Introduction

Why the Corporate Ecosystem?

The rise of China and the rapid international expansion of major Chinese corporations such as Huawei Technologies have led to a great deal of fear and misunderstanding among Western commentators and policymakers about who controls these corporations and what their motives might be. This book argues that Chinese business corporations can be properly understood only within their ecosystems, in other words, as complex living organisms interacting dynamically with (and upon) a multilayered political, cultural, and ecological natural-human environment. Without adopting this holistic perspective and identifying the key defects of the current corporate ecosystem, the historical development and future direction of Chinese corporations will continue to be misread, leading to increased international tensions, missed opportunities to address the global environmental crisis, and continuing distortions in the world economy.

Adopting this ecosystem perspective depends on three core ideas, like the three legs of an ancient Shang Dynasty tripod vessel.

The first idea is that, as organisms within a broader ecosystem, corporations may face limits to their growth due to government regulations, powerful political vested interests, legal restrictions, external competition, or lack of access to financial and natural resources. Yet frequently they will find alternative ways to overcome these limits and continue to evolve through adaptation. Some of these adaptations will be successful hybrids, leading to long-term survival and corporate ecosystem well-being, while others will be dangerous mutations leading to corruption, misuse of energy and resources, degradation of the ecosystem, and ultimately self-destruction. As successful corporations steadily expand, they must also learn to adapt to new and unfamiliar environments. This is the situation currently facing China’s largest corporate groups, its small/medium enterprises, and its government, as they deal (shakily) with rapidly changing technologies, a polluted natural-human ecosystem at home, and a frequently hostile international political environment.
The second idea is that corporate ecosystems are constituted and managed by living human beings, who provide the corporation with its vital energy through labor or decisions about circulating resources and capital. Yet beyond these constituent agents, corporations also possess legal, and often physical, identities with their own vitality. Just as the human body is formed by cells, through an immense collaborative organic growth process, so the corporate form has been formed by human beings as part of our own process of co-evolution with the wider environment; however, it has literally developed a life of its own, changing peoples’ behavior and even their whole way of thinking, with both positive and negative consequences. Discussion of the corporate ecosystem must therefore consider how corporations impact the lives of their constituent people – managers, employees, shareholders – and the external stakeholders with whom they interact, especially various colorful subspecies of government and Chinese Communist Party (CCP) officials. This requires an understanding of the incentives that drive the various actors within the Chinese corporate and political ecosystem, which may be very different from the stereotype (assumed by many Western commentators) of an obedient authoritarian hierarchy working to promote Chinese national interests.

The third idea develops logically from the first two: Because of their vitality, it is incorrect to view human-created entities such as corporations as totally separate from nature, somehow divorced from the broader ecosphere. Clearly, they interact dynamically with nature and human beings as part of the evolution process, for good or ill. Dynamic means that not only is the interaction constantly evolving but it is also bidirectional. Corporations are changed by, but also (actively or accidentally) change, their natural-human environment in fundamental ways. And that change is already having a massive impact on us as human beings. No discussion of a corporate ecosystem in China or elsewhere can neglect the impact of corporations on the natural environment, and any proposed solutions to rectify the defects of the Chinese corporate ecosystem, such as reforming corporate and political resource/energy and incentive systems, must take account of both the economic and ecological consequences of those changes.

In relation to these core ideas, this book has two major aims. The first is to illuminate the current interactions between major Chinese corporations and their sociopolitical ecosystem, explaining how they managed to grow, and in many cases thrive, within a political environment that many outsiders view (simplistically) as authoritarian and even repressive.
WHY THE CORPORATE ECOSYSTEM?

Understanding their sociopolitical ecosystem provides clues about the dramatic failures and setbacks of some Chinese corporations in recent years, the strange hybrid structures and networks that even successful corporations had to evolve to survive in their unique Chinese habitat, and why this adaptation to the Chinese ecosystem has led to serious obstacles for their international expansion and a highly unpredictable pattern of growth or decay at home.

The second main aim of the book is to show how the motivating forces or incentives of the existing Chinese corporate-political ecosystem have negatively impacted the broader natural-human ecosystem and to critically evaluate the current efforts of the Chinese government and some corporations to realign their behavior toward an ecologically sustainable path.

