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Introduction

1. The Question

Toward the end of the first millennium, China was ahead of Europe in many dimensions. China's population had grown from about 50 or 60 million in the early 700s AD to about 100 million toward the turn of the millennium. During the Northern Song period (960–1127 AD), population growth is estimated to have averaged around a rate of 0.87 percent per year (Broadberry, Guan, and Li 2018). The capital city of the Northern Song Empire, Kaifeng, had reached 1 million inhabitants, including its nine suburbs (Fairbank and Goldman 2006, p. 88). Western Europe, by contrast, was much less densely populated, particularly in the north. Although precise estimates are not available, there is little doubt that European population growth (excluding immigration) was much slower than in China. The rough estimates available suggest that the European population in 1000 AD was about the same as in 200 AD, having declined for the first centuries of this period and then made a slow recovery. Certainly no European settlements came close to the size of the largest Chinese urban centers of this time (Mitterauer 2010, pp. 20–25).

The demographic differences between China and Europe mirrored gaps in their agricultural productivity. Song China employed advanced agricultural techniques, including the use of new rice varieties, extensive irrigation systems, terrace farming, crop rotation, and fertilizers. Its canals and waterways supported an extensive trade network. Northern China was not only the world's most populous trading area, it also produced large amounts of iron, much of it for military use. ¹

1. In 1078, northern China produced more than 114,000 tons of pig iron per year—double the amount produced by England at the beginning of the eighteenth century (Fairbank and Goldman 2006, p. 88).

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In Western Europe, the early Middle Ages did see some improvement, especially in the introduction of wheeled plows and the slow adoption of the three-field rotation method (White 1962, pp. 39–78; Duby 1974, pp. 186–197). All the same, European agriculture was primitive by comparison, characterized by localized economies centered around self-sufficient manors, with only thin trickles of trade with more remote regions. Any excess production would primarily serve local markets or the local feudal lords (Mitterauer 2010, p. 24).

China's advantage over Europe in technological and scientific achievement was not limited to agriculture. The compass, gunpowder, and the printing press—that Francis Bacon famously coined as the major inventions of the millennium—all originated in China. During the Song period, scientific fields in China grew significantly as well: Chinese astronomers made significant contributions, and Chinese medicine became more refined. This progress was catalyzed by knowledge transmission becoming more systematic thanks to the establishment of state-sponsored academies to prepare people for entry into the state bureaucracy. As a result, Chinese nautical technology led the world: there is evidence that as early as the Southern Song dynasty (1127–1279), Chinese ships navigated to India and to East Africa. Foreign trade was a major source of revenue, and the government issued paper money—an epochal innovation—that circulated widely throughout the country (Fairbank and Goldman 2006, p. 88). Although medieval Europe showed evidence that it was open to absorbing technological and intellectual advances from China and the Islamic world, it was clearly far behind in its capacity to innovate until the later Middle Ages.

The proximate cause of these gaps between East and West is easy to identify. China had a strong and effective unitary state, while Europe was virtually stateless. As stressed by Scheidel (2019), China was able to preserve its state infrastructure despite frequent and intense internal wars. The state had maintained its coercive capacity and was able to subordinate and force cooperation from Chinese elites. This was reflected in the country's remarkable state capacity, which was also used to provide public goods such as defense, major infrastructure, some elements of social order, and a commonly accepted fiat money. During the Song Dynasty, central tax revenue is estimated to have approached one-tenth of the country's total output, and it could support an army of about 1 million soldiers (Scheidel 2019, p. 253). Meanwhile, in Europe, the collapse of the Roman Empire caused such prolonged devastation that by the turn of the first millennium AD, state infrastructure had almost completely disappeared (cf. Strayer 1970). Political and military power was fragmented among multiple

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local actors that were in frequent conflict with each other, and cooperation could not be enforced beyond the local level (Scheidel 2019, chapter 7).

Nine centuries later, however, China and Europe's relative positions had completely reversed. Europe occupied a position of global economic, political, and intellectual dominance, while China had fallen behind in most dimensions. Around 1850, gross domestic product (GDP) per capita in China was about one-fifth of that in Great Britain, one-fourth of the Netherlands', and less than half of Italy's (Broadberry et al. 2018). The Industrial Revolution, made possible by European innovation in science and technology, had transformed the Continent's economies, while China remained stagnant, having seemingly lost its innovative capacity. Several European nation-states had developed sophisticated and inclusive political institutions and boasted significant state capacity, with tax revenues around 10 percent of national GDP in the second half of the nineteenth century (Tanzi and Schuknecht 2000, Table III.1). By contrast, Chinese state capacity had declined, with tax revenues falling below 2 percent of GDP (Zhang 2022, p. 4), and political institutions remaining autocratic.

What explains this dramatic reversal of fortune and the social and political bifurcation between these two parts of the world? One recurrent explanation stresses the contrast between a politically fragmented Europe and the early formation of a unitary central state in China. Because Europe was so politically fragmented, its rulers were quite weak. When nation-states finally began to emerge in the late Middle Ages, European rulers had to bargain with a plurality of local elites to earn their cooperation, leading to the formation of more inclusive political institutions. In China, despite frequent internal struggles, centralized and autocratic state infrastructure never disappeared (although it weakened over time). The asymmetry of power between the central authority and weak local elites was much more pronounced in China, allowing autocratic political institutions to persist over time (Stasavage 2020; Jia, Roland, and Yang 2020).

