#### The Two Great Divergences: Eastern and Western Eurasia from Ancient Political Convergence to Modern Economic Divergence

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### 1. Argument

I argue that the debate about the "Great Divergence", first between Britain and the rest of the world, and then between Europe or the "West" on the one hand and the "rest", most notably China, on the other must take account of what we might call the "deep context" of this fairly recent development. This "deep context" is provided by the de facto disappearance of durable universal empire from westernmost Eurasia (i.e., Christian Europe) after the disintegration of the Roman Empire in the fifth century CE. The cyclical restoration of universal empire in East Asia (China) provides a counterpoint to this world-historically unique development. I discuss initially convergent state formation in Eastern and Western Eurasia (Section 2), elaborate on the character and causes of the (political) "First Great Divergence" between these two macro-regions in the mid-first millennium CE (Section 3), and identify putatively significant connections between that event and the (economic) "Great Divergence" of the recent past (Section 4). In the absence of the "First Great Divergence", crucial preconditions that facilitated the modern "Great Divergence" would have been lacking.<sup>1</sup>

### 2. Ancient Convergence

Some 2,700 years ago, both the core region of China (the Central Plain region) and many of the coastal areas of the Mediterranean as well as its European hinterland were characterized by intense political fragmentation among hundreds of city-states, chiefdoms, and tribes – formally in the West, de facto in Eastern Zhou China. In the following centuries, intensifying interstate competition resulted in up-scaling processes and consolidation into an ever smaller number of ever more powerful states – the Hellenistic kingdoms, Carthage, Syracuse, and Rome in the West, the seven major Warring States in China. In both cases – quite rapidly in late third-century BCE China, more slowly in the Mediterranean in the third to first centuries BCE –, semiperipheral marcher states (Rome and Qin) defeated and absorbed their rivals and transformed the existing state systems into near-monopolistic universal empires that lasted for a number of centuries (roughly 100 BCE to 400 CE for the mature Roman Empire, 200 BCE to 200 CE for the Han Empire). Both empires covered about 4 million square kilometers each and between them claimed

<sup>&</sup>lt;sup>1</sup> I have prepared this paper to support my presentation and refrained from extensive footnoting. Section 2 depends heavily on my chapter "From the "Great Convergence" to the "First Great Divergence": Roman and Qin-Han State Formation and its Aftermath", in Walter Scheidel, ed., *Rome and China: Comparative Studies in Ancient World Empires* (2008), 11-23, and is intended to provide some general background for non-specialists. Section 3 draws on my unpublished working paper "Fiscal Regimes and the "First Great Divergence" between eastern and western Eurasia", available at <u>www.ssrn.com</u> and forthcoming in Peter Bang and Chris Bayly, eds., *Empires in Contention: Sociology, History, and Cultural Difference.* Both papers contain proper bibliographical references. The scholarship pertaining to Section 4 is very large and only a few particularly relevant titles are cited here.

at least half of all people on earth. A pan-Afroeurasian phase of "imperialization" had brought between two thirds and three quarters of the entire human species under the control of just four Great Powers. After thousands of years of up-scaling processes, largescale empire appeared to have been firmly established as the dominant mode of sociopolitical organization.

The parallel growth of empire in Eastern and Western Eurasia coincided with a significant degree of institutional convergence. The most obvious difference between Rome and China lies in the increasing centralization of the Warring States period (403-221 BCE) that created stronger state structures in early China than anywhere in Europe prior to the modern period. The Warring States of China implemented parallel self-strengthening reforms designed to increase their military competitiveness vis-à-vis their rivals. In the fourth and third centuries BCE, the state of Qin went the farthest by breaking the power of hereditary nobles, re-organizing its entire territory into 31 uniform conscription districts, creating a pathway grid across the country, ranking the entire population in 18 grades and dividing it into groups of five and ten for collective surveillance and liability, instituting rewards for military prowess, imposing codified penal law, and standardizing currency, weights, and measures. These reforms, however imperfectly they may have been implemented in practice, went some way in creating a homogeneous territorial state, sought to extend state control across all levels of society, concentrated power in the hands of the king, raised both the power of the state and the autonomy of the central government to unprecedented levels, and reputedly enabled Oin to mobilize and deploy military and corvée work forces numbering in the hundreds of thousands. This development was ultimately a function of prolonged inconclusive warfare between fairly evenly matched competitors, an environment in which only intensification could produce decisive outcomes. (In this respect, state formation in Warring States China anticipated some of the features of early modern European state formation driven by war-making.<sup>2</sup>) When the state of Qin finally absorbed its six rivals in the 230s and 220s BCE, the regime of the First Emperor attempted to impose and perpetuate this system across China. In the novel absence of the centripetal force of interstate competition, this endeavor triggered resistance that rapidly overthrew the Qin regime and led to a re-assertion of regional forces that underwrote the establishment of the Han monarchy. It took the new dynasty at least half a century to curtail regional and aristocratic autonomy, a process that was aided by conflict with the steppe confederation of the Xiongnu, confirming the principle that war-making is conducive to state-making. After the temporary displacement of the Han dynasty during the Wang Mang usurpation in the early first century CE and ensuing civil war, the clock was once again set back 200 years, restoring much power to regional cliques and magnates. In the end, the growing power of provincial gentry and commanders-turned-warlords conspired to undermine and finally eliminate the central government in the late second and early third centuries CE.