The concluding chapter argues that this ecological realignment is more likely to succeed if key elements in the current corporate-political ecosystem are rebalanced through realignment of its motivating forces, using insights from contemporary systems biology, ecological science, and behavioral economics, melded with vital concepts from traditional Chinese philosophy that strongly resonate with Chinese people even today. This is not a return to premodern ways of thinking but a synthesis of science and a traditional Chinese organistic vision that may help to transform a self- and other-destructive Chinese corporate-political ecosystem into a sustainable, life-promoting, natural-human ecosystem. At the same time, the conclusion acknowledges the immense difficulty of putting this vision into practice.

I.1 Why This Discussion Is Necessary: Runaway Success, Misunderstandings, Strange Networks, and Hybrid Structures

One of China’s best-known corporations on the international stage is Huawei Technologies. Despite its enormous success – as the world’s number one telecom networks equipment maker and number two smartphone seller, with reported revenues of over $100 billion in 2018 – it has become a poster child for the “China threat” in the United States and many other “Western” countries. The 2018 arrest of its chief financial officer, Meng Wanzhou, in Canada made international headlines and increased political tensions between the United States, Canada, and China. Yet this incident was only the latest volley in a lengthy campaign against the company by the US government.
In 2012, after a highly intrusive investigation of Huawei and its main Chinese rival, ZTE Corporation, the Permanent Select Committee on Intelligence of the US Congress expressed “deep concerns” that Huawei and ZTE “cannot be trusted to be free of foreign state influence and thus pose a security threat to the United States and to our systems.” While unable to point to any concrete evidence of Huawei’s involvement in espionage or other activities damaging to US national security, the Congressional Committee declared:

Huawei’s failure to provide further detailed information explaining how it is formally regulated, controlled, or otherwise managed by the Chinese government undermines the company’s repeated assertions that it is not inappropriately influenced by the Chinese government. Huawei appears simply unwilling to provide greater details that would explain its relationships with the Chinese government in a way that would alleviate security concerns.

The Committee was also perplexed by the fact that the CCP had a branch committee within Huawei, despite the company’s claim to be an employee-owned private corporation:

Huawei states in its defense that all economic institutions in China are required to have a state Party apparatus inside the company. This is not, however, a compelling defense for companies seeking to build critical infrastructure in the United States. Indeed, experts in Chinese political economy agree that it is through these Committees that the Party exerts influence, pressure, and monitoring of corporate activities.

The Committee also expressed its deep suspicion that Huawei may have hidden links with the Chinese military, because its CEO and founder, Ren Zhengfei, previously worked as an engineer in the People’s Liberation Army.

In its responses, Huawei continued to insist that it is a private corporation controlled by its employees and running its operations in a purely commercial way, that it has no ties to the Chinese military, and the Chinese government does not influence its management except in a normal regulatory fashion.

Was Huawei simply not telling the truth, attempting to cover up its hidden ties to the Chinese government and military, as the Congressional Committee suspected? Or did the Committee members simply imagine those ties based on a mix of paranoia and ignorance about how the Chinese government interacts with privately controlled Chinese corporations? Answering these questions clearly involves high geopolitical stakes.

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This book argues that the reality lies between these two polar positions and can be grasped only by examining how Chinese corporate ecosystems have evolved within a broader sociopolitical ecosystem. Within this strange superstructure, highly creative, sometimes shady, legal structures and alliances of convenience have grown up, based on mutual self-interest, and then morphed into other forms. Often surface appearances, such as CCP control over corporations, turn out to be deceptive when we examine how corporations actually behave and whose interests are really being served.

Part I (Chapters 1–3) examines several different types of corporate ecosystems through case studies of well-known firms. It traces the evolution of their hybrid corporate structures back to their interactions with the surprisingly pragmatic Chinese sociopolitical system, beginning with the “stakeholder communities” formed by private firms such as Huawei and the offshore “variable interest entities” of Alibaba, Tencent, and other private internet/e-commerce firms, which themselves have intersected with and greatly facilitated the contagious growth of small and medium enterprises. Finally, there is the continued presence of huge state-owned enterprises (SOEs) – lumbering mutant dinosaurs that always seem to be on their last legs but strangely refuse to become extinct.

Part II (Chapters 4–7) moves beyond case studies of corporate types to focus on the influence of key forces that act on the corporate ecosystem, either assisting or impeding its growth. These include the Chinese government and the CCP, corruption and anti-corruption measures, guanxi (utilitarian networks of personal relationships), and the ever-evolving legal system. Their impact on corporations is complex because they themselves often embody inner contradictions. This means that corporations must constantly adapt their behavior and create disjunctions between their public statements and private actions to accommodate the conflicting and shifting demands of these external forces.

