# Fertility

Of the preventive checks, the restraint from marriage which is not followed by irregular gratifications may properly be termed moral restraint . . . Promiscuous intercourse, unnatural passions, violations of the marriage bed, and improper arts to conceal the consequences of irregular connections are preventive checks that clearly come under the head of vice.

MALTHUS, AN ESSAY ON THE PRINCIPLE OF POPULATION (1803).

# Malthusian Legacy

Malthus believed that sexual behavior within marriage was generally uniform in most societies, and that the rare exceptions of fertility control were unintentional consequences of poverty, although he admitted that some secondary sterility came earlier in some societies than in others. While moral restraint was a viable option, marital restraint was not.

Contemporary demographers have by and large accepted this claim that there was little intentional control of fertility within marriage before the fertility transition. Moreover, they have agreed that any variation in ardor from one society to another is largely a function of timing rather than phasing. Couples, in other words, might vary the frequency of their relations per month. As a result, demographers formalized a universal pattern of uncontrolled marital fertility in which only the amplitude of the curve shifts, not the fundamental shape. They therefore identified an age pattern of fertility and named it "natural" fertility, "natural" because the age pattern of fertility conforms closely to the perceived age pattern of human female fecundity. Fertility remains high in youth, when fecundity is high, and tapers off only as aging gradually undercuts the biological capacity to conceive. Numerous studies have confirmed that all pretransition fertility in

Europe was "natural," validating the Malthusian model (Coale and Watkins 1986).

Studies of fertility transition processes in the West have revealed that the fertility transition was a clear shift away from this "natural" fertility regime to an alternative age pattern of controlled fertility, named "family limitation." This age pattern is parity dependent; that is, childbearing stops after an individual or a couple reaches a desired number of children. The age pattern is therefore concave: fertility is high in youth but declines swiftly with age. Such parity-dependent fertility control became possible only after the advent of such reproductive technologies as contraception, sterilization, and abortion. <sup>5</sup>

This model of the fertility transition as a shift "from natural fertility to family limitation" does not, however, fit well with non-Western experience in either historical or contemporary populations. In Japan and China, which we shall examine in detail below, pretransition marital fertility was well below that of pretransition European populations. A variety of descriptive ethnographic and historical studies document the existence of fertility control in these societies, 6 but because these studies are largely nonquantitative, they have been ignored, rejected as anecdotal, or dismissed as unintentional and therefore disqualified as fertility control. Similarly, while a number of contemporary populations are known to use contraceptive methods largely to lengthen birth intervals, these fertility regimes are still considered "natural," since they do not use contraception to stop further births. This is especially the case for a number of African populations.<sup>7</sup> The current model of the fertility transition excludes regulating birth intervals as a means of fertility control.

## Chinese Realities

## Low Marital Fertility

Contrary to the perception of Malthus and his contemporaries, Chinese fertility overall was probably not much higher than European fertility, while marital fertility was significantly lower. Recent demographic studies have traced fertility measures as far back as the thirteenth century on the basis of retrospective Chinese genealogies. More reliable measures from the archives of the Qing imperial nobility become available beginning in the seventeenth century, and from household registers in the eighteenth century. Table 6.1 summarizes all

Table 6.1 Marital fertility, China, selected periods and populations

Period		Fertility level		
	Location	TMFR	TFR	Sample size
1296-1864	Hunan	6.0		2,670
1462-1864	Anhui	6.1		1,654
1517-1877	Jiangsu	5.8	-	1,784
1520-1661	Anhui	5.4-8.2	_	11,804
1700-1890	Beijing	5.3	_	3,178
1774–1873	Liaoning	6.3	_	3,000
1929-1931	22 provinces	6.2	5.5	50,000
1950	China	5.8	5.3	300,000
1955	China	6.2	6.0	300,000
1960	China	4.1	4.0	300,000
1965	China	6.3	6.0	300,000
1970	China	6.2	5.8	300,000
1975	China	4.4	3.6	300,000
1980	China	3.2	2.3	300,000
1985	China	_	2.2	500,000
1990	China	_	2.3	70,000
1992	China	-	2.0	_

Sources and notes: Hunan, Anhui 1462–1864, and Jiangsu: Liu Ts'ui-jung (1995b, 99). The TMFR is for ages 15–49. Liu suggests that the actual TMFR was slightly higher because not all the women in the denominator for the youngest age groups would have been married. The discrepancy is unlikely to have been large, since age-specific fertility rates below age 20 were very low.

