

History: The “Ideology” Before the “Science”

In the late twentieth century, China’s outsized population meant that managing the quantity and quality of China’s people would be crucial to the success of the Chinese Communist Party’s historic missions of making socialist revolution, fostering socialist construction, and restoring the nation’s greatness on the world stage.

Governing the population required framing the problem of human numbers and then defining its best solution. Most Westerners think of “the population problem” in Malthusian terms of population growth outstripping economic growth. Yet Karl Marx, Malthus’s adversary and the intellectual father of the Chinese Communist movement, insisted that the problem of population was not universal or absolute, but relative to the mode of production. Although Marx did not elaborate a theory of population and its management, both Marx and his collaborator Frederick Engels, as well as Lenin and Stalin in the Soviet Union, had things to say on the population question. In the mid-twentieth century, the leaders of the new Chinese People’s Republic, the latest entrant to the socialist camp, had to take these views very seriously.

As Marx had suggested, the young People’s Republic faced a set of population problems that was distinctive to its socialist mode of production. In the early years after the 1949 liberation, a variety of reproductive and population problems drew the attention of party leaders. Women cadres began demanding access to birth control so they could devote more time to studying and working for the revolution. The restoration of

peace and the promise of collective prosperity stimulated vigorous population growth, raising the question of whether larger numbers were beneficial or detrimental to socialist construction. The problem that soon came to most exercise party leaders was what Edwin A. Winckler and I have called China's "socialist birth problem": socialist institutions that encouraged more births than they could support (*GCP*: 60). An over-large population imposed a great "burden" on the socialist state, which was responsible for employing, educating, feeding, and housing it. The most socialist solution was to include population growth, along with economic and social development, within the overall development plan of the state. Mao Zedong himself was the principle author of this formulation. In one of the most famous speeches of his political career, "On the Correct Handling of Contradictions among the People," delivered to the Supreme State Council in February 1957, he defined the population problem as one of anarchy, and its solution as birth planning:

Our plans, work, [and] thinking all should start from the [awareness] that we have a population of 600 million. . . . Here [we] need birth control; it would be great [if we] could lower the birth [rate] a bit. [We] need planned births. I think humanity is most inept at managing itself. It has plans for industrial production . . . [but] it does not have plans for the production of humans. This is anarchism, no government, or organization, no rules. If [we] go on this way, I think humanity will prematurely fall into strife and hasten toward destruction. (Mao 1989[1957]: 159)

Socialist "birth planning" (*jihua shengyu*) differs from the Western liberal notion of "family planning" in that the role of the party-state is paramount: births are planned by the state to bring the production of human beings in line with the production of material goods. Under Chinese socialism, population policy breaks population growth down into its demographic determinants—the number of children, their spacing, and the timing of marriage and childbirth—and subjects each of them to regulation by the socialist state. Indeed, it is only in such a state-managed, social-engineering kind of reproductive system that a one-, two-, or three-child policy becomes thinkable. State birth planning is a unique invention of PRC statecraft.

Like many policies of the early Deng era, the one-child policy was born of the traumas of Maoist China. The damage Mao inflicted on China's population politics and policy is legendary. This story has been told before. What has not been relayed in a compelling way is the devastation Mao visited on population science and how that shaped the making of population policy in his day and beyond.¹ It is the contention

of this book that the treatment of science and the science-politics relationship under Mao—the reordering of the sciences, the redrawing of the boundaries between science and the regime, and finally the decimation of the human sciences—was fundamental to the creation of the one-child policy in the years following Mao’s death. Leader influences—the traditional preoccupation of China political science—largely determined *whether* and *when* China’s population would be subject to management by the state, but science shaped *how* it would be governed.

In the early 1950s, the regime declared population a field of interest and a matter of state. But how would population be governed in the young People’s Republic? What tools and techniques, logics and rationales would guide the making of population policy? From the mid-1950s, the authoritative formula for governing the population was the state planning of births. In a nation of a half-billion and growing, the planning of social and economic development, including population growth, was a complicated matter, especially for a new and inexperienced government. Moreover, like other objects of modern governance (“society,” “economy”), “population” was an abstract entity that possessed its own internal laws of operation. The best source of ideas and methods for managing this new object of governance was the social science of population, whose job it was to illuminate the characteristics and dynamics of the population. In the West the field of population studies is known as demography. Because Chinese population studies was constituted quite differently, I largely avoid the term “demography” and call it simply the social or human science of population.

In the first decade of the PRC, China’s population field, though small, possessed a variety of logics (theories, hypotheses, historical cases) and techniques (for data processing, calculation, representation) that could have helped the new government understand the dynamics of population growth, problematize the population issue, and work out the complexities of state planning and policymaking. But China’s experts on population would not be allowed to provide those services. Instead, they would find their careers and in some cases also their lives destroyed. The decimation of the nation’s scientific capacity was one of the most misguided and politically consequential moves of the Mao party. (One set of sciences—that involved in national defense—was preserved and fortified; I leave this second half of the science story for a later chapter.) In a series of campaigns, the party under Mao subordinated, silenced, and finally decimated the social science of population. In the reordering of higher education movement of the early 1950s, the

party erased the boundary between the social sciences and party politics, making social science part of Marxian ideology/party politics. In the Anti-Rightist Campaign of the late 1950s, the party silenced the population field's most prominent and prescient spokesman, turning the study of population into a dangerous, indeed, forbidden zone of intellectual practice. During the Cultural Revolution of 1966–1976, social scientists who were still doing intellectual work were robbed of any remaining credibility by being dragged into the vicious class politics of the day. The party's politicization of population knowledge and debasement of population specialists would have profound effects on the making and content of population policy during Mao's day and beyond.

Despite Mao's deep ambivalence about population control, in the waning years of Mao's rule his able premier, Zhou Enlai, managed to get birth planning on the agenda. Zhou's efforts would be greatly constrained by the difficult environment of late Maoism, however. In China's tumultuous Maoist history (1949–1976), the Cultural Revolution stands out as the time when radical antimodern ideology most totally eclipsed reasoned policymaking. For readers unfamiliar with that regressive era in China's history, when the antiscientific, antirational, anti-Western strands in Maoist political culture had their greatest effect, it is necessary to briefly review its core political struggles since they had a profound impact on the making of China's population policy, not only during the Cultural Revolution but after it ended as well.²

In 1966, Mao launched the Great Proletarian Cultural Revolution to purge (putative) enemies of his revolution. That year he unleashed the youthful Red Guards, who rampaged through the streets destroying remnants of old culture, attacking all established authorities, and shutting down the government. When in 1969 the nation stood paralyzed and on the verge of fracturing, Mao called in the army to quell the violence. In the spring of that year, a party congress declared the Cultural Revolution over and restored the institutions of government. Yet the relative calm soon gave way to a second phase of the Cultural Revolution that was less violent but equally corrosive. After an aborted coup d'état by Lin Biao, Mao's heir apparent, in 1971, the nation's elite politics was dominated by a struggle over succession to Mao. Mao masterminded the contest by allowing development-oriented moderates under Zhou to control the executive organs of the political system while giving a radical, "ultraleftist" clique led by his wife Jiang Qing (later dubbed the "Gang of Four") control of the powerful propaganda and media systems. The years 1973–1976 brought a seesaw between these two

camps, as the moderates strived to create sound policies and stable institutions to develop the economy while the radicals launched media attacks and mass campaigns to revolutionize the political climate and undermine the modernizers. Mao intervened in the conflict on occasion to tip the scale in one direction or another, but he never allowed one side to finally prevail.³ It was only in late 1976, when Mao’s death finally enabled the arrest of the Gang of Four, that modernizing projects such as birth planning could move steadily forward.