Finally, Part III (Chapters 8–10) traces how the various contending forces within the Chinese corporate-political ecosystem have negatively impacted the natural-human ecosystem in recent history, critically analyzes the current efforts of the Chinese government to address the environmental crisis caused largely by polluting corporations, and suggests how incentives might be adjusted to encourage Chinese corporations (and government officials) to promote natural-human ecosystem flourishing.
I.2 Defining the Corporate Ecosystem

The term “business ecosystem” was coined by James F. Moore in the early 1990s to describe the ways in which leading companies “coevolve” as part of a complex web of relationships with their affiliates, suppliers, customers, and competitors. Within each major business ecosystem, there may be a leader, such as Apple or Walmart, yet these leaders must constantly adapt and innovate in order to keep up with the competition from both external business ecosystems and members of their own web. “What remains the same from business to business,” Moore noted, “is the process of co-evolution: the complex interplay between competitive and cooperative business strategies.”

Moore’s business ecosystem metaphor was inspired by the work of evolutionary biologists observing the natural world: He borrows two analogies from anthropologist Gregory Bateson’s *Mind and Nature*, of predators and their prey (at the competitive end of the spectrum) and flowering plants and their pollinators (at the cooperative end). These analogies illustrate the contrasting ways that interdependent species—and by extension businesses—“evolve in an endless reciprocal cycle in which changes in species A set the stage for the natural selection of changes in species B, and vice versa.”

While Moore’s use of this biological metaphor to describe the coevolution of businesses was new, a similar dynamic had already been identified as a distinguishing feature of Japanese business groups in the 1970s and 1980s. Westney noted the following typical characteristics of the leading Japanese business conglomerates (*keiretsu*) of that period: dense networks with suppliers to reduce inventories and encourage “just in time” logistics; close links to distributors, retailers, and customers to ensure that output matches the needs of the market; flexible organization of production to accommodate rapid model changes based on market demand; and close integration of R&D with production and customers so that little time is wasted on researching products that have no market potential.

While cooperating internally within their loosely affiliated groups, each *keiretsu* also competed with several others in the same industries, which kept them on their toes and ensured their efficiency. Though some scholars have questioned whether these tightly knit conglomerates ever really existed in Japan, the *keiretsu* myth was reinforced in numerous case studies of Japanese business success by popular American business gurus. And whatever the reality of Japanese industrial practices, by the 1980s the modernization and rapid evolution...
of Japan’s corporations undoubtedly led to them becoming a formidable competitive force challenging the established niches of US and European corporations, which in turn forced the latter to coevolve or collapse.\(^{17}\)

This was the period when struggling American and multinational corporate groups introduced Japanese-inspired practices such as total quality management, “lean manufacturing,” and just-in-time logistics. They also took advantage of the rapid development of data networks and the Internet during the 1990s, which allowed for the simultaneous sharing of information among far-flung members of their business networks and more responsive adaptability. Business leaders became keenly aware of the need to go beyond the individual firm (or core conglomerate), to collaborate much more closely with suppliers right up and down the chain, and to coordinate global production networks to maximize efficiency — in other words, to work with the whole “business ecosystem.”\(^{18}\)

Moore argues that the business success of these restructured business ecosystems depends on knowing when to cooperate and when to compete (wipe out one’s competitors) within each territory; one’s long-term suppliers or customers may even become predators or prey over time, depending on the coevolution of their businesses. Those that keep up to date with the competing and collaborating businesses in their ecosystem and remain nimble enough to adapt to their changing fortunes will survive and grow. Those who fail to coevolve will be taken over or fade away.\(^{19}\)

Moore’s concept of business ecosystems constantly engaged in cooperative competition is a useful way to look at how Chinese corporations behave, both in their domestic development and in their international expansion. However, there are three key elements that we need to add to Moore’s concept to fit the complex Chinese business and political environment today.

The first is to include the role of the government as a crucial influence on the evolution of each country’s business ecosystem.\(^{20}\) In China, there is pervasive formal and informal government involvement in corporate regulation — whether state-controlled or private — and the metaphor of coevolution, sometimes involving cooperative symbiosis and sometimes turning into predator versus prey, is particularly apt in describing the relationship between the Chinese state and private enterprises. Interestingly, what looks like strong Communist Party control over both SOEs and private firms often turns out to be the opposite. Party branches and their Party secretaries are frequently “captured” through generous
remuneration packages; corruption influences the Party’s hiring and promotion decisions within SOEs; children of Party leaders are secretly given shares in highly profitable private corporations in return for protection and noninterference in management decisions; or corporations may act as “white gloves,” secretly assisting Party and government officials to launder their ill-gotten gains overseas, in return for lucrative business favors. Whichever direction the influence goes, it is a complex process of coevolution that needs to be included in any account of the Chinese corporate ecosystem.

