Introduction

China today is ruled by Red engineers. This term, which dates from the 1950s when China was embarking on Communist-style industrialization, was condemned during the Cultural Revolution and has not been revived since. In the 1980s, however, the Red engineers who received academic and political training at elite technical universities in the 1950s and early 1960s began moving into positions of power. They systematically replaced the first generation of Communist cadres, initially at the lower and middle levels, and then during the 1990s at the very highest levels of the Chinese Communist Party (CCP). Today, eight out of nine members of the Standing Committee of the party's Political Bureau were trained as engineers.

China's Red engineers, not by coincidence, resemble the officials who staffed the upper levels of the state machinery in the Soviet Union and Eastern Europe prior to 1989. The Soviet Union provided a model for China and other countries where Communist parties came to power, and for decades it was led by men who had degrees in engineering or agronomy, including Leonid Brezhnev, Alexei Kosygin, Andrei Gromyko, Yuri Andropov, and Mikhail Gorbachev. Red engineers in the Soviet Union, China, and elsewhere ruled socialist societies that in many ways resembled the technocratic vision of Henri Saint-Simon. In the early nineteenth century, Saint-Simon's followers had envisioned an industrial order that would transcend the avarice of capitalism by converting the means of production into public property and

conducting economic planning based on scientific principles. Although they saw inheritance and private property as unjust and inimical to progress, theirs was a supremely elitist vision, in which a talented and enlightened group of industrial leaders, scientists, and engineers would govern society.[1]

Of course, the Chinese Communist Party, like the Russian Bolsheviks, had originally championed a Marxist rather than a Saint-Simonian vision of socialism. Marx adopted the basic premises of Saint-Simonian socialism, but rejected its hierarchical character. While Saint-Simon endeavored to establish a society ruled by the talented, Marx sought to eliminate all class distinctions, including the distinction between mental and manual labor, and while Saint-Simon set out to organize a movement of the educated elite and recruited an enthusiastic following among graduates of Paris's prestigious École Polytechnique, Marx called on the proletariat to serve as the revolutionary vanguard because, he reasoned, they had little to lose by doing away with the existing class hierarchy.[2] It was Marx's ideas, with their egalitarian thrust, rather than those of Saint-Simon, which eventually galvanized the momentous socialist movements of the nineteenth and twentieth centuries. Moreover, the Communist parties that took power in Russia, China, and other countries espoused a particularly radical interpretation of Marx's ideas that committed them to mobilizing the most downtrodden classes, seizing state power by force, crushing the resistance of the old elites, and ruthlessly eliminating all class distinctions. After they came to power, these parties did, indeed, radically change the class order, but in the end they did not do away with class distinctions. The class hierarchy based on private property was destroyed, but a new hierarchy based on political and cultural power emerged, with a class of party technocrats on top.

In this book, I seek to explain how and why the Chinese Communists ultimately replaced Marx's vision of a classless society with one worthy of Saint-Simon. One possible explanation is that victorious Communist parties, despite their class-leveling rhetoric, always intended to build a technocratic society. This view has been put forward most cogently by George Konrad and Ivan Szelenyi in their seminal book, *Intellectuals on the Road to Class Power*. Konrad and Szelenyi argued that Communist parties, their claims to represent the proletariat notwithstanding, were actually the vanguard of the intelligentsia. The Communists' fundamental goal, they wrote, was to fulfill intellectuals' long-held ambition to displace aristocrats and capitalists and take the reins of society into their own hands by substituting public for private property and

planning for the market. Konrad and Szelenyi were among a wave of scholars in the 1960s and 1970s who emphasized the technocratic nature of Soviet and Eastern European elites, and they produced a brilliant insider's account of how power was distributed and wielded in Soviet-type societies.[3] Although they were personally involved in the "New Class project" they described, they subjected it to an unsentimental analysis of interests, revealing the connections between class power and the celebration of knowledge and science. The tension in their narrative is provided by contention between the Communist vanguard, who stubbornly tried to maintain the prerogatives of political power, and the wider intellectual class, who sought to make knowledge the principal basis of class power. This struggle revolved around the competing claims of political capital (party membership and political connections) and cultural capital (knowledge and academic credentials). Konrad and Szelenyi predicted that the rational premises of socialist planning would ultimately lead to the triumph of cultural capital, fulfilling what they claimed was the true essence of the Communist mission.[4] Their argument was provocative and compelling, and it profoundly influenced scholarly discussion about the class structure of socialist societies.