In turn, it is commonly argued, European political fragmentation facilitated economic development in ways that were not viable in the unified, albeit more despotic China. In Europe, for example, innovators found it easier to escape censorship and the persecution of so-called heretics because sovereign states competed for intellectual and economic supremacy and were often in conflict with each other (Mokyr 2016). Scientists and innovators, when at risk of persecution, could flee to neighboring countries for refuge. In a similar vein, frequent wars forced emerging European states to invest in tax capacity (Gennaioli and Voth 2015) and in military technology (Hoffman, 2015), both of which accelerated the process of urbanization, as walled and well-defended

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cities offered much-needed protection to its residents (Rosenthal and Wong 2011). The relatively inclusive European political institutions, borne out of political compromise, also protected business interests because economic power-holders enjoyed some degree of political representation (Acemoglu and Robinson 2012). None of this could have happened in China, where an autocratic central state controlled education and the flow of knowledge, was not threatened by comparable external rivals, and had no interest in protecting property rights from political abuse. Thus, the great economic and institutional reversal is viewed as a by-product of the same forces that explain why China was ahead of Europe in the past: namely, the initial contrast between prolonged internal and external political fragmentation in Europe, as well as the early formation of a unitary central state in China.

Although these arguments contain many elements of truth, the importance of the distinction between prolonged fragmentation in Europe and early unification in China should not be exaggerated when it comes to explaining the Great Divergence. After all, China too was subject to severe external threats and invasions of nomad tribes from the steppe, and it was frequently ravaged by insurrections, civil wars, and violence. Moreover, although conflicts had some beneficial side effects for development, particularly in the accumulation of state capacity and city fortification, they were also disastrous for human welfare. Wars brought lasting destruction and poverty. Histories of prolonged conflict between neighboring sovereign states and political fragmentation are not unique to Europe, and yet in other parts of the world, these patterns did not bring about comparable positive effects on economic and institutional development in other parts of the world.²

In this book, we take a different perspective on the issue of the Great Divergence and its relationship to the institutional bifurcation between China and Europe. Our approach does not deny the relevance of the contrast between political fragmentation in Europe and unification in China to this reversal of fortune. Rather, we highlight other crucial elements that distinguished Europe from China beginning around 1000 AD, which were inherited from their distinct historical trajectories and emphasized the importance of

2. Dincecco, Fenske, and Onorato (2019) show that precolonial warfare is positively correlated with indicators of state capacity and local economic development within India. Yet, overall, India did not reach the levels of economic development of Western Europe despite comparable and long-lasting political fragmentation. We return to a comparison between Europe and India in chapter 11.

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nonstate social organizations and cultural traditions. These additional initial differences enhanced and accentuated the consequences of the contrast between European fragmentation and Chinese unification. Our perspective not only contributes to explanations of the Great Divergence between Europe and China, it also illuminates more generally how the evolution of institutions and the process of economic development are shaped by culture and the internal organization of society.

Some caveats are in order before we proceed. Given the breadth of the questions that we investigate, we lump together large and heterogeneous geographic areas and time periods, at times neglecting important differences among them. Above all, there is ambiguity as to the exact geographical definition of "Europe." Throughout this book, we use "Europe" to refer to that part of the Continent west of the "Hajnal line" between Saint Petersburg and Trieste, although much of what we will say about "Europe" may not apply to some regions in the Mediterranean (Hajnal 1965). Furthermore, our analysis covers the entire second millennium, but two periods are of special interest: the Middle Ages and the Industrial Revolution. Yet the Industrial Revolution cannot be properly understood without taking a closer look at intellectual and technological developments in the two centuries before 1750. One may also ask: Why start the comparison between China and Europe at the turn of the millennium and not earlier? In fact, we seek to explain the many divergences between these two parts of the world in terms of "initial" differences, which were already in place at the turn of the millennium and had developed over several previous centuries. The turn of the millennium is an appropriate place to begin because it was the point when the foundations of the emerging European states were being laid down and the differences between China and Europe were becoming increasingly pronounced. Finally, our focus also implies that we must inevitably neglect temporary reversals in the tendencies that we describe, along with important differences within Europe and within

3. On September 29, 2023, *The Economist* reflected on the ambiguities of the concept of "Europe." It noted that "English-speakers may call Europe 'the continent,' but that is because their language evolved on an island off its coast. In fact it is simply a convoluted promontory of Eurasia. This sets geographers a puzzle: where does Europe end? The eastern border especially is fuzzy. . . . The idea of Europe started with the ancient Greeks, who contrasted it with despotic, barbarian Asia. . . . The Enlightenment sense of who belonged in Europe rested on Europeans' alleged rationality and cosmopolitanism." As we will see throughout this book, Europeans shared some other features, which may have been decisive in defining the role of the "Eurasian promontory in world history."

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China, as well as between different time periods. That said, despite such heterogeneity, the two civilizations exhibited significant common denominators, making a generalized analysis meaningful.

It is also important to clarify at the outset one important aspect of our conceptual framework. Following recent literature discussed below (e.g., Tabellini 2008a; Enke 2019 and 2023; Henrich 2020; Schulz, 2022), we rely on the important distinction between universalistic and communitarian value systems (or, equivalently, between generalized and limited systems of morality). This distinction refers to how the intensity of moral sentiments changes in relation to the social distance between individuals. In a utilitarian and consequentialist approach, it also refers to how altruism is affected by social distance. A universalistic value system is one where altruism and moral sentiments are not very sensitive to social distance: moral beliefs are applied with similar strength in interactions with friends and strangers. By contrast, in a communitarian value system, altruism and moral sentiments are much stronger toward socially close people than toward strangers. As emphasized by Enke (2023), this distinction is about the *slope* of the relationship between altruism and social distance (how much moral sentiments change as social distance changes), but not about the average strength of altruism and moral sentiments. In the pithy words of Enke (2024, p. 136), "A communitarian is a great friend to have, while a universalist in a great stranger to encounter."

When using this conceptual framework to discuss the divergent histories of China and Europe, our intention is not to imply that the Western Christian tradition, which we argue is more universalistic, is in any sense morally superior to the Confucian traditions, which we argue is more communitarian. Throughout the course of history, Europeans pillaged and enslaved much of the rest of the world and committed heinous crimes, no less (although perhaps more effectively) than other civilizations. Nevertheless, we argue that the differences between these two traditions were significant and contributed to the dramatic bifurcation in social arrangements, economic development, and political institutions between China and Europe.