In the midst of these larger political struggles, birth planning, which had a fragile existence in the 1950s and 1960s, was reborn and struggled to achieve policy formalization, ideological legitimation, and programmatic institutionalization. Because there was no science of population to inform those efforts, they were guided by logics and techniques rooted in Maoist politics and Marxian ideology. Starting in 1970–1971, Premier Zhou and other development-minded moderates managed to tentatively institutionalize a process of population planning, policymaking, and program building. But because the party Center was unwilling to get involved in this politically dangerous arena and the Gang of Four was successful in implicating it in revolutionary politics, program leaders were constrained to work cautiously and away from the political Center, building policy and program in close consultation with the localities. Following a “mass line” policymaking process favored by Mao, program leaders created the moderate and flexible “later-longer-fewer” policy that allowed two children, well spaced and timed. After Mao’s death, the policymaking process of the mid-1970s would be labeled “ideological” and soundly rejected. Although the policy process was indeed guided by political rather than scientific logics, and it was slow and messy rather than efficient and precise, both that process and the policy it produced had important virtues. Even without numbers and science, in the institutional context of the 1970s the later-longer-fewer policy proved remarkably effective in gaining peasant compliance and reducing population growth.

After Mao’s death and the arrest of the Gang of Four in late 1976, the policy process became more regularized and the policy was sharpened and tightened, yet it was still subject to leftist campaigns. It was only in early to mid-1978, with the rise of Deng Xiaoping and the shift of the nation’s agenda to rapid modernization, that population control began to receive strong and consistent attention from the top leadership. The Deng party, however, faced serious problems of legitimacy. During the devastation of the Cultural Revolution, people had lost faith

in the party and the Marxian ideology that justified its right to rule. The party needed a new basis for its legitimacy, one that sharply distinguished it from Mao's party. The Deng party would find its salvation in "modern science," which in the Chinese cultural and political scheme was the very antithesis of "Maoist ideology." Despite the demographic, ideological, and political accomplishments of later-longer-fewer, the new leadership would reject that approach in favor of a much more forceful policy based on "modern science."

This chapter elaborates these arguments and provides some historical details essential for understanding what follows. We begin with Chairman Mao, a virtual dictator whose contradictory stances on population created the strained linguistic context within which population work had to proceed and whose mass campaigns prevented the sustained development of birth work for two full decades. The next section describes how the party subordinated, silenced, and finally abolished the field of population studies, depriving itself of the best source of advice on population governance. The succeeding four sections highlight the accomplishments of moderates associated with Premier Zhou, who managed to create a policy, plan, and program of population governance, and to ideologically legitimize them, in the politically challenging environment of the Cultural Revolution. The chapter's conclusion suggests why the achievements of the 1970s would appear inadequate to the leaders who succeeded Mao. Looking forward to next part of the book, it explains why "modern science" carried such appeal as a solution to the political, economic, and demographic problems those leaders faced.

MAO'S HANDIWORK: A DANGEROUS AND DIFFICULT PROJECT

In a country where every issue was swept up in the political maelstrom that was Maoist China, population control was an especially treacherous matter. Population limitation was an ideological minefield because it seemed neo-Malthusian heresy in a Marxian state.⁴ Soviet orthodoxy was heavily pronatalist. Until Chinese theorists found a way to legitimate the control of population growth in terms of the regnant Marxist-Leninist theory, any project to restrain population growth would be vulnerable to political attack.

Population control was also dangerous because during his quarter-century rule (1949–1976), paramount leader Mao Zedong articulated

changing and contradictory positions on the subject. Although Mao had no principled views on the population question, on several occasions he was provoked into speaking out on the issue. His initial and belligerent hostility to population restriction, followed by his flip-flops on the question, created a climate of uncertainty and fear around an already delicate matter, making it extremely difficult for supporters of population control to secure a fixed place for their project on the nation’s agenda. Without Mao’s personal support, the birth project could not go forward. During most of Mao’s tenure, population growth remained unchecked by any governmental program. The numbers of Chinese grew rapidly, slowing only in the early 1970s when advocates of population control managed to get a birth planning program installed countrywide.

In the Speech Space of Chairman Mao

Mao’s often colorful comments on population possessed what one Chinese observer has called “decisive influence” because of the leader-centric politics of language in the PRC (Qu 1987: 37). This leader-centered politics of discourse would shape not only policymaking but also science making—in Mao’s time and beyond. How did that politics work?

Mao’s China was an autocratic system based on personal fiat by a veritable dictator (Hamrin and Zhao 1995b; Yan 1995). In the People’s Republic, language has been a major domain of power politics. The Chinese political scientist Yan Jiaqi has shown how in this sharply hierarchical system, in which power is concentrated in the hands of a few, the power of discourse belongs to the dictator or his equivalent, who alone enjoys complete freedom of speech (Yan 1995). Under the “follow-the-leader imperative,” neither subordinate leaders nor anyone else are allowed to speak differently or think independently. The rules of the political game require that others always remain within the “speech space” of the top leader, using his words to express their thoughts. They may extract his words from their original context and stretch, rework, or even twist their meaning, but they must express their views in his formulations. In a system in which political formulations are either “correct” or “incorrect”—absolutely right or dead wrong—violation of correct language has been a serious and dangerous political offense. The speech-space rule and the sanctions for violating it were clearly evident in the sphere of population, endowing Mao’s every utterance with extraordinary significance and leaving everyone else, cadre and expert alike,

fearful of making discursive or ideological mistakes. Let us see what those remarks were. Following the rules of Chinese language politics ourselves, we pay only minimal attention to their historical context, simply listing the main utterances that would stamp the politics of population during Mao's lifetime and beyond.

In September 1949, in response to a taunt of U.S. Secretary of State Dean Acheson about new China's inability to feed its people, Mao loudly proclaimed his opposition to population control, declaring:

It is a very good thing that China has a big population. Even if China's population multiplies many times, [the PRC] is fully capable of finding a solution. . . . [R]evolution plus production can solve the problem of feeding the population. . . . Of all things in the world, people are the most precious. Under the leadership of the Communist Party, as long as there are people, every kind of miracle can be performed. . . . All pessimistic views are utterly groundless. (Mao 1954[1949]: 453-454)

By the mid-1950s, events had changed Mao's mind. In early 1957, in the context of a campaign for comprehensive state planning, he introduced the notion of the (state) planning of births in the Contradictions speech mentioned earlier. In October 1957, at the Third Plenum of the party's Eighth Central Committee, he elaborated this idea: "[As for] grasping the population problem, perhaps [we should carry out] three years of experimental pilots, three years of popularization, and four years of universal implementation. . . . Let's have a ten-year plan" (*ME*: 20; *GCP*: 72).

In January 1958, on the eve of the Great Leap Forward, Mao reversed himself again. Celebrating the productive labor power of a large population, he declared to the Supreme State Council: "for now a large population is better" (*ME*: 22). In August 1958, at a party conference in Beidaihe, Mao was positively optimistic: "[Our] views on population should change. In the past, I said that [we] could manage with 800 million. Now I think that one billion plus would be no cause for alarm. . . . When [people's] level of education increases, [they] will really practice birth control" (T. White 1994: 273). Mao did not repudiate birth control or birth planning, yet his about-face on the desirability of restricting population growth left his personal support for that project in some doubt.

In the 1970s, an aging Mao finally confirmed his (lukewarm) support for birth planning. In February 1974, he confided in a foreign visitor his worry that "the Chinese people are too numerous" (*ME*: 52). In December of the same year, Mao wrote in the margins of the State Planning Commission's "Report on the 1974 National Economic Plan": "it won't do to not control population [growth]" (*renkou fei kongzhi buxing*)

(*ME*: 54). These would be Mao’s last—and most productive—words on population.

On-Again, Off-Again: Birth Planning in Mao’s China

Mao’s varying “instructions” on population, combined with the destructive campaigns he launched to propel China into a communist utopia, meant that the creation and implementation of a birth planning policy could be pursued only intermittently (for the details, see *GCP*: chap. 3).⁵ In the early 1950s Chinese policy was Soviet-influenced and pronatalist. The 1953 census counted more than 580 million Chinese, prompting a decision that “the party approves birth control” (*ME*: 7, 8). With population growing rapidly, in the mid-1950s the state began to encourage individual birth control. That project was effectively sidelined in early 1957 when Mao proposed the very different approach of state birth planning. Mao’s speech stimulated an upsurge of public discussion and government advocacy of birth control. These efforts were soon halted with the launching of the Great Leap Forward and Mao’s early 1958 declaration that “for now, a large population is better.”