Although the technocratic characteristics of China's New Class fit Konrad and Szelenyi's theory to a tee, its history does not. One dramatically incongruous element in this history was the harsh attacks on intellectuals during the first decades of Communist power in China. For over a quarter century, the Chinese Communist Party worked tenaciously to eliminate the class distinctions that separated intellectuals from workers and peasants. In their most radical moments, the Chinese Communists systematically discriminated against members of the old educated classes, eliminated entrance examinations and filled university classrooms with villagers who had not attended high school, denigrated the value of abstract knowledge, sent intellectuals to live in villages to be reeducated by peasants, and strived to level educational differences by providing nine or ten years of education to everyone—children of intellectuals, workers, and peasants alike—and then sending them to work. These hardly seem like policies invented by champions of the intelligentsia. Moreover, China's program of cultural leveling was not unique. The Bolsheviks made Marx's goal of eliminating the distinction between mental and manual labor into a central tenet of their program, and in the early years of Soviet power—especially during the period of cultural radicalism that accompanied the First Five Year Plan (1928–32)—they pursued radical education policies

similar to those later implemented in China. Konrad and Szelenyi's brief explanation for early Communist policies hostile to the educated elite—that they were part of a "costly but indispensable detour" necessary to build the strong state technocracy required—do not seem adequate.[5] It is even more difficult to fit into Konrad and Szelenyi's theory Mao Zedong's efforts to undermine the bureaucratic power of party officials. These efforts included harsh campaigns against cadres' privileges and abuse of power, which reached a crescendo during the Chinese Cultural Revolution, when Mao called on workers, peasants, and students to overthrow local party authorities in order to prevent Communist officials from becoming a "bureaucratic class."

In this book, I tell the story of the rise of China's New Class. In order to explain the incongruities noted above, this account diverges from Konrad and Szelenyi's theory in two ways. First, I do not insist that Communist cadres, most of whom were peasant revolutionaries with relatively little education, play the role of vanguard of the intelligentsia. Instead, I develop an analytic framework that I believe more accurately describes much of the conflict that followed the 1949 Revolution: contention and cooperation between a new political elite and an old educated elite. The new political elite was largely composed of peasant revolutionaries and the old educated elite was mainly made up of members of the dispossessed propertied classes. Although there was overlap between the two groups, for the most part their social origins were distinct, they had discordant value systems, and they relied on different types of resources. Members of the first group controlled the reins of political power but had little education, while members of the second group faced severe political handicaps but possessed substantial cultural resources. The New Class in China, I argue, was the product of a violent and contentious process that ultimately culminated in the convergence of these old and new elites.

Second, I take seriously Communist efforts to eliminate class distinctions. While Konrad and Szelenyi treated the emergence of a technocratic class as the achievement of Communist class-building strategy, I treat it as the failure of Communist class-leveling efforts. If the New Class was simply the product of deliberate construction, the process need not have taken so many harrowing twists and turns. I will argue that Communist parties fundamentally changed course, abandoning the road of class leveling and taking instead a technocratic road. They were converted from enemies into champions of cultural capital, a transformation that Konrad and Szelenyi obscured in their endeavor to portray the Communist movement from its

inception as a technocratic project of the intelligentsia. Thus, I will argue that Konrad and Szelenyi's boldest claim—that victorious Communist revolutionaries *deliberately* built a technocratic order ruled by an educated elite—does not hold true. If we remove this supposition of intention, however, it becomes possible to ask a more interesting question: Why—despite forceful efforts to the contrary—did the Communist project result in the creation of a new dominant class of Red experts? Answering this question is the chief purpose of this book.