The second element, surprisingly overlooked by Moore, is the bidirectional relationship between business ecosystems and the natural environment. Though he borrows his ecosystem metaphor from evolutionary biology, his own account is purely focused on economic relationships, as if the natural environment is simply not a relevant factor in evaluating the success of business ecosystems. This ecological blindness is common even in more recent accounts of “business ecosystems” in management studies journals. Of course, a primary function of businesses is to grow their economic returns, yet with increased public awareness about the dangers of environmental pollution, climate change, and loss of ecological diversity, businesses that ignore their relationship with the broader natural ecosystems within which they operate can no longer guarantee superior economic returns over the long term.

Until recently, Chinese business firms have generally ignored their impact on the natural environment, with catastrophic consequences on the health of China’s waterways, arable land, and air and on the lives of Chinese people, as we show in Chapter 8. Yet this environmental damage has raised Chinese people’s awareness of the dangers of industrial pollution and spurred the Chinese government to introduce stricter regulations and promote green/sustainable technologies, including solar and wind power, electric vehicles, and smart eco-cities. Local government officials are also now evaluated on their environmental protection performance. The result is that Chinese businesses must now include the natural environment as an integral part of their corporate ecosystems, rather than ignoring it as an irrelevant externality.

Furthermore, as we demonstrate in Part III of this book, the whole distinction between the natural and human environments is arguably a false one, from the perspective of corporate behavior. Corporate harm to the environment generally means harm to human beings too, either within or outside the walls of the firm, hence this book’s adoption of...
the compound term natural-human ecosystem as the environment within which businesses operate.

The final element overlooked in Moore’s model of business ecosystems is the tension between ecosystems and traditional legal structures, especially the corporate form. Governments seek to fix the identity of businesses and regulate them through corporate laws, for the purposes of raising revenue and limiting their harmful impact on investors and the broader society. In turn, businesses regularly look for gaps and loopholes in those laws that allow them to maximize their profits while avoiding regulations and taxes as best as they can. A coevolving dynamic develops where new laws are introduced to plug the loopholes and creative corporate lawyers then assist businesses to discover new ways to avoid them, often using offshore and hybrid structures, in an endless dance of evasion.26 This is an important element in the evolution of both corporations and the legal system.

Chinese multinationals must also learn to negotiate a variety of different political and legal systems in other countries, many of which view China as an economic threat or potential enemy. Their corporate ecosystems must be flexible enough to encompass “multiple worldviews and belief systems” and their executives must “court and even create ambiguity . . . [and] speak in many tongues.”27 Even so, they may still find that their healthy development in one political ecosystem (China) will inevitably stifle their expansion into another competing political ecosystem (the United States and its sphere of influence), particularly if their business involves any kind of “critical infrastructure” or has other “national security” implications, words that have significantly expanded their meaning recently.28 The ongoing saga of Huawei Technologies provides the clearest illustration of this broad political ecosystem incompatibility that impacts on the Chinese corporate ecosystem, but increasing numbers of Chinese SOEs and private firms are now subject to US economic sanctions.29

To give a balanced account of the impact of Chinese business ecosystems on contemporary society, and to make sense of Chinese corporations’ often weird behavior and their strange choices of developmental structures, all these three elements must be included and integrated, something that this book seeks to do. As this approach significantly expands Moore’s definition, and it also treats the corporate form or corporate groups as core organisms of the system, this book adopts the term “corporate ecosystem” to distinguish itself from such previous accounts, while still acknowledging the usefulness of Moore’s ecosystem and coevolution metaphors.
I.3 Why Not Corporate Governance?

Numerous books and thousands of articles have appeared on Chinese corporate governance in the past three decades. A comprehensive survey of this literature would require a book in itself, but there are several major drawbacks to adopting a corporate governance approach when studying Chinese business firms.\(^{33}\)

The first is that focusing on corporate governance immediately frames the analysis within the assumption that if Chinese corporations followed “international best practice” governance practices, they would become more efficient and perform better. As a result, many studies focus narrowly on Chinese corporate governance regulations, sometimes including broad statistical surveys of large numbers of firms to show whether or not they are complying with the regulations or how their performance is affected by certain practices, such as hiring independent