In the early 1960s, after the Great Leap collapsed, supporters managed to get population control back on the political agenda by advancing a limited program that embodied Mao’s concept of state birth planning, by then the only politically feasible framework within which population governance could be organized. Yet birth work was interrupted again, this time by the Cultural Revolution that erupted in 1966. During the early, Red Guard phase of the Cultural Revolution, the country descended into chaos. Virtually all routine functions of government ceased. In the late 1960s, barefoot doctors continued to purvey birth control to rural women, but the state planning of births ended.⁶

In the early 1970s, after order was restored, Premier Zhou Enlai succeeded in getting birth planning reinstated and, for the first time in the history of the PRC, extending it countrywide. In the mid-1970s, Mao’s last scribbling on population—“it won’t do to not control population”—provided the long-awaited authorization for the full-speed-ahead development of a policy and program. Advocates of birth planning seized on these words as the Great Helmsman’s acknowledgment of the seriousness of China’s population problem and his authorization to expand the birth program and develop a legitimating theory. Although Mao died in 1976, because there were still people around who could use Mao’s words to cause trouble for population controllers, population would continue

to be a dangerous topic. One of the main tasks facing post-Mao population policy makers would be to neutralize that danger, making the control of population growth discussable once again.

A Huge Population Getting Huger

Before the institution of nationwide birth planning in the early 1970s, China's population responded erratically to the turbulent vicissitudes of Chinese socialism. Growth rates rose in good times and fell in bad. With population growth largely ungoverned—"anarchic," in Mao's term—the overall numbers of Chinese grew apace. When Mao declared the victory of the Revolution in 1949, the Chinese mainland was home to 542 million people. By the time he launched the Great Leap Forward in 1958, that number had grown to 660 million. On the eve of the Cultural Revolution the population had risen to 745 million. By 1970, when order was restored, it had climbed to 830 million. Put another way, with every passing decade (from 1949 to 1959 to 1969), the CCP had 135 million more Chinese—the vast majority poor and rural—to govern. Although Mao-era leaders did not have such accurate counts—Mao's China had neither population science nor reliable population statistics—they knew that China had a gigantic population that was growing more so all the time. What happened to the science and statistics?

POPULATION STUDIES IN MAO'S CHINA: FORBIDDEN TERRAIN

Before the Communist liberation of 1949, China had been home to a lively interdisciplinary field of population studies.⁷ While maintaining the Confucian tradition of the socially responsible scholar, in the early twentieth century China's university-based scholars carried on energetic debates over the relationships among population, poverty, and national power largely free from political interference by the Nationalist state.⁸ Under the Communists that would change.⁹ All knowledge producers were incorporated into the highly centralized Marxian regime (composed of party, government, and military) and subject to the politicization of their work. Although all fields of scholarly endeavor would be subject to extensive political and institutional controls, different fields were placed in somewhat different locations on the elite cultural map of the PRC. While some were located inside the land of "ideology/politics" and subject to constant politicization of their work, at times some fields

enjoyed relative cartographic autonomy from ideology/politics and thus a degree of freedom to chart their own intellectual course. The social science of population enjoyed no such freedom. It would be located firmly within the domain of party politics, where it would be first subordinated and then obliterated in the late 1950s. This section traces the political lineaments of that fateful history.

Subordinating Social Science

Following Marxist tradition, the Chinese Marxist regime held that in class society there are two kinds of knowledge, one illuminating the forces of production, the other clarifying the relations of production (Y. Wang 1993: 40). “Natural science” (*ziran kexue*) studied the natural world, and included science and technology. “Social science” or “human science” (*shehui kexue, renwen kexue, wenke*) probed the mysteries of the social world, and included social science, history, the humanities (literature, religion, and so on), the arts, and philosophy, the latter sometimes classified separately because it was deemed the basic science of human knowledge (Braybrooke 1979: 593–594).

Because of its links to the forces of production, Marx considered natural science a progressive, liberating, revolutionary force. A century later, Mao too viewed natural science and modern technology as important means of liberation from nature and traditional culture (Suttmeier 1974: 35; also 1970). Because of their suspect class location as potential allies of the bourgeoisie, however, scientists and technicians would be allowed to make a positive contribution to the nation’s socialist construction only when party politics allowed.¹⁰ Social science met an even worse fate. Social science was deemed largely unnecessary because, it was believed, Marxism already possessed a full and correct understanding of the social world. Social science would have little independent role to play in China’s socialist construction. And because all knowledge of society was deemed inherently class-based, China’s social scientists would be dragged into the interminable class struggles that marked party politics under Mao.¹¹

In the early 1950s, when the new regime adopted the Soviet model in education, top priority was given to the development of the natural sciences and engineering, which were deemed crucial to the rapid creation of an industrial economy. Following the Soviet view of Marxism as a comprehensive theory that covered virtually all the social disciplines, most of China’s social sciences, including sociology, home to many population specialists, as well as political science, anthropology, and legal studies,

were deemed dispensable and abolished. Economics, home to economically oriented population experts, survived, but it was transformed into a Marxian discipline tasked with developing Marxian-theoretic approaches to finance, trade, law, politics, planning, and statistics (Dernberger 1980; C. C. Lin 1981; Wong 1979: 37–62).¹² Contacts with the West effectively ceased. Non-Marxist intellectuals were subject to firm “thought reform” and scholars in all social science fields were put on notice that their role was to serve the regime. Serving the regime meant that social science would have an applied, social problems focus. The bourgeois social science of the West would not be tolerated; instead, Marxist-Leninist theory would guide all their work. Indeed, the role of the social sciences was primarily to rationalize the party line and inculcate political values. To this end, the social sciences were placed under the purview of the Propaganda Department of the party’s Central Committee (Ogden 1982: 586).¹³ With these moves the regime redrew the boundaries on the cultural map, making social science part of ideology/politics and radically subordinating social scientists to the party-state, subject to continuous politicization of their work.

Silencing “Anti-Rightists”: The Shameful Matter of Ma

After several years of inattention, in 1953–1954 the leadership spoke out on population, announcing the party’s approval of birth control. In taking a stand on this sensitive issue, the party claimed population as its own, marginalizing the voices of a variety of social forces—public health specialists and women cadres as well as social scientists—who had expressed views on issues such as contraception, abortion, and population control. This was the first step in the displacement of China’s population intellectuals from the public sphere. In the mid-1950s, social scientists would continue to have a public voice on the population issue, but in sharing their ideas they would have to exercise great caution.

During the Hundred Flowers Movement of 1957, when scholars in every field were encouraged to speak their minds, many prominent population specialists complied, only to have their heads chopped off in the Anti-Rightist Campaign against the party’s critics that followed close on its heels (Tien 1973).¹⁴ Specialists who advocated population control, even those using the politically correct formulation of “birth planning,” were persecuted and silenced for the ideological crime of Malthusianism.

The most noteworthy case was that of Ma Yinchu, the eminent economist and president of Beijing (formally, Peking) University, the nation’s

premier institution of higher education. In March 1957, less than a month after Mao had proposed the state planning of births, Ma published his long essay “New Population Theory.” In this treatise, Ma highlighted the detrimental effects of population growth on capital accumulation and thus industrialization, and called for strong measures to slow the growth of Chinese numbers (Ma 1997[1957]). Although Ma’s essay used the Marxian formulation of “contradictions” between consumption and accumulation, stressed the “errors” and “bankruptcy” of Malthusian theory, and advanced a then—politically correct policy position, it was an ideal target for the anti-rightist forces. Mao’s about-face on population control in early 1958—“for now a large population is better”—only encouraged the critics. After two hundred articles appeared criticizing the essay, in 1960 Ma was removed from his post and silenced. Demography became a “forbidden zone” (*jinqu*) and population specialists were muzzled. From then on, any proposal to control population growth could be equated with Malthusianism and its author severely sanctioned (Hou 1981). Throughout the 1960s and into the 1970s, many social scientists continued to consider population control an urgent priority. Some persisted in researching and writing on population issues, but they were denied access to publication outlets (IF,11/18/85a,BJ; Banister 1987: 16–20). With the ideological issues unsettled and Mao expressing divergent and conflicting views, population was a dangerous and publicly undiscussable topic.