In the last three centuries BCE, Rome accomplished conquests on the same scale as Qin that were not accompanied by comparable intensification of government. In both cases, however, successful expansion was made possible by mass conscription of peasants. In the fourth century BCE, when Rome faced competitors of comparable strength and military organization within the Italian peninsula, it introduced a series of self-strengthening

<sup>&</sup>lt;sup>2</sup> See Victoria Tin-bor Hui, *War and State Formation in Ancient China and Early Modern Europe* (2005), and cf. Charles Tilly, *Coercion, Capital, and European States, 990-1992* (1992) for the European dynamics.

reforms that echoed many of Qin's reforms in the same period, albeit usually in a more muted fashion: the introduction of direct taxation to fund war-making; the strengthening of the peasantry by abolishing debt-bondage; the expansion of conscription across the entire citizenry; periodic registration of adult men; the creation of 35 conscription districts, functionally at least in some ways comparable to the 31 districts of Qin; land grants to soldiers drawing on annexed territories; and political reform to accommodate social mobility at the elite level. Beginning in 295 BCE, and certainly after 202 BCE, Rome did not normally face state-level competitors with matching mobilization potentials. This, and the consequent absence of prolonged inconclusive warfare against other states, obviated the need for farther-reaching domestic reforms promoting centralization and bureaucratization. In other words, the benefits of asymmetric warfare (against states that relied more on mercenaries in the eastern and southern Mediterranean and against less complex chiefdoms and tribes in the northern and western periphery) enabled Rome to succeed with less domestic re-structuring than was required in the intensely and symmetrically competitive environment of Warring States China.

Moreover, proto-bureaucratization was logically incompatible with the governmental arrangements of the Roman Republic, which was controlled by a small number of aristocratic lineages that relied on social capital, patronage relationships, and the manipulation of ritual performances to maintain power, and more mundanely drew on their own friends, clients, slaves, and freedmen to fulfill key administrative tasks. Tightly regimented popular political participation provided a benign arbitration device equivalent to the services that in more conventionally organized states would have been furnished by a weak monarch. Financial management, which required a greater concentration of human capital, was largely farmed out to private contractors. In this context, the army was the only institution that attained a certain level of professionalization. This, in turn, laid the groundwork for the increasing autonomy of military power near the end of the Republic, which facilitated warlordism and the creation of a military monarchy.

In terms of Michael Mann's distinction of the four main sources of social power, the oligarchic regime of the Roman conquest state was maintained as long as political, military, and ideological power were closely tied together and controlled by the same aristocratic collective. Once military power broke free from political and ideological constraints, the rule of the collective was replaced by warlords and monarchs who came to rely on a fully professionalized army and managed political power through the traditional mechanisms of patronage and patrimonialism. The main difference to China is that in China, military power was mostly (though by no means always) successfully contained and for long periods even marginalized by political-ideological power. The close Han fusion of political and ideological power was a function of the centralizing reforms of the Warring States period and the subsequent adoption of a hybrid Confucian-Legalist belief system that reinforced state authority and legitimacy. Except in the early city-state phase of the Roman polity, Roman regimes never benefited from a comparably close linkage of political and ideological power. Economic power was arguably less constrained in the West than in China, which allowed the Qin and Han states to aim for greater interference in economic affairs, an approach that the Roman state only belatedly adopted from the late third century CE onwards.