Anhui 1520–1660: Telford (1992b). Sample size refers to the wives and concubines married to 10,512 males. Telford found a mean of 2.77 recorded male births per married woman, which implies a TMFR of 5.4 assuming a male/female sex ratio at birth of 105. He suggests that the actual TMFR should be higher because of underregistration of male births. Telford (1995) presents an estimated TMFR of 8.2 by excluding some registers with very low recorded fertility and inflating the remaining male births by 50 percent. He provides no explanation of or justification for this procedure.

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#### Table 6.1 (continued)

Beijing: Wang, Lee, and Campbell (1995, 395). The TMFR was calculated by adjusting age-specific fertility rates by estimated proportions married in each age group. This is probably an overestimate of the true TMFR because males were included in the denominator in the original calculation only if they had at least one child in their lifetime. Men who married but never had children accordingly contributed no person-years of risk. Moreover, the proportions of males married used in the adjustment were estimated on the basis of whether males had children by specific ages, and accordingly underestimate the actual proportions of males married.

Liaoning: Lee and Campbell (1997, 90). The fertility calculation is based on population registers containing 12,466 individual records and over 3,000 marriages. The number given here, the TMFR, is higher than the TFR (given that not all people are married at all ages). The number reflects a mortality or underregistration adjustment of 33 percent.

22 provinces: Barclay et al. (1976, 614). The TMFR was calculated from age-specific marital fertility rates of women aged 15–49. The survey on which the calculation is based covered some 200,000 Chinese farmers from over 46,000 households in 191 locales. We give the sample size of 50,000 assuming that each household had slightly more than one woman of reproductive age.

China: 1950–1980 TFRs are from Coale and Chen (1987); 1950–1980 TMFRs are calculated for women aged 20–44 from Lavely (1986, 432–433); 1985–1992 TFRs are from Yao Xinwu and Yin (1994). These numbers are based largely on several large-scale fertility surveys.

the available studies from the earliest period when fertility can be estimated relatively reliably. The total marital fertility rate (TMFR) is a synthetic construct based on age-specific fertility rates within marriage, indicating the number of births a married woman could have if she observed the age-specific fertility schedule. The total fertility rate (TFR) is a synthetic measure indicating the lifetime fertility of any woman, including those not married. On average, Chinese women married by age 20 rarely had more than 6 children if they remained married until age 50; their European counterparts had on average 7.5–9 children (Flinn 1981; Wilson 1984; Wrigley et al. 1997).

This low marital fertility is one of the most distinctive features of the Chinese demographic system. Figure 6.1 shows the contrast between age-specific rates for six East Asian and six Western European historical populations. Before 1800 European marital fertility was much higher, especially in the younger age groups, and declined more slowly. Not only is the amplitude of East Asian marital fertility lower than European fertility, but the shape of the curve is fundamentally different.

Low fertility was characteristic of elite marriage, including poly-

gynous marriage. Fertility calculated for monogamous fathers of the Qing imperial nobility ranged between only 4 and 5.5 for 1700–1840. Even polygynous fathers in this elite population had a fertility level of only 6–10 births, comparable only to monogamous men in the West. By contrast, the number of children born to polygynous men in the West was 15–25.9

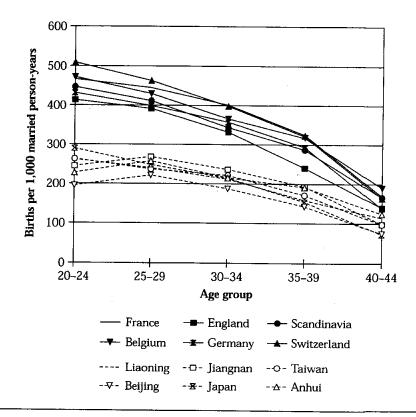


Figure 6.1. "Natural" age-specific marital fertility, East Asia and Europe, ca. 1600–1800

Sources: European populations: Flinn (1981); Japan: Kito (1991); Liaoning: Lee and Campbell (1997); Jiangnan: Liu Ts'ui-jung (1992); Anhui: Telford (1992b); Taiwan: A. Wolf (1985b). The Beijing numbers are monogamous male age-specific fertility rates but should closely approximate female age-specific fertility. The Anhui and Jiangnan figures are derived from counts of sons multiplied by 1.97. In addition we inflated the Anhui, Jiangnan, and Japanese figures by 20 percent for possible underenumeration.