With the silencing of Ma, the party under Mao not only rejected a concrete proposal that might have effectively controlled population growth; it also arrested the development of population science, depriving the party of the technical support it would need to fully understand and rationally manage population growth. The suppression of population studies also aborted the creation of a Marxian theory of population control, without which birth planning lacked ideological legitimacy. As long as Mao was alive, population work would have to be guided by political, not scientific, logics and techniques. The suppression of Ma and his policy ideas would leave a deep scar on the party’s reputation. After Mao’s death, the case of Ma Yinchu would become a powerful symbol of all that was wrong with the Maoist approach to governance.

Criticizing “Reactionary Bourgeois Authorities”

During the Cultural Revolution, population specialists—indeed, virtually all intellectuals—came under all-out attack (T.H. Chen 1981; Du 1992; Pepper 1996; Hayhoe 1999).¹⁵ The educational and (civilian) science

establishments suffered severe disruption. (Defense science was somewhat protected, as we shall see in chapter 4.) In a clear break from the early 1950s and the early 1960s, when the class location of natural scientists remained ill defined or only ambiguous, Cultural Revolution polemics now placed natural scientists and managerial elites in the superstructure of ideology/politics. Criticized as “reactionary bourgeois authorities” and the “stinking ninth category” on the “black list of bad types,” intellectuals and managerial elites were targeted for censure, class struggle, and “reeducation” to the proletarian outlook. Social scientists were placed on the front line of the propaganda battle. Always the first to be vilified, they were made to wage and to endure endless class struggle (Y. Wang 1993). Although natural scientists were subject to attack as well, the aggressions against them appear to have been less vicious and less sustained (Ogden 1982). During the violent, anarchic Red Guard phase of the Cultural Revolution, scientists and university professors were harassed, humiliated, paraded in the streets, and physically abused, sometimes to the point of death. Teaching and research were severely curtailed, publication of professional journals ceased, scholarly manuscripts, files, and libraries were destroyed, and ties with the outside world were completely severed. Universities were closed and virtually all faculty banished to the countryside, where they spent months to years at “May Seventh Cadre Schools” performing manual labor, engaging in political study, and “learning from peasants and workers” (T.H. Chen 1981: 100–103; Pepper 1996: 388–389). China’s premier research institute, the Chinese Academy of Sciences, was ravaged. During the years of greatest turmoil, roughly sixty of its hundred-plus research institutes and centers were shut down, while 1,900 of its 2,100 social scientists and philosophers stopped working (Miller 1996: 88, 97). Even those who continued to work were forced to spend most of their time on political meetings and political study (Harding 1980). By the end of the upheaval, the nation’s natural and social science had disintegrated.

INSTITUTIONALIZING A BIRTH PROGRAM AND PLAN: ACHIEVEMENTS OF THE 1970S

As government premier in charge of provisioning the urban population, Zhou Enlai was keenly aware of the economic difficulties caused by rapid population growth. In the early 1970s, as the chaotic phase of the Cultural Revolution wound down, Zhou managed to get population work on the party’s agenda. Yet with Mao masterminding a circus in

the political arena, promoting these ideas would not be easy. While permitting Zhou and other moderates to create a nationwide birth planning program, Mao allowed radicals under his wife Jiang Qing to destabilize this and other modernizing efforts. The radicals used their control over propaganda and the media to foment mass campaigns, sweeping up birth planning, along with everything else, in them. Birth planning was caught up in all the nationwide political campaigns that marked that era, from the Campaign to Criticize Lin Biao and Confucius to the Campaigns to Learn from Dazhai in Agriculture and Daqing in Industry. Under the slogan “take class struggle as the key link,” the discourse of birth planning during the decade was highly ideological and militaristic, targeting “old ideas” and noncompliant individuals. According to program historians, leftist ideology obstructed the development of birth work. Jiang Qing claimed that birth planning was a “feminine triviality” (*popo mama de xiaoshi*, literally, a mother-in-law’s and mother’s small affair) and that promoting the policy on births was evidence of “bureaucratism, obstructionism, and oppression.” Jiang also opposed using film, a key communicational tool, to propagandize birth planning and educate the public about birth control techniques (Sun Muhan 1987). At the mass level, the use of class struggle techniques to promote birth planning alienated the masses from the party and its birth policies, contributing to the general loss of faith in the leadership and ideology that occurred during the 1970s.

Against this background of elite political struggle and growing mass alienation from the party, birth planning, which had been introduced slowly and partially in the 1950s and 1960s, was revived and extended countrywide. Despite the interference of the Gang, Premier Zhou and other development-minded moderates managed to institute a population plan, program, and policy (for the details, see *GCP*: chap. 3). Zhou began this initiative in early 1969 and early 1970 when he told participants at successive national planning meetings that during the 1970s the country must pay attention to birth planning (*ME*: 41–42). At the 1970 meeting, Zhou noted that because birth planning had been relaxed during the Cultural Revolution, young people were marrying early and having more children. Therefore, he instructed, all heavily populated provinces and municipalities must pay special attention to birth planning. While repeating one of Mao’s *de rigueur* pieces of demographic wisdom, “a large labor force is a good thing,” the premier added a crucial qualification: “but it must be coordinated with economic development” (*ME*: 42).

In the 1950s and 1960s the issue of birth planning had been closely linked to that of maternal and child health. The planning of births was rationalized primarily in terms of its benefits to the health of mother and child, which in turn would benefit socialist construction. To the premier and other moderate leaders concerned about China's poverty, that focus on individual health diverted attention from the damaging macroeconomic consequences of unchecked population growth. Drawing on the planning rationale Mao had introduced in his 1957 speech, but now stretching it to emphasize its full economic implications, in June 1970 Zhou told a Ministry of Health meeting: "Birth planning belongs to the sphere of national planning; it is not a health problem, it is a planning problem. If you can't even plan population, what kind of state plan is it?" (Sun Muhan 1987: 143). Zhou's reframing of the population problem would mark the beginning of a decisive turn away from individual health toward national economic construction as the central rationale for the state planning of births. Although it would take a decade to shift gears on the ground, this reformulation would have broad ramifications for population policy, planning, and program development in the years ahead.

In the early 1970s, population planning became a reality for the first time. In 1971 a population control target was included in the Fourth Five-Year Plan (1971–1975), in 1973 a target was reflected in the annual plan, and in 1975 targets for the Fifth Five-Year Plan (1976–1980) were handed down to lower levels of government for realization on the ground. From this point on, population planning would be an integral, routine feature of economic planning and birth planning would be a fixed item on the work agendas of cadres at all levels (Wang Hong 1991: 48).

To fulfill those plan targets, the State Council authorized the buildup of a nationwide program of state birth planning. For the first time in PRC history, birth planning was extended to virtually every corner of the country (sparsely populated minority and other areas were exempted). To manage the development of birth policy, the State Council restored the Birth Planning Leading Group, which had first been formed in the mid-1960s.¹⁶ Below the Leading Group, it (re)established an administrative office within the Ministry of Health to be responsible for day-to-day coordination and supervision of birth planning work (Shi 1988: 158). In 1973, that office became the administrative office of the newly formed Leading Group. This important office was the center of birth planning activity, in charge of managing policy, planning, and program development in the late Mao era and beyond.

In the early 1970s, the State Council named Li Xiuzhen head of these offices and national program leader. (In March 1976, Li was also named deputy head of the Leading Group [ME: 57].) A specialist in women’s health with years of experience in rural work, Li was the longtime head of the ministry’s Maternal and Child Health Department (*si*), and the de facto head of birth planning work in the 1960s (Shi 1988; Yu Wang 2001: 51).¹⁷ Li would put a distinctive propeasant, prowoman, prohealth stamp on China’s population policy and program until around mid-1978, when Vice Minister Chen Muhua was put in charge of the Leading Group and macroeconomic concerns took precedence.