Over time, both systems experienced what one might call a "normalization" of the degree of state control, in the sense of a regression to the mean, the mean being defined as the range of conditions observed in most pre-modern imperial states. In a manner of speaking,

Warring States Qin and Republican Rome started out at opposite ends of the spectrum: Qin was - if only by pre-modern standards - unusually centralized and bureaucratized whereas Rome was run by a collective and greatly depended on private administrative resources. These dramatic differences may have affected the differential pace of conquest but did not impact ultimate outcomes, that is, eventual domination of their respective ecumenes. Over time, both political systems converged, a process that began around 200 BCE in China and in the late first century BCE in Rome. It is the mature Roman empire of the fourth century CE that most resembles the Han empire in institutional as well as practical terms. Both empires were divided into around 100 provinces with separate civilian and military leadership that were in turn supervised by about a dozen inspectors; the central administration was organized around a number of ministries; the "inner" court and its agents, including eunuchs, had gradually gained influence relative to formal state institutions, while the emperors became increasingly sequestered. In the Later Roman Empire, the recruitment of tens of thousands of salaried state officials promoted protobureaucratization at the expense of patrimonial and delegational forms of administration, albeit never on the same scale as in Han China.

In the final analysis, the major differences in political and administrative organization between Rome and China can be explained by initial differences in regime type. In the case of Rome, collective aristocratic rule accounted for an early reluctance to annex, for the lack of bureaucracy not just during the Republic but also during the first three centuries of the monarchy, and for the continuing use of aristocrats as delegates of the ruler and as his military commanders for the same 300-year period. In China, by contrast, centralization, the creation of territorial states, and the disempowerment of aristocrats facilitated rapid annexation and bureaucratic expansion. A second variable, the nature of interstate conflict, mediated political structure, as the shift to "asymmetric" conflict may have helped extend the shelf-life of Roman oligarchy whereas prolonged inconclusive "symmetric" warfare in China rewarded centralization and concentration of power. But this is not to say that oligarchic traditions continued to constrain Roman state formation indefinitely. As soon as an impetus for reform had been provided by the military and political crisis of the mid-third century CE, Roman state institutions rapidly converged with those of the Han state: a strong numerical expansion of the bureaucracy, homogenization of registration and taxation, the separation of military and civilian administration, the creation of formal hierarchies and spheres of competence in administration, and the severing of traditional ties between the ruler and his court on the one hand and the capital and its hinterland on the other.

In the end, both empires succumbed to the familiar combination of factors that tended to affect all pre-modern empires: increasing tax-rent competition for resources between the central state (the political ruling class) and the landowning elites (the economically dominant class); diminishing marginal returns on investment in organizational complexity; and secondary state formation beyond ecologically determined imperial borders that coincided with the social and geographical peripherization of military service in increasingly "civilianized" empires that facilitated "barbarian" infiltration, warlordism, and undermined the state's vital monopoly on the sale of protection and its monopoly profits, perturbed the extractive-coercive equilibrium between state and elites, and ultimately precipitated bargaining between local elites and outsiders, defection, and state collapse.

Peripheral warrior groups established sub-Roman and sub-Han successor states in the western half of the Roman Empire and the northern half of the Han Empire: the Goths, Franks, and Vandals in Europe, and the Xiongnu, Xianbei, and Tuoba in China. In these formations, foreign conquerors and indigenes were initially kept apart and subject to separate registration procedures, the former as warriors, the latter as producers of extractable surplus. In both cases, these barriers eroded over time, and we witness a synthesis of foreign and local elites.

Over 1,500 years, during the first millennium BCE and the first half of the first millennium CE, state organization in Eastern and Western Eurasia had gradually converged to the extent that not only did the Roman Empire of the fourth century CE share many more features with the mature Han Empire than any previous state in Western Eurasia had shared with any previous state in East Asia, but also that both empires failed and were transformed in comparable ways. It is therefore legitimate to speak of a "Great Convergence" in state formation throughout this period.

