 1988).

[3] J.J.L. Duyvendak, *China's Discovery of Africa* (London, 1949)

[4]Pierre Belon, *Les Observations*, etc. (Antwerp, 1553)

[5] George Huppert, *Public Schools in Renaissance France* (Urbana, Chicago, London, University of Illinois Press, 1984) and *The Style of Paris* (Indiana University Press, 1999)