With these moves, a plan and a program for planned births were implemented throughout the country. Yet, as *GCP* argues, because of the continued political sensitivity of the population issue, the party Center declined to put its imprimatur on these developments (pp. 84–90). Instead, policy speeches and statements during the decade were presented as the “personal views” of the program leader—that is, not official party policy. Provincial officials promoted birth planning, but took their authority from vague orders and instructions from above (“the important instructions of Chairman Mao and the party Center,” “the spirit of the Tenth CCP National Congress”).¹⁸ During the early to mid-1970s, then, the party Center effectively allowed birth planning to develop at subnational levels, but without clear and formal political authorization. By declining to formally approve the documents and activities of the program, the Center left the birth project vulnerable to interference by the radicals. The machinations of the Gang appear to have slowed moderates’ efforts to develop a formal rationale for birth planning and frustrated their attempts to convince the full leadership that population control was an important matter. Despite the remarkable success of Zhou and others in instituting a program and plan, this history left the birth work of the 1970s entangled with “Maoist ideology,” an entanglement that would cloud its reception after Mao’s death.

“MASS LINE” POLICYMAKING:
A NECESSITY WITH SOME VIRTUES

Those responsible for making population policy in the early 1970s faced daunting challenges. In the late 1960s the government had been shut down, leaving the apparatus of economic planning and policymaking in shambles. Moreover, birth planning was a new function of government. After the depredations of the Cultural Revolution, the government’s

birth planning office, like virtually all organs of government, was short on staff, know-how, and credibility (IF, 12/25/03, BJ; Yu Wang 2001). Technical obstacles abounded. There were no national-level data on China's population. Techniques for calculating future population growth, crucial for sound policymaking, were nonexistent. Birth planning was still not formally legitimated in Marxist-Leninist-Mao Zedong ideology. There was no science of population to provide technical and theoretical support. With radicals battling moderates for influence over Mao and his policies, the birth project remained highly sensitive and subject to shifts in the political winds.

The difficult politics at the Center made it impossible for Li Xiuzhen to develop policy at the national level. She thus focused her efforts at the provincial and subprovincial levels, developing a Maoist "mass line" process of policymaking that used model localities to "lead the way." After the death of Mao and the shift of the party's agenda to rapid modernization, the policy process of the early to mid-1970s would be vilified as backward, crude, and ideological (Sun Muhan 1987: 148; Song and Li 1980[1979]). Although it was indeed guided by political rather than scientific logics, both the policy process and the policy it produced had important virtues. The policy of the 1970s was both politically viable and strikingly effective in lowering population growth rates.

A Dearth of Statistics and Calculative Techniques

Effective policymaking requires reliable information on the size and internal features of the population. Yet the party under Mao had destroyed the system for gathering and processing population statistics. In the early 1970s, solid statistics on China's population were virtually nonexistent. These data difficulties merit close attention because they had not been resolved by the late 1970s, constraining the more "scientific" policymaking of the early Deng era as well. The problem of no numbers—its rhetorical management and concrete effects—will be a crucial part of the story told in the following chapters.

In the 1950s and early 1960s China had made important progress in building a modern statistical system, but that system had collapsed during the Great Leap Forward and never fully recovered (Banister 1987: 12–49). Two no-frills censuses were conducted—in 1953 and 1964—but only a handful of other special censuses and surveys were carried out (Aird 1981). No census was carried out in the 1970s, leaving everyone—including Mao Zedong—in the dark about the size and

growth rate of China’s population. Moreover, statistics in general and population statistics in particular were highly politicized and subject to massaging to show conformity with party goals. The data that were collected were treated as state secrets. No statistics could be released without explicit political approval, and such approval was often difficult to secure. Because of their ideological implications, for two decades statistics from the official population registration system went largely unreported. The results of the 1964 census, virtually the only relatively reliable data on the population as a whole, were kept secret for eighteen years. Those charged with making population policy in the 1970s had to accomplish that task without access to those crucial nationwide numbers.¹⁹

In the 1970s, only two sets of data were available: population registration statistics collected by the Public Security Bureau, and program data from some model localities. Both had serious limitations. Since the mid-1950s, when a household registration system was instituted nationwide, all localities had been required to gather and annually report data on total population, births, and deaths. Although the system produced high-quality data from some areas, some units did not report and others passed along figures that were understated or falsified to demonstrate success in fulfilling mandated targets. The population totals compiled from such reports were notoriously incomplete and biased by the disproportionate inclusion of information from model localities (Lin Fude 2002). The Public Security Bureau’s flawed numbers were the only countrywide data available to anyone.

At the subnational level, high-quality statistics were available from some birth planning models. From the early 1970s, when party committees at all levels were instructed to put birth planning on their work agendas, some grassroots localities began to develop innovative methods of mass data gathering that won them model status (e.g., *Liberation Daily* 1973). Delegations of foreign specialists visiting model localities were invariably impressed with these bottom-up data-gathering activities (Chen Pi-chao 1972; Faundes and Luukkainen 1972; Li and Li 1973). At the county level, national models such as Sichuan’s Shifang County and Jilin’s Huaide County produced data of very high quality (Lavelly 1982; Chen and Kols 1982: J-597). At the key provincial level, however, data on population growth were especially scarce, emanating only from a few well-administered localities such as Shanghai, Beijing, and Jiangsu. In the vast majority of localities at all levels, the quality of the data was most certainly quite poor.

In the absence of reliable countrywide data, throughout the 1970s national population totals continued to be expressed in the general, impressionistic terms established by Mao in the 1950s. The official formula for the size of China's population was "about 800 million" (Banister 1987: 19). Although the total from the population register passed 900 million in 1974, China's leaders reportedly did not believe that the number of Chinese could be so large, and so continued to require use of the lower, severely rounded figure (Sun Muhan 1987). (The actual total, measured only with the advent of scientific censusing in the early 1980s, was 852 million in 1971, when population control was restored, and 937 million in 1976, the year Mao died.) Meanwhile, reflecting the politicization of statistics, government bureaucracies advancing different agendas offered figures ranging from 750 million (the planning department) to 830 million (the commerce ministry) (Rida 1971: A8). It was only in mid-1979 that a newly revived State Statistical Bureau would issue the first authoritative figure of the decade: a population of 975.2 million at the end of 1978 (Sun Muhan 1987: 378).

Policy makers also lacked data on the internal characteristics of the population. The most crucial were its age and sex structure. From casual observation, political and program leaders knew that the suspension of birth planning during the early phase of the Cultural Revolution had produced spikes in the number of births (IF, 12/25/03, BJ). The rise in marriages and births during the years of chaos was first mentioned by Premier Zhou in 1970 and later framed as a "problem of peaks" (*gaofeng de wenti*) by program leaders. With no national data on age structure, however, birth planners had only a rough idea of how high the peaks were and how much they would affect future population growth. These data difficulties would greatly hamper their efforts to create a realistic and effective policy for the country as a whole.

In China's planned birth system, population policymaking and planning were intimately related. Ideally, the policy rules on number of births were designed to ensure achievement of the targets in the population plan. Creating feasible plan targets required the ability to calculate future population growth. Techniques for population projection were thus crucial to both target setting and policymaking. Yet statistical techniques such as those for population projection had disappeared with the decimation of the statistical system and the elimination of population studies.

Facing demands to reach population targets, local cadres began to improvise techniques of projecting population within their areas.

Encouraged by Li Xiuzhen, statistical workers in model localities began inventing some ingenious methods (Yu Wang 2001). These methods appear to have been the only projection techniques available at any level of government in the early to mid-1970s. In November 1974, the State Council’s Birth Planning Office convened a National Population Statistics Study Session to discuss and disseminate the more promising methods. Among those attending were Liu Zheng and Lin Fude of People’s University, who had recently been recalled from the countryside to Beijing to advise the government on population theory (for the details, see the discussion later in this chapter; Shi 1988: 168; *ME*: 54). Despite the ingenuity of statistical workers from advanced localities such as Jiangsu’s Rudong County, their seat-of-the-pants methods had limitations. Most important, they were not transferable to the national level and so “could not meet the demand of the time for macro-population control” (Lin Fude 2002: 80). Back in Beijing, Lin and Liu improved those methods and then, experimenting with Beijing data, developed another projection method that used a standardized fertility technique. Although this method could be used for larger-scale units and worked well for projecting population growth under the policy of the mid-1970s, even its creators considered it relatively crude. The limited ability of the government and of social scientists such as Liu and Lin to forecast future population growth would hamper population planning and policymaking in Mao’s day and beyond.