# 3. **Post-Ancient Divergence**

Trajectories of state formation finally diverged from the sixth century CE onward. At that time, the East Roman state's attempted re-unification of the original Roman Empire was only partially successful, and the following century witnessed its massive diminution at the hands of Persians, Avars, and most importantly Arabs. Hamstrung by the autonomy of their regional armies, the Arab conquerors were unable to establish a durable ecumenical empire. After the failure of Charlemagne's imperial revival, political fragmentation throughout western Eurasia intensified during the late first millennium CE, most notably in Christian Europe, where states lost the ability to control and tax populations and sovereignty de facto came to be shared among monarchs, lords, local strongmen, semiindependent towns, and clergy. The (re-)creation of centralized states was a drawn-out process that primarily unfolded during the first half of the second millennium CE but in some cases took even longer, resulting in a cluster of polities in which balancing mechanisms prevented the creation of a core-wide empire. Instead, intense interstate competition, internal social and intellectual upheavals, the creation of new kinds of maritime empire, and (eventually) technological progress gave rise to the modern nation state in the eighteenth (or perhaps rather nineteenth) century. In sixth-century CE China, by contrast, imperial re-unification restored the bureaucratic state that largely succeeded, albeit with substantial interruptions, in maintaining a core-wide empire under Chinese or foreign leadership until 1911 and, in effect, up to the present day.

The Chinese "core" (conservatively defined as the region controlled by the Qin Empire at the time of its maximum extension in 214 BCE) was united for 936 of the past 2,220 years, or 42 percent of the time. The corresponding tally for the section of the western ecumene that was under Roman rule at the death of Augustus in 14 CE is perhaps three and half centuries, or merely 18 per cent of the past 1,998 years.<sup>3</sup> More importantly, for the past sixteen centuries, the latter score has been exactly zero. As I will show in the presentation, between 700 and 1900 CE no state ever managed to rule more than 20 to 30 percent of the population of the area that had once been controlled by the Roman Empire, whereas several Chinese dynasties came to rule the entire population of the area that had

<sup>&</sup>lt;sup>3</sup> I owe the first estimate to Victoria Tin-bor Hui, "China's Rise in Comparative-Historical Perspective: *tianxia datong* or *tianxia daluan*?", forthcoming.

once been controlled by the Qin or Han Empires. The disintegration of the Roman Empire therefore represents a fundamental discontinuity in Western Eurasian state formation that is absent not only from East Asia but also from other macro-regions such as India (where large-scale formations from the Maurya to the Mughal Empires alternated with periods of polycentrism), the Middle East (with a similar pattern), and the pre-Columbian Americas.

Why did this happen? A variety of factors may have been relevant. As I have argued in more detail elsewhere, a difference in fiscal regimes provides a credible proximate mechanism for divergent state formation in post-Roman Europe and in post-Han China.<sup>4</sup> In the West, the "strong" Roman state (which counted and taxed a demilitarized population in order to support a large standing army) was succeeded in part by states that maintained systems of taxation and salaried military forces (the East Roman and Arab states) and in part by weak or weakening states whose rulers gradually lost the ability to count and tax their subjects (the Germanic successor states farther west), while in some marginal areas, state institutions collapsed altogether (such as in Britain). In "strong" states with registration, taxation, and centrally controlled military forces, rulers enjoyed greater autonomy from elite interests, and elites depended to a significant degree on the state (for offices, salaries, and other perquisites) to maintain their status. In "weak" states, elites relied more on the resources they themselves controlled and enjoyed greater autonomy from rulers. In the absence of centralized tax collection and coercive capabilities, the power of rulers largely depended on elite cooperation secured through bargaining processes. From the perspective of the general population, local elites rather than state rulers and their agents dominated, and feudal relationships were a likely outcome. At the same time, in the absence of the kind of trans-regional integration that is characteristic of "strong" states, elites tended to be less disproportionally wealthy. These conditions had profound consequences for economic performance, eroding interregional exchange in and among "weak" states. Over time, even the relatively "strong" post-Roman successor states experienced a decline of state taxation and salaried military forces, most notably in seventh- and eight-century Byzantium. The Umayyad Empire also suffered from the regionalization of revenue collection and military power. In this context of fiscal decline and decentralization of political and military power, it became more difficult to maintain state capabilities (especially in the military sphere) and the prospects for the creation of very large stable empires were poor.<sup>5</sup>