Social Organizations and the Enforcement of Cooperation

Our starting point is the premise that sustaining cooperation outside the narrow nuclear household is a major challenge for any society. A single household is simply too small to supply a host of essential goods and services that have

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public-good and club-good dimensions, such as risk sharing, religious worship, protection against theft and external threats, market and transportation infrastructures, settlement of disputes, education, and water management. In modern societies, cooperative behavior that supports the provision of these basic public and club goods is largely (but not exclusively) facilitated by state agents, thanks to the rule of law and the government's enforcement powers. However, in the distant past, the state was much weaker, if not totally absent, in many parts of the world. Even a relatively effective state like Song China did not have the resources to adequately provide all the kinds of public goods described and to enforce cooperation at the local level. Yet cooperation was particularly essential. Limitations in transportation and communication made social and economic interactions over long distances very difficult. Without adequate enforcement of local cooperation, social life would have been all but impossible.

Our analysis builds on a basic observation with respect to Europe's and China's methods of addressing this problem. Gradually over time, but increasingly so after the start of the second millennium, Europe's and China's methods of sustaining local cooperation diverged. Although both civilizations used nonstate social organizations, the nature of these organizations differed. In China, cooperation was increasingly sustained by kin-based social networks, the clan being the prototypical organization. In Europe, a different kind of social organization gradually emerged among *unrelated* individuals. Following Greif (2006b), we refer to these organizations as "corporations." Examples of such corporations can be traced all the way to the Middle Ages and thereafter: fraternities, guilds, monastic and religious orders, universities and academic associations, self-governing cities, and the modern business corporation. We will describe these social organizations in detail in Chapters 5 and 6.

Chinese kin-based organizations and European corporations performed seemingly similar functions essential to the effective organization of social life: they shared risk, provided individual protection, facilitated market transactions, provided financing, organized education, provided religious services, settled disputes, and assisted the state in collecting taxes and providing military resources. Yet they differed in one key respect: with whom one cooperated. Chinese clans and lineages were associations of individuals who claimed to descend from a common patrilineal ancestor. European corporations were associations of individuals unrelated by kin, who got together for a specific purpose.

Of course, there was considerable heterogeneity in the nature, scope, and form of these social organizations, both within China and Europe and over

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time. Nevertheless, Chinese and European methods of sustaining local cooperation were clearly distinct and became increasingly so during the later Middle Ages and the Early Modern era (these historical terms refer to periods of European history, although we will use them to refer to the coinciding periods in China as well). In short, Chinese clans were held together by common kin, while European corporations were held together by a specific common interest.

This basic distinction between corporations and kin-based organizations, in turn, implied other differences in function and day-to-day operations. Chinese clans and lineages were multipurpose organizations: the same kin-based network provided a variety of local public goods and club goods: ancestral ceremonies and worship, risk sharing and protection, financing, dispute settlement, and so on. Many (but not all) European corporations were instead formed for a primary specific purpose—sometimes religious, other times economic or political—or to provide education.

This distinction, in turn, had a second implication for membership. Chinese kin-based organizations created a firm partition of society along the lines of mutually exclusive and ascriptive dynastic groups, which often competed with each other. For all intents and purposes, there were no exit options for members. In medieval Europe, in contrast, individuals often belonged to several overlapping organizations: their guild, their fraternity, their parish, their city, and others. European society was formed by dense overlapping networks and associations, which fostered a cultural practice of cooperation and conflict resolution among unrelated individuals in a variety of domains (cf. Reynolds 1997). As discussed later in this chapter, this feature of European society made it easier to scale up cooperation from the local level to the national level through inclusive political institutions. The formation of European corporations would have vast unintended consequences. The same was true for the persistent commitment to kinship in China.

A third and related significance of the difference between Chinese kinbased organizations and European corporations concerns their methods for enforcing cooperation and the governance of social organizations. Cooperation is easier to enforce between members of the same dynasty than among unrelated individuals because of reciprocal altruistic ties. Moreover, the threat of exclusion is much more fearsome in a society formed by kin-based, multipurpose associations than in a society of overlapping, single-purpose associations: once excluded from a Chinese kin-based network, an individual had practically nowhere else to go to seek protection. For both reasons, Chinese

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clans could rely mostly on informal methods of enforcing cooperation, whereas external and formal enforcement procedures had to be used in several European corporations. Furthermore, Chinese clans were typically hierarchical organizations based on seniority, where elder members supposedly acted in the interest of the entire clan, without much need for consultation and accountability. European corporations instead being associations of unrelated individuals carefully regulated collective decisions through consensual practices. Corporations too were hierarchical organizations, but their rules often spelled out membership rights, paid attention to agency problems, and imposed checks and balances on leaders' authority.

How and why did these distinct social arrangements to sustain local cooperation emerge and diffuse across the two civilizations? And how did they affect the subsequent evolution of political institutions and economic development? These questions are the main focus of our analysis. The remainder of the chapter summarizes how we answer them.

3. Cultural Origins of Social Organizations

For social organizations to withstand the test of time, they have to be selfsustaining and complementary with other features of society. In particular, they have to be consistent with the surrounding cultural context. Using the conceptual framework of social network analysis, social interactions exhibit a strong degree of homophily: simply put, individuals prefer to interact with people who are similar to them (Jackson 2008, pp. 100–101; Fu et al. 2012). But similar in what way? In China, the kind of similarity that mattered most for social organization was primarily sharing a common ancestor, although in the late days of the empire, more inclusive attitudes emerged and some liberties were taken with respect to the constraint of shared ancestry. In Europe, the kind of similarity that mattered most for social organization was based on other criteria, such as location (living in the same town), occupation (belonging to the same guild), religious devotion (members of the same monastery), or more generally, sharing a common set of values and interests. These distinct preferences for social interaction were clearly consequential for future development. So the question of why kin-based organizations emerged in China and corporate organizations spread out in Europe can be posed as follows: Why did the Chinese prefer to interact mostly within kin groups, while Europeans were willing to interact with strangers? One answer suggested by Greif and Tabellini (2010, 2017) is that when the need to cooperate in the

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provision of local public goods started to become more acute, and increasingly so after the turn of the first millennium, these two parts of the world had different value systems (see also Henrich 2020 and Enke 2019). In what follows, we trace the general trajectories of these distinct value systems and their relevance for the development of both civilizations' respective cooperative institutions.