There are powerful reasons to conclude that this result was inevitable. Every Leninist state that survived for a significant length of time eventually gave rise to a technocratic class order, and the technical requirements of economic planning provide a ready functional explanation for the consistency of this outcome. Some, therefore, might be inclined to close the case without further investigation. It is always wise, however, to examine cautiously claims of historical inevitability and functional necessity, especially when one is investigating the origins of a system of social differentiation in which group interests are involved. Even though I am not convinced by Konrad and Szelenyi's account, I share with them an inclination to explain history as the product of conflicts between interested parties. Moreover, we can learn a great deal by studying the problems encountered by the Communist class-leveling projects of the twentieth century. Marxist revolutionaries vowed not only to eliminate private wealth, but also to redistribute political and cultural power to the masses, and their radical democratic and egalitarian rhetoric was converted into far-reaching social experiments. By carefully scrutinizing these experiments and identifying the reasons they failed, we can inform future redistribution efforts, which will undoubtedly run into some of the same problems.

Research Strategy

I chose to investigate China because it is an extreme case. China had much in common with other states that implemented the Soviet model; what makes the Chinese case stand out is the Cultural Revolution. As the following chapters will show, the Cultural Revolution was a determined effort to undermine the political and cultural foundations of an emergent stratum of Red experts. Scholars investigating other Leninist states have appropriately compared political campaigns and policies in these countries to aspects of the Chinese

Cultural Revolution, but no other state experienced such a protracted, tenacious, and disruptive effort to prevent the emergence of a technocratic class. If we want to know whether the rise of such a class was inevitable, it makes sense to study China.

This book is based on a case study of a single educational institution, Tsinghua University in Beijing. Tsinghua is China's consummate trainer of Red engineers. It is the country's premier engineering school, and the university's party organization is renowned for grooming political cadres. Today, Tsinghua graduates occupy key positions in the upper echelons of the party and state bureaucracies, and one-third of the members of the Political Bureau's Standing Committee, including Secretary General Hu Jintao, are alumni.[6]

China's Red engineers have been cultivated by two highly selective credentialing systems, one academic and the other political, both of which were modeled after Soviet institutions. The academic credentialing system consists of a pyramid of increasingly selective schools, starting with primary schools and culminating in a small number of elite universities. The political credentialing system is the party's recruitment apparatus, consisting of a parallel hierarchy of increasingly selective organizations. In primary school, young people compete to join the Young Pioneers, and in secondary and tertiary school they compete to join the Communist Youth League and then the Communist Party. Because of both technical requirements and ideological inclinations connected with industrialization, Tsinghua and other elite engineering schools are located at the pinnacle of both credentialing systems.

I chose to study a university because I wanted to be able to closely examine the struggles surrounding the academic and political credentialing systems, and I selected Tsinghua because it was a singularly important battlefield. Whether policy veered to the Left or the Right, the university served as a model for other schools to follow. During the decades after 1949, Tsinghua grew into a sprawling multifaceted institution that encompassed elite primary and secondary schools, numerous factories, onsite programs to train workers, peasants, and "worker-peasant cadres," and satellite schools in remote work sites and villages. All of these programs served as showcases for highly contentious social experiments. Conducting a detailed case study allowed me to analyze, from a ground-level perspective, how both the academic and political credentialing systems actually functioned, how they changed, and how the conflicts over them unfolded. I was able to observe how radically different education policies were implemented, and follow the construction of the party and Youth League

organizations at the university, as well as their collapse during the Cultural Revolution and their subsequent reorganization. By closely following changes in a particular institution, I was able to develop a much richer and more concrete story than if I had simply studied conflicts among top party leaders, the evolution of national policy, and countrywide statistical trends.

In this book, I am attempting—in the words of Michael Burawoy—to "extract the general from the unique."[7] Tsinghua is hardly a typical Chinese university; it is located at the apex of the education system, and other schools never had the resources—and often did not have the inclination—to fully implement the exemplary policies and programs developed at Tsinghua. In the following chapters, I will often point out ways in which Tsinghua was peculiar or unique. Nevertheless, the battles at the university were emblematic of wider conflicts, and we can learn much about these conflicts by examining how they played out at Tsinghua, which was always at the epicenter. China was also hardly typical of Leninist states. Countries that implemented versions of the Soviet model have so much in common, however, that it is worthwhile developing a common theoretical framework. Students of the early history of the Soviet Union and other countries in which Communist parties came to power by means of indigenous revolutions will surely recognize a family resemblance in many of the contradictions, conflicts, and policies described in the following pages. After carefully analyzing the Chinese case, with all of its irreducible peculiarities, it will be possible to compare cases, and draw more general conclusions.