Surveys conducted in the early twentieth century report similarly low levels of marital fertility. A large survey conducted around 1930 and covering much of China revealed an estimated fertility level of 5.5 per woman. This finding is not only highly consistent with earlier numbers based on married women; it also forced demographers to recognize that fertility in this supposedly natural fertility regime was very low. While others have questioned such low fertility levels, their alternative estimates have not been much different. 11

Contemporary censuses and survey data provide further confirmation that China's pretransition fertility level was below the level in high-fertility countries. Fertility levels from the mid-twentieth century, when China was still largely noncontracepting, were also quite low despite a possible postwar baby boom. National total fertility, derived from retrospective interviews conducted in 1982, was slightly below 5.0 in the late 1940s and 5.3 in 1950. While fertility increased slightly following land reform and the breakdown of the traditional household collective system of family planning, it rarely exceeded 6.0. This was significantly lower than fertility in other developing countries around the same time. The survey of the same time.

#### Marital Restraint

Low Chinese fertility was the outcome of three demographic mechanisms: late starting, early stopping, and long birth intervals. In contrast to pretransition Western couples, Chinese couples did not start childbearing until well after marriage. This feature of Chinese population behavior again can be traced back many centuries. According to the best-documented historical population, the Qing imperial nobility, the gap in 1800 between father's age at first marriage (21) and father's age at first birth (24) was three years. 15 In other less completely recorded historical populations, this gap was even larger. 16 In pretransition Europe the interval between marriage and first birth was only about 15 months. 17 Even in the early 1950s, the mean interval between marriage and first birth in China was 34 months at the national level, and up to 40 months in selected rural populations. Moreover, whereas in historical Europe premarital conceptions and illegitimate births were sometimes common (Flinn 1981), bastardy was largely nonexistent in China. 18

Despite their late starting, Chinese couples also stopped childbearing far earlier than pretransition couples in the West. Among the impe-

rial nobility, for example, the mean age at last birth was only 33.8 for monogamous wives and 34.1 for polygynous wives (Wang, Lee, and Campbell 1995, 390). The equivalent age among peasant wives was remarkably similar: 33.5 (Lee and Campbell 1997, 93). In contrast, mean age at last birth in historical Europe was usually within one year of age 40 (Coale 1986, 11). Whereas on average a European mother had a reproductive span between first and last birth of 14 years, the average Chinese mother had a reproductive span of only 11 years.

In consequence, at every age the proportion of couples subsequently infertile was much higher in China than in any known historical European population (Leridon 1977, 101–102). Figure 6.2 contrasts the cumulative proportion of monogamous couples in the Qing imperial lineage and in a Chinese peasant population who were subsequently infertile with a European population. The gap between the Chinese and European populations is extremely wide except above age 45. By age 45, over four-fifths of the Chinese couples had stopped childbearing, in contrast to only half of the European couples.

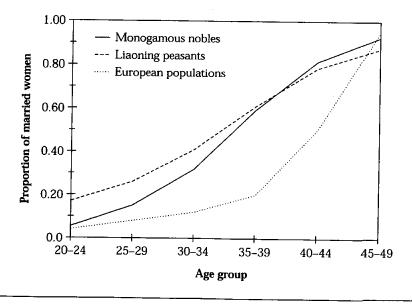


Figure 6.2. Percentage of women subsequently infertile, by age, China and Europe, 1730-1900

Source: Wang, Lee, and Campbell (1995).

The Chinese and European age patterns of stopping are thus fundamentally different. European populations contain few early stoppers and follow an exponential pattern of increase, with a rapidly rising rate after age 35; Chinese populations contain many early stoppers and follow a logistic pattern of increase with a slowly tapering rise. The curves clearly reflect two distinctive fertility patterns and cannot be transformed simply by shifting or compressing.