In terms of state capacity, developments in early medieval China differed quite dramatically from conditions in much of western Eurasia. The late fifth and sixth centuries CE in particular witnessed the gradual restoration of Han-style governmental institutions that enabled rulers to count and tax a growing proportion of their subjects, curb elite autonomy, and mobilize ever-larger resources for military efforts that eventually resulted in imperial re-unification. Serious challenges to re-centralization, such as intense conflict between rival nomadic groups and the emergence of large numbers of fortified settlements that were organized around clans and village units and designed to protect (and hence secure local control over) the agricultural population, were eventually contained: in consequence, radically different outcomes were avoided, such as feudalization and long-term fragmentation across China – a real-life counterfactual that had indeed already materialized on a previous occasion, back in the early Spring and Autumn period in the

<sup>&</sup>lt;sup>4</sup> See above, note 1.

<sup>&</sup>lt;sup>5</sup> The most elaborate exposition of this argument can be found in Chris Wickham, *Framing the Early Middle Ages: Europe and the Mediterranean 400-800* (2005).

eighth century BCE. This raises the question of why the foreign conquest elites succeeded in shoring up state capabilities where their western counterparts failed. The nature of antecedent governmental institutions and differences in the compensation of military forces (most notably between the state-managed allocation of goods in the East versus the assignation of land in parts of the West) and their organization (a predominance of cavalry or infantry) may all have played a role. However, the poor quality of the Chinese evidence from this period is a considerable obstacle to more detailed investigation.<sup>6</sup>

The resilience or revival of centralized state institutions in China may well have been driven by deeper-seated "ultimate" causes. Geographical conditions were arguably of paramount importance. The Central Plain provides the region with a natural core that supported a large, dense, and easily contained population: historically, any power that gained control of this region and exploited its resources eventually came to dominate the entire macro-region (from the Qin to Mao). Only the Indus and Ganges valleys form cores on a comparable scale whereas Europe lacks this feature altogether. Moreover, China is both more geomorphologically self-contained than Europe, shielded by the Pacific Ocean and mountain ranges to the West, South, and East, and exposed only to the northern steppe, as well as more compact. The Western Eurasian ecumene, by contrast, lacks clear natural boundaries between the Atlantic and Eastern Iran, and Europe in particular is wide open to the East and South. At the same time, much of Europe is far removed from the Central Eurasian steppe: given that most large empires in world history emerged along the "meta-ethnic" fault line between that steppe and agricultural areas to the south, it has been argued that this positional property and the competitive up-scaling processes it engendered were a vital ingredient of large-scale state formation.<sup>7</sup> Once Lithuania and then Russia shielded much of Europe from the steppe – and Russia turned into one of the largest empires in history -, the European state system was cut off from this catalytic force, reducing the incentive for imperial consolidation. Russian imperialism, in turn, itself a prime example of state formation induced by "meta-ethnic" conflict with steppe populations, spatially extended the European state system on a scale that made the establishment of a universal European empire increasingly unlikely for logistical reasons alone. (The overseas colonies of the western European powers later contributed to and reinforced this balancing effect.) Logistically relevant distances were much smaller in East Asia.

The role of ideological power also requires consideration. The Sinological tradition habitually emphasizes the long-term impact of Confucian elite traditions (or rather of the Confucian-Legalist version that had been created in the Western Han period) which favored the notion of a well-ordered unified state managed by classically-schooled civilian bureaucrats drawn from the gentry. However, the significance of ideational forces needs to be evaluated in a comparative context: in this case, we must give due weight to the comparative lack of substantive political impact of ideological commitments to Christian unity in the post-Roman west, of attempts to harness the notion of "eternal Rome" for empire-building (as in the case of Charlemagne and the Ottonians), and of the Islamic ideal of the unity of the *umma*. Moreover, the post-Han period in China was characterized

<sup>&</sup>lt;sup>6</sup> At a workshop that I organized at Stanford in April 2008, a group of experts on this period found it difficult to account for the residual persistence of Han-style bureaucratic and fiscal institutions during the massive upheavals of the fourth century CE that permitted their subsequent revival.