PREVIOUS SCHOLARSHIP

The territory covered in this book has already been partially charted by others. Four genres of scholarly literature, in particular, extensively overlap my efforts. Central elements of this book—two elite groups and two credentialing systems—each figure prominently in one of these four genres. The first two are concerned with Communist cadres and intellectuals, while the third and fourth examine China's education and political systems. Scholars writing in the first genre have recounted how a party of poorly educated peasant revolutionaries was transformed into a party of technocratic officials.[8] Although most Communist cadres received at least a modicum of technical training after 1949, the basic story told in this genre of scholarship is of a generational change that takes place after an epochal decision in 1978 to emphasize technical over political

qualifications. Remnants of the old elite classes remain in the background and the class origins of the new technocratic elite receive little attention. Scholars writing in the second genre have recounted the troubled relationship between Chinese intellectuals and the Communist regime.[9] During the Mao era, this is mainly a story of conflict, in which the Anti-Rightist movement and the Cultural Revolution loom large. Intellectuals are employed by the party/state, but are also persecuted by it; they are offered opportunities to serve, but only on Communist terms, and they must choose whether to collaborate and try to influence policy or resist. Some intellectuals join the party, and during the reform era conditions improve greatly, but the protagonists remain unchanged: intellectuals on one side and the party/state on the other. Although conflict is central to these accounts, group interests scarcely register; instead, the battles are typically about protecting space for scientific endeavor, intellectual autonomy, and humanistic ideals against the imposition of party/state dictates.

Scholarship on the Chinese education system has analyzed radical changes in education policy, while scholarship on the political system has investigated the evolution of the party system, including its breakdown during the Cultural Revolution.[10] Some scholars have explored the ways in which each of these systems has served as a mechanism of class differentiation, but the main analytical interest of most work on the education system has been the efficacy of policies in terms of conventional educational goals (quality and quantity of training), and the main analytical interest of most work on the political system has been the efficacy of policies in terms of conventional political goals (political and social control).

While the present account has benefited greatly from insights derived from scholars writing in all four genres, my research agenda is different, and it has led me to tell a story that has not been told by the works in any of these genres. Although the first two genres illuminate much about the trajectories of one or the other of the two elite groups at the center of this book, neither captures the contentious process of inter-elite convergence described in the following pages. The third and fourth genres tell us a great deal about each of the two credentialing systems at the center of this book, but they largely miss the interaction between them. Works on the education system mention the political system in passing, and works on the political system mention the education system in passing, but their analytical interests are typically confined to one realm or the other. This book is about both systems, and its analytical interest in each is the same: how the system reproduced class differentiation. More-

over, I am particularly concerned with the links between the two systems, and the political struggles chronicled in this book almost always involved both systems and both elite groups.

A fifth genre, with a narrower scope, has analyzed the social bases of contending local factions during the Cultural Revolution.[11] These accounts highlight conflict between intellectuals and party officials, and between children of the two groups. Moreover, they identify educational and political admissions policies—some of which benefited children of intellectuals, while others benefited children of party officials—as key objects of contention and determinants of factional alignment. Thus, a central theme of the present account—inter-elite conflict over academic and political credentialing policies—fits well into this genre, and my analysis of student factional struggles at Tsinghua during the Cultural Revolution (see Chapters 4 and 5) will engage these accounts in detail. While they stressed inter-elite conflict, however, I highlight strong manifestations of inter-elite unity even at the height of the battles of the Cultural Revolution, and I present these battles as part of a longer process of inter-elite convergence.

CONCEPTUAL FRAMEWORK

I use the conceptual framework Pierre Bourdieu developed to analyze class distinctions based on different types of capital.[12] Although Bourdieu mainly employed his tripartite framework—economic, cultural, and social capital—to analyze the class structure of a stable capitalist society, others have found it just as useful for analyzing radical changes in class structure. Szelenyi and others have been able to cogently describe the transitions to and from socialism in terms of changes in the relative importance of these three types of capital.[13] Communist regimes eliminated economic capital by abolishing private property in the means of production, and although control over these means of production still mattered, access to control was no longer provided by private ownership, but rather by cultural and social capital. Because Eastern European societies were dominated by Communist parties, the key form of social capital was political. As a result, class position was largely determined by an individual's stock of cultural and political capital.[14]