Moreover, until the 1970s birth intervals were much longer in China than in Europe—on average three years or more. <sup>19</sup> In rural China, for instance, mean birth intervals in 1944–1946 were 39 months between the first and second births and 37 months between the second and third. In 1951–1953 they were 36 and 38 months. In 1963–1965 they were 32 and 34 months. <sup>20</sup> In contrast, interbirth intervals in pretransition European populations were 20–40 percent shorter, mostly in the range of 20–30 months. <sup>21</sup>

As a result of late starting, early stopping, and long spacing, a Chinese couple in the past had at least two to three fewer births than a married couple in the West. Whereas European couples practiced moral restraint but little marital fertility control, Chinese couples practiced no moral restraint but considerable marital restraint.

# Health Culture and Reproductive Culture

Chinese marital restraint derives from an even longer cultural tradition of carnal restraint (Hsiung forthcoming). Over two millennia ago Laozi and Mencius argued that, in order to develop mind (xin) and spirit (shen) and in order to nurture life (yangshen), one must control carnal desire  $(y\ddot{u})$ .<sup>22</sup> This contrast between desire and mind, and this belief in temperate behavior, have been central tenets of all major Chinese philosophies and religions ever since, including Daoism, Confucianism, and Buddhism (Wile 1992).<sup>23</sup>

Sex is one of the foremost such carnal desires. A copious literature on the need to limit sexual activity dates as far back as the first millennium B.C. (Wile 1992; Hsiung forthcoming). In particular, the Chinese believed that sperm contained a life force called *qi*, and that excessive ejaculation led to enervation.<sup>24</sup> Sexual activities therefore needed to be regulated to enhance health and perhaps to prolong life.<sup>25</sup> By the eighteenth century, the long-established consensus in the medical literature appears to have been that male coital frequency should be no greater than three times a month for young adults, less than twice a month for

middle-aged adults, and once a month at most for the elderly.<sup>26</sup> To have intercourse more frequently was to risk one's health, perhaps even one's life. The low fertility and long birth intervals of Chinese couples in the past were at least in part the result of their ability and even willingness to regulate coital frequency.

A different conception of the purpose of marriage also underlies couples' ability to limit their coital frequency and consequently their fertility. Coital frequency in China, as in much of Asia, may well be low,<sup>27</sup> in part also because of a tradition of arranged marriage prevalent in many areas until very recently.<sup>28</sup> The primary familial relationship was not that between husband and wife, but that between parents and child.<sup>29</sup> Because filiality was more important than fecundity, East Asian parents accordingly discouraged sexual passion and encouraged moderation.<sup>30</sup> Childbearing in itself was not the only goal of marriage, but rather a strategy of social mobility planning.<sup>31</sup> While European marriages have traditionally required consummation to legalize the union,<sup>32</sup> consummation was unnecessary in China and until recently was frequently delayed.

Chinese mothers also practiced extended breastfeeding, which prolonged postpartum amenorrhea and contributed to the long birth intervals and low fertility (Hsiung 1995a). <sup>33</sup> As we saw in Chapter 4, the Chinese paid increasing attention to breastfeeding for both infant and maternal health. They considered breast milk not only a vital nutritional source, but also a reflection of maternal physiology and psychology. As a result, maternal nutrition, body temperature, health status, even emotional well-being were all matters of serious concern. Though solid food supplements were recommended for infants from an early age, breastfeeding was prolonged and intense. Weaning normally occurred sometime during the second year of life. Moreover, late weaning was considered neither uncommon nor inappropriate.

A wide variety of traditional reproductive technologies may also have facilitated marital restraint. One focus of traditional Chinese pharmacology was to protect women's reproductive health, including the development of methods to induce the abortion of a "bad" fetus. Such techniques included various herbal medicines for contraception, and a wide variety of abortive techniques, including some mentioned by Malthus.<sup>34</sup> These medicines, if effective, could also have been used to end unwanted pregnancies.<sup>35</sup> By the late imperial period, these contraceptive and abortificant medicines were widely sold in some towns

and cities (Hsiung forthcoming). According to the well-known Chinese ethnographer Fei Xiaotong, by the early twentieth century abortion was not only widely known and used in some locales, but a woman who did not know how to use abortion to prevent a birth was laughed at by fellow villagers as a "foolish wife" (Fei 1947/1998, 108).<sup>36</sup>