Starting roughly at the start of the millennium, a major cultural transformation occurred in China. During the Song Dynasty, neo-Confucianism became the dominant social and intellectual culture in China. As many scholars of Chinese history have pointed out, neo-Confucianism—especially as formulated by the preeminent Southern-Song philosopher Zhu Xi (1130–1200) and his followers—was to become "the living faith of China's elite down to the twentieth century" (Fairbank and Goldman, 2006, p. 98; see also Bol, 2008). A series of doctrines governing both personal and public life, neo-Confucianism emphasized kin-based values as the basis of social order. Interpersonal relations, including cooperation, were to be governed by filial loyalty, strict gender hierarchy, and respect among relatives. An archetype of the communitarian value system, neo-Confucianism made it easier to sustain cooperation among kin, who were tied together by clannish norms: strong bounds of reciprocal loyalty, strict gender hierarchy, and respect among relatives.

Western Europe was very different. Although tribal and kin-based values were also widespread after the fall of the Roman Empire, particularly because of the Germanic invasions, they were gradually and deliberately undermined by the Catholic Church. Beginning in the early Middle Ages, the Latin (Catholic) Church actively discouraged a variety of practices that had traditionally strengthened and consolidated kin networks, such as adoption, polygamy, concubinage, consanguineous marriage, and nonconsensual marriage. Violating these bans carried the threat of harsh punishment, including social sanction and religious excommunication. As documented by Schulz (2022) and others, these Church policies influenced the European family structure: the extended family gradually became less important and was replaced by the smaller nuclear family. Marriage in Europe also increasingly became neolocal: a young couple intending to establish a new household would typically live separately from both parents, which made kin-based cooperation less effective. This is not to say that the extended family was eliminated from social life. It certainly continued to play an important role in many cooperative arrangements across the Continent. However, it is undeniable that over time, the nuclear family replaced the extended family as the basic building block of

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society. This transformation in turn gave rise to other social arrangements to sustain cooperation.

In addition to weakening extended kinship ties, Christian culture, as elucidated by the Church, also strongly rejected the values associated with patrilineal descent groups and strengthened the commitment toward bilateral descent (i.e., from both parents), which was already part of the post-Roman Germanic traditions. But large kinship groups are unfeasible if ancestry is determined by symmetric maternal and paternal criteria because the number of ancestors to keep track of quickly becomes too large (cf. Roland 2020b). Last but not least, over the years, the Church reinforced universalistic values. It stressed that all human beings are equal in front of God, individuals are responsible for their own choices, and loyalty to the community of believers takes priority over kin loyalty.⁴

The Church policies that weakened European kinship are credited with creating what is called the European Marriage Pattern (EMP): neolocal nuclear family units with bilateral lineages (Hajnal 1965; Todd 1987; Mitterauer 2010). The EMP was highly distinct from prevalent family patterns in China and other parts of the world. That said, the Church's policies were not the only factor responsible for the evolution of Europe's social organizations away from kin-based loyalty. The centrality of the individual was already a feature of Greek philosophy, and the legal formalisms that sustained European corporations also benefited from the rediscovery of Roman law. Moreover, European agriculture—depending as it did on livestock—created economic opportunities for women that may not have existed elsewhere, and thus contributed to unique social developments such as relatively late marriage and neolocality, a topic to be discussed in Chapter 2.

Nevertheless, Church policies exerted significant influence over large kinship groups during a crucial period when religion was particularly important in people's lives, political power was highly fragmented, and social arrangements were necessary to sustain local cooperation. Therefore, it is largely thanks to the Church that the seeds of universalism and individualism were sowed in Europe around the turn of the first millennium. In such an environment, cooperation among individuals who were bound by interests rather than ancestry became easier to sustain.

4. In line with this, Bergeron (2019) shows that exposure to former Christian missions in Democratic Republic of the Congo is correlated with more universalistic values and preferences in lab-in-the field experiments.

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From this historical overview, it is now apparent that the social organizations of the kin network and corporation were complementary to the respective value systems in place in China and Europe at the beginning of the time period that we are studying. But causality went both ways. The different social organizations that began to emerge in China and Europe to sustain cooperation exerted strong feedback effects on their prevailing cultures, which in turn strengthened their relevance in society. As shown by Tabellini (2008b), an environment in which most interactions occur within a kin-based social network reinforces kin-based and communitarian values. In such a world, people deal with relatives whom they can trust and minimize contacts with strangers. This kind of society inevitably produces a larger gap in trust for kin than for nonkin. Conversely, frequent interactions among socially distant people reinforce generalized trust and universalistic values. 5 The diffusion of communitarian or universalistic values, in turn, further consolidates social organizations that are complementary with the prevailing culture. Thus, the complementarity between values and organizations can amplify initial differences among civilizations, leading to progressive social and cultural bifurcation.

This is highly relevant to the divergent trajectories taken by China and Europe. At the turn of the first millennium AD, their civilizations were sufficiently different in terms of prevailing values and methods of organization; although the extent of these differences is debated, they were significant enough to be documented in historical records. Over time, these differences became more pronounced and widespread as the societies evolved along different paths. As we discuss next, interactions with state institutions and different patterns of economic development reinforced these complementarities and the resulting bifurcations.

Our argument draws on interdisciplinary research carried out by social scientists. Recent scholarship has increasingly stressed the importance of cultural differences and family structures in explaining the Great Divergence. Many ideas in this book are consistent with important work by Henrich (2020), Schulz et al. (2019), Schulz (2022), and Enke (2019). These authors explore the contrast between Europe and China, emphasizing the uniqueness of

5. Tabellini (2008b) models the distinction between communitarian and universalistic values with reference to how rapidly moral obligations decay with social distance. Following Platteau (2000) and Banfield (1958), he refers to these value systems as limited versus generalized morality. Enke (2019) uses the terminology of communitarian and universalistic values, and we use these terms throughout this book.