<sup>&</sup>lt;sup>7</sup> Peter Turchin, "A Theory for Formation of Large Empires", *Journal of Global History* 4 (2009), 191-217.

by increased competition from rival belief systems, such as Daoism and Buddhism. The temporary efflorescence of Buddhist monasteries in the Northern Wei period even suggests a measure of convergence between developments in early medieval China and late Roman and post-Roman Europe, where the clerical establishment accumulated vast resources, eclipsed the state in its access to human capital, and eventually came to share in its sovereignty. Nevertheless, it is true that Confucian scholars provided a suitable instrument of state management, whereas the absence of an equivalent group in the Christian West may have made it more difficult for post-Roman regimes to maintain or restore a "strong" state: the intrinsically autonomous and schismatically riven Christian churches that had evolved outside and in some sense in opposition to the imperial state could not offer comparable services. Abiding frictions between political and ideological power in the post-Roman world may have impeded the strengthening of state capacity and thus successful empire-building.

I am currently unable to identify a single cause for the post-ancient divergence in state formation between Eastern and Western Eurasia. However, it is by no means obvious that there is such a thing as a single cause. More realistically, we might try to separate causally significant factors from those that were not essential to observed outcomes. This will be the objective of further research. At this point, all I am able to do is demonstrate that the observed divergence was not accidental but consistent with a whole array of convergent factors. In fact, in this model the observed outcome is overdetermined by ascribing causal significance to a large number of factors, not all of which need have been instrumental in generating this outcome, even though they were logically conducive to it. I will provide a visual demonstration of this explanatory model during my presentation. For now, suffice it to say that in China during the second half of the second millennium CE, fiscal practice, elite ideology, and geography were all conducive to a "strong" state and to large-scale imperial state formation, whereas in Europe, the exact opposite was the case, resulting in "weak" states, shared sovereignty, and polycentrism. The Middle East presents a mixed picture in that some factors favored large-scale state formation and others did not, an impression that is consistent with the observed shifts between universal empire and political regionalization.

# 4. From Political to Economic Divergence

Does any of this matter to our understanding of the "Great Divergence" of the last two centuries? If we distinguish very schematically between "long-term" and "short-term" perspectives on the "Great Divergence", it might seem as if proponents of the former would be more inclined to consider temporally distant developments relevant to what happened – or finally came to fruition – in the nineteenth century. In the most general terms, one might wish to argue that monopolistic state power was a "bad" thing in itself, favoring coercion and stifling competition and thus economic development. Political and cultural polycentrism, on the other hand, favored competition, state-society bargaining, and spurred development.<sup>8</sup> This kind of approach, however, seems too vague to be of much help in understanding historical outcomes: by, say, 1700, Europe had been

<sup>&</sup>lt;sup>8</sup> Eric Jones, *The European Miracle: Environments, Economies and Geopolitics in the History of Europe and Asia* (3<sup>rd</sup> ed. 2003) exemplifies this approach. See also David S. Landes, "Why Europe and the West? Why not China?", *Journal of Economic Perspectives* 20 (2006), 3-22. John A. Hall, "War and the Rise of the West," in Colin Creighton and Martin Shaw, eds., *The Sociology of War and Peace* (1987), 37-53 is a more interesting variant.

consistently polycentric for more than a millennium and consequently ought to have been well ahead of China in all relevant indicators of development if polycentrism and the absence of monopolistic despotic institutions *per se* had been critical factors.

I therefore turn to a concrete theory of the determinants of British economic performance in the period from 1500 to 1800 that prepared the ground for the Industrial Revolution. That I do so should not be construed as an endorsement of this theory: I am not a historian of that period and remain agnostic. I simply use it as an example with which to illustrate the potential significance of the developments discussed in the preceding sections. In his new book on the British Industrial Revolution, Robert Allen argues that Britain's superior economic performance from 1500 to 1800 was associated with three factors, namely strong urbanization, high agricultural total factor productivity, and high real wages. Through a series of simulations, he seeks to demonstrate that these economically beneficial features depended in the first instance on the successful export of textiles (the "new draperies"), international trade more generally, and an abundance of cheap coal. By contrast, institutional factors (representative government and enclosure) are found to be of little relevance. The expansion of textile exports, in turn, was made possible by the relaxation of Malthusian constraints caused by the Black Death (which increased the quantity and quality of sheep and their wool) and the levying of export tax on raw wool that favored the export of finished textiles. The benefits of international trade at first accrued from trade within Europe and only gradually from global commerce, especially in the Atlantic.<sup>9</sup>