### Fertility Transition

The Chinese fertility transition, like the Chinese mortality transition, derived from a long tradition of conscious control, which facilitated the formulation and implementation of a national family planning program dating back to the middle of the twentieth century. While Mao initially dismissed earlier Malthusian concerns, <sup>37</sup> the revelation in 1953 that China's population was almost 600 million convinced him and other Chinese leaders of the need for birth control. <sup>38</sup> The fledgling family planning program, however, became entangled in the ideological debates surrounding the Antirightist Movement from 1957 through 1959, which resulted in a reversal of policy. <sup>39</sup> It was not until the 1960s that the government seriously promoted birth control in urban and densely populated rural areas of China, and it was not until the late 1970s that a forceful government population control policy was formulated and enforced nationwide. <sup>40</sup>

In Shanghai, China's largest metropolis and a pioneer in birth control, fertility started to decline no later than 1955 (Guo Shenyang 1996). Figure 6.3 contrasts the early decline in total fertility rates in Shanghai with the later decline nationwide. Despite the massive interruption and rebound from the Great Leap famine, total fertility fell from above 6 in 1955 to 3 in 1959, rebounded to 4 in 1963, and then fell rapidly to 2.4 in 1964, reaching the replacement level of 2.1 as early as 1967. This decline was accomplished through a combination of early reliance on abortion and a later transition to contraceptive use. The Shanghai municipality established an "official" family planning program in 1964 and reported contraceptive saturation among eligible couples within a few years.

Nationwide, use of modern birth control methods dates back to the early 1950s, when China made abortion available nationally to couples for the purpose of family limitation <sup>41</sup> Figure 6.4 shows the rise of contraceptive use and abortion for all China from 1960 to 1987. In 1960, long before the formulation of China's current draconian family

planning policy, over 10 percent of all urban women already used some form of modern contraceptive. Five percent had experienced at least one induced abortion. By 1970, on the eve of China's first national family planning program, use of contraception and abortion had risen to 35 and 20 percent respectively in the cities. Even in the countryside, over 15 percent of women at age 35 already used modern contraceptive methods. Seven percent had had an abortion. While total fertility was still 5.7 nationwide, it had fallen to 3.8 in cities.

China's fertility transition accelerated greatly after 1970 under the official wan (later marriage) xi (longer spacing) shao (fewer births) family planning program. By the late 1970s, 80 percent of Chinese women had used contraception by age 35. Close to a third of urban women and a fifth of rural women had had at least once induced abortion. China had become one of the highest contraceptive-use societies in the world. The national fertility level declined precipitously, from 5.7 in 1970 to 2.8 in 1979, a record unmatched by any other

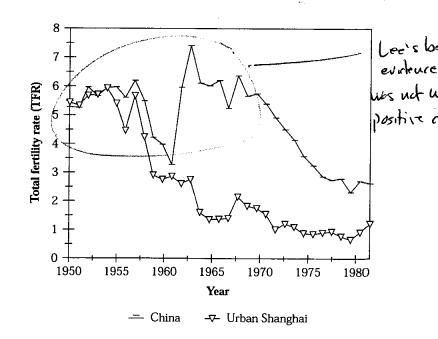


Figure 6.3. Fertility, Shanghai and China, 1950–1982 Source: Coale and Chen (1987).

large population in human history. While this decline was particularly swift among urban Chinese, whose total fertility fell close to replacement level, it was also quite sharp among rural populations in regions with a long tradition of birth control.<sup>43</sup>

Notwithstanding this success in fertility control, in 1979 the Chinese leadership extended their policy goals to reach replacement fertility as rapidly as possible under the slogan "one child per couple," which became the basis for a mass mobilization campaign on the same scale as land reform in the 1950s and economic reform in the 1980s. Because of their strong desire to raise China's living standard to levels comparable with Western industrialized societies, the Chinese leaders elevated family planning to the level of economic planning in state policy. In so doing, they made family planning for the first time in

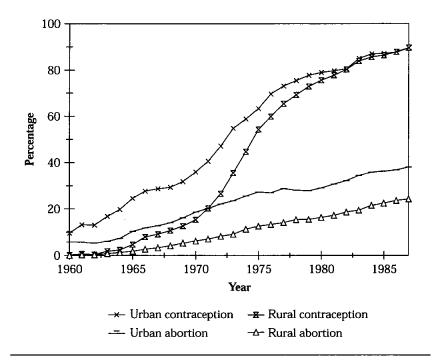


Figure 6.4. Women's use of contraception or first-trimester abortion by age 30–34, China, 1960–1987 Source: Wang (forthcoming).

world history a central component not only of the national agenda but even of national ideology.