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European economic development and cultural evolution relative to the rest of the world and stating the importance of the Catholic Church in reshaping social organization in Europe Their work explores the psychological and cultural foundations that differentiate Europeans from other populations. Schulz's work also stresses the important cultural role played by the Church in European history and the link between communitarian value systems and strong historical kinship ties. Our approach builds on this literature, but we focus on the differences between Europe and China as opposed to other parts of the world. Furthermore, we specifically elucidate the historical mechanisms and the evolution of social organizations that contributed to the economic and institutional divergence between China and Europe. Our main emphasis is on how this divergence derived from the positive feedback effects between cultural, organizational, and institutional factors. We refer more precisely to these contributions in context in the following chapters.⁶

4. Social Organizations and Institutional Bifurcation

When the state was absent or incapable of supplying public goods and social services at the local level, social organizations often acted as its substitute, doing so in its stead. This substitution was often spontaneous and implicit, but in some instances, the state explicitly recognized the arrangement and used social organizations as agents of a decentralized administration. This was the case in both Europe and China. With recognition from the state, self-governing European cities administered justice, enforced tax collection, organized the provision of military resources, and built infrastructure. Similarly, Chinese clans settled disputes, provided poor relief, assisted state magistrates in enforcing tax collection, and took responsibility for fielding soldiers. In these roles,

6. Our approach is also related to the interesting work of Gorodnichenko and Roland (2017); Roland (2020b); and Eruchimovitch, Michaeli, and Sarid (2024). Their distinction between individualistic and collectivistic societies is conceptually and empirically not quite the same as our distinction between communitarian and universalistic values, however. Communitarian cultures entail a strong attachment to a local community, and in this sense, they are also more collectivist. As stressed by Enke (2023), however, the distinction between universalistic and communitarian value systems is about how fast altruism changes with social distance, whereas the distinction between individualistic and collectivistic cultures could also be interpreted as referring to the overall amount of altruism. Moreover, while these authors mostly emphasize statistical correlations between cultural features and economic and political outcomes, we build our arguments from historical analysis and put social organizations at center stage.

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the formal state authorities and respective social organizations often enjoyed a symbiotic relationship: the two entities influenced each other. But the details of how this happened differed in Europe versus China because of the different features of clans and corporations, and this contributed to setting these two worlds increasingly far from each other. In particular, the corporation would amplify the effects of political fragmentation in Europe, and the clan would amplify the effects of an early unitary state in China.

The evolution of legal systems, discussed at length in Chapter 8, is a striking example. In China, where the state was stronger from the beginning, the legal system was designed top-down with two main goals: to maintain peace and stability and to govern the relations between the public administration and its subjects. Civil law played only a secondary role because commercial disputes were primarily resolved by clans through arbitration and compromise. State magistrates got involved only if clans failed to reach settlement. In Europe, by contrast, where the state was initially much weaker, the legal system had a bottom-up origin, and corporations influenced its evolution both on the demand and the supply side. The prevalence of impersonal exchange and contractual arrangements among unrelated individuals created a demand for external enforcement and well-functioning legal institutions, which provided the basis for the evolution of commercial and civil law. Legal principles first appeared in private contractual agreements within and between corporations. Over time, they evolved as best practices in communities of merchants, accompanying the Commercial Revolution of the twelfth and thirteenth centuries, and eventually were codified into law. This process was also influenced by corporations from the supply side because the codification and generalization of best practices were carried out by jurists and legal scholars who had served as administrators of corporations or received specific training by corporations.

The evolution of the legal system in Europe and its priority on civil law, in turn, had several important implications. First, the legal system defined and clarified the nature of corporations as separate legal entities and holders of specific rights. This made corporations more powerful and resilient and facilitated their acquisition of important political rights and prerogatives. Second, the emergence of legal institutions very early in European history coincided with the beginning of the formation of states. Their coevolution thus influenced how political institutions developed. The administration of justice and law enforcement was among the first functions performed by European sovereigns, and other institutions emerged subsequently to deal with specific domestic affairs (Strayer, 1970). This sequence in the emergence of state

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functions gave prominence to the principle of the rule of law, which encompassed two notions: the legislative and executive sovereign authority would be limited by a preexisting body of law, and the courts would uphold the principle (if not the practice) of equality before the law. The early emergence of judicial state functions in Europe also explains the growing influence acquired by national parliaments. As discussed by Boucoyannis (2021), early parliamentary assemblies performed several judicial functions of public importance, such as resolving disputes between nobles and other elites, overseeing instances of corruption among judges and other administrators, and addressing petitions.

The corporation also influenced the evolution of European political institutions in a more direct way: they provided a concrete example of how to regulate collective decisions through consensual practices. The diffusion of corporate arrangements throughout European civil society made consensual practices and ventures the norm. Citizens' notions of fairness and legitimacy were derived from their firsthand experiences with guilds, city charters, religious organizations, and other corporations. More concretely, best practices from corporations became built into the foundations of political institutions via jurists and scholars who were well acquainted with the regulation of collective decisions within corporations. As such, they were able to create a body of theory that justified consensual practices. Overarchingly, several important principles of corporate governance were adapted from corporations and transplanted into political bodies. Two prominent examples come via the principle of representation: namely, the notion that a delegate can bind the group that it represents to its decision, and the sufficiency of the majority in collective decision-making as opposed to unanimity. These principles, like several others, first emerged in corporations and were subsequently adapted to political institutions.

Ecclesiastic organizations played a special role in this process. The Church itself can be seen as a corporate body, being a self-governing group of unrelated people. Scholars of canon law thought carefully about how to regulate collective decisions inside religious organizations, drawing on their personal experience with the administration of other corporations. Often, the sequence first involved the adaptation of a norm of private law into the Church's administrative structure, and then its return to the secular domain as a constitutional norm (Tierney 1982).