Let us assume that the Roman Empire had survived intact into the early modern period, or more realistically that it had eventually been replaced by an equivalent super-state, in much the same way as the Han, Sui, Tang, Song, Yuan, Ming, and Qing dynasties had replaced earlier Chinese regimes, or the Ottomans rebuilt much of the Umayyad and Abbasid Empires, or the Mughals covered much of the same ground as the Maurya and Gupta Empires, and so forth. Let us assume, in other words, that Christian Europe west of Russia had not been exempt from the global trend towards (at least periodic) "big empire". In this scenario, Britain (and the Netherlands, for that matter) would have been a peripheral province of a Western Eurasian empire probably centered on the Mediterranean region, just as it was in the Roman period. Which of the factors identified by Allen would have remained the same? The Black Death would presumably have occurred in any case, shifting the ratio of people to resources; imperial unification would have facilitated trade within Europe; and coal would have been as abundant as in any other counterfactual universe that leaves geology unaltered.

Yet two elements would be missing: a politically dependent Britain would not have been able to implement protectionist measures such as an export tax on raw wool, and it very likely would not have benefited from Atlantic trade and, later on, from imports of raw materials from the Americas. The first of these points would seem to be uncontroversial, whereas the second one requires supporting argument. Very large, monopolistic superstates have no incentive to engage in the kind of exploration that opened the world to European traders and later colonizers. This is not a matter of cultural preference but a function of universal empire *per se*. The Chinese experience is merely the best-known instantiation of a global pattern. Any universal empire that faced asymmetric competition with peripheral "barbarians" had nothing to gain from expanding its international

<sup>&</sup>lt;sup>9</sup> Robert C. Allen, *The British Industrial Revolution in Global Perspective* (2009), 106-31.

commerce or from territorial gains far beyond its existing borders. There was no symmetric competition with rival polities within a given state system that called for the development of new resources.<sup>10</sup> Universal empires were by necessity primarily concerned with maintaining a measure of control over their existing assets in the form of a very large population of (at least potential) taxpayers, and with constraining rent-seeking elites and radical movements. Their existential goal was maintenance rather than performance.<sup>11</sup> When the Yongle Emperor dispatched Zheng He and his enormous "treasure fleets", the purpose of the exercise - eventually eclipsed by ambitious campaigning in Mongolia - was to advertise China's greatness to notional vassals and gather exotica for the imperial court. The vast resources expended on this project yielded no return, and the decision to discontinue it was perfectly rational in both economic and political terms.<sup>12</sup> The most remarkable thing about this whole episode is that it happened at all: similarly grand empires from the Romans to the Umayyads and Mughals never launched similar operations.<sup>13</sup> Throughout history, maritime exploration, commercial expansion, and overseas colonization were undertaken by small, interstitial entities, from the Phoenicians and the Greeks to the Vikings, Portuguese, and various South Asian groups. Early modern European powers ventured onto the high seas in the context of increasingly intense inter-state competition that spurred demand for both resources and mutual exclusion. Polycentrism offered opportunity: while Christopher Columbus survived multiple rejections until he finally obtained funding, a Chinese (or Roman, etc) counterpart would have had only a single option.

More than Allen's model, Kenneth Pomeranz places considerable weight on the resource inputs provided by the New World and their significance in transforming European economies.<sup>14</sup> This means that from his perspective, the absence of transoceanic colonization would speak even more strongly against the arrival of a "Great Divergence". The same is true of Daron Acemoglu and associates' argument that Atlantic trade not only yielded considerable direct economic benefits but also induced institutional change that constrained monarchical power and thereby largely accounted for the "rise of Europe" since 1500: it is unlikely that this process would have unfolded in the context of universal empire.<sup>15</sup>

<sup>&</sup>lt;sup>10</sup> See already very briefly Kenneth Pomeranz, "Without Coal? Colonies? Calculus? Counterfactuals and Industrialization in Europe and China", in Philip E. Tetlock et al., eds., *Unmaking the West: "What-If" Scenarios That Rewrite World History* (2006), 251.

<sup>&</sup>lt;sup>11</sup> Cf. also R. Bin Wong, "The Political Economy of Agrarian Empire and Its Modern Legacy," in Timothy Brook and Gregory Blue, eds., *China and Historical Capitalism: Genealogies of Sinological Knowledge* (1999), 210-45, esp. 221-31.