As a result, the implementation of the Chinese national family planning program has been more insistent and more compulsory than family planning programs elsewhere. The state not only mandates age at marriage and number of children, but has even promoted mandatory abortion, mandatory insertion and retention of intrauterine devices, and mandatory sterilization to achieve population policies (Banister 1987). This program has led to the well-known excesses of the sterilization campaign of 1983, when cadres used and supplemented mass mobilization to force many people to undergo abortion and sterilization (Hardee-Cleveland and Banister 1988).44 While recent family planning campaigns have been less overt, cadres continue to be responsible for the implementation of birth control under their jurisdiction; those who fail to fulfill family planning targets face such explicit punishments as monetary fine, demotion, and since 1991 even dismissal. Consequently, even though state family planning rhetoric emphasizes education and voluntarism, local cadres continue to resort to physical coercion to meet the demanding goals set by the state.  $^{45}$ 

Just as these other national economic programs reached different parts of China at different times and with different intensity, the current family planning program has been more effective in some areas and some periods than others. <sup>46</sup> In rural China especially, the needs for familial labor and old age support resulted in negotiations among peasants, cadres, and government officials. <sup>47</sup> As a result, the one-child policy was formally relaxed and modified in 1984 and 1988, with the exception of a few localities. Most of rural China has always followed at least a two-child policy. In contrast, more than 90 percent of all urban couples during the past two decades have had only one child. Such uniform and rapid urban compliance was at least initially a consequence largely of urban dependence on the state for employment, residence, education, and other benefits (Wang 1996). In rural China, where there is no such dependence, there is also no such compliance.

The common assumption that China uniformly follows a one-child policy is simply not true for Chinese rural families, who account for 70 percent of the total population. Figure 6.5 describes the rural period parity progression ratio, that is, the proportion of rural women per 1,000 at each parity (number of births) who continue to have children.

The proportion of women who had a second child,  $P_{1-2}$ , was hardly affected by the one-child policy throughout the 1980s.  $P_{1-2}$  declined from close to 100 percent in 1979, to 90 percent in 1985, and to 77 percent in 1991. The proportion of women who had a third parity birth,  $P_{2-3}$ , declined more substantially, from 81 percent in 1979, to 49 percent in 1985, and to 26 percent in 1991; while the proportion of fourth and higher parity births,  $P_{3-4+}$ , declined from 50 percent in 1979 to 18 percent in 1991.

Government intervention largely accounts for the acceleration of the Chinese fertility decline from a TFR of 5.7 to 2.8, and almost entirely for the most recent fall to 2.1. Nevertheless the Chinese fertility transition is fundamentally a consequence of new collective institutions and collective goals, not of new ideas. In contrast to the Western fertility transition, which required a revolutionary extension of individual decision making from marriage to fertility, the Chinese fertility transition required only the extension of collective control from the family to the state. For Chinese, deliberate fertility control has long been within the calculus of conscious choice. China's unusually rapid

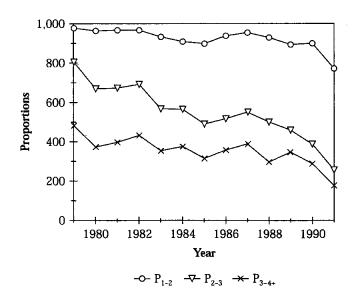


Figure 6.5. Period parity progression, rural China, 1979–1991 Source: Feeney and Yuan (1994).

fertility transition may therefore be attributed to the fact that the Chinese people did not require a change in attitudes, only the establishment of new goals and institutions, along with the diffusion of effective technologies.

# Collective and Individual Strategies

Just as Chinese parents planned their child's survival and marriage, they also consciously planned their births. The multiple methods of marital restraint—secondary chastity and traditional methods—after marriage and between births allowed Chinese to vary their fertility according to social and economic circumstances. As a result, not only did the proportion of sons vary by individual, but so did the number of children, even with social status and marriage type controlled for.