Matters were very different in China since kinship organizations relied on informal and more hierarchical principles of governance, often based on

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seniority. The neo-Confucian doctrines of ancestor worship and kin loyalty strengthened the legitimacy of the emperor—who promoted himself as the patriarch of an enlarged family—and his dynasty, as they were chosen by heaven. This was contrary to the notion of equality before the law that developed in Europe.

In addition, the Chinese state had a long tradition of relying on a powerful and effective central bureaucracy to fulfill its aims. However, its members were not recruited based on their social status or previous administrative experience in civil society, as was the case in Europe. Instead, they were selected through a demanding civil service exam that required lengthy preparation and extensive training in Confucian doctrine. This meritocratic process had several advantages from the perspective of regime stability. It created a cohesive social group of talented administrators who shared a basic ethic and a very similar education, all with a large stake in preserving the regime. Simultaneously, these administrators were—at least formally—separated from their clans of origin, preventing the rise of powerful elites or external social groups that could have created a countervailing power and challenge imperial authority.

Arguably, the diffusion of corporations in European society by itself cannot wholly explain why the political institutions that emerged in Europe were more inclusive than those in China. Certainly, the institutional divergence also reflected the greater initial political fragmentation in Europe, and the much weaker bargaining power of European sovereigns vis à vis other elites. Nevertheless, the internal organization of society amplified the effects of this contrast between a fragmented Europe and a unified China by providing concrete examples of how governance could be arranged and shaping expectations of fairness and legitimacy.

Two sets of corporations had a particularly strong impact on the evolution of European political institutions: the Church and self-governing towns. As previously discussed, the Church played a critical role in eroding extended kinship values and provided a successful example of how corporate governance principles could be adapted from the private to the public sphere.⁷ In

7. In some ways, the Church can be seen as a corporation operating on a continental scale, as it was clearly independent of kinship networks while also being capable of self-governance. Yet unlike other European corporations, members of the Church quickly lost their exit options and were outlawed from membership in rival religious organizations. What is decisive is that nothing like the Church emerged in China, and insofar that the Church was a countervailing power to the medieval state, its importance to the bifurcation was substantial.

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addition, after the Investiture Conflict between Pope Gregory VII and the Holy Roman Emperor in the late eleventh century over who had the right to appoint bishops, the Church deliberately enhanced European political fragmentation by strategically undermining the centralization of political powers between and within emerging nation-states (Møller and Doucette 2022; Grzymala-Busse 2023). One reason the Church could retain its independence from secular political powers so effectively was that it had organized itself as a corporate structure. It is interesting to note that by way of contrast in China, Buddhist monasteries, which had not formed a congregation but were isolated and self-relying entities, did not survive as a political power once the Tang emperors became hostile.

Self-governing cities, too, exerted a key influence over the evolution of European political institutions, enhancing the effects of political fragmentation. Like Chinese clans, autonomous cities in Europe-known as "communes"—enforced tax collection and contributed to other aspects of decentralized administration. Unlike Chinese clans, however, communes enjoyed exclusive control over their territories. This feature enhanced their bargaining power against sovereigns, who did not yet have adequate resources to collect tax revenues on their own. When their financial needs were particularly acute, as in war episodes, sovereigns had to concede political rights to selfgoverning cities in exchange for the additional tax resources. Often, these political rights took the form of representation in national parliaments. A key step in the evolution of European parliaments is the inclusion of representatives of corporate groups in councils previously exclusive to the nobility. As shown by Cox, Dincecco, and Onorato (2024), this step occurred only in Europe, but it was much more likely to happen if two conditions were satisfied: first, the presence of self-governing cities; and second, the occurrence of a war. In other words, conflicts were necessary to facilitate the emergence of inclusive political institutions, but sufficient only in the presence of strong corporate organizations like self-governing cities. China too had large urban centers, but they had little autonomy and did not play an important role in decentralized state administration. Clans, which were important for local administration, were not powerful enough to extract political concessions. One reason is that their dynastic origin limited their scale and did not allow them to have exclusive control over their territory, except perhaps in scarcely populated areas.

The fact that corporate and territorial interests enjoyed political representation in Europe but not China helps to explain the divergent paths in

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European and Chinese tax capacity. In Europe, corporate groups responsible for tax collection eventually gained political rights, which gave them influence over how revenues would be spent. This made it easier for them to raise revenues during times of need. In China, clans who enforced tax collection had no political representation, nor could they influence the state bureaucracy over what state revenues would be spent on. Consequently, agency problems and resultant corruption were much more severe in China than Europe, and in the long run, this state of affairs was deleterious to state capacity in China. That said, there was a countervailing measure to corruption in China; governing elites held a paternalistic attitude toward the masses. Confucian values drove them to engage in acts of charity, especially during times of emergency. Over time, of course, much charity was carried out within the clans, but several examples of government welfare in China (see the government program of granaries discussed in Chapter 8) reflect a state attuned to the needs of the people.

5. Social Organizations and the Great Divergence

The different social arrangements in China and Europe also shaped economic development in several ways. The most important reason why Europe surged ahead of China in the eighteenth and nineteenth centuries is that the Industrial Revolution occurred in Europe, not in China. Of course, this was not due to chance, and social organizations are part of the explanation of why it happened, as we will argue at length in Chapter 9.

The Industrial Revolution was driven by a host of scientific and technological innovations. European corporations were at the heart of the creation and accumulation of knowledge, following centuries-old norms and traditions. Monasteries, universities, and later scientific societies—all corporate organizations—played a crucial role in creating the conditions that made the Industrial Revolution possible. European states themselves were not a direct part of this creative process; however, the European political environment, as it had evolved since the fall of the Roman Empire, facilitated scientific and industrial innovation in three main ways. First, as already noted, the polycentric nature of political power and competition among fragmented states allowed innovators to escape censorship and suppression. Second, the Catholic Church, despite its ambiguous and often inconsistent relationship with useful knowledge, on balance created conditions that proved conducive to technological progress (even if that was not its intention). Indeed, much of medieval Europe's progress in science and technology was carried out by devout clergy,

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providing the basis for future innovation. Third, as we have recently outlined, the state had conceded some manner of political representation to business interests, which limited state interference with wealth accumulation and the functioning of markets.