Mass-Oriented Policymaking: Making Later-Longer-Fewer

Lacking both the technical resources and the political support needed for scientific policymaking at the national level, in the early 1970s program leaders devised an essentially political process of making policy in close interaction with the local level that closely approximated a standard method of party policymaking under Mao. To highlight the contrast with later policymaking procedures, I tag this a “mass line” process of making policy. Described by Mao as “from the masses, to the masses,” ideally in the mass line process “the scattered and unsystematic views of the masses are . . . collected by Party organizations, carefully studied and coordinated, and then turned into statements of Party policy” (Townsend 1967: 73). Because of its leading role in society, however, the Party makes the actual policy decision. Once a decision is rendered, it is promoted among the masses by identifying model localities,

summing up their experiences, and propagating them for emulation elsewhere. Unlike the classic mass line process, in which the party leadership ultimately decides policy on the basis of its purportedly superior theoretical knowledge and practical experience, in birth planning at this time it appears to have been health officials, probably in consultation with moderate development-minded leaders associated with Zhou, who made the decisions on population policy. The result was a policy that reflected popular interests perhaps better than most party policies.

Although some of the details remain vague, the later-longer-fewer (*wanxishao*) policy that was adopted for nationwide enforcement in the 1970s appears to have been made by a version of this top-down–bottom-up process. As documented in *GCP* (esp. pp. 73, 76, 81), the origins of later-longer-fewer stretch back to the late 1950s. In the 1950s, national reproductive guidelines called for late marriage and few births. A late 1950s Ministry of Health directive went further, advocating later marriage, longer spacing, and fewer births to protect the health of mother and child. In December 1962, the *China Youth Daily* propagated this idea among young readers. Around 1963, the policy was tested for acceptability and implementability in several localities, including Shandong's Wendeng County. Two years later, national program leaders propagated the results at a national on-the-spot conference in Wendeng. After the chaos of the late 1960s subsided, in the early 1970s program leaders revived this policy idea. Following standard practice, Li and others worked to identify successful birth planning localities, “summed up” their experiences, and then promoted them as models for emulation elsewhere (Li Xiuzhen 1972; Sun Muhan 1987: 145; Yu Wang 2001). Li adopted a low-key, highly personal work style that seems to have facilitated this process of working closely with rural localities. Her deputy Yu Wang describes how, unlike most officials, Li rode public buses to attend meetings and visit remote villages to learn the concerns of the rural people (Yu Wang 2001). In the early 1970s, *wanxishao* was tried out in several localities, most notably Shanghai's Qianwei Commune, Hebei's Leting County, and Jiangsu's Rudong and Taicang Counties. After extensive trials and local adaptations, in December 1973 later-longer-fewer was formally announced as national policy at the first official national work conference of the decade.

To facilitate enforcement, program leaders attached specific numbers to each component. “Later” meant marriage at age 23 and 25 for rural women and men, respectively, and 25 and 27 for those in the cities (Li Xiuzhen 1972: 297). “Later” also specified childbirth at age 24 or older,

with a slightly higher age in the cities. “Longer” was defined as spacing of at least three years in the countryside and four years in the cities. Under the slogan “one is not few, two is just right, three are too many,” initially “fewer” signified two births for urban couples and three for rural couples. The new *wanxishao* policy was not a national *policy* in the sense of having the imprimatur of the Central Committee or being part of formal legislation. Instead, it took the form of an ad hoc regulation. Nevertheless, it would be energetically promoted nationwide until late 1978, when the rules were tightened, this time by the authority of the party’s Central Committee.

After Mao’s death and the arrest of the Gang of Four, birth planning rose rapidly on the party’s agenda. The tightening of policy began in December 1976, when Li Xiuzhen reaffirmed *wanxishao* for achieving the targets of the Fifth Five-Year Plan (1976–1980), adding that in order to avoid future birth peaks it might be necessary to make appropriate adjustments (*EBP*: 299). And indeed, an adjustment was soon made. At a September 1977 birth meeting, Li made an important speech. Stretching Mao’s words, she declared that birth planning was now a matter of party line and propaganda must be forcefully strengthened (*GCP*: 90–91). She also announced a highly significant “shift in emphasis” from timing to number of children, with the central work task now preventing third and higher births. “Fewer” now meant two children for rural as well as urban couples (Li Xiuzhen 1997[1977]). These developments presaged a toughening of policy thinking that would take place as a new leadership impatient for change consolidated its power in 1978.

A Politically Viable and Demographically Effective Policy

With the shift of the party’s agenda to rapid modernization, the policy of the early to mid-1970s would be criticized as inadequate, and the policy process that gave rise to it would be castigated as backward and nonscientific (Sun Muhan 1987: 148; Song and Li 1980[1979]). Compared to the strict one-child policy that would succeed it, however, the later-longer-fewer policy had important political and demographic advantages.²⁰ Although it is important not to romanticize the 1970s, compared to the 1980s the policy of that still-Maoist decade seems salutary indeed. Formulated close to the point of implementation in consultation with those whose behavior it sought to change, the mass line process produced an indigenous Chinese policy that fit the realities of peasant life. The policy took account of the needs of the peasantry,

working them into a moderate and flexible set of rules that was acceptable to the rural majority. Instead of riding roughshod over peasant culture, the policy sought to temporarily accommodate village values while slowly modernizing them through propaganda and education. Unlike its successor, the one-child policy, which was created at the top by specialists who were distant from the rural scene, the top-down–bottom-up policy created by political generalists earlier in the decade was enforceable on the ground and had fewer wrenching side effects.

In part because the policy influenced three determinants of fertility (marriage age, spacing, and number of children), and in part because the collective institutional environment of the early 1970s lowered childbearing desires and eased policy enforcement, later-longer-fewer was extraordinarily effective in achieving its demographic ends.²¹ Indeed, the policy produced one of the fastest fertility declines in modern history. During the 1970s, the average number of children per woman fell from under six to under three. Between 1971 and 1978, the crude birth rate was halved (from 30.7 to 19.3 births per 1,000 population), as was the rate of population growth (from 23.4 to 12.0) (Tian 1985[1981]: 36–37). Even without numbers and science, later-longer-fewer was remarkably effective in reducing population growth.

IDEOLOGICAL LEGITIMATION: CREATING A MARXIAN THEORY OF BIRTH PLANNING

At the beginning of the decade, Premier Zhou had underscored the importance of birth planning to the success of national economic planning, yet the state planning of births continued to lack a basis in Marxian theory. Without such a rationale, the birth project that was rapidly unfolding on the ground had dubious legitimacy. This was an urgent problem (Lin Fude 2002). Cadres asked to promote birth planning confronted a series of fundamental questions. Why must China plan births? Is birth planning Marxist? How does it differ from neo-Malthusian population control? The lack of answers left them confused and fearful of making ideological mistakes. Mao's ambivalence about population control meant that for many years these basic issues could not be addressed. Only in the mid-1970s, when he issued his last and most famous instruction—*fei renkou kongzhi buxing*—did it become safe for theoretical work to proceed. Despite the theoretical hurdles, a rationale was found and, after Mao's death, made public. Transmitted to cadres around the

country, this rationale provided the birth program’s first ideological legitimation, securing its place on the nation’s agenda.

Theoretical Challenges

Because of the sensitivity of the population issue, initially the development of theory and training of cadres were undertaken by provincial party schools (Shi 1988: 168). At the same time, however, the State Council began to quietly authorize a more centralized process of theory construction. In late 1973 it asked Liu Zheng, head of the Planning Statistics Department of the People’s University of China, to create a Marxian theory of birth planning. Liu responded enthusiastically to the state’s call, eventually becoming the nation’s leading Marxian theorist of population. I introduce Liu and his colleagues in the next chapter.

In the mid-1970s there were burning issues that had to be resolved in order to secure the ideological foundations of the state’s new project of planning births. The main task, of course, was to find a rationale for birth planning in the corpus of Marxian texts. Beyond this, there was a host of larger questions needing resolution, many touching on sensitive issues of national identity and correct ideology. Is there a Marxian population theory? Do population problems exist in a socialist society? What are the laws of population under socialism? What is the relationship between population growth and economic development? Is man primarily a producer, as the prevalent “theory of hands” (*renshoulun*) held, or is man also a consumer? Should Malthusianism be rejected in its entirety? What are the advantages of socialism over capitalism in solving the problem of population?

