Environmental Change and the Rise of the Qin Empire: A Political Ecology of Ancient North China

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This thesis examines the long-term ecological transformation of the Guanzhong plain, capital region of China’s ancient empires, from the origins of agriculture to the fall of the Qin Empire in 208 BCE. It employs textual, archaeological and paleoecological evidence to reconstruct the natural environment of the region and examine how it was transformed by the centralization of political power.

Following the introduction, the second chapter reconstructs the geology, climate and ecology of the region before it was converted to farming. After discussing potential reasons why the region was not forested, it describes the many wild animals that once lived there in order to help the reader imagine an ecosystem that has long since disappeared. Chapter Three explores the environmental impacts of Neolithic and early Bronze Age societies, examining the formation of the North Chinese agricultural system through indigenous domestication and the arrival of already domesticated plants and animals from Central Asia. It also discusses the environmental impacts of these small-scale farming communities.

Chapter Four employs the Book of Odes and other evidence to analyze the human ecology of the Western Zhou period (1045-771 BC). It then considers the political ecology of the Western Zhou state, arguing that because it remained an alliance of independent economic units, it was far less aggressive towards the environment than later states despite its formidable military reach.

Chapter Five begins by arguing that the constantly increasing scale of warfare in the subsequent Eastern Zhou period (771-221) prompted states to extend their control over resources and people, leading to the development of centralized bureaucracies. It also discusses the evidence for the origins and spread of iron tools and ox-drawn ploughs in early China.

Chapter Six focuses on the political history of Qin, beginning with its origins, occupation of the Guanzhong and consolidation up to the fourth century. The second half of the chapter discusses the reforms of Shang Yang, which greatly increased the power of the state over the environment, and the Zheng Guo canal project, which transformed the northeast of the plain.

Chapter Seven employs archaeologically excavated documents to study the political ecology of Qin during the reign of the First Emperor, who reigned from 246 to 210. Qin’s power was based on its rank-based land grant system, state ownership of non-agricultural land and the large-scale use of convict and slave labor. Chapter Seven employs archaeologically excavated documents to analyze the political ecology of Qin during the reign of the First Emperor, who reigned from 246 to 210. Qin’s power was based on its rank-based land grant system, state ownership of forests and wetlands, and the large-scale use of convict and slave labor. Because it was so centralized, the Qin state had a remarkable amount of control over how land was exploited in its domain. Although the empire did not last long, its centralized bureaucracy became the standard model of political organization in China, playing an important role in the spread of agricultural societies across the subcontinent.
China: Geographical and historical treatment of China, including maps and statistics as well as a survey of its people, economy, and government. The diversity of both China’s relief and its climate has resulted in one of the world’s widest arrays of ecological niches, and these niches have been filled by a vast number of plant and animal species. Indeed, practically all types of Northern Hemisphere plants, except those of the polar tundra, are found in China, and, despite the continuous inroads of humans over the millennia, China still is home to some of the world’s most exotic animals. Probably the single most identifiable characteristic of China to the people of the rest of the world is the size of its population. Some one-fifth of China’s extraordinary economic growth and active diplomacy are already transforming East Asia, and future decades will see even greater increases in Chinese power and influence. But exactly how this drama will play out is an open question. Will China overthrow the existing order or become a part of it? And what, if anything, can the United States do to maintain its position as China rises? That course, however, is not inevitable. The rise of China does not have to trigger a wrenching hegemonic transition. The U.S.-Chinese power transition can be very different from those of the past because China faces.