In China, by contrast, knowledge accumulation and education were largely controlled by the state administration. Clans played an important role in the provision of education, but the purpose of schooling was ultimately to prepare students to pass the civil service exam, not to contribute to the advancement of science. Hence, its content was entirely determined by the state, and mandarins and other government officials largely controlled the market of ideas and the course of intellectual innovation. Moreover, the Chinese bureaucracy increasingly privileged the study of traditional Confucian doctrine, bent primarily on social peace and preserving regime stability, over subjects more relevant to the natural sciences. This conservative intellectual environment became particularly detrimental in later centuries, when innovation in Europe was increasingly driven by highly trained experts and people in the upper tail of the human capital distribution, such as chemists, engineers, mechanics, artisans, and natural philosophers (Lin, 1995). Hence, China was at a disadvantage: it had a huge supply of bright and industrious youngsters, but their learning was channeled into studies that had few or no spillovers into production technology and useful knowledge.

In addition to their role in knowledge accumulation and scientific discoveries, European corporations contributed to economic progress in two additional ways. First, they facilitated the creation of thick and well-functioning financial markets and the diffusion of long-distance trade. Arm's-length financing of major trade and business ventures, such as the East India Companies, were used in Europe at least a century before similar instruments appeared in China (Harris 2020). These impersonal economic arrangements reflected a long tradition of economic and social interactions among unrelated individuals and a legal system that supported such interactions. The Chinese social environment, where social and economic networks were predominantly comprised of related individuals, faced more difficulties in transition from a local to an impersonal, global economy. This constraint on whom to deal with and trust became a liability when transportation and communication costs decreased, making transactions among strangers and with remote markets much more important.

The second way that the corporation facilitated European industrialization was via its model for the organization of production. In a capitalist firm, investment decisions are made by capital owners who are also the residual claimants

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of the returns from investment, while labor earns a fixed wage. This organization of production creates strong incentives to invest in labor-saving innovations because the returns accrue to those who control the investment decisions. Moreover, the separation of ownership from control implies that business corporations could be easily scaled up in an environment of wellfunctioning financial markets. European economies could reap the benefits of this mode of production during the Industrial Revolution because their economies were already organized along these lines in agriculture. The early statistician Gregory King estimated in 1688 that two-thirds of the rural population owned little or no land (Overton, 1996, p. 178), and the 1851 census reported that 73 percent of the population living in the countryside consisted of wage earners. Long before the rise of the modern business corporation in the nineteenth century, European firms already had adopted the corporate form as defined previously. In China, by contrast, household production was more common because land ownership was much less concentrated and laborsharing arrangements were relatively more prevalent. Wage labor employed in agriculture is estimated to have been less than 10 percent of the rural population during a comparable period. In this environment, clans were responsible for the survival of their members, and thus they drew no benefit from replacing labor with machines. Consequently, labor-saving innovations (such as mechanization) were less attractive unless production could be scaled up quickly in proportion to the productivity enhancements. Moreover, control rights over investments typically rested with senior (i.e., older) clan members, who were less inclined to innovate.

6. General Lessons

A large body of literature has argued that culture directly influences economic outcomes, as well as the functioning of existing institutions, by shaping the beliefs and values of individuals (e.g., Greif, 1994; Guiso, Sapienza, and Zingales 2016; Tabellini 2008a; Roland 2020a). Culture is viewed as an important mechanism of historical persistence because, although endogenous, it is slow moving, so current cultural traits often reflect features of a more distant social and political environment. Our analysis of the Great Reversal points to another mechanism of cultural persistence and influence: the embedding of specific cultural traits into social organizations. Culture (whether Catholic religion or Confucian doctrine)—and in particular the difference between communitarian and universalistic values—influences with whom people

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cooperate, which social networks are formed, and how this local collaboration is sustained. Once these networks crystallize in organizational form, they exert unintended and lasting influences on future economic and political outcomes. In other words, the effects of culture are not only direct; they are also mediated by social organizations that are complementary with specific cultural traits. Once in place, these social organizations are hard to dismantle, and they contribute to spread and maintain the cultural foundations on which they are built. As we shall see in Chapter 10, the clan structure in China proved to be a tenacious institution, surviving despite the efforts of the communist regime to eradicate it.

The histories of China and Europe exemplify how culture influences the evolution of political institutions through social organizations, and reciprocally, how state and local organizations reinforced prevailing cultural traits. Here, too, the interactions between culture and institutions are not only direct, but also mediated by social organizations. Historically, social organizations such as clans and corporations fulfilled important administrative functions and had significant control over day-to-day life. They could thus be exploited by the state as instruments of local administration. This interaction was a source of reciprocal influence. On the one hand, social organizations were strengthened by acting as agents of the state. On the other hand, the evolution of state institutions also reflected the nature of underlying social arrangements.

Little of this relationship was in place at the start of the second millennium AD. However, the seeds of this divergence were nonetheless planted around that time. The histories of China and Europe during the second millennium illustrate how initial differences in prevailing cultural traits, or specific historical circumstances that led to cultural innovations (e.g., a new norm introduced by a religious authority), can set into motion a set of cascading, long-lasting transformations in cultural, social, and institutional environments.