When Bourdieu spoke of cultural capital, the assets he had in mind—educational credentials and knowledge that provide access to advantageous class positions—are largely the same as those that many economists and sociologists

discuss under the rubric of human capital.[15] The two terms, however, signal different analytic interests. While theorists of human capital investigate how returns on investment facilitate individual and social progress, Bourdieu investigated how individuals and groups use the institutions that underpin cultural capital to reproduce class privilege and power. Political capital, in Bourdieu's framework, is also about privilege and power. He conceived of political capital as a form of social capital, which he defined as "the actual or potential resources which are linked to the possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition—in other words, to membership in a group—which provides each of its members with the backing of a collectively-owned capital, a 'credential' which entitles them to credit."[16] In the countries of the Soviet bloc, Bourdieu agreed, the most important form of social capital was political, based on party membership.[17]

Because I have chosen to focus on conflicts surrounding academic and political credentialing systems, I am mainly concerned with what Bourdieu called *institutionalized* forms of capital. The credentials distributed by these systems—including academic certificates and party membership—are critical resources used to gain access to advantageous class positions. These institutionalized forms of political and cultural capital, however, are closely connected to less tangible *embodied* forms. In the cultural field, embodied capital consists of the actual knowledge possessed by an individual, including knowledge imparted as part of the school curricula as well as a broader range of cultural competences—such as manners and tastes—that distinguish the educated from the uneducated classes. Embodied political capital consists of the social networks an individual cultivates around a party organization. In this book, unfortunately, I have been compelled to give embodied forms of capital less attention than they deserve in order to focus on the institutionalized forms.

This book is essentially an analysis of struggles over the redistribution of different types of capital. Like Szelenyi, I am particularly interested in the ability of elites to maintain their social positions across revolutionary social transformations that undermined the value of one type of capital, while enhancing the value of others. In addition to the fate of elite groups, however, I am interested in the results of Communist redistribution schemes intended to eliminate class distinctions by dispersing the possession of capital. Bourdieu's tripartite framework provides a useful conceptual template to gauge the results of Communist class-leveling efforts. The extent of class differentiation

can be appraised in terms of the concentration of capital in the economic, cultural, and political fields. Any resource—whether physical property, knowledge, or political power—can only serve as a means of class differentiation to the extent that it is distributed unequally. Class power is based on the concentration of these resources in the hands of a minority and it is perpetuated by institutions that reproduce this unequal distribution. Redistribution can transfer capital from one elite group to another, further concentrate capital in the hands of an elite group, or disperse capital more widely through the population. Policies that further concentrate capital increase the gap between classes, while policies that disperse capital diminish this gap.

Tumultuous Rise of China's New Class

Stripped to its most basic elements, the story of the rise of China's New Class, as told in this book, can be summarized as follows: In the first years after the 1949 Chinese Revolution, economic and cultural capital were concentrated in the hands of the old elite classes, while political capital was concentrated in the hands of the new Communist elite, made up largely of peasant revolutionaries. The new regime first redistributed economic capital, dispossessing the old elites and converting the means of production into state and collective property. Although ownership was nominally public, control was concentrated in state and collective offices, and access to these offices was determined largely by possession of political and cultural capital. Having virtually eliminated economic capital, the CCP turned its attention to redistributing cultural capital, with the intention of further undermining the advantages of the old elite, an endeavor that reached its most radical point during the Cultural Revolution. The principal target of the Cultural Revolution, however, was the concentration of political capital in the hands of the new Communist elite. At Mao's instigation, grassroots insurgents challenged the power of local party officials, precipitating two years of factional violence. The upheaval initially exacerbated tensions between the old and new elites, but Mao's simultaneous attacks on both groups ultimately forged inter-elite unity. After Mao's death in 1976, the new CCP leadership renounced class leveling and reconciled with the old elite. This facilitated the consolidation of a technocratic class order and the emergence of a New Class, which had roots in both the old and new elites and combined their political and cultural assets.