The project of creating a Marxian theory of population control was a challenging one. Marx had said little about population except that its development was determined by the mode of production. In his view, under capitalism population was likely to outstrip resources, but under socialism population was a valued resource. The orthodox Soviet position, as interpreted by Chinese theorists, held that “as the population grows constantly and rapidly, the labor force will also grow rapidly and will contribute to the well-being of the society” (Wang Hong 1991: 62). The authoritative voice belonged to Joseph Stalin, who maintained that population growth was the law of population under socialism. From the vantage point of Soviet orthodoxy, the notion that the socialist state might control population growth was thus heretical and incorrect. Clearly, any theory of state birth planning would have to draw on

indigenous Chinese ideas. In the Chinese ideological repertoire, however, there was little on which to draw.

An Engelsian Solution: Grasping Production and Reproduction Together

In 1974, some Marxian theorists discovered a promising passage in the work of Frederick Engels on the twofold character of production—of material goods and of human beings (Engels 1972[1884]). Drawing on this notion, as well as indigenous Chinese framings based on the planned economy and, of course, Mao's population thought, Liu Zheng and his colleagues defined China's population problem as one of serious imbalance or "contradictions" between population growth, on the one hand, and social and economic development, on the other. The solution was to bring the production of material goods and of human beings together within the unified socialist plan, adjusting each to the other.

Such a project would demonstrate the demographic superiority of socialism, something Engels had underscored in a letter to Karl Kautsky a century earlier: "If communist society should one day be compelled to regulate the production of human beings, as it regulates the production of goods, then it and it alone will be able to do this without any difficulty" (quoted in Liu 1981). With several years of concrete experience in population planning to draw upon, Chinese writers were able to elaborate on Engels's point. Unlike capitalism, which leaves reproduction anarchic, socialism is able to bring economic and population growth within the unified state plan. Under the comprehensive state plan, everything can be planned and coordinated for the benefit of society as a whole, and plan targets can be achieved through the use of an integrated package of economic, educational, and legal measures (e.g., Liu 1981: 18–19). The planned control of population was thus crucial not just to China's socialist development, but also to the larger socialist mission of outcompeting capitalism on the world stage.

During the mid-1970s, Mao's continued presence on the scene kept these theoretical advances out of the public domain. That changed abruptly after his death and the arrest of the Gang of Four in the fall of 1976. Two months later, the Leading Group issued the population thoughts of the great Marxian thinkers as well as the instructions of Mao, Zhou, and other Chinese leaders on birth planning work (Shi 1988: 171; also *ME*: 60). In 1977, Mao's 1957 encouragement of state birth planning was made public for the first time (Tien 1991: 85). In late

1977, the Marxian scholars published the results of their labors anonymously in the short book *Population Theory (Renkou lilun)* (Liu et al. 1977, parts translated in Tien 1980). Their ideas became the basis for nationwide discussion seminars and study classes to train the cadres who would lead the birth planning effort on the ground. Although the book’s measured tone was soon to become obsolete, this theoretical handbook successfully refuted Soviet orthodoxy by demonstrating that population growth was not an inevitable law of socialist development. By providing the first systematic Marxian articulation of the planning rationale for the state’s ongoing birth project, this book gave that project its first ideological justification, finally guaranteeing it a place on the political agenda.

ANTI-MALTHUSIAN MANIFESTOS FOR THE OUTSIDE WORLD

The elaboration of a Marxian theory of birth planning for domestic audiences was accompanied by a refutation of Malthusian or “bourgeois” views for the benefit of international audiences. These efforts took on exceptional importance in the early 1970s, when China began to rejoin the world community after decades of self-imposed isolation. The international population community was at once fascinated by the PRC’s new, apparently successful program of population control and puzzled by the contradictions between the party’s anti-Malthusian stance and its seemingly Malthusian practices. China needed to make the world understand that its birth program was resolutely Marxian and that its anti-Malthusian standpoint remained unswerving.

In 1971, after the PRC regained its seat in the United Nations, the regime sent delegations to a handful of important international meetings on population (Y. C. Yu 1974).²² The official statements of the Chinese delegations were often highly ideological, extending the class struggle between proletariat and bourgeoisie that was unfolding in the still-Cultural Revolutionary 1970s to the domain of international politics, where the larger third-world struggle against imperialism was being played out in a Marx-versus-Malthus contest over the definition of the population problem and its proper solution. Reflecting the PRC’s long-standing identification with the oppressed nations of the world, and the mid-1970s turmoil in foreign policy as the power struggles of rival coalitions within the regime led to stagnation in China’s rapprochement with the West, these statements were stridently anti-imperialist, anti-Western,

anti-Malthusian, and even antiscientific (on mid-1970s foreign policy, see Pollack 1991).

The most significant statement of the 1970s was the speech delivered to the United Nations Population Conference held in Bucharest in 1974, the most important international meeting of the decade. This speech was reviewed by Premier Zhou Enlai himself, suggesting its status as the official party line on the population thought and practices of the major powers in the PRC's international environment (*GCP*: 84). In it, the head of Chinese delegation sharply challenged the two superpowers' neo-Malthusian claim that the third world was suffering a "population explosion" that was threatening the welfare of mankind:

One superpower asserts outright that there is a "population explosion" in Asia, Africa and Latin America and that a "catastrophe to mankind" is imminent. . . . The superpowers raise the false alarm of a "population explosion" and paint a depressing picture of the future of mankind. This reminds us of the notorious Malthus, who, more than 170 years ago, when the population of the world was less than 1 billion, raised a hue and cry about "over-population" and the impossibility for the growth of production ever to catch up with that of the population. . . . The condition of the population of a country is determined by its social system and the political and economic conditions prevailing at home and internationally. Is it owing to overpopulation that unemployment and poverty exist in many countries of the world today? No, absolutely not. It is mainly due to aggression, plunder and exploitation by the imperialists, particularly the superpowers. (Huang Shu-tse 1974: 7)

The statement was particularly scathing in its criticism of the reams of statistics—on the destruction of the food supply, the natural environment, and so on—the neo-Malthusians had marshaled to prove the existence of such a crisis:

What a mass of figures the [superpowers] have calculated in order to prove that population is too large, the food supply too small, and natural resources insufficient! But they never calculate the amount of natural resources they have plundered, the social wealth they have grabbed and the super-profits they have extorted from Asia, Africa and Latin America. (Huang Shu-tse 1974: 8)

What the delegation head was excoriating was the body of work associated with a group of Western scientists and global modelers who called themselves the "Club of Rome." Based on statistics of all kinds, Club researchers argued forcefully that the third world was suffering a population crisis that was threatening the whole world. The necessary solution was immediate and drastic population control. Popularized by

figures such as Paul R. Ehrlich, author of the best-selling alarmist tract *The Population Bomb*, these ideas were highly popular in the West at the time, at least among the general public (many population specialists had doubts) (Ehrlich 1968).

The PRC roundly rejected this reasoning, claiming that behind the science lay imperialist plots and power politics. If third-world poverty was due to external exploitation rather than internal overpopulation, the speech continued, the solution was for third-world countries to unite to battle imperialism and superpower hegemonism while developing their own national economies. As a “developing socialist country belonging to the third world,” China was ready to lead the fight against the imperialist powers and their Malthusian distortions of the nature of and solution to the population problem (Huang Shu-tse 1974: 9). While treating efforts to combat imperialism and develop the national economy as the primary means of solving the population problem, the People’s Republic also plans the growth of its population by means of a domestic population policy. This policy, the statement continued testily, is fully in accord with socialist principles and is a matter of China’s internal affairs in any case (Huang Shu-tse 1974: 9). Criticism will not be tolerated.