Although this book focuses on the historical divergence between Europe and China, the analysis of social organizations can also shed light on other historical episodes, as well as other problems of institutional and economic development. The fundamental challenge of state formation is how to scale up cooperation from the local to the national level. Most societies have found ways to sustain cooperation locally, be it within small communities such as tribes, villages, clans, or other groups. But scaling up cooperation among strangers poses new challenges and requires different social arrangements. Our historical analysis of China versus Europe, along with the work of Henrich (2020), Schulz et al. (2019), and Schulz (2022), suggest that these challenges

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are more easily overcome by societies that hold universalistic values and have developed social organizations to sustain cooperation among strangers, as was the case in Europe with the rise of the corporation as the dominant organization. In China, starting with the reunification of the country under the powerful if short-lived Qin Dynasty (221–207 BC), cooperation was scaled up and conflicts were resolved thanks to the early emergence of a strong autocratic regime, which relied on the enforcement powers of a centralized bureaucracy. In Europe, peaceful resolution of internal political conflicts and the emergence of inclusive institutions were facilitated by social practices that encouraged cooperation among strangers. However, the European path of economic and institutional development took many centuries. Is it possible for this process to be accelerated? And how can cooperation be scaled up in social environments where communitarian rather than universalistic values are prevalent? What if social organizations encouraging cooperation among strangers have not yet emerged? Addressing these difficult questions is of fundamental importance for future research on economic and political development.

7. Outline of This Book

The rest of the book is organized as follows.

In Chapter 2, we review the debate on the Great Divergence in economic history. We describe the reversal of economic fortunes between China and Europe in detail, as well as the many dimensions of their divergence between the eleventh and nineteenth centuries, critically discussing some explanations that have been put forward in the literature. The chapter emphasizes two initial differences between China and Europe that arguably played an important role in their subsequent divergence: the contrast between internal and external political fragmentation in Europe and early unification under a strong central state in China; and their different family structures.

In Chapter 3, we lay out our conceptual and analytical framework, explaining the two mechanisms that we argue are central to the observed social and cultural bifurcation. First, the prevalence of communitarian as opposed to universalistic culture leads to different organizational forms to sustain local cooperation. Second, the diffusion of one or the other organizational forms (between kin versus between strangers) contributes to the diffusion of cultural traits that are complementary with the prevailing social organizations. The central conclusion of this chapter is that initially, small differences in cultural

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traits or in organizational forms can set into motion a lasting process of cultural and social bifurcation. We discuss how this conceptual framework applies to China and Europe, and then we summarize the main logical implications of the analysis, which are more thoroughly investigated throughout the remainder of the book.

In Chapter 4, we describe the main cultural differences between China and Europe at the start of the first millennium AD, emphasizing the revival of Confucianism in China after c.1000 in comparison with the norms supported by the Catholic Church at about the same time. We also discuss how these different doctrines influenced family structures and the resulting strength of kinship ties in these two parts of the world. We point out that the influence of the Church went beyond family ties and norms of good behavior. The Church also provided a concrete and influential example of how to design corporate structures in a complex and large organization of unrelated individuals.

Chapters 5 extensively documents the prevalence of kin-based organizations in China versus corporate arrangements in Europe. We describe in detail the key features of these social organizations, as well as when and where they emerged. We identify significant differences and similarities between kinship organizations and corporations and discuss how they evolved through time and space.

Chapter 6 discusses in detail the most important corporations that spread throughout Europe during the Middle Ages, including fraternities, monasteries, guilds, universities, and self-governing cities. We contrast these organizations with their Chinese counterparts during the same period. Although the concept of a "corporation" is often associated with the modern business firm, which emerged in Europe in the early seventeenth century, Medieval corporate structures did not primarily serve an economic purpose (except for guilds). Instead, they fulfilled other social functions, including important political responsibilities that required some form of cooperation. Business corporations also emerged in China, although much later than in Europe. But importantly, unlike in Europe, Chinese corporations never acquired much of a role in the political and public sphere.

Chapter 7 discusses the institutional divergence. We first summarize the key features of Chinese state institutions, discussing why they remained stable over several centuries despite dynastic changes and internal wars, and emphasize their complementarities with prevailing kin-based organizations. We discuss the emergence and evolution of state institutions in Europe during the

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Middle Ages, explaining how they developed under the influence of the corporate structures that permeated European society. We also stress the special role that the Catholic Church and self-governing cities played in the evolution of European political institutions. The main theme of this chapter is that distinctive organizations of society in China and Europe amplified the effects of their initial differences in political unification as opposed to fragmentation.

Chapter 8 discusses other aspects of the institutional bifurcation between China and Europe that resulted from the interaction of the state with prevailing social organizations. In China, the state exploited the enforcement power of clans in its decentralized administration. European states did the same with self-governing cities. These relationships strengthened social organizations while also shaping state development. In this chapter, we focus on the evolution of the respective legal systems in East and West and their various state capacities.

Chapter 9 turns to economic divergence, discussing why the Industrial Revolution occurred first in Europe and not in China. We argue that geography alone is not an adequate explanation. Instead, this chapter emphasizes the role of corporations and universalistic values in shaping the scientific and technological innovations that led to the Industrial Revolution, and explains why similar innovations did not happen in China.

In Chapter 10, we turn to modern China. The main question that we pose is how to explain the country's exceptional economic convergence with the West after the death of Mao Zedong in the mid-1970s. We emphasize two aspects of historical continuity that facilitated economic convergence. First, although the Maoist cultural revolution deliberately sought to erase clans and Confucian traditions, kin-based social networks reemerged in China after Mao's death. These social networks absolved important economic functions in an environment characterized by weak property rights and a lack of familiarity with global markets. For instance, the Chinese diaspora abroad, who had retained links with their native country, acted as an intermediary between China and the rest of the world. The second aspect of historical continuity rests in the political sphere. Although sustained by a different political ideology, the post-Mao system of government bears many similarities with the imperial regime. In particular, starting with Deng Xiaoping, local administrators enjoyed considerable leeway and discretion in initiating policy changes and reforms while still being subjected to control from the central government via meritocratic performance criteria. With a new emphasis on economic growth rather than stability and revenue maximization, this system of decentralized

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administration created strong incentives for local officials to promote economic development. The chapter concludes with a discussion of whether Chinese growth can continue under the centralization of power imposed under Xi Jinping beginning in 2012.

Finally, Chapter 11 concludes, drawing brief comparisons between India and the Islamic Middle East, and reiterates general lessons that can be drawn from our historical analysis.

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