This behavior is particularly well documented among the Qing nobility. Low-noble fathers, for example, had on average 2.5 fewer births than high-noble fathers, even with marriage type controlled for. 48 Moreover, while rich polygynous nobles could adjust their fertility according to economic circumstances by marrying fewer spouses, poor monogamous nobles adjusted their fertility by having fewer children. As a result, poor nobles, in addition to increasing female infanticide by a factor of three in the late eighteenth century, also reduced their overall fertility from 5 or more children in the early eighteenth century to just 4 children in the late eighteenth and early nineteenth centuries (Wang, Lee, and Campbell 1995).

Such marital restraint was even more widespread among commoners. 49 In rural Liaoning, for example, registered births even for males rose and fell in inverse proportion to grain prices, with more births in low-price years and fewer births in high-price years. Household structure, an indicator of wealth and an important determinant of a couple's social context, played a key role in fertility decision making. Larger and more complex households reduced their fertility less during poor harvest years and increased their fertility more during good years by comparison with smaller and simpler households. 50 Individual household position and occupation also greatly influenced the number of births. Soldiers, artisans, and officials had substantially more children than did commoners (Lee and Campbell 1997, 180–183). While such patterns are less obvious in genealogical populations, which may well underrecord polygyny, one study of three line-

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age populations in Zhejiang, from 1550 to 1850, documents that those branches with more degree-holders had many more births than others (Harrell 1985).

Chinese parents at both ends of the social spectrum not only controlled their fertility according to their social and economic circumstances; they also planned their births by the number and sex of their existing children. Both among the Qing nobility and the Liaoning peasantry, fathers who had no sons had shorter birth intervals than those who had sons (Wang, Lee, and Campbell 1995, 397). Moreover, Liaoning peasants who had a son were much more likely to stop further childbearing altogether. This gender-differentiated stopping pattern resulted in a sex ratio at last birth as high as 500 boys to 100 girls (Lee and Campbell 1997, 96). Such stopping behavior has revived under the current family planning program. As a result, the sex ratio of third and fourth births, for example, has risen from 109 in 1976–1980 to 123 in 1985–1989 (Coale and Bannister 1994, 468).

Such a pattern of deliberate marital fertility control also shows clearly in a large national sample of almost 30,000 uneducated rural Chinese women born in 1914–1930, whose reproductive behavior was unaffected by government family planning and uninfluenced by modern contraception. Women with both sons and daughters, compared with those with only daughters or only sons, demonstrated a consistent pattern of control. Not only did a significantly lower proportion of these women proceed to the next birth at every parity; they also had longer birth intervals and an earlier age of completed child-bearing (Zhao Zhongwei 1998).

It is perhaps not surprising that such socially differentiated behavior has persisted even during the recent Chinese fertility transition. Individual education, residence, and occupation were important factors in explaining both fertility and contraception use from the 1950s to the early 1970s. <sup>51</sup> Urban and educated individuals used both contraception and abortion much earlier and more frequently and therefore had low fertility from the 1960s on. The difference in using abortion, for instance, was 10 to 1 between college-educated urban women and noneducated rural women in the 1960s and early 1970s, before the nationwide family planning program was enforced (Wang forthcoming).

Because of the Chinese preoccupation with biological perpetuation, scholars often mistakenly assume that the only purpose of marriage in

China is procreation. In fact the immediate concern for all parties is to integrate the spouse into the family for both consumption and production rather than for reproduction.<sup>52</sup> Explicit and excessive intimacy is therefore strongly discouraged, as family order takes precedence over individual indulgence. The number and timing of births moreover depends upon circumstances. Births have to be negotiated with coresident kin according to collective goals and constraints. Couples, in consequence, often have to exercise marital restraint, and resort to infanticide when such restraint fails.

Fertility control in both imperial and contemporary China, in other words, was possible because such decision making has almost never been an individual prerogative. Rather it has been a familial or community decision or a national policy. In that sense, the current family planning program is merely an extension of the familial mode of reproduction to the local community or beyond.

Part III explores the larger implications of Chinese demographic behavior for our understanding both of comparative population processes and of comparative social organization. In so doing, we not only analyze the historical context of the Chinese demographic system; we also contrast the legacy of Western individualism and Chinese collectivism.