Within a few years, the People’s Republic would reverse, though not publicly repudiate, all the positions staked out so forcefully at Bucharest. It would downplay its status as the leader of the third world, remaking itself as a determined aspirant to great-power status. A new regime would stop criticizing the first world and start seeking selectively to use its resources to speed China’s own development. The nation’s leaders would abandon their antiscience, antistatistics stance, embracing modern science and statistics with a vengeance. And, on the population question, the PRC would cease criticizing the crisis-crackdown formulation, instead making that very construct the cornerstone of its own policy requiring one child for all. How this still-Marxist regime and its newly revitalized population scientists would manage the ideological contradictions and discursive challenges these about-faces entailed is a fascinating and crucially important part of the story of science making and policymaking told in this book.

MAO TO DENG: FROM “IDEOLOGY” TO “SCIENCE”

The later-longer-fewer policy and program of the 1970s offered the modernizing regime that came to power after Mao’s death a strong foundation on which to build. Demographically, the policy had dramatically

lowered birth and population growth rates. Institutionally, the program had established a nationwide network of party and government organizations with years of experience in managing this new project of governance. Politically, at the elite level Marxian theorists had rationalized population control in terms of the regnant ideology, finally legitimizing it as a party function. At the mass level, implementation of the policy had spread a more modern reproductive culture and accustomed peasants to the idea of state intervention in their reproductive lives.

Yet to post-Mao leaders who saw a clear connection between the nation's rapid population growth and its stubbornly persistent backwardness, later-longer-fewer would be too weak and too politically tainted a policy tool. Its inadequacies were demographic, ideological, and political. First, in the late 1970s China faced a population problem of considerable magnitude. Despite the demographic achievements of later-longer-fewer, because of the impact of population momentum—continued growth due to the large cohorts born in the past—the numbers of Chinese continued to rise, reaching almost a billion by decade's end. Although the links between population and the economy were not well understood, many leaders realized that the continued rapid growth of the population contributed in some fundamental way to the nation's enduring poverty. To make matters worse, the population was not only too large, but also its age structure was unbalanced. Post-Mao leaders faced a birth peak forecast to last from the mid-1980s to the early to mid-1990s. The limit of two children for all adopted in 1977 not only could not solve this problem, it would result in more peaks down the road. Because Mao's revolution had effectively suppressed birth work for two decades, post-Mao policy makers would have to impose sharper limits to cope with the accelerated growth of the population. Mao's demographic obtuseness did not impose any particular policy, however; how sharp those limits would have to be would be a matter of debate.

The second problem was the absence of a compelling formulation of the population problem to justify the strong control of population numbers. The later-longer-fewer rationale—the necessity of population planning in a socialist society—was ideologically correct but it did not dictate strong population control. Certainly, it was too weak to justify intensifying fertility limitation beyond the fairly demanding two-child limit that was already in place. The decimation of science and the destruction of the nation's statistics-gathering capacity had prevented the development of more sophisticated, quantified formulations of the population problem. As a result, as the Cultural Revolution drew to a close many top

leaders remained unpersuaded of the urgency of the population problem. In 2003, Wu Cangping, one of the few population specialists active in the mid- to late 1970s, described the situation this way:

Around 1978, at the time of the first population studies conference, the government had no clear or systematic view of the nature and scope of the population problem. It knew only that the population was large and growing rapidly. Most officials were not very concerned about the population question. Few knew anything about it. Mao did not fully realize its significance. He had said that population growth should be controlled only when the population reached 800 million. [As a result] in the late 1970s population control was only a verbal slogan (*koutou shuo*); *there were no policy documents making it official*. Because of the huge influence of Stalinist population theory insisting that a large population is good, Chinese economists and philosophers believed that population had but a modest effect on economic development and that therefore there was no need to sharply control population growth. (IF,12/16/03,B]a; comments paraphrased, emphasis added)

Given this general lack of knowledge and concern about the damaging effects of population growth on China’s development, those seeking to strengthen birth policy at decade’s end would have to find a new rationale that went far beyond the tired logic of the late Mao era.

Beyond these difficulties specific to the population issue lay a more overarching problem faced by the CCP. Mao’s Cultural Revolution had not only destroyed the social order, it had also undermined the party’s legitimacy. Although the birth project had been able to move forward, birth planning too had gotten swept up in that cataclysm. The population question also evoked painful memories of Ma, whose scandalous treatment in the late 1950s had left a black mark on the party’s reputation. To restore its right to rule, the party had to soundly reject the Cultural Revolution and everything associated with it. In the population area, however, it overreacted. When, in the aftermath of that national trauma, population policy makers in revulsion rejected the past, instead of selectively preserving the best features of the later-longer-fewer policy, they would reject that policy and the process that produced it in toto, throwing out the good with the bad. Li Xiuzhen’s consultative mass line policy process, which had produced a peasant-centered, politically viable, and demographically effective policy, would be abandoned in favor of a process and policy that were its antitheses: exclusively top-down rather than top-down–bottom-up, “scientific” rather than political and ideological, precise rather than crude, based on foreign models rather than indigenous, and “in the

interests of the nation as a whole” rather than centered on the needs of those most affected, peasants and women.

If the Maoist approach to policymaking and the closely associated ideology of Marxism-Leninism–Mao Zedong Thought were now deemed fundamentally problematic (though politically unabandonable, given their centrality to the CCP’s identity), what would replace them as the keys to solving China’s problems? After the ideological fervor of the Cultural Revolution, which in its Gang-inspired extremes was rabidly anti-scientific, antirational, antimodern, and anti-Western, modern (natural) science—widely perceived to be rational, objective, progressive, and international—would appear as the very opposite of the politics and ideology that had turned that decade into a national disaster of epic proportion. After the horrors of the Cultural Revolution, modern science appeared as the way out, a *deus ex machina* that would guide China into the modern world. In the population arena, the post-Mao years would thus give rise to the rapid development not only of science, but also of *scientism*, the belief in science as a panacea that could solve all the nation’s human problems.

Since the early twentieth century, Western-oriented Chinese intellectuals had embraced modern science with fervor, seeing the adoption of science (and democracy) as a powerful means to critique China’s traditional culture and to put the nation on the road to modern civilization (Chow 1960; Kwok 1965; Schwarcz 1986). From that time, “science” was associated with modernity and national salvation and was imbued with almost omniscient and omnipotent powers. Far from withering under the Communists, scientism emerged victorious with the victory of the CCP, whose Marxist philosophy was scientific in the extreme (Kwok 1965; I return to this in chapter 3). After the havoc Mao had wreaked on the nation’s science and social science establishments, the energetic restoration of science was an obvious and wise response to the problems of governing the country. But the Deng regime’s adoption of science—including population science—was shadowed by an intensely scientistic culture in which the exaggerated enthusiasm for the powers of science was coupled with a worrying lack of understanding of it.

In the post–Cultural Revolution context, population science possessed extraordinary practical, political, ideological, and symbolic value. Indeed, it promised to solve all the problems left by the Mao era. Practically, it offered rationalities, logics, techniques, and tools with which to bring population into being as an object of science and governance; frame the population problem and solution; and rationalize the

process of planning and policymaking. Politically, with its powerful language of numbers and mathematics, science had the persuasive power to convince China’s leaders of the urgency of population control and to persuade cadres and masses of the legitimacy of that project. Science was perhaps uniquely capable of neutralizing the danger that had surrounded the population question since Mao had declared that “of all things in the world, people are the most precious.” Ideologically, modern science offered the Deng regime a potent new legitimating ideology to supplement the now exhausted Marxism-Leninism–Mao Zedong Thought. For the Deng regime, the claim to be a scientific modernizer would decisively separate it from the Mao leadership, which had attempted to modernize while hobbling modern science. And finally, symbolically, the embrace of modern science would serve as a fitting symbol of the dramatic rejection not only of the horrors of Cultural Revolution, but also of the whole Maoist approach to governing. Modern science had been a potent marker of Chinese modernity since the early twentieth century. A better symbol for rejecting the dark past and moving into the bright modern future could hardly be imagined.

The adoption of population “science” would be anything but straightforward, however. After decades of suppressing science generally and population science specifically, many fundamental issues would need to be resolved: Who was a “scientist”? What counted as “population science”? The next part of the book explores these questions, tracing the emergence in the immediate post–Cultural Revolutionary years of three different “sciences” of population, all competing to shape the population policy for the new era.

MAKING POPULATION SCIENCE