Tsinghua University is a narrow frame through which to tell this story, one that misses the top echelons of power and the economic infrastructure of the country. The university, however, provides an excellent vantage point to closely observe the evolution of the academic and political credentialing systems, which became the key institutional foundations of the technocratic order. Tsinghua and other elite universities were at the center of the contentious convergence of old and new elites. They were an important site where the two groups met, initially in the persons of incumbent faculty and Communist cadres dispatched to take charge of the schools. Members of the first group were virtually all from well-to-do families and they had been educated in the best schools in China, the United States, Japan, and Europe, while members of the second group were battle-hardened revolutionaries who had been trained through years of rural warfare. More important, these universities were selecting and training students who would become the Red and expert elite. Children from both elite groups, along with a small but growing number of children from working-class and peasant families, filled the classrooms of top-ranked universities, where they competed not only academically, but also to join the Youth League and the party, striving to become both Red and expert.

Tsinghua became *the* focal point of conflict over both the academic and political credentialing systems. During the first seventeen years of Communist power, the university cultivated a reputation as the "cradle of Red engineers," and for this reason Tsinghua and its leaders became prominent targets during the Cultural Revolution. The university served as the base of the most influential of the contending student factions, and after the suppression of a freewheeling factional struggle it was taken over by radical leaders determined to eliminate educational elitism and undermine the bureaucratic power of the party officialdom. Then, after the Cultural Revolution was repudiated following Mao's death, the university cemented its position as the premier training ground for the type of technocratic cadres preferred by the party's new leadership. Tsinghua, therefore, provided an ideal site to analyze in detail the contentious process through which old and new elites coalesced into a New Class and Mao's failed efforts to block the way.

This book is composed of four chronological parts, each of which is divided into thematic chapters. The first part, covering the period between the Communist seizure of power in 1949 and the outbreak of the Cultural Revolution in 1966, is composed of three chapters. The first two chapters examine the controversies and conflicts that surrounded the construction of the political

and academic credentialing systems at Tsinghua. Chapter 3 recounts how the CCP's determination to combine Redness and expertise, originally driven by class-war logic, ultimately promoted the coalescence of the new and old elites. The chapter closes by identifying powerful political and structural obstacles that effectively blocked the rise of a technocratic class.

The second part recounts the early years of the Cultural Revolution, from 1966 to 1968, when Mao called on students, workers, and peasants to attack both the political and educated elites. Through a detailed examination of how the ensuing factional struggle unfolded at Tsinghua University and its attached middle school, Chapters 4 and 5 show that while the movement initially greatly aggravated conflict between the old and new elites, giving rise to an explosion of factional fighting between children of Communist cadres and children of intellectuals, ultimately it also forged inter-elite unity.

The third part covers the late years of the Cultural Revolution, from 1968 to 1976, when Mao attempted to institutionalize the radical class-leveling program that had led him to launch the movement, with the explicit aim of preventing the development of a new privileged class. Chapter 6 examines the experimental system of governance created during this period, which was based on a volatile arrangement of institutionalized factional contention. Chapter 7 scrutinizes radical education policies designed to eliminate occupational distinctions between mental and manual labor, and Chapter 8 looks into the system of "mass recommendation" created to replace college entrance examinations, which was designed to increase the number of students from working-class and peasant families. These chapters examine how these policies were carried out in practice and assess their potential to actually diminish class distinctions.

The fourth part examines the establishment of a technocratic order after Mao's death in 1976 and its subsequent evolution. Chapter 9 recounts how the academic and political credentialing systems were rebuilt, enhancing their capacity to select and groom a stream of Red and expert cadres to staff the upper levels of the state bureaucracy. Chapter 10 traces the convergence of old and new elites and the consolidation of a new technocratic class. Chapter 11 considers the consequences of the sweeping economic reforms that began in the 1990s, which have left China's Red engineers presiding over a peculiar variety of capitalism. The main concern of the chapter is to ascertain how China's technocratic class order, which had been based mainly on political and cultural capital, is being transformed by the reemergence of economic capital.

The concluding chapter compares the two most important twentieth-century Communist experiments, in the Soviet Union and China, and proposes revisions to New Class theory. I show that in their early years the Communist regimes in both countries forcefully pursued class leveling, but that they later decisively abandoned this goal in order to implement technocratic policies, leading to very similar results. I suggest reasons why the Chinese made this fundamental switch, and then consider whether or not it was inevitable.