<sup>&</sup>lt;sup>12</sup> Edward L. Dreyer, *Zheng He: China and the Oceans in the Early Ming Dynasty, 1405-1433* (2007) is the best account.

<sup>&</sup>lt;sup>13</sup> For Roman lack of interest, see Richard Klein, "Das Eigene und das Fremde: Roms politischgeographische Denkweise über den *orbis terrarium*", *Gymnasium* 114 (2007), 219. This is a topic that merits systematic investigation.

<sup>&</sup>lt;sup>14</sup> Kenneth Pomeranz, *The Great Divergence: China, Europe, and the Making of the Modern World Economy* (2000), 264-97. For criticism, see, e.g., Peer H. H. Vries, "Are Coal and Colonies Really Crucial? Kenneth Pomeranz and the Great Divergence", *Journal of World History* 12 (2001), 423-6; Ricardo Duchesne, "On the Rise of the West: Researching Kenneth Pomeranz's *Great Divergence*", *Review of Radical Political Economics* 36 (2004), 67-71.

<sup>&</sup>lt;sup>15</sup> Daron Acemoglu, Simon Johnson, and James Robinson, "The Rise of Europe: Atlantic Trade, Institutional Change, and Economic Growth", *American Economic Review* 95 (2005), 546-79.

Alternative approaches are likewise sensitive to the presence or absence of universal empire. In his largely science-focused argument, Jack Goldstone notes the stifling effects of "state-imposed orthodoxy" that accompanied the restorationist efforts with which the Ottoman and Qing regimes responded to the global dislocations of the mid-seventeenth century. The Counter-Reformation brought similar disadvantages even in large parts of politically fragmented Europe.<sup>16</sup> Repression of scientific thought within a post-Roman European Empire allied with some form of Christian establishment – probably akin to the Orthodox Church, representing the version of Christianity most thoroughly tamed by the state – is hardly a far-fetched counterfactual. (It is not difficult to picture the potential consequences of a pan-European Habsburg Empire.)

Whenever features that logically depend on the absence of a monopolistic empire in Europe are invoked in explanations of the modern "Great Divergence", the "First Great Divergence" of the post-Roman period assumes a pivotal role. It is not the collapse of the Roman Empire that was in any way noteworthy or greatly in need of explication: all historical empires failed at some point.<sup>17</sup> What is remarkable and indeed unique is the fact that within the area that had once been its western (Latin) half, the Roman Empire was never replaced by any comparably expansive state. Instead, Roman institutions of governance gradually eroded over the course of several centuries until effective state capabilities across much of that region had fallen to levels not witnessed for a millennium or more, at the time of city-states and chiefdoms prior to the Roman conquests. Any subsequent developments that were conducive to economic growth, whether we locate them in the Middle Ages<sup>18</sup> or in the early modern period, were fundamentally shaped by this protracted decline and even more protracted recovery of the state as a coerciveextractive organization. Once the European states regained Roman-level capabilities, the ever-growing geographical spread of the state system and elaborate balance-of-power politics made the creation of a single imperial formation ever more unlikely. This outcome was unique in world history; so was the "Great Divergence". Is that coincidence?

<sup>&</sup>lt;sup>16</sup> Jack Goldstone, *Why Europe? The Rise of the West in World History, 1500-1850* (2009), 117-8. <sup>17</sup> E.g., Rein Taagepera, "Size and Duration of Empires: Growth-Decline Curves, 3000 to 600 B.C.", *Social Science Research* 7 (1978), 180-96; "Size and Duration of Empires: Growth-Decline Curves, 600 B.C. to 600 A.D.", *Social Science History* 3 (1979), 115-38. Over the course of 5,000 years there was no trend increase in the longevity of agrarian empires: Stephen K. Sanderson, *Social Transformations: A General Theory of Historical Development* (1999), 102, citing unpublished work by Taagepera. For the underlying mechanisms, see Alexander J. Motyl, *Imperial Ends: The Decay, Collapse, and Revival of Empires* (2001).

<sup>&</sup>lt;sup>18</sup> See most recently Jan Luiten van Zanden, "The Road to the Industrial Revolution: Hypotheses and Conjectures about the Medieval origins of the 'European Miracle'", *Journal of Global History* 3 (2008), 337-59, for the critical role of institutional and organizational innovation during the medieval power vacuum of 900-1300.